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Code of Federal Regulations

50

Part 17 (§§ 17.96 to 17.99(h))
Revised as of October 1, 2003

Wildlife and Fisheries

Containing a codification of documents of general applicability and future effect

As of October 1, 2003

With Ancillaries

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A Special Edition of the Federal Register

As of October 1, 2003
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Revised as of October 1, 2002
Is Replaced by Four Volumes
Title 50, Parts 1 to 16

Title 50, Part 17, Vol. 1 of 3
[Contains §§ 17.1 to 17.95]

Title 50, Part 17, Vol. 2 of 3
[Contains §§ 17.96 to 17.99(h)]
Title 50, Part 17, Vol. 3 of 3
[Contains §§ 17.99(i) to End
and 17.100 to End]

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Cite this Code: CFR

To cite the regulations in this volume use title, part and section number. Thus, 50 CFR 17.96 *refers to title 50, part 17, section 96.*

Explanation

The Code of Federal Regulations is a codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government. The Code is divided into 50 titles which represent broad areas subject to Federal regulation. Each title is divided into chapters which usually bear the name of the issuing agency. Each chapter is further subdivided into parts covering specific regulatory areas.

Each volume of the Code is revised at least once each calendar year and issued on a quarterly basis approximately as follows:

Title 1 through Title 16.....as of January 1
Title 17 through Title 27.....as of April 1
Title 28 through Title 41.....as of July 1
Title 42 through Title 50.....as of October 1

The appropriate revision date is printed on the cover of each volume.

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The contents of the Federal Register are required to be judicially noticed (44 U.S.C. 1507). The Code of Federal Regulations is prima facie evidence of the text of the original documents (44 U.S.C. 1510).

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To determine whether a Code volume has been amended since its revision date (in this case, October 1, 2003), consult the ''List of CFR Sections Affected (LSA),'' which is issued monthly, and the ''Cumulative List of Parts Affected,'' which appears in the Reader Aids section of the daily Federal Register. These two lists will identify the Federal Register page number of the latest amendment of any given rule.

EFFECTIVE AND EXPIRATION DATES

Each volume of the Code contains amendments published in the Federal Register since the last revision of that volume of the Code. Source citations for the regulations are referred to by volume number and page number of the Federal Register and date of publication. Publication dates and effective dates are usually not the same and care must be exercised by the user in determining the actual effective date. In instances where the effective date is beyond the cut-off date for the Code a note has been inserted to reflect the future effective date. In those instances where a regulation published in the Federal Register states a date certain for expiration, an appropriate note will be inserted following the text.

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The Paperwork Reduction Act of 1980 (Pub. L. 96–511) requires Federal agencies to display an OMB control number with their information collection request.

Many agencies have begun publishing numerous OMB control numbers as amendments to existing regulations in the CFR. These OMB numbers are placed as close as possible to the applicable recordkeeping or reporting requirements.

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CFR INDEXES AND TABULAR GUIDES

A subject index to the Code of Federal Regulations is contained in a separate volume, revised annually as of January 1, entitled CFR INDEX AND FINDING AIDS. This volume contains the Parallel Table of Statutory Authorities and Agency Rules (Table I). A list of CFR titles, chapters, and parts and an alphabetical list of agencies publishing in the CFR are also included in this volume.

An index to the text of ''Title 3—The President'' is carried within that volume.

The Federal Register Index is issued monthly in cumulative form. This index is based on a consolidation of the ''Contents'' entries in the daily Federal Register.

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REPUBLICATION OF MATERIAL

There are no restrictions on the republication of material appearing in the Code of Federal Regulations.

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RAYMOND A. MOSLEY,
Director,
Office of the Federal Register.

October 1, 2003.

THIS TITLE

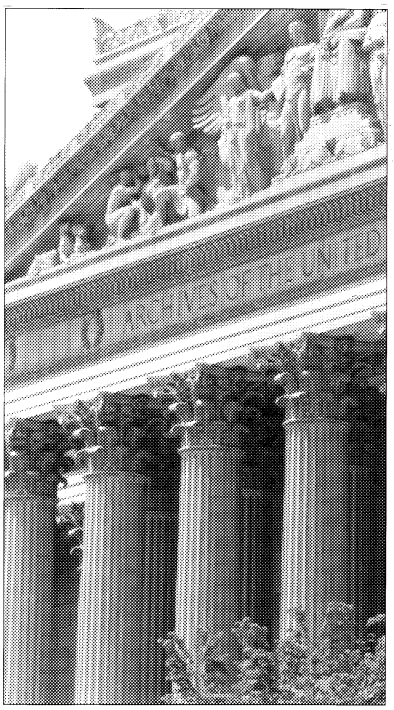
Title 50—FISH AND WILDLIFE is composed of seven volumes. The parts in these volumes are arranged in the following order: Parts 1–16; part 17 (17.1 to 17.95), part 17 (17.96 to 17.99(h)), part 17 (17.99(i) to End and 17.100 to End), parts 18–199, parts 200–599 and part 600 to End. The first five volumes (parts 1–16, part 17 (17.1 to 17.95), part 17 (17.96 to 17.99(h)), part 17 (part 17.99(i) to End and 17.100 to End), and parts 18–199) contain the current regulations issued under chapter I—United States Fish and Wildlife Service, Department of the Interior. The sixth volume (parts 200–599) contains the current regulations issued under chapter II—National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce; chapter III—International Fishing and Related Activities, chapter IV—Joint Regulations (United States Fish and Wildlife Service, Department of the Interior and National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce); Endangered Species Committee regulations; and chapter V—Marine Mammal Commission. The seventh volume (part 600 to End) contains the current regulations issued under chapter VI—Fishery Conservation and Management, National Oceanic and Atmospheric Administration, Department of Commerce. The contents of these volumes represent all current regulations codified under this title of the CFR as of October 1, 2003.

Alphabetical listings of endangered and threatened wildlife and plants appear in part 17.

The OMB control numbers for the National Oceanic and Atmospheric Administration appear in 15 CFR 902.1.

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Title 50—Wildlife and Fisheries

(This book contains part 17, §§ 17.96 to 17.99(h))

Part

CHAPTER I—United States Fish and Wildlife Service, Department of the Interior (Continued) 1

CROSS REFERENCES: Commercial fishing on Red Lake Indian Reservation, Bureau of Indian Affairs: 25 CFR part 242.

Disposal of certain wild animals in national parks, National Park Service: 36 CFR part 10.

Exchanges of land for migratory bird or other wildlife refuges, Bureau of Land Management: 43 CFR 2200.0–1—2272.1.

Fishing in coastal waters, lakes, rivers, bays, etc., Corps of Engineers: 33 CFR part 209.

Fishing, hunting, trapping, and protection of wildlife in national forests and wildlife refuges, Forest Service: 36 CFR part 241, §§ 261.8, 261.9.

Fishing, hunting, trapping, and protection of wildlife in national parks, memorials, recreation areas, etc., National Park Service: 36 CFR 2.2 and 2.3, and parts 7, 20.

Fishing and hunting in reservoir areas, Corps of Engineers: 36 CFR 327.8.

Free entry of animals, birds and products of American fisheries under specified conditions, Customs Service: 19 CFR 10.70—10.83.

Grazing areas for wildlife maintenance, Bureau of Land Management: 43 CFR Subpart 4110.

Making pictures, television production, or sound tracks on areas administered by the United States Fish and Wildlife Service or the National Park Service: 43 CFR 5.1.

CHAPTER I—UNITED STATES FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR (CONTINUED)

SUBCHAPTER B—TAKING, POSSESSION, TRANSPORTATION, SALE, PURCHASE, BARTER, EXPORTATION, AND IMPORTATION OF WILDLIFE AND PLANTS (CONTINUED)

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SUBCHAPTER B—TAKING, POSSESSION, TRANSPORTATION, SALE, PURCHASE, BARTER, EXPORTATION, AND IMPORTATION OF WILDLIFE AND PLANTS (CONTINUED)

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

Subpart I—Interagency Cooperation (Continued)

Sec.

17.96 Critical habitat—plants.
17.99 Critical habitat; plants on the islands of Kauai, Niihau, Molokai, Maui, Kahoolawe, Oahu, and Hawaii, HI, and on the Northwestern Hawaiian Islands.

AUTHORITY: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

SOURCE: 40 FR 44415, Sept. 26, 1975, unless otherwise noted.

Subpart I—Interagency Cooperation (Continued)

§ 17.96 Critical habitat—plants.

(a) *Flowering plants.*

Family Apiaceae: *Lilaeopsis schaffneriana* var. *recurva* (Huachuca water umbel). Critical habitat includes the stream courses identified in the legal descriptions below, and includes adjacent areas out to the beginning of upland vegetation. Within these areas, the primary constituent elements include, but are not limited to, the habitat components which provide—(1) Sufficient perennial base flows to provide a permanently or nearly permanently wetted substrate for growth and reproduction of *Lilaeopsis;* (2) A stream channel that is relatively stable, but subject to periodic flooding that provides for rejuvenation of the riparian plant community and produces open microsites for *Lilaeopsis* expansion; (3) A riparian plant community that is relatively stable over time and in which nonnative species do not exist or are at a density that has little or no adverse effect on resources available for *Lilaeopsis* growth and reproduction; and (4) In streams and rivers, refugial sites in each watershed and in each reach, including but not limited to springs or backwaters of mainstem rivers, that allow each population to survive catastrophic floods and recolonize larger areas.

Unit 1. Santa Cruz County, Arizona. From USGS 7.5′ quadrangle map Sonoita, Arizona.

Gila and Salt Principal Meridian, Arizona: T. 20 S., R. 16 E., beginning at a point on Sonoita Creek in sec. 34 at approx. 31°39′19″ N latitude and 110°41′52″ W longitude proceeding downstream (westerly) to a point in sec. 33 at approx. 31°39′07″ N latitude and 110°42′46″ W longitude covering approx. 2 km (1.25 mi.).

Unit 2. Santa Cruz County, Arizona. From USGS 7.5′ quadrangle map Lochiel, Arizona.

That portion of the Santa Cruz River beginning in the San Rafael De La Zanja Grant approx. at 31°22′30″ N latitude and 110°35′45″ W longitude downstream (southerly) to Gila and Salt Principal Meridian, Arizona, T. 24 S., R. 17 E., through secs. 11 and 14, to the south boundary of sec. 14 covering approx. 4.4 km (2.7 mi.). Also, a tributary that begins in T. 24 S., R. 17 E., sec. 13 at approx. 31°21′10″ N latitude and 110°34′16″ W longitude downstream (southwesterly) to its confluence with the Santa Cruz River covering approx. 3 km (1.9 mi.).

Unit 3. Cochise County, Arizona. From USGS 7.5′ quadrangle map Huachuca Peak, Arizona.

Gila and Salt Principal Meridian, Arizona: That portion of Scotia Canyon beginning in T. 23 S., R. 19 E., sec. 3 at approx. 31°27′19″ N latitude and 110°23′44″ W longitude downstream (southwesterly) through secs. 10, 9, 16 and to approx. 31°25′22″ N latitude and 110°25′22″ W longitude in sec. 21 covering approx. 5.4 km (3.4 mi.).

Unit 4. Cochise County, Arizona. From USGS 7.5′ quadrangle map Huachuca Peak, Arizona.

Gila and Salt Principal Meridian, Arizona: That portion of Sunnyside Canyon beginning in T. 23 S., R. 19 E., on the east boundary of sec. 10 downstream (southwesterly) to the south boundary of sec. 10 covering approx. 1.1 km (0.7 mi.).

Unit 5. Cochise County, Arizona. From USGS 7.5′ quadrangle map Miller Peak, Arizona.

That portion of Garden Canyon in the Fort Huachuca Military Reservation beginning at approx. 31°27′13″ N latitude and 110°22′33″ W longitude downstream (northwesterly) to approx. 31°28′45″ N latitude and 110°20′11″ W longitude covering approx. 6.1 km (3.8 mi.).

Unit 6. Cochise County, Arizona. From USGS 7.5′ quadrangle map Miller Peak, Arizona.

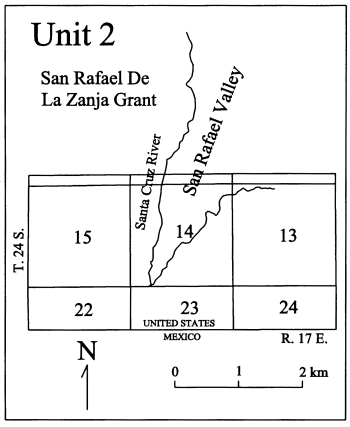
Gila and Salt Principal Meridian, Arizona: That portion of Bear Canyon beginning at a point in T. 24 S., R. 19 E., sec. 1 at approx. 31°22′30″ N latitude and 110°21′47″ W longitude upstream through T. 23 S., R. 19 E., sec. 36 to a point in sec. 31 at approx. 31°23′18″ N latitude and 110°21′22″ W longitude covering approx. 1.7 km (1.0 mi.). Also, continuing up an unnamed tributary beginning at a point

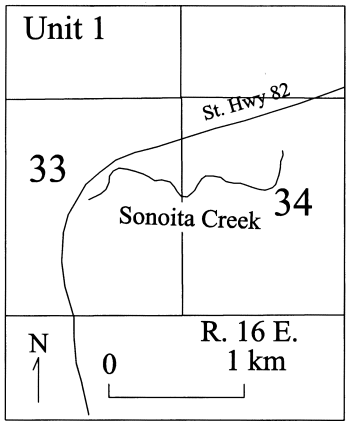
in T. 23 S., R. 19 E., sec. 31 at approx. 31°23′18″ N latitude and 110°21′22″ W longitude upstream (northerly) to a point in T. 23 S., R. 19 E., sec. 30 at approx. 31°23′44″ N latitude and 110°21′14″ W longitude covering approx. 0.9 km (0.5 mi.). Also, that portion of Lone Mountain Canyon beginning at its confluence with Bear Creek at a point in T. 23 S., R. 19 E., sec. 36 at approx. 31°22′54″ N latitude and 110°21′43″ W longitude to a point in sec. 36 at approx. 31°23′26″ N latitude and 110°21′58″ W longitude, thence up an unnamed tributary northwesterly into sec. 25 thence northerly to a point at approx. 31°24′13″ N latitude and 110°21′54″ W longitude covering approx. 2.7 km (1.7 mi.). Also that portion of Rattlesnake Canyon beginning at its confluence with Lone Mountain Canyon in T. 23 S., R. 19 E., sec. 36 upstream northeasterly into sec. 25 to a point at approx. 31°22′08″ N latitude and 110°21′31″ W longitude covering approx. 1.5 km (1.0 mi.).

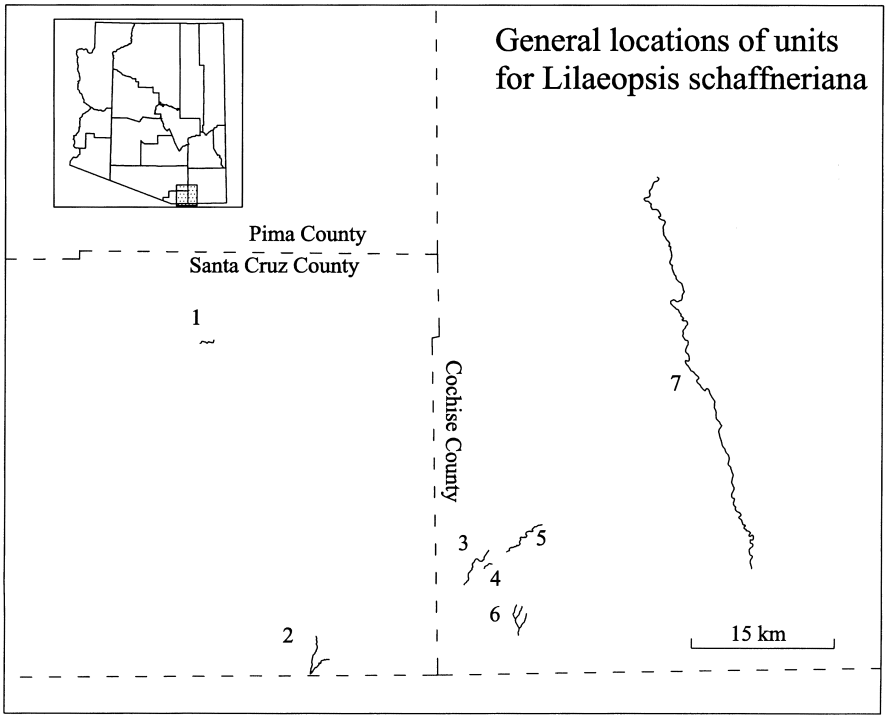
Unit 7. Cochise County, Arizona. From USGS 7.5′ quadrangle maps: Hereford, Ariz.; Tombstone SE, Ariz.; Nicksville, Ariz.; Lewis Springs, Ariz.; Fairbank, Ariz.; Land, Ariz.

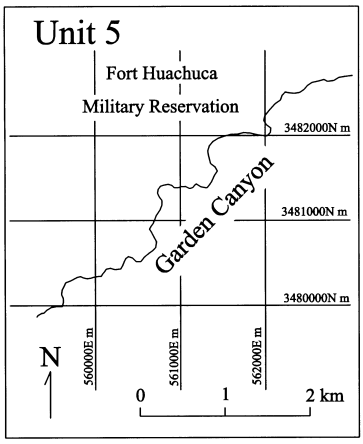
Gila and Salt Principal Meridian, Arizona: That portion of the San Pedro River beginning in the San Rafael Del Valle Grant at a point approx. 200 meters upstream (south) of the Hereford Road bridge at approx. 31°26′16″ N latitude and 110°06′24″ W longitude continuing downstream (northerly) through the San Rafael Del Valle Grant; T. 21 S., R. 22 E.; T. 21 S., R 21 S.; through the San Juan De Las Boquilla y Nogales Grant to a point at approx. 31°48′28″ N latitude and 110°12′32″ W longitude covering approx. 54.2 km (33.7 mi.).

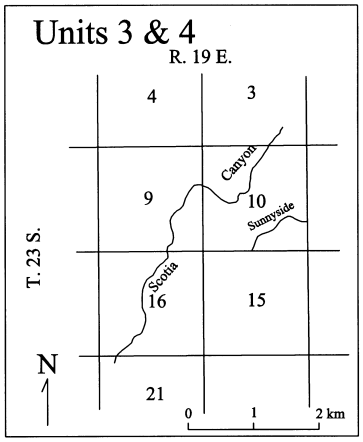
NOTE: Maps for Units 1–7 follow:

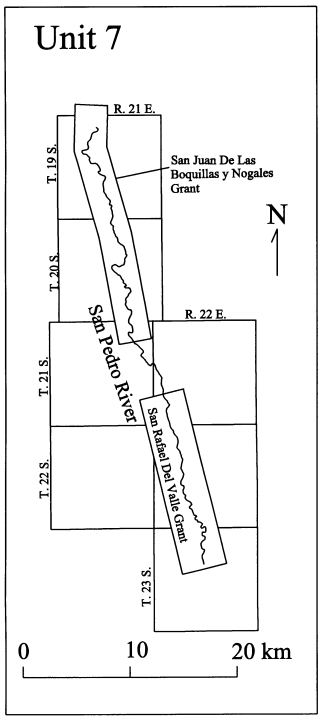

Unit 2
San Rafael De
La Zanja Grant
Santa Cruz River
San Rafael Valley
T. 24 S.
15
14
13
22
23
24
UNITED STATES
MEXICO
R. 17 E.
N
0 1 2 km

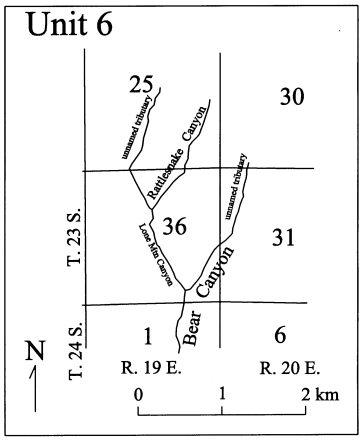

Unit 1
St. Hwy 82
33
34
Sonoita Creek
N
R. 16 E.
0
1 km


General locations of units
for Lilaeopsis schaffneriana
Pima County
Santa Cruz County
Cochise County
1
2
3
4
5
6
7
15 km





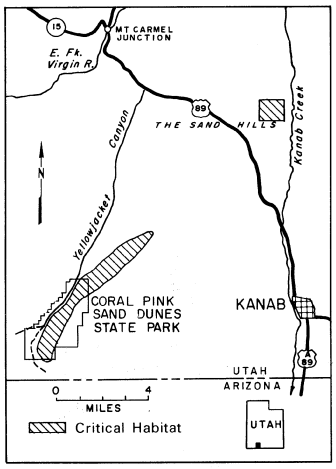




Family Asclepiadaceae: *Asclepias welshii* (Welsh's milkweed). Utah, Kane County: entire Coral Pink Sand Dunes, within T43S, R7W and R8W, and T44S, R8W about 10 miles west of Kanab; also, the area of the Sand Hills, about 10 miles north of Kanab, within T42S, R6W, Section 8 (S½ of the N½ and N½ of the S½). The constituent elements of this

critical habitat are the sand dunes themselves.

NOTE: Map follows:



Family Asteraceae: *Deinandra conjugens* (Otay tarplant)

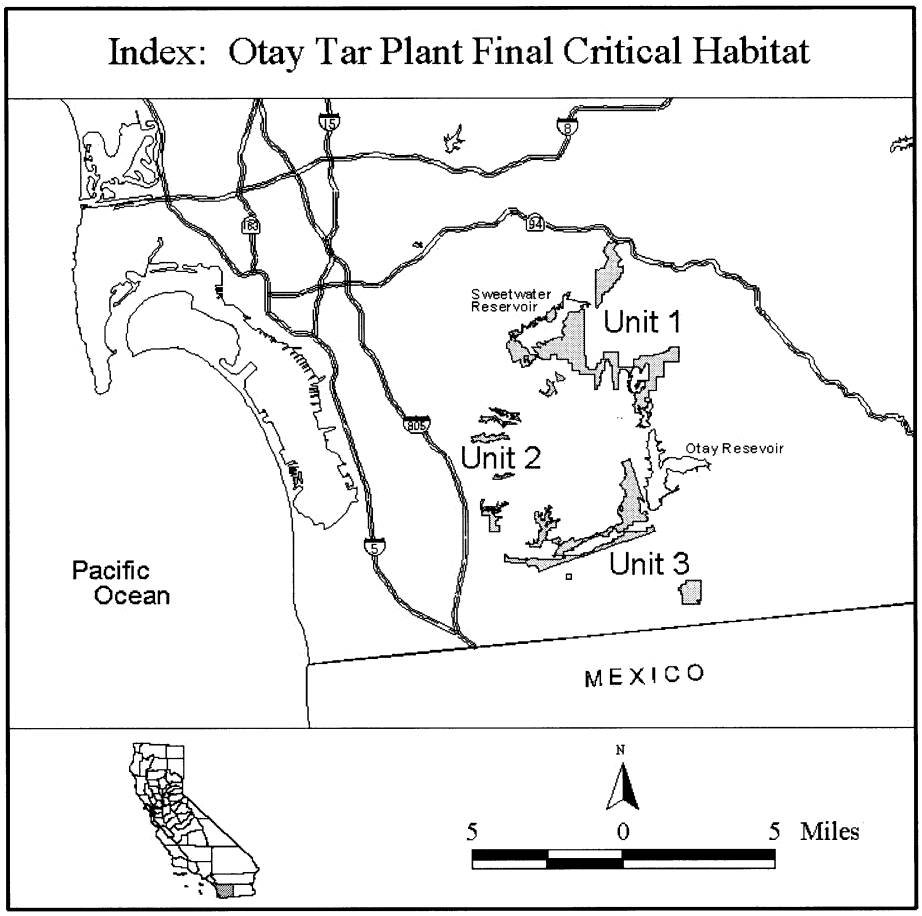
(1) Critical habitat units are depicted for San Diego County, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Deinandra conjugens* are those habitat components that are essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements for *Deinandra conjugens* consist of, but are not limited to, soils with a high clay content (generally greater than 25 percent) (or clay intrusions or lenses) that are associated with grasslands, open coastal sage scrub, or maritime succulent scrub communities between 25 m (80 ft) and 300 m (1,000 ft) elevation. These plant communities contain natural openings that provide habitat for *Deinandra conjugens* life-cycle, and pollen and seed dispersal agents.

(3) Critical habitat does not include non-Federal lands covered by a legally operative Habitat Conservation Plan issued under section 10(a)(1)(B) of the Act in which *Deinandra conjugens* is a covered species on or before the publication of this final rule.

(4) Existing features and structures, such as buildings, paved or unpaved roads, and other landscaped areas not containing primary constituent elements, are not likely to contain the primary constituent elements for *Deinandra conjugens*. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they affect the species or primary constituent elements in adjacent critical habitat.

(i) NOTE: Index map follows:



(5) *Unit 1:* Sweetwater/Proctor Valley, San Diego County, California.

(i) *Unit 1a:* From USGS 1:24,000 quadrangle map Jamul Mountains, beginning at the SDNWR boundary at UTM NAD27 x-coordinate 505100; thence south following UTM NAD27 coordinates (E, N): 505100, 3620400; 505000, 3620400; 505000, 3620200; 504900, 3620200; 504900, 3620100; 504800, 3620100; 504800, 3620000; 504700, 3620000; 504700, 3619900; 504600, 3619900; 504600, 3619700; 504500, 3619700; 504500, 3619600; 504400, 3619600; 504400, 3619500; 504300, 3619500; 504300, 3619400; 504100, 3619400; 504100, 3619300; 504000, 3619300; thence south to the SDNWR boundary at UTM x-coordinate 504000; thence south following the SDNWR boundary returning to the point of beginning on the SDNWR boundary at UTM x-coordinate 505100.

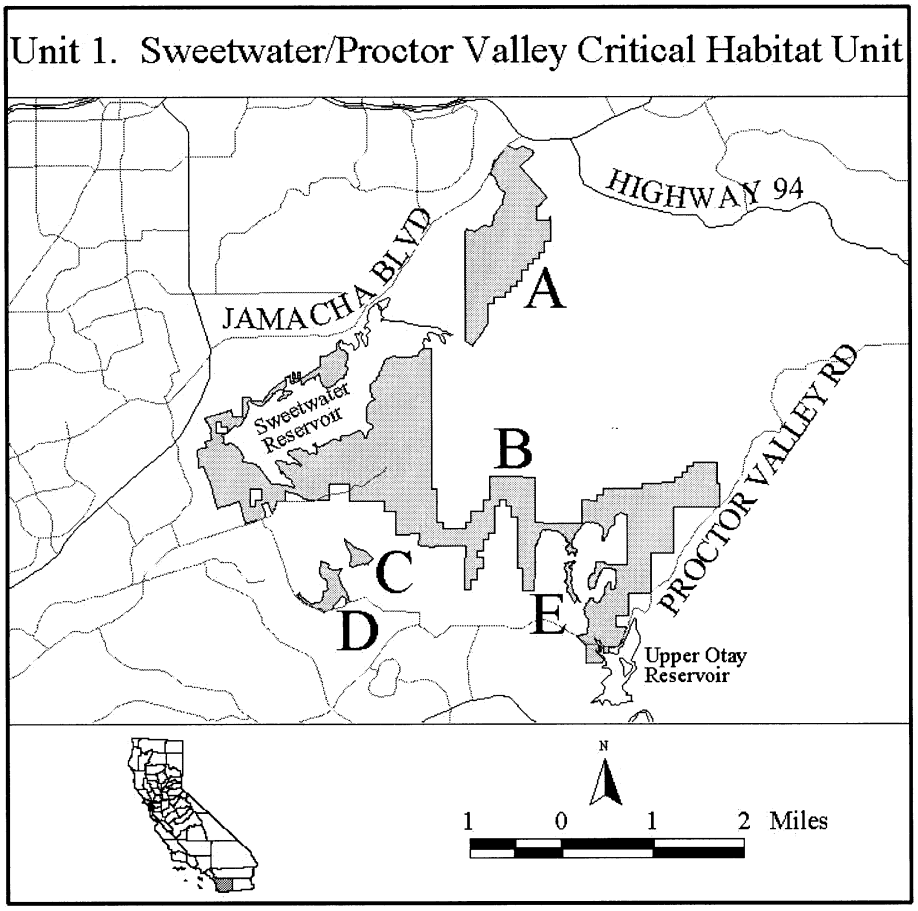
(ii) *Unit 1b:* From USGS 1:24,000 quadrangle maps National City and Jamul Mountains, beginning at the Sweetwater Reservoir at UTM NAD27 y-coordinate 3618500; thence east and following UTM NAD27 coordinates 503000, 3618500; 503000, 3616000; 503100, 3616000; 503100, 3615400; 503200, 3615400; 503200, 3615300; 503600, 3615300; 503600, 3615400; 503700, 3615400; 503700, 3615600; 503900, 3615600; 503900, 3615800; thence east to the Otay Water District (OWD) boundary at UTM NAD27 y-coordinate 3615800; thence north following the OWD boundary to the City of Chula Vista Preserve Design (CCVPD) boundary; thence east following the CCVPD boundary to UTM NAD27 x-coordinate 505900; thence north following UTM NAD27 coordinates 505900, 3615900; 506000, 3615900; 506000, 3616000; 506700, 3616000, 506700, 3616100; thence east to the SDNWR boundary at UTM NAD27 y-coordinate

3616100; thence east following the SDNWR boundary to UTM NAD27 x-coordinate 507200; thence north following UTM NAD27 coordinates 507200, 3616200; 507400, 3616200; 507400, 3616300; 507500, 3616300; 507500, 3616400; 507600, 3616400; thence north to the County of San Diego Major Amendment (CSDMjA) boundary at UTM NAD27 x-coordinate 507600; thence east following the CSDMjA boundary to the SDNWR boundary; thence south following the SDNWR boundary to the CSDMjA boundary; thence south following the CSDMjA boundary to UTM NAD27 x-coordinate 506100; thence south following UTM NAD27 coordinates 506100, 3613100; 506000, 3613100; thence north to the City of Chula Vista (CCV) boundary at UTM NAD27 x-coordinate 506000; thence northwest following the CCV boundary south to UTM NAD27 x-coordinate 505700; thence north to the CCVPD boundary at UTM x-coordinate 505700: thence northwest along the CCVPD boundary to the City of Chula Vista Major Amendment boundary (CCVMjA); thence north along the CCVMjA boundary to the CCVPD boundary; thence north and east along the CCVPD boundary to the CCVMjA boundary; thence east along the CCVMjA boundary to the CCVPD boundary; thence north and west along the CCVPD boundary to the MSCP Neutral Area boundary (MNA); thence south and back north along the MNA boundary to UTM NAD27 y-coordinate 3614700; thence east along UTM NAD27 y-coordinate to the MNA boundary; thence south along the MNA boundary to the CCVPD boundary; thence following the CCVPD boundary to the MNA boundary; thence south along the MNA boundary to the CCVPD boundary; thence west along the CCVPD boundary to UTM NAD27 y-coordinate 3621500; thence west along UTM y-coordinate to the OWD boundary; thence south following the OWD boundary to UTM NAD27 x-coordinate 504600; thence north following UTM NAD27 coordinates 504600, 3614600; 504500, 3614600; 504500, 3615500; 504400, 3615500; 504400, 3615700; 504300, 3615700; 504300, 3615800; 504200, 3615800; 504200, 3615700; 504100, 3615700; 504100, 3615200; 504000, 3615200; 504000, 3615100; 503900, 3615100; 503900, 3614900; 503800, 3614900; 503800, 3614800; 503900, 3614800; 503900, 3614600; 503800, 3614600; 503800, 3614400; 503700, 3614400; thence south to the OWD boundary at UTM NAD27 x-coordinate 503700; thence west following the OWD boundary to the Multiple Habitat Planning Area (MHPA) boundary; thence west following the MHPA to the SDNWR boundary; thence south following the SDNWR boundary to UTM NAD27 y-coordinate 3616100; thence west following UTM NAD27 coordinates 501200, 3616100; 501200, 3615800; 500800, 3615800; thence north to the Sweetwater Authority Water District (SWAWD) boundary at UTM NAD27 x-coordinate 500800; thence west following the SWAWD boundary to the County of San Diego Minor Amendment (CSDMnA) boundary; thence west following the CSDMnA boundary to the SWAWD boundary; thence west following the SWAWD boundary to approximately UTM NAD27 coordinates 5014000, 3618650 where the SWAWD meets the Sweetwater Reservoir shoreline; thence south following the Sweetwater Reservoir shoreline (SRS) to UTM NAD27 x-coordinate 499400; thence north following UTM NAD27 coordinates 499400, 3617000; 499400, 3617100; 499300, 3617100; 499300, 3617200; 499200, 3617200; 499200, 3617000; thence east to the SRS at UTM NAD27 y-coordinate 3617000; thence south following the SRS back to the point of beginning at UTM NAD27 y-coordinate 3618500; excluding lands bounded by the CCVPD boundary at UTM NAD27 x-coordinate 505800; thence east following the CCVPD boundary to UTM NAD27 x-coordinate 506100; thence north and following UTM NAD27 coordinates 506100, 3614700; 505700, 3614700; 505700, 3615300; 505800, 3615300; thence north returning to the point of beginning on the CCVPD boundary at UTM NAD27 x-coordinate 505800; excluding lands bounded by the following UTM NAD27 coordinates 499800, 3616000; 500000, 3616000; 500000, 3615800; 499900, 3615800; 499900, 3615700; 499800, 3615700; 499800, 3616000; excluding the proposed State Route 125 easement.

(iii) *Unit 1c and d:* From USGS 1:24,000 quadrangle map Jamul Mountains, the lands bounded by the CCVPD boundary at Horseshoe Bend and Gobblers Knob.

(iv) *Unit 1e:* From USGS 1:24,000 quadrangle map Jamul Mountains, the lands bounded by the MNA boundary at Rolling Hills Ranch.

(v) NOTE: Unit 1 map follows:



(6) *Unit 2:* Chula Vista, San Diego County, California.

(i) *Unit 2a:* From USGS 1:24,000 quadrangle maps National City, the lands bounded by the CCVPD boundary in Long Canyon and between UTM NAD27 coordinates 497900 and 499700.

(ii) *Unit 2b and c:* From USGS 1:24,000 quadrangle map National City, the lands bounded by the CCVPD boundary south of Otay Lakes Road and between UTM NAD27 x-coordinates 497300 and 499500.

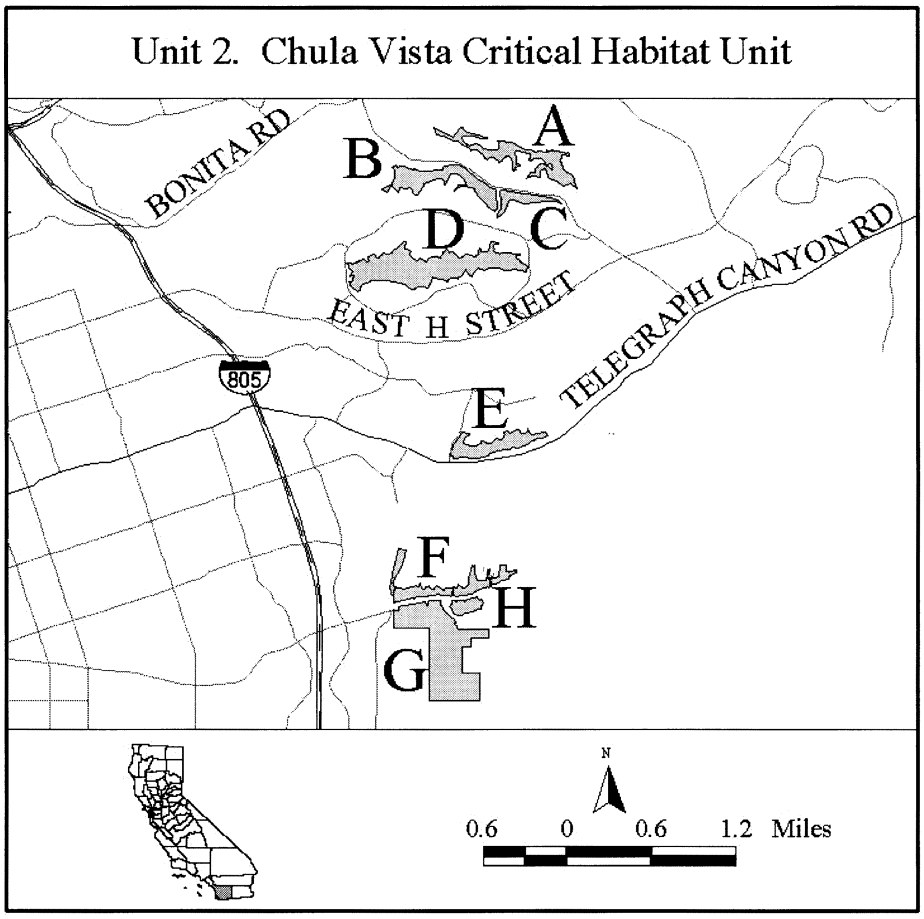
(iii) *Unit 2d:* From USGS 1:24,000 quadrangle map National City, the lands bounded by the CCVPD boundary in Rice Canyon and between UTM NAD27 x-coordinates 496900 and 499100.

(iv) *Unit 2e:* From USGS 1:24,000 quadrangle maps National City and Imperial Beach, the lands bounded by the CCVPD boundary in Telegraph Canyon and between UTM NAD27 x-coordinates 498100 and 499300.

(v) *Unit 2f:* and h: From USGS 1:24,000 quadrangle map Imperial Beach, the lands bounded by the CCVPD boundary in Poggi Canyon and between UTM NAD27 x-coordinates 497400 and 499000.

(vi) *Unit 2g:* From USGS 1:24,000 quadrangle map Imperial Beach, beginning at the CCV boundary at UTM NAD27 x-coordinate 498600; thence south following UTM NAD27 coordinates 498600, 3607300; 498400, 3607300; 498400, 3607200; 498300, 3607200; 498300, 3606900; 498500, 3606900; thence south to the CCV boundary at UTM NAD27 x-coordinate 498500; thence west following the CCV boundary to the CCVPD boundary; thence west following the CCVPD boundary to the CCV boundary; thence east returning to the point of beginning on the CCV boundary at UTM NAD27 x-coordinate 498600.

(vii) NOTE: Unit 2 map follows:



(7) *Unit 3:* Otay Valley/Big Murphy's, San Diego County, California.

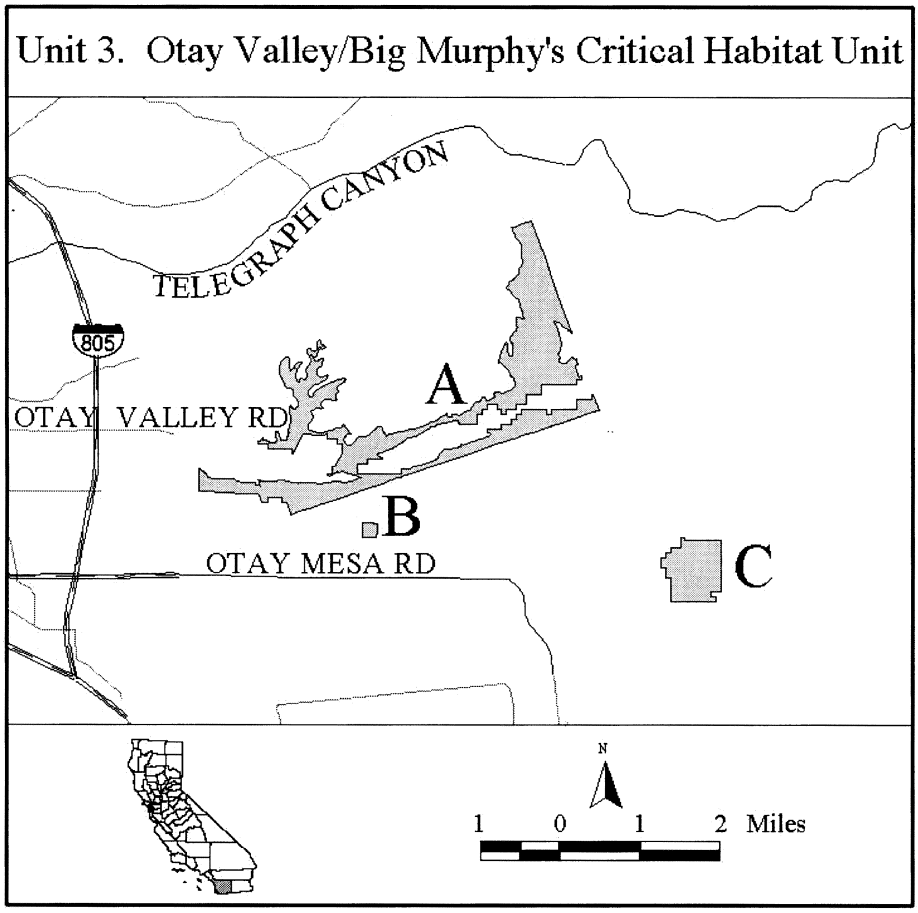
(i) *Unit 3a:* From USGS 1:24,000 quadrangle maps Imperial Beach, Otay Mesa, and Jamul Mountains beginning on the CCVPD boundary at UTM NAD27 x-coordinate 499900; thence east following the CCVPD boundary to UTM NAD27 x-coordinate 506400; thence south following the UTM NAD27 coordinates 506400, 3607200; 506300, 3607200; 506300, 3607100; 505600, 3607100; 505600, 3606900; 505300, 3606900; 505300, 3606700; 505100, 3606700; 505100, 3606600; 504900, 3606600; 504900, 3606500; 504800, 3606500; 504800, 3606600; 504700, 3606600; 504700, 3606700; 504500, 3606700; 504500, 3606600; 504400, 3606600; 504400, 3606500; 504300, 3606500; 504300, 3606300; thence west to the CCVPD boundary at UTM y-coordinate 3606300; thence north following the CCVPD boundary to UTM NAD27 x-coordinate 502400; thence south following UTM NAD27 coordinates 502100, 3605600; 502100, 3605500; 501900, 3605500; 501900, 3605300; 502800, 3605300; 502800, 3605400; thence east to the CCVPD boundary at UTM NAD27 y-coordinate 3605400; thence east following the CCVPD boundary to UTM NAD27 x-coordinate 504500; thence north following UTM NAD27 coordinates 504500, 3606200; 504800, 3606200; 504800, 3606300; 505000, 3606300; 505000, 3606400; 505100, 3606400; 505100, 3606500; 505200, 3606500; 505200, 3606600; 505700, 3606600; 505700, 3606500; 505800, 3606500; 505800, 3606600; 506300, 3606600; 506300, 3606800; 506600, 3606800; 506600, 3606900; thence east to the CCVPD boundary

at UTM NAD27 y-coordinate 3606900; thence south following the CCVPD boundary to the CCV boundary; thence west following the CCV boundary to the CCVPD boundary; thence north following the CCVPD boundary to the UTM NAD27 y-coordinate 3604700; thence west following UTM NAD27 coordinates 500400, 3604700; 500400, 3604800; 500100, 3604800; 500100, 3604700; thence west to the CCV boundary at UTM NAD27 y-coordinate 3604700; thence north along the CCV boundary to the CCVPD boundary; thence east following the CCVPD boundary to UTM NAD27 x-coordinate 501300; thence north following UTM NAD27 coordinates 501300, 3605300; 501400, 3605300; thence north to the CCVPD boundary at UTM NAD27 x-coordinate 501400; thence north following the CCVPD boundary to UTM NAD27 x-coordinate 501600; thence north following UTM NAD27 coordinates 501600, 3605900; 501500, 3605900; 501500, 3606000; 501300, 3606000; 501300, 3606100; thence north to the CCVPD boundary at UTM NAD27 x-coordinate 501300; thence east following the CCVPD boundary to UTM NAD27 y-coordinate 3605700; thence east following UTM NAD27 coordinates 500600, 3605700; 500600, 3605800; 500100, 3605800; 500100, 3605900; 499900, 3605900; thence north returning to the point of beginning on the CCVPD boundary at UTM NAD27 x-coordinate 499900; excluding the proposed State Route 125 easement.

(ii) *Unit 3b:* From USGS 1:24,000 quadrangle map Otay Mesa, the southern half of the Immigration and Nationalization Service land at Brown Field.

(iii) *Unit 3c:* From USGS 1:24,000 quadrangle map Otay Mesa, beginning on the CSDMjA boundary at UTM NAD27 y-coordinate 3604000; thence south following the CSDMjA boundary to UTM NAD27 x-coordinate 509200; thence south following UTM NAD27 coordinates 509200, 3602900; 509000, 3602900; 509000, 3602800; 509100, 3602800; 509100, 3602700; 508200, 3602700; 508200, 3603200; 508100, 3603200; 508100, 3603400; 508000, 3603400; 508000, 3603600; 508100, 3603600; 508100, 3603700; 508200, 3603700; 508200, 3603800; 508400, 3603800; 508400, 3604000; returning to the point of beginning on the CSDMjA boundary at UTM NAD27 y-coordinate 3604000.

(iv) NOTE: Unit 3 map follows:



Family Asteraceae: *Deinandra increscens* ssp. *villosa* (Gaviota tarplant)

(1) Critical habitat units are depicted for Santa Barbara County, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Deinandra increscens* ssp. *villosa* are the habitat components that provide:

(i) Sandy soils associated with coastal terraces adjacent to the coast or uplifted marine sediments at interior sites up to 5.6 km (3.5 mi) inland from the coast, and

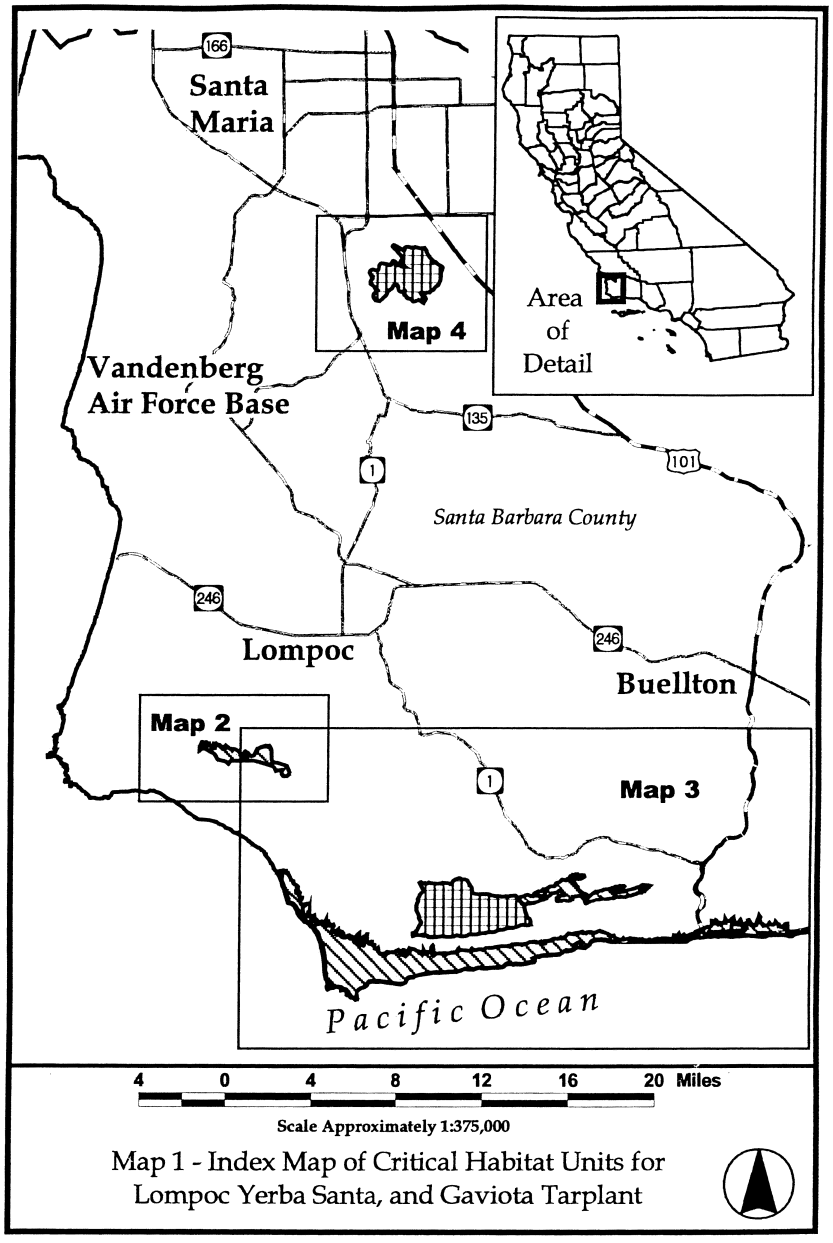
(ii) Plant communities that support associated species, including needlegrass grassland and coastal sage scrub communities, particularly where the following associated species are found: Needlegrass species (*Nassella* spp.), California sagebrush (*Artemisia californica*), coyote bush (*Baccharis pilularis*), sawtooth golden bush (*Hazardia squarrosa*), and California buckwheat (*Eriogonum fasciculatum*).

(3) Critical habitat does not include existing features and structures, such as buildings, roads, aqueducts, railroads, airports, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

CRITICAL HABITAT MAP UNITS

(i) Data layers defining map units were mapped using Universal Transverse Mercator (UTM) coordinates.

(ii) NOTE: Index map follows:

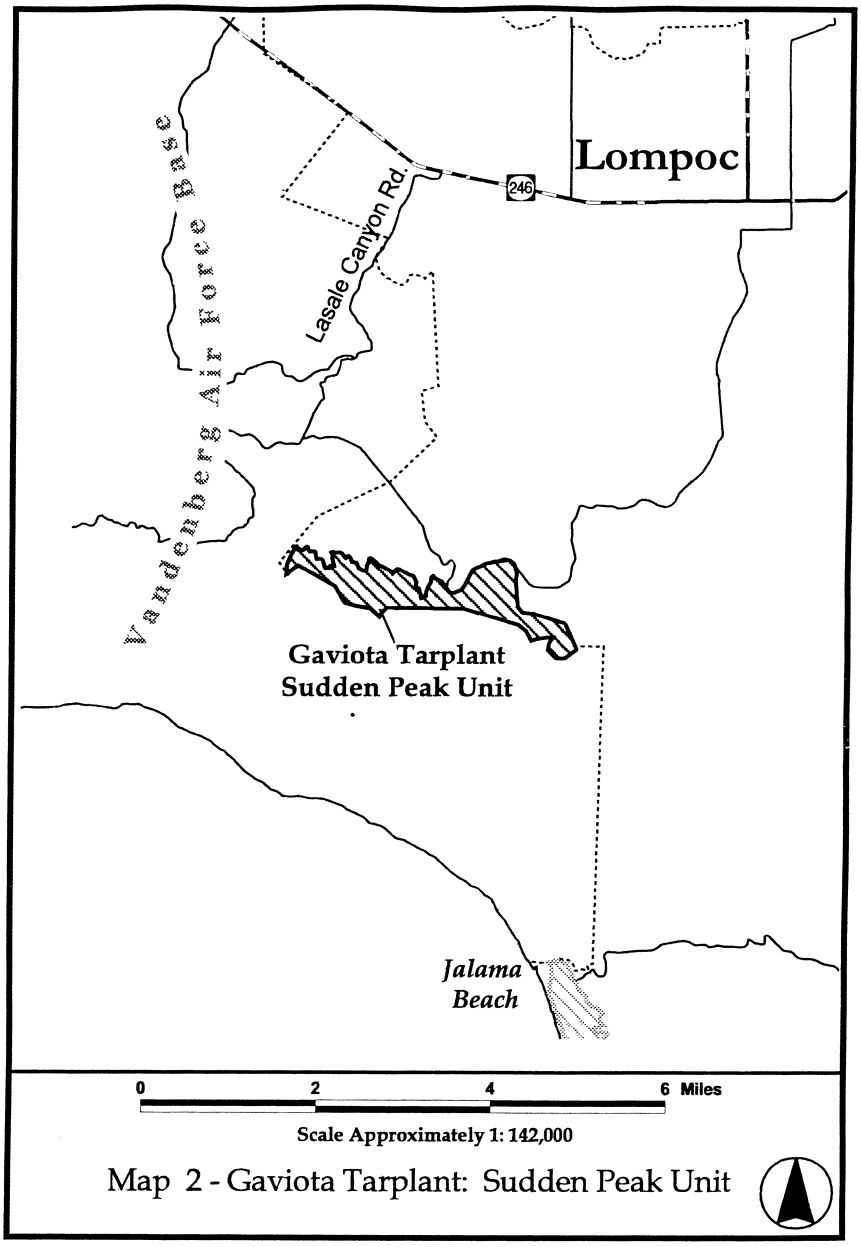


(4) Sudden Peak Unit: Santa Barbara County, California.

(i) From USGS 1:24,000 quadrangle maps Tranquillon Mountain, Lompoc Hills, Santa Rosa Hills, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 729958, 3827610; 729742, 3827440; 729579, 3827450; 729425, 3827600; 729439, 3827710; 729508, 3827830; 729376,

3827830; 729212, 3827800; 729116, 3827760; 729008, 3827960; 728870, 3828070; 727858, 3828370; 727151, 3828380; 726435, 3828390; 726349, 3828300; 726296, 3828210; 726142, 3828370; 725873, 3828420; 725662, 3828470; 725478, 3828790; 724801, 3829170; 724588, 3829000; 724595, 3829180; 724666, 3829350; 724689, 3829390; 724710, 3829420; 724742, 3829500; 724748, 3829510; 724772, 3829520; 724802, 3829490; 724864, 3829440; 724894, 3829450; 724903, 3829460; 724923, 3829490; 724952, 3829510; 724982, 3829500; 724993, 3829460; 725000, 3829450; 725013, 3829430; 725045, 3829430; 725100, 3829430; 725105, 3829430; 725116, 3829420; 725120, 3829410; 725124, 3829350; 725129, 3829320; 725139, 3829300; 725145, 3829290; 725196, 3829290; 725210, 3829290; 725229, 3829280; 725242, 3829270; 725252, 3829260; 725266, 3829230; 725267, 3829200; 725289, 3829140; 725294, 3829130; 725325, 3829110; 725354, 3829110; 725375, 3829150; 725383, 3829160; 725444, 3829140; 725456, 3829150; 725460, 3829160; 725460, 3829180; 725452, 3829200; 725437, 3829230; 725430, 3829260; 725427, 3829310; 725432, 3829350; 725406, 3829410; 725427, 3829420; 725435, 3829420; 725496, 3829400; 725526, 3829410; 725556, 3829420; 725581, 3829410; 725586, 3829410; 725617, 3829380; 725651, 3829330; 725679, 3829310; 725708, 3829340; 725738, 3829340; 725774, 3829300; 725786, 3829260; 725796, 3829240; 725862, 3829220; 725869, 3829220; 725888, 3829190; 725912, 3829130; 725917, 3829120; 725956, 3829090; 725986, 3829080; 726017, 3829070; 726048, 3829070; 726056, 3829090; 726061, 3829130; 726069, 3829170; 726090, 3829220; 726100, 3829280; 726112, 3829300; 726130, 3829310; 726163, 3829290; 726242, 3829220; 726253, 3829200; 726284, 3829170; 726314, 3829160; 726333, 3829160; 726478, 3829080; 726500, 3829060; 726529, 3829020; 726558, 3829050; 726570, 3829080; 726584, 3829090; 726616, 3829100; 726651, 3829100; 726738, 3829050; 726768, 3829040; 726799, 3829020; 726830, 3829000; 726907, 3828970; 726925, 3828950; 726935, 3828920; 726942, 3828910; 726964, 3828860; 726961, 3828830; 726952, 3828800; 726957, 3828760; 726995, 3828750; 727013, 3828740; 727022, 3828720; 727026, 3828680; 727046, 3828620; 727053, 3828560; 727083, 3828570; 727121, 3828590; 727140, 3828600; 727145, 3828620; 727143, 3828660; 727168, 3828720; 727186, 3828780; 727223, 3828840; 727232, 3828870; 727242, 3828940; 727251, 3828960; 727273, 3828970; 727281, 3828970; 727291, 3828960; 727312, 3828930; 727343, 3828910; 727414, 3828880; 727433, 3828870; 727521, 3828760; 727579, 3828670; 727659, 3828660; 727724, 3828680; 727806, 3828720; 727873, 3828820; 728014, 3829090; 728073, 3829130; 728179, 3829170; 728262, 3829210; 728345, 3829230; 728412, 3829250; 728414, 3829240; 728688, 3829280; 728783, 3829210; 728830, 3829050; 728820, 3828900; 728839, 3828590; 728863, 3828400; 728940, 3828300; 729160, 3828270; 729685, 3828110; 729721, 3828100; 729755, 3828070; 729958, 3827610.

(ii) NOTE: Map 2 follows:



(5) Conception-Gaviota Unit: Santa Barbara County, California.

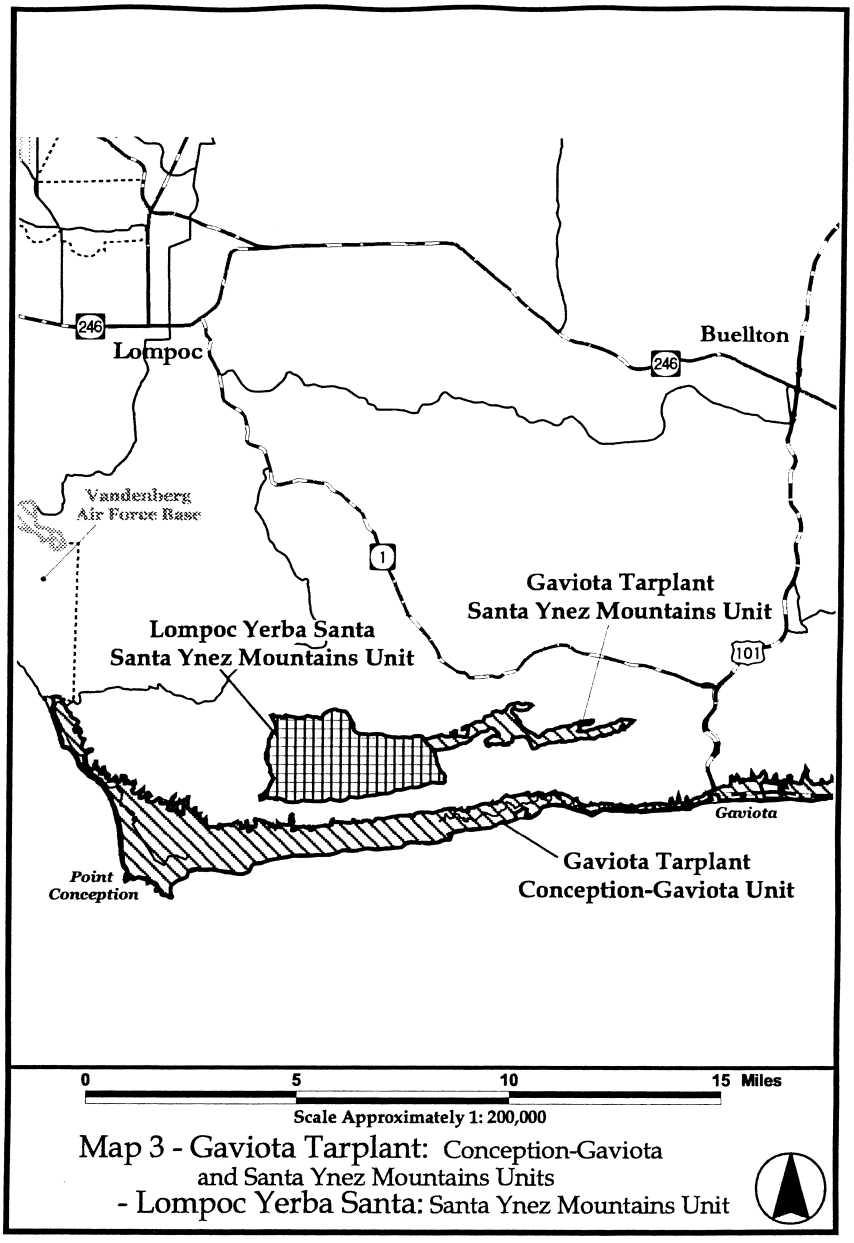
(i) From USGS 1:24,000 quadrangle maps Gaviota, Lompoc Hills, Point Conception, Sacate, and Tranquillon Mountain, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 729837, 3821770; 729855, 3821690; 729971, 3821490; 730078, 3821250;

730181, 3821200; 730191, 3821100; 730302, 3820990; 730393, 3820950; 730490, 3820870; 730490, 3820840; 730445, 3820790; 730431, 3820750; 730455, 3820690; 730520, 3820630; 730464, 3820600; 730344, 3820590; 730333, 3820570; 730346, 3820500; 730377, 3820470; 730496, 3820520; 730587, 3820480; 730593, 3820450; 730530, 3820400; 730514, 3820360; 730523, 3820330; 730625, 3820210; 730716, 3820200; 730731, 3820190; 730718, 3820160; 730653, 3820100; 730646, 3819980; 730614, 3819910; 730617, 3819860; 730679, 3819780; 730729, 3819750; 730822, 3819770; 730967, 3819830; 730997, 3819830; 731013, 3819810; 730970, 3819750; 730793, 3819640; 730748, 3819560; 730764, 3819530; 730761, 3819440; 730779, 3819410; 730783, 3819260; 730921, 3819080; 731051, 3819040; 731073, 3819060; 731099, 3819240; 731134, 3819290; 731148, 3819290; 731160, 3819400; 731174, 3819330; 731164, 3819290; 731149, 3819290; 731155, 3819210; 731165, 3819180; 731211, 3819140; 731219, 3819020; 731282, 3818980; 731303, 3818890; 731356, 3818870; 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(ii) NOTE: Map 3 follows:



(6) Santa Ynez Mountains Unit (Gaviota tarplant): Santa Barbara County, California.

(i) From USGS 1:24,000 quadrangle maps Santa Rosa Hills and Sacate, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 747710, 3821530; 747708, 3821520; 747676, 3821490; 747651, 3821470; 747601, 3821430; 747545, 3821390; 747491, 3821350; 747409, 3821330;

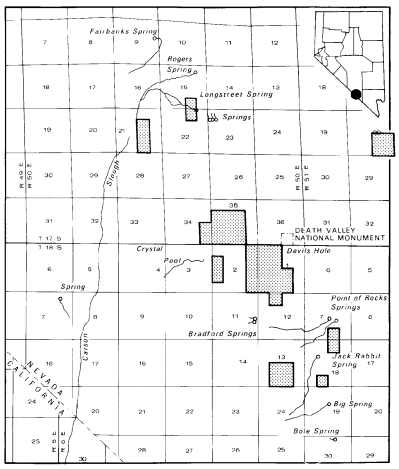
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Family Asteraceae: *Enceliopsis nudicaulis* var. *corrugata* (Ash Meadows sunray). Nevada, Nye County, Ash Meadows: SW¼SE¼ sec. 15, SW¼NE¼ and W½SE¼ sec. 21, NW¼NE¼ sec. 22, E½SE¼ sec. 34, SW¼NE¼, S½NW¼, SW¼, and W½SE¼ sec. 35, T17S R50E. SE¼ sec. 20, T17S, R51E. NW¼, SW¼, and W½SE¼ sec. 1, E½NE¼, SW¼NW¼, NW¼SW¼, and E½SE¼ sec. 2, NE¼NW¼S. 12, E½SW¼ and W½SE¼ sec. 13, T18S, R50E. SW¼SE¼ sec. 7, NW¼NE¼ and SE¼SW¼ sec. 18, T18S, R51E.

Known primary constituent elements include dry washes or whitish saline soil associated with outcrops of pale whitish limestone.

NOTE: Map follows:



Family Asteraceae: *Erigeron Parishii* (Parish's Daisy)

(1) Critical habitat units are depicted for San Bernardino County, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Erigeron parishii* are those habitat components that are essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements of critical habitat for this species are listed below and consist of, but are not limited to:

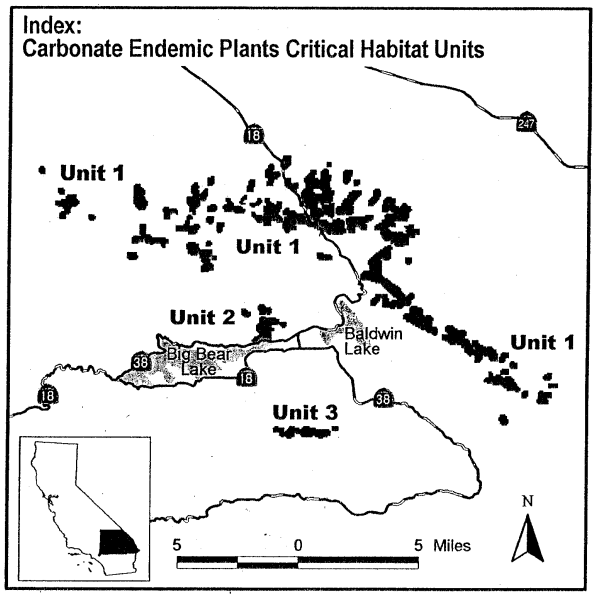
(i) Soils derived primarily from upstream or upslope limestone, dolomite, or quartz monzonite parent materials that occur on dry, rocky hillsides, shallow drainages, or outwash plains at elevations between 1,171 and 1,950 m (3,842 and 6,400 ft);

(ii) Soils with intact, natural surfaces that have not been substantially altered by land use activities (*e.g.*, graded, excavated, recontoured, or otherwise altered by ground-disturbing equipment); and

(iii) Associated plant communities that have areas with an open canopy cover.

(3) Existing features and structures, such as buildings, active mines, paved or unpaved roads, other paved or cleared areas, lawns, and other urban landscaped areas, are not likely to contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species or primary constituent elements in adjacent critical habitat.

(i) Note: Index map follows:



(4) Northeastern Slope Unit, San Bernardino County, California.

(i) From USGS 1:24,000 quadrangle maps Fawnskin, Big Bear City, and Onyx Peak, California.

(ii) Subunit 1a: land bounded by the following UTM11 NAD27 coordinates (E, N): 507200, 3802000; 507400, 3802000; 507400, 3801800; 507500, 3801800; 507500, 3801600; 507400, 3801600; 507400, 3801500; 507500, 3801500; 507500, 3801200; 507600, 3801200; 507600, 3801300; 507700, 3801300; 507700, 3801400; 507800, 3801400; 507800, 3801500; 507900, 3801500; 507900, 3801600; 508100, 3801600; 508100, 3801100; 508000, 3801100; 508000, 3800900; 507900, 3800900; 507900, 3800800; 507700, 3800800; 507700, 3800900; 507600, 3800900; 507600, 3801000; 507500, 3801000; 507500, 3800700; 507400, 3800700; 507400, 3800300; 507300, 3800300; 507300, 3799900; 507100, 3799900; 507100, 3800100; 506900, 3800100; 506900, 3800500; 506800, 3800500; 506800, 3800700; 506700, 3800700; 506700, 3801100; 507100, 3801100; 507100, 3801400; 507000, 3801400; 507000, 3801800; 507100, 3801800; 507100, 3801900; 507200, 3801900; and 507200, 3802000.

(iii) Subunit 1b: Land bounded by the following UTM11 NAD27 coordinates (E, N): 508300, 3802400; 508500, 3802400; 508500, 3801900; 508400, 3801900; 508400, 3801800; 508100, 3801800; 508100, 3802300; 508300, 3802300; and 508300, 3802400.

(iv) Subunit 1c: Land bounded by the following UTM11 NAD27 coordinates (E, N): 509700, 3800500; 510200, 3800500; 510200, 3800200; 510100, 3800200; 510100, 3800100; 509700, 3800100; and 509700, 3800500.

(v) Subunit 1d: Land bounded by the following UTM11 NAD27 coordinates (E, N): 510300, 3801000; 510500, 3801000; 510500, 3800800; 510300, 3800800; and 510300, 3801000.

(vi) Subunit 1e: Land bounded by the following UTM11 NAD27 coordinates (E, N): 510900, 3802200; 511200, 3802200; 511200, 3801700; 511100, 3801700; 511100, 3801400; 510700, 3801400; 510700, 3801800; 510800, 3801800; 510800, 3802100; 510900, 3802100; and 510900, 3802200.

(vii) Subunit 1f: Land bounded by the following UTM11 NAD27 coordinates (E, N): 511400, 3801000; 511600, 3801000; 511600, 3800900; 511700, 3800900; 511700, 3800700; 511600, 3800700; 511600, 3800600; 511500, 3800600; 511500, 3800500; 511200, 3800500; 511200, 3800400; 511000, 3800400; 511000, 3800500; 510900, 3800500; 510900, 3800600; 511000, 3800600; 511000, 3800700; 511300, 3800700; 511300, 3800800; 511400, 3800800; and 511400, 3801000.

(viii) Subunit 1g: Land bounded by the following UTM11 NAD27 coordinates (E, N): 511800, 3800000; 512200, 3800000; 512200, 3799900; 512300, 3799900; 512300, 3799800; 512400, 3799800; 512400, 3799800; 512400, 3799500; 512300, 3799400; 511900, 3799400; 511900, 3799500; 511700, 3799500; 511700, 3799400; 511500, 3799400; 511500, 3799500; 511400, 3799500; 511400, 3799600; 511300, 3799600; 511300, 3799800; 511800, 3799800; and 511800, 3800000.

(ix) Subunit 1h: Land bounded by the following UTM11 NAD27 coordinates (E, N): 512100, 3800700; 512400, 3800700; 512400, 3800600; 512500, 3800600; 512500, 3800400; 512600, 3800400; 512600, 3800300; 512700, 3800300; 512700, 3800100;

512600, 3800100; 512600, 3800000; 512300, 3800000; 512300, 3800300; 512200, 3800300; 512200, 3800200; 512100, 3800200; 512100, 3800100; 511900, 3800100; 511900, 3800200; 511800, 3800200; 511800, 3800400; 511900, 3800400; 511900, 3800500; 512100, 3800500; and 512100, 3800700.

(x) Subunit 1i: Land bounded by the following UTM11 NAD27 coordinates (E, N): 512200, 3803200; 512400, 3803200; 512400, 3802900; 512100; 3803100; 512500, 3803100; 512500, 3802800; 512400, 3802800; 512400, 3802600; 512500, 3802600; 512500, 3802700; 512800, 3802700; 512800, 3802600; 512900, 3802600; 512900, 3802400; 512800, 3802400; 512800, 3802300; 512700, 3802300; 512700, 3802200; 512500, 3802200; 512500, 3802000; 512400, 3802000; 512400, 3801800; 512000, 3801800; 512000, 3802100; 512100, 3802100; 512100, 3802300; 511900, 3802300; 511900, 3802800; 512000, 3802800; 512000, 3802900; 512100, 3802900; 512100, 3803100; 512200, 3803100; and 512200, 3803200.

(xi) Subunit 1j: Land bounded by the following UTM11 NAD27 coordinates (E, N): 513300, 3802300; 513600, 3802300; 513600, 3802000; 513700, 3802000; 513700, 3801900; 513800, 3801900; 513800, 3802000; 514100, 3802000; 514100, 3801600; 514000, 3801600; 514000, 3801400; 513800, 3801400; 513800, 3801500; 513600, 3801500; 513600, 3801600; 513400, 3801600; 513400, 3801700; 513300, 3801700; 513300, 3801800; 513200, 3801800; 513200, 3802200; 513300, 3802200; and 513300, 3802300.

(xii) Subunit 1k: Land bounded by the following UTM11 NAD27 coordinates (E, N): 515800, 3802900; 516000, 3802900; 516000, 3802800; 516100, 3802800; 516100, 3802500; 516300, 3802500; 516300, 3802200; 516000, 3802200; 516000, 3802000; 516100, 3802000; 516100, 3801900; 516200, 3801900; 516200, 3801700; 516300, 3801700; 516300, 3801500; 516400, 3801500; 516400, 3800800; 516300, 3800800; 516300, 3800700; 516000, 3800700; 516000, 3801300; 515900, 3801300; 515900, 3801400; 515800, 3801400; 515800, 3801600; 515700, 3801600; 515700, 3801700; 515100, 3801700; 515100, 3801800; 515000, 3801800; 515000, 3801500; 515100, 3801500; 515100, 3801200; 515000, 3801200; 515000, 3801100; 514900, 3801100; 514900, 3800700; 514400, 3800700; 514400, 3801000; 514300, 3801000; 514300, 3801400; 514400, 3801400; 514400, 3801500; 514500, 3801500; 514500, 3801600; 514600, 3801600; 514600, 3801600; 514600, 3802100; 514700, 3802100; 514700, 3802400; 514800, 3802400; 514800, 3802600; 514900, 3802600; 514900, 3802800; 515300, 3802800; 515300, 3802500; 515200, 3802500; 515200, 3802300; 515400, 3802300; 515400, 3802200; 515400, 3802200; 515500, 3802200; 515500, 3802100; 515600, 3802700; 515700, 3802700; 515700, 3802800; 515800, 3802800, and 515800; 3802900.

(xiii) Subunit 1l: Land bounded by the following UTM11 NAD27 coordinates (E, N): 515600, 3801200; 515900, 3801200; 515900, 3800800; 515500, 3800800; 515500, 3801100; 515600, 3801100; and 515600, 3801200.

(xiv) Subunit 1m: Land bounded by the following UTM11 NAD27 coordinates (E, N): 514900, 3799900; 514900, 3800000; 515000, 3800000; 515000, 3800200; 514900, 3800200; 514900, 3800500; 515000, 3800500; 515000, 3800600; 515400, 3800600; 515400, 3800200; 515500, 3800200; 515500, 3799700; 515400, 3799700; 515400, 3799600; 516000, 3799600; 516000, 3799500; 516100, 3799500; 516100, 3799200; 516500, 3799200; 516500, 3799100; 516600, 3799100; 516600, 3798900; 516500, 3798900; 516500, 3798800; 516200, 3798800; 516200, 3798800; 516200, 3798900; 516000, 3798900; 516000, 3799100; 515900, 3799100; 515900, 3799000; 515700, 3799000; 515700, 3799100; 515600, 3799100; 515600, 3799000; 515200, 3799000; 515200, 3799100; 514800, 3799100; 514800, 3799200; 514700, 3799200; 514700, 3799300; 514100, 3799300; 514100, 3799400; 514000, 3799400; 514000, 3799300; 513600, 3799300; 513600, 3799400; 513500, 3799400; 513500, 3799600; 513600, 3799600; 513600, 3799700; 513500, 3799700; 513500, 3800000; 513600, 3800000; 513600, 3800100; 513700, 3800100; 513700, 3800200; 513900, 3800200; 513900; 3800000; 514700, 3800000; 514700, 3799900; and 514900, 3799900; excluding land bounded by 514900, 3799900; 514900, 3799700; 515000, 3799700; 515000, 3799900; and 514900, 3799900.

(xv) Subunit 1n: Land bounded by the following UTM11 NAD27 coordinates (E, N): 517300, 3801000; 517800, 3801000; 517800, 3800600; 517600, 3800600; 517600, 3800300; 517500, 3800300; 517500, 3800200; 517000, 3800200; 517000, 3800700; 517100, 3800700; 517100, 3800800; 517200, 3800800; 517200, 3800900; 517300, 3800900; and 517300, 3801000.

(xvi) Subunit 1o: Land bounded by the following UTM11 NAD27 coordinates (E, N): 519200, 3801600; 519500, 3801600; 519500, 3801500; 519600, 3801500; 519600, 3801100; 519500, 3801100; 519500, 3800900; 519400, 3800900; 519400, 3800800; 519300, 3800800; 519300, 3800700; 519200, 3800700; 519200, 3800600; 519100, 3800600; 519100, 3800500; 518800, 3800500; 518800, 3800900; 518900, 3800900; 518900, 3801000; 519000, 3801000; 519000, 3801100; 519100, 3801100; 519100, 3801500; 519200, 3801500; and 519200, 3801600.

(xvii) Subunit 1p: Land bounded by the following UTM11 NAD27 coordinates (E, N): 520000, 3801100; 520300, 3801100; 520300, 3800700; 520100, 3800700; 520100, 3800600; 519900, 3800600; 519900, 3800700; 519800, 3800700; 519800, 3800900; 519900, 3800900; 519900, 3801000; 520000, 3801000; and 520000, 3801100.

(xviii) Subunit 1q: Land bounded by the following UTM11 NAD27 coordinates (E, N): 521100, 3800700; 521300, 3800700; 521300, 3800600; 521400, 3800600; 521400, 3800500; 521600, 3800500; 521600, 3800300; 521700, 3800300; 521700, 3800200; 521600, 3800200; 521600, 3800100; 521500, 3800100; 521500, 3800000; 521300, 3800000; 521300, 3799900; 521200, 3799900; 521200, 3799700; 521000, 3799700; 521000, 3799600; 520900, 3799600; 520900, 3799500; 520500, 3799500; 520500, 3799100; 520300, 3799100; 520300, 3799300; 520200, 3799300; 520200, 3799200; 520000, 3799200; 520000, 3799000; 520200, 3799000; 520200, 3798900; 520300, 3798900; 520300, 3798800; 520700, 3798800; 520700, 3798600; 520800, 3798600; 520800, 3798700; 521500, 3798700; 521500, 3798800; 521300, 3798800; 521300, 3798900; 521700, 3798900; 521700, 3799000; 522000, 3799000; 522000, 3798900; 522100, 3798900; 522100, 3798700; 522000, 3798700; 522000, 3798600; 521900, 3798600; 521900, 3798400; 521500, 3798400; 521500, 3798100; 521300, 3798100; 521300, 3798000; 521200, 3798000; 521200, 3797800; 520600, 3797800; 520600, 3797900; 520500, 3797900;

520500, 3798100; 520400, 3798100; 520400, 3798200; 520300, 3798200; 520300, 3798400; 520200, 3798400; 520200, 3798500; 520100, 3798500; 520100, 3798600; 519600, 3798600; 519600, 3798900; 519200, 3798900; 519200, 3799200; 519300, 3799200; 519300, 3799300; 519500, 3799300; 519500, 3799400; 519700, 3799400; 519700, 3799500; 519900, 3799500; 519900, 3799600; 520100, 3799600; 520100, 3799700; 520300, 3799700; 520300, 3799800; 520400, 3799800; 520400, 3799900; 520500, 3799900; 520500, 3800100; 520600, 3800100; 520600, 3800300; 520800, 3800300; 520800, 3800400; 520900, 3800400; 520900, 3800500; 521000, 3800500; 521000, 3800600; 521100, 3800600; and 521100, 3800700.

(xix) Subunit 1r: Land bounded by the following UTM11 NAD27 coordinates (E, N): 519200, 3797300; 519600, 3797300; 519600, 3796900; 519500, 3796900; 519500, 3796800; 519400, 3796800; 519400, 3796600; 519300, 3796600; 519300, 3796500; 519500, 3796500; 519500, 3796400; 519600, 3796400; 519600, 3796100; 519700, 3796100; 519700, 3796000; 519600, 3796000; 519600, 3795400; 519300, 3795400; 519300, 3795500; 518500, 3795500; 518500, 3795900; 518800, 3795900; 518800, 3796000; 519000, 3796000; 519000, 3796100; 519100, 3796100; 519100, 3796200; 519200, 3796200; 519200, 3796500; 518900, 3796500; 518900, 3796600; 518800, 3796600; 518800, 3796900; 518900, 3796900; 518900, 3797000; 519100, 3797000; 519100, 3797200; 519200, 3797200; and 519200, 3797300.

(xx) Subunit 1s: Land bounded by the following UTM11 NAD27 coordinates (E, N): 520000, 3797600; 520300, 3797600; 520300, 3797100; 520100, 3797100; 520100, 3797000; 520000, 3797000; 520000, 3796900; 519800, 3796900; 519800, 3797000; 519700, 3797000; 519700, 3797400; 519800, 3797400; 519800, 3797500; 520000, 3797500; and 520000, 3797600.

(xxi) Subunit 1t: Land bounded by the following UTM11 NAD27 coordinates (E, N): 521300, 3797100; 521700, 3797100; 521700, 3796700; 521600, 3796700; 521600, 3796600; 521400, 3796600; 521400, 3796700; 521300, 3796700; and 521300, 3797100.

(xxii) Subunit 1u: Land bounded by the following UTM11 NAD27 coordinates (E, N): 519300, 3794600; 519700, 3794600; 519700, 3794300; 519600, 3794300; 519600, 3794100; 519500, 3794100; 519500, 3794000; 519400, 3794000; 519400, 3793900; 519300, 3793900; 519300, 3793800; 519000, 3793800; 519000, 3794200; 519100, 3794200; 519100, 3794300; 519200, 3794300; 519200, 3794400; 519300, 3794400; and 519300, 3794600.

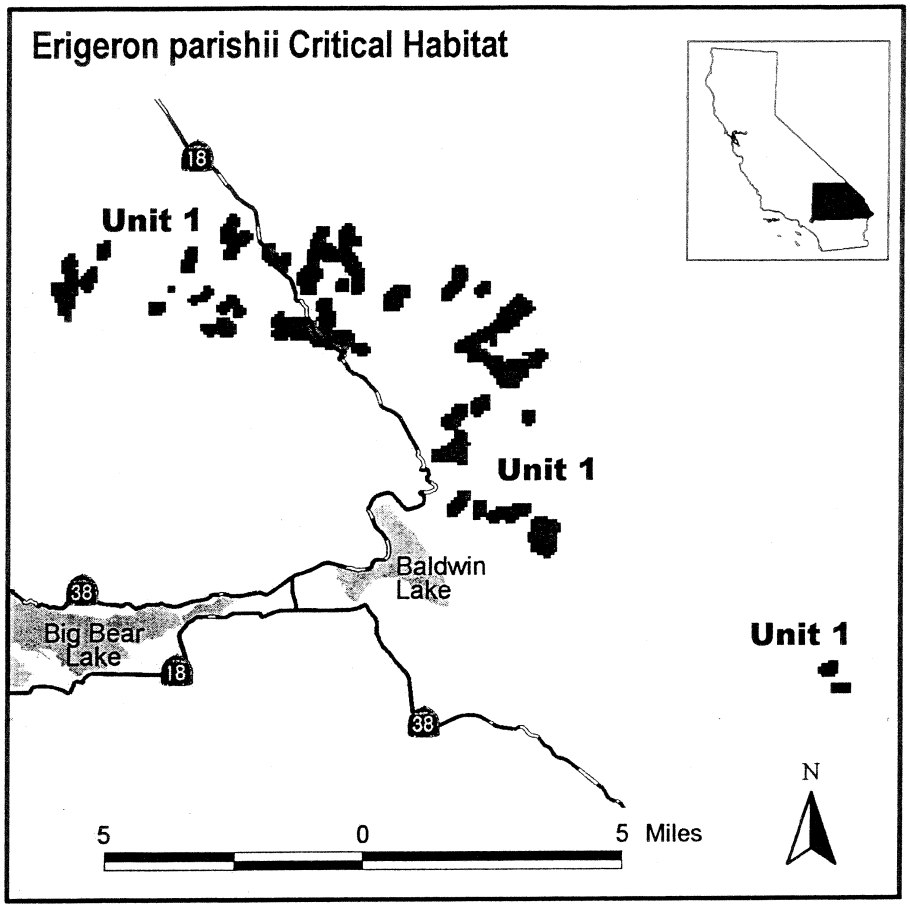
(xxiii) Subunit 1v: Land bounded by the following UTM11 NAD27 coordinates (E, N): 519800, 3794300; 520200, 3794300; 520200, 3793900; 520300, 3793900; 520300, 3794000; 520500, 3794000; 520500, 3794100; 521000, 3794100; 521000, 3794200; 521600, 3794200; 521600, 3793900; 521500, 3793900; 521500, 3793800; 521200, 3793800; 521200, 3793700; 521100, 3793700; 521100, 3793600; 520800, 3793600; 520800, 3793700; 520600, 3793700; 520600, 3793600; 520300, 3793600; 520300, 3793700; 520200, 3793700; 520200, 3793800; 520000, 3793800; 520000, 3793700; 519800, 3793700; and 519800, 3794300.

(xxiv) Subunit 1w: Land bounded by the following UTM11 NAD27 coordinates (E, N): 521700, 3793800; 522100, 3793800; 522100, 3793700; 522400, 3793700; 522400, 3793600; 522500, 3793600; 522500, 3793300; 522400, 3793300; 522400, 3792700; 522300, 3792700; 522300, 3792600; 522200, 3792600; 522200, 3792500; 522000, 3792500; 522000, 3792600; 521800, 3792600; 521800, 3792700; 521600, 3792700; 521600, 3793000; 521500, 3793000; 521500, 3793300; 521600, 3793300; 521600, 3793700; 521700, 3793700; and 521700, 3793800.

(xxv) Subunit 1x: Land bounded by the following UTM11 NAD27 coordinates (E, N): 530800, 3789300; 531100, 3789300; 531100, 3788900; 531000, 3788900; 531000, 3788800; 530600, 3788800; 530600, 3788900; 530500, 3788900; 530500, 3789100; 530600, 3789100; 530600, 3789200; 530800, 3789200; and 530800, 3789300.

(xxvi) Subunit 1y: Land bounded by the following UTM11 NAD27 coordinates (E, N): 530900, 3788600; 531500, 3788600; 531500, 3788300; 530900, 3788300; and 530900, 3788600.

(xxvii) Note: *Erigeron parishii* map follows.

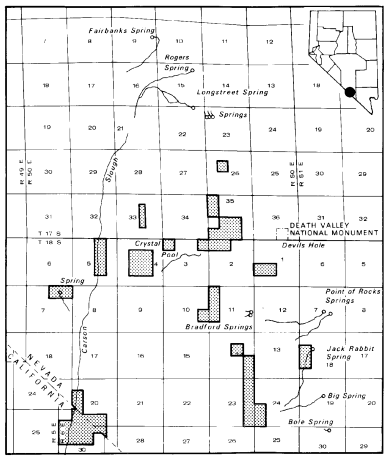


Family Asteraceae: *Grindelia fraxinopratensis* (Ash Meadows gumplant). California, Inyo County, Ash Meadows: NE¼, E½NW¼, SW¼NW¼, N½SW¼, and NW¼SE¼ sec. 30, T26N, R6E.

Nevada, Nye County, Ash Meadows: SE¼NW¼ sec. 26, W½SW¼NE¼ and W½NW¼SE¼ sec. 33, W½NW¼, SW¼SW¼, E½SE¼, and W½SE¼ sec. 35, T17S, R50E. N½SW¼ sec. 1, N½NW¼ sec. 2, NE¼NE¼ and NW¼NW¼ sec. 3, SW¼NE¼, SE¼NW¼, NE¼SW¼, and, NW¼SE¼ sec. 4; W½NE¼ and NW¼SE¼ sec. 5, N½NE¼ sec. 7, NE¼SE¼ sec. 10, W½NW¼ and NW¼SW¼ sec. 11, SW¼NE¼ and E½SE¼ sec. 14; SW¼NW¼, SW¼SE¼, W½SW¼, and SE¼SW¼ sec. 20 northeast of the Nevada-California boundary, E½NE¼ and E½SE¼ sec. 23, W½SW¼ sec. 24, NW¼NE¼ sec. 29 northeast of the Nevada-California boundary, T18S, R50E. SW¼NW¼ and NW¼SW¼ sec. 18, T18S, R51E.

Known primary constituent elements include saltgrass meadows along streams and pools or drier areas with alkali clay soils.

NOTE: Map follows:



Family Asteraceae: *Holocarpha macradenia* (Santa Cruz tarplant)

(1) Critical habitat units are depicted for Contra Costa, Santa Cruz, and Monterey Counties, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Holocarpha macradenia* are the habitat components that provide:

(i) Soils associated with coastal terrace prairies, including the Watsonville, Tierra, Elkhorn, Santa Inez, and Pinto series.

(ii) Plant communities that support associated species, including native grasses such as *Nassella* sp.(needlegrass) and *Danthonia californica* (California oatgrass); native herbaceous species such as members of the genus *Hemizonia* (other tarplants), *Perideridia gairdneri* (Gairdner's yampah), *Plagiobothrys diffusus* (San Francisco popcorn flower), and *Trifolium buckwestiorum* (Santa Cruz clover); and

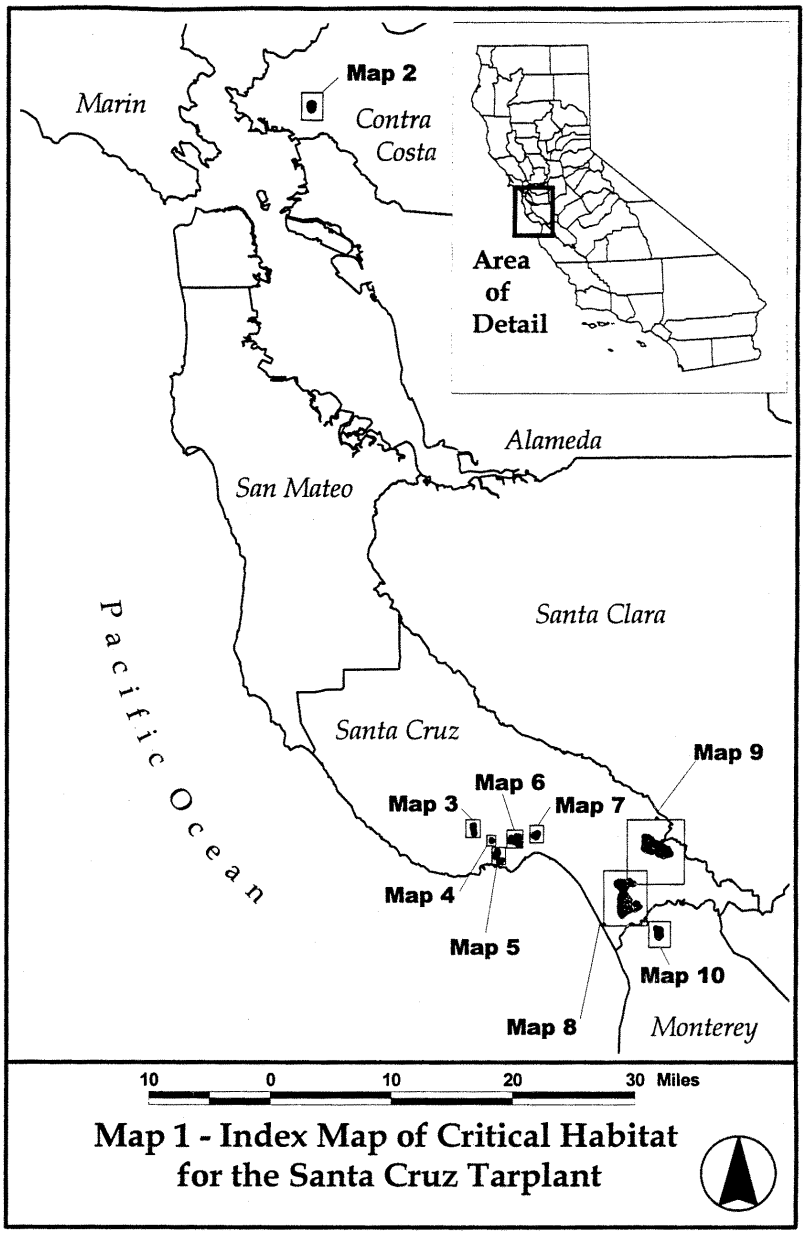
(iii) Physical processes, particularly soils and hydrologic processes, that maintain the soil structure and hydrology that produce the seasonally saturated soils characteristic of *Holocarpha macradenia* habitat.

(3) Critical habitat does not include existing features and structures, such as buildings, roads, aqueducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) *Critical Habitat Map Units.*

(i) Data layers defining map units were created on a base of USGS 7.5′ quadrangles obtained from the State of California's Stephen P. Teale Data Center. Critical habitat units were then mapped using UTM coordinates.

(ii) Map 1—Index map follows:



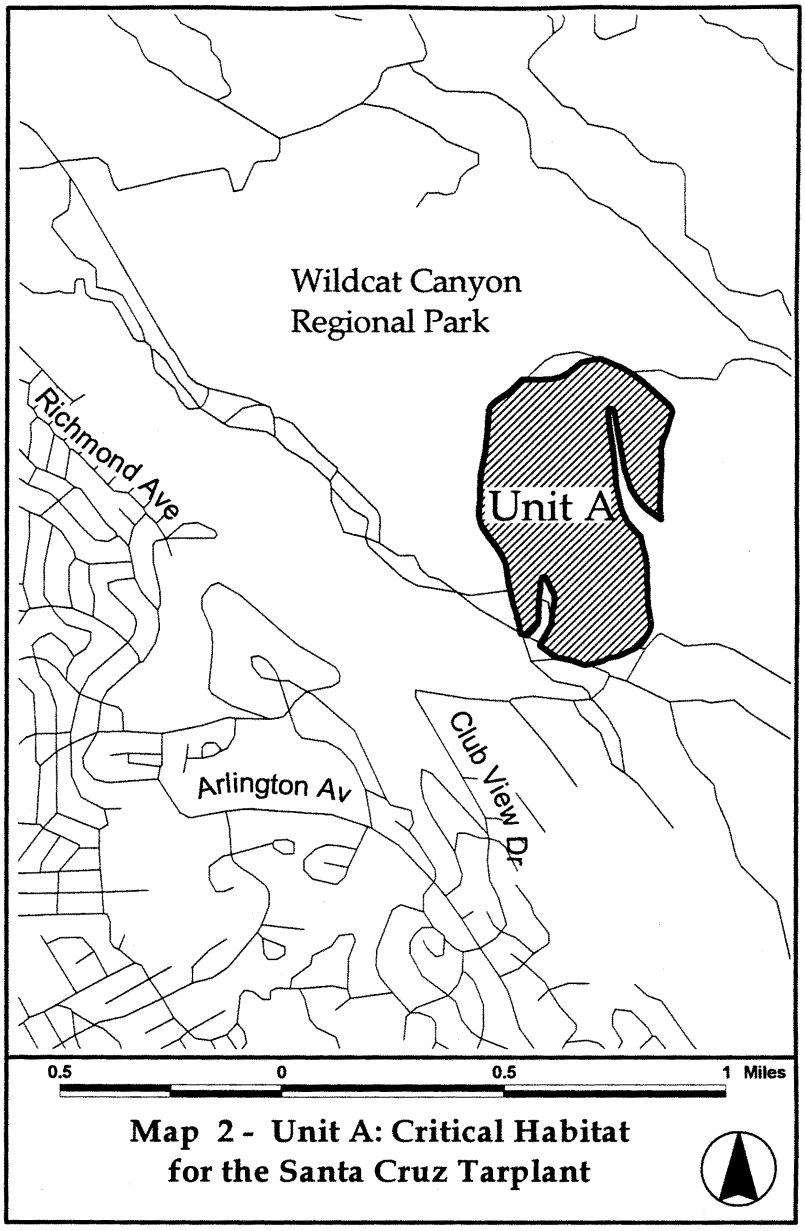
Map 1 - Index Map of Critical Habitat for the Santa Cruz Tarplant

(5) *Unit A: Mezue.* Contra Costa County, California.

(i) From USGS 1:24,000 quadrangle map Richmond. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 562046, 4199420; 562047, 4199460; 562063, 4199550; 562066, 4199570; 562070, 4199600; 562073, 4199650; 562074, 4199670; 562076, 4199690; 562076, 4199690;

562079, 4199700; 562085, 4199710; 562100, 4199720; 562116, 4199730; 562133, 4199740; 562149, 4199750; 562179, 4199780; 562190, 4199800; 562230, 4199800; 562270, 4199800; 562299, 4199800; 562324, 4199800; 562357, 4199820; 562382, 4199840; 562403, 4199860; 562466, 4199870; 562548, 4199840; 562579, 4199820; 562616, 4199790; 562703, 4199720; 562717, 4199700; 562723, 4199690; 562724, 4199680; 562722, 4199670; 562712, 4199650; 562705, 4199620; 562699, 4199600; 562690, 4199580; 562684, 4199550; 562687, 4199490; 562684, 4199440; 562683, 4199390; 562680, 4199340; 562686, 4199300; 562629, 4199340; 562599, 4199370; 562577, 4199410; 562556, 4199480; 562520, 4199680; 562513, 4199690; 562500, 4199690; 562496, 4199680; 562498, 4199650; 562520, 4199510; 562526, 4199420; 562537, 4199380; 562544, 4199340; 562567, 4199290; 562598, 4199250; 562615, 4199240; 562621, 4199200; 562629, 4199170; 562636, 4199120; 562637, 4199070; 562638, 4199010; 562640, 4198990; 562645, 4198960; 562649, 4198920; 562648, 4198910; 562632, 4198880; 562615, 4198860; 562592, 4198840; 562554, 4198820; 562530, 4198810; 562499, 4198800; 562483, 4198800; 562465, 4198790; 562417, 4198780; 562371, 4198800; 562314, 4198810; 562255, 4198850; 562280, 4198890; 562291, 4198910; 562299, 4198930; 562299, 4198950; 562301, 4198970; 562309, 4199010; 562308, 4199030; 562306, 4199040; 562293, 4199060; 562288, 4199070; 562276, 4199090; 562271, 4199090; 562264, 4199090; 562264, 4199090; 562258, 4199080; 562258, 4199060; 562253, 4199020; 562251, 4198990; 562252, 4198940; 562251, 4198930; 562250, 4198930; 562242, 4198920; 562229, 4198900; 562212, 4198880; 562188, 4198890; 562184, 4198920; 562174, 4198960; 562163, 4199000; 562155, 4199030; 562151, 4199050; 562146, 4199070; 562136, 4199130; 562135, 4199140; 562132, 4199150; 562118, 4199180; 562108, 4199190; 562092, 4199220; 562078, 4199230; 562058, 4199270; 562049, 4199280; 562045, 4199290; 562043, 4199300; 562041, 4199310; 562041, 4199330; 562042, 4199350; 562044, 4199360; 562046, 4199420.

(ii) Map 2 of Unit A follows:



(6) *Unit B: Graham Hill.* Santa Cruz County, California.

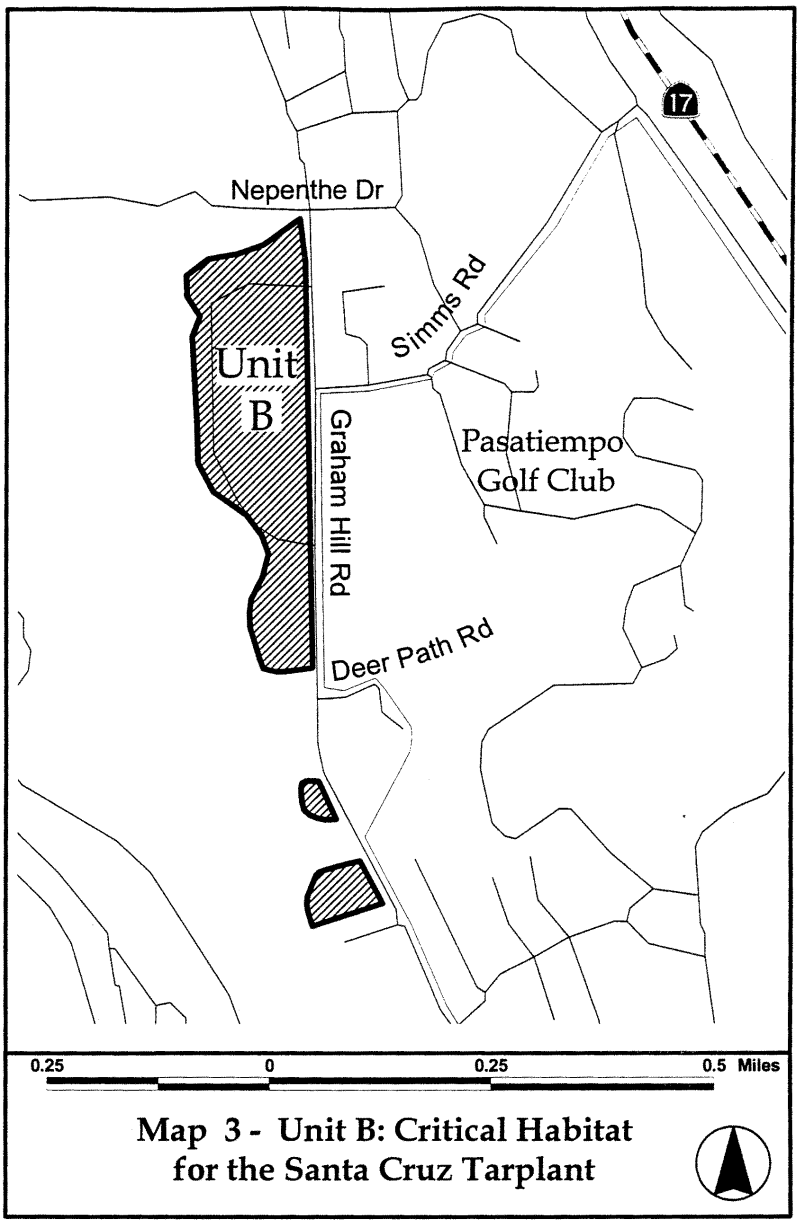
(i) Unit B (Graham Hill north subunit). From USGS 1:24,000 quadrangle map Felton. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 585905, 4096930; 585915, 4096850; 585930, 4096130; 585930, 4096110; 585879, 4096100; 585863, 4096100; 585841, 4096110;

585833, 4096130; 585817, 4096180; 585815, 4096210; 585819, 4096240; 585840, 4096280; 585850, 4096320; 585837, 4096350; 585810, 4096390; 585749, 4096430; 585721, 4096480; 585719, 4096560; 585710, 4096710; 585724, 4096750; 585701, 4096790; 585699, 4096820; 585739, 4096850; 585791, 4096860; 585839, 4096880; 585905, 4096930.

(ii) Unit B (Graham Hill central subunit). From USGS 1:24,000 quadrangle map Felton. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 585912, 4095900; 585919, 4095900; 585928, 4095910; 585942, 4095900; 585974, 4095840; 585954, 4095830; 585939, 4095840; 585925, 4095840; 585915, 4095850; 585912, 4095870; 585910, 4095880; 585910, 4095890; 585912, 4095900.

(iii) Unit B (Graham Hill south subunit). From USGS 1:24,000 quadrangle map Felton. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 586017, 4095760; 586058, 4095680; 585931, 4095640; 585928, 4095650; 585922, 4095670; 585920, 4095680; 585922, 4095690; 585930, 4095710; 585937, 4095730; 585944, 4095740; 585955, 4095740; 585976, 4095750; 586017, 4095760.

(iv) Map 3 of Unit B follows:

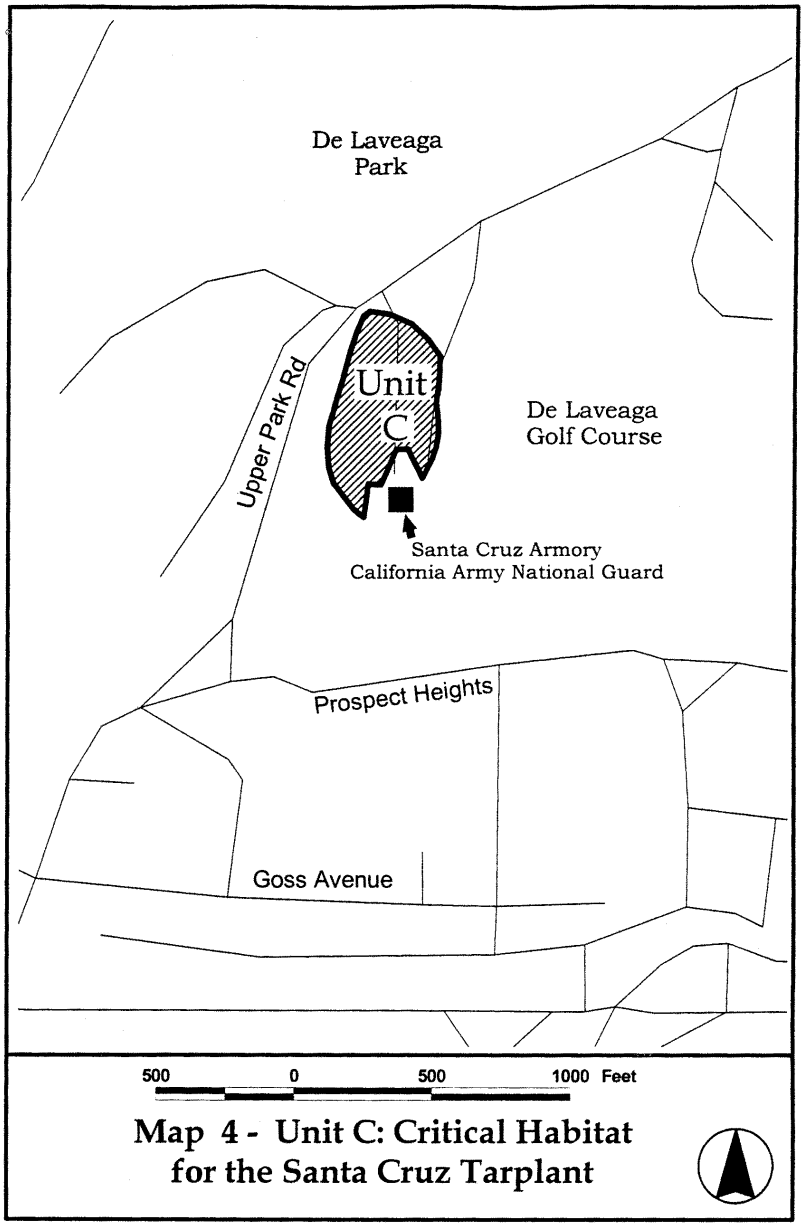


(7) *Unit C: (De Laveaga).* Santa Cruz County, California.

(i) From USGS 1:24,000 quadrangle map Santa Cruz. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 588446, 4094810; 588468, 4094810; 588492, 4094800; 588510, 4094780; 588523, 4094760; 588523, 4094740; 588522, 4094730; 588519, 4094710; 588522, 4094690;

588522, 4094680; 588519, 4094660; 588515, 4094650; 588504, 4094630; 588488, 4094660; 588476, 4094660; 588459, 4094620; 588445, 4094620; 588440, 4094590; 588429, 4094590; 588417, 4094610; 588406, 4094620; 588401, 4094640; 588399, 4094660; 588401, 4094690; 588410, 4094720; 588416, 4094740; 588424, 4094770; 588432, 4094790; 588439, 4094810; 588446, 4094810.

(ii) Map 4 of Unit C follows:



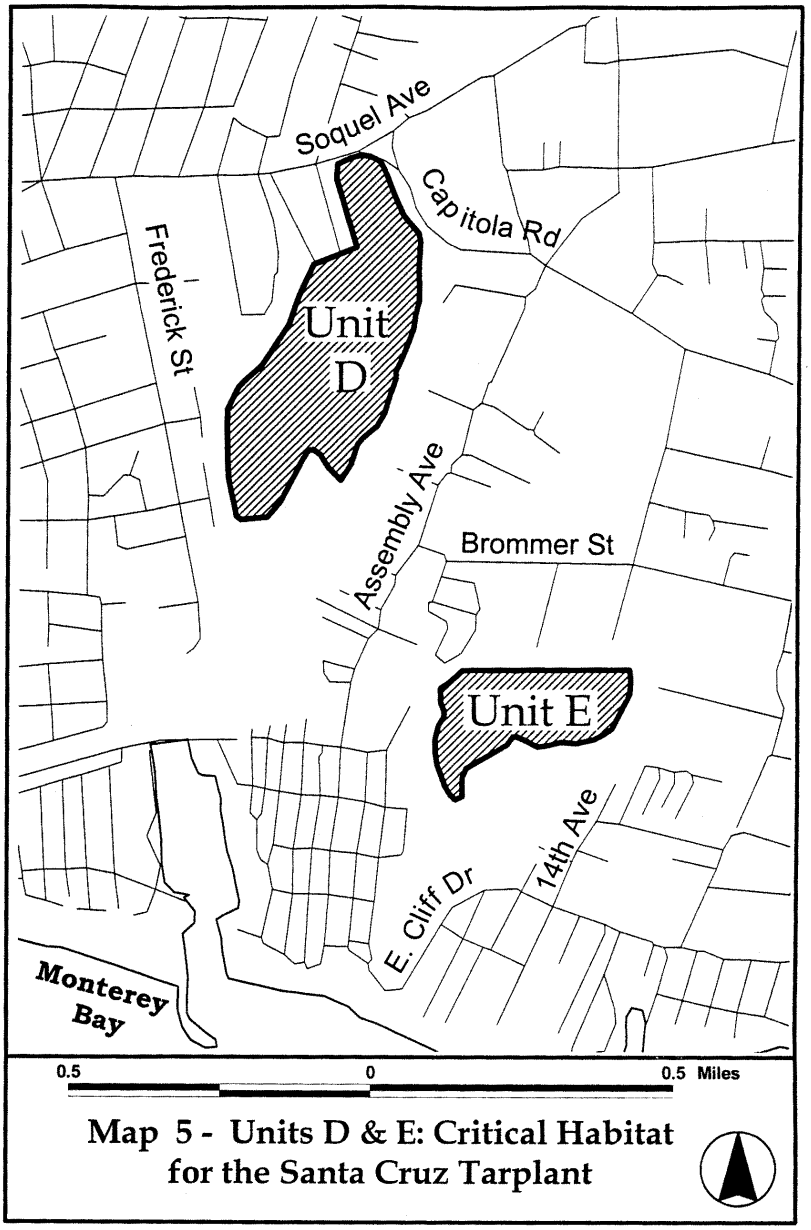
(8) *Unit D: Arana Gulch.* Santa Cruz County, California.

From USGS 1:24,000 quadrangle maps Santa Cruz and Soquel. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 589295, 4093310; 589315, 4093270; 589338, 4093210; 589358, 4093170; 589399, 4093120; 589404, 4093100; 589399, 4093030; 589401, 4092990; 589400, 4092940; 589391, 4092900; 589386, 4092860; 589375, 4092830; 589353, 4092780; 589340, 4092750; 589340, 4092730; 589325, 4092690; 589310, 4092640; 589290, 4092600; 589272, 4092590; 589252, 4092570; 589238, 4092550; 589229, 4092530; 589221, 4092500; 589195, 4092460; 589161, 4092490; 589139, 4092530; 589120, 4092540; 589108, 4092540; 589092, 4092510; 589057, 4092450; 589033, 4092400; 588999, 4092360; 588929, 4092350; 588916, 4092360; 588894, 4092470; 588891, 4092560; 588890, 4092650; 588919, 4092710; 588946, 4092730; 588980, 4092760; 589053, 4092880; 589080, 4092950; 589119, 4093040; 589234, 4093080; 589178, 4093270; 589181, 4093310; 589214, 4093320; 589245, 4093330; 589268, 4093330; 589295, 4093310.

(9) *Unit E: Twin Lakes.* Santa Cruz County, California.

(i) From USGS 1:24,000 quadrangle map Soquel. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 589964, 4091950; 589967, 4091930; 589964, 4091890; 589918, 4091800; 589899, 4091780; 589871, 4091770; 589823, 4091760; 589784, 4091760; 589744, 4091750; 589722, 4091750; 589692, 4091760; 589667, 4091780; 589656, 4091770; 589640, 4091750; 589616, 4091740; 589559, 4091710; 589532, 4091690; 589521, 4091660; 589521, 4091640; 589522, 4091620; 589504, 4091610; 589489, 4091620; 589476, 4091640; 589455, 4091700; 589450, 4091730; 589449, 4091770; 589458, 4091800; 589472, 4091830; 589473, 4091840; 589465, 4091860; 589464, 4091890; 589463, 4091900; 589482, 4091920; 589506, 4091940; 589522, 4091950; 589964, 4091950.

(ii) Map 5 of Units D and E follows:



(10) *Unit F: Rodeo Gulch.* Santa Cruz County, California.

From USGS 1:24,000 quadrangle map Soquel. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 590971, 4094630; 590995, 4094740; 591007, 4094780; 591037, 4094830; 591069, 4094860; 591095, 4094900; 591125, 4094960; 591182, 4094940; 591196, 4094940; 591199,

4094950; 591207, 4094980; 591216, 4095000; 591225, 4095030; 591220, 4095050; 591225, 4095090; 591232, 4095130; 591241, 4095160; 591252, 4095180; 591265, 4095180; 591291, 4095170; 591321, 4095140; 591353, 4095050; 591393, 4094970; 591301, 4094960; 591293, 4094950; 591299, 4094910; 591300, 4094850; 591293, 4094810; 591275, 4094750; 591252, 4094660; 591224, 4094650; 591185, 4094630; 591097, 4094630; 590971, 4094630.

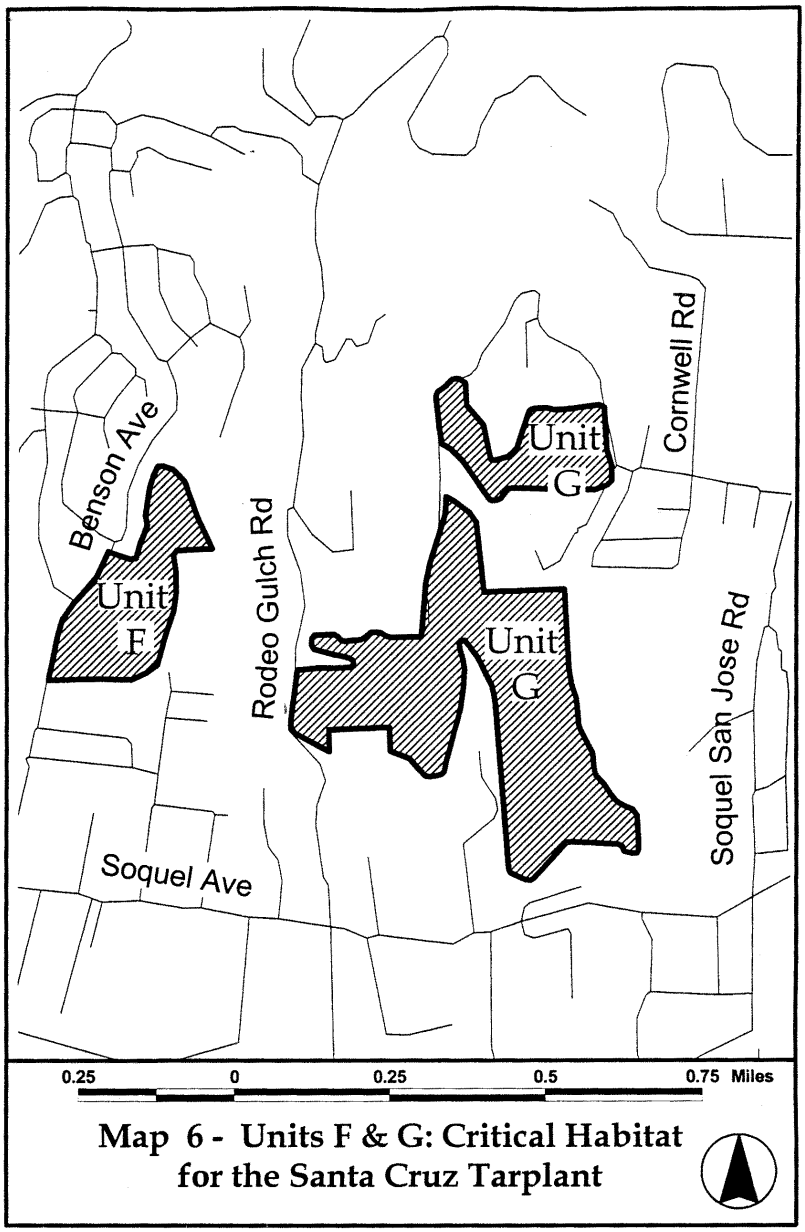
(11) *Unit G: Soquel Unit.* Santa Cruz County, California.

(i) Unit G (Soquel north subunit). From USGS 1:24,000 quadrangle maps Soquel and Laurel. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 592050, 4095340; 592094, 4095290; 592102, 4095240; 592112, 4095200; 592119, 4095200; 592130, 4095200; 592158, 4095210; 592173, 4095220; 592180, 4095230; 592193, 4095270; 592211, 4095320; 592218, 4095330; 592227, 4095330; 592257, 4095330; 592275, 4095330; 592299, 4095330; 592393, 4095340; 592404, 4095330; 592411, 4095220; 592423, 4095180; 592425, 4095140; 592414, 4095130; 592381, 4095120; 592290, 4095120; 592177, 4095120; 592165, 4095120; 592159, 4095120; 592149, 4095110; 592138, 4095100; 592129, 4095090; 592116, 4095090; 592109, 4095100; 592041, 4095190; 592009, 4095220; 591986, 4095240; 591980, 4095270; 591970, 4095360; 591971, 4095360; 591973, 4095370; 591995, 4095390; 592012, 4095400; 592021, 4095410; 592031, 4095400; 592046, 4095390; 592050, 4095340.

(ii) Unit G (Soquel north area). From USGS 1:24,000 quadrangle maps Soquel and Laurel. Lands bounded by the following UTM zone 10 NAD83 coordinates (E, N). 592050, 4095340; 592094, 4095290; 592102, 4095240; 592112, 4095200; 592119, 4095200; 592130, 4095200; 592158, 4095210; 592173, 4095220; 592180, 4095230; 592193, 4095270; 592211, 4095320; 592218, 4095330; 592227, 4095330; 592257, 4095330; 592275, 4095330; 592299, 4095330; 592393, 4095340; 592404, 4095330; 592411, 4095220; 592423, 4095180; 592425, 4095140; 592414, 4095130; 592381, 4095120; 592290, 4095120; 592177, 4095120; 592165, 4095120; 592159, 4095120; 592149, 4095110; 592138, 4095100; 592129, 4095090; 592116, 4095090; 592109, 4095100; 592041, 4095190; 592009, 4095220; 591986, 4095240; 591980, 4095270; 591970, 4095360; 591971, 4095360; 591973, 4095370; 591995, 4095390; 592012, 4095400; 592021, 4095410; 592031, 4095400; 592046, 4095390; 592050, 4095340.

(iii) Unit G (Soquel south subunit). From USGS 1:24,000 quadrangle maps Soquel and Laurel. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 592076, 4095040; 592097, 4094850; 592304, 4094860; 592315, 4094660; 592322, 4094620; 592334, 4094580; 592341, 4094510; 592347, 4094490; 592354, 4094480; 592375, 4094440; 592378, 4094430; 592380, 4094400; 592385, 4094380; 592406, 4094360; 592430, 4094320; 592442, 4094310; 592460, 4094300; 592478, 4094290; 592491, 4094280; 592494, 4094210; 592495, 4094190; 592491, 4094180; 592478, 4094180; 592458, 4094180; 592452, 4094200; 592442, 4094200; 592326, 4094210; 592311, 4094210; 592224, 4094110; 592216, 4094110; 592204, 4094110; 592165, 4094130; 592161, 4094140; 592126, 4094560; 592123, 4094590; 592117, 4094610; 592105, 4094630; 592087, 4094670; 592074, 4094690; 592057, 4094720; 592047, 4094730; 592036, 4094730; 592032, 4094720; 592036, 4094700; 592043, 4094680; 592047, 4094650; 592043, 4094610; 592036, 4094550; 592000, 4094420; 591994, 4094390; 591987, 4094380; 591973, 4094380; 591957, 4094380; 591944, 4094380; 591904, 4094420; 591855, 4094440; 591853, 4094500; 591833, 4094500; 591696, 4094500; 591696, 4094440; 591606, 4094490; 591597, 4094510; 591596, 4094520; 591613, 4094650; 591617, 4094650; 591676, 4094660; 591718, 4094660; 591751, 4094660; 591759, 4094670; 591757, 4094680; 591749, 4094680; 591738, 4094690; 591704, 4094690; 591656, 4094710; 591651, 4094720; 591651, 4094730; 591657, 4094740; 591711, 4094750; 591720, 4094740; 591726, 4094730; 591736, 4094730; 591777, 4094730; 591790, 4094740; 591797, 4094740; 591806, 4094750; 591819, 4094750; 591831, 4094750; 591845, 4094740; 591856, 4094740; 591935, 4094740; 591946, 4094880; 591956, 4094930; 591995, 4095060; 591998, 4095100; 592017, 4095090; 592059, 4095060; 592076, 4095040.

(iv) Map 6 of Units F and G follows:

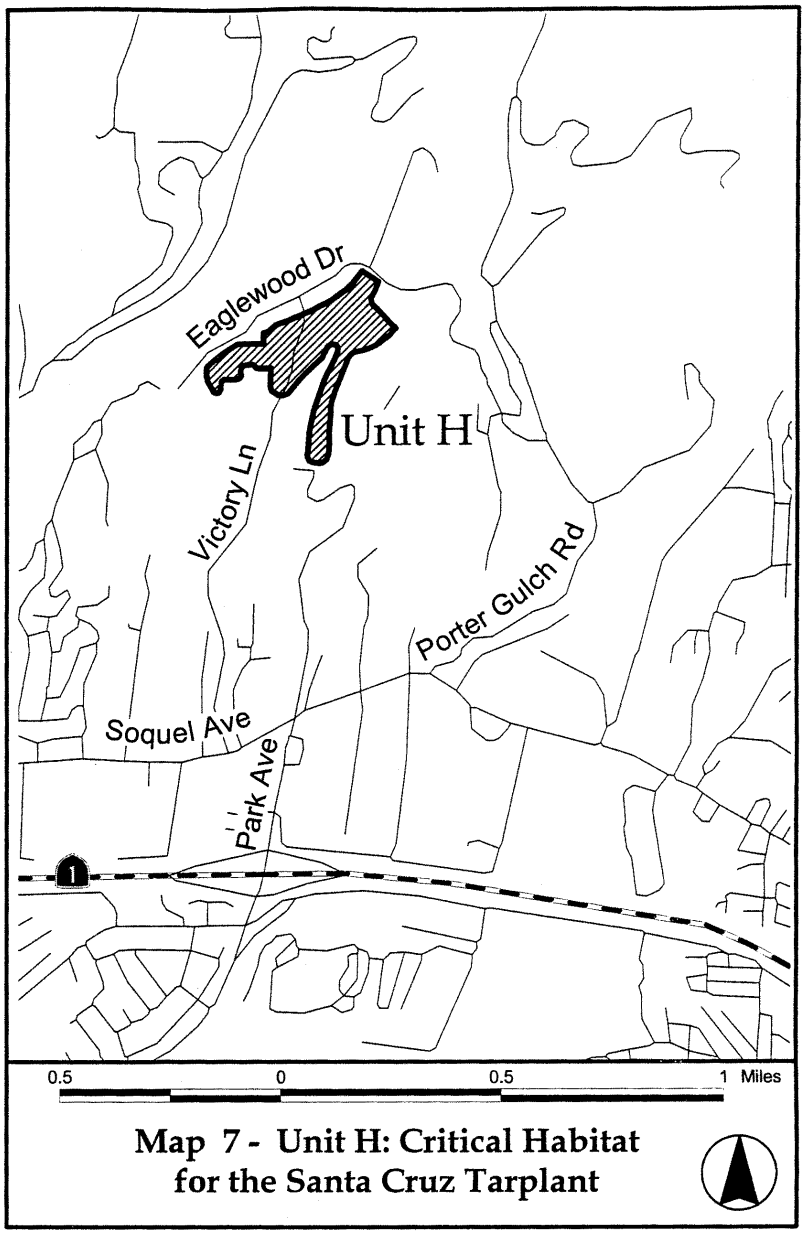


(12) *Unit H: Porter Gulch.* Santa Cruz County, California.

(i) From USGS 1:24,000 quadrangle maps Soquel and Laurel. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 594615, 4095600; 594643, 4095630; 594684, 4095640; 594774, 4095680; 594850, 4095720; 594898, 4095750; 594929, 4095780; 594958, 4095820; 595017,

4095780; 595008, 4095760; 594990, 4095720; 594993, 4095700; 595020, 4095680; 595057, 4095630; 595081, 4095610; 595068, 4095600; 595061, 4095590; 595045, 4095580; 595013, 4095550; 594989, 4095540; 594967, 4095530; 594929, 4095520; 594917, 4095520; 594907, 4095500; 594893, 4095470; 594857, 4095380; 594846, 4095340; 594843, 4095320; 594842, 4095290; 594839, 4095250; 594838, 4095180; 594835, 4095150; 594828, 4095130; 594816, 4095120; 594800, 4095120; 594785, 4095120; 594772, 4095130; 594765, 4095130; 594760, 4095140; 594758, 4095150; 594760, 4095170; 594766, 4095230; 594779, 4095310; 594819, 4095420; 594856, 4095500; 594867, 4095520; 594869, 4095540; 594863, 4095550; 594848, 4095560; 594837, 4095550; 594833, 4095540; 594828, 4095540; 594810, 4095500; 594776, 4095470; 594747, 4095440; 594718, 4095410; 594689, 4095370; 594669, 4095370; 594652, 4095370; 594639, 4095380; 594627, 4095380; 594622, 4095400; 594624, 4095470; 594606, 4095470; 594587, 4095460; 594571, 4095470; 594565, 4095480; 594557, 4095480; 594549, 4095480; 594530, 4095480; 594518, 4095470; 594514, 4095460; 594517, 4095440; 594509, 4095430; 594498, 4095430; 594473, 4095430; 594462, 4095430; 594453, 4095430; 594444, 4095420; 594442, 4095410; 594441, 4095390; 594436, 4095380; 594427, 4095380; 594415, 4095380; 594411, 4095390; 594394, 4095420; 594390, 4095440; 594390, 4095450; 594391, 4095470; 594410, 4095490; 594457, 4095530; 594502, 4095550; 594542, 4095560; 594597, 4095560; 594597, 4095600; 594615, 4095600.

(ii) Map 7 of Unit H follows:



(13) *Unit I: Watsonville Unit.* Santa Cruz County, California.

(i) Unit I (Watsonville north subunit). From USGS 1:24,000 quadrangle map Watsonville West. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 606195, 4088630; 606299, 4088730; 606331, 4088750; 606365, 4088760; 606454, 4088750; 606492,

4088750; 606515, 4088750; 606535, 4088760; 606555, 4088800; 606560, 4088840; 606580, 4088880; 606607, 4088890; 606660, 4088900; 606927, 4088910; 606938, 4088530; 606930, 4088220; 606810, 4088090; 606689, 4087970; 606652, 4088040; 606596, 4088110; 606522, 4088170; 606490, 4088210; 606437, 4088250; 606362, 4088300; 606303, 4088340; 606274, 4088370; 606263, 4088390; 606252, 4088430; 606234, 4088450; 606219, 4088480; 606215, 4088520; 606199, 4088590; 606195, 4088630.

(ii) Unit I (Airport subunit). From USGS 1:24,000 quadrangle map Watsonville West. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 607026, 4087500; 606967, 4087520; 607005, 4087620; 607031, 4087670; 607046, 4087710; 607073, 4087750; 607095, 4087820; 607136, 4087830; 607137, 4087860; 607146, 4087980; 607140, 4088020; 607145, 4088050; 607158, 4088060; 607202, 4088060; 607247, 4088050; 607252, 4088090; 607292, 4088090; 607378, 4088100; 607383, 4088250; 607306, 4088240; 607226, 4088240; 607201, 4088250; 607184, 4088270; 607159, 4088300; 607147, 4088310; 607147, 4088340; 607158, 4088380; 607195, 4088470; 607203, 4088510; 607212, 4088560; 607222, 4088620; 607226, 4088650; 607227, 4088710; 607240, 4088750; 607241, 4088780; 607236, 4088820; 607246, 4088840; 607340, 4088840; 607846, 4088860; 607947, 4089000; 608079, 4089030; 608191, 4088860; 608477, 4088700; 608460, 4088620; 608641, 4088590; 608652, 4088610; 608746, 4088570; 608602, 4088450; 607932, 4088550; 607689, 4088150; 607267, 4087440; 607312, 4087430; 607297, 4087340; 607239, 4087340; 607201, 4087350; 607181, 4087320; 607148, 4087320; 607031, 4087350; 606969, 4087370; 607026, 4087500.

(iii) Unit I (Watsonville south subunit). From USGS 1:24,000 quadrangle map Watsonville West. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 609032, 4085780; 609074, 4085770; 609198, 4085730; 609153, 4085610; 609208, 4085430; 609333, 4085390; 609504, 4085250; 609242, 4085080; 609191, 4085230; 609164, 4085310; 609006, 4085250; 609123, 4085020; 608761, 4084800; 608590, 4085160; 608651, 4085380; 608760, 4085450; 608869, 4085480; 608941, 4085530; 608976, 4085570; 609032, 4085580; 609040, 4085630; 608979, 4085640; 608931, 4085660; 608920, 4085700; 608928, 4085730; 608957, 4085760; 608995, 4085780; 609032, 4085780.

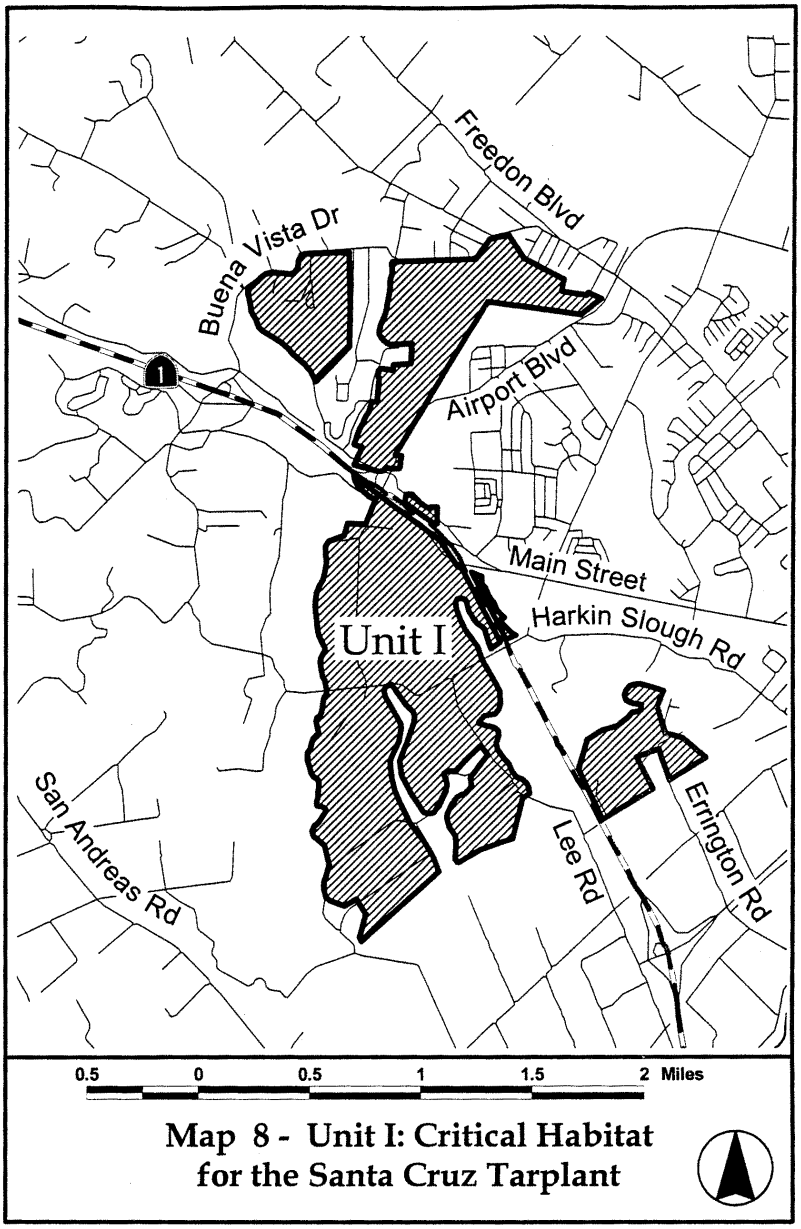
(iv) Unit I (Highway 1 north subunit). From USGS 1:24,000 quadrangle map Watsonville West. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 607333, 4087090; 607348, 4087150; 607389, 4087150; 607449, 4087090; 607498, 4087060; 607570, 4087060; 607570, 4086940; 607558, 4086930; 607333, 4087090.

(v) Unit I (Highway 1 south subunit). From USGS 1:24,000 quadrangle map Watsonville West. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 607819, 4086590; 607892, 4086560; 607893, 4086520; 607900, 4086500; 607920, 4086470; 607931, 4086440; 607946, 4086410; 607978, 4086370; 608003, 4086320; 608031, 4086280; 608057, 4086260; 608029, 4086240; 608063, 4086190; 608101, 4086160; 608138, 4086130; 608069, 4086100; 607819, 4086590.

(vi) Unit I (Harkins Slough subunit). From USGS 1:24,000 quadrangle map Watsonville West. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 606736, 4084900; 606721, 4084900; 606703, 4084900; 606698, 4084920; 606703, 4084940; 606709, 4084960; 606710, 4085000; 606715, 4085030; 606715, 4085050; 606715, 4085080; 606707, 4085090; 606698, 4085100; 606678, 4085110; 606661, 4085140; 606634, 4085230; 606632, 4085260; 606635, 4085290; 606651, 4085310; 606667, 4085370; 606677, 4085390; 606695, 4085410; 606713, 4085420; 606695, 4085510; 606701, 4085540; 606721, 4085550; 606733, 4085580; 606742, 4085610; 606745, 4085650; 606756, 4085690; 606773, 4085710; 606759, 4085800; 606744, 4085830; 606736, 4085870; 606725, 4085930; 606729, 4085960; 606741, 4085990; 606761, 4086020; 606756, 4086050; 606735, 4086090; 606715, 4086130; 606704, 4086180; 606689, 4086350; 606690, 4086390; 606696, 4086440; 606715, 4086490; 606746, 4086540; 606762, 4086620; 606767, 4086650; 606766, 4086700; 606762, 4086780; 606786, 4086810; 606896, 4086850; 606923, 4086940; 607053, 4086940; 607125, 4087120; 607085, 4087130; 607002, 4087200; 606976, 4087250; 606968, 4087280; 607157, 4087140; 607286, 4087040; 607497, 4086890; 607591, 4086820; 607719, 4086630; 607746, 4086620; 608027, 4086080; 607960, 4086030; 607945, 4086070; 607914, 4086180; 607889, 4086200; 607861, 4086220; 607830, 4086260; 607799, 4086310; 607782, 4086380; 607764, 4086400; 607738, 4086400; 607715, 4086390; 607705, 4086370; 607705, 4086350; 607713, 4086320; 607741, 4086240; 607771, 4086180; 607825, 4086100; 607863, 4086050; 607891, 4085970; 607999, 4085770; 608023, 4085720; 608026, 4085670; 608026, 4085630; 608016, 4085590; 607990, 4085560; 607945, 4085560; 607911, 4085550; 607871, 4085500; 607932, 4085480; 607985, 4085460; 608013, 4085440; 608016, 4085410; 608006, 4085380; 607995, 4085350; 608006, 4085310; 608054, 4085240; 608087, 4085210; 608107, 4085160; 608143, 4085110; 608184, 4085090; 608219, 4085060; 608233, 4085030; 608237, 4084990; 608186, 4084950; 608118, 4084660; 607891, 4084590; 607817, 4084540; 607733, 4084490; 607718, 4084490; 607703, 4084510; 607705, 4084540; 607708, 4084590; 607708, 4084640; 607703, 4084680; 607659, 4084750; 607643, 4084810; 607647, 4084850; 607672, 4084900; 607715, 4084960; 607746, 4084980; 607777, 4084990; 607821, 4085040; 607812, 4085100; 607937, 4085270; 607886, 4085330; 607769, 4085220; 607709, 4085150; 607649, 4085150; 607619, 4085130; 607642, 4085070; 607644, 4085050; 607639, 4085020; 607562, 4084870; 607547, 4084850; 607527, 4084850; 607499, 4084850; 607474, 4084850; 607385, 4084990; 607313, 4085120; 607306, 4085190; 607301, 4085230; 607313, 4085260; 607359, 4085370; 607405, 4085500; 607407, 4085550; 607397, 4085580; 607341, 4085640; 607242, 4085780; 607199, 4085760; 607186, 4085730; 607196, 4085690; 607293, 4085520; 607308, 4085490; 607311, 4085460; 607295, 4085370; 607241, 4085250; 607232, 4085220; 607232, 4085190; 607242, 4085100; 607269, 4085010; 607303, 4084920; 607375, 4084780; 607484, 4084640; 607545, 4084530; 607586, 4084420; 607028, 4083920; 607011, 4083950; 607058, 4084120; 607036, 4084150; 606990, 4084230; 606906, 4084180; 606797, 4084220; 606768, 4084240; 606753, 4084300; 606753, 4084330; 606758, 4084360; 606765, 4084380; 606774, 4084410; 606791, 4084480; 606759, 4084610; 606696, 4084670; 606680, 4084680; 606672, 4084700; 606667,

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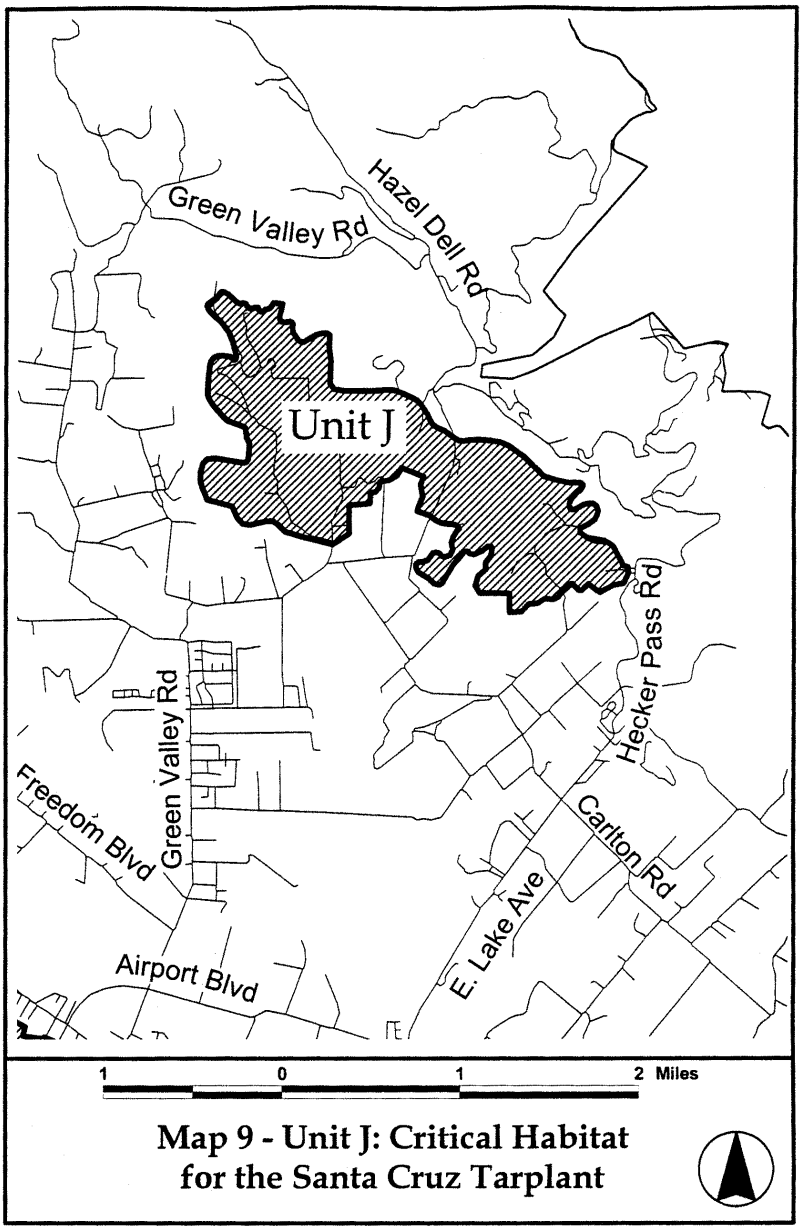
(vii) Map 8 of Unit I follows:



(14) *Unit J: Casserly*. Santa Cruz County, California.

(i) From USGS 1:24,000 quadrangle maps Loma Prieta, Mt. Madona, Watsonville East, and Watsonville West. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 610201, 4094760; 610253, 4094770; 610315, 4094760; 610340, 4094730; 610351, 4094720; 610366, 4094730; 610368, 4094750; 610363, 4094780; 610346, 4094860; 610330, 4094910; 610300, 4094980; 610231, 4095070; 610143, 4095150; 610117, 4095190; 610107, 4095220; 610111, 4095230; 610169, 4095280; 610196, 4095290; 610217, 4095330; 610236, 4095340; 610262, 4095340; 610289, 4095330; 610366, 4095260; 610399, 4095240; 610412, 4095240; 610428, 4095240; 610453, 4095240; 610471, 4095210; 610499, 4095190; 610524, 4095200; 610548, 4095210; 610563, 4095200; 610577, 4095170; 610599, 4095160; 610619, 4095170; 610630, 4095180; 610659, 4095190; 610678, 4095200; 610695, 4095220; 610702, 4095240; 610711, 4095250; 610730, 4095240; 610750, 4095240; 610789, 4095230; 610783, 4095210; 610777, 4095180; 610768, 4095150; 610761, 4095120; 610763, 4095090; 610779, 4095070; 610809, 4095070; 610832, 4095070; 610851, 4095080; 610872, 4095070; 610880, 4095050; 610878, 4095010; 610879, 4094990; 610881, 4094980; 610911, 4094930; 610924, 4094910; 610946, 4094890; 610964, 4094890; 610982, 4094890; 611082, 4094950; 611126, 4094960; 611161, 4094970; 611190, 4094970; 611213, 4094950; 611216, 4094930; 611211, 4094870; 611210, 4094830; 611226, 4094710; 611217, 4094510; 611258, 4094460; 611358, 4094440; 611566, 4094440; 611639, 4094440; 611754, 4094460; 611806, 4094450; 611867, 4094430; 612002, 4094360; 612045, 4094320; 612071, 4094280; 612100, 4094230; 612136, 4094160; 612158, 4094130; 612214, 4094100; 612248, 4094090; 612354, 4094010; 612393, 4094000; 612433, 4093990; 612493, 4094000; 612575, 4094010; 612678, 4094000; 612764, 4093980; 612836, 4093950; 612974, 4093850; 613106, 4093720; 613136, 4093690; 613169, 4093670; 613269, 4093640; 613373, 4093620; 613483, 4093620; 613505, 4093590; 613499, 4093570; 613482, 4093550; 613451, 4093520; 613409, 4093480; 613386, 4093440; 613380, 4093410; 613391, 4093380; 613409, 4093380; 613441, 4093380; 613522, 4093420; 613553, 4093430; 613596, 4093430; 613625, 4093410; 613641, 4093360; 613631, 4093320; 613615, 4093290; 613563, 4093250; 613496, 4093210; 613479, 4093190; 613480, 4093170; 613542, 4093120; 613617, 4093090; 613699, 4093090; 613732, 4093080; 613772, 4093050; 613790, 4093020; 613855, 4092900; 613866, 4092870; 613909, 4092860; 613918, 4092810; 613905, 4092770; 613871, 4092710; 613783, 4092690; 613730, 4092670; 613661, 4092630; 613624, 4092650; 613555, 4092700; 613496, 4092640; 613468, 4092650; 613409, 4092710; 613316, 4092620; 613285, 4092580; 613240, 4092560; 613167, 4092570; 613101, 4092530; 613023, 4092520; 612958, 4092450; 612847, 4092450; 612846, 4092620; 612576, 4092620; 612538, 4092680; 612564, 4092770; 612630, 4092830; 612631, 4092890; 612676, 4092950; 612688, 4093020; 612680, 4093040; 612651, 4093040; 612603, 4093000; 612561, 4092980; 612529, 4092970; 612490, 4092980; 612464, 4093000; 612439, 4093000; 612409, 4092950; 612333, 4092870; 612269, 4092760; 612242, 4092710; 612214, 4092690; 612167, 4092710; 612109, 4092760; 612022, 4092810; 612003, 4092850; 612002, 4092880; 612023, 4092900; 612065, 4092900; 612111, 4092920; 612145, 4092970; 612159, 4092990; 612183, 4092990; 612212, 4092980; 612227, 4092960; 612259, 4092950; 612312, 4092970; 612336, 4093010; 612323, 4093080; 612339, 4093130; 612369, 4093180; 612390, 4093200; 612383, 4093220; 612353, 4093240; 612307, 4093250; 612235, 4093250; 612181, 4093280; 612123, 4093320; 612011, 4093360; 612028, 4093410; 612061, 4093490; 612043, 4093600; 612069, 4093670; 611870, 4093750; 611832, 4093680; 611760, 4093640; 611676, 4093620; 611667, 4093570; 611636, 4093530; 611587, 4093520; 611584, 4093430; 611398, 4093410; 611395, 4093160; 611331, 4093110; 611251, 4093060; 610986, 4093130; 610818, 4093180; 610752, 4093240; 610709, 4093270; 610662, 4093270; 610498, 4093240; 610429, 4093250; 610382, 4093310; 610351, 4093370; 610333, 4093410; 610109, 4093470; 610090, 4093520; 610066, 4093570; 610046, 4093640; 610050, 4093710; 610070, 4093790; 610114, 4093830; 610182, 4093840; 610443, 4093800; 610465, 4093800; 610477, 4093820; 610483, 4093860; 610489, 4093950; 610489, 4093980; 610467, 4094020; 610456, 4094100; 610442, 4094120; 610426, 4094130; 610385, 4094150; 610296, 4094180; 610278, 4094190; 610255, 4094210; 610220, 4094250; 610188, 4094290; 610152, 4094330; 610121, 4094380; 610115, 4094410; 610110, 4094460; 610121, 4094590; 610133, 4094680; 610140, 4094710; 610154, 4094730; 610175, 4094750; 610201, 4094760.

(ii) Map 9 of Unit J follows:

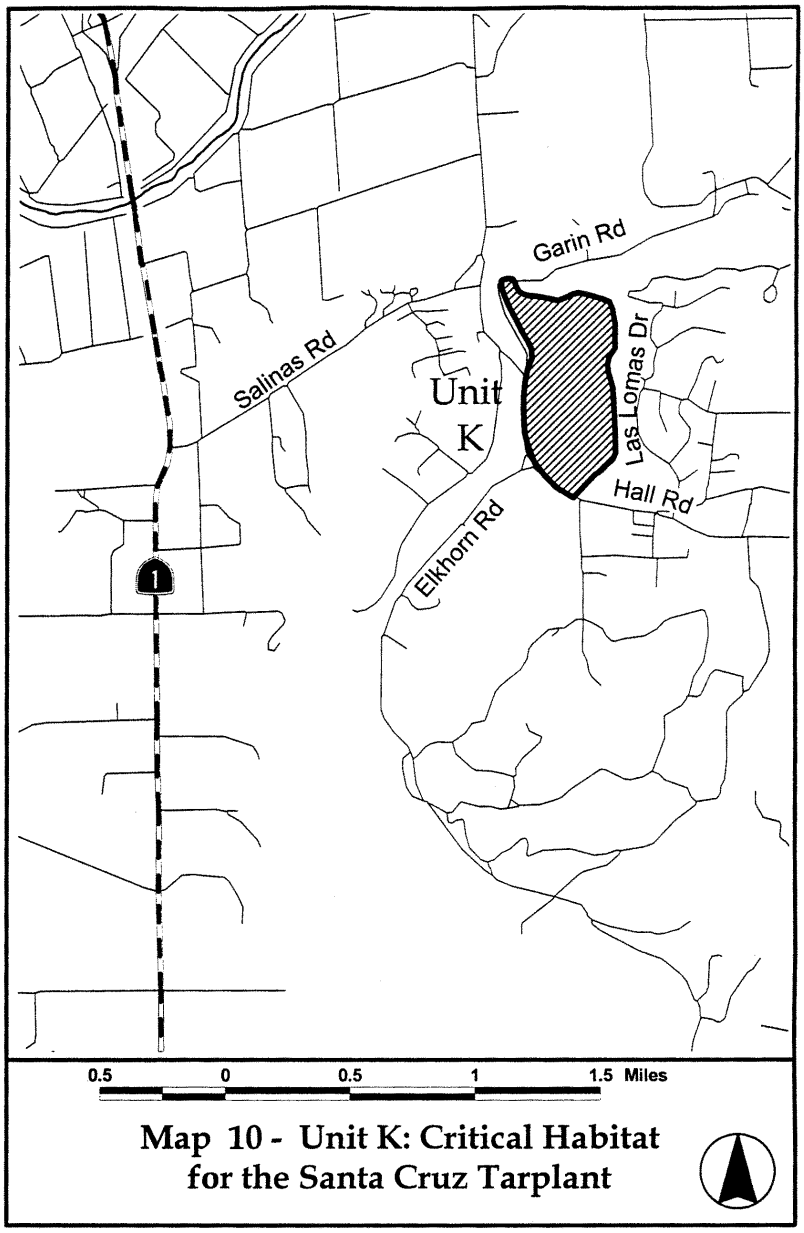


(15) *Unit K: Elkhorn.* Santa Cruz County, California.

(i) From USGS 1:24,000 quadrangle maps Watsonville East, Prunedale. Lands bounded by the following UTM zone 10, NAD83 coordinates (E, N): 611931, 4081300; 611930, 4081420; 611939, 4081530; 611956, 4081610; 611983, 4081680; 611981, 4081740; 611956, 4081790; 611918, 4081860;

611877, 4081940; 611839, 4082020; 611806, 4082090; 611787, 4082150; 611788, 4082180; 611796, 4082190; 611834, 4082200; 611862, 4082190; 611875, 4082170; 611885, 4082140; 611902, 4082110; 611916, 4082100; 611967, 4082090; 612005, 4082090; 612065, 4082080; 612155, 4082060; 612210, 4082080; 612247, 4082100; 612283, 4082110; 612348, 4082090; 612423, 4082080; 612481, 4082050; 612501, 4082000; 612519, 4081910; 612517, 4081840; 612517, 4081750; 612499, 4081720; 612478, 4081690; 612469, 4081640; 612473, 4081600; 612504, 4081490; 612509, 4081400; 612518, 4081210; 612520, 4081080; 612504, 4081040; 612475, 4081010; 612428, 4080960; 612393, 4080940; 612333, 4080880; 612255, 4080790; 612142, 4080860; 612070, 4080930; 612001, 4081020; 611957, 4081120; 611940, 4081200; 611931, 4081300.

(ii) Map 10 of Unit K follows:



Family Asteraceae: *Lasthenia conjugens* (Contra Costa Goldfields).

(1) Critical habitat units are depicted for Mendocino, Napa, Contra Costa, Alameda, Santa Clara and Monterey Counties, California, on the map below.

(2) The primary constituent elements of critical habitat for *Lasthenia conjugens* are the habitat components that provide:

(i) Vernal pools, swales, moist flats, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Lasthenia conjugens* germination, growth and reproduction, including, but not limited to, vernal pools on clay soils from a variety of soils series, rock outcrop pools on basalt flows, and vernal pools in saline alkaline transition zones with tidal marsh habitats. All of these habitats typically become inundated during winter rains, but are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil moisture for *Lasthenia conjugens* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aqueducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

(5) Unit 1: Mendocino County, California. From USGS 1:24,000 quadrangle map Point Arena, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 441000, 4310900; 440700, 4310900; 440500, 4311100; 440200, 4311100; 440000, 4311300; 439500, 4311000; 438900, 4311000; 438500, 4311400; 438500, 4311800; 438500, 4312500; 438500, 4312700; 438700, 4313000; 439000, 4313100; 439100, 4313500; 439300, 4313900; 439500, 4314000; 439800, 4313900; 440100, 4314000; 441000, 4314000; 441200, 4314200; 441300, 4314200; 441600, 4313700; 441700, 4313500; 442200, 4313400; 442500, 4313300; 442900, 4312800; 443200, 4312300; 443300, 4312000; 443300, 4311800; 442500, 4311800; 442400, 4312000; 442200, 4312000; 441300, 4311000; returning to 441000, 4310900.

(6) Unit 2: Napa County, California. From USGS 1:24,000 quadrangle maps Capell Valley, and Yountville, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 567300, 4248100; 567200, 4248300; 567000, 4249800; 566700, 4250000; 566400, 4250300; 566100, 4250400; 566000, 4250500; 565500, 4250500; 565100, 4250500; 565100, 4250800; 565400, 4251200; 566000, 4251800; 566600, 4251600; 566800, 4250900; 567300, 4250500; 568100, 4250500; 568300, 4250100; 568100, 4250000; 568400, 4249400; 568500, 4249300; 568300, 4249100; 567800, 4249000; 567500, 4248900; 567400, 4248600; returning to 567300, 4248100.

(7) Unit 3: Napa County, California. From USGS 1:24,000 quadrangle maps Cuttings Wharf, and Napa, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 564100, 4232800; 563800, 4233000; 563500, 4233200; 563500, 4233400; 563700, 4233500; 563800, 4233600; 563800, 4235100; 563800, 4235200; 563900, 4235300; 564200, 4235400; 564400, 4235300; 564500, 4235100; 564700, 4235000; 564700, 4234900; 564800, 4234700; 564700, 4234400; 564800, 4234200; 564700, 4234100; 564700, 4234000; 564800, 4233800; 565100, 4233600; 565100, 4233500; 565000, 4233300; 564800, 4233100; 564600, 4233200; returning to 564100, 423800.

(8) Unit 4: Solano County, California. [Reserved]

(9) Subunit 5A: Solano County, California. [Reserved]

(10) Subunit 5B: Solano County, California. [Reserved]

(11) Unit 6: Contra Costa County, California. From USGS 1:24,000 quadrangle maps Benicia, and Mare Island, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 568300, 4207000; 568200, 4207000; 568200, 4207100; 568100, 4207100; 568100, 4207000; 567900, 4207100; 567700, 4207200; 567600, 4207200; 567600, 4207100; 567500, 4207100; 567200, 4207100; 566600, 4207700; 566400, 4207500; 565900, 4207400; 565700, 4207700; 566400, 4208500; 566800, 4208500; 566800, 4208000; 566900, 4208000; 566900, 4207900; 566900, 4207800; 567100, 4207800; 567100, 4207900; 567000, 4207900; 567000, 4208000; 567100, 4208100; 567200, 4208200; 567500, 4207800; 567900, 4207400; 568200, 4207200; 568500, 4207100; 568400, 4207100; returning to 568300, 4207000.

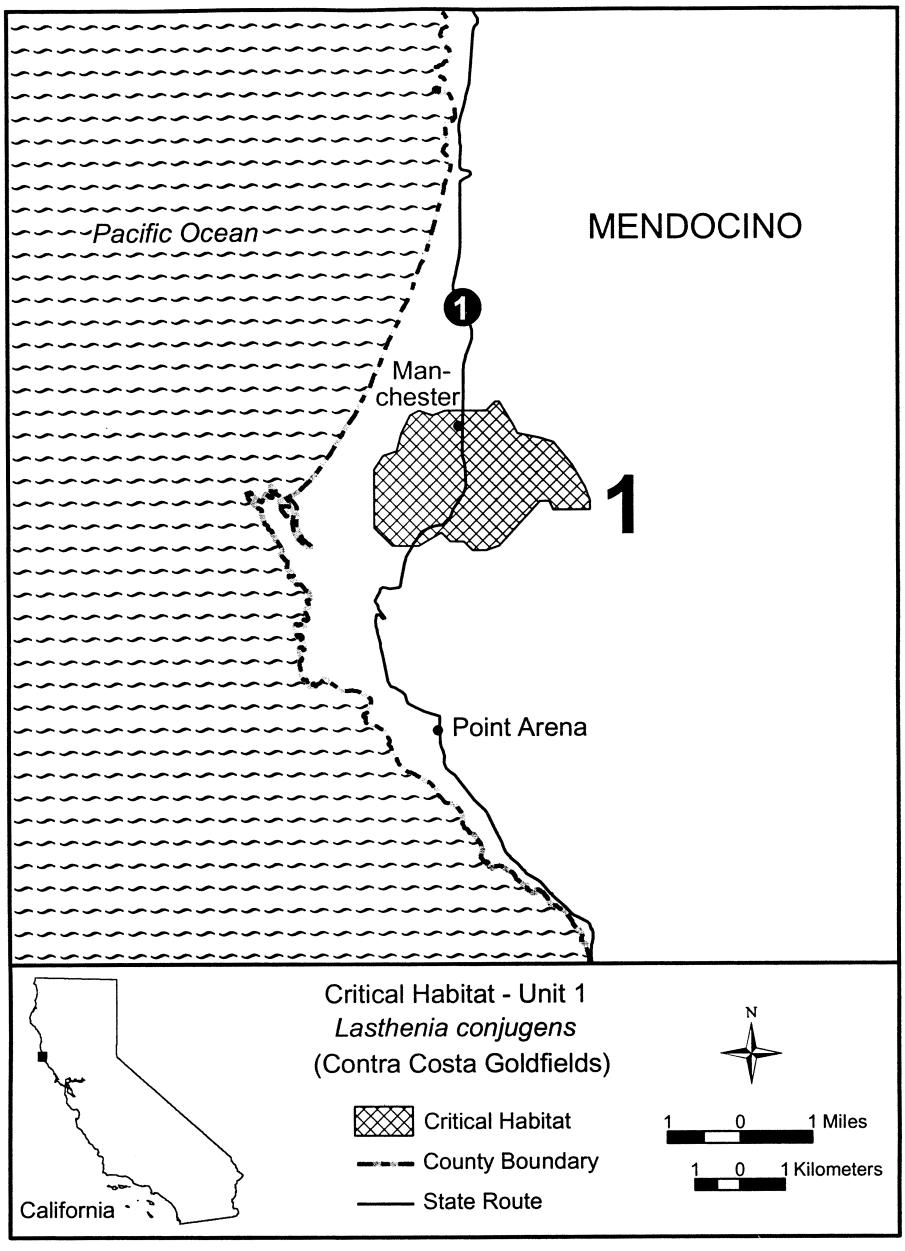
(12) Unit 7: Contra Costa County, California. From USGS 1:24,000 quadrangle maps Byron Hot Springs, and Clifton Court Forebay, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 620500, 4185200; 620200, 4185300; 620200, 4185500; 620000, 4185900; 620000, 4186100; 620500, 4186100; 620700, 4186200; 620700, 4186600; 620200, 4186800; 620100, 4186900; 620000, 4186800; 619900, 4186600; 619900, 4186400; 619800, 4186300; 619600, 4186400;

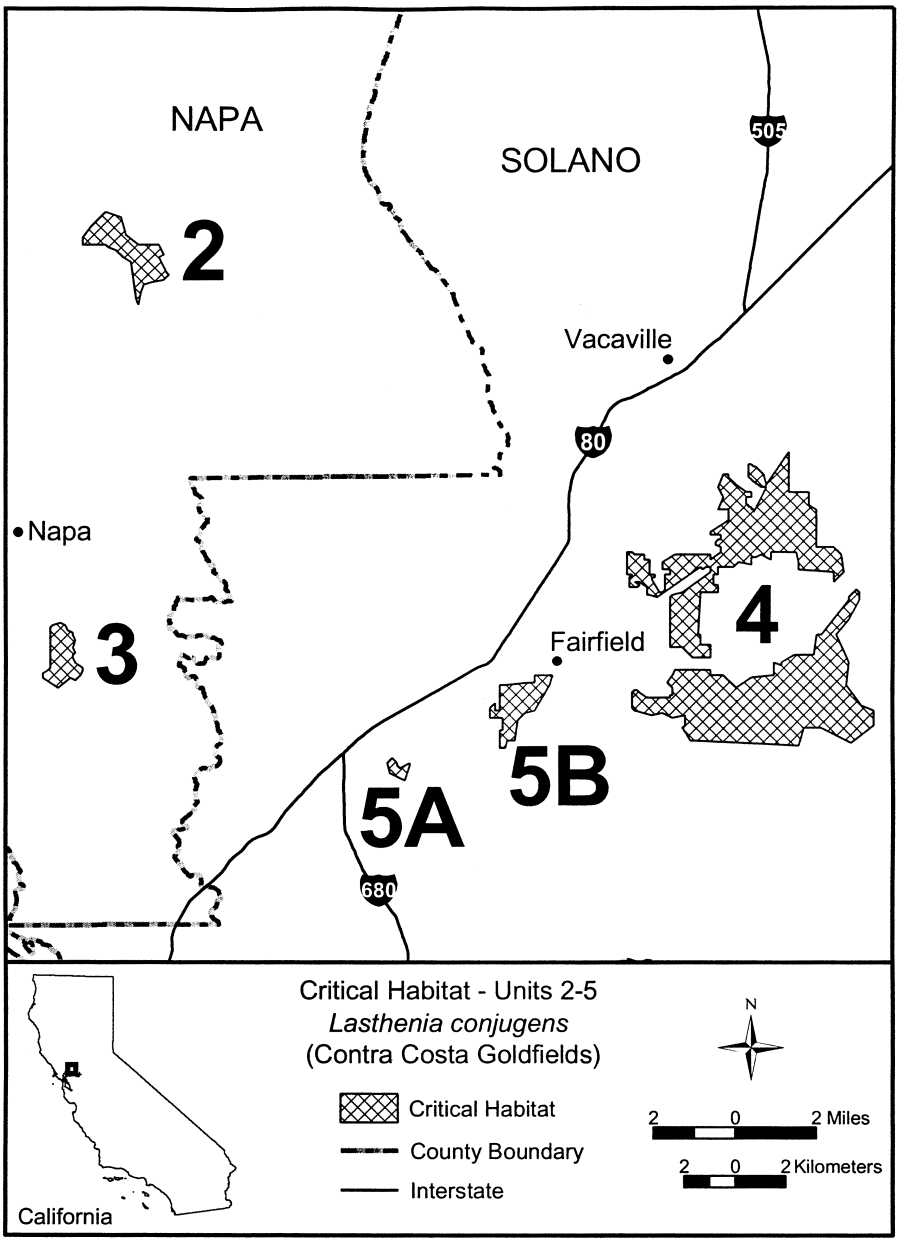
619500, 4186300; 619600, 4186100; 619600, 4185700; 619400, 4185700; 618200, 4186600; 618100, 4187100; 617700, 4187400; 617800, 4187900; 618400, 4187900; 618400, 4187500; 619000, 4186900; 619400, 4186700; 619500, 4186900; 619500, 4189200; 619300, 4189400; 619400, 4189600; 619000, 4189700; 618700, 4189400; 618500, 4189000; 617800, 4188900; 617700, 4188800; 617400, 4189000; 617400, 4189200; 618200, 4189500; 618100, 4189800; 618200, 4190100; 618700, 4190300; 618700, 4190700; 619000, 4191000; 619300, 4191100; 619600, 4191100; 619800, 4190700; 619900, 4190700; 620100, 4190900; 620400, 4190900; 620500, 4191200; 621800, 4191200; 622200, 4190700; 622300, 4190400; 621200, 4190400; 621100, 4190400; 621100, 4188700; 620900, 4188700; 620600, 4188400; 620400, 4188600; 620400, 4188100; 620500, 4187900; 620600, 4187800; 620700, 4187700; 620900, 4187700; 621100, 4187500; 620500, 4187100; 620500, 4186900; 621300, 4187281; 621700, 4187100; 621800, 4186900; 621600, 4186200; 621600, 4186000; 621800, 4185900; 621900, 4186100; 621800, 4186500; 621900, 4186600; 622100, 4186600; 622200, 4186400; 622300, 4186200; 622500, 4186000; 622500, 4185800; 622000, 4185300; 621200, 4185300; 621200, 4185700; 621300, 4186000; 621100, 4186100; 620500, 4185900; 620600, 4185400; returning to 620500, 4185200.

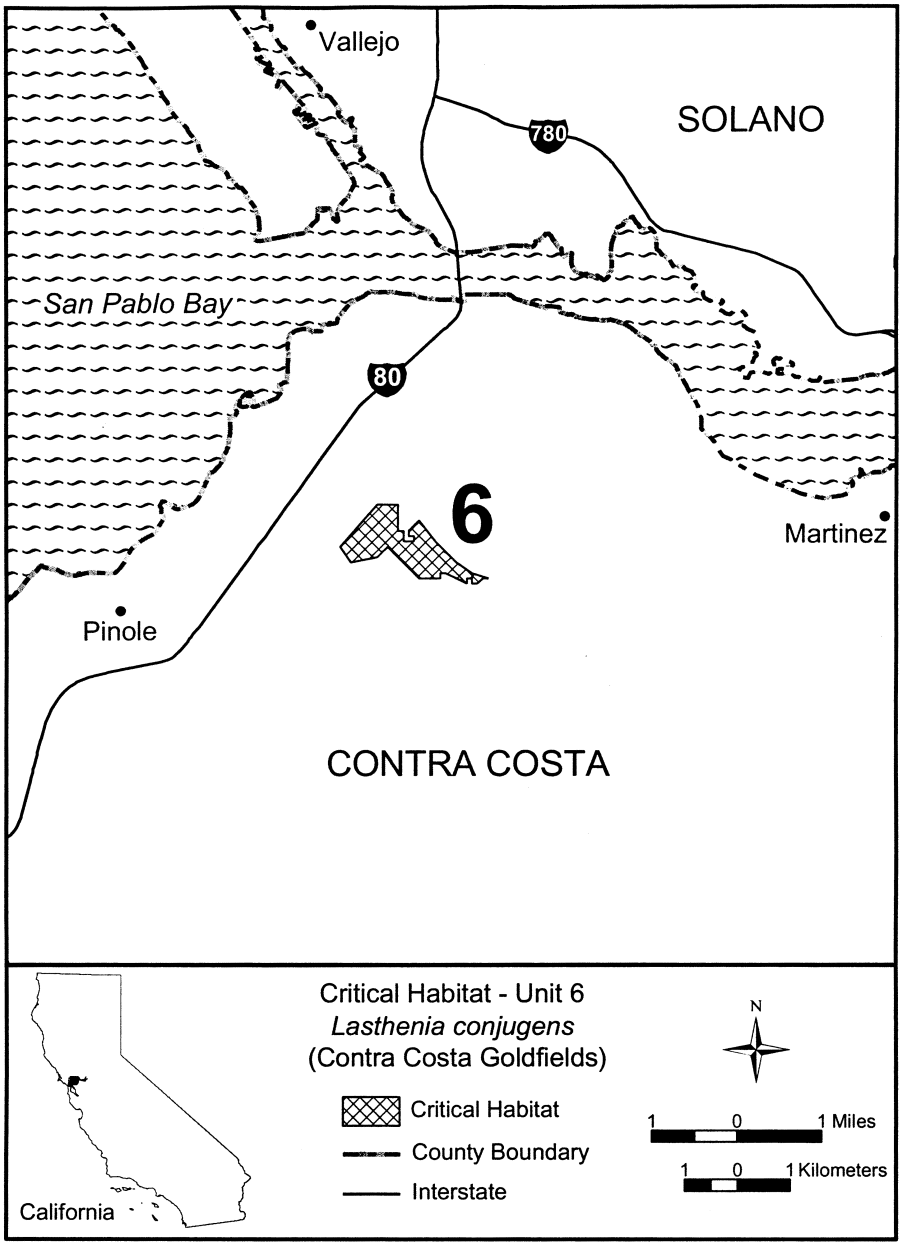
(13) Unit 8: Alameda County, California. From USGS 1:24,000 quadrangle maps Milipitas, and Niles, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 591200, 4148600; 590700, 4148600; 590700, 4148700; 590300, 4149200; 589400, 4150300; 589500, 4150200; 589900, 4150100; 590100, 4150400; 590900, 4150000; 591500, 4150800; 591600, 4150700; 591800, 4150700; 592000, 4150900; 592300, 4150600; 592300, 4150400; 592200, 4150000; 592100, 4149600; 592000, 4149500; 591600, 4149500; 591600, 4148800; returning to 591200, 4148600.

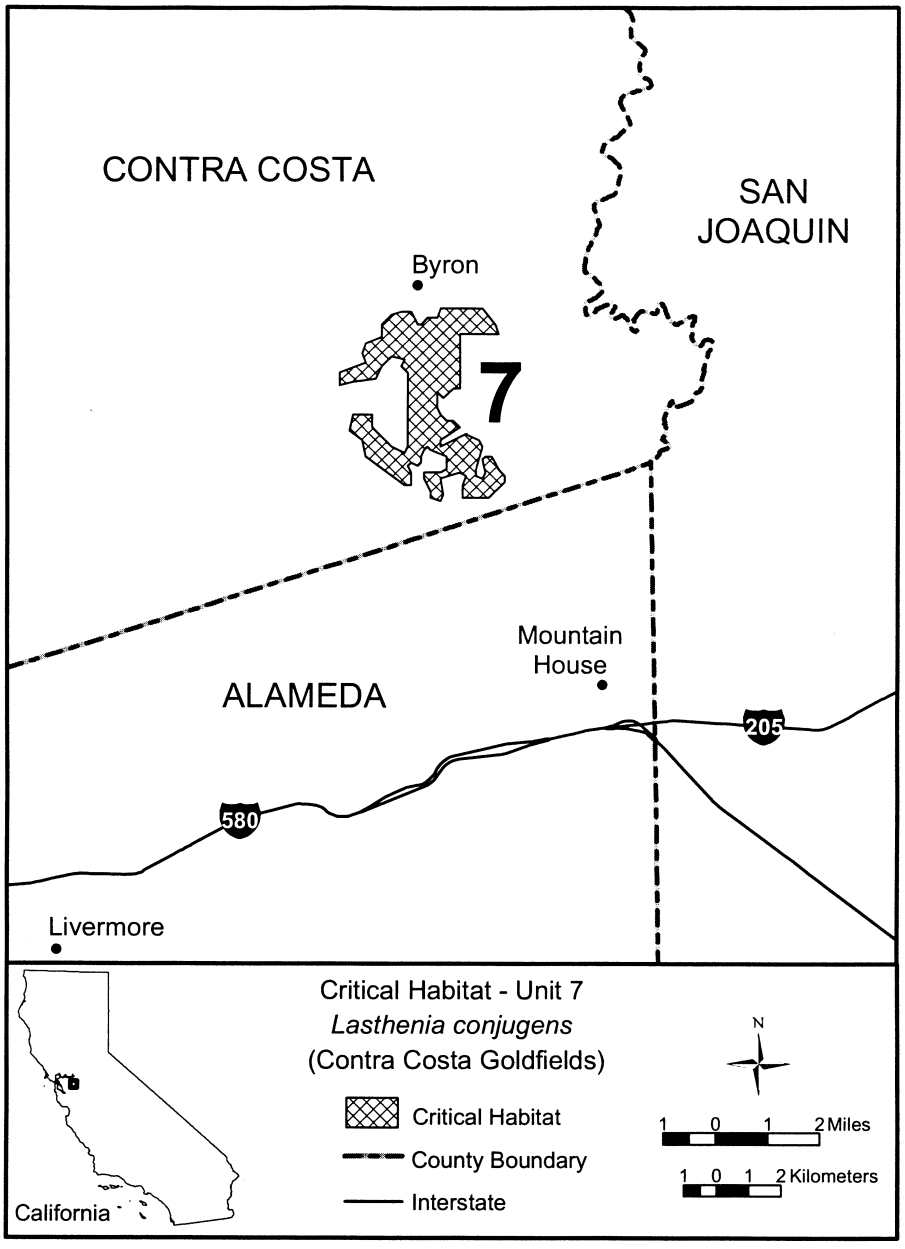
(14) Unit 9: Monterey County, California. From USGS 1:24,000 quadrangle maps Marina, Salinas, Seaside, and Spreckles, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 608100, 4048800; 607700, 4048800; 607200, 4048900; 606700, 4049100; 606500, 4049200; 606400, 4049300; 606300, 4049500; 606100, 4049800; 606000, 4049900; 605600, 4050300; 605500, 4050500; 605400, 4050800; 605400, 4051200; 605700, 4052100; 606000, 4052700; 606000, 4052800; 606900, 4053300; 607200, 4053200; 607900, 4053100; 608100, 4053100; 608400, 4053000; 609100, 4053000; 609300, 4053200; 609500, 4053500; 609600, 4053700; 609700, 4053900; 609700, 4054100; 609800, 4054300; 609900, 4054600; 609900, 4054900; 610200, 4055500; 610200, 4056300; 610400, 4056500; 610600, 4056600; 610700, 4056700; 610900, 4056800; 611100, 4056700; 611200, 4056700; 612200, 4056600; 612700, 4056600; 612900, 4056600; 613000, 4056600; 613100, 4056500; 613100, 4056400; 613200, 4056200; 613100, 4056000; 613100, 4055500; 613000, 4055200; 613000, 4055000; 612900, 4054900; 612600, 4054300; 612400, 4053900; 612000, 4053800; 611600, 4053600; 611300, 4053400; 610800, 4052900; 610400, 4051900; 610400, 4051300; 610700, 4050800; 610600, 4050600; 610200, 4050600; 609900, 4050500; 609800, 4050300; 609800, 4050000; 609900, 4049700; 609900, 4049400; 609800, 4049300; 608600, 4049000; 608400, 4049000; 608200, 4048900; returning to 608100, 4048800.

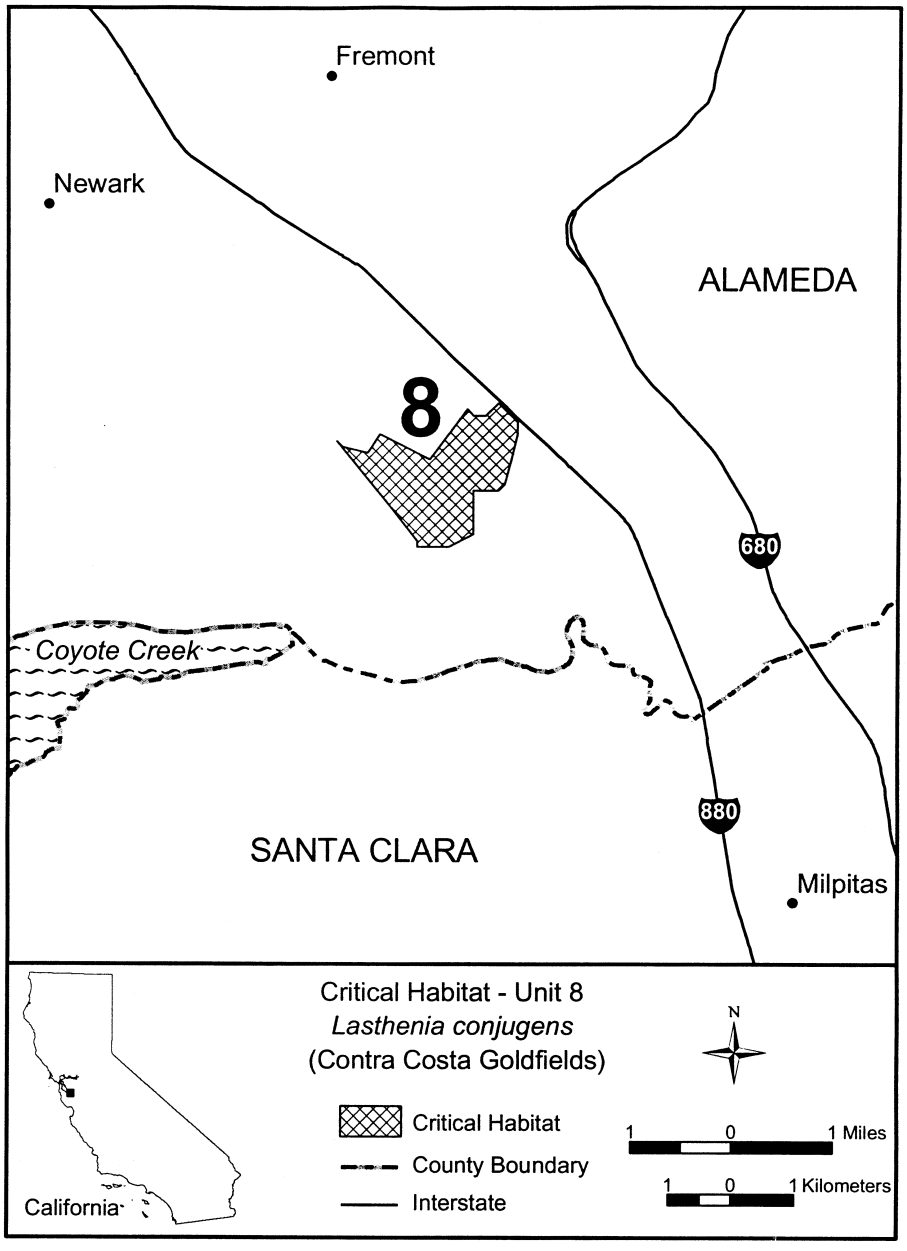
(15) Maps follow of critical habitat units 1, 2 through 5, 6, 7, 8, and 9 (respectively) for Contra Costa goldfields.

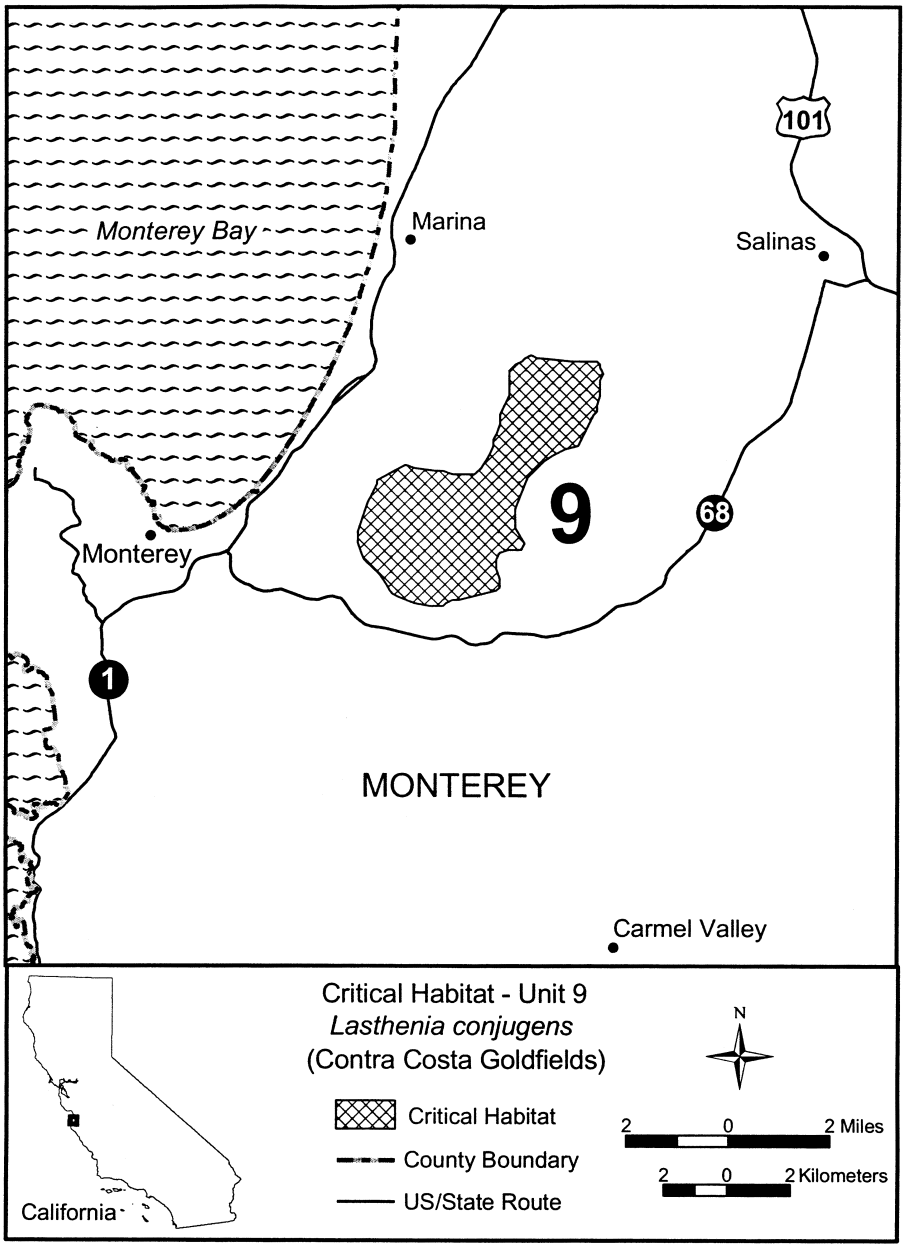

Pacific Ocean
MENDOCINO
1
Man-
chester
1
Point Arena
Critical Habitat - Unit 1
Lasthenia conjugens
(Contra Costa Goldfields)
Critical Habitat
County Boundary
State Route
N
1 0 1 Miles
1 0 1 Kilometers
California


NAPA
SOLANO
505
2
Vacaville
80
Napa
3
4
Fairfield
5B
5A
680
Critical Habitat - Units 2-5
Lasthenia conjugens
(Contra Costa Goldfields)
Critical Habitat
County Boundary
Interstate
N
2 0 2 Miles
2 0 2 Kilometers
California


Vallejo
SOLANO
780
San Pablo Bay
80
6
Martinez
Pinole
CONTRA COSTA
California
Critical Habitat - Unit 6
Lasthenia conjugens
(Contra Costa Goldfields)
Critical Habitat
County Boundary
Interstate
N
1 0 1 Miles
1 0 1 Kilometers


CONTRA COSTA
SAN JOAQUIN
Byron
7
Mountain House
ALAMEDA
205
580
Livermore
California
Critical Habitat - Unit 7
Lasthenia conjugens
(Contra Costa Goldfields)
Critical Habitat
County Boundary
Interstate
N
1 0 1 2 Miles
1 0 1 2 Kilometers


Fremont
Newark
ALAMEDA
8
680
Coyote Creek
880
SANTA CLARA
Milpitas
California
Critical Habitat - Unit 8
Lasthenia conjugens
(Contra Costa Goldfields)
N
Critical Habitat
County Boundary
Interstate
1 0 1 Miles
1 0 1 Kilometers

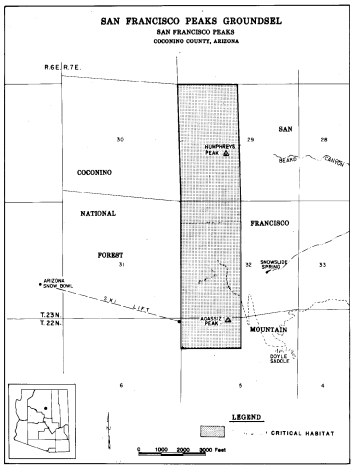


Family Asteraceae: *Senecio franciscanus* (San Francisco Peaks groundsel).

Arizona: Coconino County; Coconino National Forest, Agassiz Peak and Humphreys Peak, T22N, R7E, N½ of NW¼ Sec. 5; T23N, R7E, W½ Section 32 and W½ Section 29. Primary constituent elements are the loose cinder talus slopes of the alpine tundra system

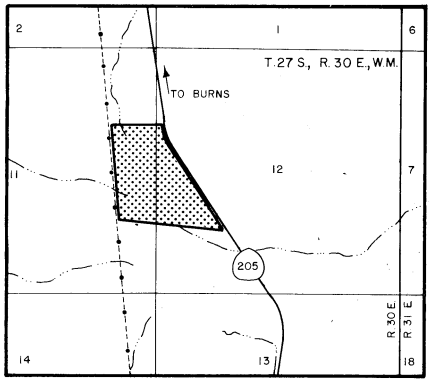
of the San Francisco Peaks and absence of disturbance and damage from hikers.

NOTE: Map follows:



Family Asteraceae: *Stephanomeria malheurensis* (Malheur wire-lettuce). Oregon, Harney County; the lands west of State Highway 205 within the SE ¼ of the NE ¼ and the NE ¼ of the SE ¼, Section 11; and the W ½ of the SW ¼ of the NW ¼, and the SW ¼ of the NE ¼ of the SW ¼, and the NW ¼ of the SW ¼, Section 12, T27S, R30E, Willamette Meridian.

NOTE: Map follows:

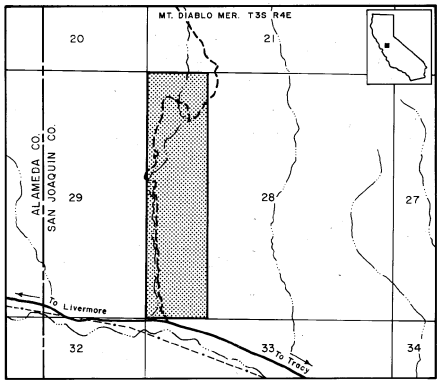


Boraginaceae: *Amsinckia grandiflora* (large-flowered fiddleneck)

California, San Joaquin County, Mount Diablo Meridian, T3S R4E Section 28 W½ NW¼ and W½ SW¼.

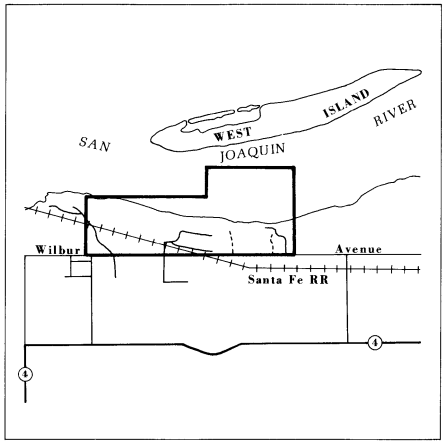
This includes the known primary constituent elements of a steep, west- and south-facing slope with light textured but stable soils.

NOTE: Map follows:



Family Brassicaceae: *Erysimum capitatum* var. *angustatum* (Contra Costa Wallflower). *California.* An area of land, water, and airspace in Contra Costa County, with the following components: T. 2 N. R. 2 E. SW¼ section 17, E⅔ of S⅓ of section 18.

NOTE: Map follows:



Family Brassicaceae: *Lesquerella Kingii* ssp. *Bernardina* (San Bernardino Mountains Bladderpod)

(1) Critical habitat units are depicted for San Bernardino County, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Lesquerella kingii* ssp. *bernardina* are those habitat components that are essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements of critical habitat for this species are listed below and consist of, but are not limited to:

(i) Soils derived primarily from Bonanza King Formation and Undivided Cambrian parent materials that occur on hillsides or

on large rock outcrops at elevations between 2,098 and 2,700 m (6,883 and 8,800 ft);

(ii) Soils with intact, natural surfaces that have not been substantially altered by land use activities (*e.g.*, graded, excavated, re-contoured, or otherwise altered by ground-disturbing equipment); and

(iii) Associated plant communities that have areas with an open canopy cover and little accumulation of organic material (*e.g.*, leaf litter) on the surface of the soil.

(3) Existing features and structures, such as buildings, active mines, paved or unpaved roads, other paved or cleared areas, lawns, and other urban landscaped areas, are not likely to contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species or primary constituent elements in adjacent critical habitat.

(4) Bertha Ridge Unit, San Bernardino County, California.

(i) From USGS 1:24,000 quadrangle maps Fawnskin and Big Bear City, California.

(ii) Subunit 2a: Land bounded by the following UTM11 NAD27 coordinates (E, N): 510400, 3793600; 510700, 3793600; 510700, 3793500; 510800, 3793500; 510800, 3793400; 511000, 3793400; 511000, 3793100; 510900, 3793100; 510900, 3793000; 510600, 3793000; 510600, 3793100; 510500, 3793100; 510500, 3793200; 510400, 3793200; and 510400, 3793600.

(iii) Subunit 2b: Land bounded by the following UTM11 NAD27 coordinates (E, N): 511600, 3793900; 511900, 3793900; 511900, 3793800; 512000, 3793800; 512000, 3793700; 512300, 3793700; 512300, 3793600; 512400, 3793600; 512400, 3793300; 512300, 3793300; 512300, 3793200; 512100, 3793200; 512100, 3793300; 512000, 3793300; 512000, 3793200; 511600, 3793200; 511600, 3793500; 511500, 3793500; 511500, 3793800; 511600, 3793800; and 511600, 3793900.

(iv) Subunit 2c: Land bounded by the following UTM11 NAD27 coordinates (E, N): 511700, 3793100; 512000, 3793100; 512000, 3793000; 512200, 3793000; 512200, 3792700; 512100, 3792700; 512100, 3792500; 511900, 3792500; 511900, 3792300; 512600, 3792300; 512600, 3792100; 512400, 3792100; 512400, 3791400; 512100, 3791400; 512100, 3791500; 511900, 3791500; 511900, 3791400; 511700, 3791400; 511700, 3791300; 511600, 3791300; 511600, 3791200; 511200, 3791200; 511200, 3791400; 511100, 3791400; 511100, 3791500; 511200, 3791500; 511200, 3791600; 511300, 3791600; 511300, 3791700; 511600, 3791700; 511600, 3792300; 511500, 3792300; 511500, 3792500; 511600, 3792500; 511600, 3792600; 511700, 3792600; 511700, 3792700; 511600, 3792700; 511600, 3793000; 511700, 3793000; and 511700, 3793100.

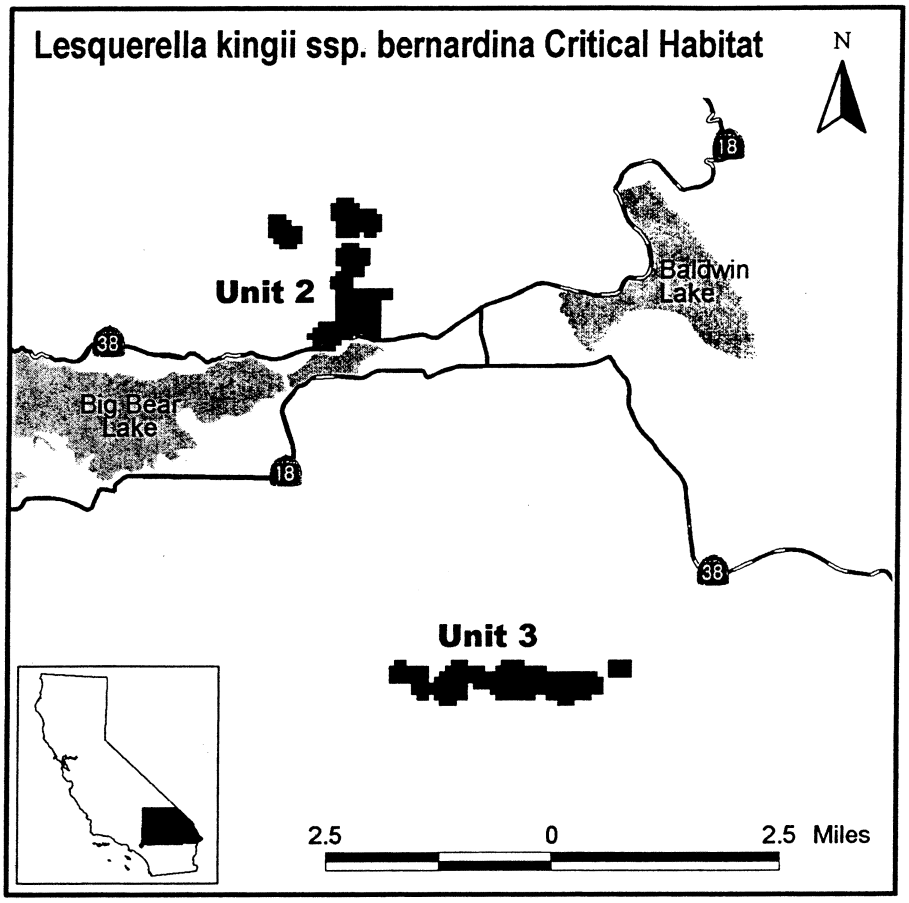
(5) Sugarlump Ridge Unit, San Bernardino County, California.

(i) From USGS 1:24,000 quadrangle map Moonridge, California.

(ii) Subunit 3a: Land bounded by the following UTM11 NAD27 coordinates (E, N): 512700, 3785700; 512900, 3785700; 512900, 3785600; 513300, 3785600; 513300, 3785300; 513400, 3785300; 513400, 3785400; 513500, 3785400; 513500, 3785500; 513600, 3785500; 513600, 3785600; 513700, 3785600; 513700, 3785700; 514000, 3785700; 514000, 3785600; 514300, 3785600; 514300, 3785500; 514500, 3785500; 514500, 3785600; 514600, 3785600; 514600, 3785700; 515000, 3785700; 515000, 3785600; 515400, 3785600; 515400, 3785500; 516300, 3785500; 516300, 3785400; 516400, 3785400; 516400, 3785100; 516200, 3785100; 516200, 3785000; 515900, 3785000; 515900, 3784900; 515600, 3784900; 515600, 3785000; 515400, 3785000; 515400, 3785100; 515200, 3785100; 515200, 3785000; 514500, 3785000; 514500, 3785100; 514400, 3785100; 514400, 3785200; 514100, 3785200; 514100, 3785300; 514000, 3785300; 514000, 3785000; 513800, 3785000; 513800, 3784900; 513500, 3784900; 513500, 3785000; 513400, 3785000; 513400, 3785100; 513300, 3785100; 513300, 3785000; 513100, 3785000; 513100, 3785100; 513000, 3785100; 513000, 3785300; 512600, 3785300; 512600, 3785600; 512700, 3785600; and 512700, 3785700.

(iii) Subunit 3b: Land bounded by the following UTM11 NAD27 coordinates (E, N): 516500, 3785700; 516900, 3785700; 516900, 3785400; 516500, 3785400; and 516500, 3785700.

(iv) Note: *Lesquerella kingii* ssp. *bernardina* map follows:



Family Brassicaceae: *Lesquerella thamnophila* (Zapata bladderpod)

1. Critical habitat units are depicted for Starr County, Texas, on the maps below. Critical habitat includes National Wildlife Refuge tracts and one private land site. Maps are for general informational purposes only; the legal descriptions precisely define critical habitat boundaries.

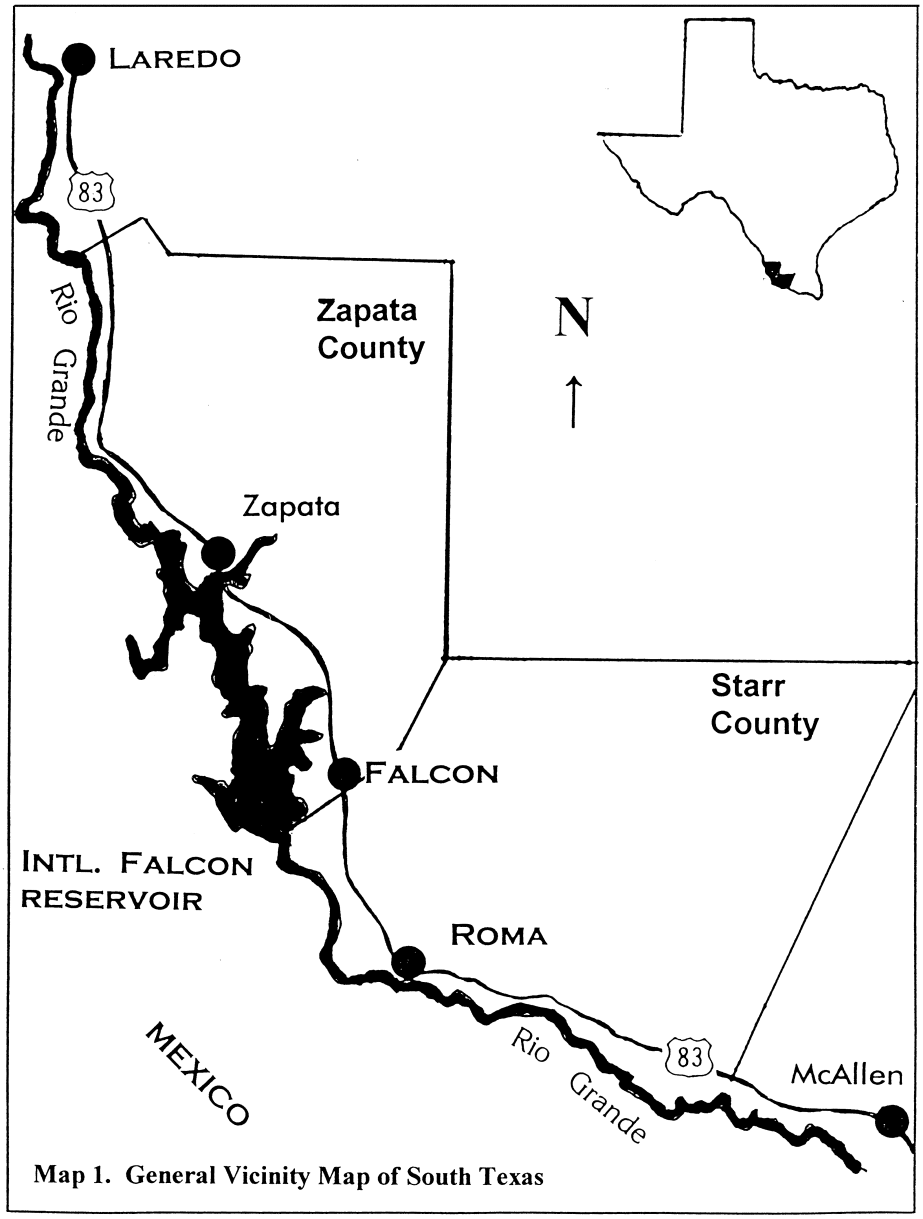
2. Within these areas, the primary constituent elements include:

(a) Arid upland habitats of various soil types, including highly calcareous sandy loam to loamy sand, with low to moderate salinity levels on low sloping hills;

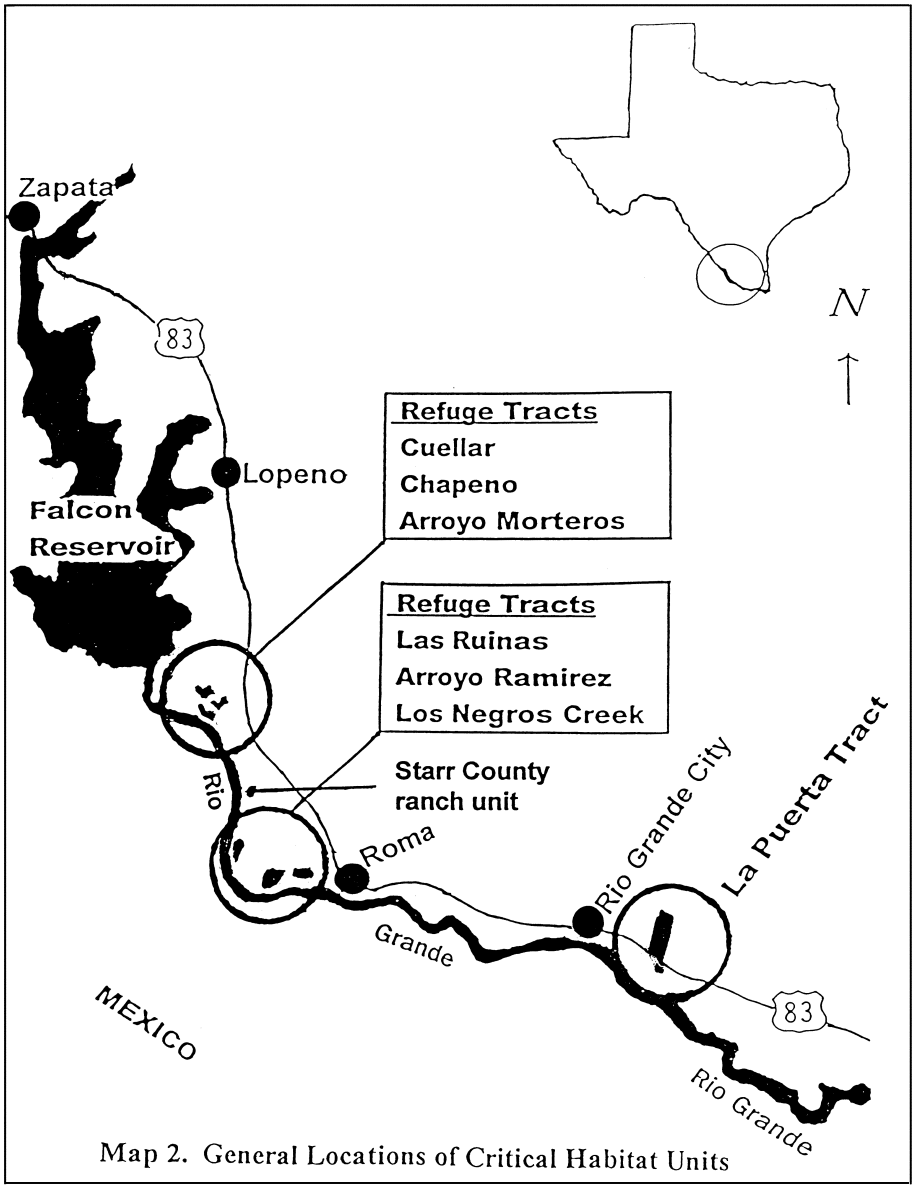
(b) Absence of substantial previous soil disturbance and seeding or sodding of exotic grasses; and

(c) A sparse overstory of shrub species typical of the Tamaulipan biotic province, but lacking a complete canopy as might be provided by a continuous overstory dominated by mesquite (*Prosopis glandulosa*).

3. Existing features and structures, such as buildings, roads, railroads, urban development, and other features not containing primary constituent elements, are not considered critical habitat.



Map 1. General Vicinity Map of South Texas



Map 2. General Locations of Critical Habitat Units

Critical Habitat on Lower Rio Grande Valley National Wildlife Refuge Tracts, Starr County, Texas (Area measurements are approximate.):

Unit 1, Cuellar Tract (18 hectares (ha); 45 acres (ac))—(Segment 669). Note: All bearings are based on the Texas State Plane Coordinate System, South Zone, as referenced by the National Geodetic Survey Triangulation Station ''LABRA'' (not found) having State plane coordinates of N = 331,881.065, E = 1,794,777.75. The scale factor used is *0.9999252*, and the theta angle is *−00°37′32″*. All areas

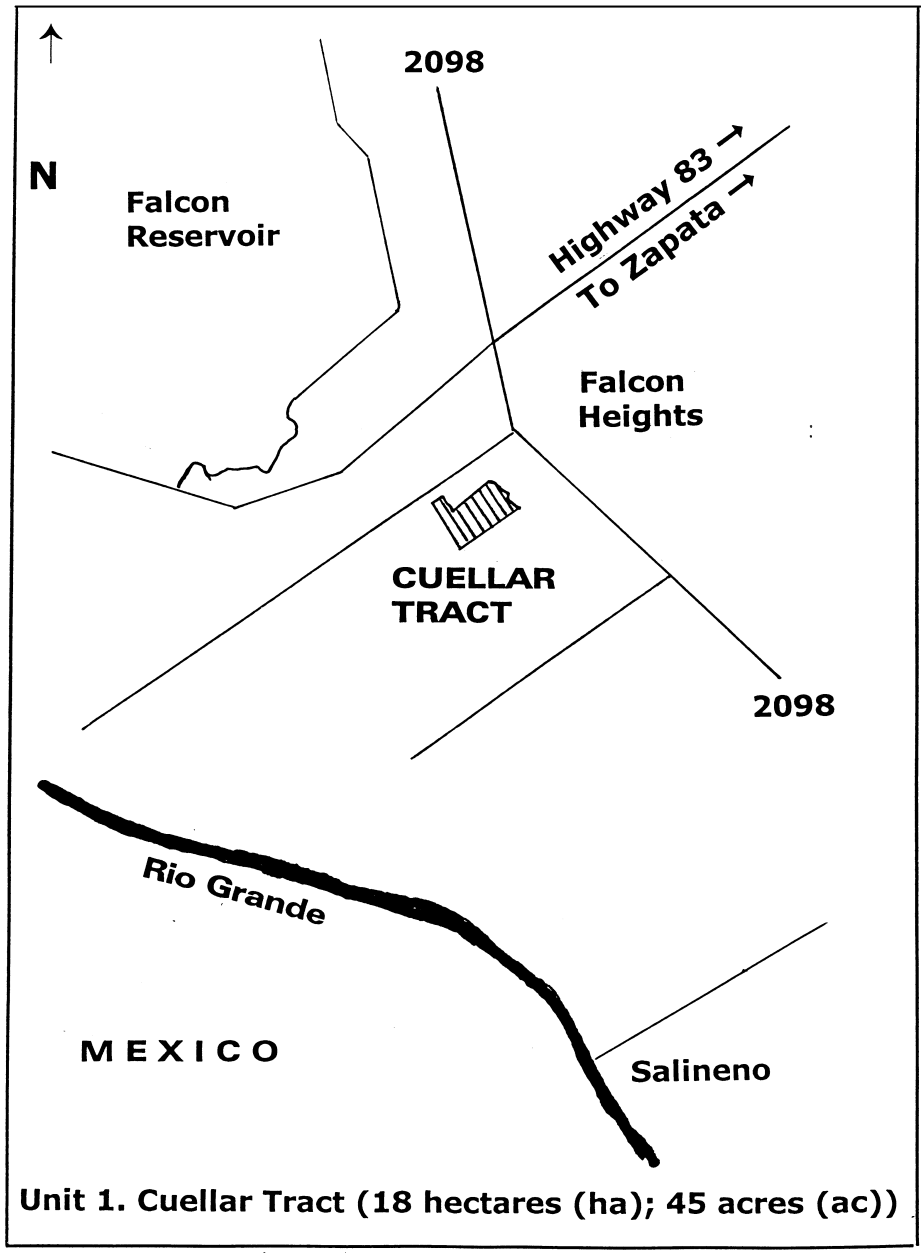
and distances are true surface measurements. Beginning at a standard U.S. Fish and Wildlife Service (FWS) aluminum monument set for corner on the southeasterly line of Porcion No. 59 and the northeast corner of Share 35 and stamped ''Tract 669, COR. No. 1, R.P.L.S. #4303'' and having a State plane coordinate value of N = 320,083.51, E = 1,799,578.77, from which triangulation station ''LABRA'', bears N 22°08′38″W, 12,737.98 feet; thence, in a southwesterly direction along the common line of Porcion 59 and 60, S 54°32′24″W, 2,290.19 feet, to a standard FWS aluminum monument set for corner, being the common corner of Shares 35 and 26 and stamped ''Tract 669, COR. No. 2, R.P.L.S. No. 4303; thence, in a northwesterly direction along the common line of Share 35 with Shares 26 and 27, N 35°27′36″W, 640.00 feet to a standard FWS aluminum monument set for corner, being the most southerly common corner of Shares 35 and 34 and stamped ''Tract 669, COR. No. 3, R.P.L.S. No. 4303''; thence, in a northeasterly direction along the common line of Shares 35 and 34; N 54°32′24″E, 2,290.19 feet to a standard FWS aluminum monument set for corner, being the most northerly common corner of shares 35 and 34 and stamped ''Tract 669, COR. No. 4, R.P.L.S. No. 4303; thence, in a southeasterly direction along the common line of Shares 35 and 36 Parcel–A; S 35°27′36″ E, 640.00 feet to the point of beginning and containing 33.648 acres of land.

(Cuellar Tract—Segment 672). Note: All bearings are based on the Texas State Plane Coordinate System, South Zone, as referenced by U.S. Fish and Wildlife Service GPS Monument No. 105 having State plane coordinates (NAD 27) of N = 311,099.90, E = 1,799,824.45. The scale factor used is *0.9999252,* and the theta angle is *−00°37′32″*. All areas and distances are true surface measurements. Beginning at a standard FWS aluminum monument set for corner on the common line between Porcions 59 and 60, and being the northeast corner of Share 26 and stamped ''Tract 672, COR. No. 1, R.P.L.S. No. 3680'' and having a State plane coordinate value of N = 318,737.64, E = 1,797,725.36, from which FWS GPS Monument No. 105 bears S 15°22′02″ E, 7,920.94 feet; thence, in a southeasterly direction along the common line of Porcion 59 and 60, S 54°27′12″W, 806.50 feet to a standard FWS aluminum monument set for corner, being the southeast corner of said north one-half (½) of Share 26, same being the northeast corner of the south one-half (½) of Share 26 and stamped ''Tract 672, COR. No. 2, R.P.L.S. No. 3680''; thence, in a northwesterly direction along the common line of said north and south one-half (½) of Share 26; N 35°27′36″ W, 463.31 feet to a standard FWS aluminum monument set for corner in the common line between Shares 26 and 27 and stamped ''Tract 672, COR. No. 3, R.P.L.S. No. 3680''; thence, in a northeast direction along the common line of Shares 26 and 27; N 54°32′24″ E, 806.50 feet to a standard FWS aluminum monument set for corner, being the most northerly common corner of Shares 26 and 27 in the south line of Share 35 and stamped ''Tract 672, COR. No. 4, R.P.L.S. No. 3680''; thence, in a southeasterly direction along the common line of Shares 35 and 26; S 35°27′36″ E, 462.09 feet to the point of beginning and containing 8.567 acres of land.

(Cuellar Tract—Segment 673). Note: All bearings are based on the Texas State Plane Coordinate System, South Zone, as referenced by FWS GPS Monument No. 105 having State plane coordinates (NAD 27) of N = 311,099.90, E = 1,799,824.45. The scale factor used is *0.9999252,* and the theta angle is *−00°37′32″*. All areas and distances are true surface measurements. Beginning at a standard FWS aluminum monument set for the common north corner of Shares 26 and 27, in the south line of Share 35 and stamped ''Tract 672, COR. No. 4, R.P.L.S. No. 3680'' and having a state plane coordinate value of N = 319,114.02, E = 1,797,457.29, from which FWS GPS Monument No. 105 bears S 16°27′21″ E, 8,356.40 feet; thence, in a southwesterly direction along the common line of Shares 26 and 27, S 54°32′24″ N, 806.50 feet to a standard FWS aluminum monument set for corner, being the southeast corner of said north one-half (½) of Share 27, same being the northeast corner of the south one-half (½) of Share 27 and stamped ''Tract 672, COR. No. 3, R.P.L.S. No. 3680''; thence, in a northwesterly direction along the common line of said north and south one-half (½) of Share 27; N 35°27′36″ W, 592.30 feet to a standard FWS aluminum monument set for corner in the common line between Shares 27 and 28 and stamped ''Tract 674, COR. No. 3, R.P.L.S. No. 3680''; thence, in a northeasterly direction along the common line of Shares 27 and 28, N 54°32′24″ E, 806.50 feet to a standard FWS aluminum monument set for corner, being the most northerly common corner of Shares 27 and 28 in the south line of Share 34 and stamped ''Tract 674, COR. No. 2, R.P.L.S. No. 3680''; thence, in a southeasterly direction along the common line of Shares 34 and 27, S 35°27′36″ E, 592.30 feet to the point of beginning and containing 10.966 acres of land.

(Cuellar Tract—Segment 672). Note: All bearings are based on the Texas State Plane Coordinate System, South Zone, as referenced by FWS GPS Monument No. 105 having State plane coordinates (NAD 27) of N = 311,099.90, E = 1,799,824.45. The scale factor used is *0.9999252,* and the theta angle is *−00°37′32″*. All areas and distances are true surface measurements. Beginning at a standard FWS aluminum monument set replacing a 1–inch iron pipe found for the common north corner of Shares 28 and 29, in the south line of Share 33 and stamped ''Tract 674, COR. No. 1, R.P.L.S. No. 3680''; and having a state plane coordinate value of N = 320,078.90,

E = 1,796,770.06, from which FWS GPS Monument No. 105 bears S 18°47′11″ E, 9,484.36 feet; thence, in a southeasterly direction along the common line of Share 28 and Shares 33 and 34, S 35°27′36″ E, 592.30 feet to a standard FWS aluminum monument set for corner, being the common northerly corner of Shares 28 and 27 and stamped ''Tract 674, COR. No. 2, R.P.L.S. No. 3680''; thence, in a southwesterly direction along the common line of said Share 28 and 27; S 54°32′24″ W, 806.50 feet to a standard FWS aluminum monument set for the southeasterly corner of said north one-half (½) of Share 28, same being the northeasterly corner of the south one-half (½) of Share 28 and stamped ''Tract 674, COR. No. 3, R.P.L.S. No. 3680''; thence, in a northwesterly direction along the common line of the north and south one-half (½) of Share 28, N 35°27′36″ W, 592.30 feet to a standard FWS aluminum monument set for corner in the common line between Shares 28 and 29 and stamped ''Tract 674, COR. No. 4, R.P.S. No. 3680''; thence, in a northeasterly direction along the common line of Shares 28 and 29; N 54°32′24″ E, 806.50 feet to the point of beginning and containing 10.966 acres of land.



Unit 1. Cuellar Tract (18 hectares (ha); 45 acres (ac))

Unit 2, Chapeno Tract (28 ha; 69 ac)—(Chapeno Tract—Segment 660). Note: All bearings and distances are based on the International Boundary Commission Monuments as referenced by the U.S.C. & G.S. Triangulation Station ''LABRA.'' The scale factor used is *0.9999252*, and the theta angle is *−00°37′32″* (NAD 1927). All areas shown are

true ground areas. Commencing for reference at the U.S.C. & G.S. triangulation station ''LABRA,'' having coordinate values: x = 1,794,777.75, y = 331,881.06; thence, S 02°08′43″ W, a distance of 9,020.47 feet to the northwesterly boundary line of said 44.900-acre tract for the northmost corner of said Share No. 17 and being corner No. 1 and the northernmost corner and place of beginning of the tract herein-described; thence, along the northeasterly boundary line of Share No. 17 and the southwesterly boundary line of a 35-foot perpetual easement, S 32°11′36″ E, 840.62 feet to the easternmost corner of said Share No. 17 and being corner No. 2 of this tract; thence, along the southeasterly boundary line of Share No. 17 and the northwesterly boundary line of Share No. 18, S 47°29′30″ W, 293.59 feet to a said point on a fence line along the southwesterly boundary line of said 44.900-acre tract for the southernmost corner of said Share No. 17 and being corner No. 3 of this tract; thence, following said fence line along the southwesterly boundary line of Share No. 17 and the southwesterly boundary line of said 44.900-acre tract, N 30°16′28″ W, 166.16 feet to a standard FWS aluminum monument stamped ''Tract (660), R.P.S. No. 4731'' set for a corner of said 44.900-acre tract and being corner No. 4 of this tract; thence, continuing along said fence line along the southwesterly boundary line of Share No. 17 and the southwesterly boundary line of said 44.900-acre tract, N 31°04′59″ W, 684.02 feet to a standard FWS aluminum monument stamped ''Tract (660), R. P. S. No. 4731'' set for the westernmost corner of said 44.900-acre tract and being corner No. 5 of this tract, thence, following a fence line along the northwesterly boundary line of Share No. 17 and the northwesterly boundary line of said 44.900-acre tract, N 48°42′36″ E, 273.46 feet to the place of beginning and containing 5.396 acres of land.

(Chapeno Tract—Segment 661). Note: All bearings and distances are based on the International Boundary Commission Monuments as referenced by the U.S.C. & G.S. triangulation station ''LABRA.'' The scale factor used is 00.9999252, and the theta angle is *−00°37′32″* (NAD 1927). All areas shown are true ground areas. Commencing for reference at the U.S.C. & G.S. triangulation station ''LABRA,'' having coordinate values: x = 1,794,777.75, y = 331,881.06; thence, S 00°48′20″ E, a distance of 9,702.45 feet to the northernmost corner of said Share No. 18 and being corner No. 1 and the northernmost corner and place of beginning of the tract herein-described; thence, along the northeasterly boundary line of Share No. 18 and the southwesterly boundary line of Share No. 19, S 42°40′05″ E, 623.01 feet to a point on a fence line along the southeasterly boundary line of said 44.900-acre tract for the easternmost corner of said Share No. 18 and being corner No. 2 of this tract; thence, following said fence line along the southeasterly boundary line of Share No. 18 and the southeasterly boundary line of said 44.900-acre tract, S 54°58′43″ W, 14.82 feet to a standard FWS aluminum monument stamped ''Tract (661), R. P. S. No. 4731'' set for a corner of said 44.900-acre tract and being corner No. 3 of this tract; thence, continuing along said fence line along the southeasterly boundary line of Share No. 18 and the southeasterly boundary line of said 44.900-acre tract, S 54°17′40″ W, 442.61 feet to a standard FWS aluminum monument stamped ''Tract (661), R. P. S. No. 4731'' set for the southernmost corner of said 44.900-acre tract and being corner No. 4 of this tract; thence, following a fence line along the southwesterly boundary line of Share No. 18 and the southwesterly boundary line of said 44.900-acre tract, N 30°16′28″ W, 581.86 feet to a point for the westernmost corner of said Share No. 18 and being corner No. 5 of this tract; thence, along the southeasterly boundary line of Share No. 17 and the northwesterly boundary line of Share No. 18, N 47°29′30″ E, 329.16 feet to the place of beginning and containing 5.396 acres of land.

(Chapeno Tract—Segment 662). Note: All bearings and distances are based on the International Boundary Commission Monuments as referenced by the U.S.C. & G.S. triangulation station ''LABRA.'' The scale factor used is 00.9999252, and the theta angle is −00°37′32″ (NAD 1927). All areas shown are true ground areas. Commencing for reference at the U.S.C. & G.S. triangulation station ''LABRA,'' having coordinate values: x = 1,794,777.75, y = 331,881.06; thence, S 00°53′22″ E, a distance of 9,308.09 feet to the northernmost corner of said Share No. 19 and being corner No. 1 and the northernmost corner and the place of beginning of the tract herein-described; thence, along the northeasterly boundary line of Share No. 19 and the southwesterly boundary line of Share No. 20, S 41°14′45″ E, 941.54 feet to a point on a fence line along the southeasterly boundary line of said 44.900-acre tract for the easternmost corner of said Share No. 19 and being corner No. 2 of this tract; thence, following said fence line along the southeasterly boundary line of Share No. 19 and the southeasterly boundary line of said 44.900-acre tract, S 55°22′51″ W, 8.49 feet to a standard FWS aluminum monument stamped ''Tract (662), R. P. S. No. 4731'' set for a corner of said 44.900-acre tract and being corner No. 3 of this tract; thence, continuing along said fence line along the southeasterly boundary line of Share No. 19 and the southeasterly boundary line of said 44.900-acre tract, S 54°58′43″ W, 243.72 feet to the southernmost corner of Share No. 19 and being corner No. 4 of this tract; thence, along the northeasterly boundary line of Share No. 18 and the southwesterly boundary line of Share No. 19, N 42°40′05″ W, 623.01 feet to a corner of Share No. 19 and

being corner No. 5 of this tract; thence, along the northeasterly boundary line of a 35-foot perpetual easement and the southwesterly boundary line of Share No. 19, N 32°08′41″ W, 293.64 feet to the westernmost corner of said Share No. 19 and being corner No. 6 of this tract; thence, along the southeasterly boundary line of a 35-ft. perpetual easement and the northwesterly boundary line of Share No. 19, N 48°23′35″ E, 219.73 feet to the place of beginning and containing 5.396 acres of land.

(Chapeno Tract—Segment 663). Note: All bearings and distances are based on the International Boundary Commission Monuments as referenced by the U.S.C. & G.S. triangulation station ''LABRA.'' The scale factor used is *00.9999252,* and the theta angle is *−00°37′32″* (NAD 1927). All areas shown are true ground areas. Commencing for reference at the U. S. C. & G. S. triangulation station ''LABRA,'' having coordinate values: x = 1,794,777.75, y = 331,881.06; thence, S 01°55′50″ E, a distance of 9,166.26 feet to the northernmost corner of said share No 20, and being corner No. 1, and the northernmost corner and place of beginning of the tract herein-described; thence, along the northeasterly boundary line of Share No. 20 and the southwesterly boundary line of Share No. 21, S 44°17′45″ E, 975.87 feet to a point on a fence line along the southeasterly boundary line of said 44.900-acre tract for the easternmost corner of said Share No. 20 and being corner No. 2 of this tract; thence, following said fence line along the southeasterly boundary line of Share No. 20 and the southeasterly boundary line of said 44.900-acre tract; S 55°22′51″ W, 273.48 feet to the southernmost corner of Share No. 20 and being corner No. 3 of this tract; thence, along the northeasterly boundary line of Share No. 19 and the southwesterly boundary line of Share No. 20, N 41°14' 45'' W, 941.54 feet to the westernmost corner of Share No. 20 and being corner No. 4 of this tract; thence, along the southeasterly boundary line of a 35-ft. perpetual easement and the northwesterly boundary line of Share No. 20, N 48°23′35″ E, 219.73 feet to the place of beginning and containing 5.396 acres of land.

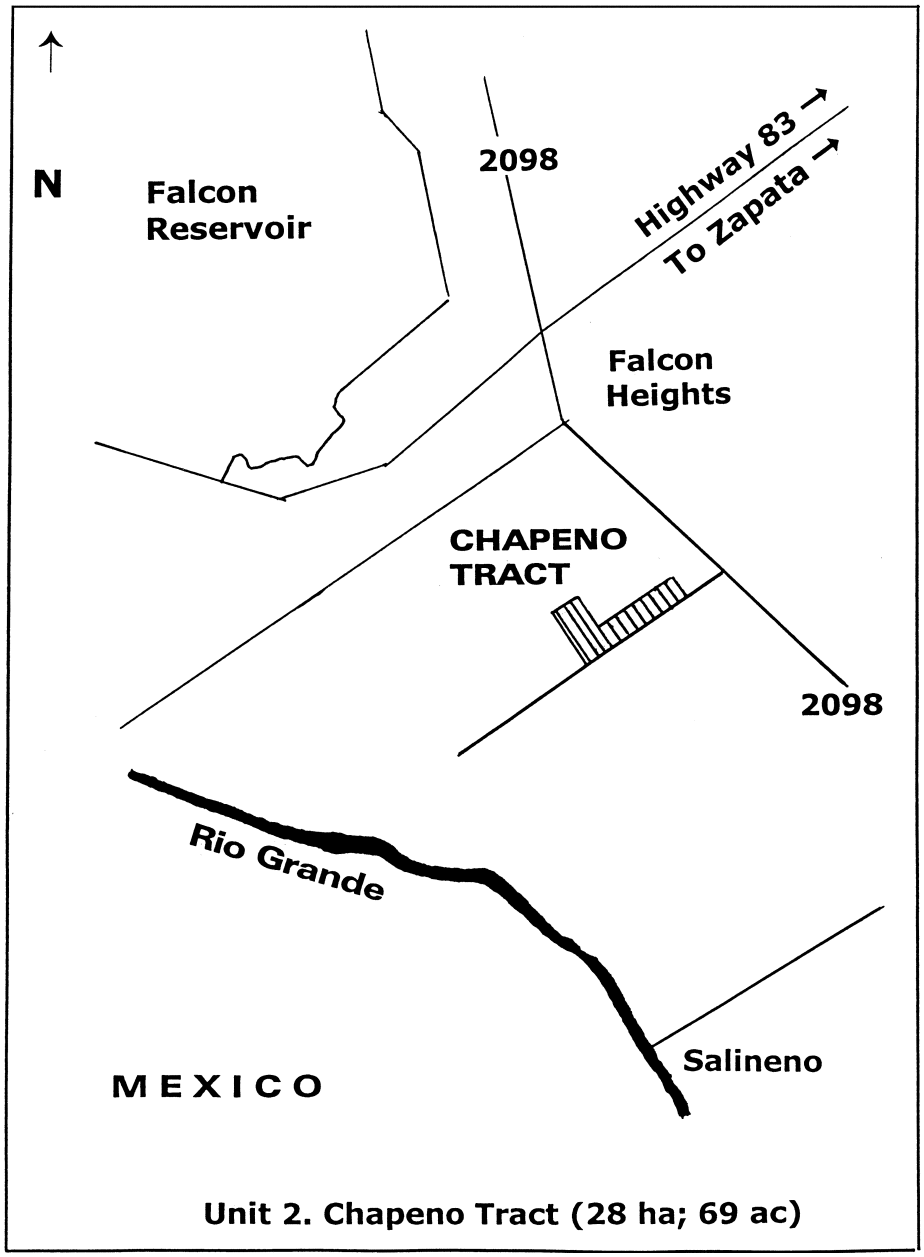
(Chapeno Tract—Segment 664). Note: All bearings and distances are based on the International Boundary Commission Monuments as referenced by the U.S.C. & G.S. triangulation station ''LABRA.'' The scale factor used is *00.9999252,* and the theta angle is *−00°37′32″* (NAD 1927). All areas shown are true ground areas. Commencing for reference at the U.S.C. & G.S. triangulation station ''LABRA,'' having coordinate values: x = 1,794,777.75, y = 331,881.06; thence, S 03°00′15″ E, a distance of 9,027.56 feet to the northernmost corner of said Share No. 21 and being corner No. 1 and the northernmost corner and place of beginning of the tract herein-described; thence, along the northeasterly boundary line of Share No. 21 and the southwesterly boundary line of Share No 22, S 46 °18′57″'' E, 1,008.60 feet to a point on a fence line along the southeasterly boundary line of said 44.900-acre tract for the easternmost corner of Share No. 21 and being corner No. 2 of this tract; thence, following said fence line along the southeasterly boundary line of Share No. 21 and the southeasterly boundary line of said 44.900-acre tract, S 54°17′59″ W, 56.04 feet to a standard FWS aluminum monument stamped ''Tract (664), R. P. S. No. 4731'' set for a corner of said 44.900-acre tract and being corner No. 3 of this tract; thence, continuing along said fence line along the southeasterly boundary line of Share No. 21 and the southeasterly boundary line of said 44.900-acre tract, S 55°22′51″ W, 202.51 feet to the southernmost corner of Share No. 21 and being corner No. 4 of this tract; thence, along the northeasterly boundary line of Share No. 20 and the southwesterly boundary line of Share No. 21, N 44°17′45″ W, 975.87 feet to the westernmost corner of Share No. 21 and being corner No. 5 of this tract; thence, along the southeasterly boundary line of a 35-foot perpetual easement and the northwesterly boundary line of Share No. 21, N 48°23′35″ E, 219.73 feet to the place of beginning and containing 5.396 acres of land.

(Chapeno Tract—Segment 665). Note: All bearings and distances are based on the International Boundary Commission Monuments as referenced by the U.S.C. & G.S. Triangulation station ''LABRA.'' The scale factor used is *00.9999252,* and the theta angle is *−00°37′32″* (NAD 1927). All areas shown are true ground areas. Commencing for reference at the U.S.C. & G.S. Triangulation station ''LABRA,'' having coordinate values: x = 1794,777.75, y = 331,881.06; thence, S 04°06′38″ E, a distance of 8,892.12 feet to the northernmost corner of said Share No. 22 and being corner No. 1 and the northernmost corner and place of beginning of the tract herein-described; thence, following a fence line along the northeasterly boundary line of Share No. 22 and the southwesterly boundary line of Share No. 23, S 47°33′31″ E, 1,036.06 feet to a point on a fence line along the southeasterly boundary line of said 44.900-acre tract for the easternmost corner of said Share No. 22 and being corner No. 2 of this tract; thence, following said fence line along the southeasterly boundary line of Share No. 22 and the southeasterly boundary line of said 44.900-acre tract, S 54°17′59″ W, 245.67 feet to the southernmost corner of Share No. 22 and being corner No. 3 of this tract; thence, along the northeasterly boundary line of Share No. 21 and the southwesterly boundary line of Share No. 22, N 46°18′57″ W, 1,008.60 feet to the westernmost corner of Share No. 22 and being corner No. 4 of this tract; thence, along the southeasterly boundary line of a 35-foot perpetual easement and the northwesterly boundary line of Share No. 22,

N 48°23′35″ E, 219.73 feet to the place of beginning and containing 5.396 acres of land.

(Chapeno Tract—Segment 666). Note: All bearings and distances are based on the International Boundary Commission Monuments as referenced by the U.S.C. & G.S. triangulation station ''LABRA.'' The scale factor used is *00.9999252,* and the theta angle is *−00°37′32″* (NAD 1927). All areas shown are true ground areas. Commencing for reference at the U.S.C. & G.S. Triangulation station ''LABRA,'' having coordinate values: x = 1,794,777.75, y =331,881.06; thence, S 05°15′03″ E, a distance of 8,710.10 feet to the northernmost corner of said Share No. 23 and being corner No. 1 and the northernmost corner and place of beginning of the tract herein-described; thence, following a fence line along the northeasterly boundary line of Share No. 23 and the southwesterly boundary line of said Share No. 24, S 48 °10′23″ E, 1,061.62 feet to a point on a fence line along the southeasterly boundary line of said 44.900-acre tract for the easternmost corner of Share No.23 and being corner No. 2 of this tract; thence, following said fence line along the southeasterly boundary line of Share No. 23 and the southeasterly boundary line of said 44.900-acre tract, S 54°17′59″ W, 234.95 feet to the southernmost corner of Share No.23 and being corner No. 3 of this tract; thence, along the northeasterly boundary line of Share No. 22 and the southwesterly boundary line of Share No. 23, N 47°33′31″ W, 1,036.06 feet to the westernmost corner of Share No. 23 and being corner No. 4 of this tract; thence, along the southeasterly boundary line of a 35-ft. perpetual easement and the northwesterly boundary line of Share No. 23, N 48°23′35″ E, 219.73 feet to the place of beginning and containing 5.396 acres of land.

(Chapeno Tract—Segment 667). Note: All bearings and distances are based on the International Boundary Commission Monuments as referenced by the U.S.C. & G.S. Triangulation station ''LABRA.'' The scale factor used is *00.9999252,* and the theta angle is *−00°37′32″* (NAD 1927). All areas shown are true ground areas. Commencing for reference at the U.S.C. & G.S. Triangulation station ''LABRA,'' having coordinate values: x = 1,794,777.75, y = 331,881.06; thence, S 06°25′32″ E, a distance of 8,631.65 feet to the northeasterly boundary line of said 44.900-acre tract for corner No. 1 and the place of beginning of the tract herein-described; thence, following a fence line along the northeasterly boundary line of share No. 24 and the northeasterly boundary line of said 44.900-acre tract, S 51°42′47″ E, 679.97 feet to a standard FWS aluminum monument stamped ''Tract (667), R. P. S. No. 4731'' set for a corner of said 44.900-acre tract and being corner No. 2 of this tract; thence, continuing along the fence line along the northeasterly boundary line of Share No. 24 and the northeasterly boundary line of said 44.900-acre tract, S 01°11′48″ E, 136.46 feet to a standard FWS aluminum monument stamped ''Tract (667), R. P. S. No. 4731'' set for a corner of said 44.900-acre tract and being corner No. 3 of this tract; thence, continuing along the fence line along the northeasterly boundary line of Share No. 24 and the northeasterly boundary line of said 44.900-acre tract, S 54°15′17″ E, 309.21 feet to a standard FWS aluminum monument stamped ''Tract (667), R. P. S. No. 4731'' set on a fence line for the easternmost corner of Share No. 24 and being on the southeasterly boundary line of said 44.900-acre tract and being corner No. 4 of this tract; thence, following said fence line along the southeasterly boundary line of share No. 24 and the southeasterly boundary line of said 44.900-acre tract, S 54°17′59″ W, 197.94 feet to the southernmost corner of Share No. 24 and being corner No. 5 of this tract; thence, following said fence line along the southwesterly boundary line of Share No. 24 and the northeasterly boundary line of Share No. 23, N 48°10′23″ W, 1,061.62 feet to the westernmost corner of Share No. 24 and northernmost corner of Share No. 23 and being corner No. 6 of this tract; thence, along the southeasterly boundary line of a 35-ft. perpetual easement and the northwesterly boundary line of Share No. 24, N 48°23′35″ E, 219.73 feet to the place of beginning and containing 5.396 acres of land.

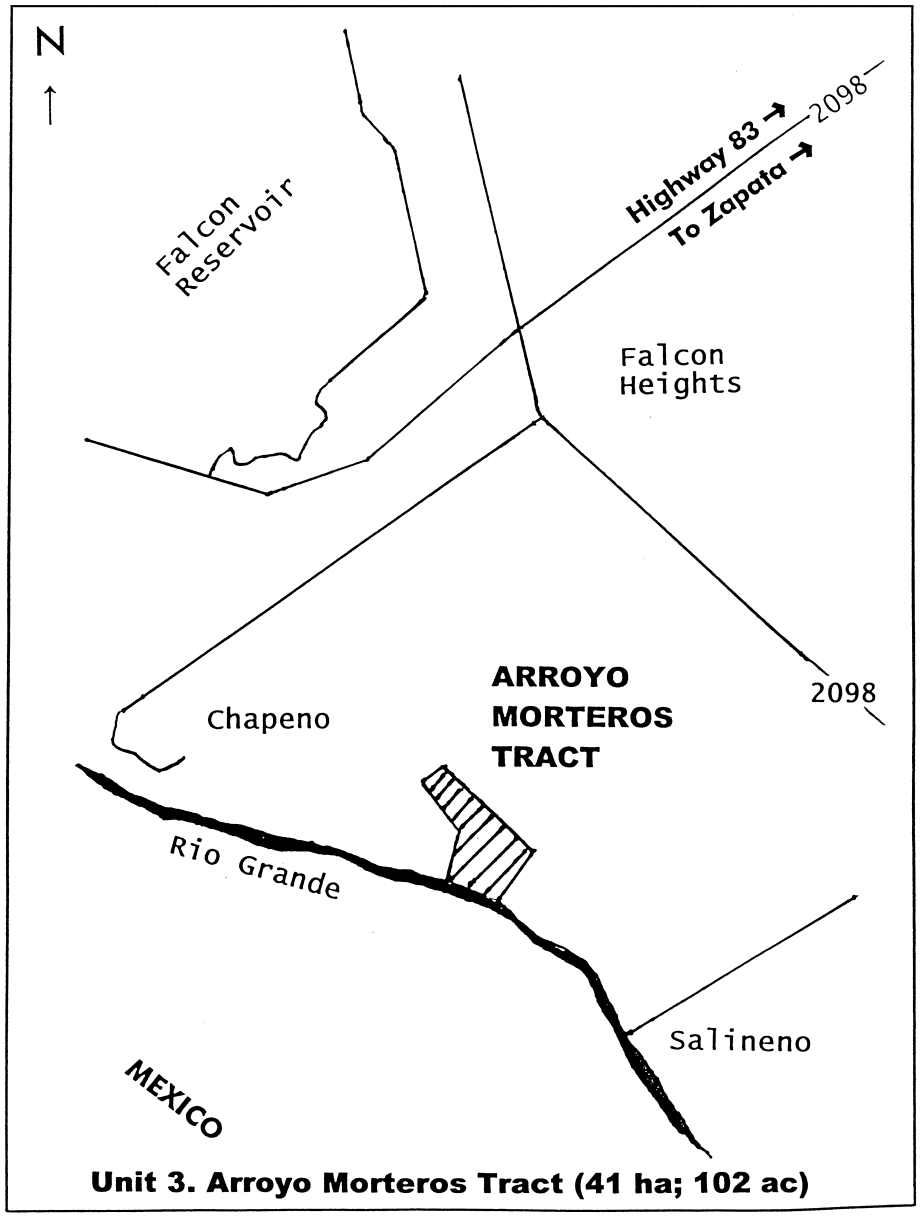


Unit 2. Chapeno Tract (28 ha; 69 ac)

Unit 3, Arroyo Morteros Tract (41 ha; 102 ac)—Note: All bearings are based on the Texas State Plane Coordinate System, South Zone, (NAD 27), as referenced by FWS GPS Monument No. 105 having State plane coordinates of N = 311,099.90, E = 1,799,824.45. The scale factor used is *0.9999252*, and the theta angle is *−00°37′32″*. All areas and distances

are true surface measurements. Beginning at a ½-inch iron rod found for corner No. 1 on the common line between Porcions 59 and 60, and being the northwest corner of that certain 127.71-acre tract and having a State plane coordinate value of N = 315,746.07, E = 1,793,538.58, from which FWS GPS monument No. 105 bears S 53°31′49″ E, 7,816.59 feet; thence, in a northeasterly direction along the common line of Porcion 59 and 60; N 54°27′12″ E, 510.43 feet to a standard FWS aluminum monument set for corner replacing a ½-inch iron rod found, being the northwest corner of the herein described tract and stamped ''Tract 670, Cor. No. 2, R. P. L. S. No. 3680''; thence, in a easterly direction through the interior of said 536.485 acre tract; S 35°20′27″ E, 3,621.01 feet to a standard FWS aluminum monument set for corner replacing a ½-inch iron rod found, being the northeast corner of the herein-described tract and stamped ''Tract 670, Cor. No. 3, R.P.L.S. No. 3680''; thence, in a southerly direction continuing through the interior of said 536.485 acre tract; S 61°18′54″ W, 219.24 feet to a fence corner post found for a northwesterly corner of that certain 17.408 acre tract and being corner No. 4; thence, in a easterly direction along the common line between said 17.408 acre tract and the herein described tract; S 88°47′16″ W, 110.41 feet to a fence post found for angle point and corner No. 5; thence, in a easterly direction continuing along said common line between a 17.408 acre tract and herein described tract; N 79°11′33″ W, 67.63 feet to a fence post found for angle point and corner No. 6; thence, in a easterly direction continuing along said common line between a 17.408 acre tract and herein described tract; S 71°49′04″ W, 50.57 feet to a fence post found for angle point and corner No. 7; thence, in a southerly direction continuing along said common line between a 17.408 acre tract and herein described tract; S 15°40′49″ W, 44.43 feet to a fence post found for angle point and corner No. 8; thence, in a southerly direction continuing along said common line between a 17.408 acre tract and herein described tract; S 00°18′59″ E, 253.83 feet to a fence post found for angle point and corner No. 9; thence, in a southerly direction continuing along said common line between a 17.408 acre tract and herein described tract; S 06°36′21″ W, 182.88 feet to a fence post found for angle point and corner No. 10; thence, in a southerly direction continuing along said common line between a 17.408 acre tract and herein described tract; S 26°38′19″ W, 125.18 feet to a fence post found for angle point and corner No. 11; thence, in a southerly direction continuing along said common line between a 17.408 acre tract and herein described tract; S 67°33′26″ W, 129.76 feet to a fence post found for angle point and corner No. 12; thence, in a southerly direction continuing along said common line between a 17.408-acre tract and herein described tract; S 45°58′19″ W, 73.00 feet to a fence post found for angle point and corner No. 13; thence, in a southerly direction continuing along said common line between a 17.408 acre tract and herein described tract; S 35°10′19″ W, 113.60 feet to a fence post found for angle point and corner No. 14; thence, in a southerly direction continuing along said common line between a 17.408 acre tract and herein described tract; S 19°34′19″ W, 42.80 feet to a fence post found for angle point and corner No. 15; thence, in a southerly direction continuing along said common line between a 17.408-acre tract and herein described tract; S 15°23′41″ W, 28.84 feet to a ½-inch iron rod found on the apparent gradient boundary of the Rio Grande for the southeast corner hereof and corner No. 16; thence, in a westerly direction along said apparent gradient boundary of the Rio Grande; N 62°26′09″ W, 81.47 feet to a point on said apparent gradient boundary of the Rio Grande for corner No. 7; thence, in a northwesterly direction continuing along said apparent gradient boundary of the Rio Grande; N 36°34′14″ W, 122.63 feet to a point on said apparent gradient boundary of the Rio Grande for corner No. 18; thence, in a northerly direction continuing along said apparent gradient boundary of the Rio Grande; N 20°15′10″ W, 58.91 feet to a point on said apparent gradient boundary of the Rio Grande for corner No. 19; thence, in a northwesterly direction continuing along said apparent gradient boundary of the Rio Grande; N 34°02′20″ W, 118.95 feet to a point on said apparent gradient boundary of the Rio Grande for Corner No. 20; thence, in a westerly direction continuing along said apparent gradient boundary of the Rio Grande; S 73°36′56″ W, 17.73 feet to a point on said apparent gradient boundary of the Rio Grande for corner No. 21; thence, in a northwesterly direction continuing along said apparent gradient boundary of the Rio Grande; N 43°36′30″ W, 118.21 feet to a point on said apparent gradient boundary of the Rio Grande corner No. 22; thence, in a northerly direction continuing along said apparent gradient boundary of the Rio Grande; N 28°12′58″ W, 168.21 feet to a point on said apparent gradient boundary of the Rio Grande for corner No. 23; thence, in a northwesterly direction continuing along said apparent gradient boundary of the Rio Grande; N 49°09′29″ W, 149.82 feet to a point on said apparent gradient boundary of the Rio Grande for corner No. 24; thence, in a westerly direction continuing along said apparent gradient boundary of the Rio Grande; N 66°23′26″ W, 123.27 feet to a point on said apparent gradient boundary of the Rio Grande for corner No. 25; thence, in a westerly direction continuing along said apparent gradient boundary of the Rio Grande; N 77°18′49″ W, 240.49 feet to a point on said apparent gradient boundary of the Rio Grande for corner

No. 26; thence, in a westerly direction continuing along said apparent gradient boundary of the Rio Grande; S 80°06′32″ W, 129.98 feet to a point on said apparent gradient boundary of the Rio Grande for corner No. 27; thence, in a westerly direction continuing along said apparent gradient boundary of the Rio Grande; N 79°54′48″ W, 218.17 feet to a point on said apparent gradient boundary of the Rio Grande for corner No. 28; thence, in a westerly direction continuing along said apparent gradient boundary of the Rio Grande; S 81°13′28″ W, 136.03 feet to a ½-inch iron rod found on said apparent gradient boundary of the Rio Grande for the southeast corner of the aforementioned 127.71 acre tract, same being the southwest corner hereof and corner No. 29; thence, in a northerly direction along the common line between said 127.71-acre tract and the herein described tract; N 06°09′33″ W, 237.00 feet to a fence post found for angle point and corner No. 30; thence, in a northerly direction continuing along the common line between said 127.71-acre tract and the herein described tract; N 05°51′34″ W, 198.49 feet to a fence post found for angle point and corner No. 31; thence, in a Northerly direction continuing along the common line between said 127.71-acre tract and the herein described tract; N 07°49′27″ E, 161.97 feet to a fence post found for angle point and corner No. 32; thence, in a Northerly direction continuing along the common line between said 127.71-acre tract and the herein described tract; N 07°47′00″ E, 302.39 feet to a fence post found for angle point and corner No. 33; thence, in a northerly direction continuing along the common line between said 127.71 acre tract and the herein described tract; N 07°17′37″ E, 493.82 feet to a fence post found for angle point and corner No. 34; thence, in a northeasterly direction continuing along the common line between said 127.71-acre tract and the herein described tract, as fenced; N 46°28′41″ E, 643.50 feet to a fence post found for angle point and corner No. 35; thence, in a northwesterly direction continuing along the common line between said 127.71 acre tract and the herein described tract; N 47°51′47″ W, 1,087.49 feet to a fence post found for angle point and corner No. 36; thence, in a northerly direction continuing along the common line between said 127.71-acre tract and the herein described tract; N 21°22′25″ W, 375.05 feet to the point of beginning and containing 89.90 acres of land.

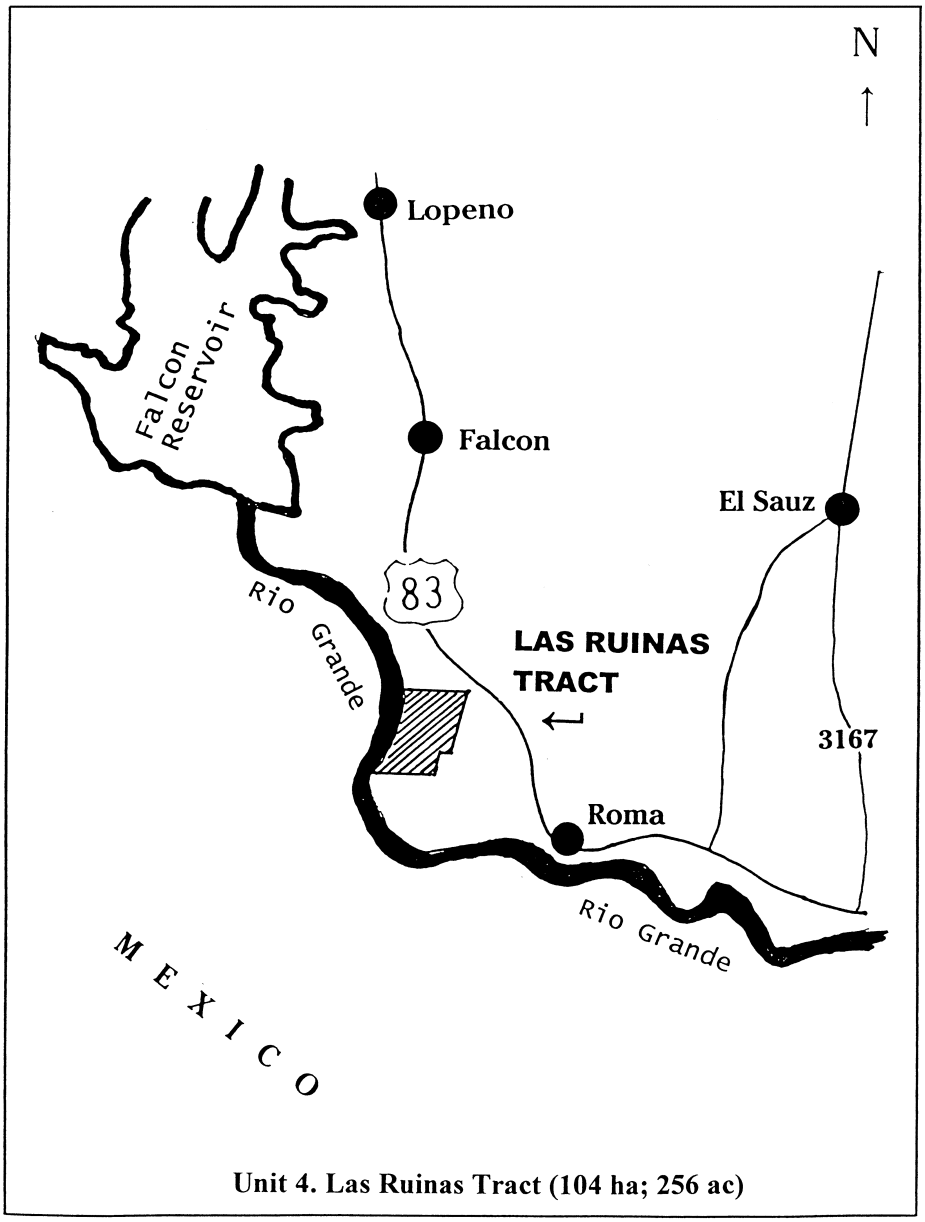


Unit 3. Arroyo Morteros Tract (41 ha; 102 ac)

Unit 4, Las Ruinas Tract (104 ha; 256 ac)—Note: All bearings are based on the Texas State Plane Coordinate System, South Zone, as referenced by National Geodetic Survey (NGS.) Triangulation Station ''GORGORA'' having State plane coordinates (NAD 27) of N = 275,335.73, E = 1.833,217.01. The scale factor used is *0.9999421*, and the theta angle is *-00°16′22″*. All areas and distances are true surface measurements. Beginning at a 2-inch iron pipe having State plane coordinates of N = 280,488.40, E = 1,804,584.01 for the northerly

southeast corner of the herein described tract, from which said triangulation station ''GORGORA'' bears S 79°47′55″ E, a distance of 29,092.93 feet, same being the southwest corner of Share 96, of said Porcion 66, and the southwest corner of a 1455.52-acre tract of land as described, same being in the north line of Share 94, of said Porcion 66, same being in the north line of Tract ''K'', a 26.82-acre tract of land as described, for corner No. 1 and point of beginning of the herein described tract of land. Thence, westerly along the common line between said northerly line of tract ''K'' and the southerly line hereof N 80°30′29″ W, 871.09 feet to a 6′iron pipe found for corner No. 2, same being the northwest corner of said Tract ''K''; thence, southerly along the common line between the westerly line of said Tract ''K'' and the easterly line hereof S 09°22′35″ W, 837.18 feet, to a 1¾″ iron pipe found for the southwest corner of said tract ''K'' and the northwest corner of a 23.5131-acre tract of land at corner No. 3, thence, southerly along the common line between said 23.5131-acre tract and the most southerly easterly line hereof, S 09°22′35″ W, 540.00 feet to a standard FWS aluminum monument set, said monument being in the north line of a 56.82-acre tract of land as described for corner No. 4 and stamped ''Tract 630, Ref. No. 4, RPLS 3680''; thence, westerly along the common northerly line between said 56.82 acre tract and the southerly line hereof, N 80°31′16″ W, 3295.18 feet to the apparent gradient boundary of the Rio Grande, and passing a standard FWS aluminum monument set for reference at a distance of 3,210.08 feet and stamped ''Tract 630, Ref. No. 5, RPLS 3680''; thence, northerly along the apparent gradient boundary of the Rio Grande N 63°00′17″ E, 192.97 feet to a point on the apparent gradient boundary of the Rio Grande for Corner No. 6; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 62°39′49″ E, 398.99 feet to a point on the apparent gradient boundary of the Rio Grande for Corner No. 7; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 60°14′39″ E, 722.34 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 8; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 57°28′43″ E, 416.75 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 9; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 57°55′40″ E, 171.44 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 10; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 47°49′48″ E, 287.44 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 11; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 43°00′00″ E, 246.79 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 12; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 39°40′14″ E, 295.08 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 13; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 35°41′43″ E, 380.79 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 14; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 31°28′24″ E, 370.58 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 15; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 33°19′15″ E, 293.00 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 16; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 13°43′08″ E, 146.31 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 17; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 11°00′57″ E, 189.14 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 18; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 02°10′54″ W, 305.51 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 19; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 01°31′51″ W, 416.25 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 20; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 00°01′29″ W, 441.45 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 21; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 03°29′26″ E, 405.03 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 22; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 08°08′02″ E, 308.09 feet to a point on the apparent gradient boundary of the Rio Grande for corner No. 23; thence, northerly continuing along said apparent gradient boundary of the Rio Grande N 39°03′01″ E, 218.95 feet to a point on the apparent gradient boundary line of the Rio Grande, for corner No. 24 and northwest corner of this tract, same being the southwest corner of a 60.77-acre tract of land; thence, easterly along the common line between the south line of said 60.77-acre tract and the northerly line hereof S 80°31′16″ E, 1942.92 feet to a standard FWS aluminum monument set and stamped ''Tract 630, Ref. No. 25, RPLS 3680'' for corner No. 25, same being the southeast corner of said 60.77-acre tract, same being in the west line of Share

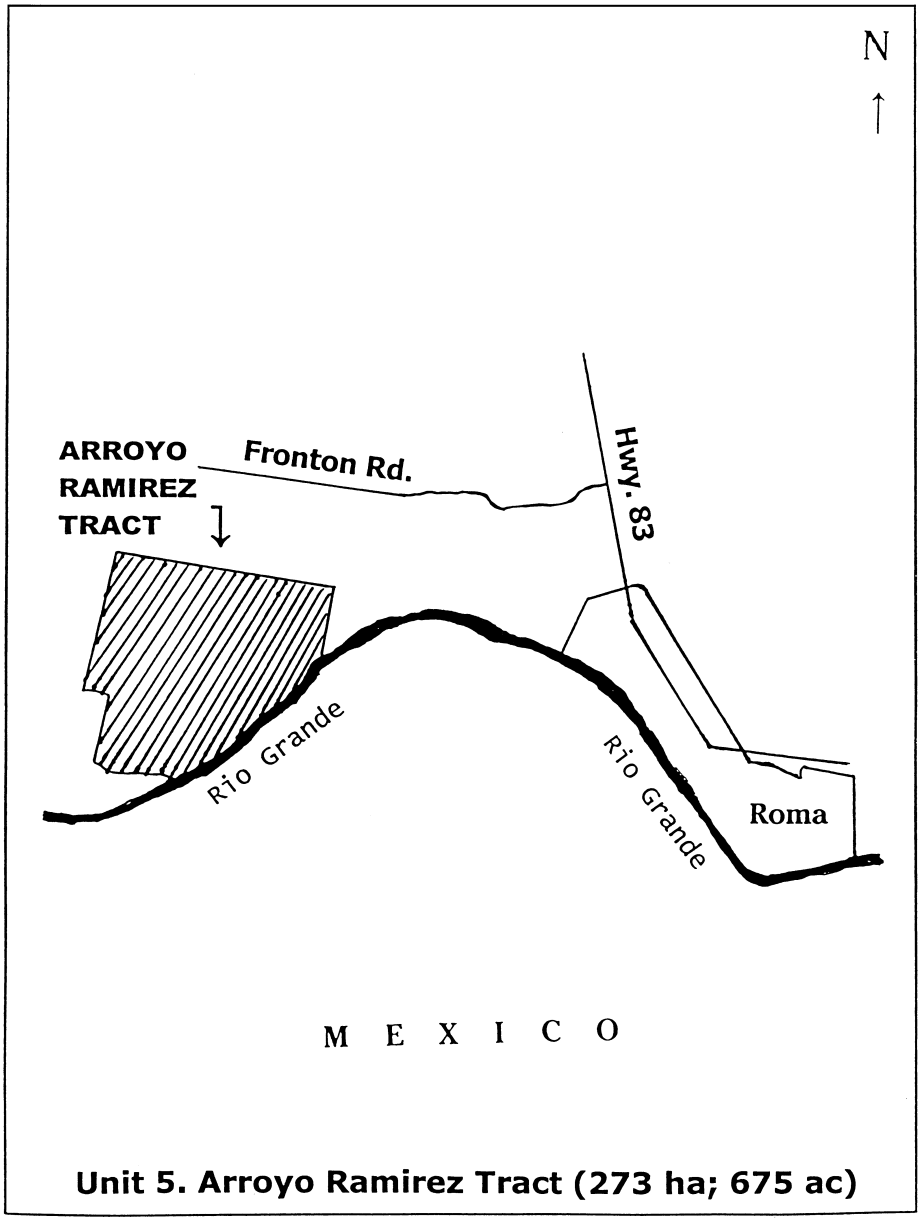
339 of said Porcion 66, same being in the west line of said 1,455.52-acre tract of land, and passing a standard FWS aluminum monument set for Reference at a distance of 38.95 feet and stamped ''Tract 630, Ref. No. 24, RPLS 3680''; thence, southerly along the common line between the west line of said Share 339, Share 319, Share 227, Share 231, Share 230, Share 229, Share 518, Share 226, Share 225, Share 224, and said Share 96, same being the west line of said 1,455.52-acre tract and the east line hereof S 09°28′44″ W, 3,845.12 feet and passing a 2-inch iron pipe found for the southwest corner of Share 339, same being the northwest corner of Share 319 at a distance of 315.48 feet, and being 0.46 feet easterly of and perpendicular to this line, and also passing a 1-½ inch iron pipe found for the southwest corner of Share 319, same being the northwest corner of Share 227 at a distance of 711.48 feet, and being 0.39 feet easterly of and perpendicular to this line, and also passing a 2-inch iron pipe found for the southwest corner of Share 231, same being the northwest corner of Share 230 at a distance of 1,320.71 feet, and being 0.09 feet easterly of and perpendicular to this line, to the point of beginning of the herein described tract and containing 254.42 acres of land.



Unit 4. Las Ruinas Tract (104 ha; 256 ac)

Unit 5, Arroyo Ramirez Tract (273 ha; 675 ac)—Formal surveying of the tract has not been performed. Described as, ''All of Share 79, Porcion 68, Abstract 191, Former Jurisdiction of Mier, Mexico, now Starr County, Texas, and all of Share 166, Porcion 69, Abstract No. 160, Former Jurisdiction of Mier, Mexico, now Starr County, Texas. Description by approximated latitude/longitude coordinates (attached maps): Beginning at Latitude/Longitude 26°24 00.9′N/099°03′23.9″W, westward to Latitude/Longitude 026°24′04.7″N/

099°03′46.5″W, northward to Lat/Long 026°24′25.2″N/099°03′43.3″ W, westward to Lat/Long 026°24′26.0″ N/099°03′49.8″ W, northward to Lat/Long 026°25′05.5″ N/099°03′42.6″ W, eastward to Lat/Long 026°24′56.6″ N/099°02′40.3″ W to the apparent gradient boundary of the Rio Grande River.



Unit 5. Arroyo Ramirez Tract (273 ha; 675 ac)

Unit 6, Los Negros Creek Tract (47 ha; 116 ac)—The following described tract of land is located in Starr County, Texas, about 1 mile northwest of the town of Roma, being 111.67 acres out of Share 13, Porcion 70, and being more particularly described as follows: Beginning at Cor. No. 1, an iron pin set for the northeast corner of Share No. 13 of Porcion No. 70 ; thence, along an old fence line and the dividing line between Share Nos. 13, 1–B and 12–A, S 09°15′ W, 2,694.00 feet to Cor. No. 2 an iron pin set on the Old High Bank of the Rio Grande and the southeast corner of this tract; thence leaving said fence line and along said Old High Bank with the following two courses, N 63°17′27″ W, 1,161.54 feet to Cor. No. 3 and N 87°10′00″ W, 612.00 feet to Cor. No. 4, a set iron pin and the southwest corner of this tract; thence leaving said Old High Bank and along the dividing line of Tract 2 and 3 of said Share 13 and an old fence line with the following three courses, N 09°15″ E, 841.30 feet to Cor. No. 5, a set iron pin; N 80°45′ W, 397.50 feet to Cor. No. 6, a set iron pin; and N 09°15′ E, 1,572.60 feet to Cor. No. 7 & iron pin set for the northwest corner of this tract; thence leaving said dividing line and along the north line of this tract and an old fence line, S 80°45′ E, 2,113.70 feet to Cor. No. 1 and the true place of beginning, containing 111.67 acres of land bounded on the West, North, and East by lands of unknown owner and on the South by the Rio Grande.



Unit 6. Los Negros Creek Tract (47 ha; 116 ac)

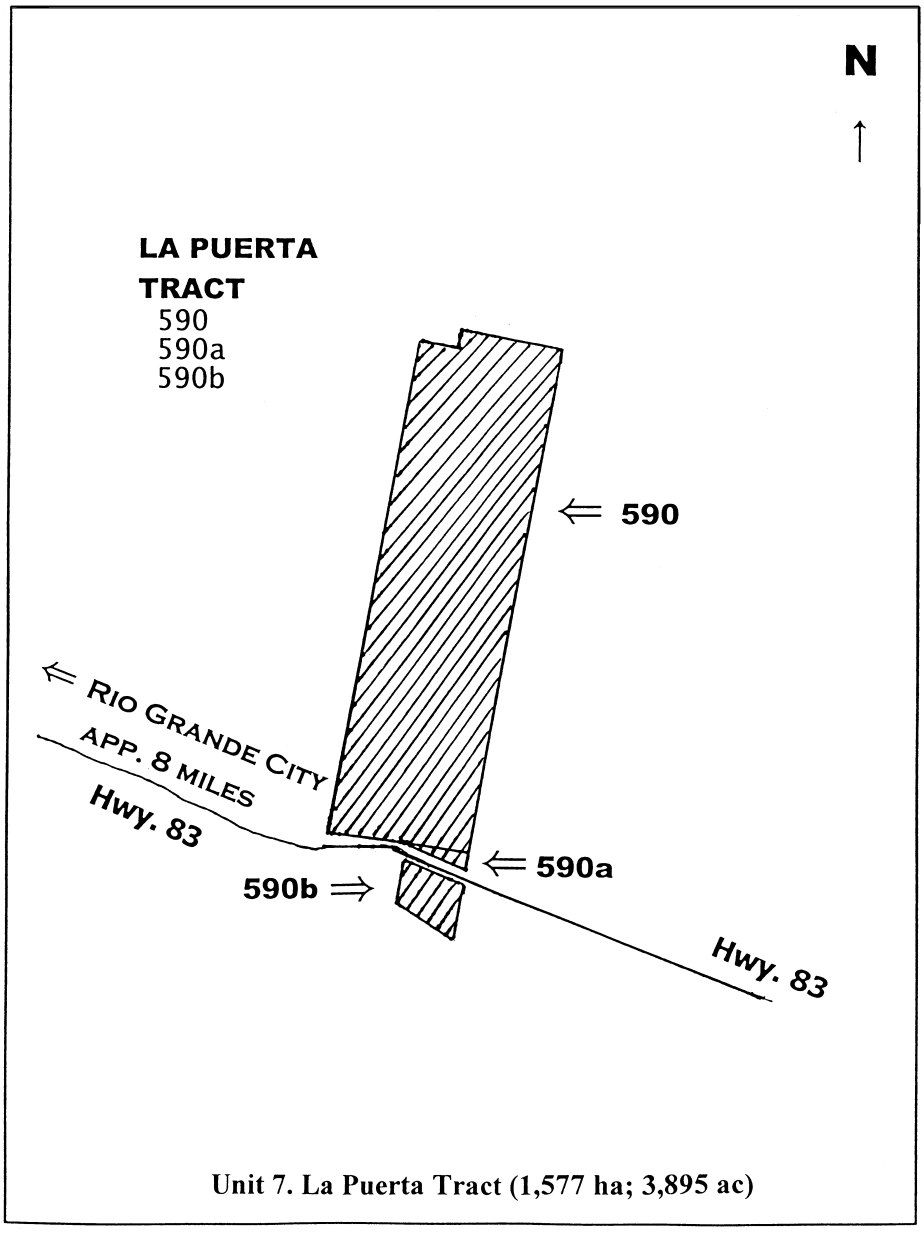
Unit 7, La Puerta Tract (1,577 ha; 3,895 ac) (Segment 590). Note: All bearings and distances are based on the Texas State Plane Coordinate System, South Zone, as referenced by National Geodetic Survey (NGS) triangulation station ''Fordyce 2'' and NGS triangulation station ''Monument''. Scale factor used was *0.99993949;* theta angle used was *−00°06′15″*. All areas are true ground measured areas. Beginning at corner No. 1, a standard U.S. Fish and Wildlife Service (FWS) aluminum monument stamped ''TR

590 COR 1'' set in the west boundary of Porcion 86, said point being at the southwest corner of the aforementioned 8,061-acre tract, and also being the northeast corner of a 160-acre tract recorded in volume 60, pages 47–48, Deed Records, Starr County, Texas, from which NGS triangulation station ''Monument'' bears N. 68°59′27″ W, 8,477.20 feet; thence, from corner No. 1, along the western boundary line of said 8,061-acre tract and Porcion 86, N 09°02′27″ E, 25,125.17 feet to corner No. 2, a standard FWS aluminum monument stamped ''TR 590 COR 2'', set at a fence corner from which NGS triangulation station ''Monument'' bears S 28°34′49″ W, 24,795.18 feet; said corner No. 2 also being the northwest corner of the herein described tract, thence, from corner No. 2, departing said western boundary line, with fence, S. 78°52′36″ E, 1,889.04 feet, to corner No. 3, a standard FWS aluminum monument stamped ''TR 590 COR 3'' set at fence corner; thence, from corner No. 3, continuing with fence, N 06°16′07″ E, 1,007.99 feet to corner No. 4, a standard FWS aluminum monument stamped ''TR 590 COR 4'' set at fence corner; thence, from corner No. 4, continuing with fence, S 78°42′12″ E, 2,691.33 feet to corner No. 5, a standard FWS aluminum monument stamped ''TR 590 COR 5'' set for angle; thence from corner No. 5, continuing with fence, S 72°35′38″ E, 2,000.57 feet to corner No. 6, a standard FWS aluminum monument stamped ''TR 590 COR 6'' set at fence corner, said point being a perpendicular distance of 20.20 feet from the eastern boundary line of Porcion 87, said point also being the Northeast corner of the herein described tract; thence, from corner No. 6, continuing with fence, S 09°01′08″ W, 10,831.38 feet to corner No. 7, a standard FWS aluminum monument stamped ''TR 590 COR 7'' set for angle adjacent to a found ⅝-inch iron pin; thence, from corner No. 7, continuing with fence, S 08°56′57″ W, 10,030.04 feet, to corner No. 8, a standard FWS aluminum monument stamped ''TR 590 COR 8'' set for angle point, said point being at the intersection of said fence with the east boundary line of Porcion 87; thence, from corner No. 8, departing said fence, along the east boundary line of Porcion 87, S 09°02′27″ W, 4,824.69 feet to corner No. 9, a standard FWS aluminum monument stamped ''TR 590 COR 9'' set for corner; thence, from corner No. 9, departing said east line, N 80°47′09″ W, 6,527.80 feet to the place of beginning and containing 3,844.674 acres.

(La Puerta 590a). Note: All bearings and distances are based on the Texas State Plane Coordinate System, South Zone, (NAD 27), as referenced by the National Geodetic Survey (NGS) Triangulation Station ''Monument'' having a coordinate value of N = 250,167.56; E = 1,912,489.81. Scale factor applied equals *0.99993949;* theta angle equals *−00°06′15″*. All areas are based on true ground measurements. Beginning at corner No. 1, a standard FWS aluminum monument stamped ''TR 590A COR 1'' set over a 2-inch iron pipe found in the west boundary line of Porcion 87, east boundary line of Porcion 86, at the northwest corner of said Lot 22, also being the northeast corner of a 2.83-acre tract as described by deed recorded in Volume 516, Page 62, Official Records, Starr County, Texas and being in the south boundary line of USA Tract (590) as described by deed recorded in Volume 608, Page 309, Official Records, Starr County, Texas said point having a coordinate value of N = 246,550.96; E = 1,923,962.74 and bearing S 72°30′13″ E, 12,029.47 feet from NGS Triangulation Station ''Monument''; thence from corner No. 1, with south boundary line of said USA Tract (590), the north boundary line of said Lot 22, S 80°47′09″ E, 2,922.00 feet to corner No. 2, a standard FWS aluminum monument stamped ''TR 590 COR 9'' found at the southeast corner of said USA Tract (590), also being the northeast corner of said Lot 21, and being in the east boundary line of Porcion 87, west boundary line of Porcion 88 for the northeast corner of the herein-described tract of land; thence, from Corner No. 2, with the said east boundary line of Porcion 87, west boundary line of Porcion 88, and also being the east boundary line of said Lot 21, S 08°18′30″ W, 1,130.60 feet to corner No. 3, a standard FWS aluminum monument stamped ''TR 590A COR 3'' set in the existing north right-of-way line of U.S. Highway 83 with the intersection of said east boundary line of Porcion 87, west boundary line of Porcion 88 for the southeast corner of the herein described tract of land; thence, from corner No. 3, with and along the said existing north right-of-way line of U.S. Highway 83, N 66°14′23″ W, 18.20 feet to corner No. 4, a standard FWS aluminum monument stamped ''TR 590A COR 4'' set for an angle point; thence, from corner No. 4, continuing along said existing north right-of-way line, N 60°31′23″ W, 100.39 feet to corner No. 5, a standard FWS aluminum monument stamped ''TR 590A COR 5'' set for an angle point; thence, from corner 5, continuing along said existing north right-of-way line, N 66°14′23″ W, 499.97 feet to corner No. 6, a standard FWS aluminum monument stamped ''TR 590A COR 6'' set for an angle point; thence, from corner No. 6, continuing along said existing north right-of-way line, N 71°57′23″ W, 100.39 feet to a corner No. 7, a standard FWS aluminum monument stamped ''TR 590A COR 7'' set for an angle point; thence, from corner No. 7, continuing along said existing north right-of-way line, N 66°14′14″ W, 1,084.94 feet to corner No. 8, a ⅝-inch iron rod found at the intersection of the said existing north right-of-way line with the proposed north right-of-way line of U.S. Highway 83; thence, from corner No. 8, departing said existing north

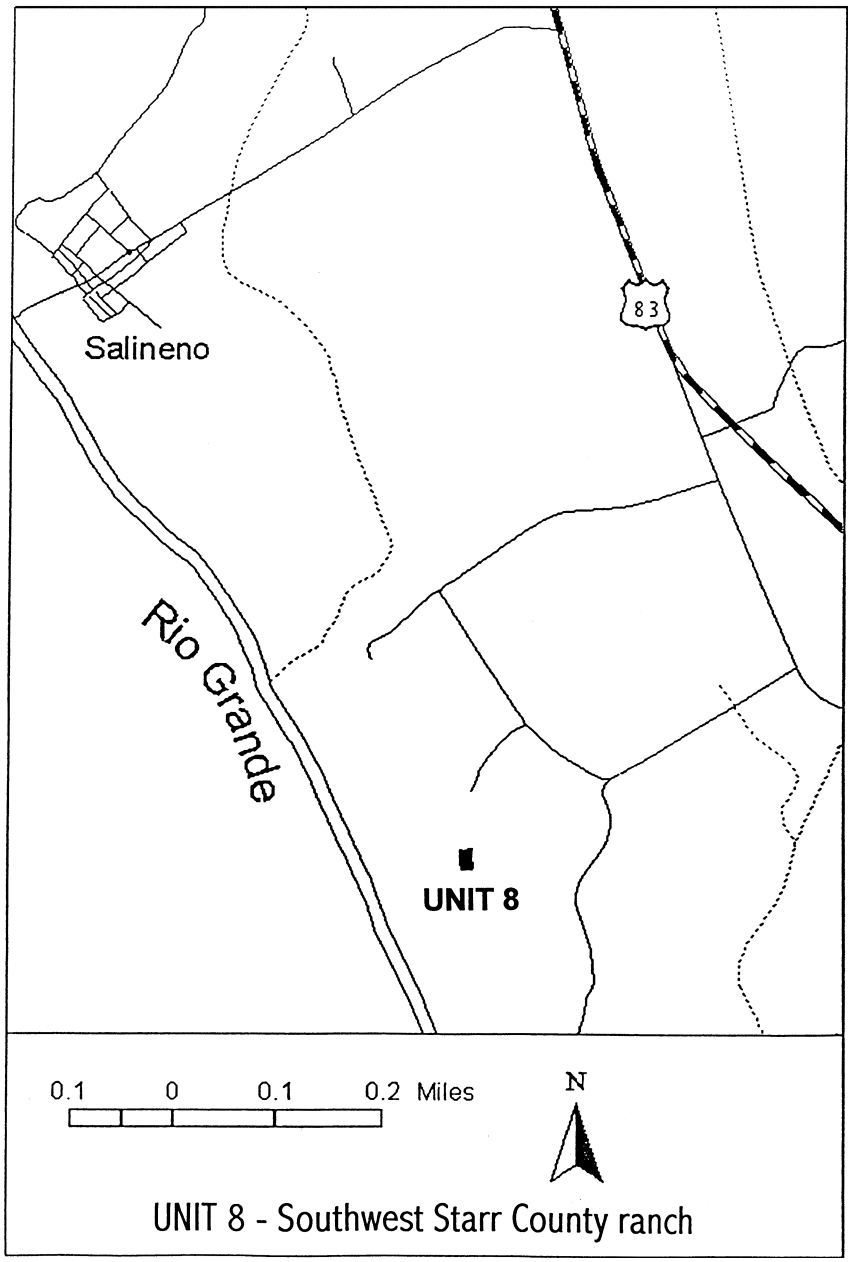
right-of-way line with and along the proposed north right-of-way line of U.S. Highway 83, N 60°43′04″ W, 200.90 feet to corner No. 9, a ⅝-inch iron rod found for an angle point; thence, from corner No. 9, continuing along said proposed north right-of-way line, N 69°54′31″ W, 300.83 feet to corner No. 10, a ⅝-inch iron rod found at the intersection of said proposed north right-of-way line with the existing north right-of-way line of U.S. Highway 83; thence, from corner No. 10, with the said existing north right-of-way line of U.S. Highway 83, N 66°16′51″ W, 399.70 feet to corner No.11, a standard FWS aluminum monument stamped ''TR 590A COR 11'' set over a ½-inch iron rod found for an angle point; thence, from corner No. 11, continuing along said existing North right-of-way line, N 64°31′54″ W, 335.45 feet to corner No.12, a standard FWS aluminum monument stamped ''TR 590A COR 12'' set at the intersection of said existing north right-of-way line with the west boundary line of Porcion 87, east boundary line of Porcion 86; thence, from corner No. 12, departing said existing north right-of-way line with the said west boundary line of Porcion 87, east boundary line of Porcion 86, N 08°56′59″ E, 357.90 feet to corner No.1, the point of beginning and containing 50.033 acres of land.

(La Puerta Tract—Segment 590b). Note: All bearings and distances are based on the Texas State Plane Coordinate System, South Zone, (NAD 27), as referenced by the National Geodetic Survey (NGS) Triangulation Station ''Monument'' having a coordinate value of N = 250,167.56′ E = 1,912,489.81. Scale factor applied equals *0.00003040;* theta angle equals *−00°06′15″.* All areas are based on true ground measurements. Beginning at corner No. 1, a ⅝-inch iron rod found at the intersection of the west boundary line of Porcion 87, east boundary line of Porcion 86 with the proposed south right-of-way line of U.S. Highway 83, said point bears S 08°57′33″ W, 139.55 feet from a ⅝-inch iron rod found in the existing south right-of-way line of U.S. Highway 83, said point having a coordinate value of N = 245,880.85, E = 1,923,857.21 and bearing S 69°20′18″ E, 12,148.81 feet from NGS Triangulation Station ''Monument''; thence, from corner No. 1, with the said proposed south right-of-way line, S 66°14′23″ E, 3,043.33 feet to corner No. 2, a ⅝-inch iron rod found at the intersection of the east boundary line of Porcion 87, the west boundary line of Porcion 88 and the said proposed south right-of-way line, thence, from corner No. 2, with the said east boundary line of Porcion 87, west boundary line of Porcion 88, S 08°59′29″ W, 2,925.70 feet to corner No. 3, a standard FWS aluminum monument stamped ''TR 590B COR 3'' set over a ½-inch iron rod found at the intersection of said east boundary line of Porcion 87, west boundary line of Porcion 88 with the north right-of-way line of the Missouri-Pacific Railroad; thence, from corner No. 3, with the said north right-of-way line of the Missouri-Pacific Railroad, N 52°58′07″ W, 3,333.49 feet to corner No. 4, a standard FWS aluminum monument stamped ''TR 590B COR 4'' set over a ⅜-inch iron rod found at the intersection of the said north right-of-way line with the said west boundary line of Porcion 87, the east boundary line of Porcion 86, said point also being the southeast corner of a 39.492-acre tract, thence from corner No. 4, with the said west boundary line of Porcion 87, east boundary line of Porcion 86, N 08°56′13″ E, 1,715.55 feet to corner No. 5, a standard FWS aluminum monument stamped ''TR 590B COR 5'' set over a ½-inch iron rod found at the southeast corner of a 2.0-acre tract, thence, from corner No. 5, continuing along said west boundary line of Porcion 87, east boundary line of Porcion 86, N 09°08′05″ E, 418.93 feet to corner No. 1, the point of beginning and containing 170.950 acres of land.



Unit 7. La Puerta Tract (1,577 ha; 3,895 ac)

Unit 8-Private ranch site comprises 0.552 hectares (1.36 acres) within the Universal Transverse Mercator, Zone 14 and begins at UTM 490706 E, 2929709 N; thence to 490729 E, 2929706 N; to 490748 E, 2929720 N; to 490762 E, 2929722 N; to 490767 E, 2929704 N; to 490767 E, 2929679 N; to 490769 E, 2929654 N; to 490770 E, 2929637 N; to 490770 E, 2929629 N; to 490760 E, 2929619 N; to 490743 E, 2929614 N; to 490732 E, 2929612 N; to 490720 E, 2929614 N; to 490709 E, 2929670 N; and thence to point of beginning.


Salineno
83
Rio Grande
UNIT 8
0.1 0 0.1 0.2 Miles
N
UNIT 8 - Southwest Starr County ranch

Family Brassicaceae: *Thlaspi californicum* (Kneeland Prairie penny-cress)

(1) A critical habitat unit is depicted for Humboldt County, California, on the map below.

(2) The primary constituent elements of critical habitat for *Thlaspi californicum* are the habitat components that provide:

(i) Thin rocky soils that have developed on exposures of serpentine substrates;

(ii) Plant communities that support a relatively sparse assemblage of serpentine indicator, or facultative-serpentine indicator, species, including various native forbs and grasses, but not trees or shrubs, such that competition for space and water (both above and below ground) and light is reduced, compared to the surrounding habitats. Known associated species include the following: *Festuca rubra* (red fescue), *Koeleria macrantha* (junegrass), *Elymus glaucus* (blue wildrye), *Eriophyllum lanatum* (woolly sunflower), *Lomatium macrocarpum* (large-fruited lomatium), and *Viola hallii* (Hall's violet);

(iii) Serpentine substrates that contain 15 percent or greater (by surface area) of exposed gravels, cobbles, or larger rock fragments, which may contribute to alteration of factors of microclimate, including surface drainage and moisture availability, exposure to wind and sun, and temperature; and

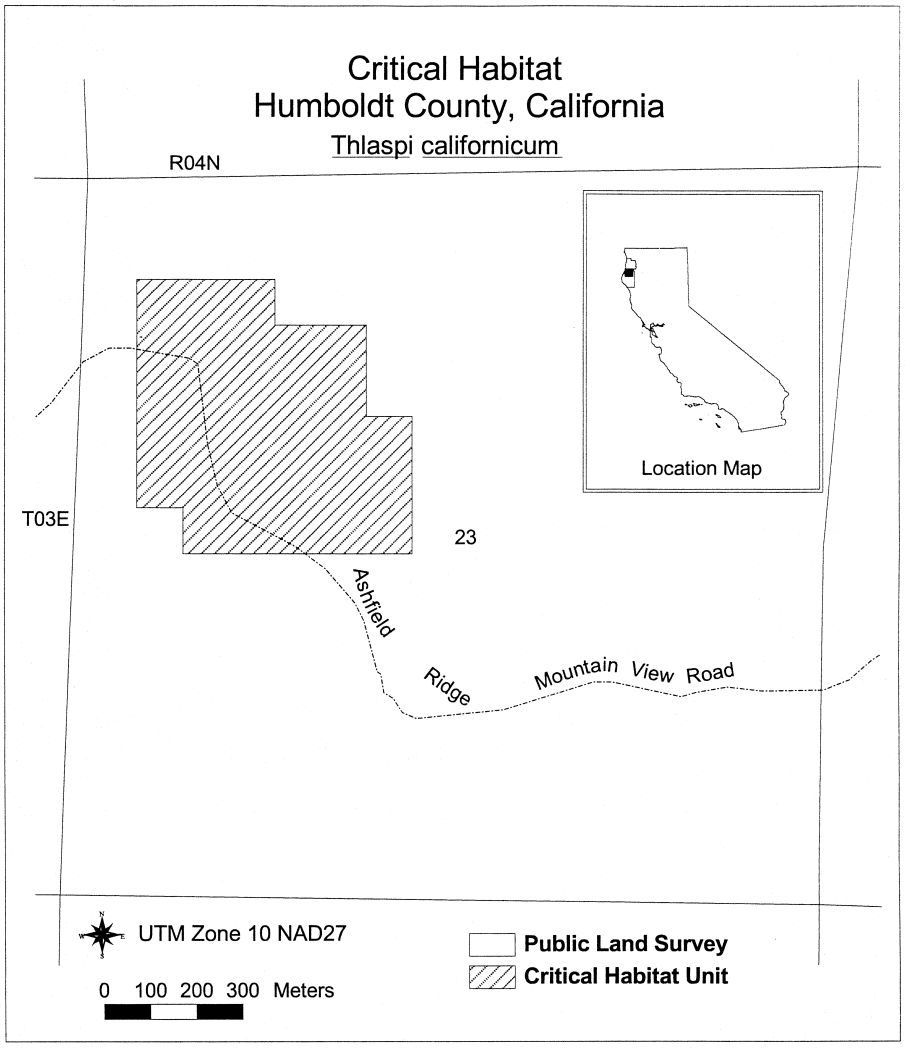
(iv) Prairie grasslands and oak woodlands located within 30 m (100 ft) of the serpentine outcrop area on Ashfield Ridge. Protection of these habitats is essential to the conservation of *Thlaspi californicum* in that it will provide connectivity among the serpentine sites, help to maintain the hydrologic and edaphic integrity of the serpentine sites, and support populations of pollinators and seed dispersal organisms.

(3) Existing features and structures within the boundaries of mapped critical habitat units, such as buildings, roads, airports, and other paved areas will not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they affect the species and/or primary constituent elements in adjacent critical habitat.

(4) Critical habitat unit. Humboldt County, California.

(i) From USGS. 1:24,000 scale Iaqua Buttes quadrangle, land bounded by the following UTM Zone 10 NAD27 coordinate pairs (East, North): 421800, 4507300; 422100, 4507800; 422100, 4507300; 422200, 4507600; 421700, 4507400; 421800, 4507500; 421600, 4507500; 421800, 4507900; 421800, 4507800; 421900, 4507900

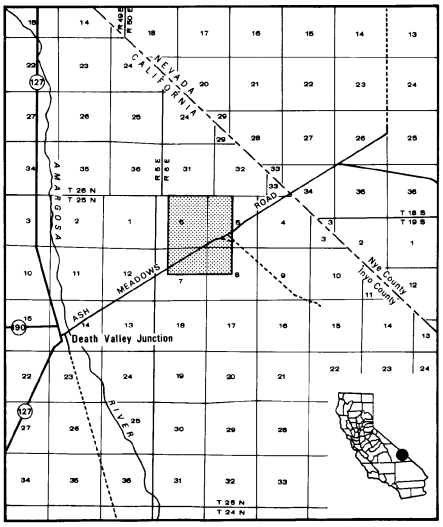
(ii) Map follows:


Critical Habitat
Humboldt County, California
Thlaspi californicum
R04N
T03E
23
Location Map
Ashfield
Ridge
Mountain View Road
UTM Zone 10 NAD27
0 100 200 300 Meters
Public Land Survey
Critical Habitat Unit

Family Chenopodiaceae: *Nitrophila mohavensis* (Amargosa niterwort). California, Inyo County, Ash Meadows: W½ sec. 5, E½ sec. 6, NE¼ and E½NW¼ sec. 7, NW¼ sec. 8, T25N, R6E.

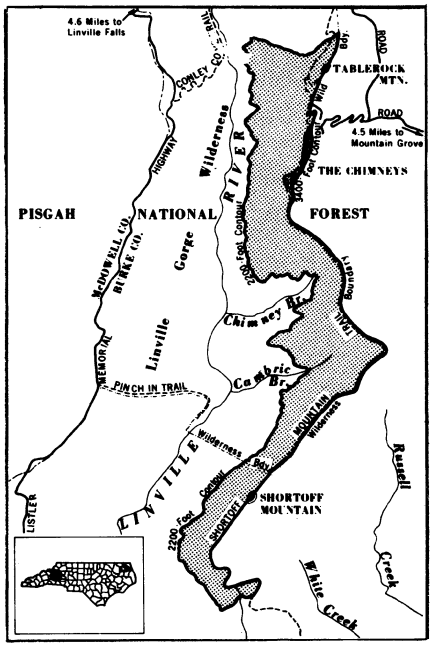
Known primary constituent elements include salt-encrusted alkaline flats.

NOTE: Map follows:



Family Cistaceae: *Hudsonia montana* (Mountain golden heather) North Carolina; Burke County; the areas bounded by the following: on the west by the 2200′ contour; on the east by the Linville Gorge Wilderness Boundary north from the intersection of the 2200′ contour and the Shortoff Mountain Trail to where it intersects the 3400′ contour at ''The chimneys''—then following the 3400′ contour north until it reintersects the Wilderness Boundary—then following the Wilderness Boundary again northward until it intersects the 3200′ contour extending west from its intersection with the Wilderness Boundary until it begins to turn south—at this point the Boundary extends due east until it intersects the 2200′ contour.

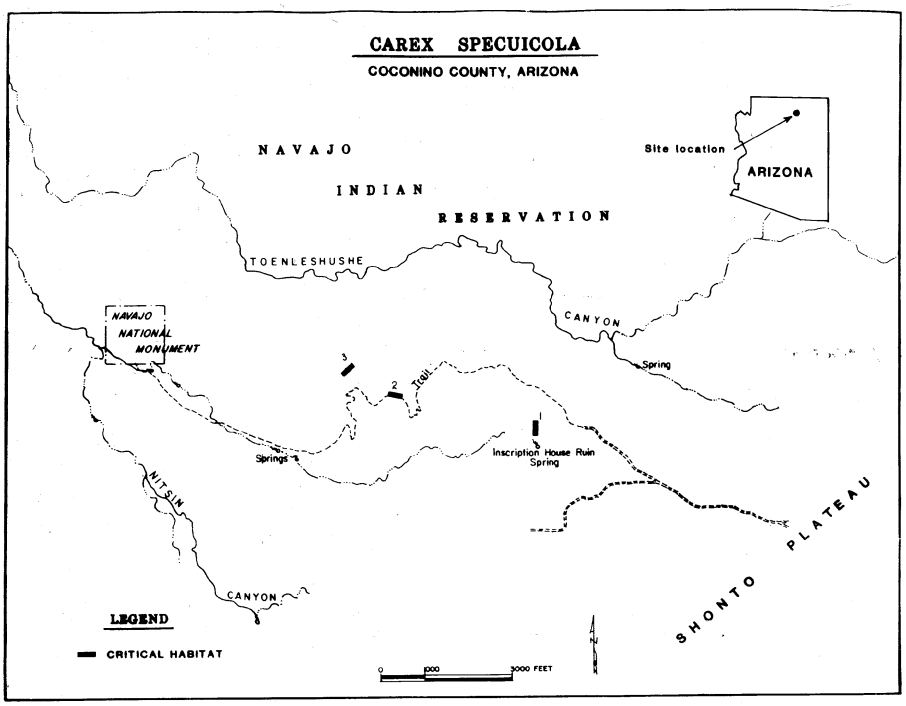
NOTE: Map follows:



Family Cyperaceae: *Carex specuicola* (Navajo sedge)

Arizona: Coconino County; Navajo Indian Reservation. A 40×5 meter rectangular area, with its long axis in the direction of seep-spring flow, around each of the following points: (1) Latitude 36°39′53″ N, longitude 110°47′18″ W; (2) latitude 36°40′07″ N, longitude 110°47′55″ W; and (3) latitude 36°40′18″ N, longitude 110°48′15″ W. Primary constituent elements include moist sandy to silty soils at shady seep-springs within the Navajo Sandstone Formation.

NOTE: Map follows:



Family Euphorbiaceae: *Chamaesyce hooveri* (Hoovers Spurge).

(1) Critical habitat units are depicted for Tehama, Glenn, Colusa, Stanislaus, Tulare and Tuolumne Counties, California, on the map below.

(2) The primary constituent elements of critical habitat for *Chamaesyce hooveri* are the habitat components that provide:

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Chamaesyce hooveri* germination, growth and reproduction, including but not limited to, vernal pools formed on neutral to saline-alkaline soils over lime-silica cemented hardpan or claypan, or on acidic soils over iron-silica cemented hardpan, that typically become inundated during winter rains, but are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil moisture for *Chamaesyce hooveri* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aqueduct, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

(5) Unit 1: Butte and Tehama Counties, California. From USGS 1:24,000 quadrangle maps Acorn Hollow, Foster Island, Los Molinos, Nord, Richardson Springs NW, and Vina, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 588700, 4429900; 588900, 4429500; 589500, 4429500; 589500, 4428600; 589500, 4428000; 589800, 4427100; 590500, 4426400; 590500, 4425300; 591200, 4424400; 591500, 4423300; 591600, 4422100; 590900, 4420900; 590700, 4419800; 588000, 4417000; 587500, 4416400; 587200, 4415500; 587200, 4415100; 587300, 4415000; 587300, 4414500; 587200, 4414400; 587100, 4414300; 586900, 4414000; 586400, 4413900; 586200, 4413700; 586000, 4413600; 585800, 4413600; 585800, 4414700; 585300, 4414700; 585300, 4413800; 585200, 4413700; 584800, 4413700; 584600, 4413600; 584400, 4413600; 584200, 4413500; 584000, 4413700; 583200, 4413400; 583000, 4414200; 583700, 4414600; 583500, 4415000; 583000, 4415900; 583000, 4416400; 582900, 4416700; 582800, 4416900; 582700, 4417000; 582700, 4417200; 582900, 4417300; 582800, 4417400; 582700, 4417500; 582700, 4417600; 582600, 4417700; 582600, 4418000; 582600, 4418100; 582600, 4418200; 582700, 4418300; 582500, 4418400; 582400, 4418300; 582200, 4418300; 582100, 4418400; 582100, 4418500; 582000, 4418600; 582100, 4418700; 582100, 4418900; 582200, 4419100; 582100, 4419300; 582200, 4419500; 582100, 4419600; 582000, 4419700; 582100, 4419800; 582100, 4419900; 582200, 4420000; 582200, 4420300; 582100, 4420500; 582200, 4420600; 582200, 4420800; 582300, 4421100; 582900, 4421500; 582900, 4421600; 583300, 4422000; 583400, 4422100; 583900, 4422100; 584100, 4422300; 584200, 4422300; 584300, 4422400; 584400, 4422500; 584600, 4422900; 585100, 4423400; 585600, 4423700; 585800, 4423900; 585800, 4424200; 586100, 4424200; 586600, 4424800; 586800, 4424900; 587300, 4425500; 587400, 4425600; 587500, 4425800; 587500, 4425900; 587600, 4426000; 587700, 4426100; 587800, 4426100; 587900, 4426200; 587900, 4426300; 587900, 4426800; 587800, 4426900; 587900, 4427000; 588000, 4427300; 587900, 4427300; 587800, 4427200; 587600, 4426800; 587500, 4426600; 587400, 4426400; 587200, 4426200; 586700, 4425700; 586500, 4425700; 586200, 4425400; 585900, 4425400; 585800, 4425400; 585500, 4425600; 584900, 4425600; 584900, 4425400; 584900, 4425200; 585000, 4425000; 584800, 4425000; 584600, 4424900; 584500, 4424900; 584300, 4425000; 584100, 4425000; 583900, 4425200; 583700, 4425400; 583400, 4425500; 583300, 4425500; 583300, 4425300; 583100, 4425300; 583000, 4425400; 582900, 4425200; 582800, 4425000; 582700, 4424800; 582700, 4424600; 582600, 4424500; 582600, 4424200; 582400, 4424100; 582300, 4423800; 582100, 4423600; 582100, 4423500; 581300, 4422800; 581000, 4422600; 580600, 4422800; 580200, 4423800; 579900, 4424500; 579700, 4424800; 579500, 4425400; 579700, 4425600; 580100, 4425600; 580800, 4426400; 581700, 4427000; 582300, 4427000; 582300, 4426900; 582400, 4426800; 582500, 4426800; 582700, 4426700; 582800, 4426700; 583500, 4426800; 583900, 4426900; 584000, 4427000; 584200, 4427100; 584600, 4427600; 584800, 4427900; 585100, 4428200; 585900, 4428500; 586300, 4428500; 586900, 4428900; 587300, 4429100; 588300, 4429600; 588500, 4430000; returning to 588700, 4429900.

(6) Unit 2: Butte County, California. [Reserved]

(7) Unit 3: Colusa and Glenn Counties, California. [Reserved]

(8) Unit 4: Stanislaus and Tuolumne Counties, California. From USGS 1:24,000 quadrangle maps Cooperstown, Keystone, Knights Ferry, La Grange Paulsell, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 720800, 4176400; 721400, 4175900; 722200, 4175300; 722700, 4175200; 722800, 4173600; 723000, 4173500; 723200, 4173600; 723700, 4173600; 724000, 4173300; 724100, 4172300; 722800, 4172200; 721700, 4171200; 721600, 4170700; 721500, 4170500; 721400, 4170400; 721200, 4170300; 721000, 4170100; 721000, 4169600; 720900, 4169600; 720000, 4168500; 718900, 4168000; 718700, 4168100; 718100, 4168500; 718000, 4168500; 717900, 4168600; 716200, 4168600; 715900, 4168500; 715600, 4168300; 715500, 4168200; 715400, 4168300; 715400, 4169400; 714900, 4169900; 714900, 4170000; 715100, 4170000; 715200, 4170200; 715300, 4170200; 715300, 4170400; 715300, 4171200; 715200, 4171200; 715200, 4171000; 715100, 4171000; 715100, 4170700; 714900, 4170700; 714900, 4170300; 713900, 4169800; 713800, 4169900; 713000, 4169500; 712500, 4169400; 712200, 4169400; 712000, 4169600; 711500, 4169900; 711300, 4169900; 710500, 4169100; 709300, 4169100; 709100, 4169500; 709100, 4169700; 708900, 4169700; 708800, 4169900; 708700, 4169900; 708600, 4169800; 708500, 4169900; 708400, 4170000; 708700, 4170200; 708800, 4170300; 708900, 4170400; 709100, 4170500; 709200, 4170600; 709400, 4170600; 709400, 4170800; 709300, 4170800; 709200, 4170900; 709100, 4170800; 708800, 4170700; 708800, 4170600; 708500, 4170500; 708400, 4170300; 708100, 4170200; 707900, 4170200; 707900, 4170300; 708100, 4170500; 708200, 4170500; 708200, 4170600; 708000, 4170600; 708200, 4170800; 708200, 4170900; 708100, 4170900; 707900, 4170700; 707700, 4170700; 707700, 4170800; 707600, 4170900; 707400, 4170900; 707100, 4171100; 707100, 4171200; 707200, 4171300; 707300, 4171200; 707500, 4171300; 707800, 4171600; 707900, 4171600; 708100, 4171600; 708200, 4171700; 708100, 4171800; 708100, 4171900; 708300, 4171900; 708300, 4172100; 708400, 4172100; 708500, 4172200; 708500, 4172300; 708700, 4172400; 708800, 4172500; 708800, 4172600; 708700, 4172700; 708500, 4172700; 708400, 4172800; 708300, 4172700; 708200, 4172700; 708100, 4172600; 708000, 4172500; 707900, 4172500; 707800, 4172700; 707600, 4172600; 707400, 4172500; 707400, 4172600; 707200, 4172700; 707100, 4172300; 707000, 4172200; 706700, 4172200; 706700, 4172300; 706500, 4172300; 706400, 4172300; 706400, 4172400; 706200, 4172600; 706300, 4172700; 706400, 4172800; 706300, 4172800; 706200, 4172800; 706100, 4172900; 705900, 4173100; 705800, 4173300; 705800, 4173500; 706000, 4173800; 705900, 4173900; 705800, 4174100; 705700, 4174200; 705500, 4174200; 705400, 4174100; 705400, 4173700; 705300, 4173500; 705200, 4173200; 705100, 4174700; 705400, 4175400; 705000, 4175900; 705300, 4176300; 705700, 4176700; 705700, 4177000; 705700, 4177500; 705700, 4177700; 705200, 4177900; 705000, 4178100; 705400, 4178900; 706200, 4178400; 706300, 4178000; 706200, 4177600; 706200, 4177100; 706700, 4177100; 706700, 4175900; 706800, 4175700; 707100,

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(9) Unit 5: Merced and Stanislaus Counties, California. From USGS 1:24,000 quadrangle maps Cooperstown, La Grange, Merced Falls, Montpelier, Paulsell, Snelling, Turlock Lake, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at 724100, 4158200; 723800, 4158200; 723700, 4159000; 722500, 4159000; 722500, 4159200; 722400, 4159200; 722300, 4159300; 722200, 4159300; 721600, 4159300; 721600, 4159500; 721500, 4159600; 721500, 4159800; 721600, 4159800; 721600, 4159900; 721700, 4159900; 721700, 4160500; 721100, 4160500; 721100, 4160100; 720800, 4160100; 720800, 4160500; 719500, 4160500; 719500, 4160300; 720000, 4159600; 719600, 4159600; 719600, 4159500; 719500, 4159500; 719400, 4159500; 719300, 4159400; 719100, 4159400; 719000, 4159400; 718900, 4159300; 718700, 4159100; 718600, 4159000; 718600, 4158900; 718400, 4158900; 718200, 4158800; 718200, 4158700; 718300, 4158600; 718400, 4158500; 718500, 4158500; 718600, 4158400; 718700, 4158400; 718900, 4158300; 719000, 4158100; 719000, 4157900; 718700, 4157600; 718000, 4157700; 717800, 4157400; 717900, 4157200; 718000, 4157000; 718400, 4157300; 718700, 4156700; 718700, 4156300; 717500, 4156300; 717500, 4156700; 717100, 4156700; 717100, 4156300; 716600, 4156300; 716600, 4155800; 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(ii) Start at 704200, 4166200; 704000, 4166200; 703800, 4166400; 703400, 4166600; 703400, 4166800; 703500, 4166800; 703600, 4166900; 703700, 4167000; 703700, 4167200; 704600, 4167600; 704700, 4167600; 704800, 4167500; 705000, 4167400; 705300, 4167400; 705300, 4166400; 705000, 4166300; 704400, 4166300; returning to 704200, 4166200.

(iii) Start at 712600, 4155200; 712600, 4156800; 712900, 4156800; 712900, 4157100; 714800, 4157200; 714800, 4156800; 714300, 4156300; 714200, 4156200; 714000, 4155500; 714000, 4155400; 713800, 4155400; returning to 712600, 4155200.

(10) Subunit 6A: Merced County, California. [Reserved]

(11) Subunit 6B: Merced County, California. [Reserved]

(12) Subunit 6C: Merced County, California. [Reserved]

(13) Subunit 7A: Tulare County, California. From USGS 1:24,000 quadrangle maps Ivanhoe, and Stokes Mtn., California, land bounded by the following UTM 11 NAD 83 coordinates (E, N):

(i) Start at 300900, 4041500; 300900, 4041800; 300200, 4041800; 299900, 4041900; 299600, 4042100; 299200, 4042700; 298900, 4043000; 298900, 4043300; 299200, 4043500; 299700, 4043500; 299700, 4044700; 300100, 4045300; 300700, 4045400; 301200, 4044900; 301400, 4044900; 301400, 4045200; 301300, 4045200; 301300, 4045800; 302200, 4045800; 302200, 4045600; 302500, 4045600; 303000, 4045900; 303100, 4045900; 303300, 4045700; 303600, 4045700; 303800, 4046100; 304300, 4046100; 304500, 4046300; 304700, 4046300; 304900, 4046800; 304700, 4047700; 304800, 4047900; 304700, 4048300; 304800, 4048500; 305400, 4048500; 305800, 4048000; 306000, 4047900; 306300, 4047900; 306500, 4047600; 306500, 4047000; 306300, 4046900; 306100, 4045900; 305900, 4045300; 305600, 4045100; 305400, 4044300; 305400, 4044100; 305900, 4043900; 305700, 4043400; 305700, 4042400; 305000, 4042400; 304900, 4042000; 304200, 4042000; 304100, 4041600; 301400, 4041700; returning to 300900, 4041500.

(ii) Start at 300900, 4041500; 300900, 4041400; 300400, 4041400; 300400, 4040100; 300300, 4040100; 300300, 4039400; 300300, 4039300; 300000, 4039300; 300000, 4038600; 299200, 4038600; 298400, 4038600; 298400, 4039500; 298500, 4039800; 298900, 4039900; 298900, 4041000; 299700, 4041000; 299300, 4041500; returning to 300900, 4041500.

(14) Subunit 7B: Tulare County, California. From USGS 1:24,000 quadrangle maps Auckland, Ivanhoe, Stokes Mtn., and Woodlake, California, land bounded by the following UTM 11 NAD 83 coordinates (E, N):

(i) Start at 308500, 4033700; 308200, 4033800; 308000, 4033900; 308100, 4034300; 308000, 4034500; 308000, 4034900; 307700, 4035100; 307500, 4035400; 307400, 4035600; 307400, 4035800; 307200, 4036300; 306900, 4036900; 307100, 4037300; 306700, 4038300; 306700, 4038400; 306800, 4038500; 307000, 4038500; 307200, 4038600; 307100, 4038700; 307100, 4039900; 308100, 4040200; 308500, 4040700; 308200, 4041500; 307600, 4041500; 307100, 4042000; 307100, 4042600; 307700, 4043700; 307800, 4044500; 308200, 4044700; 309000, 4043900; 309600, 4043400; 311700, 4043400; 312100, 4043000; 312700, 4043000; 313000, 4042700; 313000, 4042300; 312500, 4042000; 311000, 4041000; 311000, 4040400; 310600, 4040200; 310600, 4039900; 310400, 4039900; 310400, 4039800; 310000, 4039800; 310000, 4039500; 309900, 4039400; 309900, 4039200; 309700, 4039200; 309300, 4039200; 309300, 4038800; 308900, 4038800; 308900, 4038400; 308100, 4038400; 308000, 4038200; 307900, 4038200; 307900, 4037600; 308100, 4037600; 308100, 4037400; 308300, 4037400; 308300, 4038000; 308700, 4038000; 308700, 4037900; 308800, 4037800; 308700, 4037600; 308900, 4037600; 308900, 4037400; 308700, 4037400; 308700, 4037200; 309100, 4037200; 309100, 4036800; 308700, 4036800; 308700, 4037000; 308100, 4037000; 308100, 4036900; 308200, 4036900; 308200, 4036800; 308100, 4036800; 308100, 4036600; 308300, 4036600; 308300, 4036500; 308500, 4036500; 308400, 4035800; 308300, 4035800; 308300, 4035400; 308900, 4035000; 309000, 4034800; 308700, 4034800; 308700, 4034100; 308600, 4034100; 308600, 4034000; 308700, 4033900; returning to 308500, 4033700.

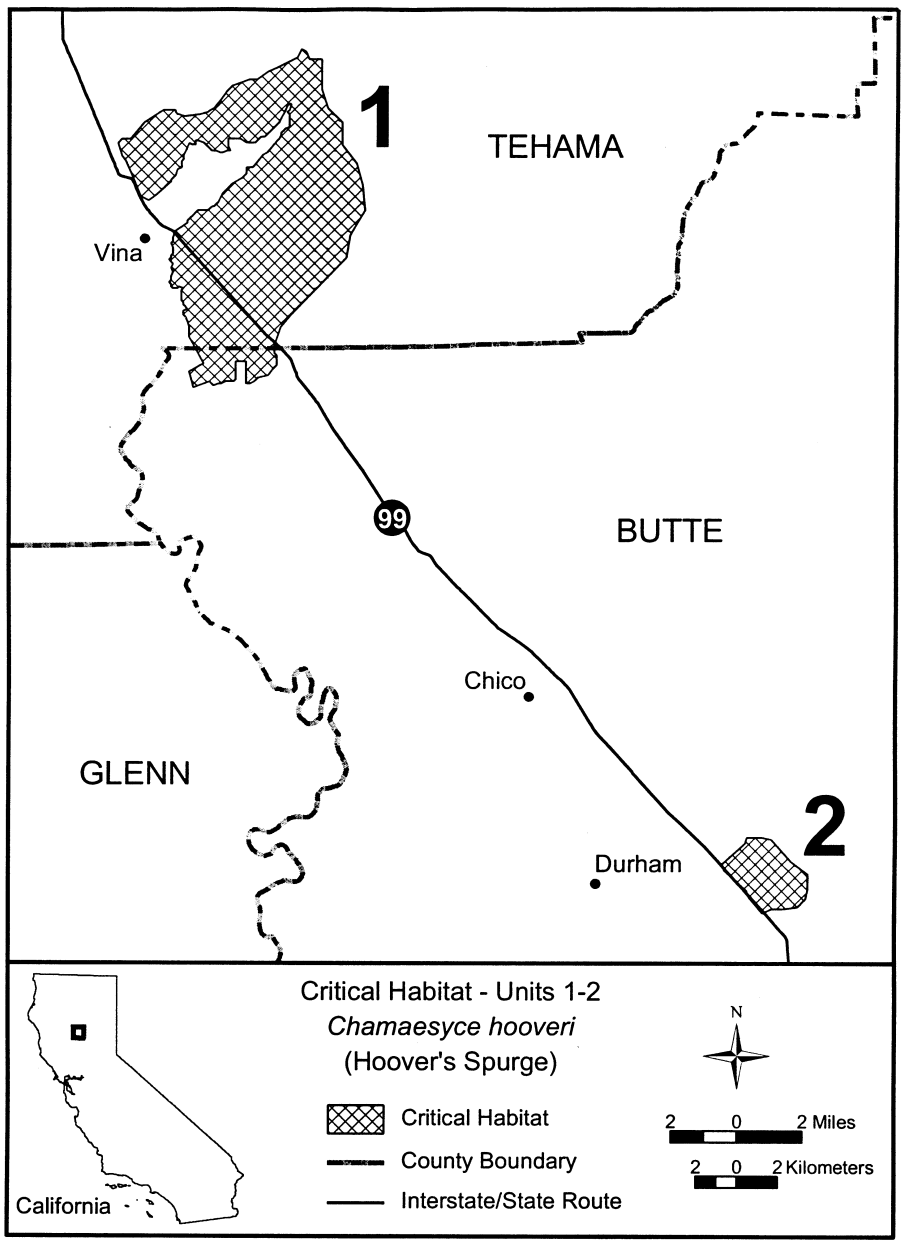
(ii) Start at 315900, 4034500; 314100, 4034600; 313400, 4034900; 312800, 4035000; 312800, 4035100; 313000, 4035100; 313000, 4035900; 312500, 4035900; 312500, 4035700; 312300, 4035700; 312100, 4035500; 312000, 4035500; 312000, 4035100; 311300, 4035100; 311300, 4035300; 311500, 4035300; 311500, 4035500; 311100, 4035600; 311100, 4035300; 311000, 4035200; 311000, 4035100; 310500, 4035100; 310400, 4035000; 310300, 4035100; 310300, 4035900; 310600, 4035900; 310600, 4036700; 310800, 4036700; 310800, 4037000; 310500, 4037000; 310500, 4037100; 310600, 4037400; 310400, 4037600; 309800, 4037600; 309900, 4038400; 310100, 4038400; 310100, 4038200; 310500, 4038200; 310500, 4037900; 310800, 4037900; 310800, 4038300; 311200, 4038300; 311200, 4038700; 311500, 4038700; 311500, 4038800; 311600, 4038800; 311600, 4039000; 311700, 4039100; 312000, 4039100; 312000, 4039500; 311800, 4039500; 311600, 4039600; 311700, 4040000; 312100, 4040700; 312700, 4041000; 313000, 4041000; 313600, 4040500; 313700, 4040300; 313100, 4039600; 312700, 4039600; 312700, 4039400; 313300, 4039400; 313500, 4039000; 313100, 4038600; 313700, 4038600; 313900, 4038500; 314100, 4038000; 314600, 4038000; 314800, 4037500; 314800, 4037200; 314000, 4036600; 314100, 4036400; 314900, 4036400; 315100, 4036600;

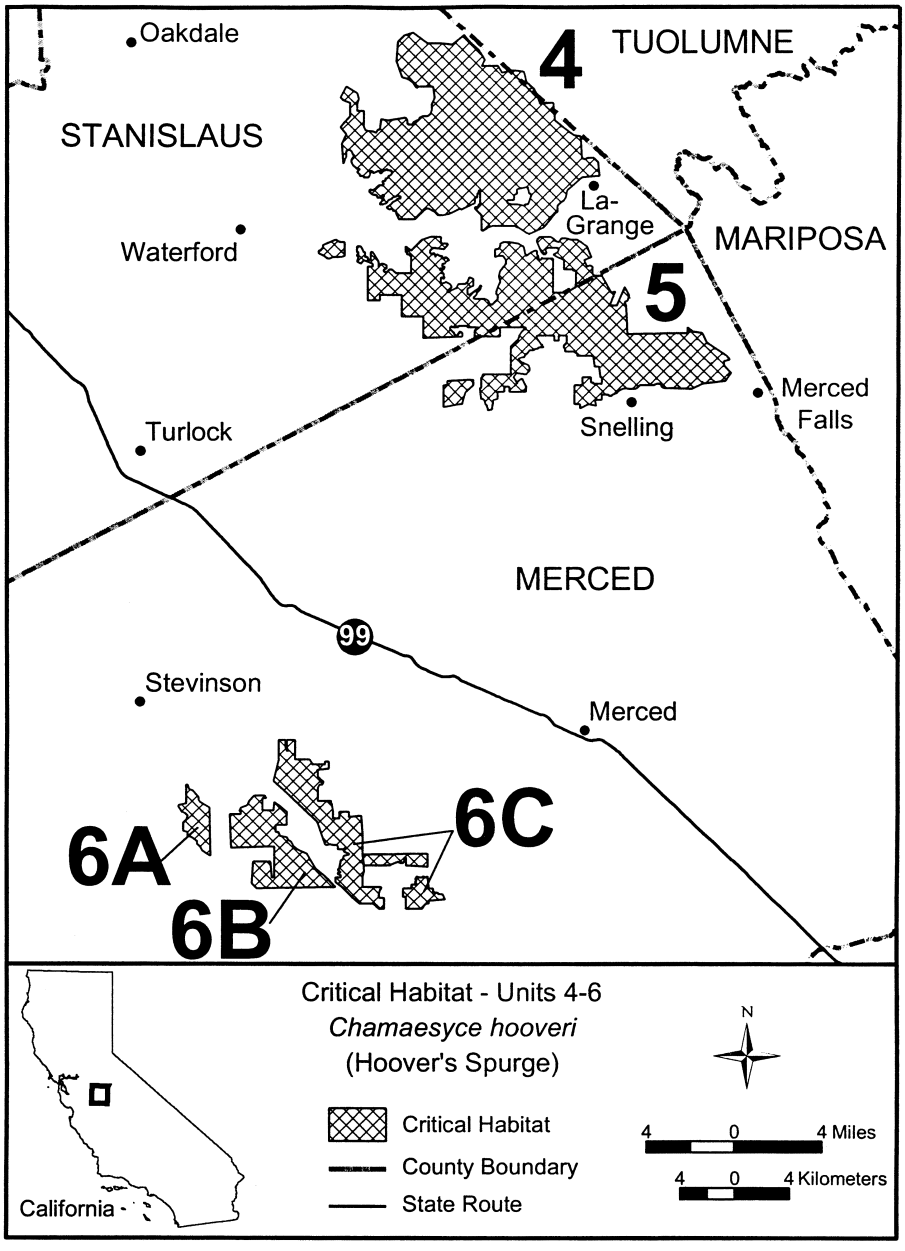
315500, 4036600; 316100, 4036400; 316400, 4035400; 316400, 4035200; returning to 315900, 4034500.

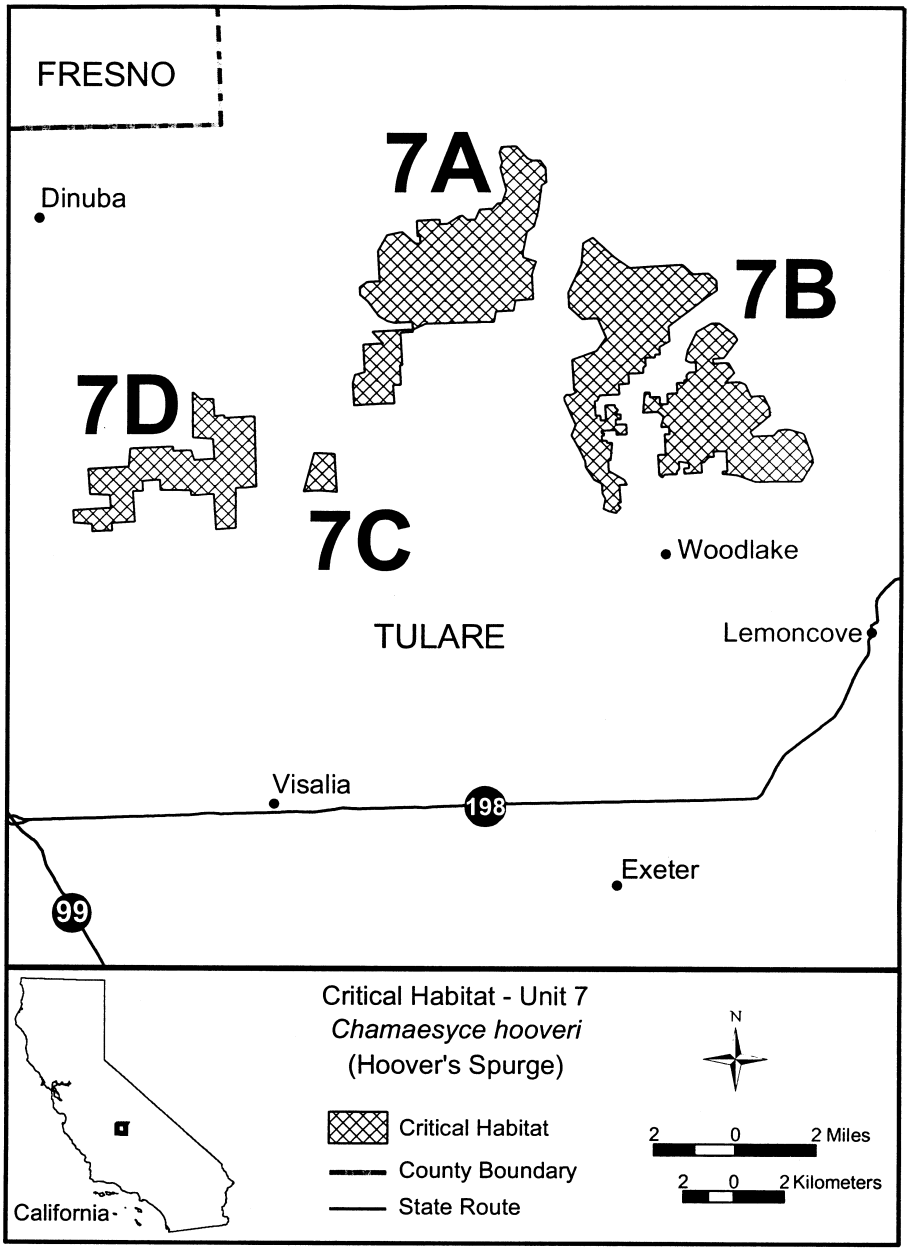
(15) Subunit 7C: Tulare County, California. From USGS 1:24,000 quadrangle map Monson, California, land bounded by the following UTM 11 NAD 83 coordinates (E, N): 297500, 4035500; 297500, 4035200; 296800, 4035300; 296200, 4035300; 296700, 4036800; 297500, 4036700; 297500, 4036300; returning to 297500, 4035500.

(16) Subunit 7D: Tulare County, California. From USGS 1:24,000 quadrangle maps Monson, and Traver, California, land bounded by the following UTM 11 NAD 83 coordinates (E, N): 294300, 4035600; 293500, 4035600; 293400, 4034000; 292600, 4034000; 292600, 4035400; 291900, 4035400; 291700, 4035400; 291700, 4035600; 290500, 4035700; 290500, 4036100; 289800, 4036100; 289800, 4035700; 289400, 4035700; 289400, 4034500; 288500, 4034500; 288500, 4034200; 287700, 4034200; 287700, 4034500; 287000, 4034600; 287000, 4035100; 288500, 4035100; 288500, 4035600; 287700, 4035700; 287700, 4036700; 289300, 4036700; 289400, 4037400; 291100, 4037400; 291100, 4037200; 291800, 4037200; 291900, 4036800; 292700, 4036800; 292700, 4037600; 291900, 4037700; 292000, 4039500; 292300, 4039200; 292800, 4039200; 292800, 4038500; 293200, 4038500; 293200, 4038400; 294400, 4038400; returning to 294300, 4035600.

(17) Maps follow of critical habitat units 1 and 2, 4 through 6 and 7 (respectively) for Hoover's spurge.


1
TEHAMA
Vina
99
BUTTE
Chico
GLENN
2
Durham
California
Critical Habitat - Units 1-2
Chamaesyce hooveri
(Hoover's Spurge)
Critical Habitat
County Boundary
Interstate/State Route
N
2 0 2 Miles
2 0 2 Kilometers


Oakdale
4
TUOLUMNE
STANISLAUS
La-
Grange
Waterford
MARIPOSA
5
Merced
Falls
Snelling
Turlock
MERCED
99
Stevinson
Merced
6A
6C
6B
Critical Habitat - Units 4-6
Chamaesyce hooveri
(Hoover's Spurge)
N
Critical Habitat
County Boundary
State Route
4 0 4 Miles
4 0 4 Kilometers
California



Family Fabaceae: *Astragalus Albens* (Cushenbury Milk-Vetch)

(1) Critical habitat units are depicted for San Bernardino County, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Astragalus albens* are those habitat components that are essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements of critical habitat for this species are listed below and consist of, but are not limited to:

(i) Soils derived primarily from the upper and middle members of the Bird Spring Formation and Undivided Cambrian parent materials that occur on hillsides or along rocky washes with limestone outwash/deposits at elevations between 1,171 and 2,013 m (3,864 and 6,604 ft);

(ii) Soils with intact, natural surfaces that have not been substantially altered by land use activities (*e.g.*, graded, excavated, recontoured, or otherwise altered by ground-disturbing equipment); and

(iii) Associated plant communities that have areas with an open canopy cover and little accumulation of organic material (*e.g.*, leaf litter) on the surface of the soil.

(3) Existing features and structures, such as buildings, active mines, paved or unpaved roads, other paved or cleared areas, lawns, and other urban landscaped areas, are not likely to contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species or primary constituent elements in adjacent critical habitat.

(4) Northeastern Slope Unit, San Bernardino County, California.

(i) From USGS 1:24,000 quadrangle maps Fawnskin, Big Bear City, Rattlesnake Canyon, and Cougar Buttes, California.

(ii) Subunit 1a: Land bounded by the following UTM11 NAD27 coordinates (E, N): 503300, 3801900; 503600, 3801900; 503600, 3801700; 503700, 3801700; 503700, 3801600; 503800, 3801600; 503800, 3801500; 503900, 3801500; 503900, 3801200; 503800, 3801200; 503800, 3801100; 503900, 3801100; 503900, 3800900; 504000, 3800800; 504100, 3800800; 504100, 3800800; 504100, 3800500; 504000, 3800500; 504000, 3800300; 503900, 3800300; 503900, 3800200; 503500, 3800200; 503500, 3800300; 503400, 3800300; 503400, 3800400; 503300, 3800400; 503300, 3800600; 503200, 3800600; 503200, 3801800; 503300, 3801800; and 503300, 3801900.

(iii) Subunit 1b: Land bounded by the following UTM11 NAD27 coordinates (E, N): 507000, 3801600; 507400, 3801600; 507400, 3801300; 507500, 3801300; 507500, 3800900; 507600, 3800900; 507600, 3800500; 507500, 3800500; 507500, 3800400; 507400, 3800400; 507400, 3800300; 507300, 3800300; 507300, 3800200; 507200, 3800200; 507200, 3800100; 507100, 3800100; 507100, 3800200; 507000, 3800200; 507000, 3800500; 506800, 3800500; 506800, 3800600; 506700, 3800600; 506700, 3801100; 506900, 3801100; 506900, 3801000; 507100, 3801000; 507100, 3801300; 507000, 3801300; and 507000, 3801600.

(iv) Subunit 1c: Land bounded by the following UTM11 NAD27 coordinates (E, N): 513100, 3803700; 513600, 3803700; 513600, 3803100; 513500, 3803100; 513500, 3803000; 513400, 3803000; 513400, 3802900; 513300, 3802900; 513300, 3802800; 513100, 3802800; 513100, 3802900; 513000, 3802900; 513000, 3803000; 512900, 3803000; 512900, 3803400; 513000, 3803400; 513000, 3803500; 513100, 3803500; and 513100, 3803700.

(v) Subunit 1d: Land bounded by the following UTM11 NAD27 coordinates (E, N): 516000, 3803300; 516300, 3803300; 516300, 3803000; 516000, 3803000; and 516000, 3803300.

(vi) Subunit 1e: Land bounded by the following UTM11 NAD27 coordinates (E, N): 514800, 3802600; 515200, 3802600; 515200, 3802200; 515100, 3802200; 515100, 3801900; 515300, 3801900; 515300, 3802000; 515400, 3802000; 515400, 3801900; 515500, 3801900; 515500, 3801600; 515100, 3801600; 515100, 3801500; 514800, 3801500; 514800, 3801600; 514700, 3801600; 514700, 3801900; 514600, 3801900; 514600, 3802000; 514500, 3802000; 514500, 3802300; 514600, 3802300; 514600, 3802400; 514700, 3802400; 514700, 3802500; 514800, 3802500; and 514800, 3802600.

(vii) Subunit 1f: Land bounded by the following UTM11 NAD27 coordinates (E, N): 516000, 3802500; 516200, 3802500; 516200, 3802400; 516300, 3802400; 516300, 3802100; 516200, 3802100; 516200, 3801900; 515800, 3801900; 515800, 3801800; 515700, 3801800; 515700, 3801900; 515600, 3801900; 515600, 3802100; 515500, 3802100; 515500, 3802200; 515600, 3802200; 515600, 3802300; 515900, 3802300; 515900, 3802400; 516000, 3802400; and 516000, 3802500.

(viii) Subunit 1g: Land bounded by the following UTM11 NAD27 coordinates (E, N): 513700, 3800000; 514100, 3800000; 514100, 3799900; 514300, 3799900; 514300, 3799800; 514700, 3799800; 514700, 3799500; 514800, 3799500; 514800, 3799600; 515000, 3799600; 515000, 3799500; 515100, 3799500; 515100, 3799200; 515000, 3799200; 515000, 3799100; 514800, 3799100; 514800, 3799200; 514700, 3799200; 514700, 3799300; 514600, 3799300; 514600, 3799400; 514500, 3799400; 514500, 3799300; 514100, 3799300; 514100, 3799500; 514000, 3799500; 514000, 3799400; 513800, 3799400; 513800, 3799500; 513700, 3799500; and 513700, 3800000.

(ix) Subunit 1h: Land bounded by the following UTM11 NAD27 coordinates (E, N): 515200, 3801300; 515500, 3801300; 515500, 3801200; 515600, 3801200; 515600, 3800800; 515500, 3800800; 515500, 3800700; 515400, 3800700; 515400, 3800400; 515300, 3800400; 515300, 3800300; 515400, 3800300; 515400, 3800200; 515500, 3800200; 515500, 3799600; 515600, 3799600; 515600, 3799500; 515900, 3799500; 515900, 3799400; 516300, 3799400; 516300, 3799200; 516500, 3799200; 516500, 3799000; 516700, 3799000; 516700, 3799600; 517100, 3799600; 517100, 3799400; 517200, 3799400; 517200, 3799300; 517100, 3799300; 517100, 3799200; 517200, 3799200; 517200, 3798900; 517100, 3798900; 517100, 3798600; 516500, 3798600; 516500, 3798900; 516400, 3798900; 516400, 3798800; 516200, 3798800; 516200, 3798900; 515400, 3798900; 515400, 3799000; 515300, 3799000; 515300, 3799100; 515200, 3799100; 515200, 3799600; 515100, 3799600; 515100, 3799700; 515000, 3799700; 515000, 3800100; 514900, 3800100; 514900, 3800800; 514800, 3800800; 514800, 3800700; 514600, 3800700; 514600, 3800800; 514500, 3800800; 514500, 3801000; 514600, 3801000;

514600, 3801100; 514800, 3801100; 514800, 3801000; 514900, 3801000; 514900, 3801100; 515100, 3801100; 515100, 3801200; 515200, 3801200; and 515200, 3801300.

(x) Subunit 1i: Land bounded by the following UTM11 NAD27 coordinates (E, N): 517200, 3802800; 517700, 3802800; 517700, 3802400; 517600, 3802400; 517600, 3802100; 517500, 3802100; 517500, 3802000; 517400, 3802000; 517400, 3801900; 517200, 3801900; 517200, 3802000; 517100, 3802000; 517100, 3802700; 517200, 3802700; and 517200, 3802800.

(xi) Subunit 1j: Land bounded by the following UTM11 NAD27 coordinates (E, N): 517800, 3802200; 518200, 3802200; 518200, 3801900; 518100, 3801900; 518100, 3801800; 517800, 3801800; and 517800, 3802200.

(xii) Subunit 1k: Land bounded by the following UTM11 NAD27 coordinates (E, N): 517700, 3801500; 518300, 3801500; 518300, 3801200; 518200, 3801200; 518200, 3801100; 518100, 3801100; 518100, 3801000; 518000, 3801000; 518000, 3800900; 517900, 3800900; 517900, 3800800; 517800, 3800800; 517800, 3800600; 517700, 3800600; 517700, 3800500; 517800, 3800500; 517800, 3800000; 517700, 3800000; 517700, 3799900; 517300, 3799900; 517300, 3800000; 517200, 3800000; 517200, 3799900; 516800, 3799900; 516800, 3800000; 516700, 3800000; 516700, 3800200; 517100, 3800200; 517100, 3800900; 517200, 3800900; 517200, 3801000; 517400, 3801000; 517400, 3801200; 517500, 3801200; 517500, 3801400; 517700, 3801400; and 517700, 3801500.

(xiii) Subunit 1l: Land bounded by the following UTM11 NAD27 coordinates (E, N): 517800, 3799800; 518600, 3799800; 518600, 3799500; 518500, 3799500; 518500, 3799400; 518400, 3799400; 518400, 3799300; 518200, 3799300; 518200, 3799100; 517900, 3799100; 517900, 3798700; 517500, 3798700; 517500, 3798900; 517400, 3798900; 517400, 3799600; 517700, 3799600; 517700, 3799700; 517800, 3799700; and 517800, 3799800.

(xiv) Subunit 1m: Land bounded by the following UTM11 NAD27 coordinates (E, N): 520200, 3801000; 520600, 3801000; 520600, 3800700; 520500, 3800700; 520500, 3800600; 520600, 3800600; 520600, 3800500; 520800, 3800500; 520800, 3800400; 520900, 3800400; 520900, 3800300; 521100, 3800300; 521100, 3800200; 521200, 3800200; 521200, 3800000; 521100, 3800000; 521100, 3799900; 520800, 3799900; 520800, 3800100; 520300, 3800100; 520300, 3800200; 520200, 3800200; 520200, 3800300; 520100, 3800300; 520100, 3800200; 519800, 3800200; 519800, 3800700; 520100, 3800700; 520100, 3800600; 520200, 3800600; and 520200, 3801000.

(xv) Subunit 1n: Land bounded by the following UTM11 NAD27 coordinates (E, N): 519300, 3799300; 519600, 3799300; 519600, 3798900; 519300, 3798900; 519300, 3799000; 519200, 3799000; 519200, 3799200; 519300, 3799200; and 519300, 3799300.

(xvi) Subunit 1o: Land bounded by the following UTM11 NAD27 coordinates (E, N): 520100, 3800000; 520400, 3800000; 520400, 3799900; 520500, 3799900; 520500, 3799700; 520400, 3799700; 520400, 3799600; 520000, 3799600; 520000, 3799500; 520100, 3799500; 520100, 3799400; 520200, 3799400; 520200, 3799300; 520300, 3799300; 520300, 3799400; 520600, 3799400; 520600, 3799100; 520300, 3799100; 520300, 3799200; 520100, 3799200; 520100, 3799000; 520200, 3799000; 520200, 3798900; 520300, 3798900; 520300, 3798800; 520700, 3798800; 520700, 3798700; 521500, 3798700; 521500, 3798800; 521400, 3798800; 521400, 3799000; 521300, 3799000; 521300, 3799100; 521200, 3799100; 521200, 3799200; 521500, 3799200; 521500, 3799300; 521800, 3799300; 521800, 3798600; 521600, 3798600; 521600, 3798500; 521500, 3798500; 521500, 3797900; 521100, 3797900; 521100, 3798000; 521000, 3798000; 521000, 3797900; 520900, 3797900; 520900, 3797800; 520600, 3797800; 520600, 3797900; 520500, 3797900; 520500, 3798000; 520300, 3798000; 520300, 3798300; 520200, 3798300; 520200, 3798200; 519900, 3798200; 519900, 3798300; 519800, 3798300; 519800, 3798400; 519700, 3798400; 519700, 3799000; 519800, 3799000; 519800, 3799100; 519700, 3799100; 519700, 3799600; 519900, 3799600; 519900, 3799900; 520100, 3799900; and 520100, 3800000.

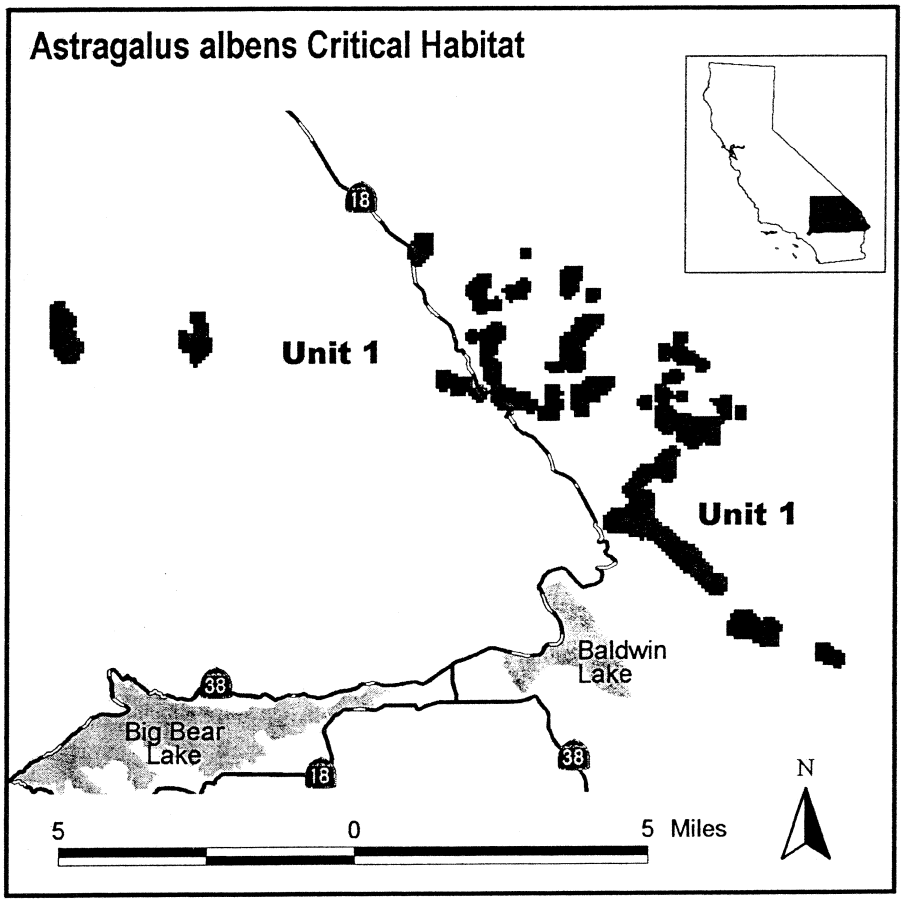
(xvii) Subunit 1p: Land bounded by the following UTM11 NAD27 coordinates (E, N): 521900, 3799000; 522200, 3799000; 522200, 3798600; 521900, 3798600; and 521900, 3799000.

(xviii) Subunit 1q: Land bounded by the following UTM11 NAD27 coordinates (E, N): 520100, 3797900; 520300, 3797900; 520300, 3797800; 520400, 3797800; 520400, 3797600; 520300, 3797600; 520300, 3797000; 520200, 3797000; 520200, 3796900; 519900, 3796900; 519900, 3797000; 519600, 3797000; 519600, 3796900; 519500, 3796900; 519500, 3796800; 519400, 3796800; 519400, 3796700; 519600, 3796700; 519600, 3796600; 519700, 3796600; 519700, 3795900; 519800, 3795900; 519800, 3795800; 519900, 3795800; 519900, 3795700; 520100, 3795700; 520100, 3795600; 520200, 3795600; 520200, 3795500; 520300, 3795500; 520300, 3795400; 520400, 3795400; 520400, 3795300; 520600, 3795300; 520600, 3795200; 520800, 3795200; 520800, 3795100; 520900, 3795100; 520900, 3795000; 521000, 3795000; 521000, 3794800; 521100, 3794800; 521100, 3794700; 521200, 3794700; 521200, 3794600; 521300, 3794600; 521300, 3794400; 521600, 3794400; 521600, 3794300; 521700, 3794300; 521700, 3793900; 521600, 3793900; 521600, 3793800; 521200, 3793800; 521200, 3793900; 521100, 3793900; 521100, 3794000; 521000, 3794000; 521000, 3794100; 520900, 3794100; 520900, 3794200; 520800, 3794200; 520800, 3794300; 520700, 3794300; 520700, 3794400; 520500, 3794400; 520500, 3794500; 520400, 3794500; 520400, 3794600; 520300, 3794600; 520300, 3794700; 520200, 3794700; 520200, 3794800; 520100, 3794800; 520100, 3794900; 520000, 3794900; 520000, 3795000; 519900, 3795000; 519900, 3795100; 519800, 3795100; 519800, 3795200; 519700, 3795200; 519700, 3795300; 519500, 3795300; 519500, 3795400; 519400, 3795400; 519400, 3795300; 519300, 3795300; 519300, 3795400; 519000, 3795400; 519000, 3795500; 518400, 3795500; 518400, 3795600; 518300, 3795600; 518300, 3796000; 518400, 3796000; 518400, 3796100; 518500, 3796100; 518500, 3796200; 518900, 3796200; 518900, 3796300; 519000, 3796300; 519000, 3796500; 518900, 3796500; 518900, 3796600; 518800, 3796600; 518800, 3796800; 518900, 3796800; 518900, 3796900; 519000, 3796900; 519000, 3797000; 519100, 3797000; 519100, 3797200; 519200, 3797200; 519200, 3797300; 519300, 3797300; 519300, 3797400; 519700, 3797400; 519700, 3797600; 519800, 3797600; 519800, 3797700; 519900, 3797700; 519900, 3797800; 520100, 3797800; and 520100, 3797900.

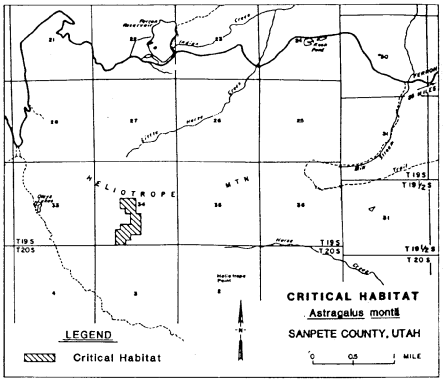
(xix) Subunit 1r: Land bounded by the following UTM11 NAD27 coordinates (E, N): 521900, 3793400; 522400, 3793400; 522400, 3793300; 522500, 3793300; 522500, 3793200; 522600, 3793200; 522600, 3793100; 522700, 3793100; 522700, 3793200; 523000, 3793200; 523000, 3793100; 523100, 3793100; 523100, 3793000; 523200, 3793000; 523200, 3792800; 523100, 3792800; 523100, 3792400; 522600, 3792400; 522600, 3792500; 522400, 3792500; 522400, 3792600; 521900, 3792600; 521900, 3792700; 521700, 3792700; 521700, 3793100; 521800, 3793100; 521800, 3793300; 521900, 3793300; and 521900, 3793400.

(xx) Subunit 1s: Land bounded by the following UTM11 NAD27 coordinates (E, N): 524100, 3792500; 524500, 3792500; 524500, 3792400; 524600, 3792400; 524600, 3792300; 524800, 3792300; 524800, 3792200; 524900, 3792200; 524900, 3791900; 524800, 3791900; 524800, 3791800; 524600, 3791800; 524600, 3791900; 524300, 3791900; 524300, 3792000; 524100, 3792000; and 524100, 3792500.

(xxi) Note: *Astragalus albens* map follows:



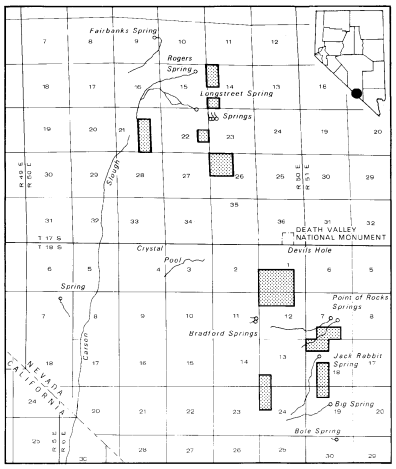
Family Fabaceae: *Astragalus montii* (Heliotrope milk-vetch). Utah, Sanpete County, western Heliotrope Mountain. T19S R4E, Sec. 34, SE ¼ of SW ¼ of SE ¼ of NW ¼; S ½ of SE ¼ of SE ¼ of NW ¼; NE ¼ of NW ¼ of NE ¼ of SW ¼; NE ¼ of NE ¼ of SW ¼; E ½ of SE ¼ of NE ¼ of SW ¼; NE ¼ of NW ¼ of SE ¼ of SW ¼; S ½ of NW ¼ of SE ¼ of SW ¼; NW ¼ of SE ¼ of SW ¼; N ½ of SW ¼ of SE ¼ of SW ¼; SW ¼ of SW ¼ of SE ¼ of SW ¼; W ½ of SE ¼ of NW ¼ of SE ¼; NW ¼ of NW ¼ of SW ¼ of SE ¼. The primary constituent element is the white limestone barrens of the Flagstaff Formation.



Family Fabaceae: *Astragalus phoenix* (Ash Meadows milk-vetch). Nevada, Nye County, Ash Meadows: W½NW¼ and SW¼SW¼ sec. 14, SW¼NE¼ and W½SE¼ sec. 21, NE¼SE¼ sec. 22, NW¼ sec. 26, T17S, R50E. SW¼ and W½SE¼ sec. 1, NW¼NE¼ and N½NW¼ sec. 12, SW¼SW¼ sec. 13, W½NW¼ sec. 24, T18S, R50E. SE¼SW¼ and SW¼SE¼ sec. 7, N½NW¼ and E½SW¼ sec. 18, NE¼NW¼ sec. 19, T18S, R51E.

Known primary constituent elements include dry, hard, white, barren, saline, clay flats, knolls, and slopes.

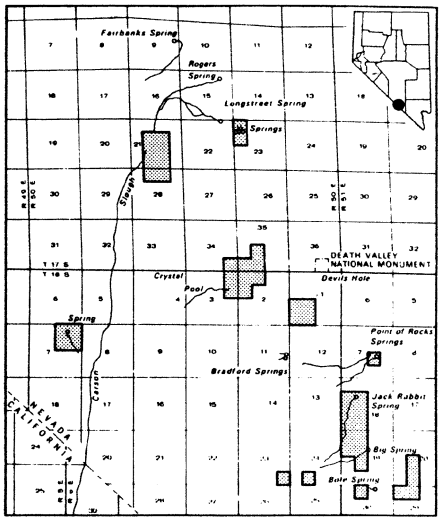
NOTE: Map follows:



Family Gentianaceae: *Centaurium namophilum* (spring-loving centaury). Nevada, Nye County, Ash Meadows: SW¼NE¼, SE¼NW¼, E½SW¼, and W½SE¼ sec. 21; W½NW¼ sec. 23, NW¼NE¼ and NE¼NW¼ sec. 28, SE¼SE¼ sec. 34, SW¼SW¼ and E½SW¼ sec. 35, T17S, R50E. SW½ sec. 1, NE¼NW¼ and W½NW¼ sec. 2, E½NE¼ sec. 3, NE¼ sec. 7; SE¼SE¼ sec. 23, SE¼SW¼ sec. 24, T18S, R50E. NW¼SE¼ sec. 7, S½NW¼ and SW¼ sec. 18, NW¼ and NE¼SE¼ sec. 19, E½SW¼ sec. 20, N½NW¼ sec. 29, NE¼NW¼ sec. 30, T18S, R51E.

Known primary constituent elements include moist to wet clay soils along banks of streams or in seepage areas.

NOTE: Map follows:



Family Hydrophyllaceae: Eriodictyon capitatum (Lompoc yerba santa)

(1) Critical habitat units are depicted for Santa Barbara County, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Eriodictyon capitatum* are the habitat components that provide:

(i) Soils with a large component of sand and that tend to be acidic; and

(ii) Plant communities that support associated species, including maritime chaparral, particularly where the following associated species are found: *Dendromecon rigida* (bush poppy), *Quercus berberidifolia* (California scrub oak), *Quercus parvula* (Santa Cruz Island scrub oak), and *Ceanothus cuneatus* (buck brush); and in southern bishop pine forests that intergrade with chaparral *Arctostaphylos* spp. (manzanita) and *Salvia mellifera* (black sage).

(3) Critical habitat does not include existing features and structures, such as buildings, roads, aqueducts, railroads, airports, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical Habitat Map Units

Data layers defining map units were mapped using Universal Transverse Mercator (UTM) coordinates.

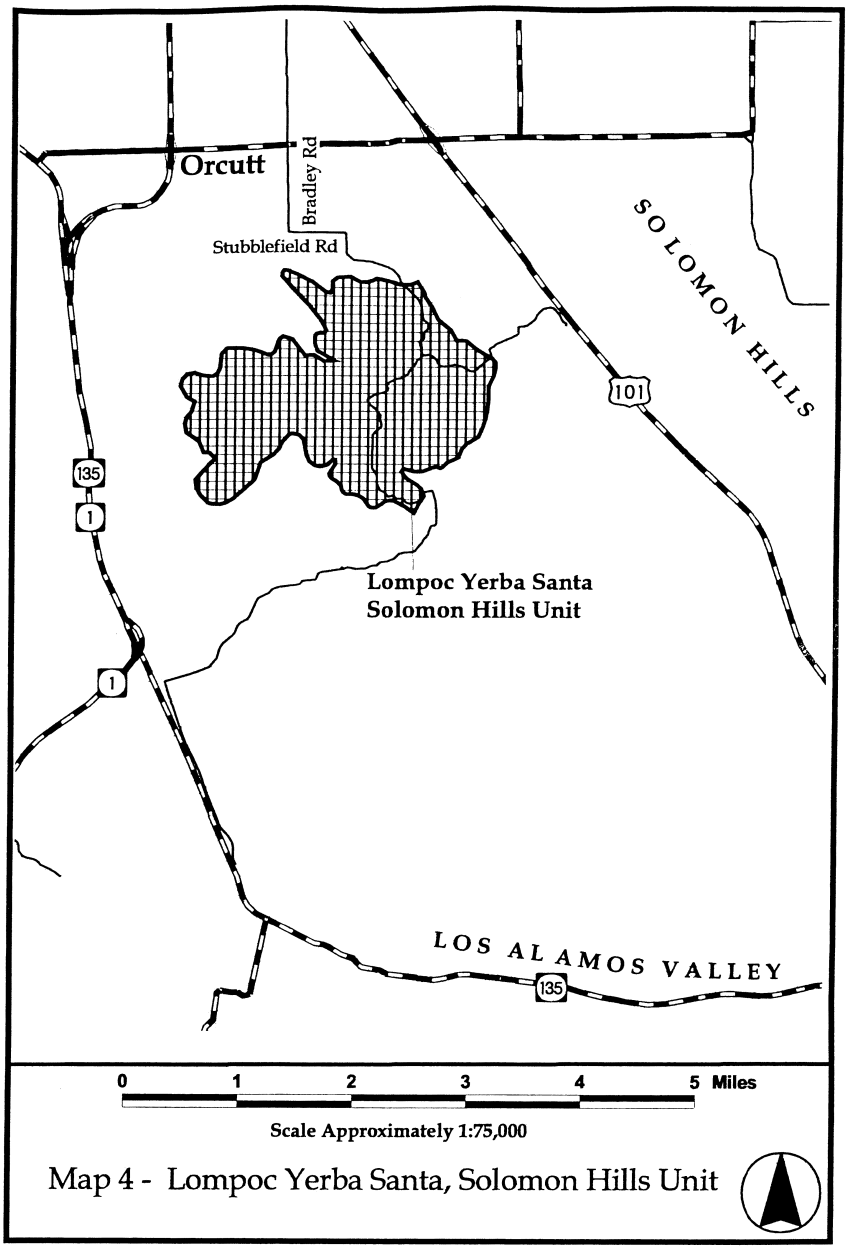
(5) Santa Ynez Mountains Unit (Lompoc yerba santa). Santa Barbara County, California

(i) From USGS 1:24,000 quadrangle maps Lompoc Hills, Point Conception, Sacate, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 739493, 3817820; 739352, 3817850; 739008, 3817860; 738828, 3817800; 738440, 3817810; 738377, 3817820; 738294, 3817900; 738288, 3817900; 738104, 3817960; 738034, 3817960; 738028, 3817900; 738026, 3817900; 737925, 3817940; 737892, 3817950; 737726, 3817950; 737666, 3818000; 737619, 3817970; 737540, 3817910; 737423, 3817890; 737416, 3817960; 737414, 3818040; 737489, 3818070; 737612, 3818160; 737622, 3818190; 737676, 3818230; 737715, 3818280; 737744, 3818320; 737757, 3818380; 737791, 3818440; 737809, 3818500; 737838, 3818550; 737862, 3818600; 737916, 3818660; 737924, 3818710; 737903, 3818760; 737865, 3818820; 737823, 3818880; 737791, 3818950; 737804, 3819010; 737791, 3819100; 737774, 3819180; 737701, 3819270; 737662, 3819360; 737624, 3819450; 737611, 3819560; 737633, 3819670; 737661, 3819750; 737679, 3819800; 737708, 3819870; 737731, 3819930; 737729, 3820000; 737717, 3820070; 737725, 3820140; 737753, 3820210; 737777, 3820240; 737816, 3820290; 737829, 3820360; 737868, 3820430; 737942, 3820490; 738005, 3820560; 738019, 3820610; 737996, 3820700; 737947, 3820820; 737893, 3820930; 737840, 3821030; 737813, 3821090; 737897, 3821130; 738005, 3821060; 738136, 3821070; 738167, 3821060; 738214, 3821020; 738264, 3821030; 738308, 3821050; 738328, 3821090; 738373, 3821110; 738439, 3821080; 738520, 3821060; 738581, 3821060; 738652, 3821060; 738698, 3821030; 738759, 3821030; 738830, 3821010; 738891, 3821010; 738951, 3821010; 739027, 3821020; 739077, 3821020; 739111, 3821060; 739161, 3821090; 739227, 3821090; 739288, 3821070; 739384, 3821050; 739541, 3821060; 739607, 3821020; 739669, 3820990; 739714, 3821020; 739762, 3821080; 739796, 3821140; 739825, 3821180; 739969, 3821260; 740158, 3821340; 740234, 3821350; 740295, 3821320; 740387, 3821280; 740453, 3821280; 740503, 3821280; 740575, 3821270; 740631, 3821250; 740677, 3821220; 740710, 3821150; 740767, 3821070; 740784, 3821010; 740786, 3820950; 740822, 3820930; 740869, 3820870; 740917, 3820790; 740919, 3820720; 740917, 3820630; 740945, 3820540; 741007, 3820480; 741084, 3820430; 741186, 3820400; 741298, 3820400; 741383, 3820400; 741510, 3820380; 741666, 3820390; 741747, 3820400; 741808, 3820400; 741863, 3820390; 741990, 3820390; 742184, 3820310; 742250, 3820300; 742356, 3820290; 742458, 3820280; 742554, 3820270; 742604, 3820280; 742645, 3820260; 742690, 3820260; 742741, 3820260; 742817, 3820270; 742907, 3820270; 742973, 3820280; 743029, 3820250; 743100, 3820250; 743139, 3820280; 743224, 3820310; 743315, 3820320; 743406, 3820320; 743461, 3820320; 743528, 3820300; 743579, 3820260; 743632, 3820200; 743644, 3820130; 743686, 3820090; 743727, 3820040; 743779, 3819990; 743826, 3819960; 743857, 3819910; 743889, 3819860; 743926, 3819820; 743958, 3819770; 743999, 3819720; 744026, 3819680; 744028, 3819620; 744039, 3819570; 744061, 3819530; 744067, 3819490; 744074, 3819420; 744096, 3819360; 744108, 3819300; 744104, 3819260; 744146, 3819210; 744162, 3819170; 744190, 3819080; 744211, 3819050; 744228, 3819020; 744244, 3818970; 744300, 3818940; 744347, 3818910; 744373, 3818900; 744394, 3818840; 744417, 3818780; 744403, 3818730; 744383, 3818720; 744395, 3818650; 744401, 3818620; 744407, 3818580; 744388, 3818560; 744376, 3818540; 744260, 3818520; 744138, 3818530; 744059, 3818550; 743870, 3818540; 743706, 3818470; 743584, 3818440; 743363, 3818350; 743096, 3818380; 742902, 3818290; 742736, 3818260; 742563, 3818270; 742371, 3818150; 742218, 3818120; 742033, 3818130; 741925, 3818110; 741699, 3818060; 741574, 3818050; 741405, 3818040; 741236, 3817980; 741084, 3817970; 740947, 3817980; 740756, 3817980; 740697, 3817920; 740515, 3817850; 740279, 3817860; 740080, 3817930; 739907, 3817850; 739493, 3817820.

(6) Solomon Hills Unit. Santa Barbara County, California.

(i) From USGS 1:24,000 quadrangle map Orcutt, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 737417, 3856100; 737363, 3856080; 737307, 3856040; 737239, 3856000; 737175, 3856000; 737140, 3856010; 737105, 3856070; 737059, 3856130; 736981, 3856170; 736919, 3856190; 736825, 3856180; 736785, 3856210; 736755, 3856250; 736747, 3856310; 736677, 3856370; 736618, 3856410; 736583, 3856440; 736581, 3856480; 736669, 3856620; 736664, 3856670; 736629, 3856680; 736545, 3856600; 736451, 3856570; 736373, 3856590; 736298, 3856650; 736258, 3856730; 736239, 3856830; 736217, 3856960; 736147, 3857020; 736067, 3857040; 736018, 3857030; 735919, 3856920; 735881, 3856830; 735798, 3856740; 735620, 3856630; 735534, 3856390; 735378, 3856240; 735233, 3856110; 735139, 3856060; 735052, 3856040; 734942, 3856040; 734875, 3856060; 734778, 3856160; 734716, 3856270; 734705, 3856380; 734792, 3856490; 734985, 3856680; 734902, 3856760; 734811, 3856770; 734747, 3856930; 734572, 3857050; 734549, 3857170; 734576, 3857260; 734640, 3857350; 734687, 3857490; 734576, 3857560; 734488, 3857710; 734512, 3857810; 734582, 3857880; 734687, 3857900; 734802, 3857860; 734945, 3857850; 735007, 3857890; 735042, 3857970; 735063, 3858170; 735141, 3858250; 735367, 3858250; 735539, 3858220; 735720, 3858150; 735768, 3858170; 735803, 3858200; 735870, 3858370; 735919, 3858410; 736045, 3858370; 736228, 3858140; 736354, 3858150; 736497, 3858060; 736637, 3858070; 736403, 3858210; 736363, 3858320; 736363, 3858410; 736384, 3858450; 736443, 3858460; 736494, 3858470; 736519, 3858500; 736497, 3858560; 736446, 3858650; 736287, 3858850; 736024, 3859120; 735900, 3859270; 735905, 3859310; 735935, 3859340; 735972, 3859350; 736126, 3859280; 736336, 3859170; 736524, 3859030; 736580, 3859030; 736605, 3859080; 736607, 3859190; 736683, 3859240; 736779, 3859250; 736868, 3859260; 737000, 3859190; 737102, 3859190; 737186, 3859210; 737240, 3859240; 737430, 3859200; 737572, 3859160; 737721, 3859160; 737818, 3859200; 737915, 3859040; 737934, 3858970; 738022, 3858840; 738108, 3858670; 738286, 3858510; 738364, 3858370; 738498, 3858350; 738646, 3858230; 738754, 3858160; 738859, 3858100; 738907, 3858050; 738905, 3857960; 738883, 3857860; 738810, 3857710; 738808, 3857600; 738811, 3857490; 738800, 3857370; 738770, 3857240; 738734, 3857130; 738675, 3857000; 738613, 3856960; 738509, 3856890; 738452, 3856830; 738398, 3856710; 738240, 3856630; 738188, 3856580; 738149, 3856550; 738100, 3856580; 738059, 3856570; 737904, 3856510; 737780, 3856510; 737635, 3856540; 737608, 3856510; 737632, 3856470; 737687, 3856410; 737833, 3856320; 737890, 3856260; 737928, 3856160; 737869, 3856080; 737787, 3855920; 737740, 3855950; 737651, 3856020; 737576, 3856050; 737484, 3856100; 737417, 3856100.

(ii) NOTE: Map 4 follows:

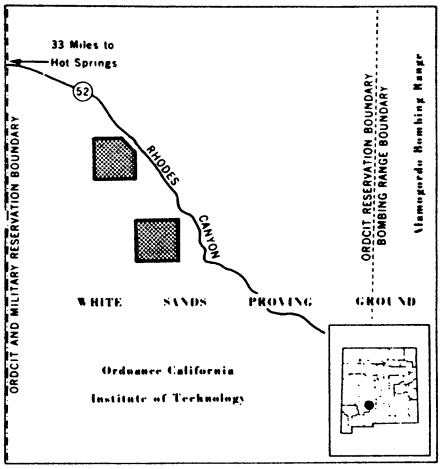


Family Lamiaceae: *Hedeoma todsenii* (Todsens pennyroyal).

New Mexico; Sierra County; the Critical Habitat of *Hedeoma todsenii* is best defined by two one–square kilometer sections on the 1000 m2 Universal Transverse Mercator Grid, Zone 13. The more northern critical habitat lies between 76 and 77,000 m N and 39 and

40,000 m E. The southern area lies between 74 and 75,000 m N and 40 and 41,000 m E. Gypsum limestone soils.

NOTE: Map follows:



Family Liliaceae: *Chlorogalum purpureum* (purple amole)

(1) Critical habitat units are depicted for Monterey and San Luis Obispo counties, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Chlorogalum purpureum* var. *purpureum* consist of, but are not limited to:

(i) Soils that are sandy clay to loamy clay, well-drained on the surface, and are often overlain with fine gravel; and,

(ii) Plant communities in functioning ecosystems that support associated plant and animal species (*e.g.*, pollinators, predator-prey species, etc.), including valley and foothill grassland, blue oak woodland or oak savannahs, and open areas within shrubland communities. Within these vegetation community types, *C. p.* var. *purpureum* appears where there is little cover of other species which compete for resources available for growth and reproduction.

(3) The primary constituent elements of critical habitat for *Chlorogalum purpureum* var. *reductum* consist of, but are not limited to:

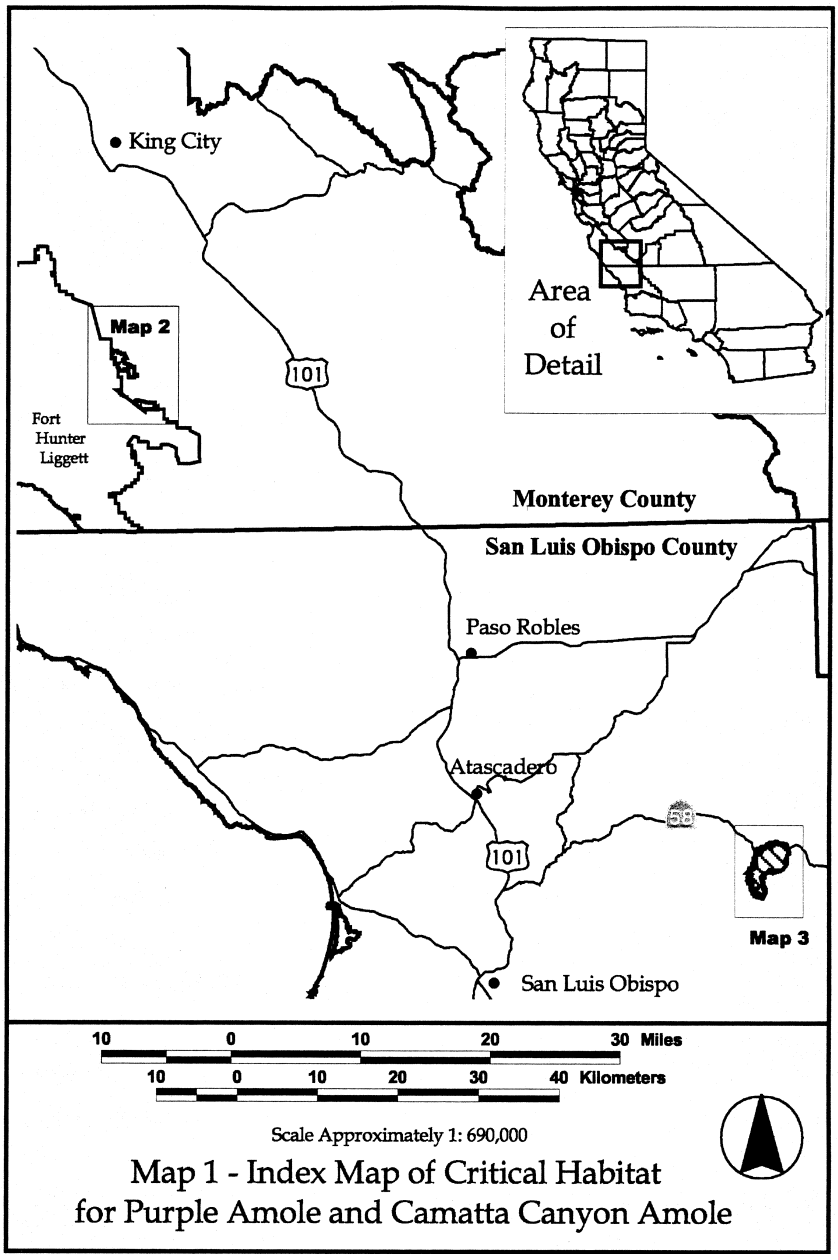
(i) Well-drained, red clay soils with a large component of gravel and pebbles on the upper soil surface; and,

(ii) Plant communities in functioning ecosystems that support associated plant and animal species (*e.g.*, pollinators, predator-prey species, etc.), including grassland, blue oak woodland (*Quercus douglasii*) or oak savannahs, and open areas within shrubland communities. Within these vegetation communities *C. p.* var. *reductum* appears where there is little cover of other species which compete for resources available for growth and reproduction.

(4) Critical habitat does not include existing features and structures, such as buildings, hard-packed roads (*e.g.*, asphalt, pavement), aqueducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing any of the primary constituent elements.

(5) *Critical Habitat Map Units*—Data layers defining map units were mapped using Universal Transverse Mercator (UTM) coordinates.

(6) Note: Map 1—Index Map follows:



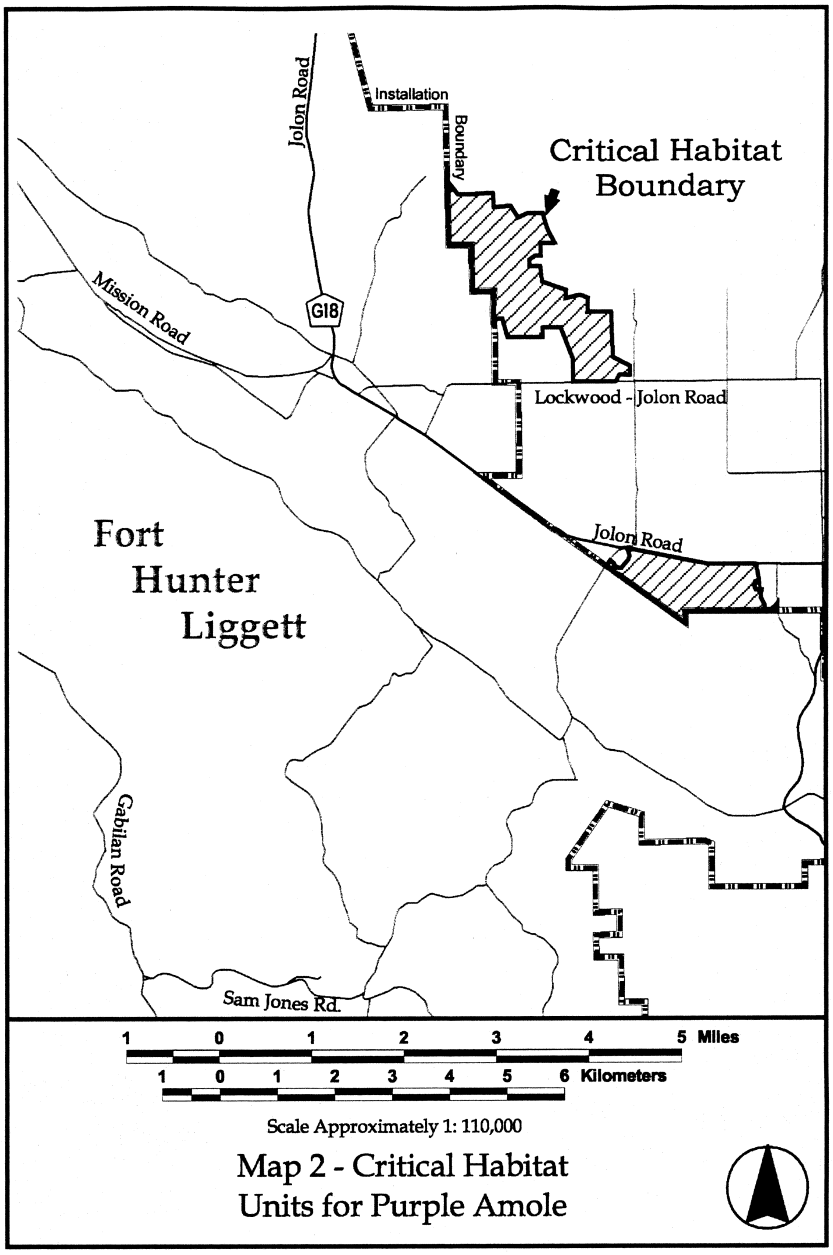
(7) *Jolon Unit.*

(i) *Chlorogalum purpureum* var. *purpureum.* Monterey County, California. From USGS 1:24,000 quadrangle map Jolon. Lands bounded by UTM zone 10 NAD83 coordinates (E,N): 666471, 3985340; 666646, 3985110; 666965, 3985110; 667260, 3985130; 667281, 3984880; 667567, 3984910; 667699, 3984690; 667849, 3984770; 668125, 3984770;

668175, 3984600; 668224, 3984470; 668334, 3984260; 668086, 3984250; 668094, 3984040; 668004, 3984040; 667888, 3983960; 667891, 3983860; 668085, 3983860; 668118, 3983590; 668538, 3983430; 668526, 3983290; 668780, 3983360; 668909, 3983300; 668905, 3983060; 669317, 3983070; 669346, 3982270; 669638, 3982120; 669638, 3981950; 669463, 3981960; 669396, 3981850; 668647, 3981840; 668649, 3982250; 668435, 3982790; 668126, 3982790; 668122, 3982620; 667509, 3982620; 667426, 3982950; 667272, 3982930; 667261, 3983040; 667283, 3983420; 666998, 3983420; 666907, 3983410; 666887, 3984220; 666496, 3984220; 666471, 3985340.

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(ii) NOTE: See Map 2.



(8) *Camatta Canyon Unit.*

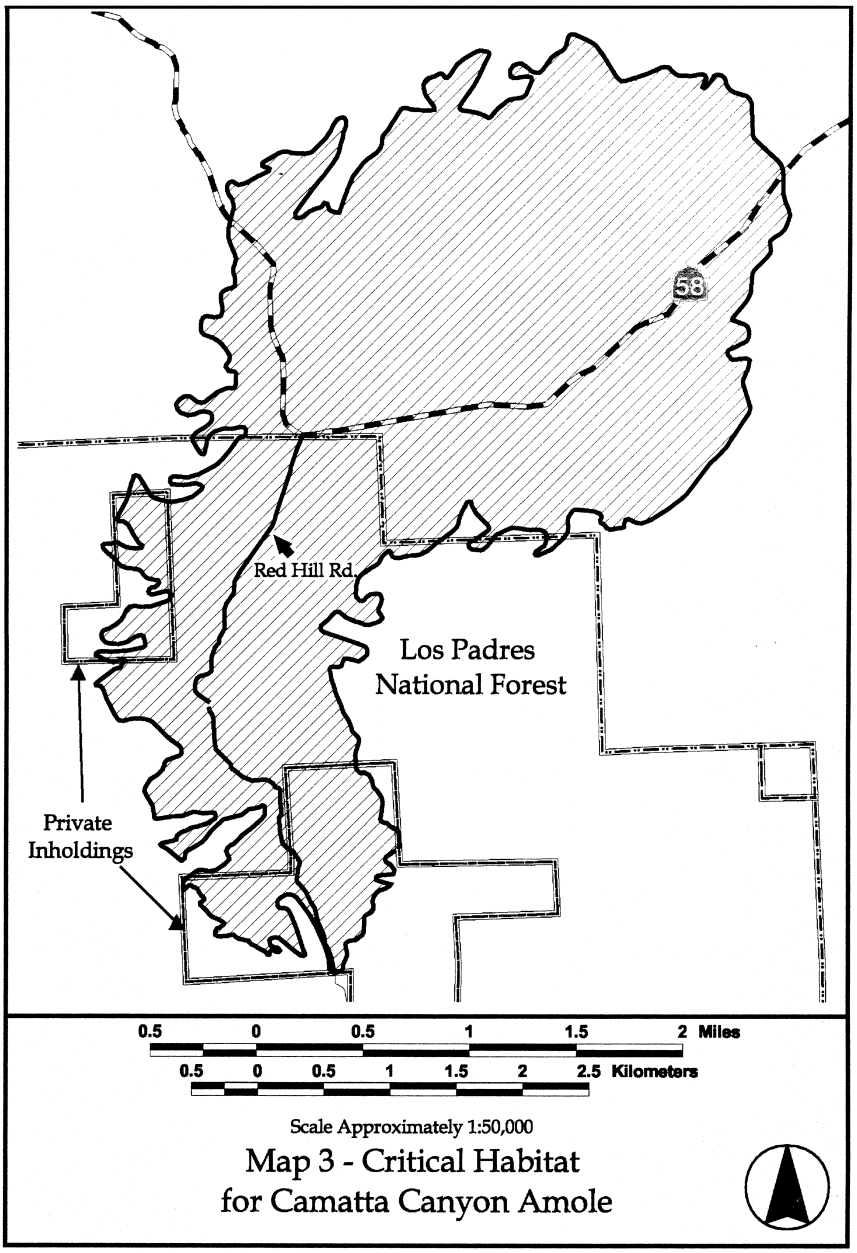
(i) *Chlorogalum purpureum* var. *reductum.* San Luis Obispo County, California. From USGS 1:24,000 quadrangle maps Camatta Ranch, La Panza Ranch, and Pozo Summit. Lands bounded by the following UTM zone 10 NAD83 coordinates (E, N): 747763, 3918050; 747749, 3918040; 747714, 3918020; 747690, 3918000;

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(ii) Note: Map 3 follows:



Family Limnanthaceae: *Limnanthes floccosa* ssp. *californica* (Butte County Meadowfoam).

(1) Critical habitat units are depicted for Tehama County, California, on the map below.

(2) The primary constituent elements of critical habitat for *Limnanthes floccosa* ssp. *californica* are the habitat components that provide:

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Limnanthes floccosa* ssp. *californica* germination, growth and reproduction, including but not limited to, vernal pool swales and the margins of vernal pools on the Tuscan, Redbluff, Riverbank, and Modesto geologic formations underlain by Tuscan-Anita and Igo-Redding complex soils among others. These habitats typically become inundated during winter rains, but are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil moisture for *Limnanthes floccosa* ssp. *californica* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aqueducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

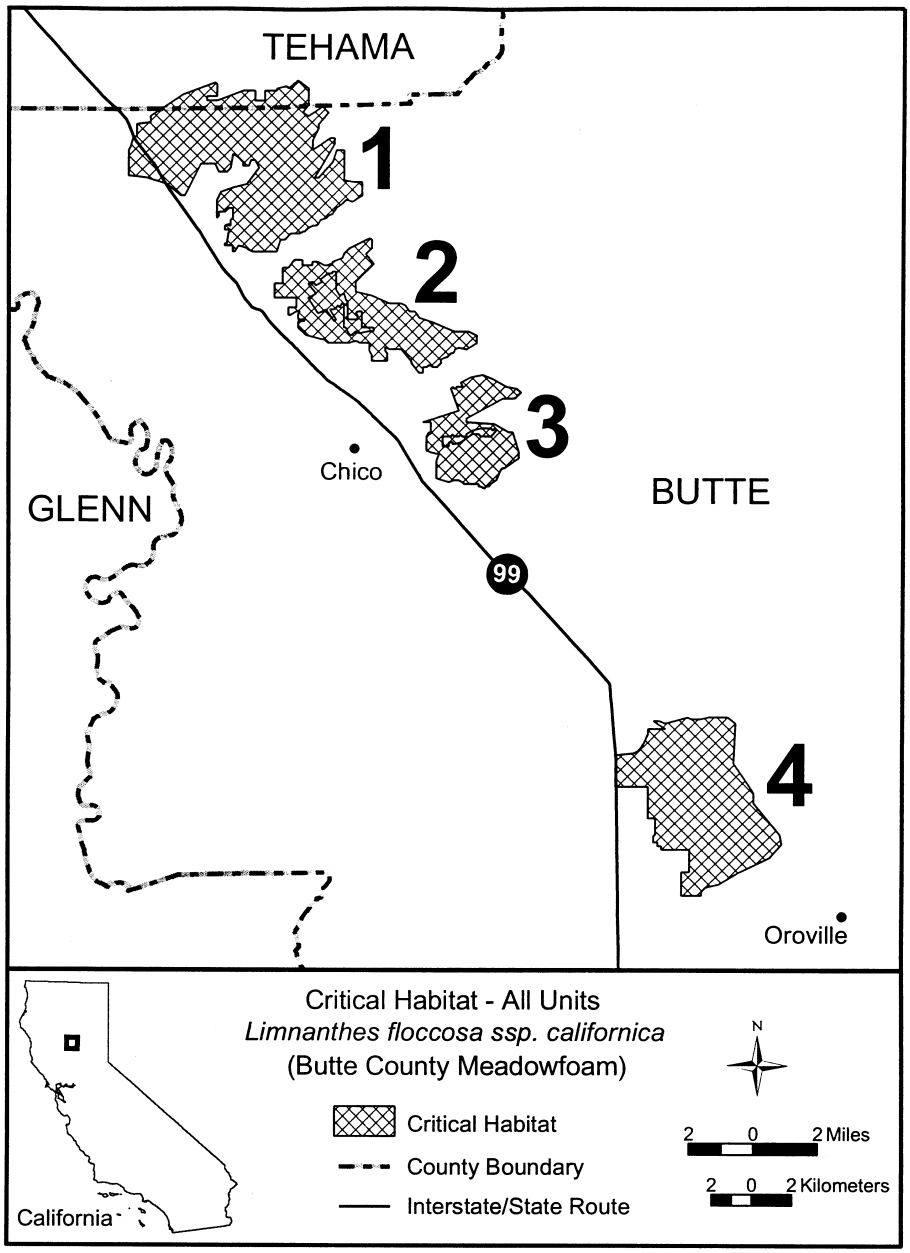
(5) Unit 1: Butte and Tehama Counties, California. From USGS 1:24,000 quadrangle maps Campbell Mound, Nord, Richardson Springs, and Richardson Springs NW, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 595500, 4408200; 594300, 4408200; 594100, 4408300; 594000, 4408400; 593600, 4408500; 593400, 4408200; 593300, 4408200; 593300, 4408500; 592900, 4408500; 592900, 4408600; 593000, 4408600; 593100, 4409200; 593200, 4409200; 593200, 4409300; 592900, 4409300; 592900, 4409500; 593100, 4409600; 593100, 4409500; 593200, 4409500; 593200, 4409800; 593300, 4409900; 593300, 4410400; 593100, 4410400; 592900, 4410200; 592600, 4410200; 592600, 4410000; 592500, 4409900; 592500, 4410800; 592700, 4411200; 593300, 4411400; 594000, 4411600; 594600, 4412400; 594400, 4412800; 594200, 4412800; 594100, 4412500; 593800, 4412500; 593800, 4412700; 593600, 4412900; 593300, 4413100; 593200, 4412400; 593000, 4412200; 592600, 4412200; 592400, 4412600; 591700, 4412600; 590900, 4411000; 590700, 4411000; 590000, 4411600; 589000, 4411900; 588100, 4412000; 588100, 4413300; 588200, 4413500; 588300, 4413900; 588500, 4414000; 588500, 4414600; 589200, 4414700; 589200, 4415000; 590800, 4416100; 592400, 4416700; 592500, 4416600; 592500, 4416000; 592000, 4416000; 592000, 4415800; 592500, 4415800; 593800, 4416300; 594100, 4416300; 594400, 4416300; 594400, 4415800; 594900, 4415800; 594900, 4416300; 595500, 4416300; 595500, 4416400; 595900, 4416500; 596000, 4416500; 596100, 4416400; 596200, 4416500; 596300, 4416600; 596400, 4416700; 596500, 4416700; 596500, 4416800; 596600, 4416800; 597100, 4416400; 597100, 4415600; 596800, 4415200; 597100, 4415000; 597800, 4415500; 598100, 4415200; 597600, 4414600; 597600, 4414400; 597300, 4413800; 597300, 4413300; 598200, 4413900; 598400, 4413900; 598400, 4413600; 597400, 4411900; 597600, 4411900; 598300, 4412700; 598500, 4413300; 598900, 4413300; 598900, 4411800; 599400, 4411700; 599800, 4411700; 599800, 4411000; 599300, 4410700; 599100, 4410800; 599000, 4410800; 598800, 4410600; 598500, 4410400; 598300, 4410100; 598100, 4410000; 598000, 4409900; 597700, 4409800; 597600, 4409600; 597500, 4409500; 597300, 4409500; 597100, 4409400; 596900, 4409200; 596800, 4409200; 596700, 4409100; 596200, 4409100; 596000, 4408900; 595900, 4408800; 595700, 4408800; returning to 595500, 4408200.

(6) Unit 2: Butte County, California. [Reserved]

(7) Unit 3: Butte County, California. [Reserved]

(8) Unit 4: Butte County, California. [Reserved]

(9) Map follows of critical habitat units 1 through 4 for Butte County meadowfoam.

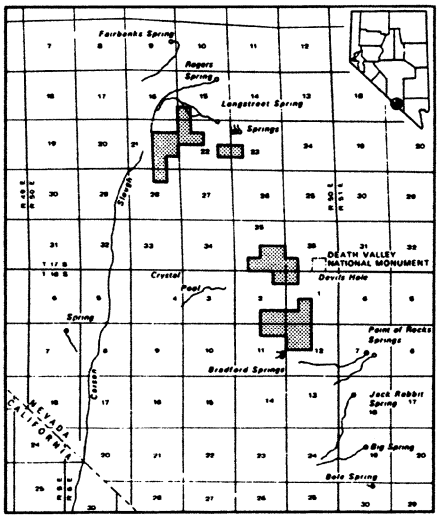


Family Loasaceae: *Mentzelia leucophylla* (Ash Meadows blazing star). Nevada, Nye County, Ash Meadows: SW¼SW¼ sec. 15, S½NE¼, N½SE¼, and SW¼SE¼ sec. 21, NW¼NW¼, S½NW¼, and NE¼SE¼ sec. 22, NW¼SW¼ sec. 23, NW¼NE¼ sec. 28, SE¼SW¼ and SE¼ sec. 35, SW¼SW¼ sec. 36, T17S, R50E. NW¼NW¼, SW¼SW¼, and

E½SW¼ sec. 1, NE¼NE¼ and S½SE¼ sec. 2, N½NE¼ sec. 11, NW¼ sec. 12, T18S, R50E.

Known primary constituent elements include sandy or saline clay soils along canyon washes and near springs and seeps.

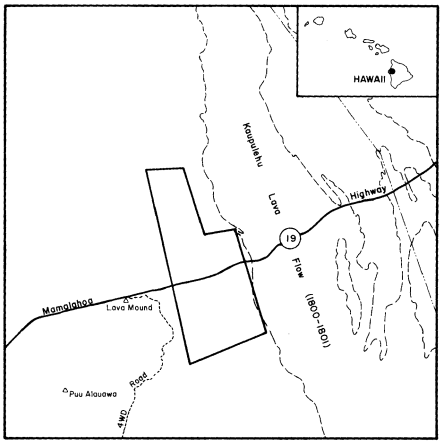
NOTE: Map follows:



Malvaceae: *Kokia drynarioides* (koki'o). Hawaii, Island and County of Hawaii, North Kona District, three areas totaling approximately 2,600 acres.

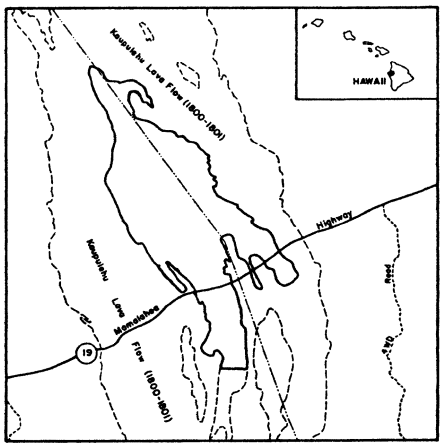
1. Ka'upulehu Ahupua'a area, bounded as follows: from a point of origin at Universal Transverse Mercator (UTM) coordinate 925880 near or on the west boundary of the Ka'upulehu 1800–1801 lava flow (approximately at intersection of said west boundary and 2600 ft elevation contour); thence west southwesterly approximately 864 ft to UTM coordinate 914875 (also near 2600 ft elevation contour); thence north northwesterly approximately 1987 ft to UTM coordinate 909899 (near the 1400 ft elevation contour); thence east northeasterly approximately 378 ft to UTM coordinate 913900 (also near the 1400 ft elevation contour; then south southeasterly approximately 720 ft to UTM coordinate 916891; thence east northeasterly approximately 320 ft to UTM coordinate 920892 (near the said west boundary of the 1800–1801 lava flow); thence south southeasterly approximately 1140 ft to the point of origin. Included in this area is Ka'upulehu Forest Reserve, Section B.

NOTE: Map follows:



2. Ka'upulehu Ahupua'a and Pu'uwa'awa'a Ahupua'a boundary area, identified as follows: An unnamed kipuka (discontinuity) in 1800–1801 lava that straddles the boundary between Ka'upulehu and Pu'uwa'awa'a Ahupua'a and also crosses Mamalahoa Highway between 2400 and 1000 feet of elevation. Excluded is a small tongue of the said kipuka that extends south of UTM coordinate 941885 at approximately 2400 ft of elevation and above. UTM coordinate 931924 marks the low elevation end of the said kipuka.

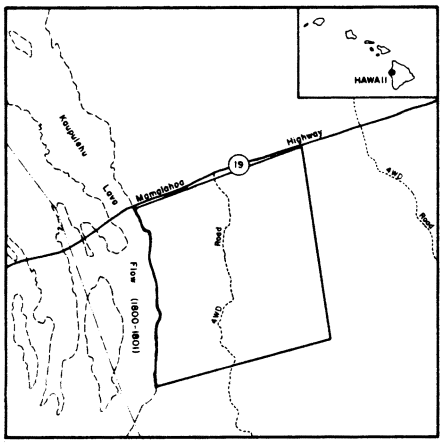
NOTE: Map follows:



3. Pu'uwa'awa'a Ahupua'a area, identified as follows: Halepi'ula 3, Waimea Paddock of Pu'uwa'awa'a Ranch, which lies south of (upslope) and abuts Mamalahoa Highway

just east of the boundary between Ka'upulehu and Pu'uwa'awa'a Ahupua'a. East boundary of the 1800–1801 Ka'upulehu lava flow is the west boundary of the paddock. The paddock corners are near UTM coordinates 948901 (NW), 985909 (NE) 973886 (SE), and 971879 (SW).

NOTE: Map follows:



Primary constituent elements of critical habitat are appropriate soil type, climate, protection from grazing damage, protection from aggressive exotic weeds, and presence of suitable pollinators.

Family Malvaceae: *Sidalcea keckii* (Keck's checkermallow).

(1) Critical habitat units are depicted for Fresno and Tulare Counties, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Sidalcea keckii* are the habitat components that provide:

(i) Minimally shaded annual grasslands in the foothills of the Sierra Nevada Mountains containing open patches in which competing vegetation is relatively sparse; and

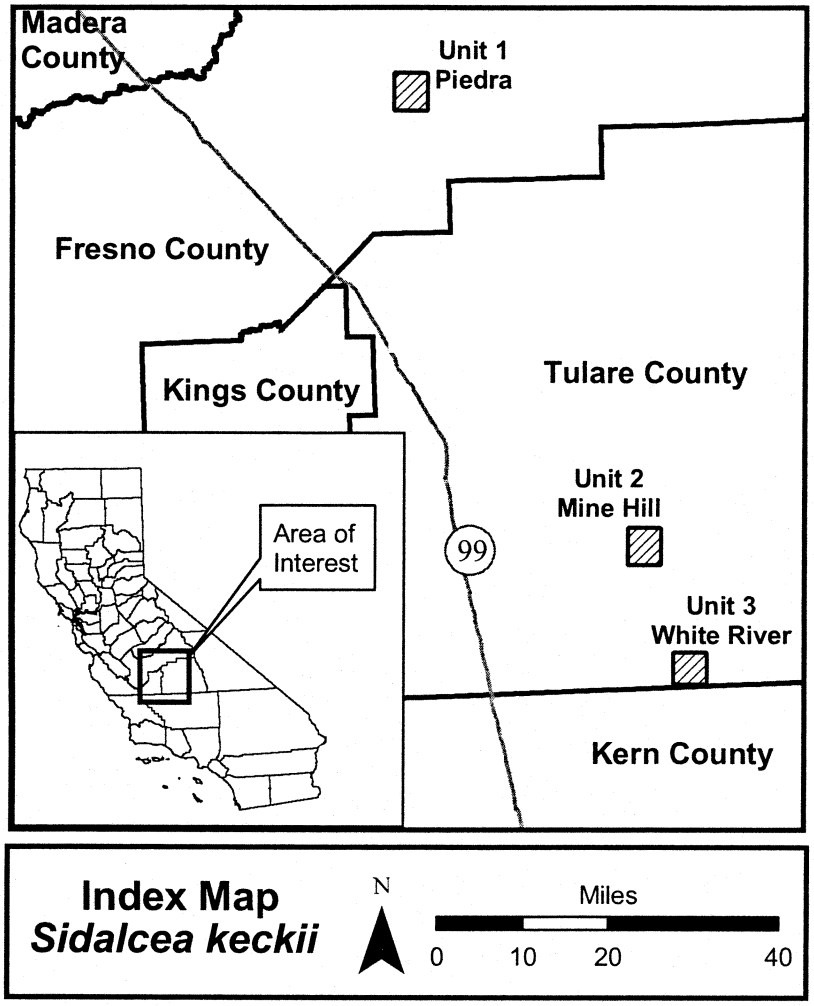
(ii) Serpentine soils or other soils that tend to restrict competing vegetation.

(3) Existing features and structures made by people, such as buildings, roads, railroads, airports, other paved areas, lawns, and other urban landscaped areas, do not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they may affect the species and/or primary constituent elements in adjacent critical habitat.

(4) *Critical Habitat Map Units*

(i) Data layers defining map units were created on a base of USGS 7.5' quadrangles, and critical habitat units were then mapped using Universal Transverse Mercator (UTM) coordinates.

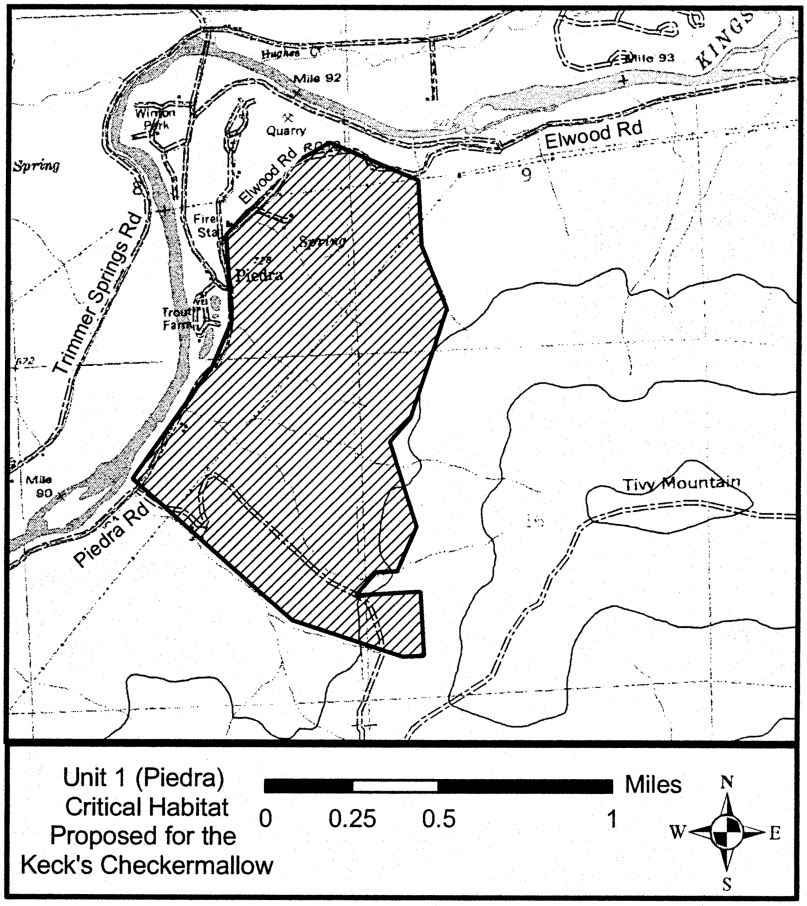
(ii) NOTE: Index map follows:



(5) Unit 1: Piedra Unit, Fresno County, California.

(i) From USGS 1:24,000 quadrangle maps Piedra, and Pine Flat Dam, California; land bounded by the following UTM11 NAD83 coordinates (E,N): 288300, 4074700; 288200, 4074700; 287700, 4074900; 287000, 4075600; 287400, 4076100; 287500, 4076300; 287500, 4076700; 287800, 4077000; 288000, 4077100; 288400, 4076900; 288400, 4076600; 288500, 4076300; 288300, 4075800; 288200, 4075700; 288300, 4075300; 288200, 4075100; 288100, 4075100; 288000, 4075000; 288300, 4075000; 288300, 4074700.

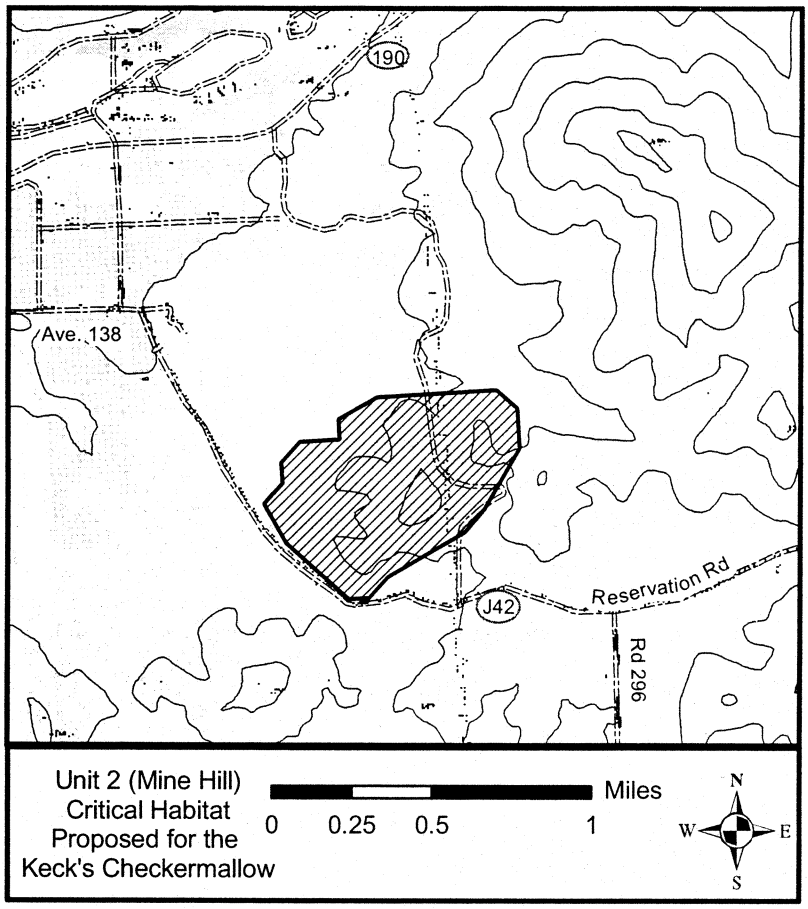
(ii) NOTE: Unit 1 map follows:



(6) Unit 2: Mine Hill Unit, Tulare County, California.

(i) From USGS 1:24,000 quadrangle maps Success Dam, California; land bounded by the following UTM11 NAD83 coordinates (E,N): 326600, 3988600; 326500, 3988600; 326200, 3988900; 326100, 3989100; 326200, 3989200; 326200, 3989300; 326300, 3989400; 326500, 3989400; 326500, 3989500; 326700, 3989600; 327300, 3989600; 327400, 3989500; 327400, 3989300; 327200, 3989000; 327100, 3988900; 326700, 3988700; 326600, 3988600.

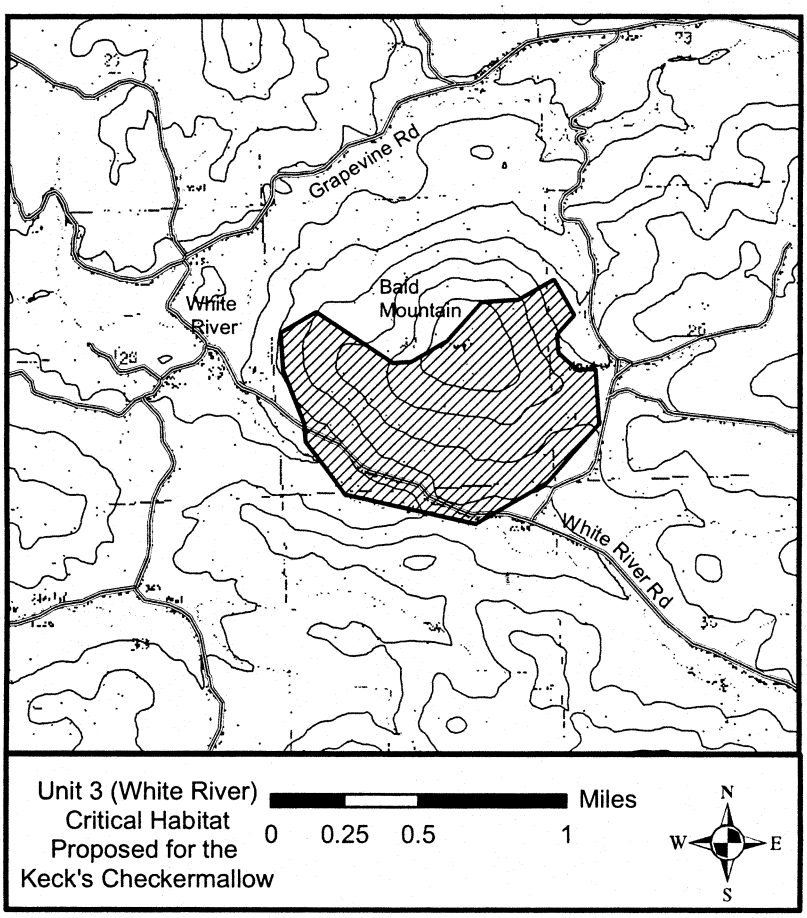
(ii) NOTE: Unit 2 map follows:



(7) Unit 3: White River Unit, Tulare County, California.

(i) From USGS 1:24,000 quadrangle maps White River, California; land bounded by the following UTM11 NAD83 coordinates (E,N): 334800, 3963600; 334100, 3963800; 333900, 3964100; 333900, 3964200; 333800, 3964500; 333800, 3964700; 334000, 3964800; 334400, 3964500; 334500, 3964500; 334700, 3964600; 334900, 3964800; 335100, 3964800; 335300, 3964900; 335400, 3964700; 335300, 3964600; 335300, 3964500; 335400, 3964400; 335500, 3964400; 335500, 3964100; 335200, 3963800; 334800, 3963600.

(ii) NOTE: Unit 3 map follows:



Family Malvaceae: *Sidalcea oregana* var. *calva* (Wenatchee Mountains checker-mallow).

(1) Critical habitat unit is depicted for Chelan County, Washington, on the map below.

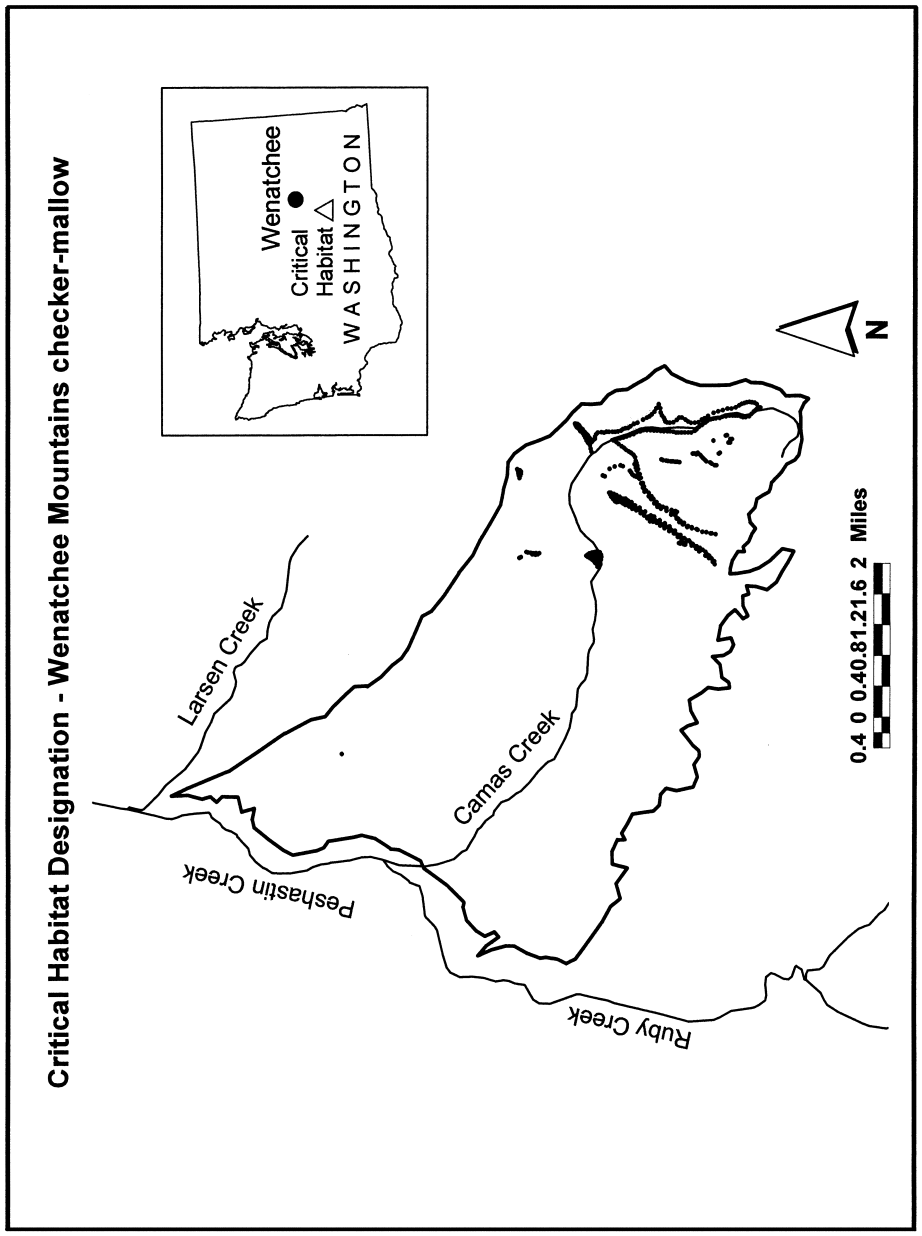
(2) Washington, Chelan County. From USGS 7.5′ quadrangle maps Peshastin and Tip Top, Washington. T. 23 N., R 18 E., beginning at a point on Camas Creek in the NW¼ of NW¼ of section 35 at approximately 47°26′52″ N latitude and 120°38′57″ W longitude proceeding downstream (northwesterly), expanding in all directions to include the entire wetland complex that comprises the Camas Meadow Natural Area Preserve, to a point approximately 0.4 km (0.25 mi) from the confluence of Pendleton Creek and Peshastin Creek, located at 47°31′06″ and 120°37′18″ W longitude. From this last point, the western boundary of the designated critical habitat parallels Peshastin Creek to a point at the southwest of the designated area located at 47°28′46″ N latitude and 120°38′57″ W longitude. The maximum elevation of the designated critical habitat is 1,000 m (3,300 ft) and the lowest elevation is 488 m (1,600 ft). Critical habitat within this area includes watercourses and wetland habitat out to the beginning of upland vegetation.

(3) The known primary constituent elements of critical habitat for *Sidalcea oregana* var. *calva* include: surface water or saturated upper soil profiles; a wetland plant community dominated by native grasses and forbs, and generally free of woody shrubs and conifers that would produce shade and competition for *Sidalcea oregana* var. *calva*; seeps and springs on fine-textured soils (clay loams and silt loams), which contribute to the

maintenance of hydrologic processes necessary to support meadows that remain moist into the early summer; and elevations of 488–1,000 m (1,600–3,300 ft).

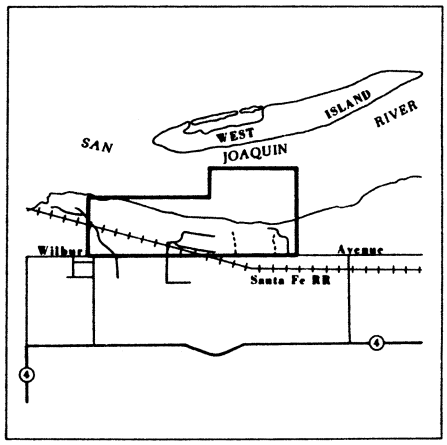
Critical habitat does not include existing features and structures, such as buildings, roads, aqueducts, railroads, airports, other paved areas, lawns, and other rural residential landscaped areas, not containing one or more of the primary constituent elements.

NOTE: Map follows:



Family Onagraceae: *Oenothera deltoides* ssp. *howellii* (Antioch Dunes Evening-Primrose). California. An area of land, water, and airspace in Contra Costa County with the following components: T. 2 N. R. 2 E. SW¼ section 17, E⅔ of S⅓ of section 18.

NOTE: Map follows:



Family Poaceae: *Neostapfia colusana* (Colusa Grass)

(1) Critical habitat units are depicted for Yolo, Stanislaus, Mariposa, Tuolumne and Calaveras Counties, California, on the map below.

(2) The primary constituent elements of critical habitat for *Neostapfia colusana* are the habitat components that provide:

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Neostapfia colusana* germination, growth and reproduction, and that typically become inundated during winter rains, including but not limited to vernal pools formed on the rim of alkaline basins in the Sacramento and San Joaquin valleys, as well as on acidic soils of alluvial fans and stream terraces along the eastern margin of the San Joaquin Valley and into the adjacent foothills. All of these pool types are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil moisture for *Neostapfia colusana* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aqueducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

(5) Unit 1: Yolo County, California. From USGS 1:24,000 quadrangle maps Davis, and Saxon, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 615400, 4260700; 614500, 4260700; 614500, 4261500; 614200, 4261500; 614200, 4261800; 614000, 4261800; 614000, 4262300; 615400, 4262300; returning to 615400, 4260700.

(6) Unit 2: Solano County, California. [Reserved]

(7) Unit 3: Calaveras and Stanislaus Counties, California. From USGS 1:24,000 quadrangle maps Bachelor Valley, Copperopolis, Farmington, Knights Ferry, and Oakdale, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 697300, 4184800; 697100, 4185000; 696900, 4185400; 696500, 4185700; 696900, 4186000; 696900, 4186300; 696600, 4186300; 696600, 4187000; 696000, 4187000; 696000, 4186900; 695800, 4186700; 695600, 4186700; 695500, 4186500; 695400, 4185900; 695100, 4185400; 694600, 4185500; 694600, 4185700; 694900, 4186200; 694800, 4186200; 694600, 4186100; 694400, 4186100; 694300, 4186000; 694200, 4186000; 693900, 4186200; 693800, 4186200; 693700, 4186100; 693700, 4185900; 693500, 4185800; 693300, 4185600; 693100, 4185500; 693000, 4185200; 692500, 4185200; 692400, 4185400; 692500, 4185500; 692500, 4185600; 692500, 4186200; 692600, 4186300; 692600, 4186800; 692500, 4186800; 692400, 4186900; 692300, 4186800; 692200, 4187000; 692100, 4186800; 692000, 4187000; 691900, 4187000; 691900, 4186800; 691800, 4186800; 691700, 4187200; 691600, 4187200; 691400, 4187200; 691300, 4187200; 691200, 4187300; 691000, 4187400; 690800, 4187800; 690800, 4187900; 690900, 4187900; 691000, 4188000; 691000, 4187900; 691100, 4187900; 691100, 4188100; 691000, 4188200; 690900, 4188200; 690900, 4188100; 690700, 4188000; 690600, 4188100; 690600, 4188300; 690400, 4188500; 690300, 4188700; 690300, 4188800; 690100, 4188900; 690200, 4189100; 690300, 4189100; 690500, 4189200; 690000, 4189300; 689900, 4189400; 691100, 4189400; 691100, 4189900; 690900, 4190000; 691000, 4190100; 690900, 4190500; 691000, 4190600; 691000, 4190800; 691100, 4190800; 691200, 4190600; 691400, 4190700; 691600, 4190600; 691600, 4190500; 691700,

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(8) Unit 4: Stanislaus and Tuolumne Counties, California. From USGS 1:24,000 quadrangle maps Cooperstown, Keystone, Knights Ferry, La Grange, Oakdale, Paulsell, and Waterford, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at 710300, 4182900; 711400, 4182100; 712400, 4182100; 713200, 4182000; 714100, 4182600; 714700, 4182000; 715200, 4181600; 715600, 4180900; 715400, 4180400; 716600, 4180400; 716900, 4179900; 717700, 4180100; 718500, 4180000; 718700, 4179200; 719300, 4178700; 719700, 4177600; 720300, 4177700; 720700, 4177700; 720800, 4176400; 721400, 4175900; 722200, 4175300; 722700, 4175200; 722800, 4173600; 723000, 4173500; 723200, 4173600; 723700, 4173600; 724000, 4173300; 724100, 4172300; 722800, 4172200; 721700, 4171200; 721600, 4170700; 721500, 4170500; 721400, 4170400; 721200, 4170300; 721000, 4170100; 721000, 4169600; 720900, 4169600; 720000, 4168500; 718900, 4168000; 718700, 4168100; 718100, 4168500; 718000, 4168500; 717900, 4168600; 716200, 4168600; 715900, 4168500; 715600, 4168300; 715500, 4168200; 715400, 4168300; 715400, 4169400; 714900, 4169900; 714900, 4170000; 715100, 4170000; 715200, 4170200; 715300, 4170200; 715300, 4170400; 715300, 4171200; 715200, 4171200; 715200, 4171000; 715100, 4171000; 715100, 4170700; 714900, 4170700; 714900, 4170300; 713900, 4169800; 713800, 4169900; 713000, 4169500; 712500, 4169400; 712200, 4169400; 712000, 4169600; 711500, 4169900; 711300, 4169900; 710500, 4169100; 709300, 4169100; 709100, 4169500; 709100, 4169700; 708900, 4169700; 708800, 4169900; 708700, 4169900; 708600, 4169800; 708500, 4169900; 708400, 4170000; 708700, 4170200; 708800, 4170300; 708900, 4170400; 709100, 4170500; 709200, 4170600; 709400, 4170600; 709400, 4170800; 709300, 4170800; 709200, 4170900; 709100, 4170800; 708800, 4170700; 708800, 4170600; 708500, 4170500; 708400, 4170300; 708100, 4170200; 707900, 4170200; 707900, 4170300; 708100, 4170500; 708200, 4170500; 708200, 4170600; 708000, 4170600; 708200, 4170800; 708200, 4170900; 708100, 4170900; 707900, 4170700; 707700, 4170700; 707700, 4170800; 707600, 4170900; 707400, 4170900; 707100, 4171100; 707100, 4171200; 707200, 4171300; 707300, 4171200; 707500, 4171300; 707800, 4171600; 707900, 4171600; 708100, 4171600; 708200, 4171700; 708100, 4171800; 708100, 4171900; 708300, 4171900; 708300, 4172100; 708400, 4172100; 708500, 4172200; 708500, 4172300; 708700, 4172400; 708800, 4172500; 708800, 4172600; 708700, 4172700; 708500, 4172700; 708400, 4172800; 708300, 4172700; 708200, 4172700; 708100, 4172600; 708000, 4172500; 707900, 4172500; 707800, 4172700; 707600, 4172600; 707400, 4172500; 707400, 4172600; 707200, 4172700; 707100, 4172300; 707000, 4172200; 706700, 4172200; 706700, 4172300; 706500, 4172300; 706400, 4172300; 706400, 4172400; 706200, 4172600; 706300, 4172700; 706400, 4172800; 706300, 4172800; 706200, 4172800; 706100, 4172900; 705900, 4173100; 705800, 4173300; 705800, 4173500; 706000, 4173800; 705900, 4173900; 705800, 4174100; 705700, 4174200; 705500, 4174200; 705400, 4174100; 705400, 4173700; 705300, 4173500; 705200, 4173200; 705100, 4173200; 705100, 4172600; 704900, 4172400; 704800, 4172100; 704600, 4172100; 704500, 4171900; 704400, 4171800; 704500, 4171600; 704600, 4171400; 704700, 4171500; 704900, 4171200; 704700, 4171100; 704900, 4171000; 704800, 4170900; 704600, 4170900; 704600, 4170700; 704800, 4170200; 705100, 4170200; 705000, 4170100; 705000, 4169600; 705000, 4169500; 704900, 4169400; 704800, 4169300; 704100, 4169300; 703500, 4169500; 703400, 4169600; 703400, 4170100; 703600, 4170200; 703600, 4170300; 703500, 4170300; 703500, 4170600; 703500, 4170700; 703500, 4170800; 703400, 4170900; 703400, 4171300; 703300, 4171400; 703200, 4171500; 703400, 4171500; 703400, 4171800; 703600, 4171800;

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(ii) Start at 702000, 4169700; 701000, 4169700; 700700, 4169700; 700700, 4170500; 700500, 4170500; 700500, 4170900; 700300, 4170900; 700300, 4171100; 700300, 4171800; 701200, 4171800; 702000, 4171800; 702000, 4169800; returning to 702000, 4169700.

(9) Unit 5: Merced and Stanislaus Counties, California. From USGS 1:24,000 quadrangle maps Cooperstown, La Grange, Merced Falls, Montpelier, Paulsell, Snelling, and Turlock Lake, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at 724100, 4158200; 723800, 4158200; 723700, 4159000; 722500, 4159000; 722500, 4159200; 722400, 4159200; 722300, 4159300; 722200, 4159300; 721600, 4159300; 721600, 4159500; 721500, 4159600; 721500, 4159800; 721600, 4159800; 721600, 4159900; 721700, 4159900; 721700, 4160500; 721100, 4160500; 721100, 4160100; 720800, 4160100; 720800, 4160500; 719500, 4160500; 719500, 4160300; 720000, 4159600; 719600, 4159600; 719600, 4159500; 719500, 4159500; 719400, 4159500; 719300, 4159400; 719100, 4159400; 719000, 4159400; 718900, 4159300; 718700, 4159100; 718600, 4159000; 718600, 4158900; 718400, 4158900; 718200, 4158800; 718200, 4158700; 718300, 4158600; 718400, 4158500; 718500, 4158500; 718600, 4158400; 718700, 4158400; 718900, 4158300; 719000, 4158100; 719000, 4157900; 718700, 4157600; 718000, 4157700; 717800, 4157400; 717900, 4157200; 718000, 4157000; 718400, 4157300; 718700, 4156700; 718700, 4156300; 717500, 4156300; 717500, 4156700; 717100, 4156700; 717100, 4156300; 716600, 4156300; 716600, 4155800; 716300, 4155700; 716200, 4155000; 715900, 4154900; 715900, 4155100; 715800, 4155200; 715800, 4155300; 715700, 4155400; 715600, 4155700; 715500, 4155800; 715400, 4155800; 715300, 4156600; 715400, 4156600; 715400, 4157200; 715400, 4157400; 715500, 4157400; 715500, 4157600; 717600, 4157600; 717600, 4159700; 718100, 4160200; 718200, 4160500; 718400, 4160800; 718700, 4161100; 716800, 4161100; 716800, 4160400; 714900, 4160400; 714900, 4160900; 715000, 4160900; 715000, 4161000; 715200, 4161000; 715200, 4161100; 714400, 4161100; 714400, 4161200; 713700, 4161200; 713700, 4161100; 713300, 4161100; 713200, 4161200; 713100, 4161100; 713100, 4161000; 713400, 4160700; 713400, 4160600; 713600, 4160500; 713800, 4160800; 713900, 4160800; 714000, 4160700; 714000, 4160400; 711100, 4160300; 711100, 4161900; 709500, 4161900; 709500, 4163500; 707900, 4163500; 707900, 4163100; 707000, 4163100; 707000, 4165600; 707400, 4165600; 707400, 4165800; 706700, 4166100; 706500, 4165800; 706200, 4166000; 706300, 4166300; 706200, 4166400; 706200, 4166500; 706300, 4166500; 706300, 4166700;

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(ii) Start at 712600, 4155200; 712600, 4156800; 712900, 4156800; 712900, 4157100; 714800, 4157200; 714800, 4156800; 714300, 4156300; 714200, 4156200; 714000, 4155500; 714000, 4155400; 713800, 4155400; returning to 712600, 4155200.

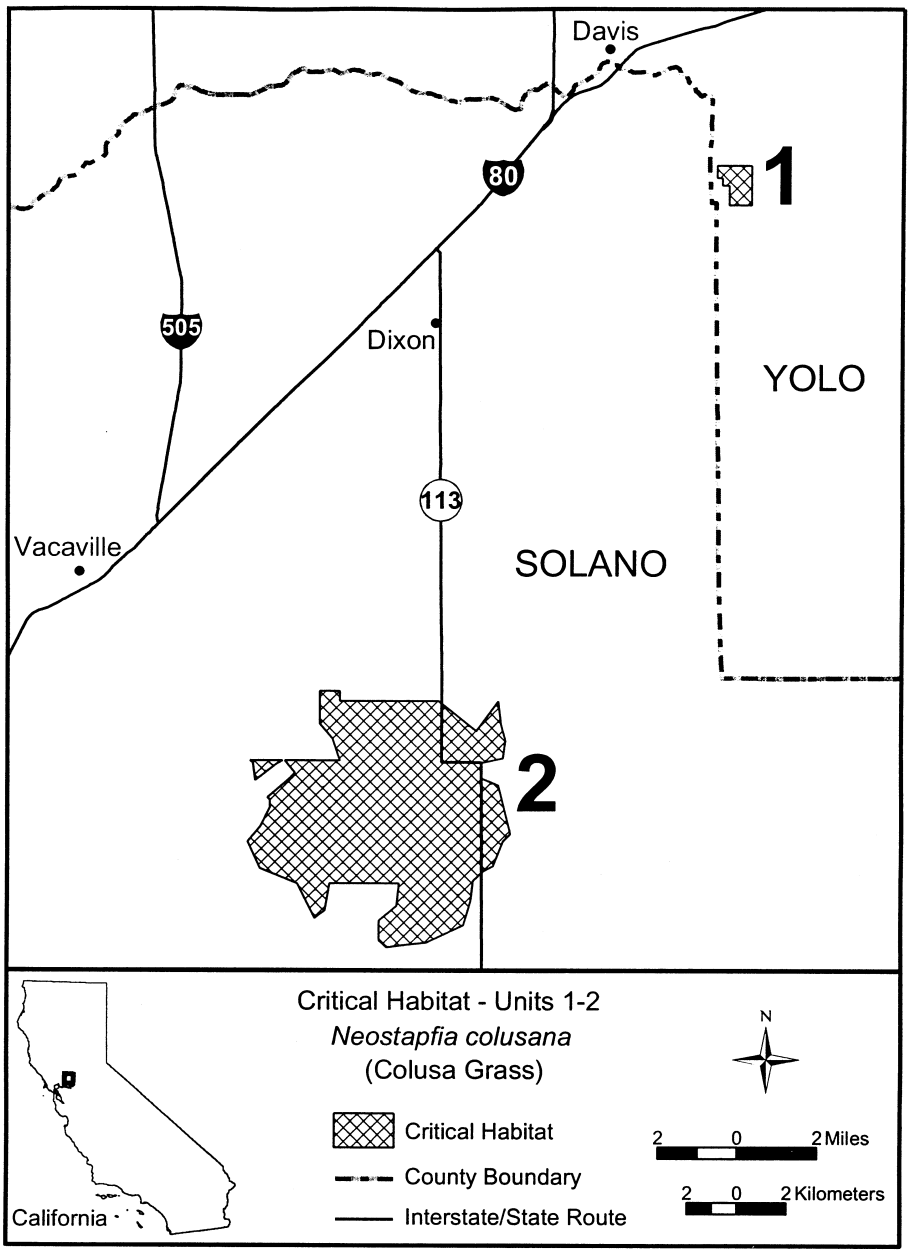
(10) Unit 6: Mariposa and Merced Counties, California. From USGS 1:24,000 quadrangle maps Haystack Mtn., Indian Gulch, Merced, Merced Falls, Owens Reservoir, Planada, Snelling, Winton, and Yosemite Lake, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 736600, 4134200; 733900, 4134200; 733900, 4134800; 733800, 4134900; 733800, 4135000; 733000, 4135000; 733000, 4135800; 732500, 4135800; 730300, 4135700; 730200, 4135600; 730100, 4135600; 729900, 4135700; 729900, 4136500; 729900, 4136700; 730000, 4136700; 730100, 4136600; 730200, 4136600; 730300, 4136600; 730400, 4136700; 730500, 4136800; 730600, 4136900; 730600, 4137000; 730600, 4137200; 730600, 4137300; 730500, 4137400; 730400, 4137500; 730300, 4137500; 729900, 4137700; 729800, 4137700; 729700, 4137600; 729400, 4137600; 729300, 4137800; 729300, 4138400; 729200, 4138500; 729000, 4138400; 728800, 4138700; 728400, 4138800; 728200, 4138800; 727900, 4138600; 727700, 4138500; 727600, 4138400; 727400, 4138300; 727400, 4137800; 727300, 4137800; 727300, 4137600; 727400, 4137600; 727400, 4137500; 727300, 4137500; 727300, 4137400; 727400, 4137400; 727400, 4137200; 726500, 4137200; 726500, 4136500; 726400, 4136400; 725800, 4136400; 725800, 4137200; 725000, 4137200; 724900, 4138800; 725500, 4138800; 725500, 4138700; 725800, 4138700; 725800, 4138800; 725900, 4138800; 725900, 4139500; 726500, 4139500; 726500, 4139600; 725900, 4139600; 725800, 4139600; 725800, 4140200; 725900, 4140200; 725900, 4140900; 725400, 4140900; 725400, 4140800; 725100, 4140800; 725100, 4141000; 724900, 4141000; 724900, 4141200; 724100, 4141200; 724100, 4141600; 723400, 4141600; 723400, 4141100; 723200, 4141100; 723200, 4140600; 723400, 4140500; 723400, 4139500; 724000, 4139500; 724000, 4139400; 723900, 4138900; 723900, 4138700; 723500, 4138200; 723400, 4138200; 723400, 4138300; 723000, 4138300; 723000, 4138700; 723000, 4138900; 723100, 4139100; 723200, 4139400;

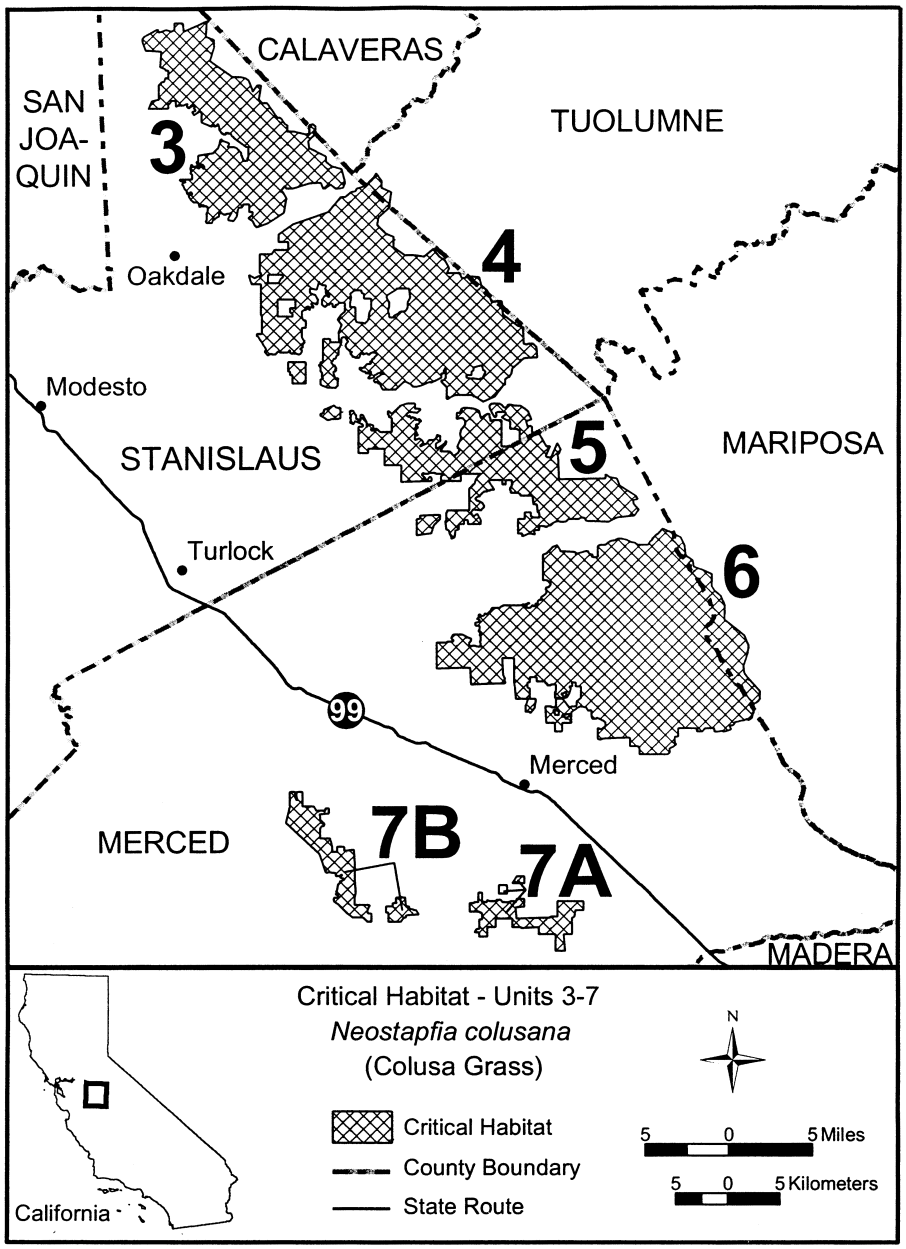
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(11) Subunit 7A: Merced County, California. [Reserved]

(12) Subunit 7B: Merced County, California. [Reserved]

(13) Maps follow of critical habitat units 1 and 2, and 3 through 7 (respectively) for Colusa grass.


Davis
80
1
505
Dixon
YOLO
113
Vacaville
SOLANO
2
Critical Habitat - Units 1-2
Neostapfia colusana
(Colusa Grass)
N
Critical Habitat
County Boundary
Interstate/State Route
2 0 2 Miles
2 0 2 Kilometers
California



Family Poaceae: *Orcuttia inaequalis* (San Joaquin Valley Orcutt Grass).

(1) Critical habitat units are depicted for Mariposa, Fresno and Tulare Counties, California, on the map below.

(2) The primary constituent elements of critical habitat for *Orcuttia inaequalis* are the habitat components that provide:

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Orcuttia inaequalis* germination, growth and reproduction, including but not limited to vernal pools on alluvial fans, high and low stream terraces, and tabletop lava flows. These habitats typically become inundated during winter rains, but are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil moisture for *Orcuttia inaequalis* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aqueducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

(5) Unit 1: Mariposa and Merced Counties, California. From USGS 1:24,000 quadrangle maps Haystack Mtn., Indian Gulch, Merced, Merced Falls, Owens Reservoir, Planada, Snelling, Winton, and Yosemite Lake, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 736600, 4134200; 733900, 4134200; 733900, 4134800; 733800, 4134900; 733800, 4135000; 733000, 4135000; 733000, 4135800; 732500, 4135800; 730300, 4135700; 730200, 4135600; 730100, 4135600; 729900, 4135700; 729900, 4136500; 729900, 4136700; 730000, 4136700; 730100, 4136600; 730200, 4136600; 730300, 4136600; 730400, 4136700; 730500, 4136800; 730600, 4136900; 730600, 4137000; 730600, 4137200; 730600, 4137300; 730500, 4137400; 730400, 4137500; 730300, 4137500; 729900, 4137700; 729800, 4137700; 729700, 4137600; 729400, 4137600; 729300, 4137800; 729300, 4138400; 729200, 4138500; 729000, 4138400; 728800, 4138700; 728400, 4138800; 728200, 4138800; 727900, 4138600; 727700, 4138500; 727600, 4138400; 727400, 4138300; 727400, 4137800; 727300, 4137800; 727300, 4137600; 727400, 4137600; 727400, 4137500; 727300, 4137500; 727300, 4137400; 727400, 4137400; 727400, 4137200; 726500, 4137200; 726500, 4136500; 726400, 4136400; 725800, 4136400; 725800, 4137200; 725000, 4137200; 724900, 4138800; 725500, 4138800; 725500, 4138700; 725800, 4138700; 725800, 4138800; 725900, 4138800; 725900, 4139500; 726500, 4139500; 726500, 4139600; 725900, 4139600; 725800, 4139600; 725800, 4140200; 725900, 4140200; 725900, 4140900; 725400, 4140900; 725400, 4140800; 725100, 4140800; 725100, 4141000; 724900, 4141000; 724900, 4141200; 724100, 4141200; 724100, 4141600; 723400, 4141600; 723400, 4141100; 723200, 4141100; 723200, 4140600; 723400, 4140500; 723400, 4139500; 724000, 4139500; 724000, 4139400; 723900, 4138900; 723900, 4138700; 723500, 4138200; 723400, 4138200; 723400, 4138300; 723000, 4138300; 723000, 4138700; 723000, 4138900; 723100, 4139100; 723200, 4139400; 723300, 4139500; 722100, 4139500; 722000, 4140500; 721900, 4141100; 721900, 4141900; 721900, 4143400; 720800, 4143400; 720900, 4141800; 721000, 4141500; 721000, 4141200; 721100, 4141100; 721000, 4141000; 717800, 4140900; 717700, 4142500; 714500, 4142400; 714500, 4144900; 715500, 4144900; 715500, 4145000; 715800, 4145000; 715900, 4145000; 716000, 4145000; 716100, 4145100; 716100, 4145200; 716000, 4145200; 715900, 4145300; 715900, 4145400; 716000, 4145500; 716000, 4145600; 716100, 4145700; 717000, 4145700; 717700, 4145300; 717800, 4145300; 717800, 4145200; 717800, 4145100; 717600, 4144900; 717600, 4144800; 717600, 4144700; 717800, 4144500; 717900, 4144600; 718200, 4144600; 718400, 4144500; 718700, 4144500; 718700, 4144800; 718600, 4145000; 718700, 4145100; 718700, 4145600; 718600, 4145600; 718600, 4145700; 718700, 4145800; 718600, 4145900; 718500, 4146000; 718500, 4146100; 718600, 4146200; 718600, 4146500; 718300, 4146500; 718200, 4146600; 718200, 4146800; 718300, 4146800; 718500, 4146900; 718600, 4147000; 718600, 4147100; 718400, 4147200; 718500, 4147300; 718500, 4147600; 718700, 4147600; 718700, 4147400; 719000, 4147500; 719100, 4147700; 719300, 4147600; 719600, 4147900; 719700, 4148000; 719700, 4148100; 719800, 4148200; 720000, 4148200; 720600, 4148200; 720600, 4148300; 720700, 4148400; 720800, 4148400; 720900, 4148500; 722700, 4148500; 722700, 4148600; 722900, 4148600; 723200, 4148700; 723400, 4148700; 723200, 4148600; 723100, 4148500; 723000, 4148400; 723200, 4148200; 723400, 4148200; 723500, 4148300; 723600, 4148400; 723600, 4148500; 723800, 4148500; 723800, 4148400; 723900, 4148400; 723900, 4148500; 724000, 4148700; 724200, 4148500; 724200, 4148900; 724300, 4149000; 724300, 4149100; 724500, 4149000; 724500, 4149300; 724700, 4149400; 724900, 4149600; 725000, 4149700; 725000, 4150000; 724900, 4150100; 725000, 4150200; 725200, 4150200; 725300, 4150400; 725400, 4150500; 725400, 4150600; 725100, 4150900;

724700, 4150900; 724700, 4153400; 725000, 4153500; 725400, 4153900; 725600, 4154100; 725800, 4154200; 726000, 4154300; 726200, 4154000; 726300, 4153800; 726300, 4153700; 727800, 4153700; 727800, 4153400; 727900, 4153400; 727900, 4153500; 728400, 4153600; 728700, 4153700; 729000, 4153700; 729000, 4153600; 729100, 4153500; 729300, 4153400; 729400, 4153400; 729400, 4153300; 729300, 4153200; 729500, 4153100; 729800, 4153100; 729900, 4153200; 729900, 4154200; 730000, 4154200; 730100, 4154300; 730600, 4154300; 730700, 4154400; 731000, 4154600; 731200, 4154700; 731500, 4154700; 731800, 4154900; 732200, 4154900; 732600, 4154800; 733200, 4154500; 733400, 4154500; 733700, 4154300; 734700, 4154300; 734900, 4154600; 735100, 4154800; 735100, 4154900; 735500, 4155300; 735600, 4155300; 735800, 4155500; 736100, 4155900; 737100, 4155400; 737800, 4155000; 738200, 4154200; 738300, 4153300; 739000, 4152800; 739100, 4152200; 740200, 4151800; 740800, 4151500; 740800, 4150300; 741100, 4149900; 741700, 4149400; 742100, 4148500; 742100, 4147100; 743400, 4146100; 744000, 4145600; 744400, 4144600; 744300, 4143900; 743900, 4142700; 744000, 4142000; 744200, 4141700; 745500, 4140300; 745500, 4139600; 745500, 4139500; 745400, 4139400; 745300, 4139300; 745200, 4139200; 744900, 4139000; 744800, 4138800; 744900, 4138500; 744700, 4137700; 744400, 4137500; 744200, 4137600; 744000, 4137500; 743800, 4137500; 743400, 4137400; 743100, 4137300; 743100, 4137200; 742900, 4137000; 742700, 4137000; 742600, 4136900; 742600, 4136600; 742400, 4136500; 742000, 4136400; 741800, 4136500; 741400, 4136400; 741100, 4136400; 741100, 4136700; 740200, 4136700; 739900, 4136400; 739400, 4136400; 739400, 4136700; 737600, 4136700; 737600, 4135900; 737300, 4135900; 737300, 4135300; 737400, 4135200; 737200, 4135000; 736800, 4134800; 736800, 4134600; 736800, 4134400; returning to 736600, 4134200; excluding land bound by 727200, 4138700; 726600, 4139500; 726600, 4139600; 726800, 4139600; 727000, 4139700; 727200, 4140000; 727300, 4140500; 727200, 4140700; 727400, 4140700; 727500, 4140800; 727400, 4141100; 727800, 4141100; 727800, 4140700; 728300, 4140700; 728300, 4139600; 727900, 4139300; 727900, 4139000; 727800, 4138800; 727400, 4138800; returning to 727200, 4138700; and excluding land bound by 726700, 4139700; 726400, 4140000; 726600, 4140000; 726800, 4140200; 726900, 4140100; 726900, 4140000; 726800, 4139800; returning to 726700, 4139700; and excluding land bound by 726200, 4138000; 725800, 4138000; 725800, 4138200; 725700, 4138200; 725700, 4138500; 725800, 4138500; 725800, 4138400; 726200, 4138400; returning to 726200, 4138000; and excluding land bound by 727000, 4137600; 726800, 4137600; 726800, 4137800; 726500, 4137800; 726500, 4138000; 727300, 4138100; 727300, 4138000; 727200, 4137900; 727000, 4137800; returning to 727000, 4137600.

(6) Unit 2: Madera, Mariposa, and Merced Counties, California. From USGS 1:24,000 quadrangle maps Illinois Hill, Indian Gulch, Le Grand, Owens Reservoir, Plainsburg, and Raynor Creek, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 4124000; 757000, 4123700; 757600, 4123900; 757900, 4123200; 758400, 4122900; 759200, 4122900; 760300, 4121300; 761000, 4121000; 761300, 4120300; 762100, 4119400; 762100, 4119300; 762000, 4119200; 761900, 4119200; 761800, 4119100; 761700, 4119200; 761600, 4119100; 761500, 4119100; 761400, 4119000; 761200, 4118800; 761000, 4118800; 760900, 4118700; 760800, 4118700; 760500, 4118500; 760200, 4118500; 759900, 4118400; 759700, 4118500; 759600, 4118400; 759400, 4118300; 759300, 4118200; 759200, 4118200; 759000, 4118100; 758800, 4118000; 758600, 4117900; 758200, 4117900; 758000, 4118000; 757800, 4117900; 757600, 4117800; 757500, 4117800; 757400, 4117600; 757300, 4117600; 757200, 4117500; 757100, 4117400; 757000, 4117400; 756900, 4117300; 756800, 4117300; 756600, 4117100; 756500, 4117200; 756200, 4117300; 755800, 4117200; 755700, 4117200; 755700, 4116700; 755700, 4116600; 755500, 4116500; 755400, 4116500; 754900, 4116300; 754800, 4116300; 754800, 4116600; 753700, 4116600; 753700, 4116400; 753300, 4116400; 753300, 4115600; 753100, 4115500; 752700, 4115400; 752400, 4115300; 752200, 4115200; 752200, 4115600; 751800, 4115600; 752000, 4115800; 751900, 4116000; 751400, 4116100; 751100, 4116300; 751300, 4116300; 751300, 4116900; 751100, 4116900; 750800, 4116900; 750700, 4117000; 750000, 4116800; 749300, 4116800; 749300, 4116500; 746000, 4116500; 746000, 4116600; 745200, 4116600; 745200, 4117800; 744600, 4117800; 744600, 4118600; 743600, 4118600; 743600, 4119000; 745400, 4119000; 745400, 4119700; 744700, 4119700; 744700, 4120500; 745300, 4120500; 745500, 4120600; 745600, 4120700; 746000, 4120700; 746000, 4121400; 746200, 4121500; 746200, 4121600; 746400, 4121700; 746400, 4121800; 747600, 4120700; 746500, 4120700; 746500, 4119700; 747000, 4119700; 747000, 4120300; 747800, 4120300; 747800, 4120000; 748400, 4120000; 747800, 4120500; 747800, 4121400; 748600, 4121400; 748600, 4121900; 747800, 4121900; 747800, 4123300; 748300, 4123300; 748300, 4123500; 748500, 4123500; 748600, 4123500; 748600, 4123900; 747800, 4123900; 747800, 4124600; 747400, 4125100; 747400, 4125500; 746900, 4125500; 746900, 4125800; 747000, 4125900; 746900, 4125900; 746600, 4125800; 746300, 4125700; 746200, 4125600; 746200, 4125500; 745700, 4125500; 745700, 4125100; 744500, 4125100; 744500, 4125300; 744400, 4125300; 744400, 4125200; 743700, 4125200; 743700, 4125800; 744500, 4125800; 744500, 4126200; 743700, 4126200; 743700, 4127000; 742400, 4127000; 742000, 4127200; 742000, 4128600; 742800, 4128600; 742800, 4129100; 742900, 4129100; 743000, 4129100; 743000, 4129200; 743400, 4129300; 743600, 4129500; 743600, 4130700; 743500, 4130700; 743500, 4130900; 743500, 4132200; 744000, 4133400; 742700, 4133400; 742600, 4133500; 741500, 4132900; 740900, 4132200; 740800, 4132600; 740300, 4132600; 740300, 4132800; 740300, 4133500; 741000, 4133500; 741000, 4133900; 741900, 4133900; 741800, 4135800; 741000, 4135800; 741000, 4136400; 741100, 4136400; 741400, 4136400; 741800, 4136500; 742000, 4136400; 742400, 4136500; 742700, 4136600; 742600, 4136900; 742700, 4137000; 742900, 4137000; 743100, 4137200; 743100, 4137300; 743400, 4137400; 743800, 4137500; 744000, 4137500; 744200, 4137600; 744400, 4137500; 744700, 4137700; 744900, 4138500; 744800, 4138800; 744900, 4139000; 745200, 4139200; returning to 745300, 4139300.

(7) Unit 3: Madera County, California. [Reserved]

(8) Unit 4: Fresno County, California. From USGS 1:24,000 quadrangle map Friant, California, land bounded by the following UTM 11 NAD 83 coordinates (E, N): 259800, 4086700;

259300, 4086700; 259300, 4087600; 259600, 4087500; 260000, 4087500; 260100, 4087900; 260000, 4088100; 259700, 4088300; 258500, 4088300; 258000, 4088300; 258000, 4089100; 258200, 4089200; 258200, 4089100; 258500, 4089100; 258700, 4089200; 258700, 4089600; 258800, 4089600; 258900, 4089700; 258900, 4089800; 258600, 4089800; 258600, 4089900; 258200, 4089900; 258200, 4089700; 258100, 4089600; 257700, 4089600; 257700, 4089200; 257400, 4089200; 257400, 4089900; 257200, 4089900; 257200, 4089200; 256600, 4089200; 256600, 4089700; 256800, 4089700; 256800, 4090000; 256600, 4090000; 256600, 4090200; 256800, 4090800; 257000, 4091500; 257100, 4092700; 257100, 4092900; 257200, 4093100; 257300, 4094300; 257300, 4095400; 257400, 4095500; 258200, 4096300; 258900, 4096300; 258900, 4096700; 259600, 4096700; 259600, 4094700; 260300, 4094700; 260300, 4093300; 259400, 4091700; 260800, 4091700; 262200, 4091100; 262900, 4091100; 262900, 4090400; 263000, 4090100; 262700, 4089600; 262400, 4089500; 261800, 4089100; 261700, 4089200; 261700, 4089400; 261600, 4089400; 261500, 4089400; 261300, 4089400; 261300, 4088200; 261100, 4088200; 261100, 4087400; 260400, 4087400; 260400, 4087500; 260100, 4087500; 260100, 4086900; 259800, 4086900; returning to 259800, 4086700.

(9) Subunit 5A: Madera County, California. [Reserved]

(10) Subunit 5B: Fresno County, California. From USGS 1:24,000 quadrangle maps Academy, and Millerton Lake East, California, land bounded by the following UTM 11 NAD 83 coordinates (E, N): 267300, 4097300; 266900, 4097300; 267000, 4097600; 267800, 4098300; 268100, 4098700; 268100, 4098900; 268000, 4099100; 267400, 4099800; 267400, 4100300; 267700, 4100800; 268100, 4101400; 268600, 4101400; 269100, 4101100; 269600, 4101100; 269800, 4101300; 269900, 4101500; 269600, 4102200; 269200, 4102400; 268600, 4102800; 268700, 4103800; 269100, 4103800; 269600, 4103100; 270200, 4103500; 270300, 4103500; 270700, 4102500; 270500, 4102400; 270300, 4102200; 270300, 4101900; 270500, 4101500; 270600, 4101100; 270500, 4101000; 270200, 4100700; 269400, 4100500; 268300, 4100500; 268100, 4100300; 268100, 4100100; 268400, 4099800; 268600, 4099500; 268700, 4099200; 268700, 4098900; 268600, 4098300; 268500, 4098100; 268400, 4097800; 268100, 4097600; 267800, 4097400; returning to 267300, 4097300.

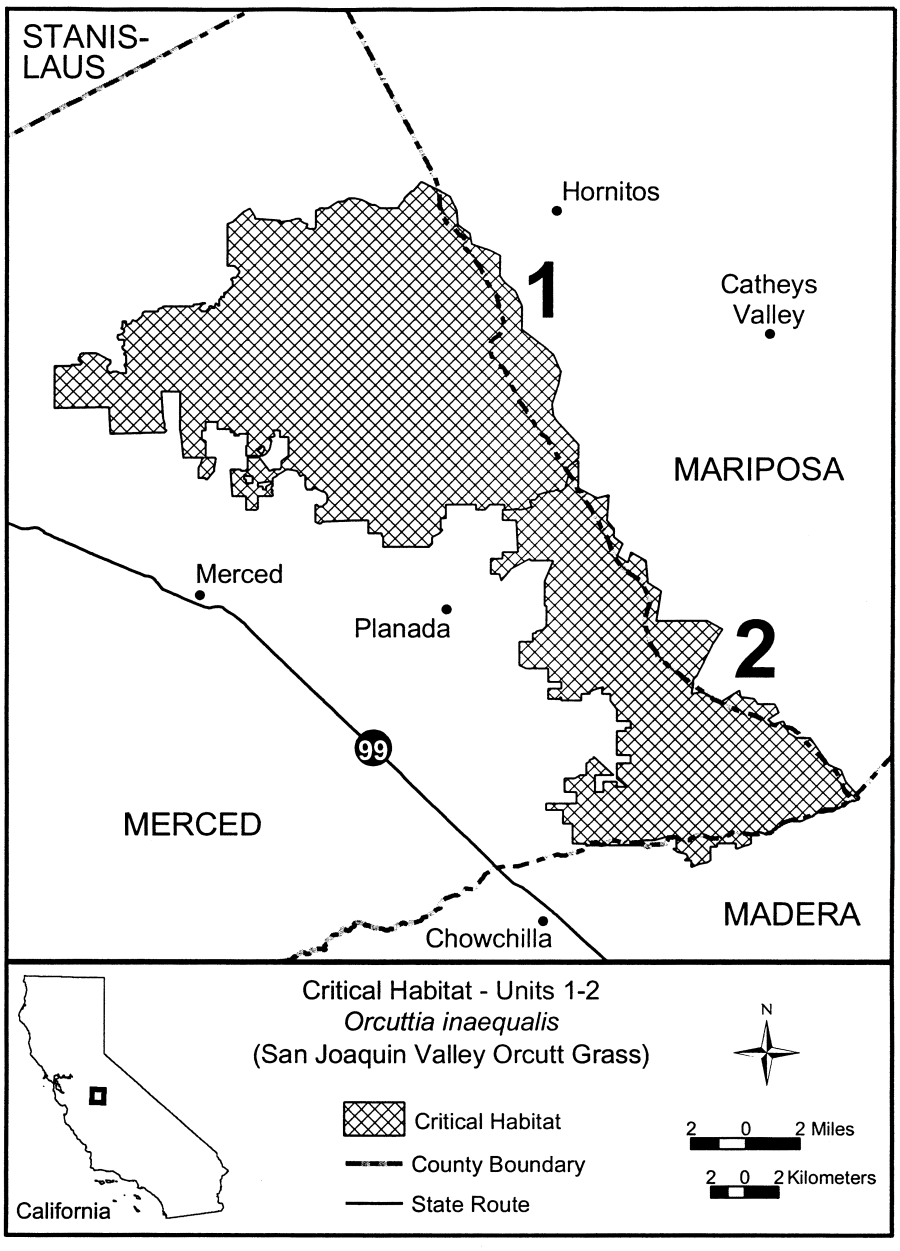
(11) Subunit 6A: Tulare County, California. From USGS 1:24,000 quadrangle maps Monson, and Traver, California, land bounded by the following UTM 11 NAD 83 coordinates (E, N): 294300, 4035600; 293500, 4035600; 293400, 4034000; 292600, 4034000; 292600, 4035400; 291900, 4035400; 291700, 4035400; 291700, 4035600; 290500, 4035700; 290500, 4036100; 289800, 4036100; 289800, 4035700; 289400, 4035700; 289400, 4034500; 288500, 4034500; 288500, 4034200; 287700, 4034200; 287700, 4034500; 287000, 4034600; 287000, 4035100; 288500, 4035100; 288500, 4035600; 287700, 4035700; 287700, 4036700; 289300, 4036700; 289400, 4037400; 291100, 4037400; 291100, 4037200; 291800, 4037200; 291900, 4036800; 292700, 4036800; 292700, 4037600; 291900, 4037700; 292000, 4039500; 292300, 4039200; 292800, 4039200; 292800, 4038500; 293200, 4038500; 293200, 4038400; 294400, 4038400; returning to 294300, 4035600.

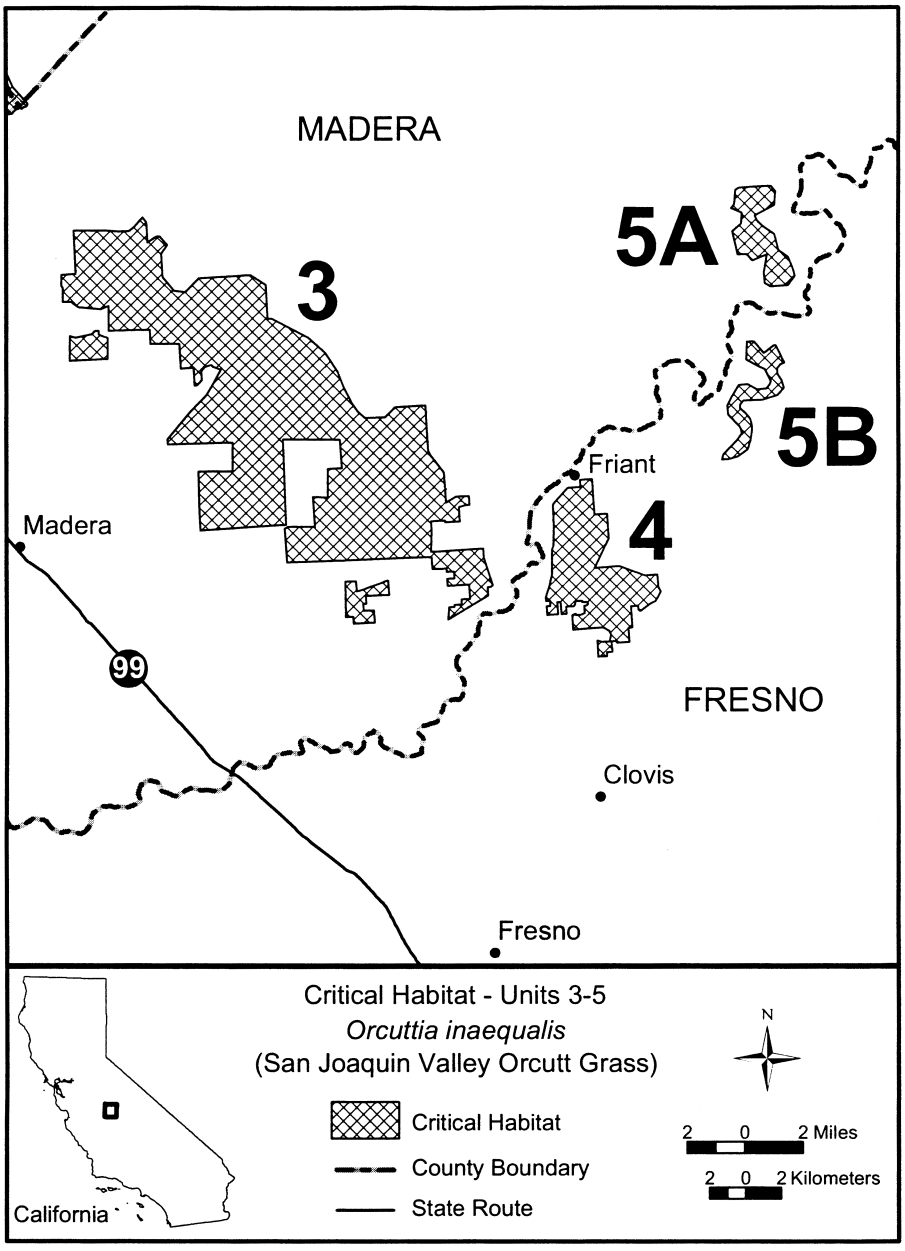
(12) Subunit 6B: Tulare County, California. From USGS 1:24,000 quadrangle maps Auckland, Ivanhoe, Stokes Mtn., and Woodlake, California, land bounded by the following UTM 11 NAD 83 coordinates (E, N):

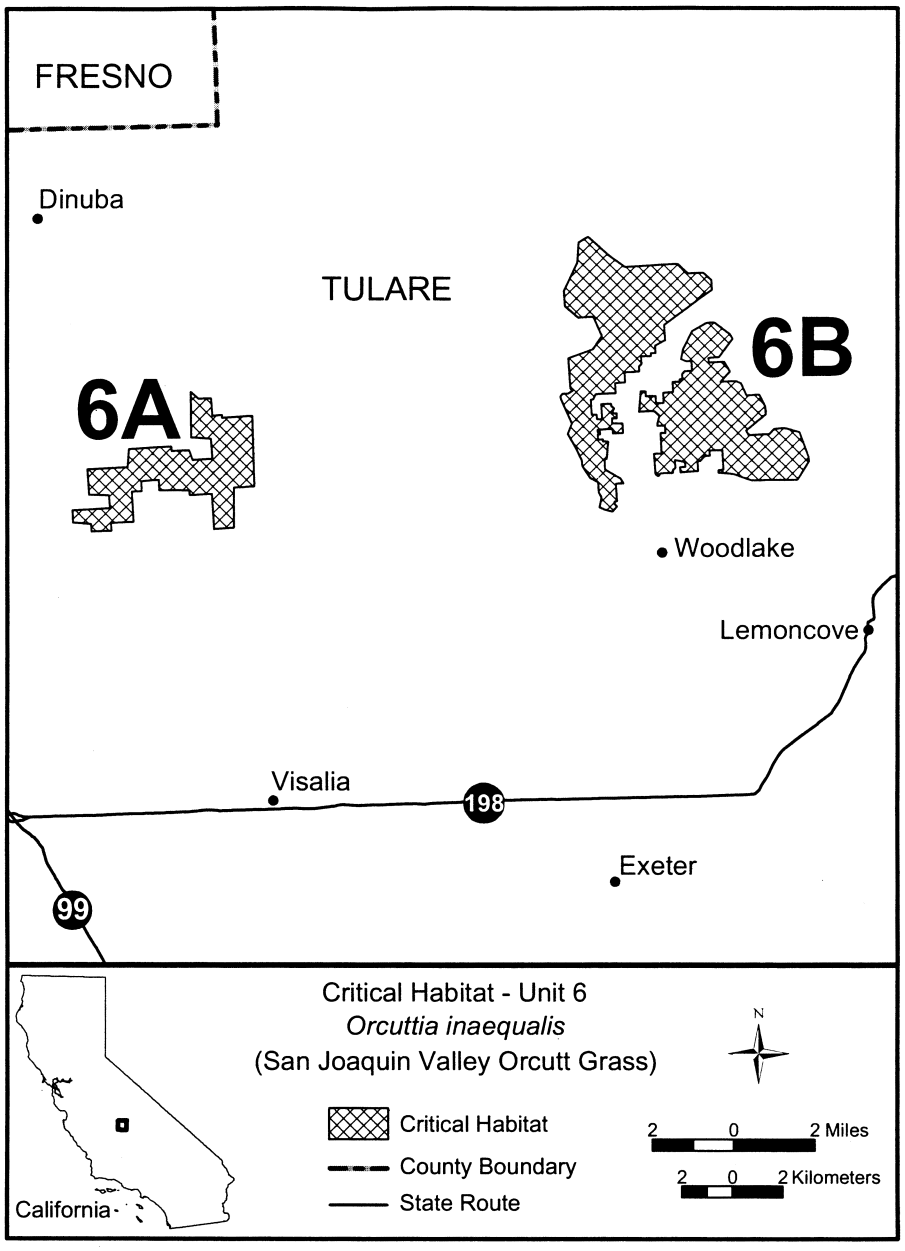
(i) Start at 308500, 4033700; 308200, 4033800; 308000, 4033900; 308100, 4034300; 308000, 4034500; 308000, 4034900; 307700, 4035100; 307500, 4035400; 307400, 4035600; 307400, 4035800; 307200, 4036300; 306900, 4036900; 307100, 4037300; 306700, 4038300; 306700, 4038400; 306800, 4038500; 307000, 4038500; 307200, 4038600; 307100, 4038700; 307100, 4039900; 308100, 4040200; 308500, 4040700; 308200, 4041500; 307600, 4041500; 307100, 4042000; 307100, 4042600; 307700, 4043700; 307800, 4044500; 308200, 4044700; 309000, 4043900; 309600, 4043400; 311700, 4043400; 312100, 4043000; 312700, 4043000; 313000, 4042700; 313000, 4042300; 312500, 4042000; 311000, 4041000; 311000, 4040400; 310600, 4040200; 310600, 4039900; 310400, 4039900; 310400, 4039800; 310000, 4039800; 310000, 4039500; 309900, 4039400; 309900, 4039200; 309700, 4039200; 309300, 4039200; 309300, 4038800; 308900, 4038800; 308900, 4038400; 308100, 4038400; 308000, 4038200; 307900, 4038200; 307900, 4037600; 308100, 4037600; 308100, 4037400; 308300, 4037400; 308300, 4038000; 308700, 4038000; 308700, 4037900; 308800, 4037800; 308700, 4037600; 308900, 4037600; 308900, 4037400; 308700, 4037400; 308700, 4037200; 309100, 4037200; 309100, 4036800; 308700, 4036800; 308700, 4037000; 308100, 4037000; 308100, 4036900; 308200, 4036900; 308200, 4036800; 308100, 4036800; 308100, 4036600; 308300, 4036600; 308300, 4036500; 308500, 4036500; 308400, 4035800; 308300, 4035800; 308300, 4035400; 308900, 4035000; 309000, 4034800; 308700, 4034800; 308700, 4034100; 308600, 4034100; 308600, 4034000; 308700, 4033900; returning to 308500, 4033700.

(ii) Start at 315900, 4034500; 314100, 4034600; 313400, 4034900; 312800, 4035000; 312800, 4035100; 313000, 4035100; 313000, 4035900; 312500, 4035900; 312500, 4035700; 312300, 4035700; 312100, 4035500; 312000, 4035500; 312000, 4035100; 311300, 4035100; 311300, 4035300; 311500, 4035300; 311500, 4035500; 311100, 4035600; 311100, 4035300; 311000, 4035200; 311000, 4035100; 310500, 4035100; 310400, 4035000; 310300, 4035100; 310300, 4035900; 310600, 4035900; 310600, 4036700; 310800, 4036700; 310800, 4037000; 310500, 4037000; 310500, 4037100; 310600, 4037400; 310400, 4037600; 309800, 4037600; 309900, 4038400; 310100, 4038400; 310100, 4038200; 310500, 4038200; 310500, 4037900; 310800, 4037900; 310800, 4038300; 311200, 4038300; 311200, 4038700; 311500, 4038700; 311500, 4038800; 311600, 4038800; 311600, 4039000; 311700, 4039100; 312000, 4039100; 312000, 4039500; 311800, 4039500; 311600, 4039600; 311700, 4040000; 312100, 4040700; 312700, 4041000; 313000, 4041000; 313600, 4040500; 313700, 4040300; 313100, 4039600; 312700, 4039600; 312700, 4039400; 313300, 4039400; 313500, 4039000; 313100, 4038600; 313700, 4038600; 313900, 4038500; 314100, 4038000; 314600, 4038000; 314800, 4037500; 314800, 4037200; 314000, 4036600; 314100, 4036400; 314900, 4036400; 315100, 4036600; 315500, 4036600; 316100, 4036400; 316400, 4035400; 316400, 4035200; returning to 315900, 4034500.

(13) Maps follow of critical habitat units 1 and 2, 3 through 5 and 6 (respectively) for San Joaquin Valley Orcutt grass.


STANIS-
LAUS
Hornitos
1
Catheys
Valley
MARIPOSA
Merced
Planada
2
99
MERCED
MADERA
Chowchilla
Critical Habitat - Units 1-2
Orcuttia inaequalis
(San Joaquin Valley Orcutt Grass)
N
Critical Habitat
County Boundary
State Route
2 0 2 Miles
2 0 2 Kilometers
California


MADERA
3
5A
5B
4
Friant
Madera
99
FRESNO
Clovis
Fresno
Critical Habitat - Units 3-5
Orcuttia inaequalis
(San Joaquin Valley Orcutt Grass)
Critical Habitat
County Boundary
State Route
N
2 0 2 Miles
2 0 2 Kilometers
California



Family Poaceae: *Orcuttia pilosa* (Hairy Orcutt Grass).

(1) Critical habitat units are depicted for Tehama, Glenn, Colusa, Stanislaus, Mariposa and Fresno Counties, California, on the map below.

(2) The primary constituent elements of critical habitat for *Orcuttia pilosa* are the habitat components that provide:

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Orcuttia pilosa* germination, growth and reproduction, including but not limited to features occurring on both acidic and saline-alkaline soils, with an iron-silica cemented hardpan or claypan, and that typically become inundated during winter rains, but are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil moisture for *Orcuttia pilosa* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aqueducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

(5) Unit 1: Butte and Tehama Counties, California. From USGS 1:24,000 quadrangle maps Acorn Hollow, Foster Island, Nord, Richardson Springs NW, and Vina, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 583200, 4413400; 583000, 4414200; 583700, 4414600; 583500, 4415000; 583000, 4415900; 583000, 4416400; 582900, 4416700; 582800, 4416900; 582700, 4417000; 582700, 4417200; 582900, 4417300; 582800, 4417400; 582700, 4417500; 582700, 4417600; 582600, 4417700; 582600, 4418000; 582600, 4418100; 582600, 4418200; 582700, 4418300; 582500, 4418400; 582400, 4418300; 582200, 4418300; 582100, 4418400; 582100, 4418500; 582000, 4418600; 582100, 4418700; 582100, 4418900; 582200, 4419100; 582100, 4419300; 582200, 4419500; 582100, 4419600; 582000, 4419700; 582100, 4419800; 582100, 4419900; 582200, 4420000; 582200, 4420300; 582100, 4420500; 582200, 4420600; 582200, 4420800; 582300, 4421100; 582900, 4421500; 582900, 4421600; 583300, 4422000; 583400, 4422100; 583900, 4422100; 584100, 4422300; 584200, 4422300; 584300, 4422400; 584400, 4422500; 584600, 4422900; 585100, 4423400; 585600, 4423700; 585800, 4423900; 585800, 4424200; 586100, 4424200; 586600, 4424800; 586800, 4424900; 587300, 4425500; 587400, 4425600; 587500, 4425800; 587500, 4425900; 587600, 4426000; 587700, 4426100; 587800, 4426100; 587900, 4426200; 587900, 4426300; 588200, 4426500; 588700, 4429900; 588900, 4429500; 589500, 4429500; 589500, 4428600; 589500, 4428000; 589800, 4427100; 590500, 4426400; 590500, 4425300; 591200, 4424400; 591500, 4423300; 591600, 4422100; 590900, 4420900; 590700, 4419800; 588000, 4417000; 587500, 4416400; 587200, 4415500; 587200, 4415100; 587300, 4415000; 587300, 4414500; 587200, 4414400; 587100, 4414300; 586900, 4414000; 586400, 4413900; 586200, 4413700; 586000, 4413600; 585800, 4413600; 585800, 4414700; 585300, 4414700; 585300, 4413800; 585200, 4413700; 584800, 4413700; 584600, 4413600; 584400, 4413600; 584200, 4413500; 584000, 4413700; returning to 583200, 4413400.

(6) Unit 2: Butte County, California. [Reserved]

(7) Unit 3: Colusa and Glenn Counties, California. [Reserved]

(8) Unit 4: Mariposa, Merced, and Stanislaus Counties, California. From USGS 1:24,000 quadrangle maps Cooperstown, La Grange, Merced Falls, Montpelier, Paulsell, Snelling, and Turlock Lake, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at 732200, 4162500; 732700, 4162700; 733000, 4162600; 733600, 4162100; 733700, 4161500; 733600, 4161000; 734600, 4160400; 734800, 4160200; 734800, 4159500; 734400, 4158700; 734300, 4158100; 734500, 4157900; 734700, 4158000; 734900, 4158300; 735000, 4158800; 735500, 4158800; 735700, 4158600; 735600, 4158100; 736200, 4157500; 736800, 4157300; 736900, 4157100; 736900, 4156500; 736300, 4156500; 736000, 4156300; 735500, 4156300; 734100, 4156900; 733400, 4157100; 731700, 4156900; 730900, 4156500; 728900, 4156600; 728700, 4156700; 728700, 4156800; 728600, 4156900; 728300, 4156900; 728100, 4156800; 727900, 4156800; 727100, 4156800; 726900, 4156600; 726700, 4156500; 726300, 4156500; 726100, 4156600; 725800, 4156500; 725600, 4156400; 725500, 4156300; 725400, 4156200; 725100, 4156100; 725000, 4156000; 724900, 4156000; 724800, 4156100; 724300, 4156100; 724300, 4155700; 723800, 4155700; 723900, 4155300; 723300, 4155400; 722700, 4155100; 722700, 4155400; 722300, 4155400; 722300, 4156800; 722900, 4156800; 722900, 4157400; 723500, 4157400; 723500, 4157000; 723700, 4157000; 723700, 4156900; 724300, 4156900; 724300, 4157400; 724200, 4157400; 724100, 4158200; 723800, 4158200; 723700, 4159000; 722500, 4159000; 722500, 4159200; 722400, 4159200; 722300, 4159300;

722200, 4159300; 721600, 4159300; 721600, 4159500; 721500, 4159600; 721500, 4159800; 721600, 4159800; 721600, 4159900; 721700, 4159900; 721700, 4160500; 721100, 4160500; 721100, 4160100; 720800, 4160100; 720800, 4160500; 719500, 4160500; 719500, 4160300; 720000, 4159600; 719600, 4159600; 719600, 4159500; 719500, 4159500; 719400, 4159500; 719300, 4159400; 719100, 4159400; 719000, 4159400; 718900, 4159300; 718700, 4159100; 718600, 4159000; 718600, 4158900; 718400, 4158900; 718200, 4158800; 718200, 4158700; 718300, 4158600; 718400, 4158500; 718500, 4158500; 718600, 4158400; 718700, 4158400; 718900, 4158300; 719000, 4158100; 719000, 4157900; 718700, 4157600; 718000, 4157700; 717800, 4157400; 717900, 4157200; 718000, 4157000; 718400, 4157300; 718700, 4156700; 718700, 4156300; 717500, 4156300; 717500, 4156700; 717100, 4156700; 717100, 4156300; 716600, 4156300; 716600, 4155800; 716300, 4155700; 716200, 4155000; 715900, 4154900; 715900, 4155100; 715800, 4155200; 715800, 4155300; 715700, 4155400; 715600, 4155700; 715500, 4155800; 715400, 4155800; 715300, 4156600; 715400, 4156600; 715400, 4157200; 715400, 4157400; 715500, 4157400; 715500, 4157600; 717600, 4157600; 717600, 4159700; 718100, 4160200; 718200, 4160500; 718400, 4160800; 718700, 4161100; 716800, 4161100; 716800, 4160400; 714900, 4160400; 714900, 4160900; 715000, 4160900; 715000, 4161000; 715200, 4161000; 715200, 4161100; 714400, 4161100; 714400, 4161200; 713700, 4161200; 713700, 4161100; 713300, 4161100; 713200, 4161200; 713100, 4161100; 713100, 4161000; 713400, 4160700; 713400, 4160600; 713600, 4160500; 713800, 4160800; 713900, 4160800; 714000, 4160700; 714000, 4160400; 711100, 4160300; 711100, 4161900; 709500, 4161900; 709500, 4163500; 707900, 4163500; 707900, 4163100; 707000, 4163100; 707000, 4165600; 707400, 4165600; 707400, 4165800; 706700, 4166100; 706500, 4165800; 706200, 4166000; 706300, 4166300; 706200, 4166400; 706200, 4166500; 706300, 4166500; 706300, 4166700; 706200, 4166700; 706200, 4167100; 706500, 4167100; 706700, 4166700; 706800, 4166700; 706800, 4166300; 707000, 4166300; 707000, 4166100; 707200, 4166100; 707200, 4166700; 707400, 4166700; 707800, 4166000; 707800, 4165600; 708000, 4165800; 708200, 4165800; 708400, 4165700; 708400, 4165500; 708200, 4165400; 708200, 4165300; 708300, 4165200; 708400, 4165200; 708500, 4165300; 708600, 4165400; 708800, 4165400; 709100, 4165100; 710200, 4165100; 710200, 4166400; 710100, 4166400; 710100, 4166500; 710000, 4166500; 709900, 4166500; 709900, 4166700; 709800, 4166700; 709800, 4167100; 710200, 4166800; 711000, 4167600; 711600, 4167800; 712400, 4167800; 712400, 4167300; 712900, 4167300; 712900, 4167200; 712600, 4166900; 711800, 4167000; 711600, 4166800; 711600, 4166600; 711800, 4166500; 711800, 4166600; 711900, 4166600; 712000, 4166300; 712100, 4166500; 712200, 4166500; 712300, 4166400; 712500, 4166400; 712500, 4166200; 712700, 4166200; 712700, 4166300; 712800, 4166300; 713000, 4166100; 712800, 4166000; 712700, 4165800; 712500, 4165800; 712500, 4165600; 712700, 4165600; 712600, 4165400; 712400, 4165500; 712300, 4165400; 712500, 4165300; 712500, 4165200; 712400, 4165100; 712600, 4165100; 712600, 4165000; 712600, 4164900; 712700, 4164800; 712600, 4164700; 712500, 4164800; 712400, 4164800; 712400, 4164300; 712800, 4164500; 713100, 4164300; 713200, 4164100; 712900, 4163800; 712900, 4163700; 713100, 4163800; 713500, 4164000; 713600, 4164000; 713600, 4164100; 713700, 4164300; 714200, 4164300; 714400, 4164500; 714500, 4164800; 714600, 4164800; 714800, 4164700; 714800, 4164200; 714400, 4164000; 714400, 4163600; 714500, 4163500; 715200, 4164000; 715300, 4164200; 715400, 4164200; 715300, 4163900; 715100, 4163700; 715000, 4163500; 714800, 4163300; 714900, 4163200; 715000, 4163200; 715700, 4163200; 715900, 4163100; 716000, 4162900; 716100, 4162800; 716200, 4162800; 716300, 4162900; 716400, 4163000; 716500, 4163100; 716600, 4163200; 716600, 4163500; 716500, 4163600; 716500, 4163800; 716600, 4164100; 716800, 4164500; 716700, 4164900; 716800, 4165300; 717200, 4165800; 717200, 4166100; 717000, 4166400; 716600, 4166400; 716400, 4166300; 716400, 4166900; 716600, 4166900; 716800, 4167100; 716800, 4167350; 717000, 4167400; 717500, 4167400; 718100, 4167300; 718500, 4167100; 718600, 4166600; 718700, 4166400; 719100, 4166700; 719300, 4166800; 719500, 4166800; 719500, 4166500; 719600, 4166400; 719600, 4166100; 719800, 4166100; 719900, 4166300; 719900, 4166200; 720700, 4166200; 720700, 4163700; 721700, 4163700; 722400, 4164100; 722400, 4165300; 722200, 4165300; 722200, 4165400; 721500, 4165400; 721500, 4166100; 721000, 4166300; 720700, 4166500; 720900, 4166600; 721000, 4166700; 721100, 4166900; 721000, 4167000; 720300, 4167000; 720100, 4166900; 720200, 4166700; 720200, 4166600; 720100, 4166500; 720000, 4166500; 719800, 4166800; 719500, 4167400; 719500, 4167600; 719700, 4167800; 720500, 4167800; 720700, 4167700; 720900, 4167500; 721100, 4167400; 721300, 4167700; 721700, 4167700; 722000, 4167600; 722500, 4167600; 722900, 4167500; 723300, 4167400; 723000, 4168400; 723000, 4169200; 723300, 4169700; 723800, 4169800; 724100, 4169800; 724600, 4169200; 724700, 4168300; 725100, 4167900; 725300, 4167200; 726200, 4167100; 726500, 4166800; 726500, 4166600; 727300, 4166000; 727700, 4165800; 729000, 4165800; 730100, 4165400; 730400, 4165100; 730500, 4164900; 730700, 4164100; 731300, 4164100; 731700, 4163800; 731800, 4163400; 732200, 4162800; returning to 732200, 4162500.

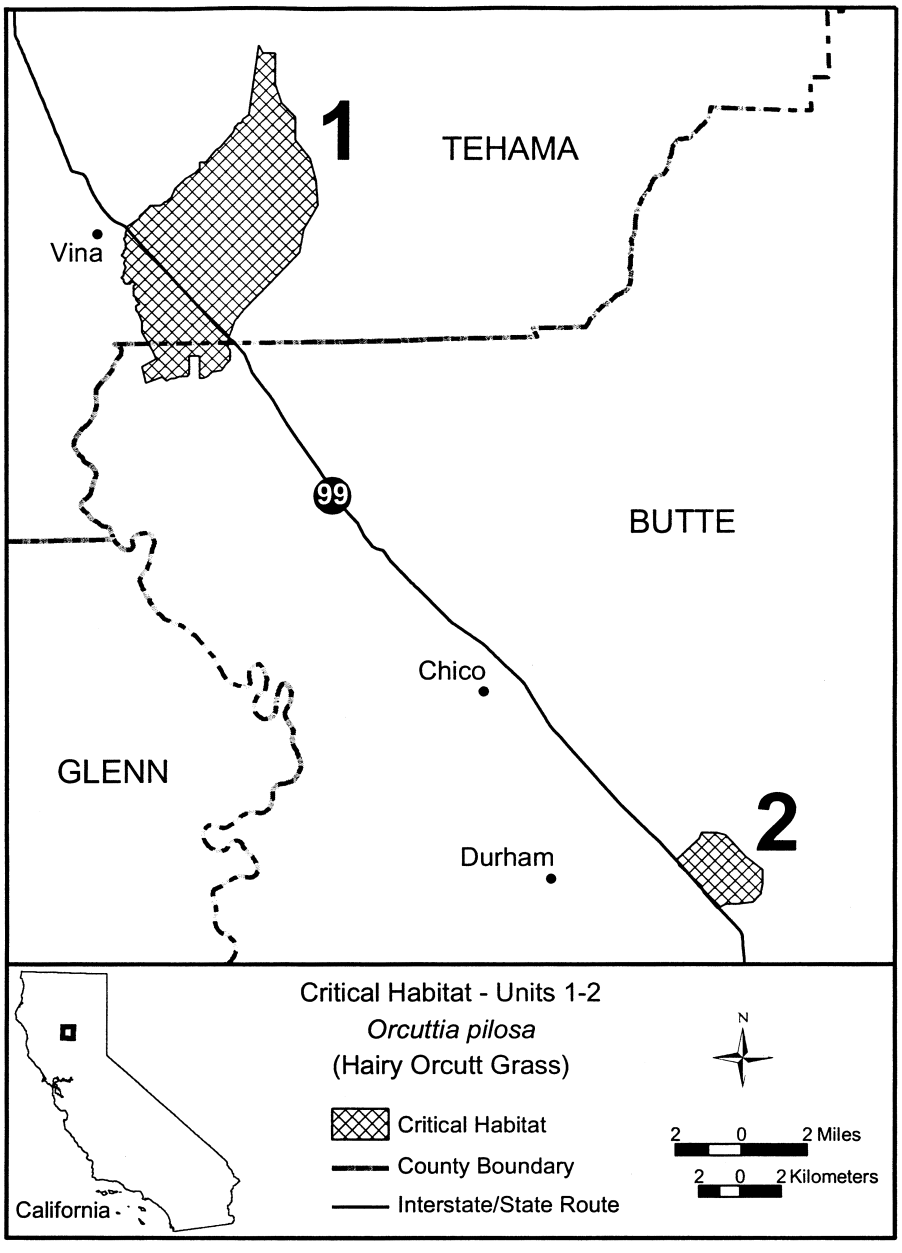
(ii) Start at 704200, 4166200; 704000, 4166200; 703800, 4166400; 703400, 4166600; 703400, 4166800; 703500, 4166800; 703600, 4166900; 703700, 4167000; 703700, 4167200; 704600, 4167600; 704700, 4167600; 704800, 4167500; 705000, 4167400; 705300, 4167400; 705300, 4166400; 705000, 4166300; 704400, 4166300; returning to 704200, 4166200.

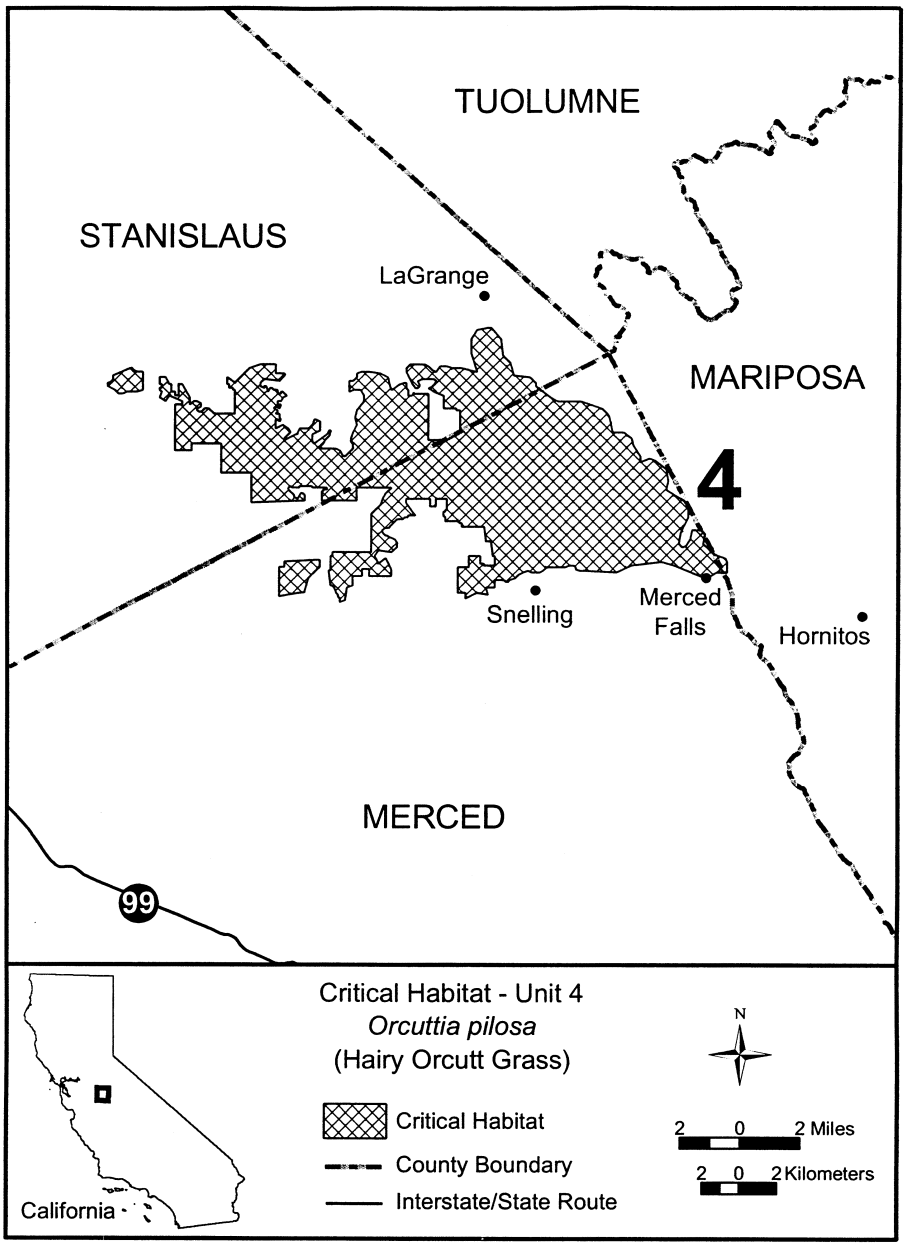
(iii) Start at 712600, 4155200; 712600, 4156800; 712900, 4156800; 712900, 4157100; 714800, 4157200; 714800, 4156800; 714300, 4156300; 714200, 4156200; 714000, 4155500; 714000, 4155400; 713800, 4155400; returning to 712600, 4155200.

(9) Unit 5: Madera County, California. [Reserved]

(10) Unit 6: Fresno and Madera Counties, California. [Reserved]

(11) Maps follow of critical habitat units 1 and 2, and 4 (respectively) for hairy Orcutt grass.


1
TEHAMA
Vina
99
BUTTE
Chico
GLENN
2
Durham
California
Critical Habitat - Units 1-2
Orcuttia pilosa
(Hairy Orcutt Grass)
Critical Habitat
County Boundary
Interstate/State Route
N
2 0 2 Miles
2 0 2 Kilometers



Family Poaceae: *Orcuttia tenuis* (Slender Orcutt Grass).

(1) Critical habitat units are depicted for Siskiyou, Modoc, Shasta, Lassen, Tehama, Plumas, and Lake Counties, California, on the map below.

(2) The primary constituent elements of critical habitat for *Orcuttia tenuis* are the habitat components that provide:

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Orcuttia tenuis* germination, growth and reproduction, including but not limited to, Northern Volcanic Ashflow and Northern Volcanic Mudflow vernal pools (Sawyer and Keeler-Wolf 1995) with iron-silica and bedrock hardpan impervious layers, and that typically become inundated during winter rains, but are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil moisture for *Orcuttia tenuis* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aquaducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

(5) Subunit 1A: Modoc, Shasta, and Siskiyou Counties, California. From USGS 1:24,000 quadrangle maps Day and Timbered Crater, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at 627500, 4561300; 626000, 4561600; 626000, 4562200; 626200, 4562900; 625800, 4563900; 626000, 4564100; 626100, 4564300; 626200, 4564400; 626300, 4564600; 626400, 4564700; 626400, 4564900; 626500, 4565100; 626700, 4565100; 626700, 4565400; 626800, 4565600; 627000, 4565700; 627000, 4566000; 627100, 4566100; 627300, 4566200; 627500, 4566200; 627700, 4566200; 627800, 4566100; 627900, 4566000; 628000, 4565900; 628200, 4565800; 628200, 4565600; 628300, 4565200; 628000, 4565000; 627900, 4564700; 628000, 4564400; 627900, 4564200; 627900, 4564000; 627900, 4563805; 628100, 4563700; 628200, 4563600; 628100, 4563300; 628200, 4563200; 628200, 4563000; 628300, 4562900; 628600, 4562800; 628600, 4562600; 628700, 4562500; 628900, 4562300; 628900, 4562000; 628700, 4561900; 628500, 4561800; 628400, 4561800; 628100, 4561700; 628000, 4561600; 627900, 4561500; 627800, 4561400; 627600, 4561400; returning to 627500, 4561300.

(ii) Start at 634900, 4557900; 634100, 4558300; 633900, 4559000; 633700, 4560000; 634000, 4560800; 634500, 4561300; 634600, 4560900; 635000, 4560700; 635100, 4561000; 635700, 4561000; 636000, 4561100; 637300, 4560000; 637400, 4559300; 637300, 4558900; 636900, 4558700; 636700, 4558300; 636100, 4558000; returning to 634900, 4557900.

(6) Subunit 1B. Shasta County, California. From USGS 1:24,000 quadrangle maps Burney Falls, and Dana, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 616900, 4549000; 616800, 4549000; 615900, 4549500; 615700, 4549800; 615600, 4549900; 615600, 4550000; 615500, 4550100; 615400, 4550200; 615300, 4550400; 615300, 4550600; 615600, 4550700; 615900, 4550700; 616200, 4550500; 616400, 4550300; 616700, 4550100; 616800, 4549800; 617000, 4549400; 617100, 4549100; returning to 616900, 4549000.

(7) Subunit 1C. Shasta County, California. From USGS 1:24,000 quadrangle map Burney, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 612800, 4536000; 612700, 4536000; 612600, 4536100; 612600, 4536200; 612500, 4536300; 612500, 4536500; 612300, 4536500; 612300, 4536700; 612300, 4537100; 612500, 4537400; 612500, 4537600; 612600, 4537700; 612700, 4537700; 612900, 4537800; 613000, 4537900; 613000, 4538100; 612900, 4538300; 612900, 4538500; 613000, 4538600; 613100, 4538800; 613400, 4538900; 613600, 4539000; 613700, 4539100; 613800, 4539100; 613900, 4539100; 614000, 4539000; 614100, 4538900; 614200, 4538800; 614400, 4538700; 614400, 4538600; 614300, 4538500; 614100, 4538400; 614000, 4538400; 613800, 4538300; 613600, 4538100; 613400, 4537900; 613400, 4537700; 613400, 4537500; 613200, 4537400; 613200, 4537100; 613100, 4536800; 613000, 4536500; 613000, 4536200; returning to 612800, 4536000.

(8) Subunit 1D: Shasta County, California. From USGS 1:24,000 quadrangle map Burney, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 611900, 4529900; 611700, 4529900; 611500, 4529900; 611000, 4529900; 610500, 4530200; 610400, 4530300; 610200, 4530400; 610200, 4530600; 610300, 4530900; 610600, 4531100; 610500, 4531400; 610200, 4531600; 610200, 4531800; 610100, 4532200; 610100, 4532600; 610000, 4532800; 610000, 4533000; 609900, 4533200; 609900, 4533500; 609700, 4533900; 609600, 4534100; 609600, 4534300; 609600, 4534600; 609600, 4534800; 609600, 4535200; 609500, 4535300; 609300, 4535400; 609100, 4535500; 608800, 4535600; 608600, 4535600; 608300,

4535700; 608200, 4535800; 608000, 4535800; 608100, 4536000; 609700, 4536000; 610300, 4535500; 610500, 4535000; 610600, 4534600; 610500, 4533700; 610800, 4532700; 611000, 4532500; 611000, 4532400; 611100, 4532100; 611300, 4531900; 611500, 4531600; 611500, 4531400; 611600, 4531200; 611800, 4531100; 612000, 4531000; 612200, 4530800; 612200, 4530500; 612100, 4530100; returning to 611900, 4529900.

(9) Subunit 1E: Shasta County, California. From USGS 1:24,000 quadrangle maps Murken Bench and Old Station, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 634800, 4510800; 634600, 4511200; 634400, 4511400; 634600, 4512400; 634200, 4512800; 634300, 4513000; 634400, 4512900; 634800, 4512900; 635100, 4513200; 635800, 4513200; 636000, 4513100; 636000, 4512800; 636000, 4512400; 635600, 4512100; 635500, 4511700; 635500, 4511400; 635400, 4511200; 635100, 4510900; returning to 634800, 4510800.

(10) Subunit 1F. Lassen, and Shasta Counties, California. From USGS 1:24,000 quadrangle maps Poison Lake, and Swains Hole, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at 644800, 4500100; 644300, 4500300; 643500, 4500400; 642400, 4500800; 641500, 4501500; 641200, 4502700; 641300, 4502900; 641600, 4502900; 641700, 4503100; 642100, 4503100; 642100, 4503200; 642500, 4503300; 642700, 4503300; 643000, 4503400; 643200, 4503500; 643400, 4503600; 644000, 4503500; 644100, 4503500; 644200, 4503400; 644400, 4503300; 645000, 4503400; 645200, 4503200; 645200, 4502900; 645500, 4502200; 645500, 4501700; 645300, 4501300; 645300, 4500600; 645200, 4500200; returning to 644800, 4500100.

(ii) Start at 648700, 4503600; 648100, 4504000; 647400, 4505400; 647800, 4505900; 647500, 4506600; 647700, 4507200; 648800, 4507600; 649500, 4507400; 650300, 4507600; 651200, 4507700; 651500, 4507600; 651800, 4506500; 652200, 4505700; 651700, 4504900; 651500, 4505100; 650800, 4504400; 650300, 4504700; 649500, 4504900; 648800, 4504600; 648900, 4503800; returning to 648700, 4503600.

(11) Subunit 1G. Lassen County, California. From USGS 1:24,000 quadrangle maps Bogard Buttes, Harvey Mountain, Pine Creek Valley, and Poison Lake, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 661100, 4497700; 659900, 4497900; 659300, 4497700; 657500, 4499000; 655500, 4500700; 655000, 4501200; 654900, 4501700; 655100, 4501600; 655600, 4501800; 656600, 4502600; 656700, 4502800; 657700, 4503200; 658700, 4503200; 660000, 4503600; 661300, 4504400; 662200, 4505000; 662900, 4505100; 663600, 4504700; 664200, 4504500; 664400, 4504300; 664400, 4503100; 664100, 4503000; 662800, 4502300; 661600, 4501100; 661300, 4499600; 660800, 4498800; 660700, 4498600; 660700, 4498200; 660800, 4498000; 661000, 4498000; returning to 661100, 4497700.

(12) Subunit 1H. Shasta County, California. From USGS 1:24,000 quadrangle maps Old Station, and West Prospect, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 630400, 4492700; 629900, 4493100; 629300, 4493500; 629100, 4493700; 629300, 4494200; 629500, 4494700; 629400, 4494800; 629400, 4495200; 629700, 4495500; 630500, 4495700; 630500, 4496500; 631700, 4497100; 631700, 4497600; 631800, 4498000; 631900, 4498200; 632000, 4498400; 632100, 4498400; 632400, 4498400; 633900, 4497900; 634200, 4496800; 634200, 4496700; 634100, 4496600; 634100, 4496300; 634400, 4496100; 634400, 4495800; 634600, 4495600; 634600, 4495400; 634800, 4495400; 635000, 4495200; 635000, 4494900; 635200, 4494800; 635200, 4494500; 635100, 4494400; 634800, 4494000; 635100, 4493500; 635000, 4493400; 635200, 4493100; 634900, 4492900; 634300, 4492900; 634300, 4493700; 634100, 4493900; 634100, 4494100; 633600, 4494400; 632500, 4495100; 631900, 4495300; 631300, 4495200; 631000, 4495000; 630700, 4494500; 630500, 4494000; 630500, 4493400; 630400, 4493300; returning to 630400, 4492700.

(13) Subunit 1I: Plumas County, California. From USGS 1:24,000 quadrangle map Almanor, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 655400, 4452100; 655000, 4452100; 654900,4452500; 654400, 4452700; 654100, 4453000; 653900, 4453200; 653700, 4453200; 653400, 4453000; 652600, 4453000; 652300, 4453500; 651900, 4453700; 651600, 4454400; 651600, 4454700; 652000, 4455400; 652400, 4455500; 652700, 4455700; 653200, 4455300; 653000, 4455100; 653000, 4454800; 653300, 4454400; 653500, 4454100; 653900, 4453900; 654500, 4453700; 654900, 4453400; 655300, 4452900; 655400, 4452600; returning to 655400, 4452100.

(14) Subunit 2A: Shasta County, California. From USGS 1:24,000 quadrangle map Enterprise, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 558800, 4488900; 558500, 4488900; 558000, 4489000; 558000, 4489800; 558100, 4489800; 558300, 4489900; 558200, 4490100; 558000, 4490100; 558000, 4491700; 558500, 4491700; 558900, 4491600; 559100, 4491300; 559100, 4490700; 559000, 4490600; 559000, 4490400; 559200, 4490200; 559200, 4490000; 559400, 4489800; 559400, 4489300; 559200, 4489000; returning to 558800, 4488900.

(15) Subunit 2B: Shasta County, California. From USGS 1:24,000 quadrangle maps Balls Ferry, Cottonwood, Enterprise, and Palo Cedro, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at 564200, 4480900; 563600, 4480900; 563300, 4481000; 563100, 4480900; 562900, 4480900; 562500, 4481200; 562400, 4481500; 562400, 4481700; 562300, 4482400; 562000, 4482500; 561900, 4482800; 561800, 4483300; 561500, 4483700; 561000, 4484000; 560700, 4485400; 560700, 4486500; 560800, 4486700; 561000, 4486900; 561200, 4487000; 561300, 4487600; 561600, 4487900; 562000, 4487900; 562500, 4487400; 562700, 4487100; 562900, 4487200; 563200, 4487200; 563300, 4487000; 563300, 4486700; 563800, 4486400; 564300, 4484700; 564300, 4484400; 564500, 4484100; 564500, 4483800; 564600, 4483700; 564600, 4483400; 564400, 4483100; 564100, 4482800; 564100, 4482600; 564300, 4482600; 564300, 4482400; 564300, 4482300; 564200, 4482200; 564100, 4482100; 564000, 4482100; 564200, 4481800; returning to 564200, 4480900; excluding land bounded by 562900, 4485000; 562100, 4485000; 562100, 4485372; 562100, 4485400; 561700, 4485400; 561700, 4485400; 561700, 4485779; 561700, 4485800; 561300, 4485800; 561300, 4484100;

562100, 4484100; 562300, 4484010; 562300, 4484000; 562300, 4483803; 562300, 4483800; 562304, 4483794; 562500, 4483500; 562500, 4483500; 562400, 4483500; 562400, 4483500; 562400, 4482600; returning to 562900, 4482600.

(ii) Start at 559900, 4482000; 559400, 4482000; 558900, 4482400; 558900, 4482900; 558900, 4483600; 558300, 4483600; 558200, 4483900; 558200, 4484500; 558000, 4484800; 558000, 4485100; 558000, 4485300; 557800, 4485600; 557600, 4485900; 557300, 4486100; 557300, 4487400; 559000, 4487400; 559000, 4486800; 559000, 4484000; 559300, 4484000; 559300, 4483900; 559500, 4483900; 559800, 4483600; 560700, 4483600; 560900, 4483500; 560500, 4483500; 560500, 4482600; 560100, 4482500; 559900, 4482500; returning to 559900, 4482000.

(16) Subunit 2C: Shasta County, California. From USGS 1:24,000 quadrangle maps Balls Ferry, and Palo Cedro, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 566900, 4477300; 566700, 4477300; 566100, 4478200; 565900, 4478900; 565500, 4479200; 565500, 4479300; 565600, 4479600; 565300, 4479700; 565300, 4479900; 565400, 4480200; 566100, 4480400; 566100, 4480700; 565700, 4480800; 565700, 4481000; 565700, 4481300; 565700, 4481700; 565500, 4482500; 565100, 4482600; 564900, 4482900; 564900, 4483100; 565000, 4483300; 565400, 4483800; 565700, 4484900; 566400, 4485400; 567400, 4485000; 568100, 4483800; 568100, 4483300; 568400, 4483000; 568400, 4482100; 568200, 4481600; 567500, 4481300; 567500, 4480200; 567700, 4479400; 567700, 4478400; 567500, 4477800; returning to 566900, 4477300.

(17) Unit 3: Shasta and Tehama Counties, California. From USGS 1:24,000 quadrangle maps Balls Ferry, Bend, Dales, Red Bluff East, Shingletown, and Tuscan Buttes NE, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 570200, 4454800; 570200, 4455000; 570600, 4455900; 570000, 4456100; 569500, 4456300; 569300, 4456500; 568900, 4456500; 568600, 4456500; 568000, 4456800; 567900, 4457100; 567900, 4458000; 568400, 4458800; 569100, 4459800; 569600, 4460500; 569500, 4460800; 569000, 4460600; 568300, 4460700; 567500, 4460700; 566800, 4460000; 566400, 4460000; 565900, 4461100; 565800, 4461400; 565800, 4461700; 566000, 4462000; 565800, 4462300; 565900, 4462400; 565800, 4462500; 565900, 4462600; 565800, 4462800; 565900, 4462900; 565900, 4463000; 566000, 4463100; 566300, 4463100; 566500, 4463300; 566500, 4463600; 566700, 4463700; 566800, 4463700; 566900, 4463600; 567100, 4463500; 567200, 4463600; 567600, 4463400; 568300, 4463200; 569800, 4463200; 570600, 4463900; 570800, 4464300; 572000, 4465200; 572000, 4466300; 572100, 4466600; 572800, 4467300; 573500, 4468600; 573400, 4469000; 573100, 4469400; 572900, 4469600; 572600, 4469600; 571800, 4468800; 571400, 4468100; 571000, 4467900; 571000, 4468700; 571200, 4468700; 571100, 4469200; 571200, 4469500; 571200, 4470500; 570500, 4470900; 570300, 4471000; 570100, 4471000; 569800, 4470900; 569600, 4471000; 569400, 4471400; 569400, 4471800; 569700, 4471900; 569600, 4472000; 569900, 4472200; 570200, 4472100; 570500, 4472000; 570800, 4472200; 570900, 4472100; 571000, 4472100; 571300, 4472200; 571700, 4472200; 571900, 4472200; 572200, 4472300; 572500, 4472100; 573900, 4472100; 574300, 4473200; 575100, 4473200; 575600, 4473500; 576000, 4473900; 576600, 4473900; 577300, 4473900; 577700, 4474200; 578600, 4474200; 579300, 4474400; 580000, 4474400; 580600, 4474700; 581900, 4474700; 582400, 4475300; 583000, 4475400; 583200, 4475400; 583700, 4475000; 584200, 4475200; 584600, 4475200; 585400, 4474500; 586000, 4473600; 586100, 4473400; 585800, 4472600; 585500, 4472100; 584800, 4471900; 584500, 4471600; 584500, 4471400; 584700, 4471100; 584700, 4470800; 584500, 4470500; 583400, 4469700; 583100, 4469400; 582600, 4468500; 582600, 4467600; 582700, 4466900; 582700, 4466700; 581900, 4465800; 581000, 4465500; 580600, 4465200; 580400, 4464000; 580200, 4463300; 578900, 4462700; 578500, 4462300; 578100, 4462000; 577800, 4460900; 577700, 4460000; 576700, 4459300; 576600, 4458800; 576800, 4458300; 576800, 4457100; 576400, 4456700; 575500, 4456800; 574900, 4456800; 574100, 4455900; 573500, 4455600; 572300, 4455300; 572000, 4455300; 571600, 4455600; 571400, 4455400; 571100, 4454900; 570600, 4454900; returning to 570200, 4454800.

(18) Unit 4: Butte, and Tehama Counties, California. From USGS 1:24,000 quadrangle maps Acorn Hollow, Foster Island, Los Molinos, Nord, Richardson Springs NW, and Vina, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at 588700, 4429900; 588200, 4426500; 587900, 4426300; 587900, 4426800; 587800, 4426900; 587900, 4427000; 588000, 4427300; 587900, 4427300; 587800, 4427200; 587600, 4426800; 587500, 4426600; 587400, 4426400; 587200, 4426200; 586700, 4425700; 586500, 4425700; 586200, 4425400; 585900, 4425400; 585800, 4425400; 585500, 4425600; 584900, 4425600; 584900, 4425400; 584900, 4425200; 585000, 4425000; 584800, 4425000; 584600, 4424900; 584500, 4424900; 584300, 4425000; 584100, 4425000; 583900, 4425200; 583700, 4425400; 583400, 4425500; 583300, 4425500; 583300, 4425300; 583100, 4425300; 583000, 4425400; 582900, 4425200; 582800, 4425000; 582700, 4424800; 582700, 4424600; 582600, 4424500; 582600, 4424200; 582400, 4424100; 582300, 4423800; 582100, 4423600; 582100, 4423500; 581300, 4422800; 581000, 4422600; 580600, 4422800; 580200, 4423800; 579900, 4424500; 579700, 4424800; 579500, 4425400; 579700, 4425600; 580100, 4425600; 580800, 4426400; 581700, 4427000; 582300, 4427000; 582300, 4426900; 582400, 4426800; 582500, 4426800; 582700, 4426700; 582800, 4426700; 583500, 4426800; 583900, 4426900; 584000, 4427000; 584200, 4427100; 584600, 4427600; 584800, 4427900; 585100, 4428200; 585900, 4428500; 586300, 4428500; 586900, 4428900; 587300, 4429100; 588300, 4429600; 588500, 4430000; returning to 588700, 4429900.

(ii) Start at 588700, 4429900; 588900, 4429500; 589500, 4429500; 589500, 4428600; 589500, 4428000; 589800, 4427100; 590500, 4426400; 590500, 4425300; 591200, 4424400; 591500, 4423300; 591600, 4422100; 590900, 4420900; 590700, 4419800; 588000, 4417000; 587500, 4416400; 587200, 4415500; 587200, 4415100; 587300, 4415000; 587300, 4414500; 587200, 4414400; 587100, 4414300; 586900, 4414000; 586400, 4413900; 586200, 4413700; 586000, 4413600; 585800, 4413600; 585800, 4414700; 585300, 4414700; 585300, 4413800; 585200, 4413700; 584800, 4413700; 584600, 4413600; 584400, 4413600; 584200, 4413500; 584000, 4413700; 583200, 4413400; 583000, 4414200; 583700, 4414600; 583500, 4415000; 583000, 4415900; 583000, 4416400;

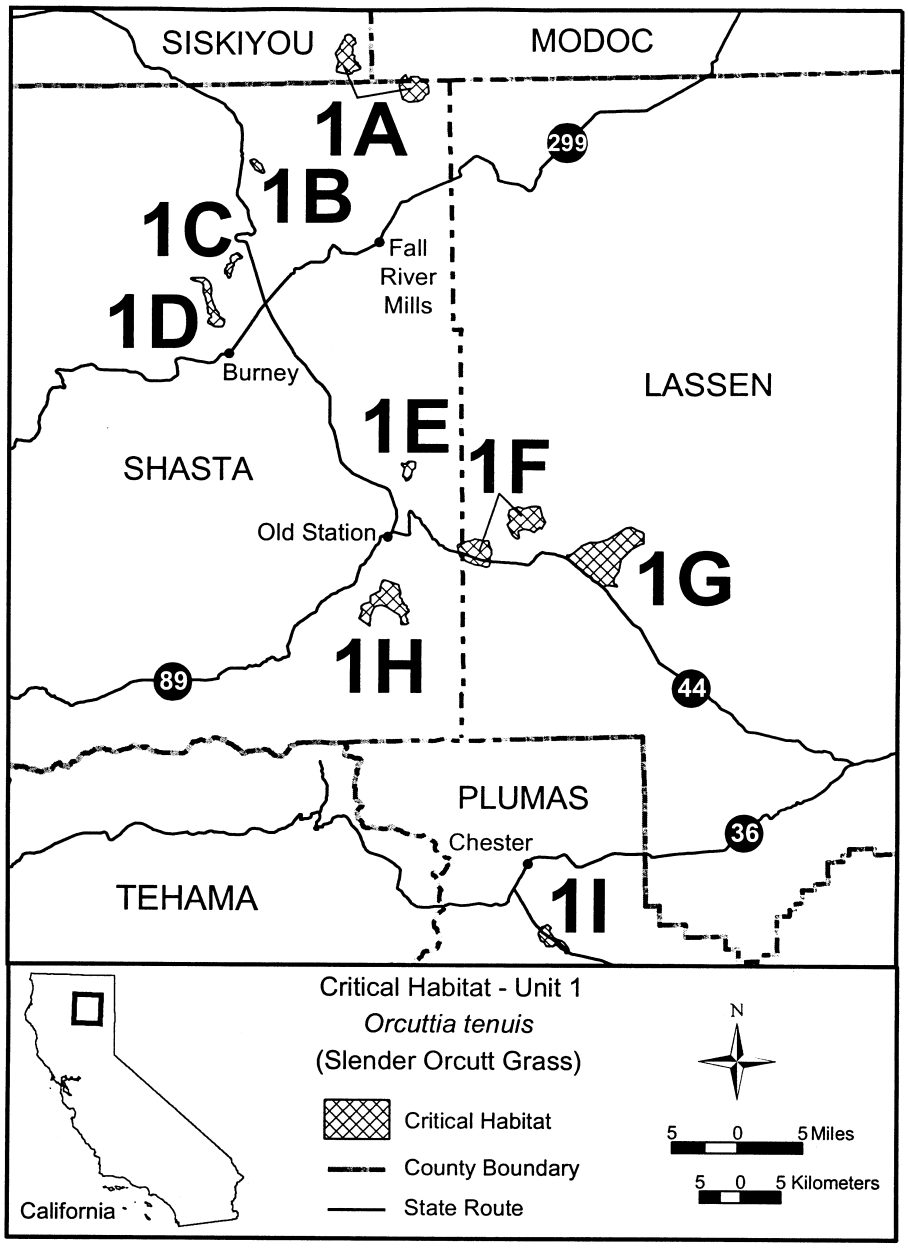
582900, 4416700; 582800, 4416900; 582700, 4417000; 582700, 4417200; 582900, 4417300; 582800, 4417400; 582700, 4417500; 582700, 4417600; 582600, 4417700; 582600, 4418000; 582600, 4418100; 582600, 4418200; 582700, 4418300; 582500, 4418400; 582400, 4418300; 582200, 4418300; 582100, 4418400; 582100, 4418500; 582000, 4418600; 582100, 4418700; 582100, 4418900; 582200, 4419100; 582100, 4419300; 582200, 4419500; 582100, 4419600; 582000, 4419700; 582100, 4419800; 582100, 4419900; 582200, 4420000; 582200, 4420300; 582100, 4420500; 582200, 4420600; 582200, 4420800; 582300, 4421100; 582900, 4421500; 582900, 4421600; 583300, 4422000; 583400, 4422100; 583900, 4422100; 584100, 4422300; 584200, 4422300; 584300, 4422400; 584400, 4422500; 584600, 4422900; 585100, 4423400; 585600, 4423700; 585800, 4423900; 585800, 4424200; 586100, 4424200; 586600, 4424800; 586800, 4424900; 587300, 4425500; 587400, 4425600; 587500, 4425800; 587500, 4425900; 587600, 4426000; 587700, 4426100; 587800, 4426100; 587900, 4426200; 587900, 4426300; 588200, 4426500; returning to 588700, 4429900.

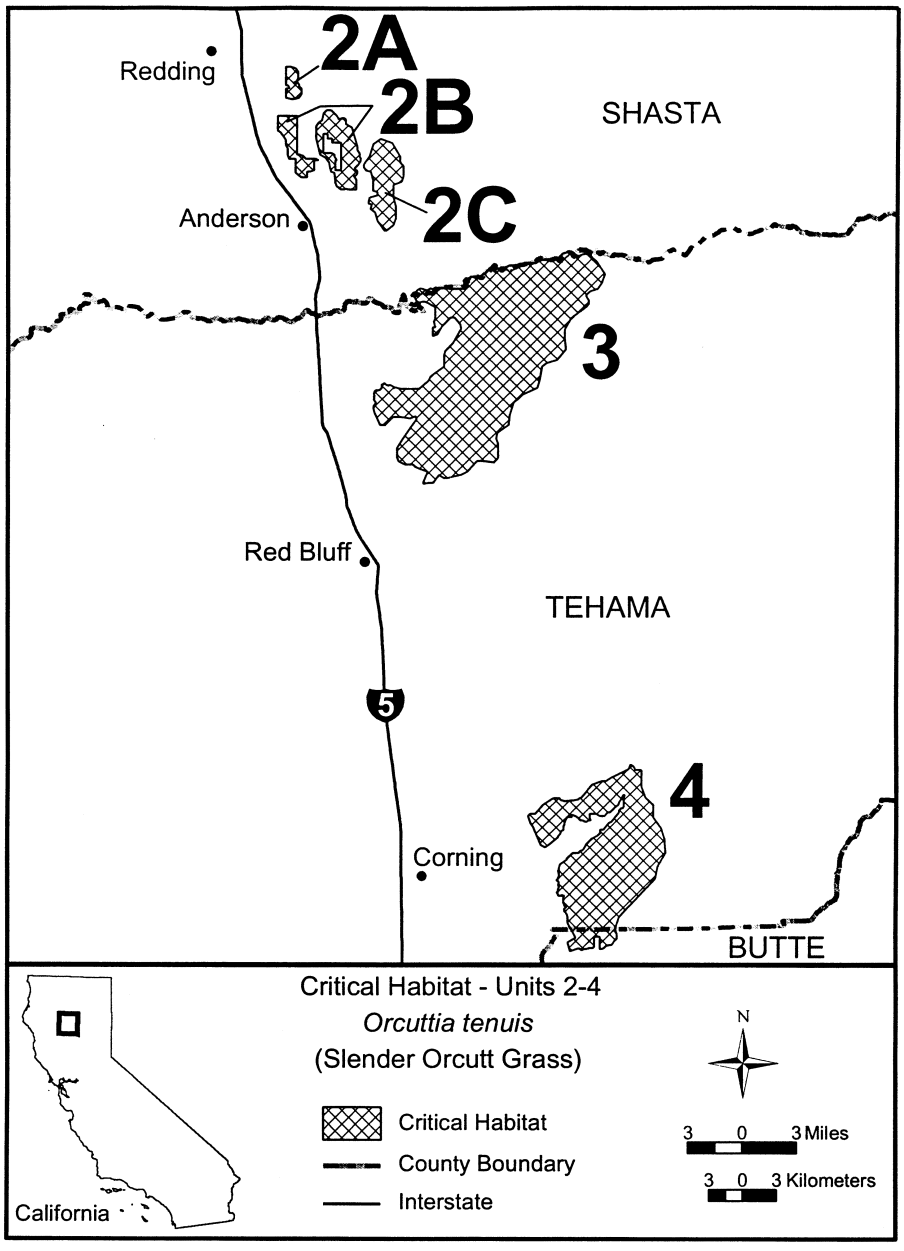
(19) Subunit 5A: Lake County, California. From USGS 1:24,000 quadrangle maps Kelseyville, and The Geysers, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 520000, 4302900; 519600, 4302900; 519200, 4303200; 518600, 4303600; 518400, 4304000; 517700, 4304500; 517700, 4305500; 518000, 4305800; 518900, 4305800; 519400, 4305600; 519400, 4305200; 520600, 4304700; 520700, 4304400; 521200, 4303900; 521200, 4303500; 520900, 4303400; returning to 520000, 4302900.

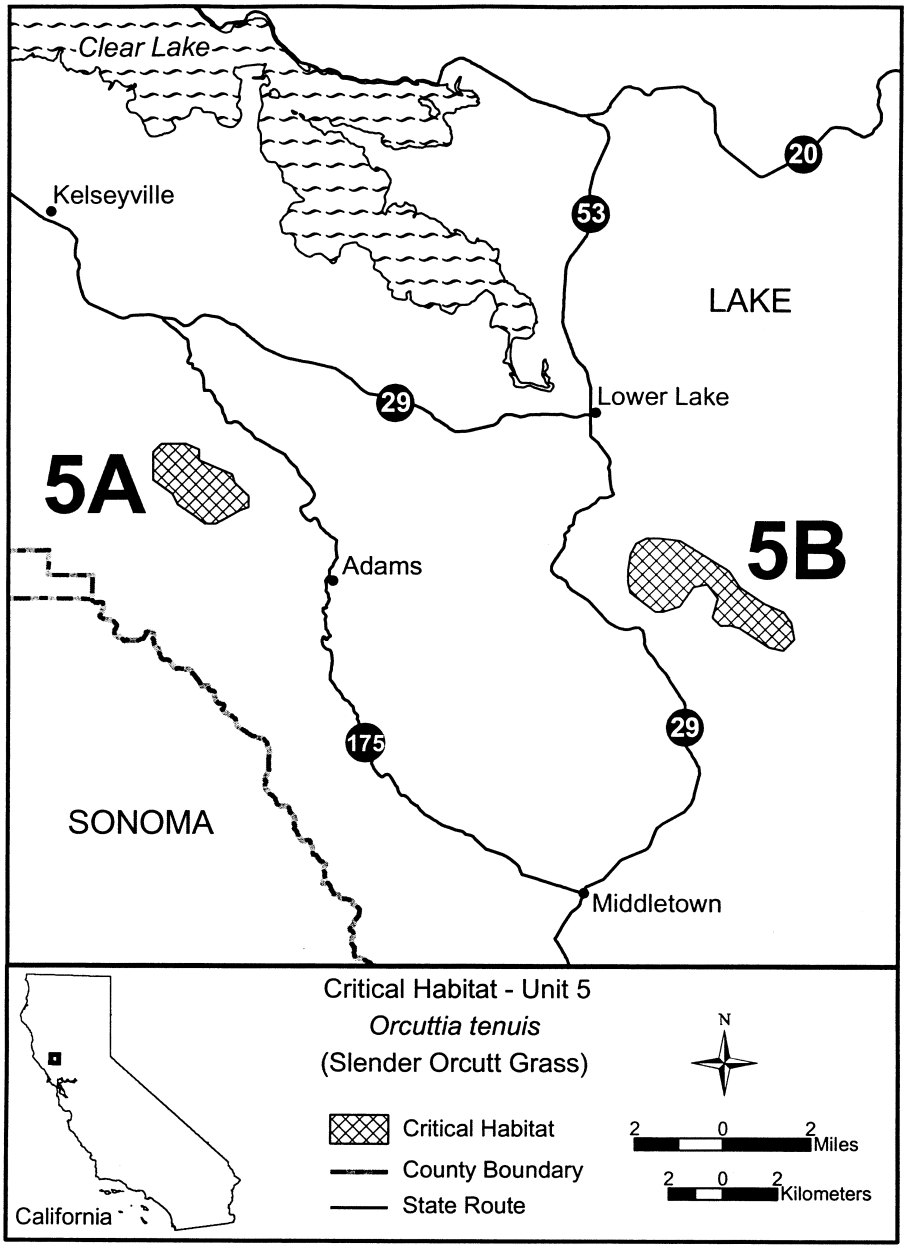
(20) Subunit 5B: Lake County, California. From USGS 1:24,000 quadrangle maps Middletown, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 540700, 4298300; 540200, 4298400; 539100, 4299100; 538800, 4299200; 538400, 4299200; 538100, 4299500; 538300, 4300200; 537900, 4300700; 537400, 4300600; 536900, 4299900; 536300, 4299700; 536000, 4299700; 535100, 4300400; 535000, 4300800; 535000, 4301200; 535100, 4301800; 535300, 4302200; 535700, 4302400; 536100, 4302400; 536900, 4302300; 538700, 4301200; 539100, 4300600; 540000, 4300000; 540700, 4299700; 541000, 4299300; 541100, 4298700; returning to 540700, 4298300.

(21) Unit 6: Sacramento County, California. [Reserved]

(22) Maps follow of critical habitat unit 1, 2 through 4, and 5 (respectively) for slender Orcutt grass.


SISKIYOU
MODOC
1A
1B
1C
1D
299
Fall
River
Mills
Burney
LASSEN
1E
1F
SHASTA
Old Station
1G
1H
89
44
PLUMAS
Chester
36
TEHAMA
1I
Critical Habitat - Unit 1
Orcuttia tenuis
(Slender Orcutt Grass)
Critical Habitat
County Boundary
State Route
California
N
5 0 5 Miles
5 0 5 Kilometers


2A
2B
2C
3
4
Redding
Anderson
Red Bluff
Corning
SHASTA
TEHAMA
BUTTE
5
Critical Habitat - Units 2-4
Orcuttia tenuis
(Slender Orcutt Grass)
Critical Habitat
County Boundary
Interstate
N
3 0 3 Miles
3 0 3 Kilometers
California



Family Poaceae: *Orcuttia viscida* (Sacramento Orcutt Grass).

(1) Critical habitat units are depicted for Amador County, California, on the map below.

(2) The primary constituent elements of critical habitat for *Orcuttia viscida* are the habitat components that provide:

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Orcuttia viscida* germination, growth and reproduction, including but not limited to vernal pools on high terrace landforms on acidic soils such as Red Bluff, Redding, and Corning soil series. These habitats typically become inundated during winter rains, but are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil moisture for *Orcuttia viscida* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aquaducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

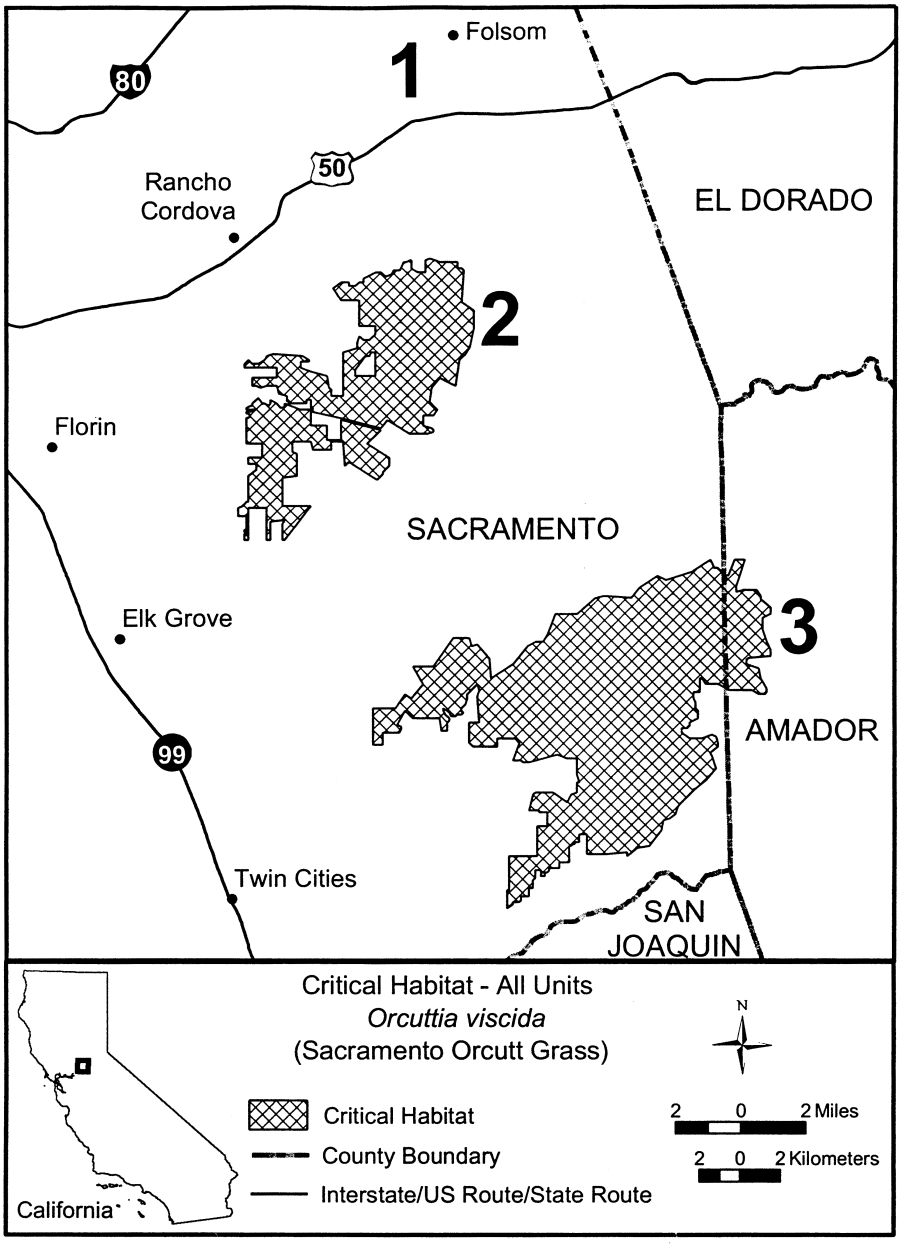
(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

(5) Unit 1: Sacramento County, California. [Reserved]

(6) Unit 2: Sacramento County, California. [Reserved]

(7) Unit 3: Amador and Sacramento Counties, California. From USGS 1:24,000 quadrangle maps Carbondale, Clay, Goose Creek, and Sloughhouse, California land bounded by the following UTM 10 NAD 83 coordinates (E N): 661400, 4239000; 661400, 4239900; 661500, 4239900; 661500, 4241600; 662900, 4241600; 662900, 4243100; 663400, 4243100; 663400, 4243800; 663000, 4243800; 663000, 4243900; 662500, 4243900; 662700, 4244700; 662850, 4244800; 663700, 4244800; 664400, 4244300; 664600, 4244700; 664900, 4244800; 664900, 4245275; 665000, 4245300; 664900, 4245700; 664900, 4246500; 664400, 4246500; 663900, 4246700; 662500, 4246300; 662200, 4246300; 662100, 4246400; 661700, 4246400; 662000, 4247300; 661800, 4247500; 660900, 4247500; 660850, 4247100; 659700, 4247100; 659500, 4247300; 659500, 4248300; 660000, 4248300; 659900, 4249600; 660000, 4249900; 659900, 4250200; 659400, 4249700; 659400, 4249500; 659300, 4249200; 659100, 4249000; 659100, 4248900; 659200, 4248800; 659100, 4248700; 658900, 4248700; 658800, 4248600; 658600, 4248600; 658500, 4248800; 658400, 4248900; 658200, 4249000; 658200, 4248900; 658300, 4248700; 658500, 4248500; 658500, 4248400; 658400, 4248300; 658400, 4247900; 658100, 4247900; 658000, 4248500; 656700, 4248500; 656300, 4248900; 655900, 4248200; 656100, 4248100; 656100, 4248000; 656000, 4247800; 655200, 4247800; 655200, 4247200; 654700, 4247200; 654700, 4248750; 654700, 4249000; 655100, 4249000; 655800, 4249000; 656300, 4249700; 656600, 4249500; 657200, 4250200; 656700, 4251100; 657700, 4251100; 658700, 4252500; 659500, 4252500; 659600, 4252100; 659900, 4252200; 660500, 4251500; 660600, 4250500; 661700, 4251200; 662400, 4252100; 662800, 4252300; 663200, 4252300; 663400, 4252700; 663800, 4253700; 664900, 4253700; 665800, 4254500; 666200, 4254600; 667600, 4254500; 668000, 4255000; 668900, 4255600; 669300, 4255400; 670600, 4255800; 671500, 4256400; 671700, 4256000; 671900, 4256000; 672200, 4255600; 672400, 4255600; 672700, 4256400; 673200, 4256400; 672800, 4255100; 672800, 4254800; 673100, 4254900; 673800, 4254900; 674000, 4254600; 674000, 4254400; 674500, 4254000; 674500, 4253700; 674100, 4253500; 674100, 4252900; 674300, 4252300; 674500, 4251900; 674500, 4251600; 673400, 4251500; 673300, 4251400; 673300, 4251200; 673900, 4251000; 674000, 4250500; 674300, 4250000; 674300, 4249800; 674200, 4249700; 673900, 4249700; 673600, 4249900; 672500, 4249900; 671900, 4250200; 671300, 4250200; 671100, 4250500; 671000, 4250500; 671000, 4249800; 670700, 4249800; 670700, 4249500; 670800, 4249300; 670800, 4249000; 670900, 4248900; 670900, 4248500; 670500, 4248300; 670500, 4248125; 670400, 4248100; 670400, 4248000; 670100, 4248000; 670100, 4247800; 670500, 4247500; 671100, 4247500; 671600, 4247700; 671800, 4247600; 671900, 4247300; 671900, 4247100; 671500, 4246800; 671600, 4246600; 671800, 4246000; 671300, 4245400; 670800, 4245000; 670000, 4244200; 669900, 4244100; 669800, 4243700; 669500, 4243500; 669200, 4243400; 669100, 4242900; 668500, 4242100; 667900, 4242000; 667400, 4241600; 667400, 4241800; 666400, 4241700; 665400, 4241700; 665400, 4242700; 665000, 4242700; 665000, 4242300; 664800, 4242300; 664800, 4242200; 664700, 4242200; 664600, 4242100; 664500, 4242100; 664500, 4241300; 664000, 4241300; 664000, 4241000; 663500, 4241000; 663500, 4240900; 663400, 4240800; 663300, 4240800; 663300, 4240600; 663100, 4240600; 663100, 4240900; 662800, 4240900; 662800, 4240500; 662700, 4240400; 662700, 4240000; 662500, 4240000; 662500, 4239600; 662100, 4239600; 662100, 4239400; 662000, 4239300; 661700, 4239300; 661700, 4239200; returning to 661400, 4239000.

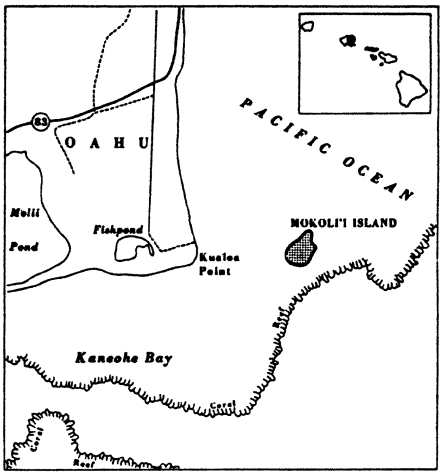
(8) Maps follow of critical habitat for units 1 through 3 for Sacramento Orcutt grass.



Family Poaceae: *Panicum faurei var. carteri* (Carter's panicgrass) Hawaii: City and County of Honolulu: Entire island of Mokoli'i (see map).

Probable primary constituent elements include: Exposure to strong sunlight; low rainfall; exposure to sea spray; and presence of gravelly, basalt-derived soil.

NOTE: Map follows:



Family Poaceae: *Tuctoria greenei* (Greene's Tuctoria).

(1) Critical habitat units are depicted for Shasta, Tehama, Glenn, Colusa, Stanislaus, Tuolumne, and Mariposa Counties, California, on the map below.

(2) The primary constituent elements of critical habitat for *Tuctoria greenei* are the habitat components that provide:

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Tuctoria greenei* germination, growth and reproduction, including but not limited to, Northern Claypan, Northern Hardpan and Northern Basalt flow vernal pools, that typically become inundated during winter rains, but are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil moisture for *Tuctoria greenei* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aqueducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

(5) Unit 1: Shasta County, California. From USGS 1:24,000 quadrangle map Merken Bench, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 00, 4521200; 630000, 4521200; 628900, 4522800; 629200, 4523500; 629600, 4523900; 630900, 4524100; 631800, 4523500; 632400, 4522900; 632000, 4521600; 631200, 4521600; 631100, 4521700; 630900, 4521600; 630500, 4521600; 630300, 4521300; returning to 630200, 4521200.

(6) Unit 2: Butte and Tehama Counties, California. From USGS 1:24,000 quadrangle maps Acorn Hollow, Foster Island, Los Molinos, Nord, Richardson Springs NW, and Vina, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 588700, 4429900; 588900, 4429500; 589500, 4429500; 589500, 4428600; 589500, 4428000; 589800, 4427100; 590500, 4426400; 590500, 4425300; 591200, 4424400; 591500, 4423300; 591600, 4422100; 590900, 4420900; 590700, 4419800; 588000, 4417000; 587500, 4416400; 587200, 4415500; 587200, 4415100; 587300, 4415000; 587300, 4414500; 587200, 4414400; 587100, 4414300; 586900, 4414000; 586400, 4413900; 586200, 4413700; 586000, 4413600; 585800, 4413600; 585800, 4414700; 585300, 4414700; 585300, 4413800; 585200, 4413700; 584800, 4413700; 584600, 4413600; 584400, 4413600; 584200, 4413500; 584000, 4413700; 583200, 4413400; 583000, 4414200; 583700, 4414600; 583500, 4415000; 583000, 4415900; 583000, 4416400; 582900, 4416700; 582800, 4416900; 582700, 4417000; 582700, 4417200; 582900, 4417300; 582800, 4417400; 582700, 4417500; 582700, 4417600; 582600, 4417700; 582600, 4418000; 582600, 4418100; 582600, 4418200; 582700, 4418300; 582500, 4418400; 582400, 4418300; 582200, 4418300; 582100, 4418400; 582100, 4418500; 582000, 4418600; 582100, 4418700; 582100, 4418900; 582200, 4419100; 582100, 4419300; 582200, 4419500; 582100, 4419600;

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(7) Unit 3: Butte County, California. [Reserved]

(8) Unit 4: Butte County, California. [Reserved]

(9) Unit 5: Colusa and Glenn Counties, California. [Reserved]

(10) Unit 6: Stanislaus and Tuolumne Counties, California. From USGS 1:24,000 quadrangle maps Cooperstown, Keystone, Knights Ferry, La Grange, Oakdale, Paulsell, and Waterford, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at 708700, 4190000; 709200, 4189300; 709200, 4188600; 710100, 4188200; 709900, 4186700; 708900, 4185800; 708800, 4185000; 709600, 4184200; 710300, 4183900; 710300, 4182900; 711400, 4182100; 712400, 4182100; 713200, 4182000; 714100, 4182600; 715100, 4182600; 715500, 4183400; 715800, 4183400; 716000, 4182700; 716900, 4182700; 717100, 4182500; 717100, 4182000; 716900, 4181300; 717200, 4180900; 717200, 4180600; 716900, 4179900; 717700, 4180100; 718500, 4180000; 718700, 4179200; 719300, 4178700; 719700, 4177600; 720300, 4177700; 720700, 4177700; 720800, 4176400; 721400, 4175900; 722200, 4175300; 722700, 4175200; 722800, 4173600; 723000, 4173500; 723200, 4173600; 723700, 4173600; 724000, 4173300; 724100, 4172300; 722800, 4172200; 721700, 4171200; 721600, 4170700; 721500, 4170500; 721400, 4170400; 721200, 4170300; 721000, 4170100; 721000, 4169600; 720900, 4169600; 720000, 4168500; 718900, 4168000; 718700, 4168100; 718100, 4168500; 718000, 4168500; 717900, 4168600; 716200, 4168600; 715900, 4168500; 715600, 4168300; 715500, 4168200; 715400, 4168300; 715400, 4169400; 714900, 4169900; 714900, 4170000; 715100, 4170000; 715200, 4170200; 715300, 4170200; 715300, 4170400; 715300, 4171200; 715200, 4171200; 715200, 4171000; 715100, 4171000; 715100, 4170700; 714900, 4170700; 714900, 4170300; 713900, 4169800; 713800, 4169900; 713000, 4169500; 712500, 4169400; 712200, 4169400; 712000, 4169600; 711500, 4169900; 711300, 4169900; 710500, 4169100; 709300, 4169100; 709100, 4169500; 709100, 4169700; 708900, 4169700; 708800, 4169900; 708700, 4169900; 708600, 4169800; 708500, 4169900; 708400, 4170000; 708700, 4170200; 708800, 4170300; 708900, 4170400; 709100, 4170500; 709200, 4170600; 709400, 4170600; 709400, 4170800; 709300, 4170800; 709200, 4170900; 709100, 4170800; 708800, 4170700; 708800, 4170600; 708500, 4170500; 708400, 4170300; 708100, 4170200; 707900, 4170200; 707900, 4170300; 708100, 4170500; 708200, 4170500; 708200, 4170600; 708000, 4170600; 708200, 4170800; 708200, 4170900; 708100, 4170900; 707900, 4170700; 707700, 4170700; 707700, 4170800; 707600, 4170900; 707400, 4170900; 707100, 4171100; 707100, 4171200; 707200, 4171300; 707300, 4171200; 707500, 4171300; 707800, 4171600; 707900, 4171600; 708100, 4171600; 708200, 4171700; 708100, 4171800; 708100, 4171900; 708300, 4171900; 708300, 4172100; 708400, 4172100; 708500, 4172200; 708500, 4172300; 708700, 4172400; 708800, 4172500; 708800, 4172600; 708700, 4172700; 708500, 4172700; 708400, 4172800; 708300, 4172700; 708200, 4172700; 708100, 4172600; 708000, 4172500; 707900, 4172500; 707800, 4172700; 707600, 4172600; 707400, 4172500; 707400, 4172600; 707200, 4172700; 707100, 4172300; 707000, 4172200; 706700, 4172200; 706700, 4172300; 706500, 4172300; 706400, 4172300; 706400, 4172400; 706200, 4172600; 706300, 4172700; 706400, 4172800; 706300, 4172800; 706200, 4172800; 706100, 4172900; 705900, 4173100; 705800, 4173300; 705800, 4173500; 706000, 4173800; 705900, 4173900; 705800, 4174100; 705700, 4174200; 705500, 4174200; 705400, 4174100; 705400, 4173700; 705300, 4173500; 705200, 4173200; 705100, 4173200; 705100, 4172600; 704900, 4172400; 704800, 4172100; 704600, 4172100; 704500, 4171900; 704400, 4171800; 704500, 4171600; 704600, 4171400; 704700, 4171500; 704900, 4171200; 704700, 4171100; 704900, 4171000; 704800, 4170900; 704600, 4170900; 704600, 4170700; 704800, 4170200; 705100, 4170200; 705000, 4170100; 705000, 4169600; 705000, 4169500; 704900, 4169400; 704800, 4169300; 704100, 4169300; 703500, 4169500; 703400, 4169600; 703400, 4170100; 703600, 4170200; 703600, 4170300; 703500, 4170300; 703500, 4170600; 703500, 4170700; 703500, 4170800; 703400, 4170900; 703400, 4171300; 703300, 4171400; 703200, 4171500; 703400, 4171500; 703400, 4171800; 703600, 4171800; 703600, 4174000; 704300, 4174000; 704300, 4173700; 705200, 4173700; 705100, 4174700; 705400, 4175400; 705000, 4175900; 705300, 4176300; 705700, 4176700; 705700, 4177000; 705700, 4177500; 705100, 4177500; 705000, 4177300; 704800, 4177300; 704800, 4177100; 704600, 4177100; 704500, 4177200; 704500, 4177400; 704300, 4177500; 704200, 4177300; 704000, 4177300; 703800, 4177100; 703500, 4177300; 703500, 4177800; 703800, 4178200; 704000, 4178200; 704100, 4178100; 704200, 4178100; 704200, 4178400; 703900, 4178400; 703900, 4178800; 703800, 4178900; 703900, 4179100; 703900, 4179200;

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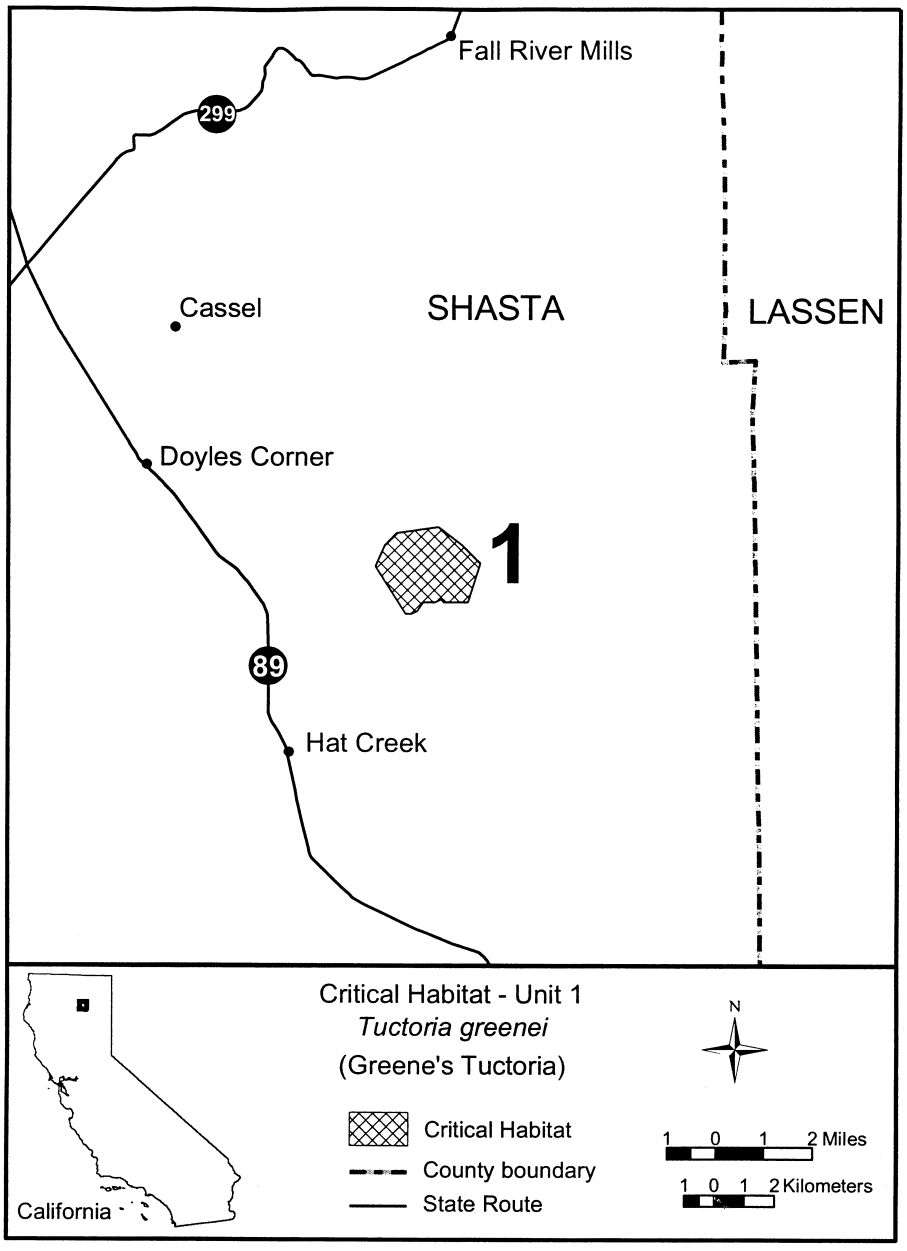
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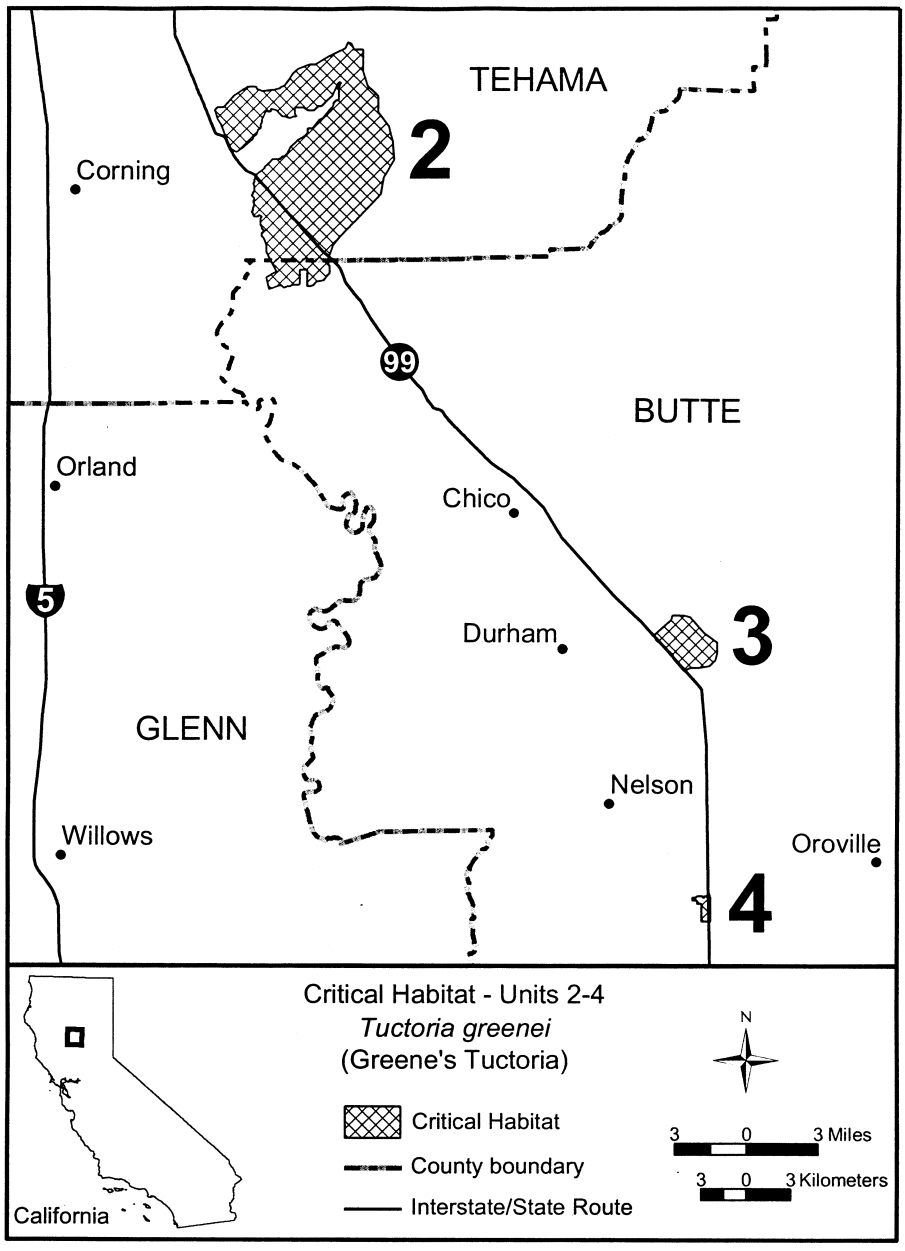
(11) Unit 7: Mariposa and Merced Counties, California. From USGS 1:24,000 quadrangle maps Haystack Mtn., Illinois Hill, Indian Gulch, La Grand, Merced, Merced Falls, Owens Reservoir, Plainsburg, Planada, Raynor Creek, Snelling, Winton, and Yosemite Lake, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 756700, 4123994; 756500, 4123700; 753500, 4122400; 750200, 4122400; 750200, 4121400; 748600, 4121400; 748600, 4121900; 747800, 4121900; 747800, 4123300; 748300, 4123300; 748300, 4123500; 748500, 4123500; 748600, 4123500; 748600, 4123900; 747800, 4123900; 747800, 4124600; 747400, 4125100; 747400, 4125500; 746900, 4125500; 746900, 4125800; 747000, 4125900; 746900, 4125900; 746600, 4125800; 746300, 4125700; 746200, 4125600; 746200, 4125500; 745700, 4125500; 745700, 4125100; 744500, 4125100; 744500, 4125300; 744400, 4125300; 744400, 4125200; 743700, 4125200; 743700, 4125800; 744500, 4125800; 744500, 4126200; 743700, 4126200; 743700, 4127000; 742400, 4127000; 742000, 4127200; 742000, 4128600; 742800, 4128600; 742800, 4129100; 742900, 4129100; 743000, 4129100; 743000, 4129200; 743400, 4129300; 743600, 4129500; 743600, 4130700; 743500, 4130700; 743500, 4130900; 743100, 4130900; 743000, 4130800; 743000, 4130600; 742400, 4130600; 742400, 4130800; 742000, 4130800; 742000, 4131100; 741200, 4131100; 741300, 4131000; 741500, 4131000; 741600, 4130900; 741600, 4130700; 741400, 4130400; 741300, 4130200; 740400, 4130200; 740400, 4130300; 740300, 4130300; 740300, 4131100; 740500, 4131100; 740500, 4131200; 740700, 4131200; 740700, 4131300; 740800, 4131400; 741000, 4131400; 741000, 4131500; 741100, 4131500; 741100, 4131600; 741000, 4131900; 741000, 4132100; 740800, 4132200; 740700, 4132200; 740500, 4132100; 740400, 4132100; 740400, 4132200; 740300, 4132200; 740200, 4132200; 740200, 4132300; 739900, 4132600; 740000, 4132600; 740300, 4132800; 740300, 4133500; 738800, 4133500; 738300, 4133600; 738100, 4133600; 737100, 4133400; 737100, 4134200; 736600, 4134200; 733900, 4134200; 733900, 4134800; 733800, 4134900; 733800, 4135000; 733000, 4135000; 733000, 4135800; 732500, 4135800; 730300, 4135700; 730200, 4135600; 730100, 4135600; 729900, 4135700; 729900, 4136500; 729900, 4136700; 730000, 4136700; 730100, 4136600; 730200, 4136600; 730300, 4136600; 730400, 4136700; 730500, 4136800; 730600, 4136900; 730600, 4137000; 730600, 4137200; 730600, 4137300; 730500, 4137400; 730400, 4137500; 730300, 4137500; 729900, 4137700; 729800, 4137700; 729700, 4137600; 729400, 4137600; 729300, 4137800; 729300, 4138400; 729200, 4138500; 729000, 4138400; 728800, 4138700; 728400, 4138800; 728200, 4138800; 727900, 4138600; 727700, 4138500; 727600, 4138400; 727400, 4138300; 727400, 4137800; 727300, 4137800; 727300, 4137600; 727400, 4137600; 727400, 4137500; 727300, 4137500; 727300, 4137400; 727400, 4137400; 727400, 4137200; 726500, 4137200; 726500, 4136500;

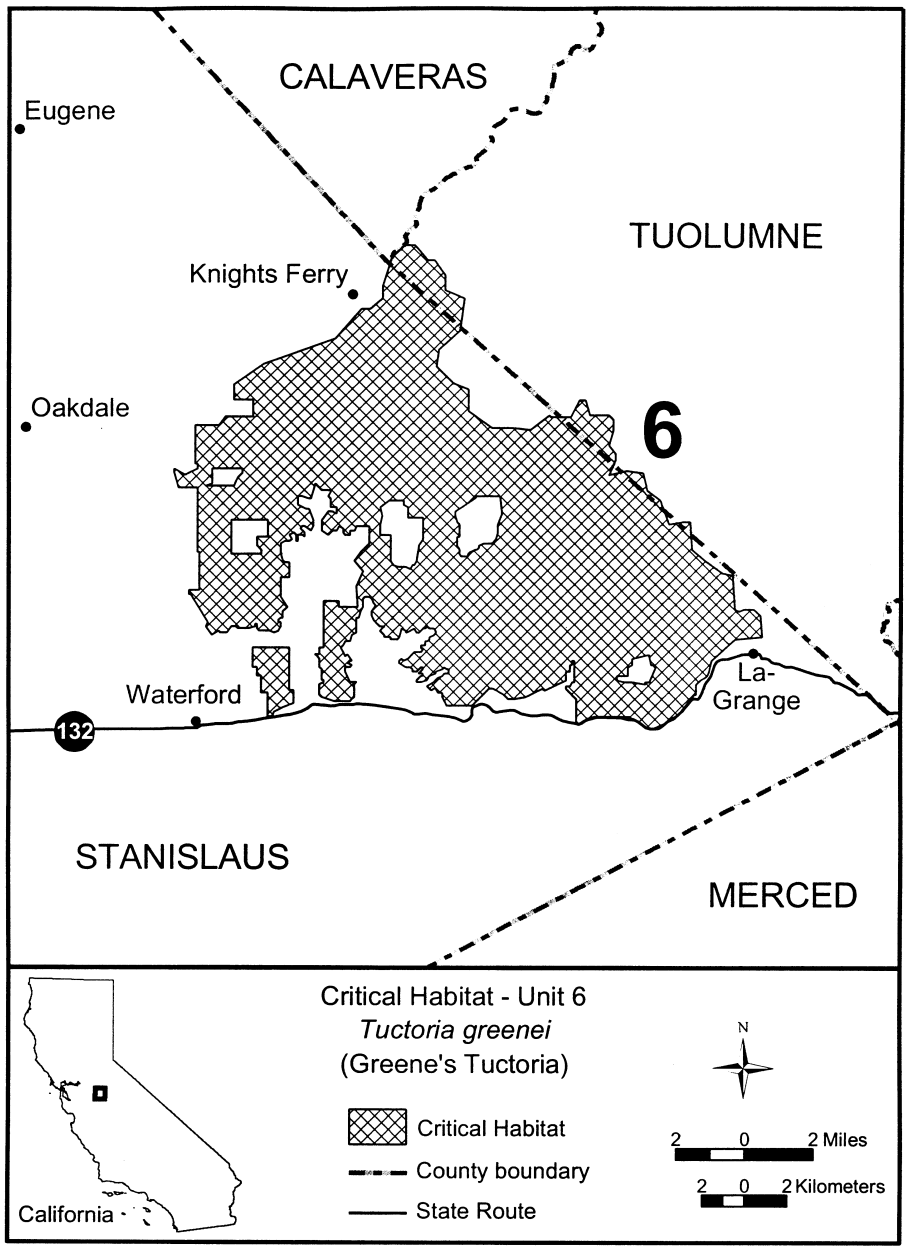
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and excluding land bound by 726700, 4139700; 726400, 4140000; 726600, 4140000; 726800, 4140200; 726900, 4140100; 726900, 4140000; 726800, 4139800; returning to 726700, 4139700; and excluding land bound by 726200, 4138000; 725800, 4138000; 725800, 4138200; 725700, 4138200; 725700, 4138500; 725800, 4138500; 725800, 4138400; 726200, 4138400; returning to 726200, 4138000; and excluding land bound by 727000, 4137600; 726800, 4137600; 726800, 4137800; 726500, 4137800; 726500, 4138000; 727300, 4138100; 727300, 4138000; 727200, 4137900; 727000, 4137800; returning to 727000, 4137600; and excluding land bound by 741100, 4136400; 741000, 4136400; 740900, 4136400; 740700, 4136400; 740500, 4136400; 740300, 4136300; 740000, 4136300; 739800, 4136100; 739700, 4135900; 739500, 4135800; 739200, 4135900; 738900, 4135900; 738700, 4135700; 738500, 4135800; 738300, 4135800; 738200, 4135600; 738000, 4135500; 737900, 4135400; 737700, 4135300; 737400, 4135200; 737300, 4135300; 737300, 4135900; 737600, 4135900; 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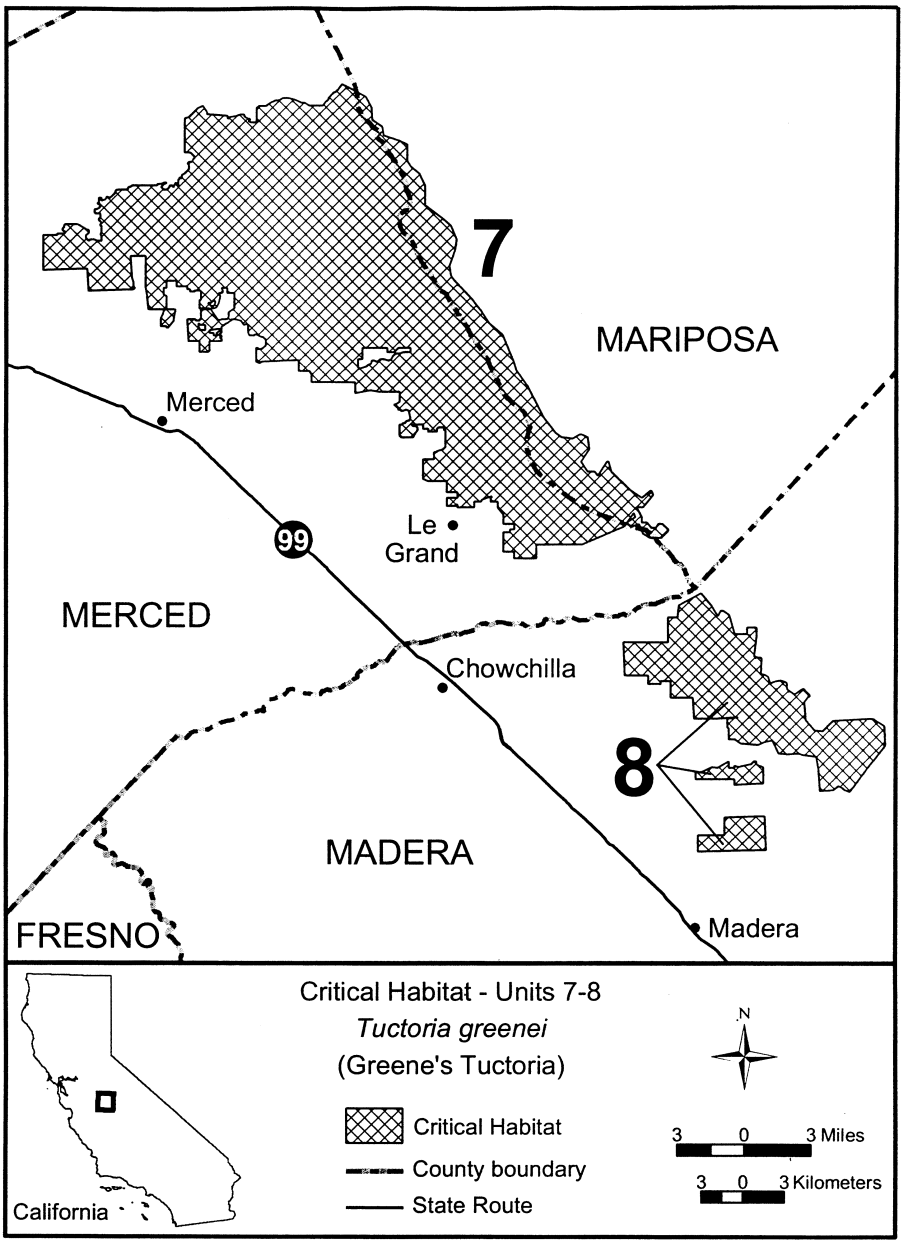
(12) Unit 8: Madera County, California. [Reserved]

(13) Maps follow of critical habitat unit 1, 2 through 4, 6, and 7 and 8 (respectively) on Greene's tuctoria.


Fall River Mills
299
Cassel
SHASTA
LASSEN
Doyles Corner
1
89
Hat Creek
California
Critical Habitat - Unit 1
Tuctoria greenei
(Greene's Tuctoria)
N
Critical Habitat
County boundary
State Route
1 0 1 2 Miles
1 0 1 2 Kilometers


TEHAMA
2
Corning
99
BUTTE
Orland
Chico
5
Durham
3
GLENN
Nelson
Willows
Oroville
4
Critical Habitat - Units 2-4
Tuctoria greenei
(Greene's Tuctoria)
N
Critical Habitat
3 0 3 Miles
County boundary
3 0 3 Kilometers
Interstate/State Route
California


CALAVERAS
Eugene
TUOLUMNE
Knights Ferry
Oakdale
6
Waterford
La-
Grange
132
STANISLAUS
MERCED
California
Critical Habitat - Unit 6
Tuctoria greenei
(Greene's Tuctoria)
Critical Habitat
County boundary
State Route
N
2 0 2 Miles
2 0 2 Kilometers



Family Poaceae: *Tuctoria mucronata* (Solano Grass).

(1) Critical habitat units are depicted for Yolo County, California, on the map below.

(2) The primary constituent elements of critical habitat for *Tuctoria mucronata* are the habitat components that provide:

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Tuctoria mucronata* germination, growth and reproduction, including but not limited to, Northern Claypan vernal pools (Sawyer and Keeler-Wolf 1995) on saline-alkaline clay or silty clay in the Pescadero soil series that typically become inundated during winter rains, but are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil moisture for *Tuctoria mucronata* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aqueducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

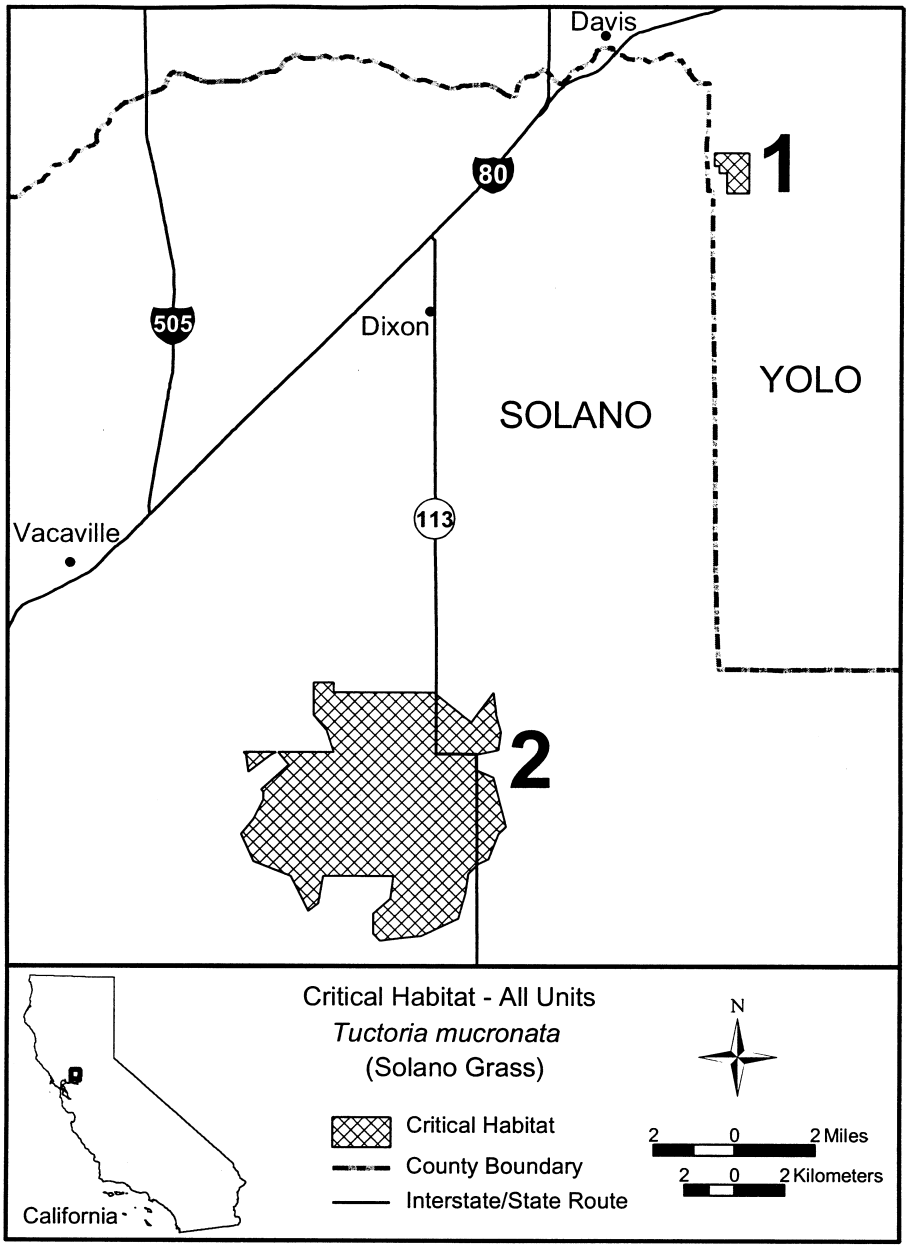
(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

(5) Unit 1: Yolo County, California. From USGS 1:24,000 quadrangle maps Davis, and Saxon, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 615400, 4260700; 614500, 4260700; 614500, 4261500; 614200, 4261500; 614200, 4261800; 614000, 4261800; 614000, 4262300; 615400, 4262300; returning to 615400, 4260700.

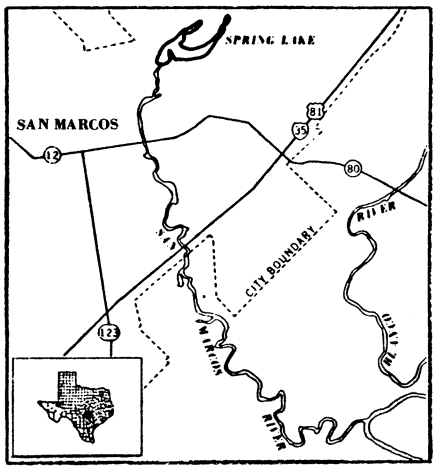
(6) Unit 2: Solano County, California. [Reserved]

(7) Map follows of critical habitat units 1 and 2 for Solano grass.



Family Poaceae: *Zizania texana* (Texas Wild-Rice) Texas, Hays County; Spring Lake and its outflow, the San Marcos River, downstream to its confluence with the Blanco River.

NOTE: Map follows:



Family Polygonaceae: *Chorizanthe pungens* var. *pungens* (Monterey spineflower)

(1) Critical habitat units are depicted for Santa Cruz and Monterey Counties, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Chorizanthe pungens* var. *pungens* are the habitat components that provide:

(i) Sandy soils associated with active coastal dunes, coastal bluffs with a deposition of windblown sand, inland sites with sandy soils, and interior floodplain dunes;

(ii) Plant communities that support associated species, including coastal dune, coastal scrub, grassland, maritime chaparral, oak woodland, and interior floodplain dune communities, and have a structure such that there are openings between the dominant elements (e.g., scrub, shrub, oak trees, clumps of herbaceous vegetation);

(iii) No or little cover by nonnative species which would compete for resources available for growth and reproduction of *Chorizanthe pungens* var. *pungens*; and

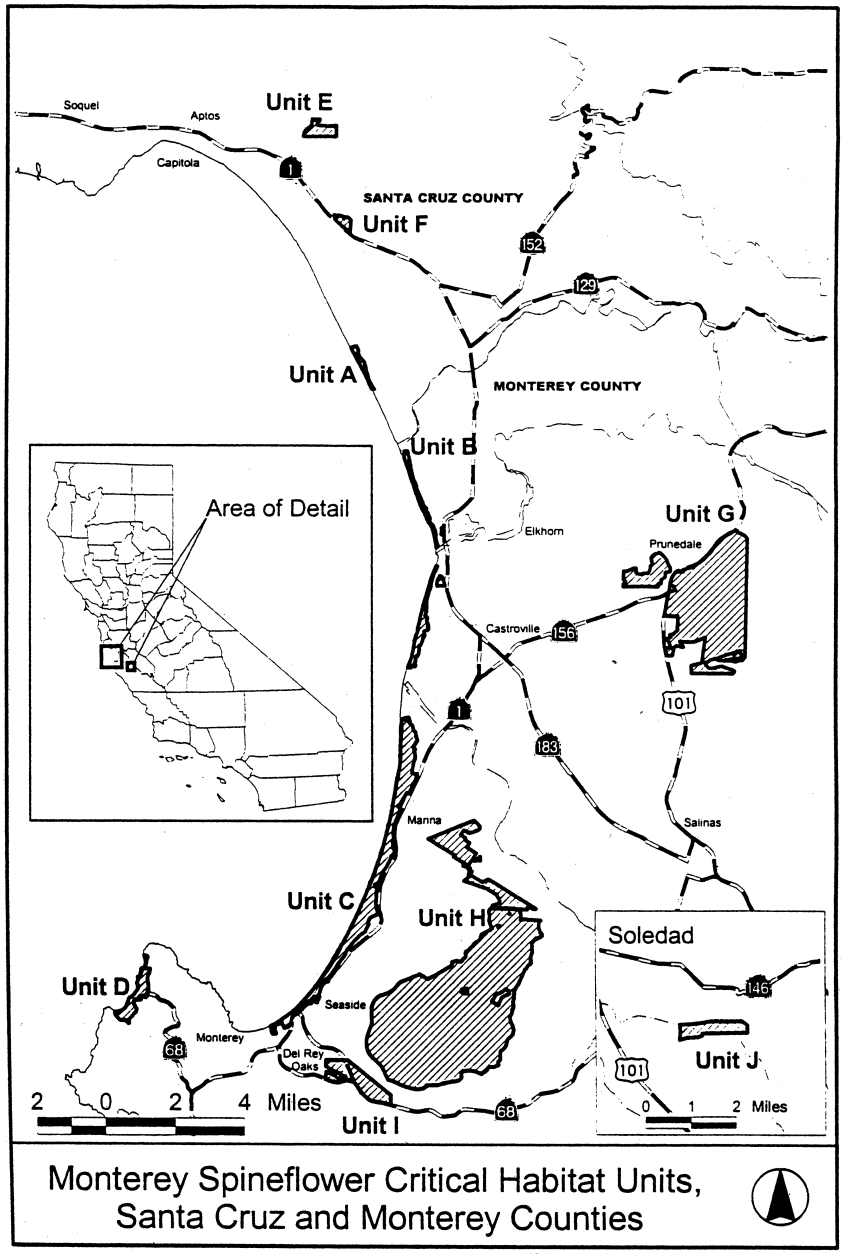
(iv) Physical processes, such as occasional soil disturbance, that support natural dune dynamics along coastal areas.

(3) Critical habitat does not include existing features and structures, such as buildings, roads, aqueducts, railroads, airports, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

Critical Habitat Map Units

Data layers defining map units were mapped using Universal Transverse Mercator (UTM) coordinates.

(4) Index Map Follows

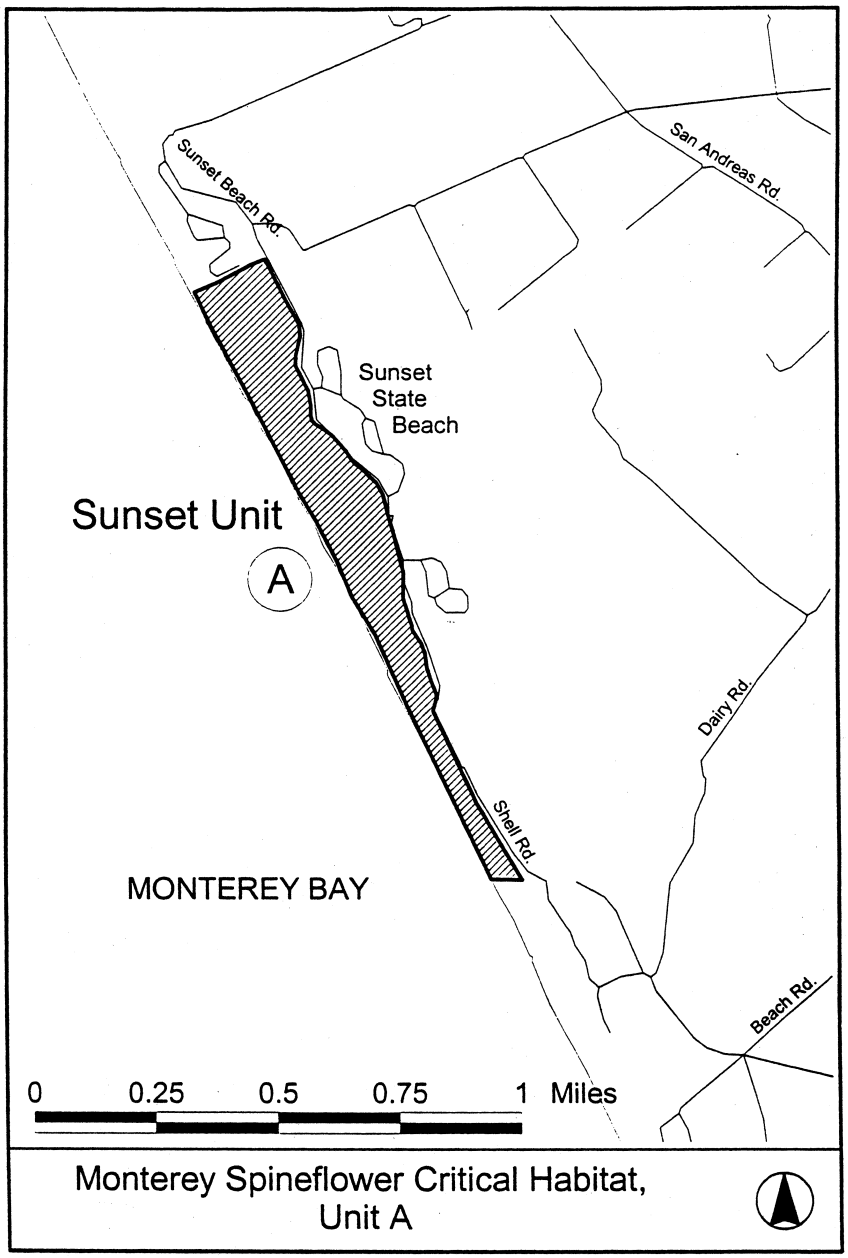


(5) Unit A: *Sunset Unit.*

(i) Santa Cruz County, California. From USGS 1:24,000 quadrangle map Watsonville West, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 603772, 4083610; 603885, 4083680; 603931, 4083700; 604008, 4083560; 604053, 4083490; 604059, 4083450; 604054, 4083420; 604045, 4083380; 604045, 4083350; 604080,

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(ii) Map Unit A follows:



(6) Unit B: *Moss Landing Unit.* Monterey County, California.

(i) From USGS 1:24,000 quadrangle map Moss Landing, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 608197, 4072970; 608305, 4072940; 608361, 4072820; 608468, 4072510; 608077, 4072480; 608070, 4072540; 608067, 4072620; 608090, 4072700; 608121,

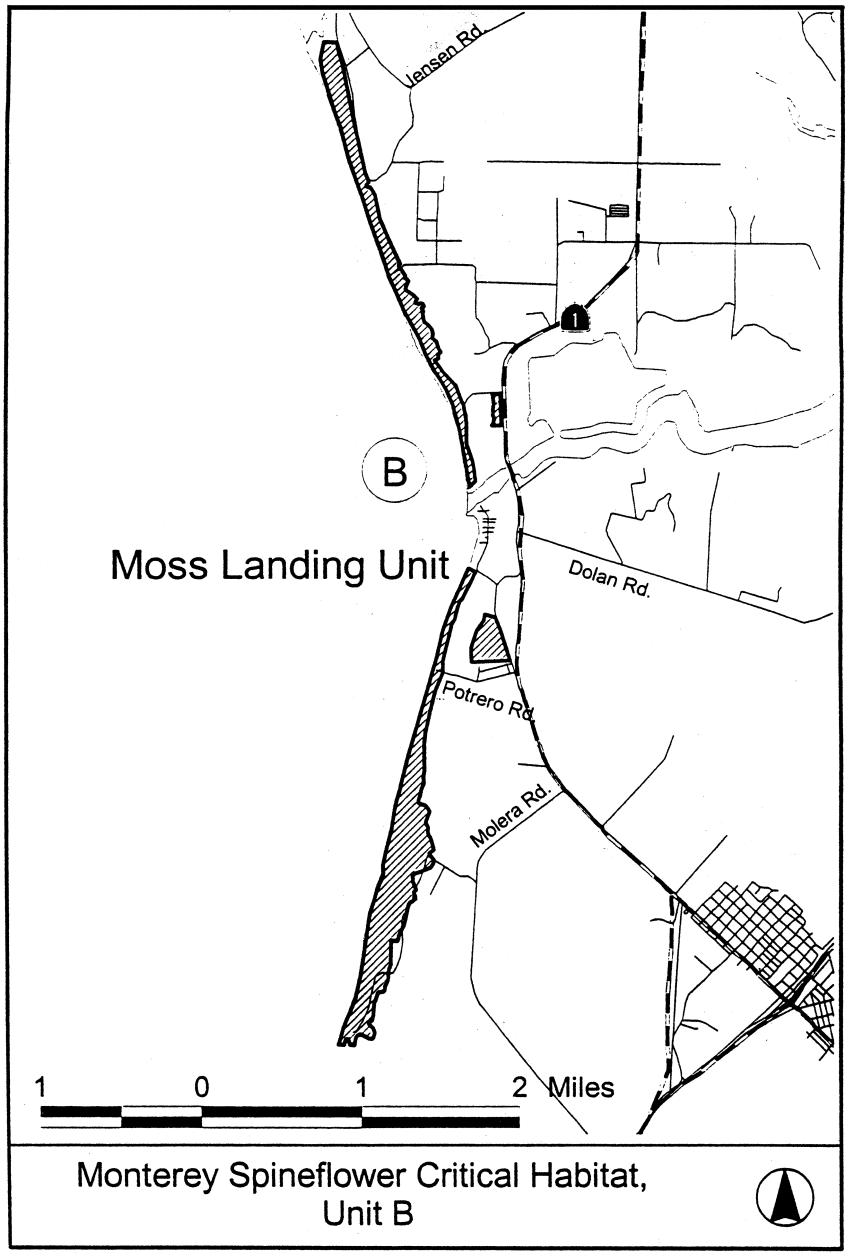
4072800; 608163, 4072870; 608184, 4072900; 608193, 4072950; 608195, 4072970; 608197, 4072970.

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(ii) Map Unit B follows.



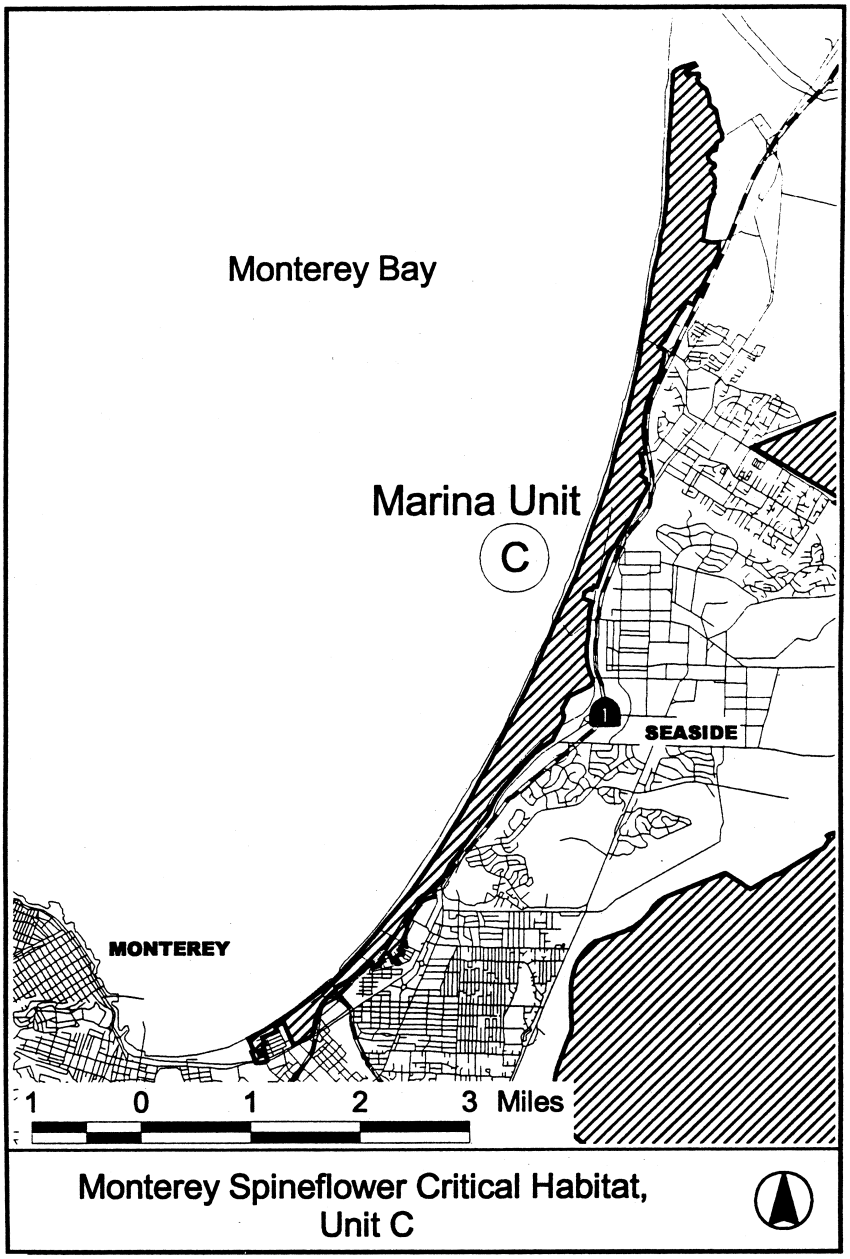
(7) Unit C: *Marina Unit.* Monterey County, California

(i) From USGS 1:24,000 quadrangle maps Marina and Seaside, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 606623, 4066060; 606685, 4066120; 606740, 4066150; 606840, 4066180; 606929, 4066210; 606953, 4066170; 606872, 4066140; 606843, 4066090; 606826,

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(ii) Excluding lands bounded by: 604634, 4056280; 604620, 4056260; 604616, 4056260; 604611, 4056230; 604611, 4056230; 604612, 4056220; 604618, 4056210; 604626, 4056200; 604632, 4056190; 604633, 4056180; 604631, 4056170; 604626, 4056160; 604616, 4056150; 604608, 4056140; 604603, 4056130; 604601, 4056120; 604602, 4056100; 604603, 4056090; 604599, 4056080; 604593, 4056080; 604579, 4056080; 604571, 4056080; 604559, 4056080; 604539, 4056090; 604530, 4056090; 604523, 4056090; 604516, 4056080; 604514, 4056070; 604514, 4056070; 604519, 4056050; 604526, 4056030; 604528, 4056010; 604526, 4056010; 604522, 4056000; 604517, 4055990; 604501, 4055980; 604491, 4055980; 604479, 4055970; 604467, 4055960; 604459, 4055940; 604456, 4055930; 604450, 4055920; 604443, 4055910; 604423, 4055890; 604420, 4055880; 604422, 4055870; 604427, 4055850; 604438, 4055850; 604451, 4055850; 604473, 4055860; 604484, 4055860; 604498, 4055870; 604510, 4055890; 604524, 4055910; 604537, 4055920; 604560, 4055940; 604578, 4055950; 604613, 4055970; 604651, 4056000; 604697, 4056070; 604723, 4056120; 604729, 4056140; 604733, 4056160; 604736, 4056180; 604730, 4056240; 604724, 4056270; 604710, 4056290; 604702, 4056300; 604676, 4056300; 604653, 4056300; 604634, 4056280.

(iii) Map Unit C follows.

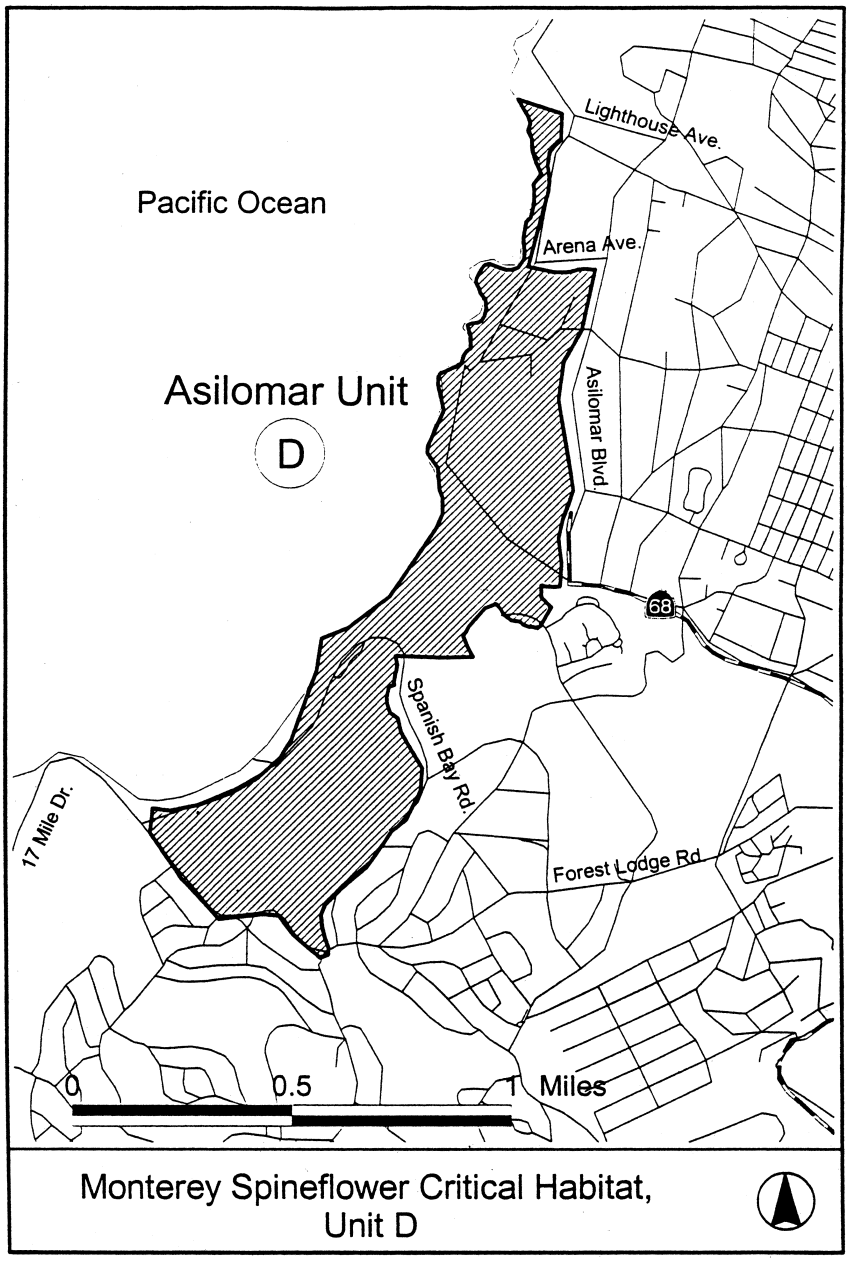


(8) Unit D: *Asilomar Unit.* Monterey County, California.

(i) From USGS 1:24,000 quadrangle map Monterey, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 594965, 4054010; 595058, 4053990; 595108, 4054000; 595134, 4054000; 595161, 4054010; 595209, 4054010; 595169, 4053780; 595109, 4053660; 595094, 4053520; 595130,

4053330; 595156, 4053180; 595123, 4053070; 595110, 4053000; 595124, 4052910; 595121, 4052820; 595106, 4052820; 595073, 4052820; 595052, 4052830; 595053, 4052780; 595092, 4052740; 595058, 4052680; 595056, 4052670; 595044, 4052670; 595037, 4052670; 595025, 4052670; 595018, 4052670; 595009, 4052670; 594992, 4052680; 594980, 4052690; 594972, 4052690; 594959, 4052690; 594945, 4052690; 594937, 4052700; 594919, 4052710; 594910, 4052730; 594890, 4052750; 594850, 4052730; 594804, 4052680; 594791, 4052660; 594784, 4052650; 594773, 4052630; 594792, 4052590; 594811, 4052550; 594694, 4052540; 594526, 4052550; 594534, 4052510; 594523, 4052450; 594524, 4052440; 594509, 4052430; 594504, 4052420; 594498, 4052390; 594501, 4052370; 594514, 4052340; 594541, 4052320; 594555, 4052270; 594635, 4052140; 594632, 4052050; 594582, 4051940; 594530, 4051900; 594505, 4051850; 594455, 4051780; 594397, 4051730; 594293, 4051610; 594279, 4051580; 594283, 4051540; 594293, 4051500; 594310, 4051460; 594308, 4051430; 594279, 4051420; 594177, 4051500; 594123, 4051570; 594062, 4051570; 593904, 4051550; 593762, 4051690; 593643, 4051860; 593651, 4051950; 593714, 4051950; 593821, 4051970; 593939, 4052020; 594032, 4052080; 594113, 4052160; 594152, 4052220; 594236, 4052480; 594251, 4052600; 594348, 4052640; 594497, 4052770; 594662, 4053030; 594680, 4053080; 594680, 4053140; 594667, 4053170; 594658, 4053250; 594618, 4053310; 594619, 4053330; 594673, 4053460; 594648, 4053560; 594648, 4053580; 594655, 4053600; 594727, 4053640; 594734, 4053640; 594740, 4053670; 594751, 4053690; 594765, 4053700; 594763, 4053750; 594755, 4053770; 594750, 4053790; 594766, 4053800; 594788, 4053800; 594800, 4053810; 594811, 4053820; 594817, 4053850; 594813, 4053880; 594795, 4053910; 594788, 4053930; 594776, 4053950; 594778, 4053960; 594784, 4053980; 594798, 4054000; 594807, 4054010; 594822, 4054020; 594862, 4054000; 594883, 4054000; 594906, 4054000; 594928, 4054010; 594949, 4054040; 594950, 4054060; 594944, 4054110; 594952, 4054170; 594968, 4054190; 594979, 4054240; 594977, 4054290; 594972, 4054310; 595001, 4054350; 594980, 4054390; 594962, 4054440; 594960, 4054480; 594946, 4054510; 594953, 4054540; 594944, 4054560; 594905, 4054620; 595068, 4054580; 595069, 4054560; 595069, 4054480; 595048, 4054460; 595028, 4054430; 595022, 4054380; 595028, 4054350; 595032, 4054330; 595029, 4054290; 594965, 4054010.

(ii) Map Unit D follows.

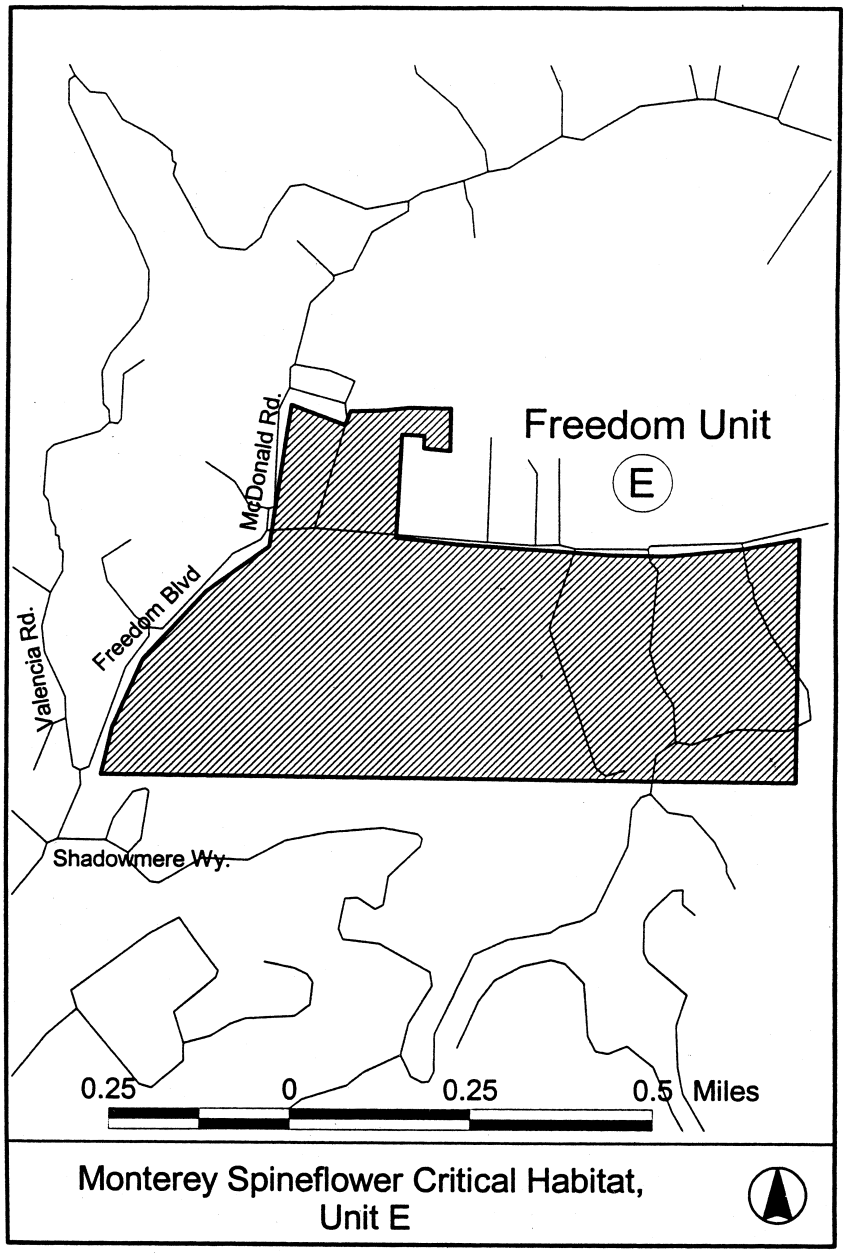


(9) Unit E: *Freedom Boulevard Unit*. Santa Cruz County, California.

(i) From USGS 1:24,000 quadrangle map Watsonville West, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 601095, 4093430; 601117, 4093530; 601180, 4093690; 601315, 4093840; 601452, 4093950; 601490, 4094270; 601612, 4094230; 601623, 4094260; 601689,

4094260; 601755, 4094270; 601845, 4094270; 601848, 4094180; 601789, 4094180; 601789, 4094210; 601740, 4094210; 601735, 4093980; 601871, 4093970; 602214, 4093960; 602341, 4093960; 602500, 4093980; 602626, 4094000; 602637, 4093460; 601095, 4093430.

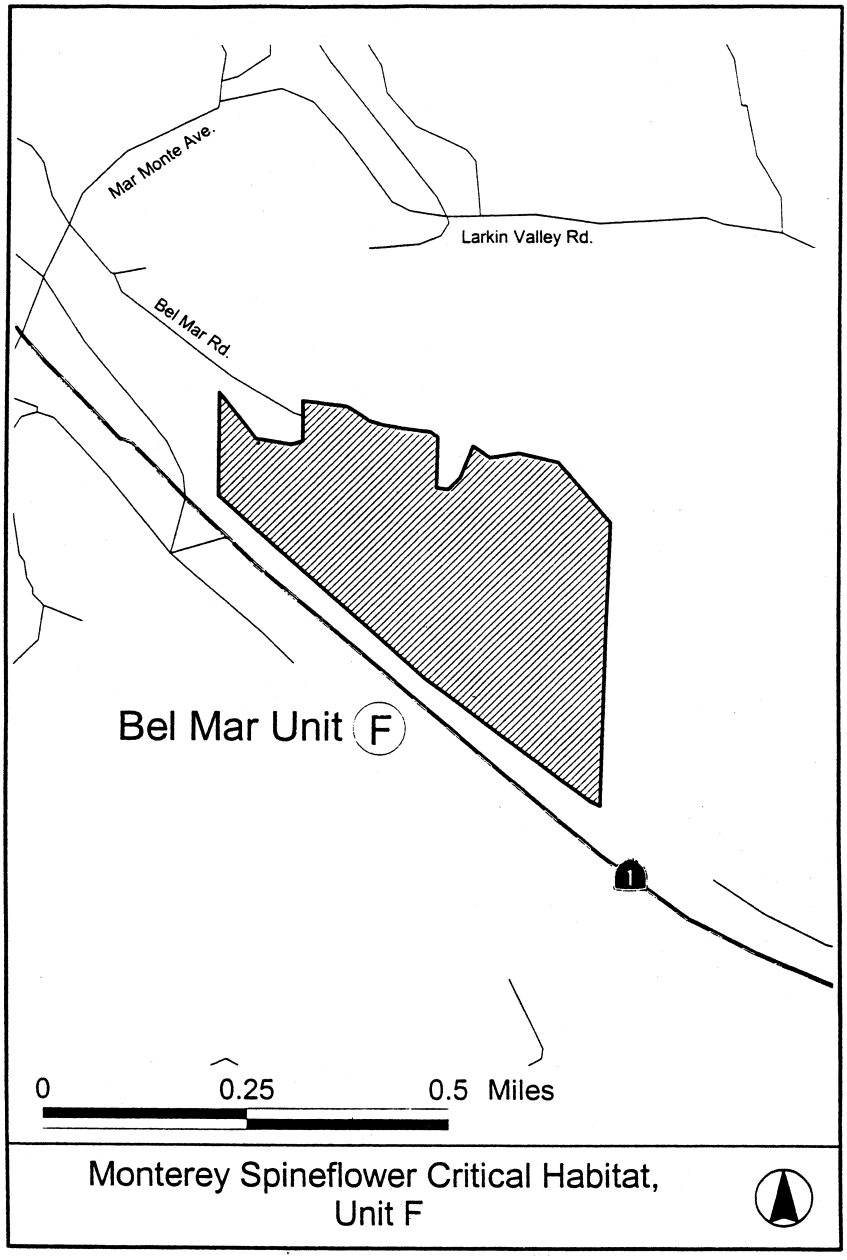
(ii) Map Unit E follows.



(10) Unit F: *Bel Mar unit.* Santa Cruz County, California.

(i) From USGS 1:24,000 quadrangle map Watsonville West, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 602688, 4089780; 602766, 4089690; 602836, 4089680; 602858, 4089690; 602855, 4089770; 602944, 4089760; 602971, 4089740; 602991, 4089730; 603014, 4089730; 603059, 4089720; 603114, 4089710; 603129, 4089700; 603130, 4089600; 603154, 4089600; 603177, 4089630; 603201, 4089690; 603236, 4089670; 603292, 4089680; 603373, 4089660; 603481, 4089550; 603476, 4088970; 603457, 4088980; 603120, 4089220; 602693, 4089570; 602688, 4089780.

(ii) Map Unit F follows.



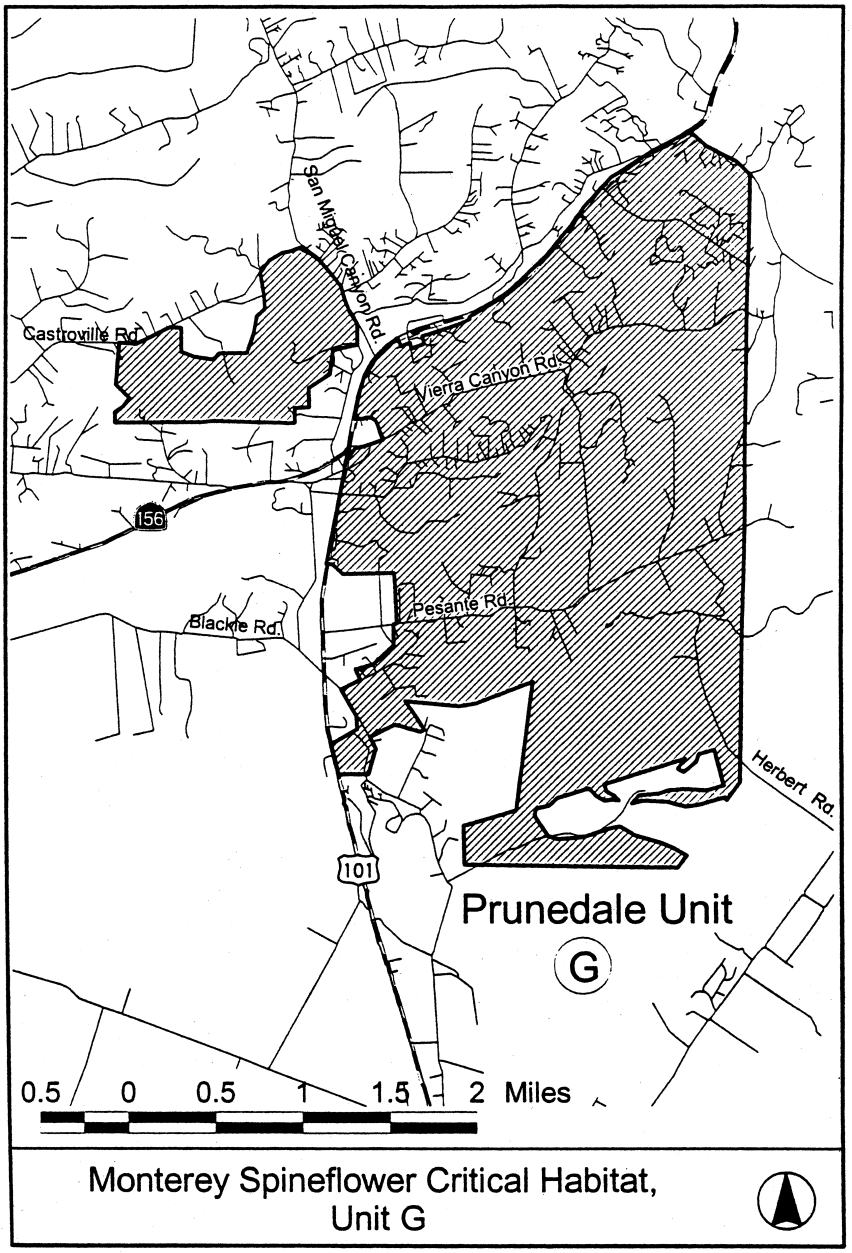
(11) Unit G: *Prunedale Unit.* Monterey County, California. From USGS 7.5′ quadrangle map Prunedale, California.

(i) From USGS 1:24,000 quadrangle map Prunedale, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N). Western portion: 618343, 4074370; 618464, 4074420;

618606, 4074310; 618731, 4074180; 618828, 4074060; 618863, 4073950; 618915, 4073840; 618988, 4073730; 618993, 4073540; 618770, 4073470; 618751, 4073250; 618562, 4073110; 618572, 4072940; 618441, 4072930; 618443, 4072790; 618391, 4072780; 618346, 4072790; 618096, 4072780; 617914, 4072790; 617680, 4072780; 617591, 4072770; 616784, 4072740; 616781, 4072840; 616855, 4072890; 616906, 4072970; 616780, 4073090; 616783, 4073170; 616796, 4073480; 616951, 4073470; 617265, 4073640; 617366, 4073630; 617373, 4073410; 617490, 4073370; 617670, 4073350; 617722, 4073410; 617785, 4073420; 617979, 4073420; 618035, 4073600; 618057, 4073760; 618132, 4073840; 618119, 4073960; 618076, 4074170; 618162, 4074290; 618279, 4074360; 618343, 4074370.

(ii) Eastern Portion: 619646, 4070100; 619725, 4069980; 619688, 4069950; 619448, 4070010; 619226, 4069890; 619285, 4069780; 619266, 4069740; 619221, 4069550; 618942, 4069540; 618864, 4069810; 619102, 4069960; 619089, 4070090; 618943, 4070330; 619120, 4070420; 619071, 4070520; 619240, 4070570; 619422, 4070750; 619410, 4070950; 619442, 4070960; 619414, 4071320; 619402, 4071420; 618929, 4071400; 618825, 4071490; 618773, 4071490; 618871, 4072100; 618932, 4072480; 618960, 4072480; 618970, 4072520; 618989, 4072550; 619018, 4072580; 619091, 4072600; 619147, 4072610; 619263, 4072660; 619257, 4072680; 619212, 4072790; 619196, 4072830; 619158, 4072860; 619117, 4072860; 619072, 4072850; 618989, 4072850; 619011, 4073000; 619072, 4073250; 619138, 4073380; 619266, 4073530; 619365, 4073610; 619404, 4073530; 619483, 4073570; 619496, 4073510; 619614, 4073560; 619593, 4073630; 619905, 4073740; 619988, 4073780; 620028, 4073800; 620030, 4073820; 620125, 4073880; 620280, 4073980; 620392, 4074080; 620700, 4074380; 620956, 4074720; 621042, 4074860; 621284, 4075150; 621644, 4075400; 621980, 4075590; 622139, 4075460; 622413, 4075320; 622539, 4075210; 622554, 4074580; 622555, 4074040; 622576, 4072770; 622598, 4072010; 622602, 4071520; 622604, 4071130; 622618, 4069970; 622622, 4069580; 622509, 4069410; 622491, 4069430; 622428, 4069420; 622272, 4069360; 622140, 4069340; 621971, 4069380; 621770, 4069380; 621656, 4069350; 621720, 4069430; 621910, 4069460; 621983, 4069490; 622131, 4069500; 622325, 4069500; 622479, 4069550; 622386, 4069880; 622252, 4069830; 622227, 4069760; 622117, 4069660; 622063, 4069690; 622126, 4069780; 621657, 4069620; 621403, 4069520; 621423, 4069460; 621496, 4069420; 621536, 4069380; 621474, 4069380; 621404, 4069370; 621329, 4069410; 621258, 4069480; 620978, 4069380; 620900, 4069310; 620782, 4069280; 620768, 4069210; 620901, 4069030; 620986, 4069000; 621230, 4069030; 621485, 4069120; 621551, 4069140; 621693, 4069060; 621916, 4069000; 622049, 4068950; 622163, 4068890; 622089, 4068770; 620954, 4068750; 620129, 4068740; 620111, 4069100; 620598, 4069260; 620719, 4070460; 620207, 4070240; 620044, 4070200; 619538, 4070240; 619646, 4070100.

(iii) Map Unit G follows.



(12) Unit H: *Fort Ord Unit:* Monterey County, California.

(i) From USGS 1:24,000 quadrangle maps Marina, Salinas, Seaside, and Spreckels, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 609722, 4059410; 610035, 4059230; 610010, 4059190; 610075, 4059110; 610137, 4059070; 610131, 4059060; 610126, 4059050;

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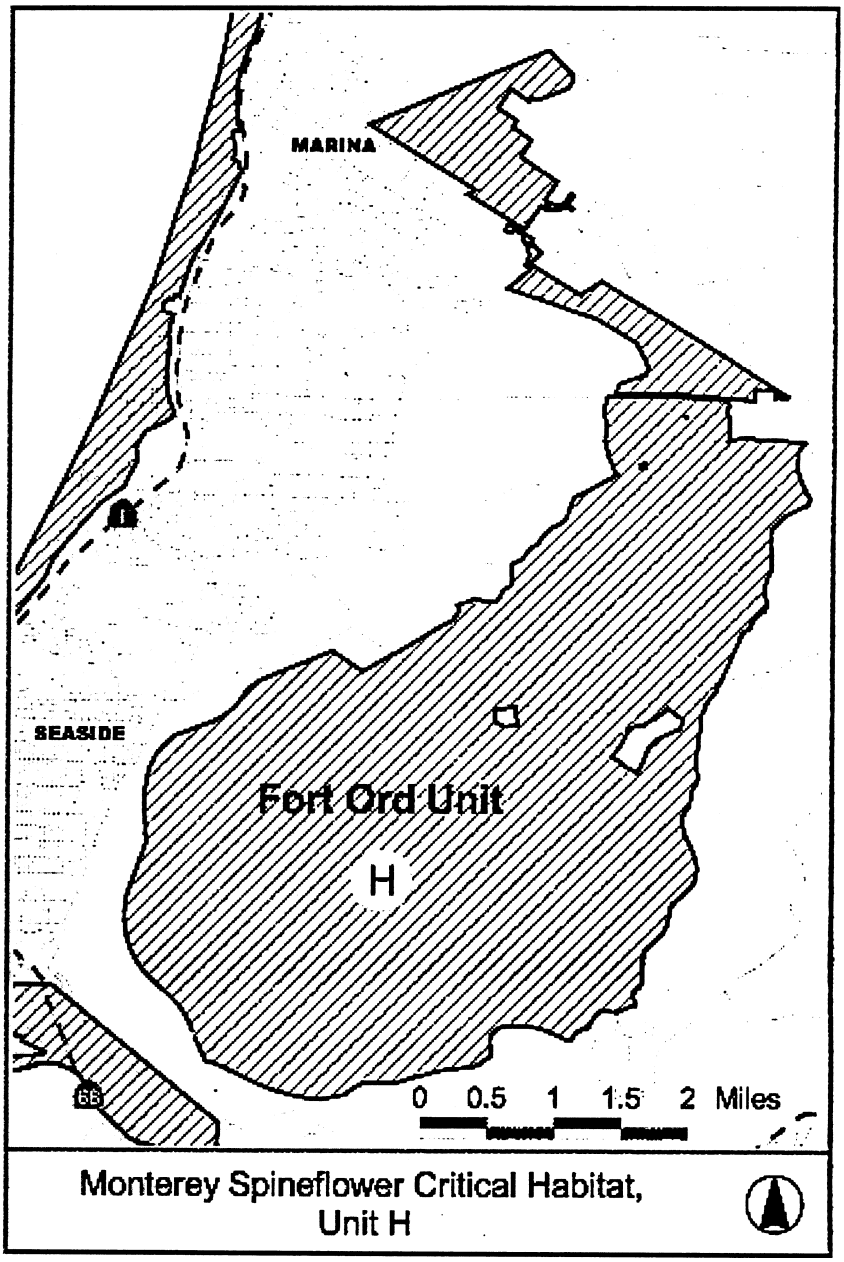
(ii) Excluding lands bounded by: 611438, 4056500; 611495, 4056520; 611476, 4056580; 611418, 4056560; 611438, 4056500.

Excluding lands bounded by: 611939, 4057140; 611960, 4057140; 611959, 4057160; 611938, 4057160; 611939, 4057140.

Excluding lands bounded by: 609833, 4053400; 609908, 4053360; 610068, 4053380; 610032, 4053600; 610030, 4053600; 610026, 4053600; 610022, 4053600; 610021, 4053600; 610019, 4053600; 609791, 4053560; 609792, 4053420; 609833, 4053400.

Excluding lands bounded by: 611759, 4053550; 611754, 4053540; 611727, 4053520; 611706, 4053510; 611679, 4053500; 611658, 4053490; 611642, 4053480; 611613, 4053450; 611582, 4053430; 611536, 4053420; 611500, 4053420; 611469, 4053410; 611436, 4053390; 611394, 4053340; 611367, 4053290; 611346, 4053240; 611313, 4053170; 611278, 4053120; 611240, 4053070; 611218, 4053040; 611270, 4053010; 611305, 4052990; 611336, 4052970; 611371, 4052940; 611402, 4052910; 611442, 4052910; 611514, 4052860; 611524, 4052850; 611585, 4052980; 611610, 4053050; 611638, 4053130; 611670, 4053190; 611724, 4053240; 611761, 4053280; 611826, 4053310; 611953, 4053370; 611994, 4053390; 612029, 4053400; 612049, 4053520; 611979, 4053570; 611863, 4053640; 611759, 4053550.

(iii) Map Unit H follows.

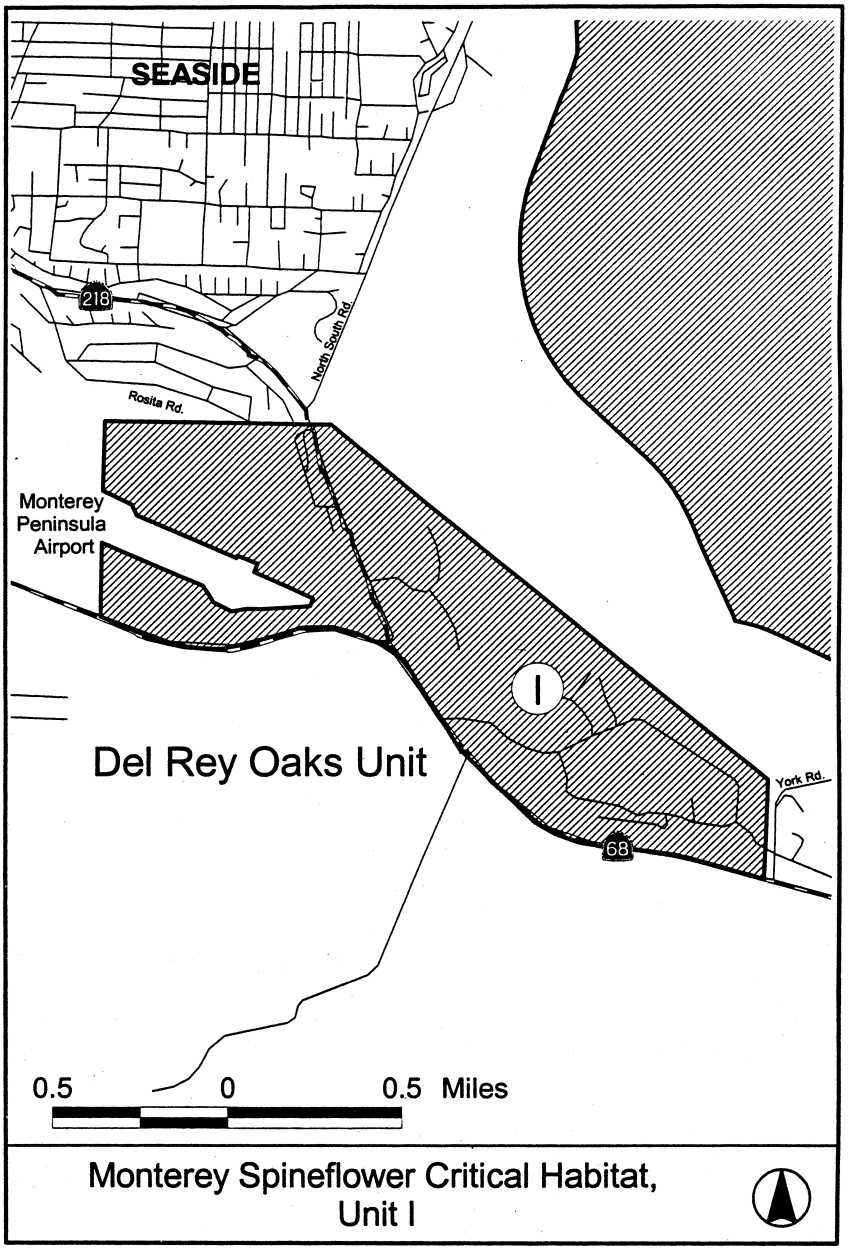


(13) Unit I: *Del Rey Oaks Unit.* Monterey County, California.

(i) From USGS 1:24,000 quadrangle map Seaside lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 603516, 4050050; 604562, 4050070; 606616, 4048490; 606612, 4048020; 606317, 4048090; 606197, 4048120; 606101, 4048130; 605982, 4048140; 605862, 4048150; 605758,

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(ii) Map Unit I follows.

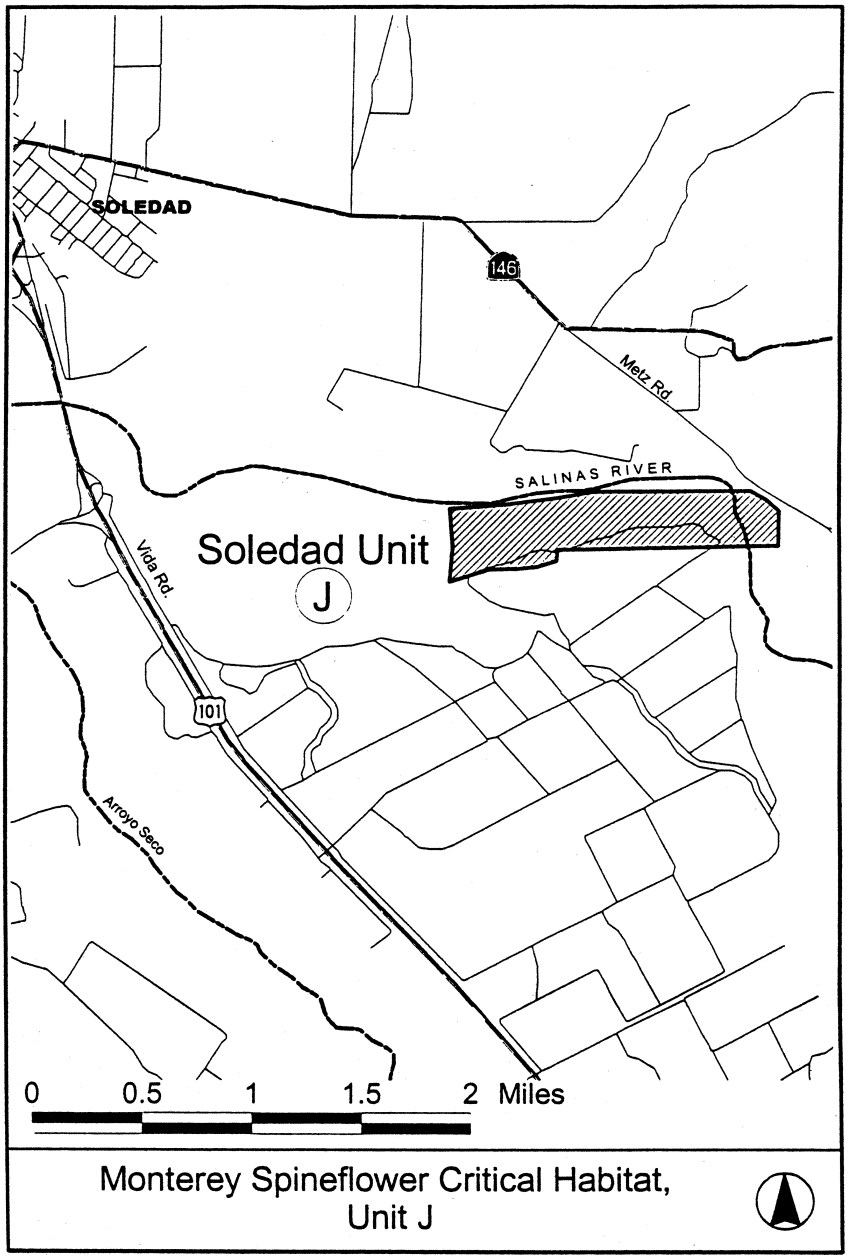


(14) Unit J: *Soledad Unit.* Monterey County, California.

(i) From USGS 1:24,000 quadrangle map Soledad, lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 653580, 4030090; 653997, 4030130; 654337, 4030190; 654644, 4030250; 655780, 4030290; 655904, 4030220; 655999, 4030140; 655999, 4029880; 654381, 4029810; 654381,

4029730; 654236, 4029680; 654093, 4029660; 653886, 4029650; 653594, 4029550; 653609, 4029810; 653580, 4030090.

(ii) Map Unit J follows.



Family Polygonaceae: *Chorizanthe robusta* var. *hartwegii* (Scotts Valley spineflower)

(1) Critical habitat units are depicted for Santa Cruz County, California, on the map below.

(2) The primary constituent elements of critical habitat for *Chorizanthe robusta* var. *hartwegii* are the habitat components that provide:

(i) Thin soils in the Bonnydoon series that have developed over outcrops of Santa Cruz mudstone and Purisima sandstone;

(ii) ''Wildflower field'' habitat that has developed on these thin-soiled sites;

(iii) A grassland plant community that supports the ''wildflower field'' habitat, that is stable over time and in which nonnative species are absent or are at a density that has little or no adverse effect on resources available for growth and reproduction of *Chorizanthe robusta* var. *hartwegii;*

(iv) Sufficient areas around each population to allow for recolonization to adjacent suitable microhabitat sites in the event of catastrophic events;

(v) Pollinator activity between existing colonies of *Chorizanthe robusta* var. *hartwegii;*

(vi) Seed dispersal mechanisms between existing colonies and other potentially suitable sites; and

(vii) Sufficient integrity of the watershed above habitat for *Chorizanthe robusta* var. *hartwegii* to maintain soil and hydrologic conditions that provide the seasonally wet substrate for growth and reproduction.

(3) Existing features and structures, such as buildings, roads, railroads, airports, other paved areas, lawns, and other urban landscaped areas, do not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they may affect the species and/or primary constituent elements in adjacent critical habitat.

(4) Unit 1: Santa Cruz County, California.

From USGS 7.5′ quadrangle map Felton, California, Mount. Diablo Meridian, California.

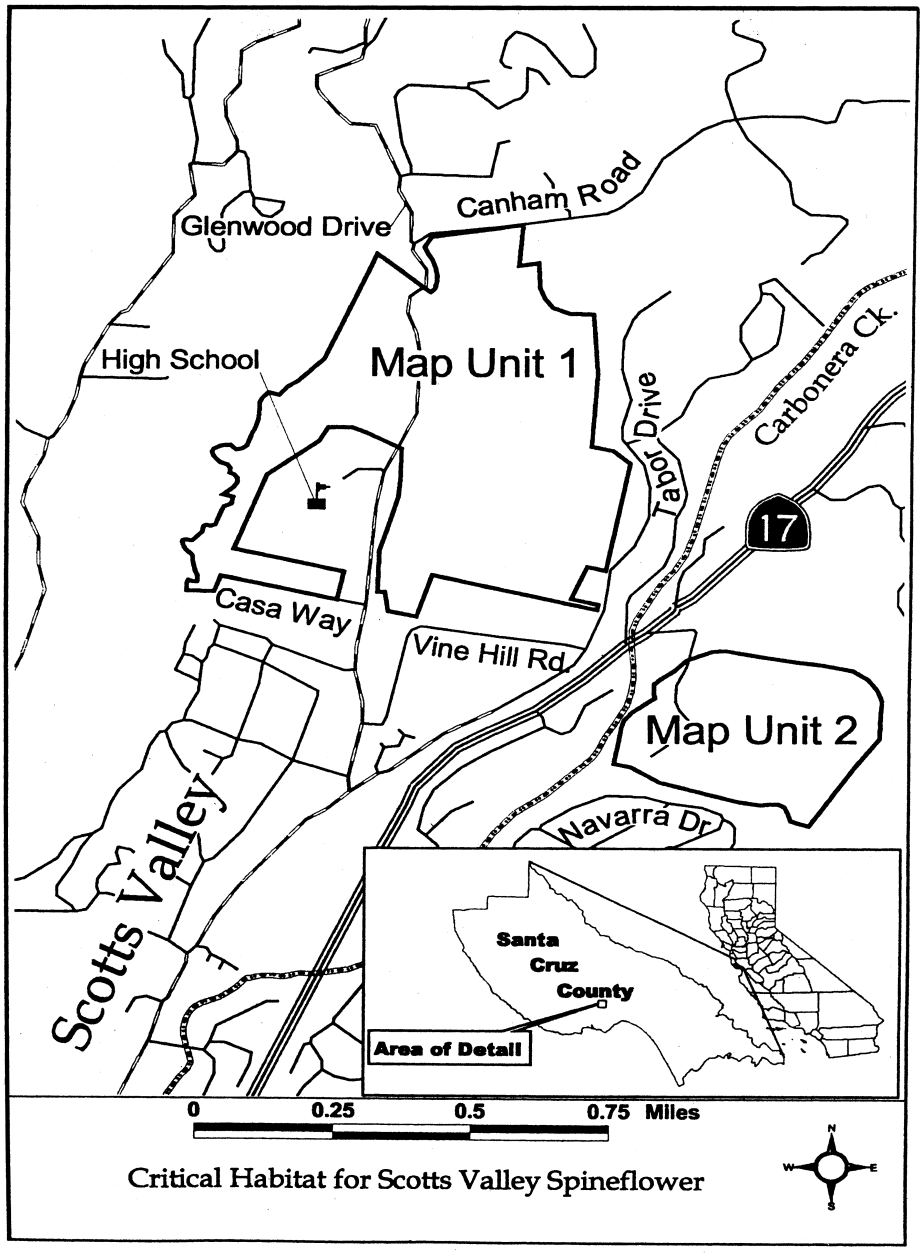
Lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 587990, 4103190; 587999, 4103220; 588021, 4103230; 588025, 4103250; 587997, 4103260; 588025, 4103280; 588035, 4103290; 588033, 4103310; 588025, 4103320; 588012, 4103330; 588014, 4103340; 588005, 4103350; 587984, 4103360; 587969, 4103370; 587962, 4103380; 587958, 4103390; 587962, 4103400; 587975, 4103410; 587992, 4103410; 588012, 4103420; 588029, 4103400; 588046, 4103410; 588058, 4103420; 588064, 4103430; 588072, 4103450; 588082, 4103480; 588088, 4103500; 588091, 4103530; 588091, 4103560; 588099, 4103570; 588115, 4103590; 588146, 4103580; 588169, 4103610; 588201, 4103630; 588272, 4103700; 588411, 4104050; 588571, 4103930; 588584, 4103940; 588589, 4103960; 588590, 4103980; 588583, 4104010; 588574, 4104030; 588559, 4104050; 588549, 4104070; 588568, 4104110; 588833, 4104150; 588827, 4104020; 588883, 4104030; 588891, 4103950; 588906, 4103920; 588931, 4103890; 588979, 4103870; 589049, 4103870; 589069, 4103680; 589061, 4103450; 589124, 4103440; 589173, 4103400; 589117, 4103050; 589062, 4103060; 589019, 4102960; 589099, 4102940; 589096, 4102920; 588612, 4103020; 588570, 4102880; 588485, 4102900; 588474, 4102960; 588452, 4102960; 588452, 4103090; 588473, 4103160; 588502, 4103270; 588504, 4103330; 588505, 4103420; 588402, 4103470; 588360, 4103480; 588292, 4103480; 588267, 4103440; 588121, 4103320; 588033, 4103080; 588352, 4103020; 588337, 4102930; 588000, 4102990; 587981, 4102940; 587900, 4102940; 587900, 4102960; 587905, 4102980; 587919, 4102970; 587931, 4102970; 587932, 4102990; 587924, 4103010; 587916, 4103040; 587915, 4103060; 587893, 4103070; 587887, 4103090; 587883, 4103100; 587885, 4103100; 587891, 4103110; 587911, 4103100; 587939, 4103130; 587942, 4103150; 587951, 4103160; 587963, 4103150; 587977, 4103160; 587990, 4103190.

(5) Unit 2: Santa Cruz County, California.

From USGS 7.5′ quadrangle map Laurel, California.

Lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 589297, 4102370; 589213, 4102420; 589164, 4102430; 589168, 4102460; 589174, 4102500; 589181, 4102550; 589189, 4102570; 589210, 4102600; 589243, 4102620; 589261, 4102630; 589274, 4102640; 589271, 4102660; 589270, 4102680; 589270, 4102690; 589289, 4102710; 589327, 4102740; 589361, 4102770; 589402, 4102790; 589435, 4102800; 589472, 4102800; 589571, 4102790; 589657, 4102780; 589762, 4102770; 589845, 4102750; 589889, 4102730; 589917, 4102690; 589932, 4102660; 589932, 4102620; 589930, 4102530; 589865, 4102440; 589732, 4102250; 589681, 4102260; 589669, 4102290; 589661, 4102300; 589642, 4102310; 589623, 4102310; 589590, 4102310; 589531, 4102320; 589297, 4102370.

(6) *Critical Habitat Map for Units 1 and 2 follows:*



Family Polygonaceae: *Chorizanthe robusta* var. *robusta* (robust spineflower).

(1) Critical habitat units are depicted for Santa Cruz County, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Chorizanthe robusta* var. *robusta* include, but are not limited to, the habitat components that provide:

(i) Sandy soils associated with active coastal dunes, coastal bluffs with a deposition of windblown sand, inland sites with sandy soils, and interior floodplain dunes;

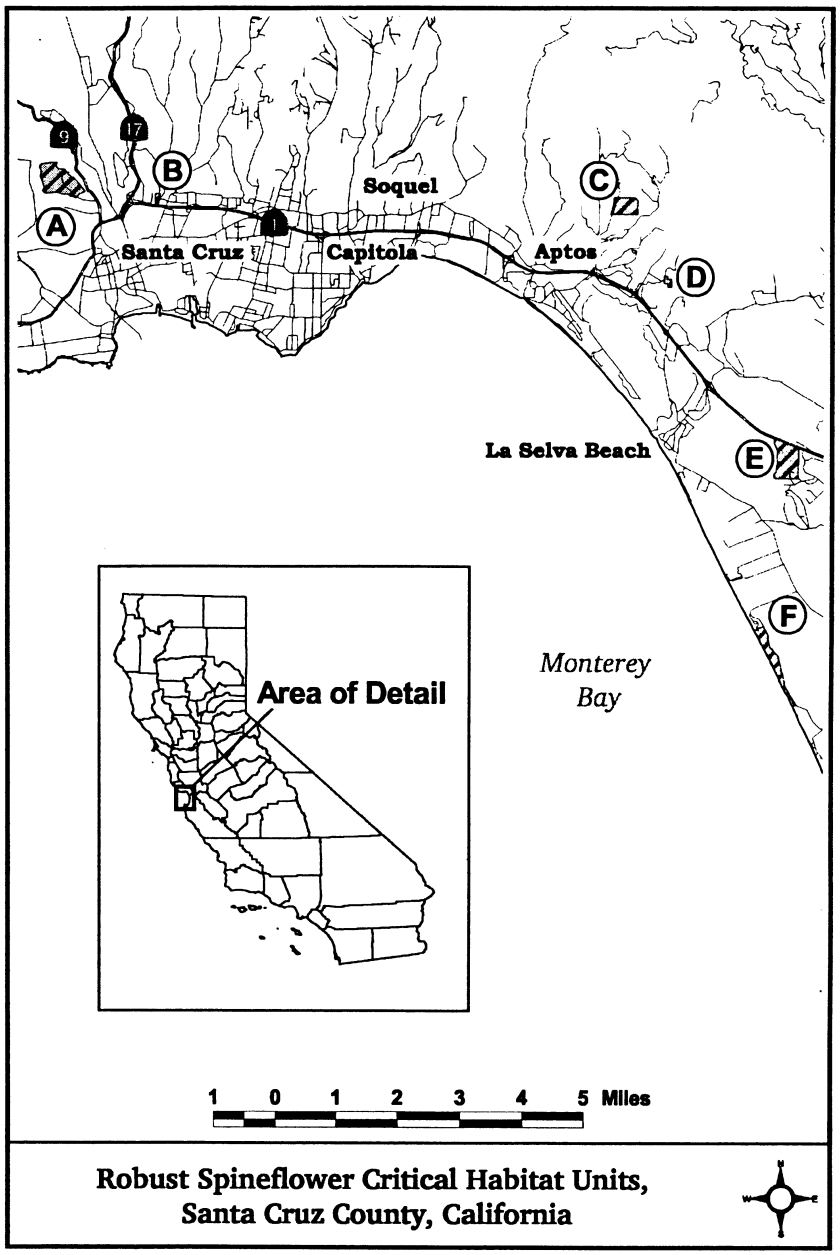
(ii) Plant communities that support associated species, including coastal dune, coastal scrub, grassland, maritime chaparral, oak woodland, and interior floodplain dune communities, and have a structure such that there are openings between the dominant elements (e.g, scrub, shrub, oak trees, clumps of herbaceous vegetation);

(iii) Plant communities that contain no or little cover by nonnative species which would complete for resources available for growth and reproduction of *Chorizanthe robusta* var. *robusta*; and

(iv) Physical processes, such as occasional soil disturbance, that support natural dune dynamics along coastal areas.

(3) Existing features and structures, such as buildings, roads, railroads, airports, other paved areas, lawns, and other urban landscaped areas, do not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they may affect the species and/or primary constituent elements in adjacent critical habitat.

(4) Critical Habitat Map Units—Index Map Follows



(5) Map Unit A (Pogonip): Santa Cruz County, California

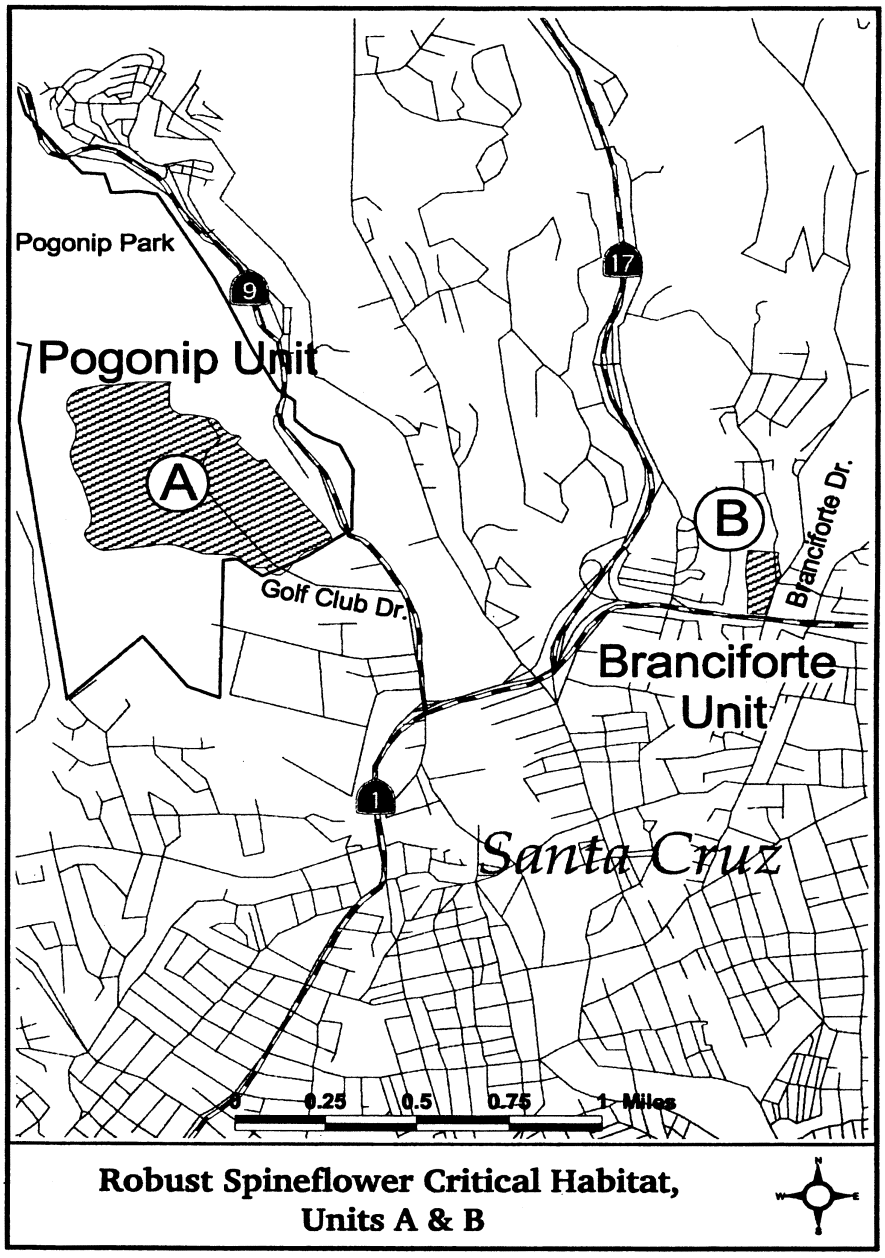
From USGS 7.5′ quadrangle map Santa Cruz, California. Lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 585912, 4094380; 585909, 4094380; 585900, 4094370; 585882, 4094350; 585830, 4094330; 585798, 4094320; 585775, 4094300; 585747, 4094260; 585722,

4094230; 585688, 4094200; 585666, 4094200; 585649, 4094210; 585617, 4094230; 585571, 4094230; 585556, 4094240; 585546, 4094240; 585537, 4094250; 585505, 4094280; 585487, 4094290; 585468, 4094290; 585442, 4094290; 585393, 4094290; 585340, 4094290; 585313, 4094300; 585220, 4094330; 585162, 4094330; 585101, 4094320; 584986, 4094300; 584917, 4094290; 584886, 4094300; 584871, 4094310; 584856, 4094320; 584839, 4094340; 584828, 4094360; 584829, 4094380; 584834, 4094390; 584846, 4094400; 584853, 4094420; 584856, 4094440; 584853, 4094470; 584844, 4094500; 584811, 4094600; 584798, 4094630; 584787, 4094650; 584773, 4094670; 584762, 4094700; 584754, 4094740; 584756, 4094770; 584762, 4094790; 584772, 4094830; 584777, 4094870; 584772, 4094890; 584730, 4094960; 584729, 4094990; 584738, 4095020; 584751, 4095040; 584767, 4095050; 584781, 4095060; 584805, 4095060; 584841, 4095070; 584879, 4095080; 584901, 4095090; 584926, 4095090; 585050, 4095110; 585125, 4095110; 585174, 4095110; 585168, 4095090; 585166, 4095070; 585169, 4095000; 585182, 4094980; 585193, 4094970; 585208, 4094960; 585223, 4094950; 585244, 4094950; 585265, 4094950; 585337, 4094940; 585366, 4094940; 585388, 4094930; 585397, 4094910; 585414, 4094890; 585446, 4094870; 585480, 4094860; 585492, 4094850; 585470, 4094830; 585568, 4094740; 585606, 4094750; 585626, 4094720; 585885, 4094430; 585899, 4094410; 585907, 4094400; 585912, 4094380.

(6) Map Unit B (Branciforte): Santa Cruz County, California

(i) From USGS 7.5′ quadrangle map Santa Cruz, California. Lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 587730, 4094370; 587728, 4094390; 587865, 4094380; 587863, 4094360; 587877, 4094270; 587816, 4094080; 587738, 4094090; 587737, 4094190; 587724, 4094280; 587730, 4094370.

(ii) Map Unit A and B: Pogonip and Branciforte Map Follows.



(7) Map Unit C (Aptos): Santa Cruz County, California

Santa Cruz County, California.

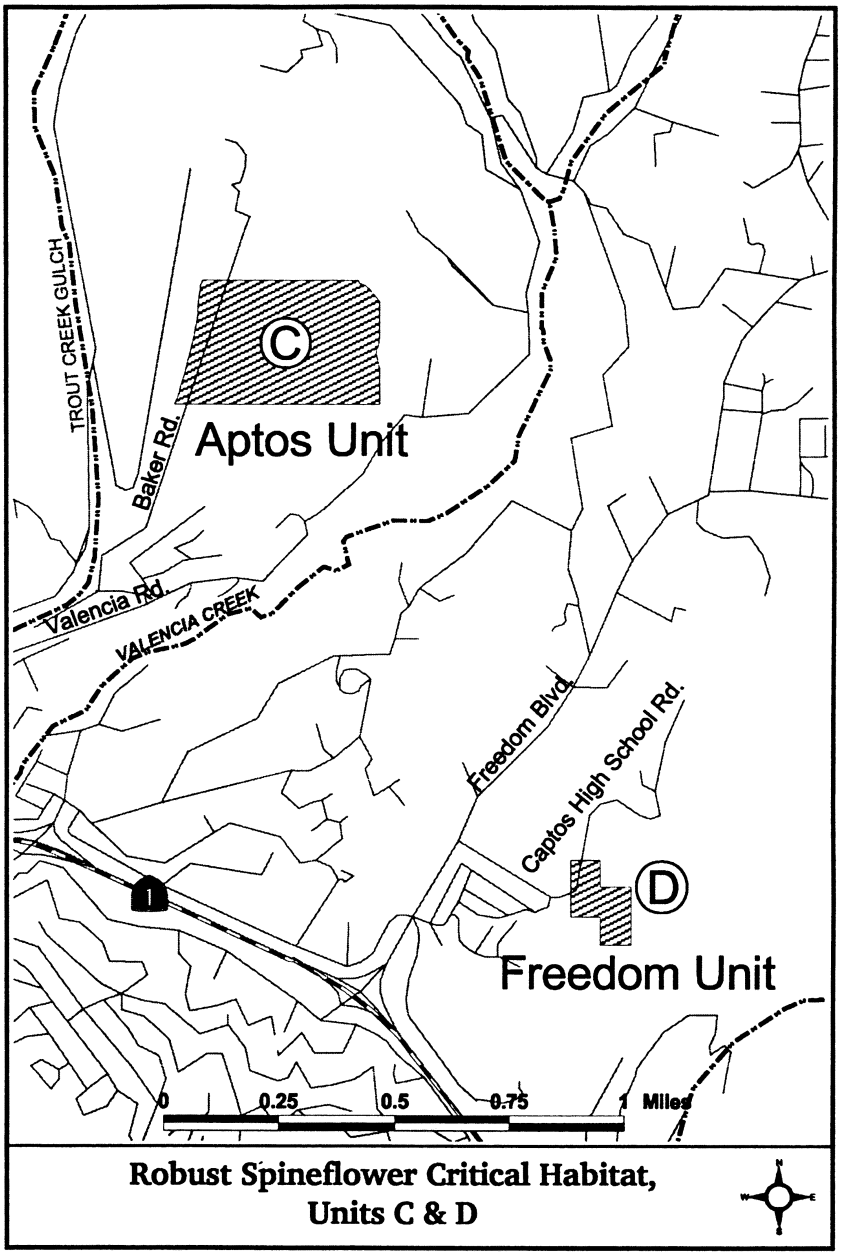
Lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 599729, 4094230; 599670, 4094230; 599629, 4094230; 599577, 4094230; 599591, 4094270; 599596, 4094290; 599609, 4094340;

599623, 4094400; 599636, 4094460; 599641, 4094490; 599645, 4094530; 599647, 4094540; 599647, 4094570; 599648, 4094580; 599653, 4094640; 599655, 4094650; 599658, 4094660; 599661, 4094660; 599662, 4094660; 599701, 4094670; 599776, 4094670; 600002, 4094670; 600092, 4094680; 600199, 4094680; 600204, 4094670; 600209, 4094670; 600220, 4094670; 600225, 4094660; 600231, 4094660; 600242, 4094650; 600247, 4094640; 600272, 4094620; 600276, 4094610; 600280, 4094480; 600280, 4094480; 600278, 4094460; 600276, 4094460; 600274, 4094450; 600271, 4094440; 600270, 4094440; 600270, 4094430; 600271, 4094420; 600283, 4094380; 600287, 4094250; 600138, 4094250; 600007, 4094240; 599915, 4094240; 599729, 4094230.

(8) Map Unit D (Freedom): Santa Cruz County, California

(i) From USGS 7.5′ quadrangle map Watsonville West, California. Lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 601011, 4092690; 601113, 4092700; 601116, 4092600; 601223, 4092600; 601230, 4092400; 601122, 4092400; 601119, 4092500; 601019, 4092490; 601011, 4092690.

(ii) Map Units C and D: Aptos and Freedom Map Follows.



(9) Map Unit E (Buena Vista): Santa Cruz County, California

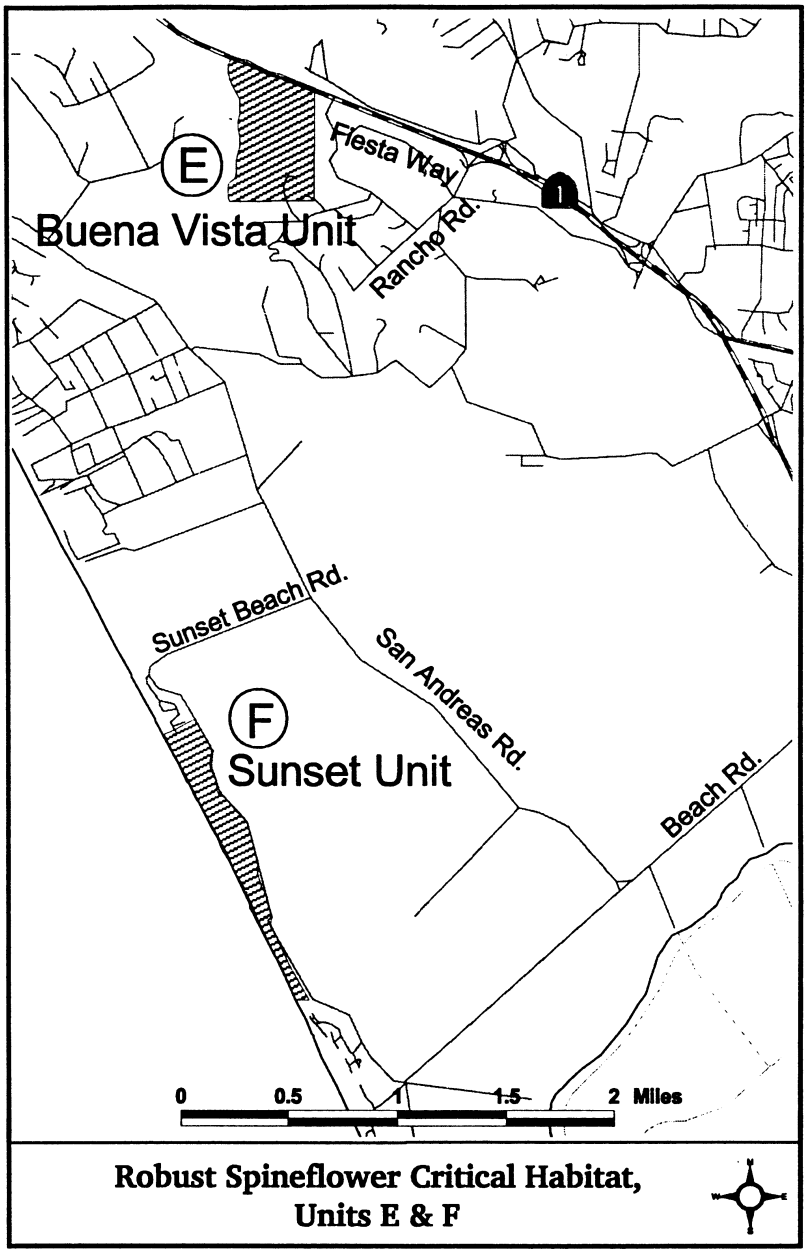
From USGS 7.5′ quadrangle map Watsonville West, California. Lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 604046, 4088420; 604031, 4088480; 604029, 4088530; 604036, 4088560; 604049, 4088580; 604681, 4088360; 604692, 4087930; 604701, 4087560;

604071, 4087530; 604064, 4087550; 604057, 4087580; 604053, 4087630; 604060, 4087660; 604069, 4087670; 604089, 4087690; 604101, 4087700; 604111, 4087730; 604110, 4087790; 604109, 4087820; 604116, 4087870; 604125, 4087900; 604131, 4087930; 604130, 4088020; 604119, 4088060; 604114, 4088090; 604114, 4088110; 604123, 4088170; 604125, 4088250; 604120, 4088280; 604102, 4088320; 604082, 4088350; 604046, 4088420.

(10) Map Unit F (Sunset): Santa Cruz County, California

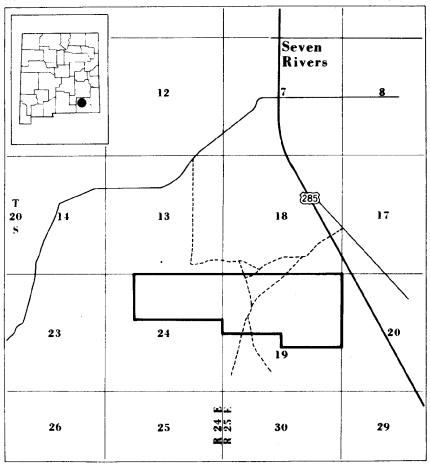
(i) From USGS 7.5′ quadrangle map Watsonville West, California. Lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 603772, 4083610; 603885, 4083680; 603931, 4083700; 604008, 4083560; 604053, 4083490; 604059, 4083450; 604054, 4083420; 604045, 4083380; 604045, 4083350; 604080, 4083290; 604092, 4083270; 604102, 4083220; 604103, 4083180; 604109, 4083160; 604122, 4083150; 604149, 4083140; 604176, 4083120; 604202, 4083090; 604224, 4083060; 604243, 4083040; 604256, 4083020; 604279, 4083000; 604303, 4082980; 604328, 4082960; 604349, 4082920; 604373, 4082840; 604386, 4082800; 604412, 4082710; 604424, 4082670; 604425, 4082640; 604425, 4082610; 604426, 4082580; 604443, 4082530; 604449, 4082510; 604457, 4082490; 604460, 4082470; 604480, 4082440; 604492, 4082430; 604504, 4082400; 604512, 4082350; 604530, 4082300; 604546, 4082260; 604547, 4082250; 604536, 4082200; 604688, 4081900; 604847, 4081650; 604743, 4081650; 604613, 4081900; 604539, 4082040; 604449, 4082220; 604338, 4082450; 604258, 4082580; 604205, 4082690; 604132, 4082830; 604076, 4082910; 603987, 4083070; 603871, 4083280; 603804, 4083400; 603755, 4083480; 603700, 4083580; 603772, 4083610.

(ii) Map Units E and F: Buena Vista and Sunset Map Follows.



Family Polygonaceae: *Eriogonum gypsophilum* (Gypsum Wild Buckwheat) New Mexico; Eddy County; T20S, R25E, Section 19: N½, N½ NE¼ SE¼, N½ NW¼ SE¼; and T20S, R24E, Section 24: N½ NE¼, N½ S½ NE¼, NE¼ NW¼, N½ SE¼ NW¼; gypsum soils.

NOTE: Map follows:



Family Polgonaceae: *Eriogonum Ovalifolium* var. *Vineum* (Cushenbury Buckwheat)

(1) Critical habitat units are depicted for San Bernardino County, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Eriogonum ovalifolium* var. *vineum* are those habitat components that are essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements of critical habitat for this species are listed below and consist of, but are not limited to:

(i) Soils derived primarily from the upper and middle members of the Bird Spring Formation and Bonanza King Formation parent materials that occur on hillsides at elevations between 1,400 and 2,400 m (4,600 and 7,900 ft);

(ii) Soils with intact, natural surfaces that have not been substantially altered by land use activities (*e.g.*, graded, excavated, recontoured, or otherwise altered by ground-disturbing equipment); and

(iii) Associated plant communities that have areas with an open canopy cover (generally less than 15 percent cover) and little accumulation of organic material (*e.g.*, leaf litter) on the surface of the soil.

(3) Existing features and structures, such as buildings, active mines, paved or unpaved roads, other paved or cleared areas, lawns, and other urban landscaped areas, are not likely to contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species or primary constituent elements in adjacent critical habitat.

(4) Northeastern Slope Unit, San Bernardino County, California.

(i) From USGS 1:24,000 quadrangle maps Fawnskin, Big Bear City, Rattlesnake Canyon, Butler Peak, and Onyx Peak, California.

(ii) Subunit 1a: Land bounded by the following UTM11 NAD27 coordinates (E, N): 497000, 3803000; 497200, 3803000; 497200, 3802900; 497300, 3802900; 497300, 3802500; 497000, 3802500; 497000, 3802600; 496900, 3802600; 496900, 3802900; 497000, 3802900; and 497000, 3803000.

(iii) Subunit 1b: Land bounded by the following UTM11 NAD27 coordinates (E, N): 498000, 3800800; 498600, 3800800; 498600, 3800400; 498200, 3800400; 498200, 3800500; 498000, 3800500; and 498000, 3800800.

(iv) Subunit 1c: Land bounded by the following UTM11 NAD27 coordinates (E, N): 503400, 3801200; 503700, 3801200; 503700, 3801100; 503900, 3801100; 503900, 3800800; 504000, 3800800; 504000, 3800400; 503900, 3800400; 503900, 3800300; 503700, 3800300; 503700, 3800400; 503400, 3800400; 503400, 3800600; 503300, 3800600; 503300, 3800700; 503200, 3800700; 503200, 3801000; 503300, 3801000; 503300, 3801100; 503400, 3801100; and 503400, 3801200.

(v) Subunit 1d: Land bounded by the following UTM11 NAD27 coordinates (E, N): 505200, 3800400; 505500, 3800400; 505500, 3800300; 506000, 3800300; 506000, 3800200; 506100, 3800200; 506100, 3799900; 506000, 3799900; 506000, 3800000; 505700, 3800000; 505700, 3799900; 505600, 3799900; 505600, 3799600; 505200, 3799600; 505200, 3800100; 505100, 3800100; 505100, 3800300; 505200, 3800300; and 505200, 3800400.

(vi) Subunit 1e: Land bounded by the following UTM11 NAD27 coordinates (E, N): 506800, 3799900; 507000, 3799900; 507000, 3799800; 507100, 3799800; 507100, 3799600; 506900, 3799600; 506900, 3799200; 507200, 3799200; 507200, 3799300; 507500, 3799300; 507500, 3799200; 507600, 3799200; 507600, 3799000; 507500, 3799000; 507500, 3798900; 507400, 3798900; 507400, 3798700; 507300, 3798700; 507300, 3798600; 506800, 3798600; 506800, 3798800; 506200, 3798800; 506200, 3799200; 506500, 3799200; 506500, 3799300; 506600, 3799300; 506600, 3799500; 506700, 3799500; 506700, 3799800; 506800, 3799800; and 506800, 3799900.

(vii) Subunit 1f: Land bounded by the following UTM11 NAD27 coordinates (E, N): 506800, 3798100; 507000, 3798100; 507000, 3798000; 507500, 3798000; 507500, 3797700; 507600, 3797700; 507600, 3797400; 507500, 3797400; 507500, 3797300; 507400, 3797300; 507400, 3797200; 507000, 3797200; 507000, 3797300; 506800, 3797300; 506800, 3797600; 506700, 3797600; 506700, 3798000; 506800, 3798000; and 506800, 3798100.

(viii) Subunit 1g: Land bounded by the following UTM11 NAD27 coordinates (E, N): 508100, 3798200; 508300, 3798200; 508300, 3798100; 508400, 3798100; 508400, 3797900; 508300, 3797900; 508300, 3797800; 508000, 3797800; 508000, 3798100; 508100, 3798100; and 508100, 3798200.

(ix) Subunit 1h: Land bounded by the following UTM11 NAD27 coordinates (E, N): 507900, 3797600; 508400, 3797600; 508400, 3797200; 508300, 3797200; 508300, 3797100; 508200, 3797100; 508200, 3796800; 507800, 3796800; 507800, 3797100;

507700, 3797100; 507700, 3797500; 507900, 3797500; and 507900, 3797600.

(x) Subunit 1i: Land bounded by the following UTM11 NAD27 coordinates (E, N): 508400, 3797200; 508700, 3797200; 508700, 3796900; 508400, 3796900; and 508400, 3797200.

(xi) Subunit 1j: Land bounded by the following UTM11 NAD27 coordinates (E, N): 508300, 3800600; 508600, 3800600; 508600, 3800500; 508700, 3800500; 508700, 3800200; 508600, 3800200; 508600, 3800100; 508100, 3800100; 508100, 3800500; 508300, 3800500; and 508300, 3800600.

(xii) Subunit 1k: Land bounded by the following UTM11 NAD27 coordinates (E, N): 508100, 3799800; 508500, 3799800; 508500, 3799400; 508400, 3799400; 508400, 3799300; 508200, 3799300; 508200, 3799400; 508000, 3799400; 508000, 3799700; 508100, 3799700; and 508100, 3799800.

(xiii) Subunit 1l: Land bounded by the following UTM11 NAD27 coordinates (E, N): 508700, 3799400; 509200, 3799400; 509200, 3799100; 509100, 3799100; 509100, 3798900; 508700, 3798900; and 508700, 3799400.

(xiv) Subunit 1m: Land bounded by the following UTM11 NAD27 coordinates (E, N): 509400, 3800700; 509700, 3800700; 509700, 3800600; 509800, 3800600; 509800, 3800500; 510300, 3800500; 510300, 3800400; 510400, 3800400; 510400, 3800300; 510600, 3800300; 510600, 3800100; 510200, 3800100; 510200, 3800300; 510100, 3800300; 510100, 3800400; 509900, 3800400; 509900, 3800200; 509500, 3800200; 509500, 3800100; 509200, 3800100; 509200, 3800300; 509100, 3800300; 509100, 3800500; 509200, 3800500; 509200, 3800600; 509400, 3800600; and 509400, 3800700.

(xv) Subunit 1n: Land bounded by the following UTM11 NAD27 coordinates (E, N): 510500, 3801200; 510700, 3801200; 510700, 3800900; 510500, 3800900; 510500, 3800800; 510400, 3800800; 510400, 3800700; 510600, 3800700; 510600, 3800600; 510300, 3800600; 510300, 3800700; 510200, 3800700; 510200, 3800800; 510300, 3800800; 510300, 3801000; 510400, 3801000; 510400, 3801100; 510500, 3801100; and 510500, 3801200.

(xvi) Subunit 1o: Land bounded by the following UTM11 NAD27 coordinates (E, N): 510900, 3800700; 511300, 3800700; 511300, 3800500; 510900, 3800500; and 510900, 3800700.

(xvii) Subunit 1p: Land bounded by the following UTM11 NAD27 coordinates (E, N): 511900, 3801000; 512200, 3801000; 512200, 3800800; 512300, 3800800; 512300, 3800700; 512500, 3800700; 512500, 3800600; 512700, 3800600; 512700, 3800800; 513000, 3800800; 513000, 3800300; 512900, 3800300; 512900, 3800100; 512800, 3800100; 512800, 3799900; 512900, 3799900; 512900, 3799800; 513000, 3799800; 513000, 3799700; 513100, 3799700; 513100, 3799500; 513000, 3799500; 513000, 3799400; 512700, 3799400; 512700, 3799500; 512500, 3799500; 512500, 3799600; 512300, 3799600; 512300, 3799700; 512200, 3799700; 512200, 3799800; 512100, 3799800; 512100, 3799600; 512200, 3799600; 512200, 3799500; 512300, 3799500; 512300, 3799200; 511800, 3799200; 511800, 3799500; 511700, 3799500; 511700, 3799400; 511400, 3799400; 511400, 3799500; 511300, 3799500; 511300, 3799600; 511200, 3799600; 511200, 3799700; 511100, 3799700; 511100, 3799800; 511000, 3799800; 511000, 3800100; 511200, 3800100; 511200, 3800000; 511300, 3800000; 511300, 3799900; 511700, 3799900; 511700, 3799800; 511800, 3799800; 511800, 3799900; 512000, 3799900; 512000, 3800100; 511900, 3800100; 511900, 3800500; 512000, 3800500; 512000, 3800700; 511900, 3800700; and 511900, 3801000.

(xviii) Subunit 1q: Land bounded by the following UTM11 NAD27 coordinates (E, N): 513200, 3800300; 513500, 3800300; 513500, 3800200; 513900, 3800200; 513900, 3800100; 514000, 3800100; 514000, 3800000; 514100, 3800000; 514100, 3799900; 514200, 3799900; 514200, 3800000; 514600, 3800000; 514600, 3799800; 514500, 3799800; 514500, 3799300; 514100, 3799300; 514100, 3799600; 514000, 3799600; 514000, 3799400; 513700, 3799400; 513700, 3799500; 513500, 3799500; 513500, 3799400; 513600, 3799400; 513600, 3799300; 513900, 3799300; 513900, 3799200; 514000, 3799200; 514000, 3798900; 513600, 3798900; 513600, 3798800; 513500, 3798800; 513500, 3798700; 513300, 3798700; 513300, 3798800; 513200, 3798800; 513200, 3799000; 513100, 3799000; 513100, 3799500; 513200, 3799500; 513200, 3799800; 513400, 3799800; 513400, 3799900; 513100, 3799900; 513100, 3800200; 513200, 3800200; and 513200, 3800300.

(xix) Subunit 1r: Land bounded by the following UTM11 NAD27 coordinates (E, N): 514200, 3800800; 514500, 3800800; 514500, 3800500; 514200, 3800500; and 514200, 3800800.

(xx) Subunit 1s: Land bounded by the following UTM11 NAD27 coordinates (E, N): 515500, 3802100; 515900, 3802100; 515900, 3801900; 516000, 3801900; 516000, 3801800; 516100, 3801800; 516100, 3801600; 516000, 3801600; 516000, 3801500; 516500, 3801500; 516500, 3801200; 516400, 3801200; 516400, 3801100; 516200, 3801100; 516200, 3800900; 516100, 3800900; 516100, 3800800; 516000, 3800800; 516000, 3800700; 515800, 3800700; 515800, 3800600; 516200, 3800600; 516200, 3800700; 516500, 3800700; 516500, 3799800; 516400, 3799800; 516400, 3799700; 516300, 3799700; 516300, 3799800; 516100, 3799800; 516100, 3799900; 515800, 3799900; 515800, 3799800; 515600, 3799800; 515600, 3799700; 515300, 3799700; 515300, 3799800; 515000, 3799800; 515000, 3799900; 514900, 3799900; 514900, 3800100; 515000, 3800100; 515000, 3800200; 515300, 3800200; 515300, 3800100; 515400, 3800100; 515400, 3800200; 515500, 3800200; 515500, 3800300; 515600, 3800300; 515600, 3800200; 515800, 3800200; 515800, 3800300; 515700, 3800300; 515700, 3800600; 515600, 3800600; 515600, 3800800; 515100, 3800800; 515100, 3800700; 515200, 3800700; 515200, 3800400; 515100, 3800400; 515100, 3800300; 514700, 3800300; 514700, 3800400; 514600, 3800400; 514600, 3800800; 514500, 3800800; 514500, 3800900; 514400, 3800900; 514400, 3801100; 514500, 3801100; 514500, 3801200; 514600, 3801200; 514600, 3801300; 514800, 3801300; 514800, 3801400; 515200, 3801400; 515200, 3801300; 515700, 3801300; 515700, 3801500; 515600, 3801500; 515600, 3801600; 515500, 3801600; 515500, 3801700; 515400, 3801700; 515400, 3802000; 515500, 3802000; and 515500, 3802100.

(xxi) Subunit 1t: Land bounded by the following UTM11 NAD27 coordinates (E, N): 514800, 3799600; 515000, 3799600; 515000, 3799500; 515100, 3799500; 515100, 3799200; 515000, 3799200; 515000, 3799100; 514800, 3799100; 514800, 3799200; 514700, 3799200; 514700, 3799300; 514600, 3799300;

514600, 3799400; 514700, 3799400; 514700, 3799500; 514800, 3799500; and 514800, 3799600.

(xxii) Subunit 1u: Land bounded by the following UTM11 NAD27 coordinates (E, N): 516700, 3799700; 516900, 3799700; 516900, 3799600; 517100, 3799600; 517100, 3799500; 517200, 3799500; 517200, 3799000; 517300, 3799000; 517300, 3798700; 516800, 3798700; 516800, 3798600; 516400, 3798600; 516400, 3798700; 516300, 3798700; 516300, 3798600; 516100, 3798600; 516100, 3798700; 516000, 3798700; 516000, 3798800; 515900, 3798800; 515900, 3798900; 515700, 3798900; 515700, 3799000; 515400, 3799000; 515400, 3799100; 515300, 3799100; 515300, 3799500; 516000, 3799500; 516000, 3799400; 516300, 3799400; 516300, 3799300; 516400, 3799300; 516400, 3799600; 516700, 3799600; and 516700, 3799700.

(xxiii) Subunit 1v: Land bounded by the following UTM11 NAD27 coordinates (E, N): 516700, 3800500; 517100, 3800500; 517100, 3800300; 517200, 3800300; 517200, 3800000; 517100, 3800000; 517100, 3799900; 516700, 3799900; 516700, 3800000; 516600, 3800000; 516600, 3800400; 516700, 3800400; and 516700, 3800500.

(xxiv) Subunit 1w: Land bounded by the following UTM11 NAD27 coordinates (E, N): 518600, 3799900; 519100, 3799900; 519100, 3799600; 519000, 3799600; 519000, 3799500; 518700, 3799500; 518700, 3799400; 518500, 3799400; 518500, 3799200; 518400, 3799200; 518400, 3799100; 518300, 3799100; 518300, 3799000; 518200, 3799000; 518200, 3799100; 517900, 3799100; 517900, 3798900; 517800, 3798900; 517800, 3798800; 517600, 3798800; 517600, 3798900; 517500, 3798900; 517500, 3799000; 517400, 3799000; 517400, 3799300; 517300, 3799300; 517300, 3799700; 517500, 3799700; 517500, 3799800; 518100, 3799800; 518100, 3799700; 518400, 3799700; 518400, 3799800; 518600, 3799800; and 518600, 3799900.

(xxv) Subunit 1x: Land bounded by the following UTM11 NAD27 coordinates (E, N): 515400, 3797400; 515800, 3797400; 515800, 3797300; 516300, 3797300; 516300, 3797200; 516400, 3797200; 516400, 3796900; 515500, 3796900; 515500, 3797000; 515400, 3797000; and 515400, 3797400.

(xxvi) Subunit 1y: Land bounded by the following UTM11 NAD27 coordinates (E, N): 519100, 3797200; 519400, 3797200; 519400, 3797100; 519500, 3797100; 519500, 3796900; 519700, 3796900; 519700, 3796000; 519600, 3796000; 519600, 3795900; 519500, 3795900; 519500, 3795700; 519100, 3795700; 519100, 3796100; 519000, 3796100; 519000, 3796300; 518900, 3796300; 518900, 3796600; 518800, 3796600; 518800, 3796800; 518900, 3796800; 518900, 3797000; 519000, 3797000; 519000, 3797100; 519100, 3797100; and 519100, 3797200.

(xxvii) Subunit 1z: Land bounded by the following UTM11 NAD27 coordinates (E, N): 519600, 3797600; 519800, 3797600; 519800, 3797500; 520300, 3797500; 520300, 3797100; 520200, 3797100; 520200, 3797000; 519800, 3797000; 519800, 3797100; 519700, 3797100; 519700, 3797200; 519500, 3797200; 519500, 3797500; 519600, 3797500; and 519600, 3797600.

(xxviii) Subunit 1aa: Land bounded by the following UTM11 NAD27 coordinates (E, N): 519700, 3800600; 520200, 3800600; 520200, 3800200; 520100, 3800200; 520100, 3800100; 519700, 3800100; and 519700, 3800600.

(xxix) Subunit 1ab: Land bounded by the following UTM11 NAD27 coordinates (E, N): 520000, 3800000; 520700, 3800000; 520700, 3799900; 520800, 3799900; 520800, 3799500; 520400, 3799500; 520400, 3799600; 519900, 3799600; 519900, 3799900; 520000, 3799900; and 520000, 3800000.

(xxx) Subunit 1ac: Land bounded by the following UTM11 NAD27 coordinates (E, N): 521000, 3800000; 521500, 3800000; 521500, 3799700; 521400, 3799700; 521400, 3799500; 520900, 3799500; 520900, 3799800; 521000, 3799800; and 521000, 3800000.

(xxxi) Subunit 1ad: Land bounded by the following UTM11 NAD27 coordinates (E, N): 520000, 3799400; 520500, 3799400; 520500, 3799300; 520600, 3799300; 520600, 3799100; 520300, 3799100; 520300, 3799200; 520200, 3799200; 520200, 3799100; 520000, 3799100; 520000, 3799000; 520200, 3799000; 520200, 3798800; 520100, 3798800; 520100, 3798700; 519700, 3798700; 519700, 3799100; 519900, 3799100; 519900, 3799300; 520000, 3799300; and 520000, 3799400.

(xxxii) Subunit 1ae: Land bounded by the following UTM11 NAD27 coordinates (E, N): 521400, 3799000; 522000, 3799000; 522000, 3798600; 521600, 3798600; 521600, 3798500; 521500, 3798500; 521500, 3798400; 521300, 3798400; 521300, 3798300; 521200, 3798300; 521200, 3798200; 520900, 3798200; 520900, 3798300; 520700, 3798300; 520700, 3798000; 520300, 3798000; 520300, 3798300; 520400, 3798300; 520400, 3798400; 520600, 3798400; 520600, 3798500; 520400, 3798500; 520400, 3798700; 520500, 3798700; 520500, 3798800; 520700, 3798800; 520700, 3798700; 520800, 3798700; 520800, 3798800; 521100, 3798800; 521100, 3798700; 521400, 3798700; 521400, 3798800; 521300, 3798800; 521300, 3798900; 521400, 3798900; and 521400, 3799000.

(xxxiii) Subunit 1af: Land bounded by the following UTM11 NAD27 coordinates (E, N): 519800, 3794600; 520100, 3794600; 520100, 3794200; 519800, 3794200; and 519800, 3794600.

(xxxiv) Subunit 1ag: Land bounded by the following UTM11 NAD27 coordinates (E, N): 520400, 3794200; 521100, 3794200; 521100, 3793900; 521000, 3793900; 521000, 3793800; 520700, 3793800; 520700, 3793700; 520400, 3793700; 520400, 3793800; 520300, 3793800; 520300, 3793700; 520000, 3793700; 520000, 3793800; 519900, 3793800; 519900, 3794000; 520000, 3794000; 520000, 3794100; 520400, 3794100; and 520400, 3794200.

(xxxv) Subunit 1ah: Land bounded by the following UTM11 NAD27 coordinates (E, N): 521600, 3794700; 521800, 3794700; 521800, 3794600; 521900, 3794600; 521900, 3794300; 521800, 3794300; 521800, 3794200; 521400, 3794200; 521400, 3794500; 521500, 3794500; 521500, 3794600; 521600, 3794600; and 521600, 3794700.

(xxxvi) Subunit 1ai: Land bounded by the following UTM11 NAD27 coordinates (E, N): 521300, 3793300; 521700, 3793300; 521700, 3793200; 521800, 3793200; 521800, 3793000; 521900, 3793000; 521900, 3793100; 522400, 3793100; 522400, 3793000; 522600, 3793000; 522600, 3792900; 522800, 3792900; 522800, 3792800; 523000, 3792800; 523000, 3792500; 523100, 3792500; 523100, 3792400; 523400, 3792400; 523400, 3792300; 523500, 3792300; 523500, 3791900; 523400, 3791900; 523400, 3791800; 523200, 3791800;

523200, 3791900; 523100, 3791900; 523100, 3792000; 522800, 3792000; 522800, 3792100; 522700, 3792100; 522700, 3792200; 522400, 3792200; 522400, 3792300; 522200, 3792300; 522200, 3792400; 522000, 3792400; 522000, 3792600; 521900, 3792600; 521900, 3792500; 521800, 3792500; 521800, 3792600; 521700, 3792600; 521700, 3792700; 521400, 3792700; 521400, 3792900; 521200, 3792900; 521200, 3793200; 521300, 3793200; and 521300, 3793300.

(xxxvii) Subunit 1aj: Land bounded by the following UTM11 NAD27 coordinates (E, N): 524100, 3792500; 524300, 3792500; 524300, 3792400; 524500, 3792400; 524500, 3792300; 524700, 3792300; 524700, 3792200; 524800, 3792200; 524800, 3792100; 524900, 3792100; 524900, 3792200; 525300, 3792200; 525300, 3792100; 525400, 3792100; 525400, 3791800; 525300, 3791800; 525300, 3791600; 525500, 3791600; 525500, 3791500; 525600, 3791500; 525600, 3791300; 525700, 3791300; 525700, 3791200; 525800, 3791200; 525800, 3791500; 526200, 3791500; 526200, 3791300; 526300, 3791300; 526300, 3791200; 526500, 3791200; 526500, 3791100; 526700, 3791100; 526700, 3791000; 526800, 3791000; 526800, 3791100; 527100, 3791100; 527100, 3791000; 527200, 3791000; 527200, 3790900; 527400, 3790900; 527400, 3790600; 527500, 3790600; 527500, 3790100; 527000, 3790100; 527000, 3790200; 526900, 3790200; 526900, 3790400; 526600, 3790400; 526600, 3790500; 526500, 3790500; 526500, 3790200; 526400, 3790200; 526400, 3790100; 526300, 3790100; 526300, 3790000; 526000, 3790000; 526000, 3790500; 525700, 3790500; 525700, 3790400; 525600, 3790400; 525600, 3790500; 525500, 3790500; 525500, 3790600; 525400, 3790600; 525400, 3790700; 525300, 3790700; 525300, 3791000; 525100, 3791000; 525100, 3791200; 524800, 3791200; 524800, 3791300; 524700, 3791300; 524700, 3791200; 524300, 3791200; 524300, 3791300; 524200, 3791300; 524200, 3791400; 524000, 3791400; 524000, 3791500; 523800, 3791500; 523800, 3791900; 524200, 3791900; 524200, 3792100; 524000, 3792100; 524000, 3792400; 524100, 3792400; and 524100, 3792500; excluding land bounded by 525900, 3791100; 525900, 3790900; 526000, 3790900; 526000, 3791100; and 525900, 3791100.

(xxxviii) Subunit 1ak: Land bounded by the following UTM11 NAD27 coordinates (E, N): 527600, 3790400; 527900, 3790400; 527900, 3790300; 528000, 3790300; 528000, 3790100; 527900, 3790100; 527900, 3790000; 527600, 3790000; and 527600, 3790400.

(xxxix) Subunit 1al: Land bounded by the following UTM11 NAD27 coordinates (E, N): 527900, 3789600; 528200, 3789600; 528200, 3789300; 527800, 3789300; 527800, 3789500; 527900, 3789500; and 527900, 3789600.

(xl) Subunit 1am: Land bounded by the following UTM11 NAD27 coordinates (E, N): 526900, 3789400; 527100, 3789400; 527100, 3789300; 527200, 3789300; 527200, 3789100; 527400, 3789100; 527400, 3789200; 527700, 3789200; 527700, 3789100; 527800, 3789100; 527800, 3789000; 528000, 3789000; 528000, 3789100; 528400, 3789100; 528400, 3789000; 528500, 3789000; 528500, 3788900; 528600, 3788900; 528600, 3788700; 528700, 3788700; 528700, 3788600; 528800, 3788600; 528800, 3788400; 528900, 3788400; 528900, 3788300; 529000, 3788300; 529000, 3788100; 528900, 3788100; 528900, 3788000; 528700, 3788000; 528700, 3788100; 528100, 3788100; 528100, 3788300; 527900, 3788300; 527900, 3788400; 527800, 3788400; 527800, 3788500; 527700, 3788500; 527700, 3788600; 527600, 3788600; 527600, 3788500; 527200, 3788500; 527200, 3788700; 527100, 3788700; 527100, 3788600; 526800, 3788600; 526800, 3788700; 526600, 3788700; 526600, 3788900; 526700, 3788900; 526700, 3789000; 526900, 3789000; and 526900, 3789400.

(xli) Subunit 1an: Land bounded by the following UTM11 NAD27 coordinates (E, N): 529200, 3788100; 529500, 3788100; 529500, 3787700; 529400, 3787700; 529400, 3787600; 529100, 3787600; 529100, 3788000; 529200, 3788000; and 529200, 3788100.

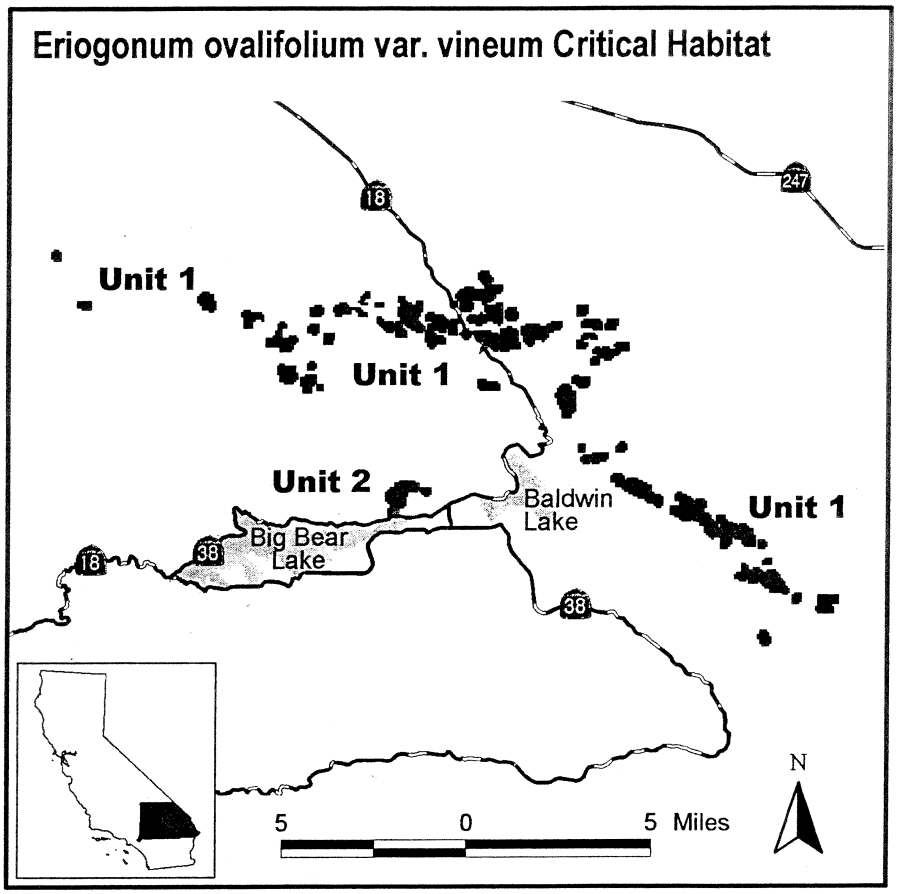
(xlii) Subunit 1ao: Land bounded by the following UTM11 NAD27 coordinates (E, N): 530200, 3788000; 531100, 3788000; 531100, 3787600; 530800, 3787600; 530800, 3787500; 530900, 3787500; 530900, 3787200; 530200, 3787200; 530200, 3787300; 530100, 3787300; 530100, 3787500; 530200, 3787500; and 530200, 3788000.

(xliii) Subunit 1ap: Land bounded by the following UTM11 NAD27 coordinates (E, N): 527700, 3786500; 528000, 3786500; 528000, 3786400; 528100, 3786400; 528100, 3786200; 528200, 3786200; 528200, 3785900; 528100, 3785900; 528100, 3785800; 527800, 3785800; 527800, 3785900; 527700, 3785900; 527700, 3786100; 527600, 3786100; 527600, 3786300; 527700, 3786300; and 527700, 3786500.

(5) Bertha Ridge Unit, San Bernardino County, California.

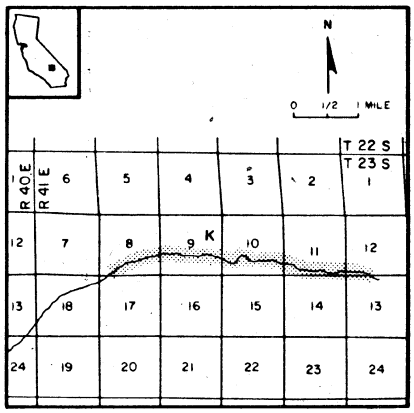
(i) From USGS 1:24,000 quadrangle maps Fawnskin and Big Bear City, California, land bounded by the following UTM11 NAD27 coordinates (E, N): 512000, 3793000; 512700, 3793000; 512700, 3792900; 512900, 3792900; 512900, 3792700; 513400, 3792700; 513400, 3792400; 513300, 3792400; 513300, 3792300; 513100, 3792300; 513100, 3792400; 513000, 3792400; 513000, 3792500; 512900, 3792500; 512900, 3792600; 512800, 3792600; 512800, 3792500; 512400, 3792500; 512400, 3792300; 512300, 3792300; 512300, 3791900; 512200, 3791900; 512200, 3791800; 512000, 3791800; 512000, 3791600; 511900, 3791600; 511900, 3791400; 511500, 3791400; 511500, 3791800; 511600, 3791800; 511600, 3792000; 511500, 3792000; 511500, 3792100; 511400, 3792100; 511400, 3792500; 511500, 3792500; 511500, 3792600; 511600, 3792600; 511600, 3792700; 511800, 3792700; 511800, 3792900; 512000, 3792900; and 512000, 3793000.

(ii) Note: *Eriogonum ovalifolium* var. *vineum* map follows:



Family Polygonaceae: *Eriogonum pelinophilum* (clay-loving wild-buckwheat). Colorado, Delta County. About 3 miles east of Austin near Highway 92. T14S, R94W 6th P.M. Section 26—west 225 feet of Section 26 lying south of State Highway 92 (5.6 acres). Section 27—that part of the SE¼SE¼ lying south of State Highway 92 (35.6 acres). Section 34—an area bounded by a line beginning at the northeast corner of Section 34, thence south along the section line 200 feet to a point; thence southwesterly to a point 1050 feet south and 550 feet west of the northeast corner of Section 34; thence southwesterly to a point 700 feet north and 900 feet east of center ¼ corner of Section 34; thence westerly 900 feet to the north-south ¼ line; thence northerly 600 feet along the ¼ line to a point; thence northeasterly to a point of the east 1/16 line; thence northerly along the 1/16 line 300 feet to the north section line of Section 34; thence easterly along the north section line to the point of beginning (65.0 acres). Section 35—north 200 feet of the west 225 feet (1.0 acres). Section 27—west 200 feet of Section 27 lying south of State Highway 92 (4.3 acres). Section 28—east 400 feet of Section 28 lying south of State Highway 92 (8.3 acres). Total 119.8 acres. The primary constituent elements include those factors associated with the whitish alkaline clay soils within the sparsely vegetated badlands of Mancos shale.

NOTE: Map follows:



Family Polygonaceae: *Oxytheca Parishii* var. *goodmaniana* (Cushenbury Oxytheca)

(1) Critical habitat units are depicted for San Bernardino County, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Oxytheca parishii* var. *goodmaniana* are those habitat components that are essential for the primary biological needs of the species. Based on our current knowledge of this species, the primary constituent elements of critical habitat for this species are listed below and consist of, but are not limited to:

(i) Soils derived primarily from upslope limestone, a mixture of limestone and dolomite, or limestone talus substrates with parent materials that include Bird Spring Formation, Bonanza King Formation, middle and lower members of the Monte Cristo Limestone, and the Crystal Pass member of the Sultan Limestone Formation at elevations between 1,440 and 2,372 m (4,724 and 7,782 ft);

(ii) Soils with intact, natural surfaces that have not been substantially altered by land use activities (*e.g.*, graded, excavated, recontoured, or otherwise altered by ground-disturbing equipment); and

(iii) Associated plant communities that have areas with a moderately open canopy cover (generally between 25 and 53 percent (Neel 2000)).

(3) Existing features and structures, such as buildings, active mines, paved or unpaved roads, other paved or cleared areas, lawns, and other urban landscaped areas, are not likely to contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species or primary constituent elements in adjacent critical habitat.

(4) Northeastern Slope Unit, San Bernardino County, California.

(i) From USGS 1:24,000 quadrangle maps Butler Peak, Fawnskin, Big Bear City, Rattlesnake Canyon, and Onyx Peak, California.

(ii) Subunit 1a: Land bounded by the following UTM11 NAD27 coordinates (E, N): 498200, 3801600; 498500, 3801600; 498500, 3801500; 498600, 3801500; 498600, 3801200; 498300, 3801200; 498300, 3801300; 498200, 3801300; and 498200, 3801600.

(iii) Subunit 1b: Land bounded by the following UTM11 NAD27 coordinates (E, N): 498800, 3801200; 499400, 3801200; 499400, 3800900; 499500, 3800900; 499500, 3800800; 499600, 3800800; 499600, 3800600; 499500, 3800600; 499500, 3800500; 499400, 3800500; 499400, 3800400; 499100, 3800400; 499100, 3800300; 499000, 3800300; 499000, 3800000; 498900, 3800000; 498900, 3799900; 498700, 3799900; 498700, 3799600; 498300, 3799600; 498300, 3800000; 498400, 3800000; 498400, 3800100; 498600, 3800100; 498600, 3800300; 498500, 3800300; 498500, 3800400; 498200, 3800400; 498200, 3800500; 498000, 3800500; 498000, 3800800; 498400, 3800800; 498400, 3800900; 498700, 3800900; 498700, 3801100; 498800, 3801100; and 498800, 3801200.

(iv) Subunit 1c: Land bounded by the following UTM11 NAD27 coordinates (E, N): 500200, 3799900; 500600, 3799900; 500600, 3799800; 500700, 3799800; 500700, 3799600; 500600, 3799600; 500600, 3799500; 500300, 3799500; 500300, 3799600; 500200, 3799600; and 500200, 3799900.

(v) Subunit 1d: Land bounded by the following UTM11 NAD27 coordinates (E, N): 502800, 3797400; 503400, 3797400; 503400, 3797200; 503500, 3797200; 503500, 3797000; 503400, 3797000; 503400, 3796900; 502900, 3796900; 502900, 3797000; 502800, 3797000; and 502800, 3797400.

(vi) Subunit 1e: Land bounded by the following UTM11 NAD27 coordinates (E, N): 503600, 3799300; 504000, 3799300; 504000, 3798600; 504300, 3798600; 504300, 3798500; 504400, 3798500; 504400, 3798400; 505300, 3798400; 505300, 3798300; 505500, 3798300; 505500, 3798000; 505300, 3798000; 505300, 3797700; 505100, 3797700; 505100, 3797800; 505000, 3797800; 505000, 3798000; 504500, 3798000; 504500, 3797900; 504300, 3797900; 504300, 3798000; 504000, 3798000; 504000, 3798100; 503900, 3798100; 503900, 3798300; 503800, 3798300; 503800, 3798100; 503500, 3798100; 503500, 3798000; 503100, 3798000; 503100, 3798400; 503200, 3798400; 503200, 3798500; 503700, 3798500; 503700, 3798600; 503600, 3798600; and 503600, 3799300.

(vii) Subunit 1f: Land bounded by the following UTM11 NAD27 coordinates (E, N): 506700, 3799500; 506900, 3799500; 506900, 3799200; 507200, 3799200; 507200, 3799300; 507500, 3799300; 507500, 3799200; 507600, 3799200; 507600, 3799000; 507500, 3799000; 507500, 3798900; 507400, 3798900; 507400, 3798800; 506900, 3798800; 506900, 3798900; 506700, 3798900; 506700, 3798800; 506000, 3798800; 506000, 3799200; 506600, 3799200; 506600, 3799400; 506700, 3799400; and 506700, 3799500.

(viii) Subunit 1g: Land bounded by the following UTM11 NAD27 coordinates (E, N): 506800, 3798100; 507300, 3798100; 507300, 3797800; 507400, 3797800; 507400, 3797700; 507600, 3797700; 507600, 3797600; 507900, 3797600; 507900, 3797500; 508000, 3797500; 508000, 3797400; 508100, 3797400;

508100, 3797200; 508200, 3797200; 508200, 3797000; 508300, 3797000; 508300, 3796700; 508400, 3796700; 508400, 3796600; 508500, 3796600; 508500, 3796200; 508200, 3796200; 508200, 3796100; 507700, 3796100; 507700, 3796500; 507800, 3796500; 507800, 3796600; 507900, 3796600; 507900, 3796700; 507800, 3796700; 507800, 3796800; 507700, 3796800; 507700, 3797000; 507600, 3797000; 507600, 3797400; 507500, 3797400; 507500, 3797300; 507400, 3797300; 507400, 3797200; 507000, 3797200; 507000, 3797300; 506900, 3797300; 506900, 3797400; 506800, 3797400; 506800, 3797600; 506700, 3797600; 506700, 3798000; 506800, 3798000; and 506800, 3798100.

(ix) Subunit 1h: Land bounded by the following UTM11 NAD27 coordinates (E, N): 508800, 3799300; 509000, 3799300; 509000, 3799200; 509100, 3799200; 509100, 3798800; 509000, 3798800; 509000, 3798700; 508800, 3798700; 508800, 3798800; 508700, 3798800; 508700, 3799100; 508800, 3799100; and 508800, 3799300.

(x) Subunit 1i: Land bounded by the following UTM11 NAD27 coordinates (E, N): 509300, 3801000; 509600, 3801000; 509600, 3800800; 509700, 3800800; 509700, 3800700; 509800, 3800700; 509800, 3800500; 510100, 3800500; 510100, 3800400; 510300, 3800400; 510300, 3800300; 510500, 3800300; 510500, 3800000; 509900, 3800000; 509900, 3800100; 509500, 3800100; 509500, 3800400; 509600, 3800400; 509600, 3800500; 509500, 3800500; 509500, 3800600; 509400, 3800600; 509400, 3800800; 509300, 3800800; and 509300, 3801000.

(xi) Subunit 1j: Land bounded by the following UTM11 NAD27 coordinates (E, N): 511000, 3800100; 511200, 3800100; 511200, 3800000; 511300, 3800000; 511300, 3799900; 511500, 3799900; 511500, 3799800; 511600, 3799800; 511600, 3799600; 511500, 3799600; 511500, 3799500; 511300, 3799500; 511300, 3799600; 511200, 3799600; 511200, 3799800; 511100, 3799800; 511100, 3799900; 511000, 3799900; and 511000, 3800100.

(xii) Subunit 1k: Land bounded by the following UTM11 NAD27 coordinates (E, N): 512300, 3800600; 512600, 3800600; 512600, 3800500; 512700, 3800500; 512700, 3800100; 512600, 3800100; 512600, 3799900; 512700, 3799900; 512700, 3799600; 512300, 3799600; 512300, 3799700; 512100, 3799700; 512100, 3799600; 511700, 3799600; 511700, 3799800; 511900, 3799800; 511900, 3799900; 512000, 3799900; 512000, 3799800; 512100, 3799800; 512100, 3800000; 511900, 3800000; 511900, 3800100; 511800, 3800100; 511800, 3800500; 512300, 3800500; and 512300, 3800600.

(xiii) Subunit 1l: Land bounded by the following UTM11 NAD27 coordinates (E, N): 513300, 3799300; 513600, 3799300; 513600, 3799200; 513700, 3799200; 513700, 3798900; 513600, 3798900; 513600, 3798800; 513400, 3798800; 513400, 3798900; 513200, 3798900; 513200, 3799200; 513300, 3799200; and 513300, 3799300.

(xiv) Subunit 1m: Land bounded by the following UTM11 NAD27 coordinates (E, N): 513300, 3800400; 513500, 3800400; 513500, 3800200; 513700, 3800200; 513700, 3800100; 513800, 3800100; 513800, 3800000; 514000, 3800000; 514000, 3799900; 514100, 3799900; 514100, 3799700; 513800, 3799700; 513800, 3799800; 513700, 3799800; 513700, 3799900; 513300, 3799900; 513300, 3800000; 513200, 3800000; 513200, 3800300; 513300, 3800300; and 513300, 3800400.

(xv) Subunit 1n: Land bounded by the following UTM11 NAD27 coordinates (E, N): 514200, 3800800; 514400, 3800800; 514400, 3800700; 514500, 3800700; 514500, 3800500; 514200, 3800500; and 514200, 3800800.

(xvi) Subunit 1o: Land bounded by the following UTM11 NAD27 coordinates (E, N): 514800, 3801300; 515000, 3801300; 515000, 3801200; 515100, 3801200; 515100, 3801000; 515000, 3801000; 515000, 3800900; 514700, 3800900; 514700, 3801200; 514800, 3801200; and 514800, 3801300.

(xvii) Subunit 1p: Land bounded by the following UTM11 NAD27 coordinates (E, N): 514600, 3799700; 514900, 3799700; 514900, 3799400; 514600, 3799400; and 514600, 3799700.

(xviii) Subunit 1q: Land bounded by the following UTM11 NAD27 coordinates (E, N): 515900, 3802200; 516200, 3802200; 516200, 3801900; 516100, 3801900; 516100, 3801800; 515900, 3801800; 515900, 3801900; 515800, 3801900; 515800, 3802100; 515900, 3802100; and 515900, 3802200.

(xix) Subunit 1r: Land bounded by the following UTM11 NAD27 coordinates (E, N): 516100, 3801400; 516400, 3801400; 516400, 3801000; 516100, 3801000; 516100, 3801100; 516000, 3801100; 516000, 3801300; 516100, 3801300; and 516100, 3801400.

(xx) Subunit 1s: Land bounded by the following UTM11 NAD27 coordinates (E, N): 515300, 3800400; 515600, 3800400; 515600, 3800300; 515700, 3800300; 515700, 3799800; 515600, 3799800; 515600, 3799700; 515300, 3799700; and 515300, 3800400.

(xxi) Subunit 1t: Land bounded by the following UTM11 NAD27 coordinates (E, N): 515700, 3800600; 516100, 3800600; 516100, 3800500; 516400, 3800500; 516400, 3800400; 516500, 3800400; 516500, 3799800; 516400, 3799800; 516400, 3799700; 516300, 3799700; 516300, 3799800; 516100, 3799800; 516100, 3800000; 516000, 3800000; 516000, 3800100; 515800, 3800100; 515800, 3800300; 515700, 3800300; and 515700, 3800600.

(xxii) Subunit 1u: Land bounded by the following UTM11 NAD27 coordinates (E, N): 516800, 3800400; 517100, 3800400; 517100, 3800300; 517200, 3800300; 517200, 3800000; 516800, 3800000; and 516800, 3800400.

(xxiii) Subunit 1v: Land bounded by the following UTM11 NAD27 coordinates (E, N): 515500, 3799600; 515900, 3799600; 515900, 3799500; 516000, 3799500; 516000, 3799400; 516400, 3799400; 516400, 3799300; 516500, 3799300; 516500, 3799100; 516700, 3799100; 516700, 3799200; 516600, 3799200; 516600, 3799400; 516700, 3799400; 516700, 3799500; 517000, 3799500; 517000, 3799300; 517100, 3799300; 517100, 3799100; 517200, 3799100; 517200, 3798700; 516500, 3798700; 516500, 3798800; 516300, 3798800; 516300, 3798900; 516200, 3798900; 516200, 3799000; 516100, 3799000; 516100, 3799100; 515900, 3799100; 515900, 3799000; 515700, 3799000; 515700, 3798900; 515400, 3798900; 515400, 3799000; 515300, 3799000; 515300, 3799300; 515400, 3799300; 515400, 3799500; 515500, 3799500; and 515500, 3799600.

(xxiv) Subunit 1w: Land bounded by the following UTM11 NAD27 coordinates (E, N):

517500, 3799800; 518000, 3799800; 518000, 3799700; 518300, 3799700; 518300, 3799800; 518600, 3799800; 518600, 3799700; 518800, 3799700; 518800, 3799400; 518600, 3799400; 518600, 3799300; 518700, 3799300; 518700, 3798900; 518300, 3798900; 518300, 3799000; 518200, 3799000; 518200, 3799100; 517900, 3799100; 517900, 3798800; 517800, 3798800; 517800, 3798700; 517500, 3798700; 517500, 3799000; 517400, 3799000; 517400, 3799300; 517500, 3799300; and 517500, 3799800.

(xxv) Subunit 1x: Land bounded by the following UTM11 NAD27 coordinates (E, N): 520900, 3798700; 521200, 3798700; 521200, 3798600; 521300, 3798600; 521300, 3798300; 521200, 3798300; 521200, 3798100; 520800, 3798100; 520800, 3798200; 520700, 3798200; 520700, 3798600; 520900, 3798600; and 520900, 3798700.

(xxvi) Subunit 1y: Land bounded by the following UTM11 NAD27 coordinates (E, N): 526700, 3791000; 527000, 3791000; 527000, 3790900; 527300, 3790900; 527300, 3790800; 527400, 3790800; 527400, 3790600; 527000, 3790600; 527000, 3790400; 526600, 3790400; 526600, 3790700; 526700, 3790700; and 526700, 3791000.

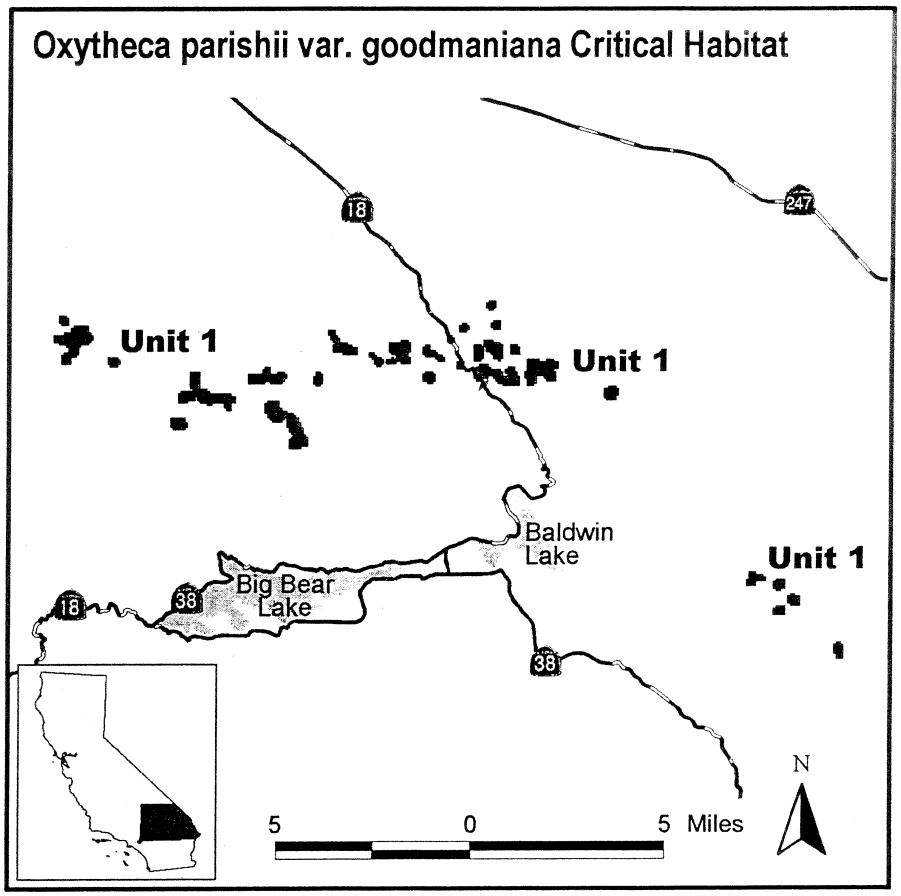
(xxvii) Subunit 1z: Land bounded by the following UTM11 NAD27 coordinates (E, N): 527800, 3790700; 528200, 3790700; 528200, 3790300; 528000, 3790300; 528000, 3790200; 527800, 3790200; 527800, 3790300; 527700, 3790300; 527700, 3790600; 527800, 3790600; and 527800, 3790700.

(xxviii) Subunit 1aa: Land bounded by the following UTM11 NAD27 coordinates (E, N): 527800, 3789600; 528200, 3789600; 528200, 3789200; 527700, 3789200; 527700, 3789500; 527800, 3789500; and 527800, 3789600.

(xxix) Subunit 1ab: Land bounded by the following UTM11 NAD27 coordinates (E, N): 528400, 3790100; 528600, 3790100; 528600, 3790000; 528800, 3790000; 528800, 3789600; 528400, 3789600; 528400, 3789700; 528300, 3789700; 528300, 3790000; 528400, 3790000; and 528400, 3790100.

(xxx) Subunit 1ac: Land bounded by the following UTM11 NAD27 coordinates (E, N): 530300, 3788100; 530500, 3788100; 530500, 3788000; 530600, 3788000; 530600, 3787400; 530300, 3787400; 530300, 3787600; 530200, 3787600; 530200, 3788000; 530300, 3788000; and 530300, 3788100.

(xxxi) Note: *Oxytheca parishii* var. *goodmaniana* map follows:



Family Polygonaceae: *Polygonum hickmanii* (Scotts Valley polygonum)

(1) Critical habitat units are depicted for Santa Cruz County, California, on the map below.

(2) The primary constituent elements of critical habitat for *Polygonum hickmanii* are the habitat components that provide:

(i) Thin soils in the Bonnydoon series that have developed over outcrops of Santa Cruz mudstone and Purisima sandstone;

(ii) ''Wildflower field'' habitat that has developed on these thin-soiled sites;

(iii) A grassland plant community that supports the ''wildflower field'' habitat and that supports the pollinator activity and seed dispersal mechanisms that typically occur within the grassland plant community;

(iv) Areas around each colony to allow for recolonization to adjacent suitable microhabitat sites; and

(v) Habitat within the subwatersheds upslope to the ridgelines to maintain the edaphic and hydrologic conditions and slope stability that provide the seasonally wet substrate for growth and reproduction of *Polygonum hickmanii.*

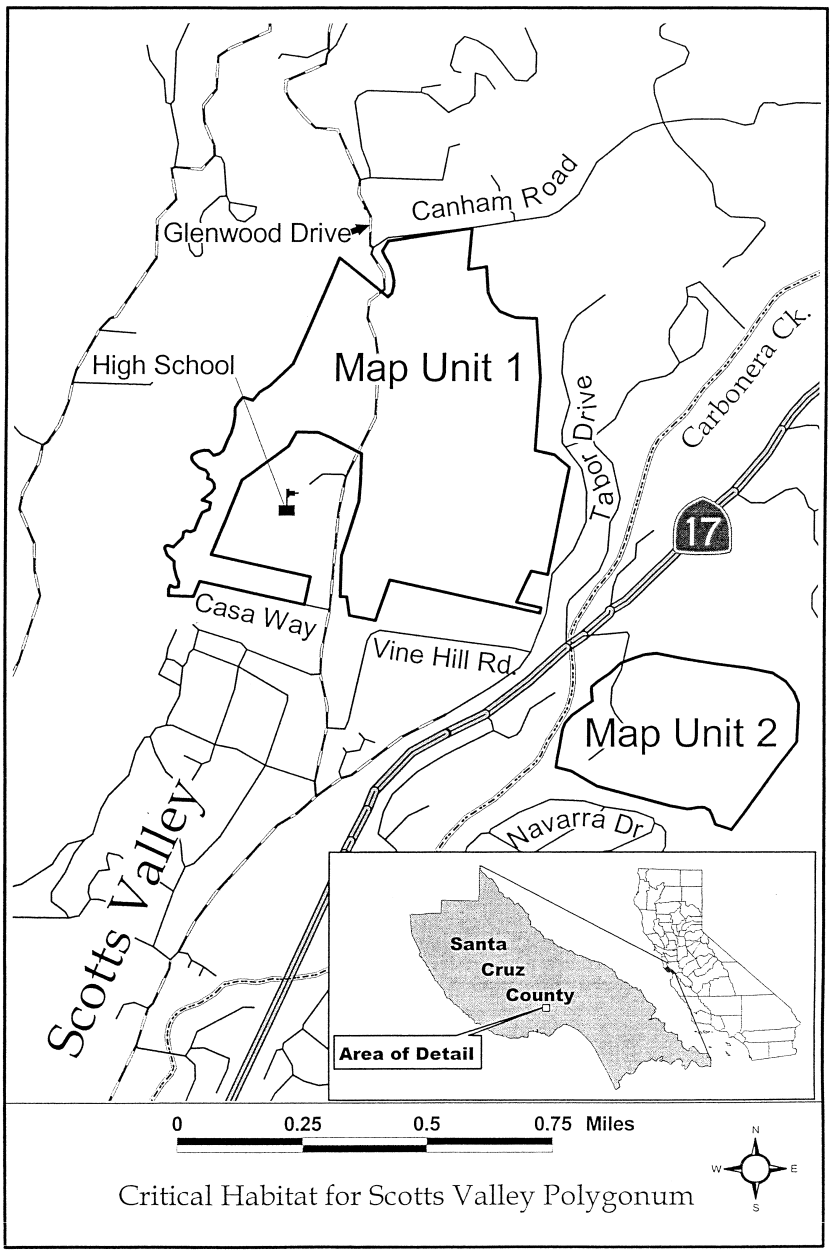
(3) Existing features and structures, such as buildings, roads, railroads, airports, other paved areas, lawns, and other urban landscaped areas, do not contain one or more of the primary constituent elements. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they may affect the species and/or primary constituent elements in adjacent critical habitat.

(4) Unit 1: Santa Cruz County, California. From USGS 7.5′ quadrangle map Felton, California, Mount Diablo Meridian, California. Lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 587990,

4103190; 587999, 4103220; 588021, 4103230; 588025, 4103250; 587997, 4103260; 588025, 4103280; 588035, 4103290; 588033, 4103310; 588025, 4103320; 588012, 4103330; 588014, 4103340; 588005, 4103350; 587984, 4103360; 587969, 4103370; 587962, 4103380; 587958, 4103390; 587962, 4103400; 587975, 4103410; 587992, 4103410; 588012, 4103420; 588029, 4103400; 588046, 4103410; 588058, 4103420; 588064, 4103430; 588072, 4103450; 588082, 4103480; 588088, 4103500; 588091, 4103530; 588091, 4103560; 588099, 4103570; 588115, 4103590; 588146, 4103580; 588169, 4103610; 588201, 4103630; 588272, 4103700; 588411, 4104050; 588571, 4103930; 588584, 4103940; 588589, 4103960; 588590, 4103980; 588583, 4104010; 588574, 4104030; 588559, 4104050; 588549, 4104070; 588568, 4104110; 588833, 4104150; 588827, 4104020; 588883, 4104030; 588891, 4103950; 588906, 4103920; 588931, 4103890; 588979, 4103870; 589049, 4103870; 589069, 4103680; 589061, 4103450; 589124, 4103440; 589173, 4103400; 589117, 4103050; 589062, 4103060; 589019, 4102960; 589099, 4102940; 589096, 4102920; 588612, 4103020; 588570, 4102880; 588485, 4102900; 588474, 4102960; 588452, 4102960; 588452, 4103090; 588473, 4103160; 588502, 4103270; 588504, 4103330; 588505, 4103420; 588402, 4103470; 588360, 4103480; 588292, 4103480; 588267, 4103440; 588121, 4103320; 588033, 4103080; 588352, 4103020; 588337, 4102930; 588000, 4102990; 587981, 4102940; 587900, 4102940; 587900, 4102960; 587905, 4102980; 587919, 4102970; 587931, 4102970; 587932, 4102990; 587924, 4103010; 587916, 4103040; 587915, 4103060; 587893, 4103070; 587887, 4103090; 587883, 4103100; 587885, 4103100; 587891, 4103110; 587911, 4103100; 587939, 4103130; 587942, 4103150; 587951, 4103160; 587963, 4103150; 587977, 4103160; 587990, 4103190.

(5) Unit 2: Santa Cruz County, California. From USGS 7.5′ quadrangle map Laurel, California, Mount Diablo Meridian, California. Lands bounded by the following UTM zone 10 NAD83 coordinates (E,N): 589297, 4102370; 589213, 4102420; 589164, 4102430; 589168, 4102460; 589174, 4102500; 589181, 4102550; 589189, 4102570; 589210, 4102600; 589243, 4102620; 589261, 4102630; 589274, 4102640; 589271, 4102660; 589270, 4102680; 589270, 4102690; 589289, 4102710; 589327, 4102740; 589361, 4102770; 589402, 4102790; 589435, 4102800; 589472, 4102800; 589571, 4102790; 589657, 4102780; 589762, 4102770; 589845, 4102750; 589889, 4102730; 589917, 4102690; 589932, 4102660; 589932, 4102620; 589930, 4102530; 589865, 4102440; 589732, 4102250; 589681, 4102260; 589669, 4102290; 589661, 4102300; 589642, 4102310; 589623, 4102310; 589590, 4102310; 589531, 4102320; 589297, 4102370.

(6) Map for Units 1 and 2 follows:



Family Ranunculaceae: *Delphinium bakeri* (Baker's larkspur)

(1) Critical habitat units are depicted for Sonoma and Marin counties, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Delphinium bakeri* are the habitat components that provide:

(i) Soils that are derived from decomposed shale;

(ii) Plant communities that support associated species, including, but not limited to: *Umbellularia californica* (California bay), *Aesculus californica* (California buckeye), *Quercus agrifolia* (coastal live oak), *Baccharis pulularis* ssp. *consanguinea* (coyotebrush), *Symphorcarpos* cf. *rivularis* (snowberry), *Rubus ursinus* (California blackberry), *Pteridium aqulinum* (braken fern), *Polystichum munitum* (Sword fern), *Pityrogramma triangularis* (goldback fern), *Dryopteris arguta* (coastal woodfern), *Adiantum jordanii* (maidenhair fern), *Polypodium glycyrrhiza* (licorice fern), *Toxicodendron diversilobum* (poison oak), *Ceanothus thyrsiflorus* (blueblossom ceanothus), *Lithophragma affine* (woodland star), and *Holodiscus discolor* (oceanspray); and

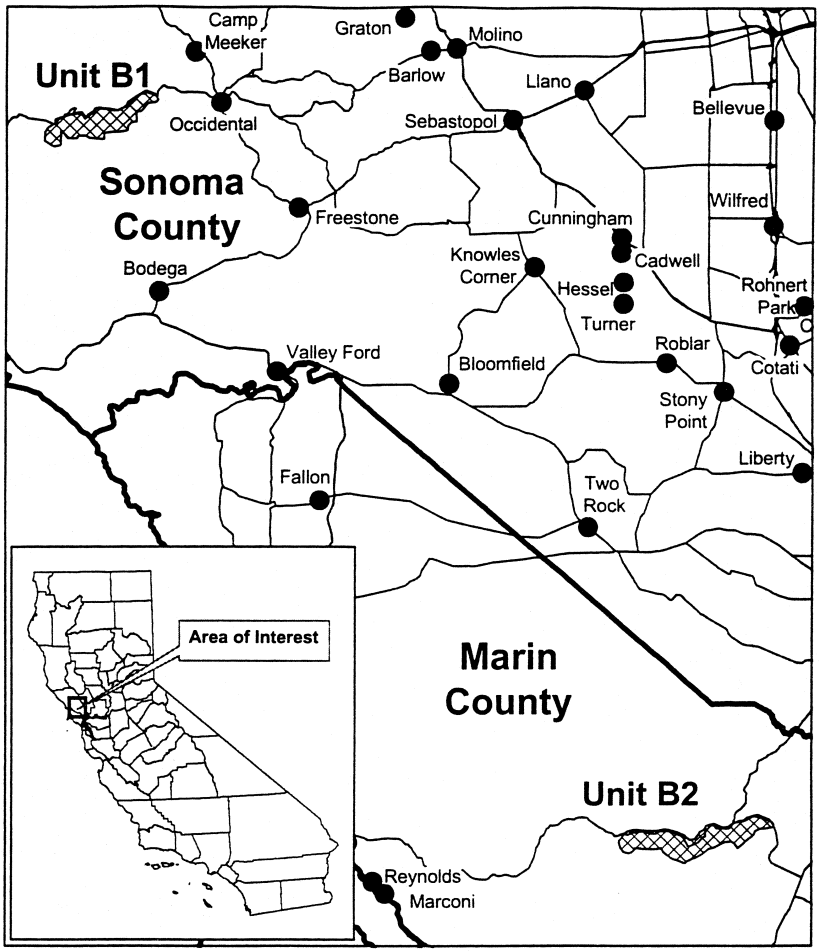
(iii) Mesic conditions on extensive north-facing slopes.

(3) Critical habitat does not include existing features and structures made by people, such as buildings, roads and other paved areas, lawns, and developed areas not containing one or more of the primary constituent elements.

(4) Critical Habitat Map Units.

(i) Data layers defining map units were created on a base of USGS 7.5′ quadrangles obtained from the State of California's Stephen P. Teale Data Center. Proposed critical habitat units were then mapped using Universal Transverse Mercator (UTM) coordinates.

(ii) Map 1—Index map for *Delphinium bakeri* follows:

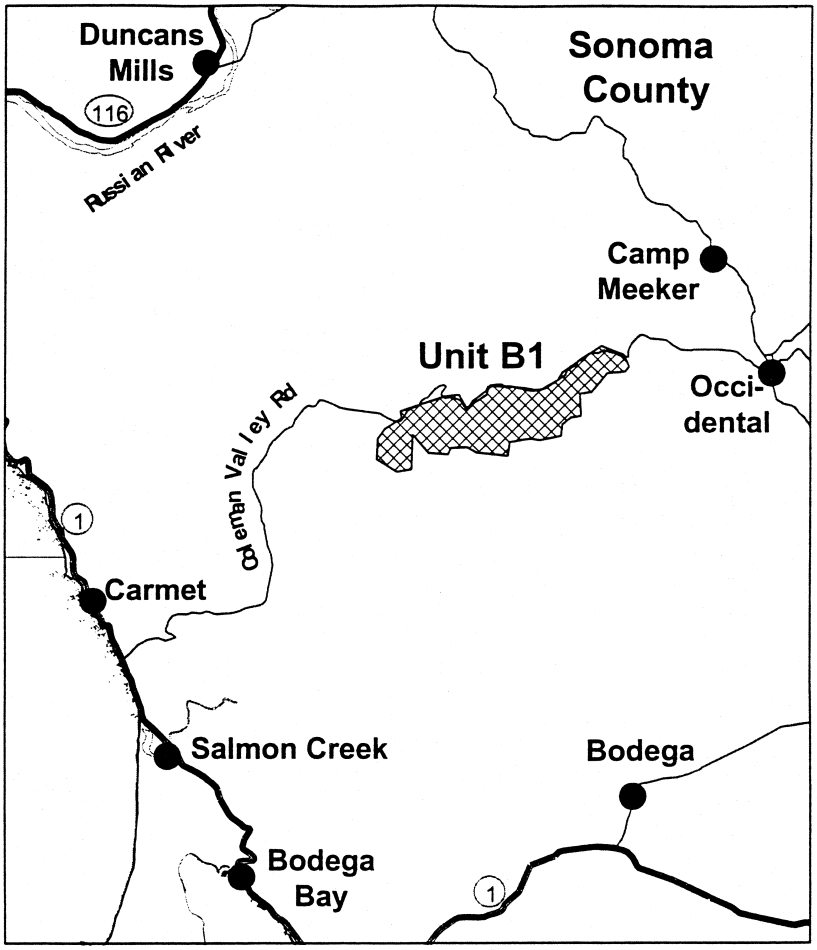


(5) Unit B1: Sonoma County, California.

(i) From USGS 1:24,000 quadrangle maps Camp Meeker and Duncan Hills, California, land bounded by the following UTM10 NAD83 coordinates (E,N): 498360, 4249440; 498030, 4249650; 498040, 4249990; 498160, 4250150; 498430, 4250320; 498420, 4250440; 499140, 4250680; 499380, 4250710; 499510, 4250490; 499840, 4250710; 499880,

4250840; 500250, 4250840; 500580, 4250770; 500730, 4250780; 501020, 4250950; 501080, 4251070; 501360, 4251270; 501520, 4251370; 501730, 4251520; 502100, 4251370; 502190, 4251180; 502120, 4251090; 501830, 4251060; 501570, 4250750; 501380, 4250720; 501400, 4250360; 501230, 4250330; 501090, 4250220; 501070, 4250030; 500720, 4249960; 500550, 4249990; 500220, 4249930; 500190, 4249700; 499680, 4249760; 499520, 4249850; 499250, 4249830; 499210, 4249730; 498880, 4249750; 498620, 4250050; 498600, 4249490; 498360, 4249440.

(ii) Map 2—Unit B1 for *Delphinium bakeri* follows:



Map 2: Critical Habitat Unit B1
Delphinium bakeri

Critical Habitat

Miles
0 1 2

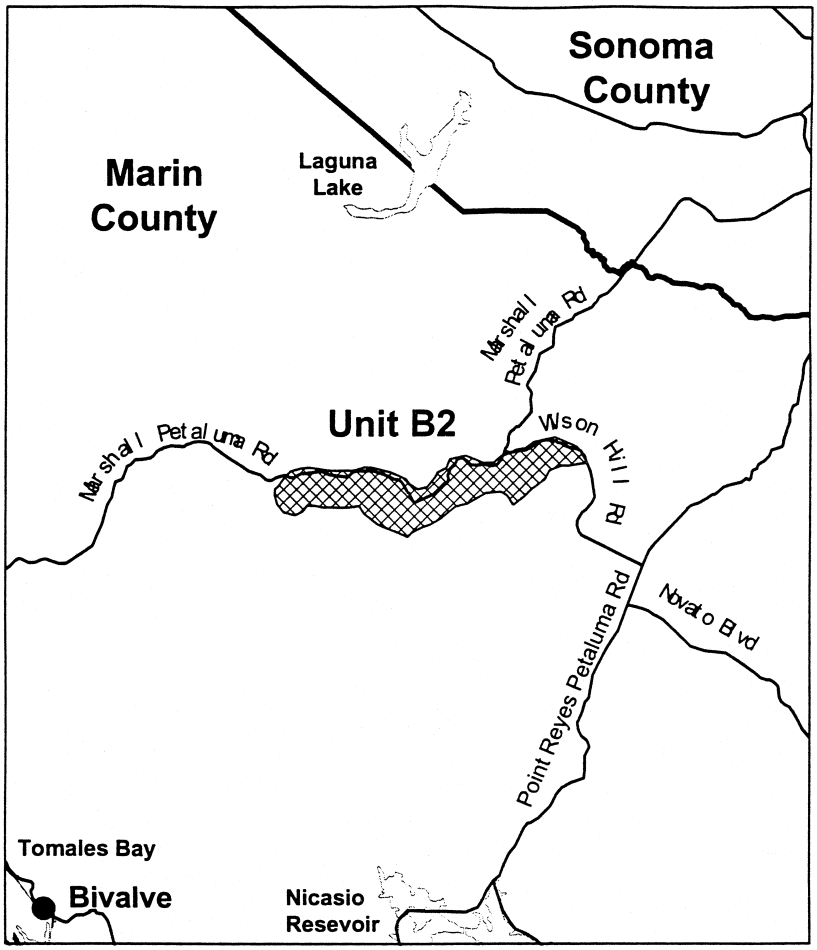
N
W E
S

(6) Unit B2: Marin County, California.

(i) From USGS 1:24,000 quadrangle maps Petaluma and Point Reyes NE, California, land bounded by the following UTM10 NAD83 coordinates (E,N): 521780, 4222900; 521560, 4223000; 521350, 4223070; 521230, 4223130; 520980, 4223320; 520890, 4223460; 520680, 4223430; 520220, 4223440; 520100, 4223460; 519940, 4223460; 519870,

4223360; 519720, 4223280; 519510, 4223340; 519400, 4223480; 519350, 4223630; 519360, 4223760; 519410, 4223800; 519530, 4223970; 519640, 4224090; 519830, 4224140; 519980, 4224160; 520440, 4224100; 520760, 4224100; 520990, 4224170; 521130, 4224160; 521460, 4224080; 521740, 4223960; 521820, 4223870; 521960, 4223770; 522130, 4223810; 522290, 4224000; 522320, 4224070; 522480, 4224160; 522550, 4224310; 522830, 4224380; 523160, 4224240; 523340, 4224250; 523470, 4224360; 523660, 4224430; 523750, 4224480; 523920, 4224510; 524070, 4224620; 524460, 4224710; 524860, 4224530; 525010, 4224370; 525030, 4224250; 524690, 4224190; 524590, 4224200; 524360, 4224100; 524280, 4223950; 524050, 4223780; 523920, 4223650; 523700, 4223480; 523600, 4223640; 523480, 4223720; 523210, 4223700; 522880, 4223510; 522650, 4223450; 522370, 4223230; 522170, 4223120; 522050, 4223080; 521860, 4222980; 521780, 4222900.

(ii) Map 3—Unit B2 for *Delphinium bakeri* follows:



Family Ranunculaceae: *Delphinium luteum* (Yellow larkspur)

(1) Critical habitat units are depicted for Sonoma and Marin counties, California, on the maps below.

(2) The primary constituent elements of critical habitat for *Delphinium luteum* are the habitat components that provide:

(i) Plant communities, including north coastal scrub or coastal prairie communities, including but not limited to: *Arabis blepharophylla* (rose rockcress), *Calochortus tolmei* (Tolmei startulip), *Mimulus aurantiacus* (orange bush monkeyflower), *Dudleya caespitosa* (sea lettuce), *Polypodium californicum* (California polyploidy), *Eriogonum parviflorum* (sea cliff buckwheat), *Toxicodendron diversilobum* (poison oak), *Romanzoffia californica* (California mistmaiden), *Hesperevax sparsiflora* (evax), *Pentagramma triangularis* (goldenback fern), and *Sedum spathulifolium* (broadleaf stonecrop);

(ii) Relatively steep sloped soils (30 percent or greater) derived from sandstone or shale, with rapid runoff and high erosion potential, such as Kneeland or Yorkville series soils;

(iii) Generally north aspected areas; and

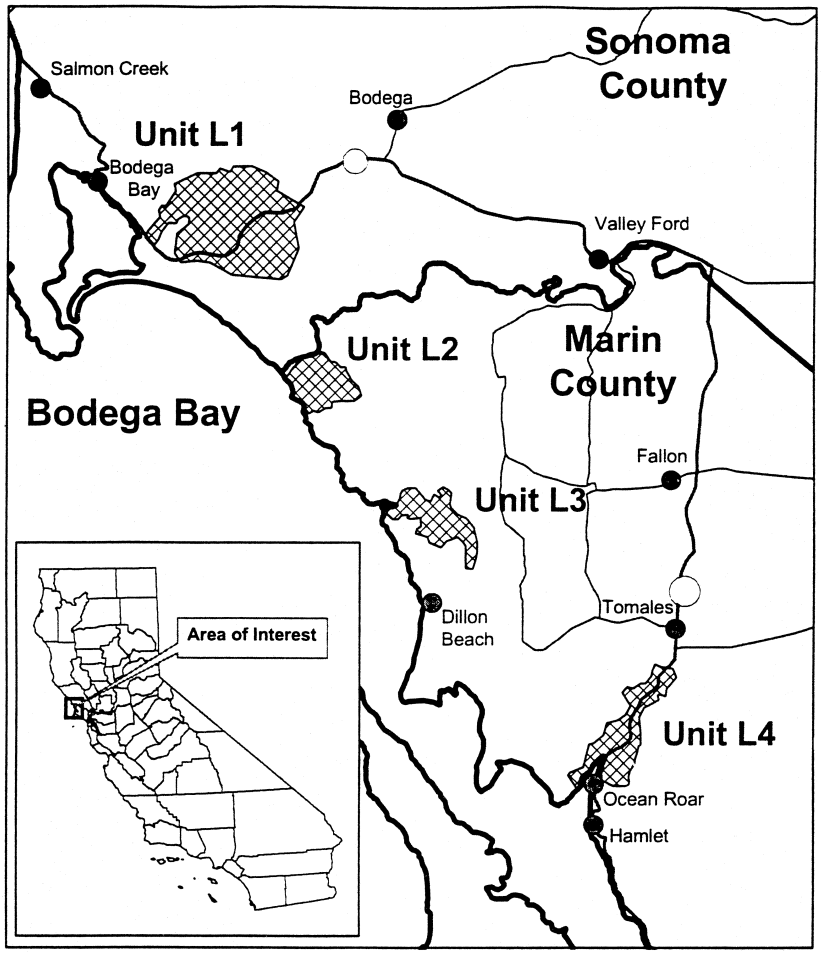
(iv) Habitat upslope and downslope from known populations to maintain disturbance such as occasional rock slides or soil slumping that the species appears to require.

(3) Critical habitat does not include existing features and structures made by people, such as buildings, roads and other paved areas, lawns, and other developed areas not containing one or more of the primary constituent elements.

(4) Critical Habitat Map Units.

(i) Data layers defining map units were created on a base of USGS 7.5' quadrangles obtained from the State of California's Stephen P. Teale Data Center. Proposed critical habitat units were then mapped using Universal Transverse Mercator (UTM) coordinates.

(i) Map 4–Index map for *Delphinium luteum* follows:



(5) Unit L1: Bodega Bay, Sonoma County, California.

(i) From USGS 1:24,000 quadrangle map Bodega Head. Lands bounded by the following UTM10 NAD83 coordinates (E,N): 496820, 4241560; 496870, 4241690; 497130, 4241990; 497110, 4242130; 497170, 4242240; 497250, 4242220; 497470, 4242550; 497440, 4242700; 497930, 4242940;

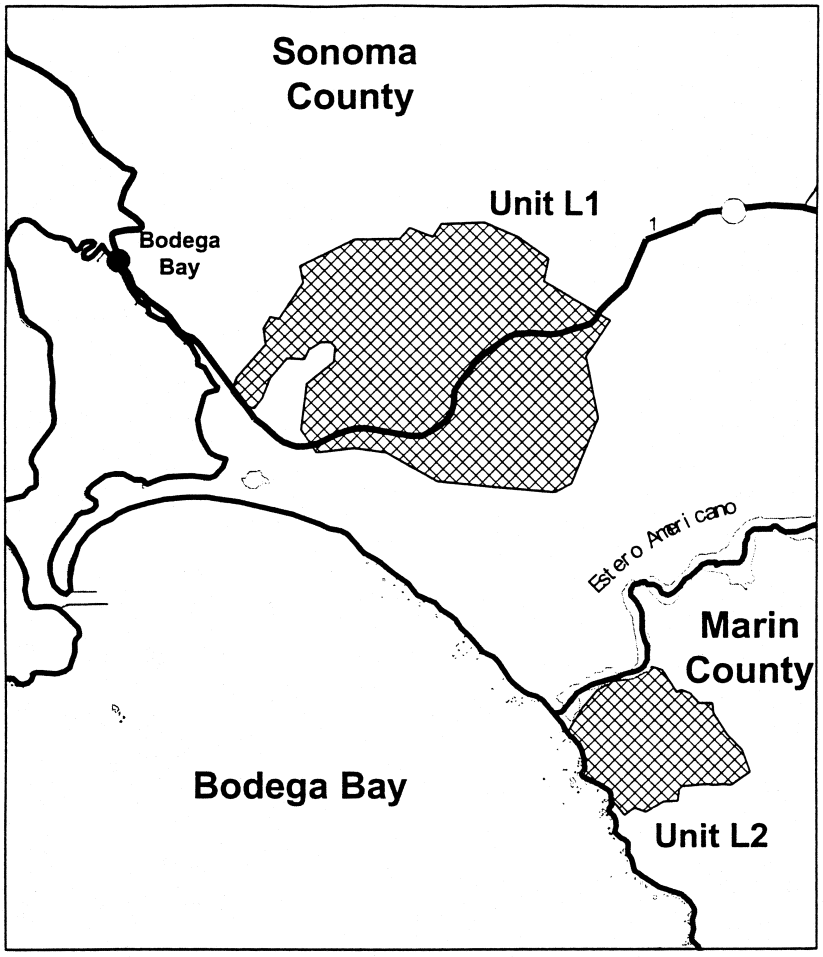
498340, 4242940; 498430, 4243040; 498640, 4242960; 498720, 4243080; 499110, 4243090; 499410, 4242960; 499690, 4242760; 499650, 4242560; 500250, 4242210; 500030, 4241880; 500140, 4241320; 499900, 4240730; 499750, 4240650; 498690, 4240750; 498220, 4241010; 497940, 4241050; 497590, 4241010; 497450, 4241220; 497500, 4241630; 497750, 4241830; 497760, 4241970; 497720, 4242010; 497630, 4242010; 497520, 4241940; 497480, 4241850; 497320, 4241860; 497170, 4241680; 497100, 4241500; 497030, 4241410; 496910, 4241440; 496820, 4241560.

(ii) Map for Unit L1 is set forth below.

(6) Unit L2: Estero Americano, Marin County, California.

(i) From USGS 1:24,000 quadrangle map Valley Ford. Lands bounded by the following UTM10 NAD83 coordinates (E,N): 499970, 4238100; 500010, 4238150; 500010, 4238240; 499870, 4238480; 500010, 4238710; 500140, 4238860; 500280, 4238940; 500470, 4238970; 500580, 4239030; 500630, 4239070; 500720, 4239040; 500850, 4238840; 500890, 4238860; 500970, 4238830; 501050, 4238740; 501170, 4238740; 501180, 4238650; 501300, 4238460; 501440, 4238320; 501510, 4238120; 501340, 4238000; 501270, 4238010; 501190, 4238000; 501120, 4238010; 500900, 4237990; 500870, 4237960; 500860, 4237860; 500730, 4237850; 500570, 4237760; 500470, 4237800; 500380, 4237730; 500250, 4237890; 500240, 4237940; 500180, 4237980; 499990, 4238060; 499970, 4238100.

(ii) Map 5—Units L1 and L2 for *Delphinium luteum* follows:



Map 5: Critical Habitat Units L1 and L2
Delphinium luteum

Critical Habitat

Miles
0 0.75 1.5

N
W E
S

(7) Unit L3: Estero de San Antonio, Marin County, California.

(i) From USGS 1:24,000 quadrangle map Valley Ford. Lands bounded by the following UTM10 NAD83 coordinates (E,N): 502060, 4235600; 502110, 4235750; 502230, 4235770; 502300, 4235840; 502350, 4235930; 502370, 4236030; 502410, 4236100; 502510, 4236150; 502700, 4236150; 502900,

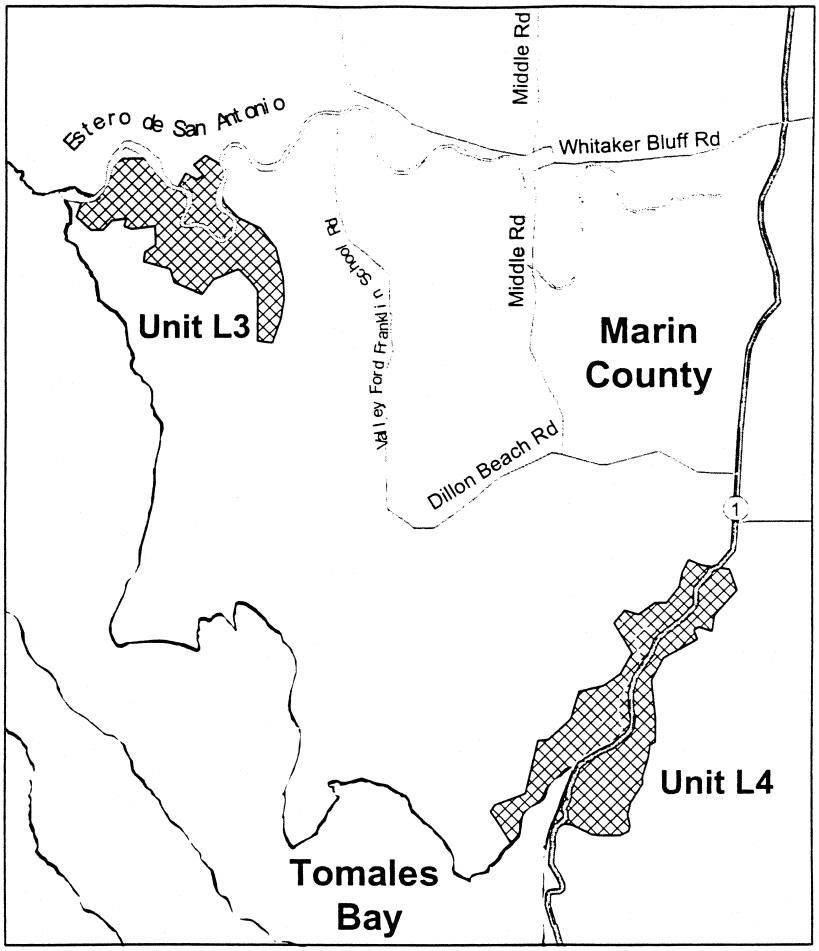
4235910; 503010, 4235860; 502900, 4236160; 502870, 4236120; 502700, 4236260; 502880, 4236400; 503060, 4236370; 503130, 4236240; 503070, 4236180; 503090, 4236010; 503200, 4235950; 503260, 4235990; 503170, 4236090; 503280, 4236180; 503410, 4236100; 503470, 4236040; 503430, 4235810; 503460, 4235720; 503600, 4235580; 503800, 4235490; 503950, 4235300; 504020, 4235010; 504030, 4234810; 504000, 4234630; 503920, 4234390; 503780, 4234410; 503780, 4234890; 503710, 4234990; 503610, 4234970; 503520, 4234840; 503560, 4234620; 503580, 4234470; 503520, 4234440; 503350, 4234580; 503360, 4234710; 503250, 4234860; 502990, 4234970; 502950, 4235100; 502700, 4235170; 502710, 4235260; 502810, 4235330; 502800, 4235510; 502580, 4235480; 502510, 4235510; 502530, 4235580; 502390, 4235560; 502310, 4235470; 502200, 4235470; 502060, 4235600.

(ii) Map for Unit L3 is set forth below.

(8) Unit L4: Tomales, Marin County, California.

(i) From USGS 1:24,000 quadrangle map Tomales. Lands bounded by the following UTM10 NAD83 coordinates (E,N): 506200, 4229650; 506000, 4229960; 506040, 4230020; 506330, 4230130; 506450, 4230630; 506550, 4230640; 506760, 4230830; 506840, 4231090; 507070, 4231150; 507230, 4231260; 507340, 4231460; 507170, 4231740; 507270, 4231860; 507400, 4231820; 507550, 4231930; 507660, 4231930; 507780, 4232080; 507810, 4232220; 507870, 4232340; 507990, 4232290; 508250, 4232250; 508320, 4232050; 508110, 4231810; 508090, 4231660; 507960, 4231700; 507920, 4231670; 507950, 4231580; 507630, 4231410; 507520, 4231200; 507560, 4230830; 507560, 4230620; 507510, 4230590; 507490, 4230470; 507440, 4230300; 507440, 4230220; 507330, 4230050; 507300, 4229930; 507320, 4229820; 507310, 4229770; 507230, 4229730; 507060, 4229730; 506960, 4229740; 506780, 4229830; 506710, 4229840; 506580, 4229790; 506600, 4229860; 506720, 4230150; 506770, 4230340; 506640, 4230230; 506460, 4230020; 506200, 4229650.

(ii) Map 6—Units L3 and L4 for *Delphinium luteum* follows:



Map 6: Critical Habitat Units L3 and L4
Delphinium luteum

Critical Habitat

Miles
0 0.75 1.5

N
W E
S

Family Rhamnaceae: *Gouania hillebrandii.* Hawaii, Maui County, Maui Island, Lahaina District, two zones located as follows:

(1) Pa'upa'u Zone, Ahupua'a of Kuia. The following Universal Transverse Mercator (UTM) designations form the corners of the quadrangular Pa'upa'u habitat area:

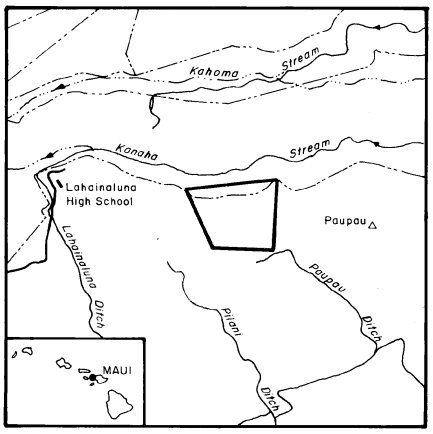
NW:0744123121

NE:0744723122

SW:0744223118

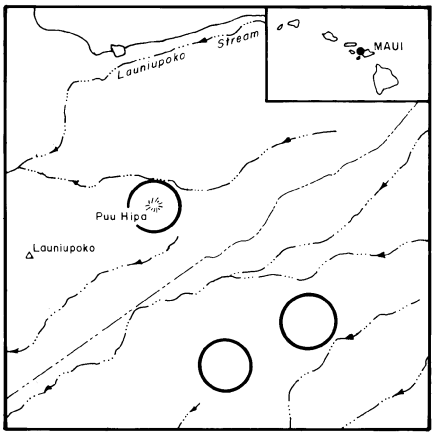
SE:0744723117

NOTE: Map follows:



(2) Lihau Zone, Ahupua'a of Kuia. This zone consists of three circular areas having radii of 0.1 mile on the western slopes of Lihau Mountain, one centered at Pu'u Hipa (near UTM 0746823070), one at UTM 0747723063, and the third at UTM 0747223059.

NOTE: Map follows:

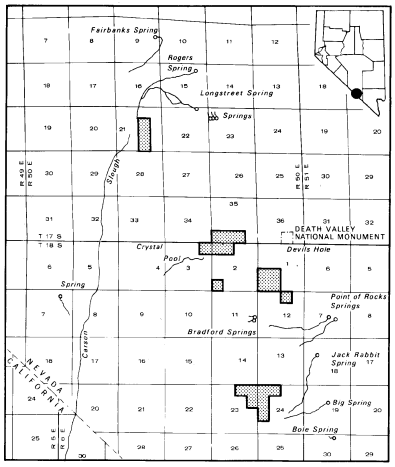


Primary constituent habitat elements are considered to be climatic and edaphic factors that discourage introduced plant competitors and insect pests, and freedom from unrestricted browsing and trampling by domestic or feral livestock.

Family Rosaceae: *Invesia kingii var. eremica* (Ash Meadows invesia). Nevada, Nye County, Ash Meadows: SW¼NE¼ and W½SE¼ sec. 21, S½SW¼ and SW¼SE¼ sec. 35, T17S, R50E. SW¼ sec. 1, N½NW¼ and SW¼SW¼ sec. 2, NE¼NE¼ sec. 3, NW¼NE¼ sec. 12, N½NE¼ and SE¼NE¼ sec. 23, N½NW¼, SW¼NW¼, and NW¼SW¼ sec. 24, T18S, R50E.

Known primary constituent elements include saline seep areas of light colored clay uplands.

NOTE: Map follows:



Family Scrophulariaceae: *Castilleja campestris* ssp. *succulenta* (Fleshy Owl's Clover).

(1) Critical habitat units are depicted for San Joaquin, Stanislaus, Tuolumne, Mariposa, and Fresno Counties, California, on the map below.

(2) The primary constituent elements of critical habitat for *Castilleja campestris* ssp. *succulenta* are the habitat components that provide:

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Castilleja campestris* ssp. *succulenta* germination, growth and reproduction, including but not limited to, hardpan vernal pools on alluvial terraces and San Joaquin, Redding, Corning, Keyes, and Pentz soils series, among others, and northern basalt flow vernal pools on Hideaway soils series, that typically become inundated during winter rains, but are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil

moisture for *Castilleja campestris* ssp. *succulenta* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aqueducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

(5) Unit 1: Sacramento and San Joaquin Counties, California. From USGS 1:24,000 quadrangle maps Clay and Lockeford, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): ; 654000, 4232700; 653600, 4232700; 653600, 4234100; 654100, 4234800; 655100, 4234800; 655500, 4234500; 655900, 4234700; 656000, 4234700; 656000, 4234500; 656800, 4234500; 656800, 4234700; 657600, 4234700; 657900, 4235000; 658800, 4235200; 658700, 4235100; 658700, 4234600; 659200, 4234600; 659200, 4234700; 659000, 4234900; 660500, 4235300; 661000, 4235300; 661100, 4235100; 660700, 4234700; 660300, 4234400; 660000, 4234300; 659600, 4233400; 656900, 4233400; 654100, 4233200; 654000, 4233200; returning to 654000, 4232700.

(6) Unit 2: Stanislaus and Tuolumne Counties, California. From USGS 1:24,000 quadrangle maps Cooperstown, Keytone, La Grange, Knights Ferry, and Paulsell, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at: 714100, 4182600; 715100, 4182600; 715500, 4183400; 715800, 4183400; 716000, 4182700; 716900, 4182700; 717100, 4182500; 717100, 4182000; 716900, 4181300; 717200, 4180900; 717200, 4180600; 716900, 4179900; 716600, 4180400; 715400, 4180400; 715600, 4180900; 715200, 4181600; 714700, 4182000; returning to 714100, 4182600.

(ii) Start at: 716900, 4179900; 717700, 4180100; 718500, 4180000; 718700, 4179200; 719300, 4178700; 719700, 4177600; 720300, 4177700; 720700, 4177700; 720800, 4176400; 720500, 4175200; 719500, 4174100; 720700, 4173500; 720700, 4172500; 719800, 4171900; 718800, 4171400; 718800, 4171500; 718000, 4171300; 718000, 4171000; 717800, 4170900; 717700, 4170900; 717300, 4170700; 716800, 4171000; 716700, 4171800; 716500, 4171800; 716200, 4170900; 715500, 4170500; 715300, 4170406,715300, 4171200; 715200, 4171200; 715200, 4171000; 715100, 4171000; 715100, 4170700; 714900, 4170700; 714900, 4170300; 713900, 4169800; 713800, 4169900; 713000, 4169500; 712500, 4169400; 712200, 4169400; 712000, 4169600; 711500, 4169900; 711300, 4169900; 710500, 4169100; 709300, 4169100; 709100, 4169500; 709100, 4169700; 708900, 4169700; 708800, 4169900; 708700, 4169900; 708600, 4169800; 708500, 4169900; 708400, 4170000; 708700, 4170200; 708800, 4170300; 708900, 4170400; 709100, 4170500; 709200, 4170600; 709400, 4170600; 709400, 4170800; 709300, 4170800; 709200, 4170900; 709100, 4170800; 708800, 4170700; 708800, 4170600; 708500, 4170500; 708400, 4170300; 708100, 4170200; 707900, 4170200; 707900, 4170300; 708100, 4170500; 708200, 4170500; 708200, 4170600; 708000, 4170600; 708200, 4170800; 708200, 4170900; 708100, 4170900; 707900, 4170700; 707700, 4170700; 707700, 4170800; 707600, 4170900; 707400, 4170900; 707100, 4171100; 707100, 4171200; 707200, 4171300; 707300, 4171200; 707500, 4171300; 707800, 4171600; 707900, 4171600; 708100, 4171600; 708200, 4171700; 708100, 4171800; 708100, 4171900; 708300, 4171900; 708300, 4172100; 708400, 4172100; 708500, 4172200; 708500, 4172300; 708700, 4172400; 708800, 4172500; 708800, 4172600; 708700, 4172700; 708500, 4172700; 708400, 4172800; 708300, 4172700; 708200, 4172700; 708100, 4172600; 708000, 4172500; 707900, 4172500; 707800, 4172700; 707600, 4172600; 707400, 4172500; 707400, 4172600; 707200, 4172700; 707100, 4172300; 707000, 4172200; 706700, 4172200; 706700, 4172300; 706500, 4172300; 706400, 4172300; 706400, 4172400; 706200, 4172600; 706300, 4172700; 706400, 4172800; 706300, 4172800; 706200, 4172800; 706100, 4172900; 705900, 4173100; 705800, 4173300; 705800, 4173500; 706000, 4173800; 705900, 4173900; 705800, 4174100; 705700, 4174200; 705500, 4174200; 705400, 4174100; 705400, 4173700; 705300, 4173500; 705200, 4173200; 705100, 4174700; 705400, 4175400; 705000, 4175900; 705300, 4176300; 705700, 4176700; 705700, 4177000; 705700, 4177500; 705700, 4177700; 705200, 4177900; 705000, 4178100; 705400, 4178900; 706200, 4178400; 706300, 4178000; 706200, 4177600; 706200, 4177100; 706700, 4177100; 706700, 4175900; 706800, 4175700; 707100, 4175600; 707400, 4175600; 707600, 4175500; 707700, 4175700; 707800, 4175700; 707900, 4175900; 707900, 4176000; 708000, 4176500; 708500, 4176400; 709800, 4176600; 709900, 4176400; 709900, 4176200; 710000, 4176100; 710300, 4176100; 710300, 4176200; 710400, 4176300; 710600, 4176400; 710700, 4176400; 710800, 4176500; 710800, 4176600; 711000, 4176700; 711200, 4176700; 711400, 4176700; 711600, 4176900; 711700, 4177200; 711700, 4177600; 711900, 4178100; 711800, 4178900; 710700, 4178900; 710600, 4178800; 710300, 4179200; 709900, 4179500; 709500, 4179600; 709100, 4180800; 709200, 4182200; 709700, 4182700; 710300, 4182900; 711400, 4182100; 712400, 4182100; 713200, 4182000; 714100, 4182600; 714700, 4182000; 715200, 4181600; 715600, 4180900; 715400, 4180400; 716600, 4180400; returning to 716900, 4179900.

(7) Subunit 3A: Mariposa and Merced Counties, California. [Reserved]

(8) Unit 3B: Mariposa and Merced Counties, California. From USGS 1:24,000 quadrangle

maps Haystack Mountain, Indian Gulch, Le Grand, Merced, Merced Falls, Owens Reservoir, Planada, Plainsburg, Snelling, Winton, and Yosemite Lake, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at: 745300, 4139300; 745200, 4139200; 744900, 4139000; 744800, 4138800; 744900, 4138500; 744700, 4137700; 744400, 4137500; 744200, 4137600; 744000, 4137500; 743800, 4137500; 743400, 4137400; 743100, 4137300; 743100, 4137200; 742900, 4137000; 742700, 4137000; 742600, 4136900; 742600, 4136600; 742400, 4136500; 742000, 4136400; 741800, 4136500; 741400, 4136400; 741100, 4136400; 741100, 4136700; 740200, 4136700; 739900, 4136400; 739400, 4136400; 739400, 4136700; 737600, 4136700; 737600, 4135900; 737300, 4135900; 737300, 4135300; 737400, 4135200; 737200, 4135000; 736800, 4134800; 736800, 4134600; 736800, 4134400; 736600, 4134200; 733900, 4134200; 733900, 4134800; 733800, 4134900; 733800, 4135000; 733000, 4135000; 733000, 4135800; 732500, 4135800; 730300, 4135700; 730200, 4135600; 730100, 4135600; 729900, 4135700; 729900, 4136500; 729900, 4136700; 730000, 4136700; 730100, 4136600; 730200, 4136600; 730300, 4136600; 730400, 4136700; 730500, 4136800; 730600, 4136900; 730600, 4137000; 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724500, 4149300; 724700, 4149400; 724900, 4149600; 725000, 4149700; 725000, 4150000; 724900, 4150100; 725000, 4150200; 725200, 4150200; 725300, 4150400; 725400, 4150500; 725400, 4150600; 725100, 4150900; 724700, 4150900; 724700, 4153400; 725000, 4153500; 725400, 4153900; 725600, 4154100; 725800, 4154200; 726000, 4154300; 726200, 4154000; 726300, 4153800; 726300, 4153700; 727800, 4153700; 727800, 4153400; 727900, 4153400; 727900, 4153500; 728400, 4153600; 728700, 4153700; 729000, 4153700; 729000, 4153600; 729100, 4153500; 729300, 4153400; 729400, 4153400; 729400, 4153300; 729300, 4153200; 729500, 4153100; 729800, 4153100; 729900, 4153200; 729900, 4154200; 730000, 4154200; 730100, 4154300; 730600, 4154300; 730700, 4154400; 731000, 4154600; 731200, 4154700; 731500, 4154700; 731800, 4154900; 732200, 4154900; 732600, 4154800; 733200, 4154500; 733400, 4154500; 733700, 4154300; 734700, 4154300; 734900, 4154600; 735100, 4154800; 735100, 4154900; 735500, 4155300; 735600, 4155300; 735800, 4155500; 736100, 4155900; 737100, 4155400; 737800, 4155000; 738200, 4154200; 738300, 4153300; 739000, 4152800; 739100, 4152200; 740200, 4151800; 740800, 4151500; 740800, 4150300; 741100, 4149900; 741700, 4149400; 742100, 4148500; 742100, 4147100; 743400, 4146100; 744000, 4145600; 744400, 4144600; 744300, 4143900; 743900, 4142700; 744000, 4142000; 744200, 4141700; 745500, 4140300; 745500, 4139600; 745500, 4139500; 745400, 4139400; returning to 745300, 4139300,excluding land bounded by 726800, 4139800; 726900, 4140000; 726900, 4140100; 726800, 4140200; 726600, 4140000; 726400, 4140000; 726700, 4139700; excluding land bounded by 727400, 4138800; 727800, 4138800; 727900, 4139000; 727900, 4139300; 728300, 4139600; 728300, 4140700; 727800, 4140700; 727800, 4141100; 727400, 4141100; 727500, 4140800; 727400, 4140700; 727200, 4140700; 727300, 4140500; 727200, 4140000; 727000, 4139700; 726800, 4139600; 726600, 4139600; 726600, 4139500; 727200, 4138700; excluding land bounded by 726200, 4138400; 725800, 4138400; 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739700, 4135900; 739500, 4135800; 739200, 4135900; 738900, 4135900; 738700, 4135700; 738500, 4135800; 738300, 4135800; 738200, 4135600; 738000, 4135500; 737900, 4135400; 737700, 4135300; 737400, 4135200; 737300, 4135300; 737300, 4135900; 737600, 4135900; 737600, 4136700; 739400, 4136700; 739400, 4136400; 739900, 4136400; 740200, 4136700; 741100, 4136700; 741100, 4136400; returning to 741000, 4136400.

(ii) Start at: 745300, 4139300; 745400, 4139400; 745500, 4139500; 745500, 4139600; 745500, 4140300; 746100, 4139500; 746800, 4138500; 747700, 4137700; 748500, 4135800; 748700, 4135100; 749500, 4134000; 749500, 4134000; 750700, 4131701; 750700, 4131700; 751600, 4130500; 752000, 4130200; 752200, 4130200; 752100, 4130200; 752000, 4130000; 751900, 4129900; 751900, 4129900; 751800, 4129800; 751700, 4129800; 751700, 4129800; 750100, 4129800; 750400, 4131600; 749600, 4132100; 749500, 4133400; 748600, 4133900; 748400, 4133300; 747800, 4133700; 748100, 4134400; 747600, 4134800; 747600, 4135300; 747200, 4135800; 747300, 4137300; 746600, 4137100; 745500, 4137700; 745500, 4139100; 745500, 4139300; returning to 745300, 4139300.

(iii) Start at: 741000, 4136400; 741100, 4136400; 741400, 4136400; 741800, 4136500; 742000, 4136400; 742400, 4136500; 742600, 4136600; 742600, 4136900; 742700, 4137000; 742900, 4137000; 743100, 4137200; 743100, 4137300; 743400, 4137400; 743800, 4137500; 744000, 4137500; 744200, 4137600; 744400, 4137500; 744700, 4137700; 744900, 4138500; 744800, 4138800; 744900, 4139000; 745200, 4139200; 745300, 4139300; 745500, 4139300; 745500, 4139100; 745500, 4137700; 746600, 4137100; 747300, 4137300; 747200, 4135800; 747600, 4135300; 747600, 4134800; 748100, 4134400; 747800, 4133700; 748400, 4133300; 748600, 4133900; 749500, 4133400; 749600, 4132100; 750400, 4131600; 750100, 4129800; 751700, 4129800; 751400, 4129700; 751300, 4129700; 751100, 4129500; 751000, 4129500; 751000, 4129400; 751000, 4129400; 750900, 4129200; 750800, 4129000; 750600, 4128900; 750500, 4128800; 750500, 4128800; 750400, 4128760; 750300, 4128700; 750000, 4128700; 750000, 4128700; 749900, 4128700; 749600, 4128800; 749400, 4128600; 749100, 4128500; 748900, 4128400; 748900, 4128100; 748800, 4128000; 748700, 4127800; 748500, 4127600; 748300, 4127500; 748300, 4127300; 748300, 4127100; 748200, 4127000; 748100, 4126800; 748000, 4126700; 747900, 4126700; 747800, 4126700; 747700, 4126400; 747500, 4126200; 747400, 4126000; 747200, 4126000; 747000, 4125900; 746900, 4125900; 746600, 4125800; 746300, 4125700; 746200, 4125600; 746200, 4125500; 745700, 4125500; 745700, 4125100; 744500, 4125100; 744500, 4125300; 744400, 4125300; 744400, 4125200; 743700, 4125200; 743700, 4125800; 744500, 4125800; 744500, 4126200; 743700, 4126200; 743700, 4127000; 742400, 4127000; 742000, 4127200; 742000, 4128600; 742800, 4128600; 742800, 4129100; 742900, 4129100; 743000, 4129100; 743000, 4129200; 743400, 4129300; 743600, 4129500; 743600, 4130700; 743500, 4130700; 743500, 4130900; 743500, 4132200; 744000, 4133400; 742700, 4133400; 742600, 4133500; 741500, 4132900; 740900, 4132200; 740800, 4132600; 740300, 4132600; 740300, 4132800; 740300, 4133500; 741000, 4133500; 741000, 4133900; 741900, 4133900; 741800, 4135800; 741028, 4135800; 741000, 4135800; returning to 741000, 4136400.

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(9) Unit 4: Fresno, Madera, and Merced Counties, California. [Reserved]

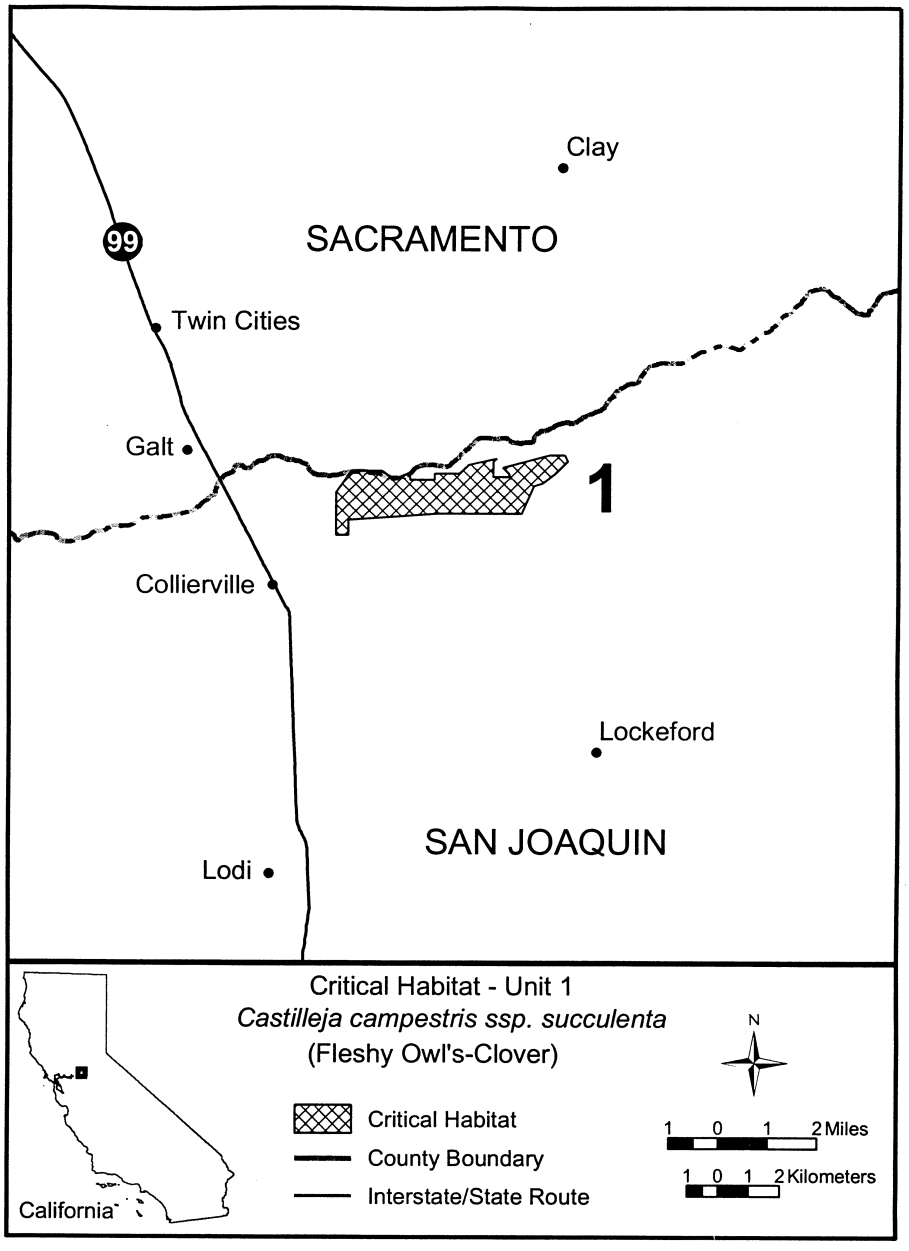
(10) Unit 5: Fresno County, California. From USGS 1:24,000 quadrangle maps Academy, Clovis, Friant, and Round Mountain, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 263100, 4089400; 264700, 4088700; 265000, 4087900; 265300, 4087600; 265900, 4087600; 265900, 4086800; 267000, 4086800; 267600, 4087000; 267800, 4086500; 267200, 4085500; 267400, 4085100; 268100, 4085300; 268300, 4085800; 269100, 4085800; 269800, 4085400; 270300, 4084900; 271100, 4084800; 271900, 4085100; 272200, 4085600; 272800, 4086200; 273000, 4087300; 273300, 4087700; 273200, 4088500; 273200, 4089600; 274700, 4089600; 275400, 4090000; 275600, 4090500; 275900, 4090800; 276500, 4090900; 277100, 4090900; 277100, 4090200; 276100, 4088900; 276100, 4087900; 276000, 4087500; 275400, 4087200; 275100, 4086600; 274900, 4086000; 274400, 4085500; 274000, 4084900; 273400, 4084400; 273400, 4083800; 273600, 4083400; 273600, 4083000; 272900, 4082900; 272800, 4082200; 272800, 4081400; 273000, 4080800; 273200, 4080500; 273500, 4080100; 273700, 4079700; 273800, 4079100; 274200, 4078600; 274300, 4078100; 273300, 4078100; 273300, 4077100; 273000, 4076600; 271300, 4076700; 271400, 4076900; 271700, 4077100; 271800, 4077300; 271800, 4077500; 271500, 4077700; 271100, 4077700; 271100, 4078200; 271300, 4078400; 271600, 4078900; 271800, 4079100; 272100, 4079100; 272100, 4079900; 271100, 4079900; 268000, 4080000; 268000, 4080600; 268300, 4080600; 268300, 4080800; 268000, 4080800; 268000, 4081300; 267500, 4081300; 267500, 4080900; 266500, 4080900; 266500, 4081100; 266300, 4081100; 266300, 4081300; 266600, 4081300; 266600, 4081700; 267000, 4082300; 267000, 4082400; 268300, 4082400; 268300, 4081700; 268400, 4081600; 268400, 4081200; 268800, 4081200; 268800, 4082800; 269600, 4082800; 269600,

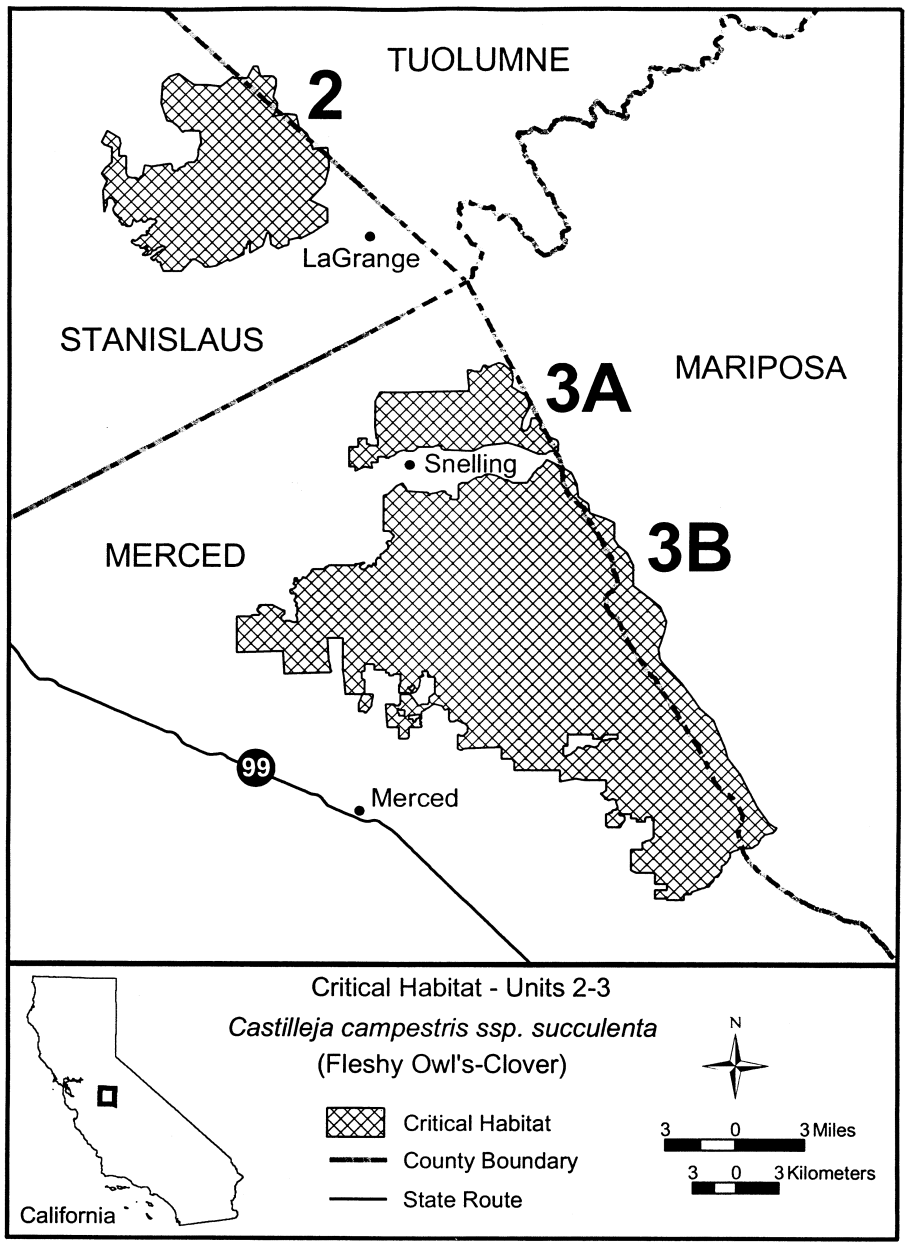
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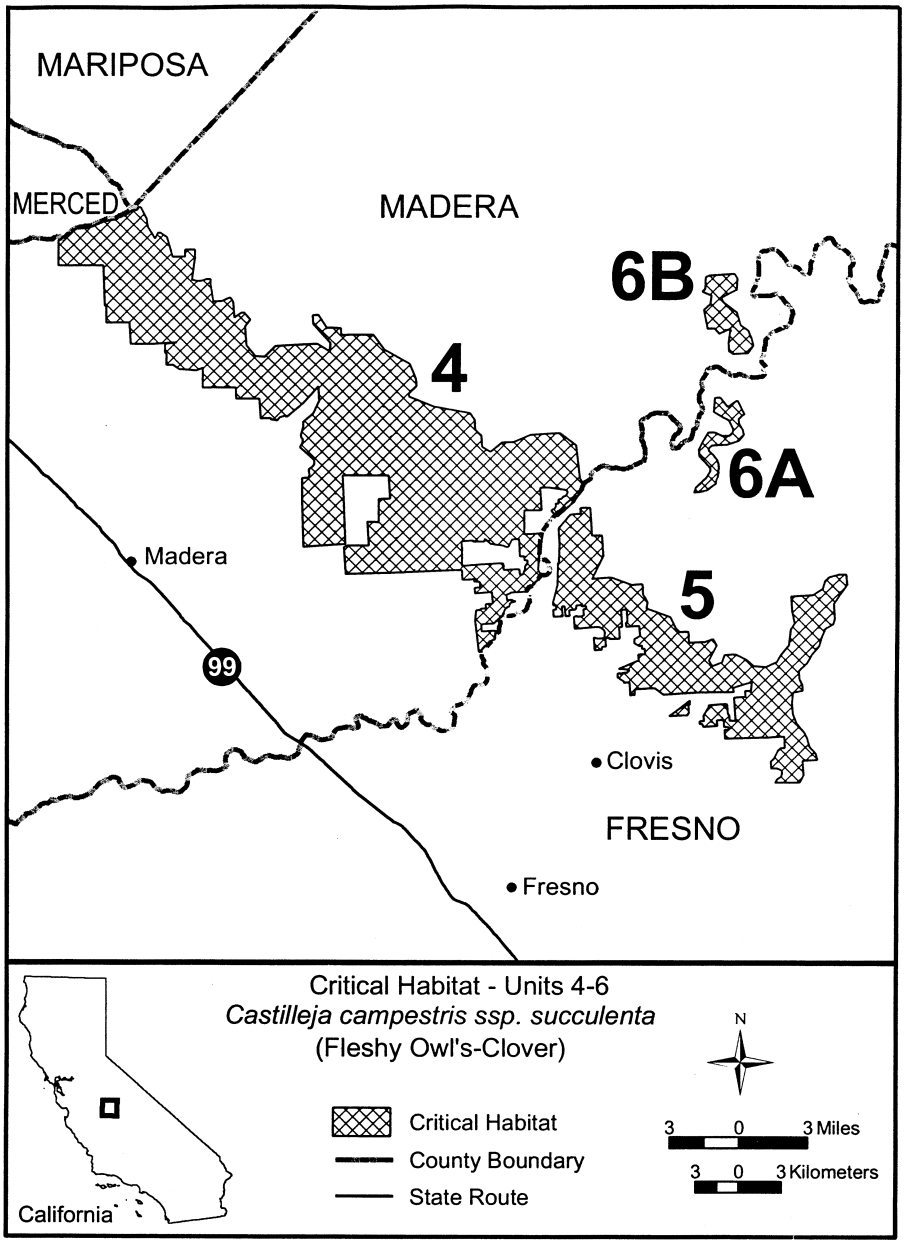
(11) Subunit 6A: Fresno County, California. From USGS 1:24,000 quadrangle maps Academy and Millerton Lake East, California, land bounded by the following UTM 11 NAD 83 coordinates (E, N): 267300, 4097300; 266900, 4097300; 267000, 4097600; 267800, 4098300; 268100, 4098700; 268100, 4098900; 268000, 4099100; 267400, 4099800; 267400, 4100300; 267700, 4100800; 268100, 4101400; 268600, 4101400; 269100, 4101100; 269600, 4101100; 269800, 4101300; 269900, 4101500; 269600, 4102200; 269200, 4102400; 268600, 4102800; 268700, 4103800; 269100, 4103800; 269600, 4103100; 270200, 4103500; 270300, 4103500; 270700, 4102500; 270500, 4102400; 270300, 4102200; 270300, 4101900; 270500, 4101500; 270600, 4101100; 270500, 4101000; 270200, 4100700; 269400, 4100500; 268300, 4100500; 268100, 4100300; 268100, 4100100; 268400, 4099800; 268600, 4099500; 268700, 4099200; 268700, 4098900; 268600, 4098300; 268500, 4098100; 268400, 4097800; 268100, 4097600; 267800, 4097400; returning to 267300, 4097300.

(12) Subunit 6B: Madera County, California. [Reserved]

(13) Maps follow of critical habitat unit 1, 2 and 3, and 4 through 6 (respectively) for fleshy owl's clover.


Clay
99
SACRAMENTO
Twin Cities
Galt
1
Collierville
Lockeford
SAN JOAQUIN
Lodi
Critical Habitat - Unit 1
Castilleja campestris ssp. succulenta
(Fleshy Owl's-Clover)
N
Critical Habitat
County Boundary
Interstate/State Route
1 0 1 2 Miles
1 0 1 2 Kilometers
California

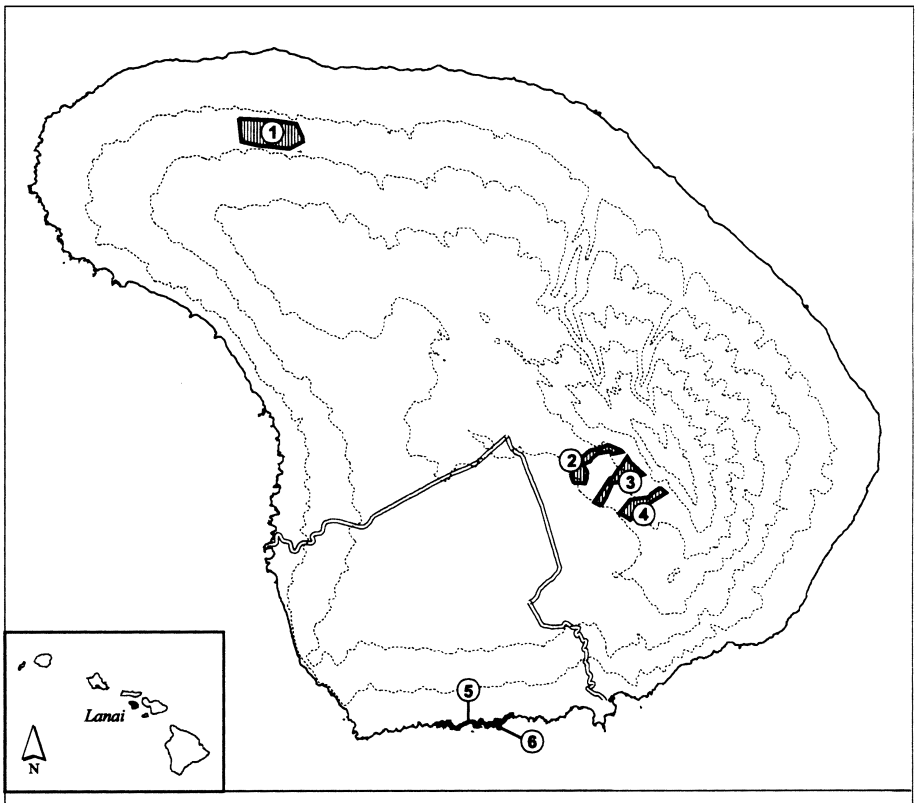

TUOLUMNE
2
LaGrange
STANISLAUS
3A
MARIPOSA
Snelling
MERCED
3B
99
Merced
Critical Habitat - Units 2-3
Castilleja campestris ssp. succulenta
(Fleshy Owl's-Clover)
Critical Habitat
County Boundary
State Route
N
3 0 3 Miles
3 0 3 Kilometers
California



(b) *Critical habitat; plants on the island of Lanai, Hawaii*—(1) *Maps and critical habitat unit descriptions.* The following paragraphs contain the legal descriptions of the critical habitat units designated for the island of Lanai, Hawaii. Existing manmade features and structures within proposed areas, such as

buildings, roads, aqueducts, reservoirs, diversions, flumes, telecommunications equipment, telemetry antennas, radars, missile launch sites, arboreta and gardens, heiau (indigenous places of worship or shrines), airports, other paved areas, lawns, other rural residential landscaped areas, electrical transmission and distribution, and communication facilities and regularly maintained associated rights-of way and access ways do not contain one or more of the primary constituent elements described for each species in paragraph (b)(2) of this section and therefore, are not included in the critical habitat designations. Critical habitat units are described below. Coordinates in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following map shows the general locations of the six critical habitat units designated on the island of Lanai.

(i) NOTE: Map 1—Index map follows:



Map 1
Lanai Final Critical Habitat - Island Index Map

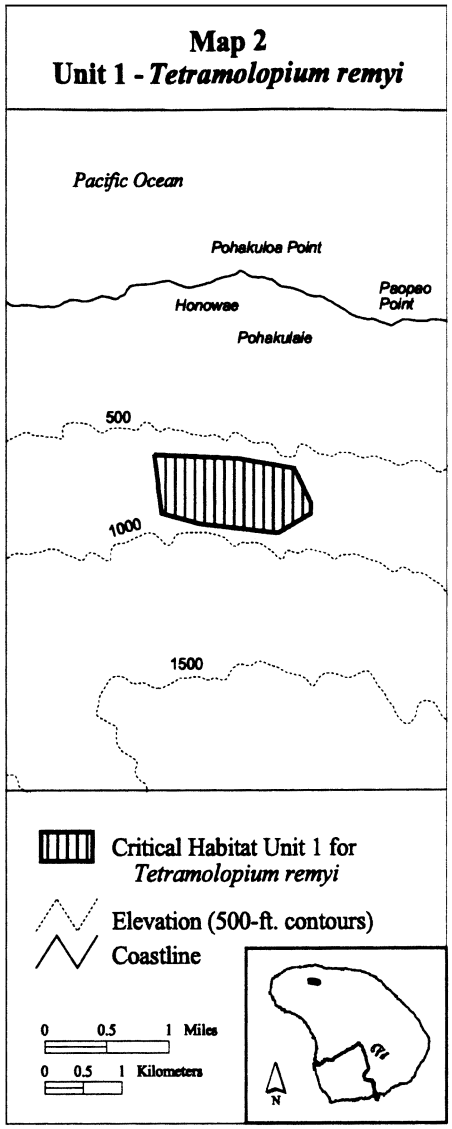
Final Lanai Critical Habitat Unit

Major Roads
Coastline
Elevation (500-ft. contours)

(ii) Lanai 1—*Tetramolopium remyi* (151 ha; 373 ac).

(A) Unit consists of the following nine boundary points: 708156, 2313405; 709229, 2313365; 709970, 2313244; 710178, 2312821; 710182, 2312686; 709754, 2312448; 708741, 2312566; 708241, 2312691; 708156, 2313405.

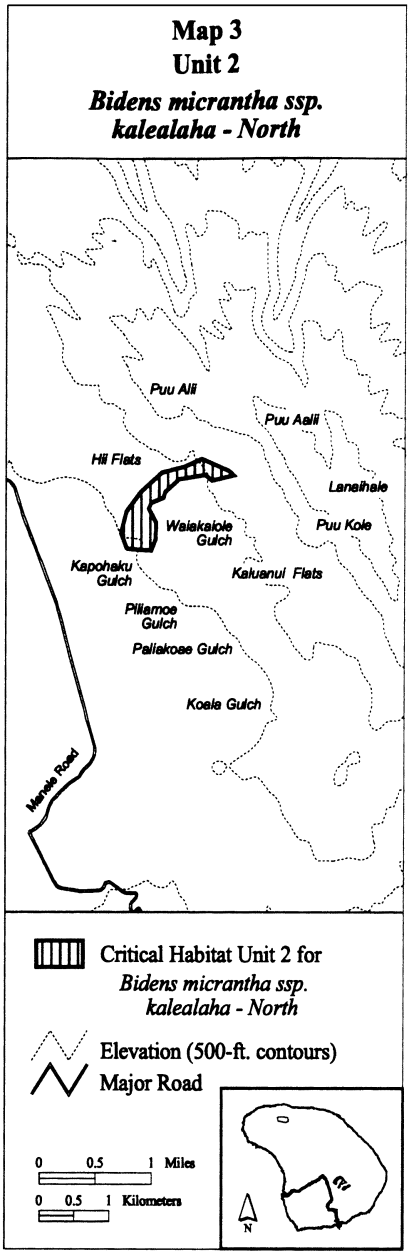
(B) NOTE: Map 2 follows:



(iii) Lanai 2—*Bidens micrantha* ssp. *kalealaha*—North (53 ha; 131 ac)

(A) Unit consists of the following 20 boundary points: 718727, 2301883; 718642, 2302092; 718720, 2302377; 718928, 2302637; 719228, 2302896; 719550, 2302974; 719799, 2303078; 720193, 2302917; 720260, 2302858; 719948, 2302788; 719846, 2302865; 719474, 2302802; 719277, 2302635; 719253, 2302561; 719078, 2302494; 719042, 2302419; 719144, 2302231; 719136, 2302009; 719078, 2301859; 718727, 2301883.

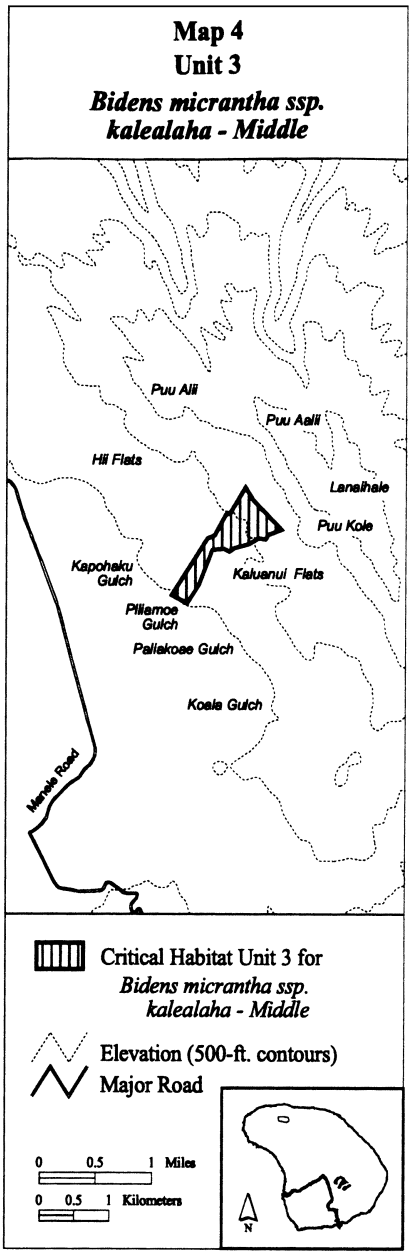
(B) NOTE: Map 3 follows:



(iv) Lanai 3—*Bidens micrantha* ssp. *kalealaha*—Middle (60 ha; 148 ac)

(A) Unit consists of the following 19 boundary points: 719582, 2301162; 719361, 2301274; 719868, 2302031; 719968, 2302070; 720134, 2302344; 720198, 2302369; 720411, 2302710; 720524, 2302530; 720931, 2302147; 720741, 2302073; 720699, 2302012; 720600, 2302026; 720464, 2301954; 720259, 2301901; 720187, 2301857; 720106, 2301890; 719937, 2301876; 719749, 2301413; 719582, 2301162.

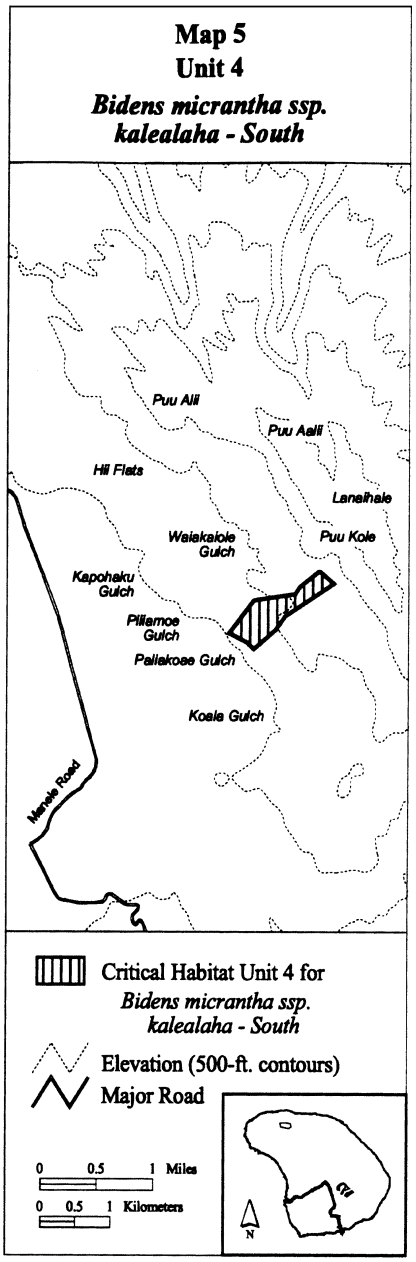
(B) NOTE: Map 4 follows:



(v) Lanai 4—*Bidens micrantha* ssp. *kalealaha*—South (48 ha; 118 ac)

(A) Unit consists of the following 11 boundary points: 721438, 2301740; 721647, 2301574; 720952, 2301142; 720824, 2300969; 720507, 2300707; 720411, 2300796; 720164, 2300917; 720513, 2301353; 721094, 2301439; 721161, 2301532; 721438, 2301740.

(B) NOTE: Map 5 follows:

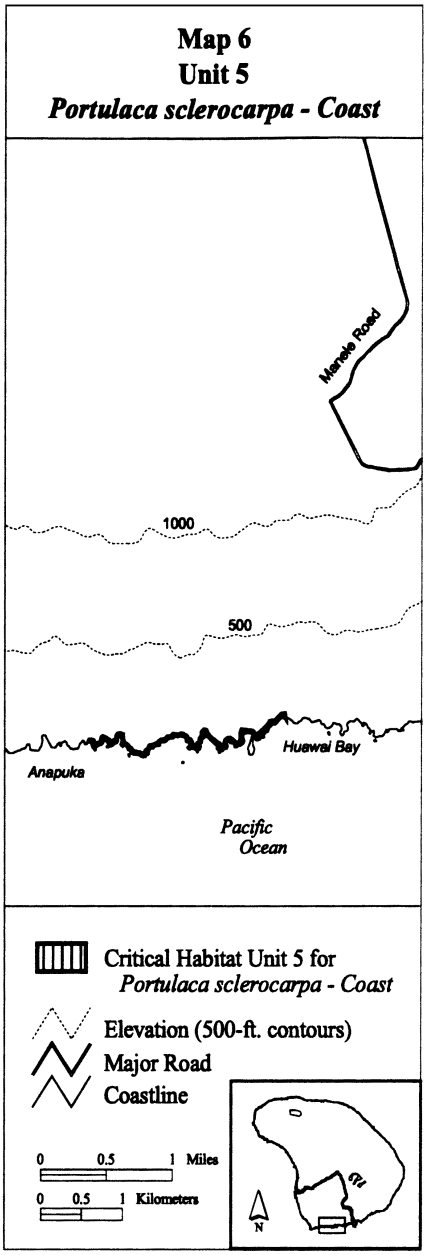


(vi) Lanai 5—*Portulaca sclerocarpa*—Coast (7 ha; 17 ac).

(A) Area consists of the following 109 boundary points and the intermediate coastline: 716811, 2294534; 714416, 2294262; 714411, 2294277; 714422, 2294291; 714456, 2294290; 714473,

2294280; 714478, 2294247; 714484, 2294226; 714558, 2294267; 714568, 2294317; 714590, 2294331; 714662, 2294292; 714689, 2294248; 714719, 2294280; 714735, 2294279; 714745, 2294295; 714745, 2294323; 714766, 2294357; 714795, 2294361; 714829, 2294349; 714833, 2294329; 714834, 2294305; 714838, 2294281; 714832, 2294257; 714855, 2294254; 714880, 2294241; 714901, 2294221; 714907, 2294204; 714937, 2294195; 714949, 2294166; 714960, 2294158; 714995, 2294154; 715038, 2294145; 715070, 2294126; 715089, 2294125; 715107, 2294172; 715130, 2294182; 715151, 2294225; 715167, 2294229; 715188, 2294229; 715221, 2294240; 715245, 2294248; 715267, 2294269; 715290, 2294289; 715314, 2294291; 715335, 2294295; 715357, 2294305; 715377, 2294327; 715415, 2294331; 715439, 2294357; 715477, 2294353; 715496, 2294344; 715533, 2294357; 715564, 2294356; 715580, 2294347; 715605, 2294340; 715615, 2294316; 715619, 2294292; 715644, 2294298; 715659, 2294286; 715669, 2294259; 715670, 2294239; 715660, 2294219; 715671, 2294213; 715692, 2294216; 715715, 2294212; 715735, 2294242; 715758, 2294268; 715763, 2294284; 715770, 2294312; 715799, 2294336; 715787, 2294371; 715800, 2294392; 715821, 2294402; 715849, 2294396; 715860, 2294364; 715893, 2294324; 715983, 2294259; 716003, 2294252; 716014, 2294216; 716064, 2294227; 716070, 2294286; 716106, 2294307; 716142, 2294307; 716174, 2294283; 716210, 2294248; 716239, 2294258; 716264, 2294284; 716262, 2294373; 716275, 2294406; 716412, 2294390; 716458, 2294326; 716484, 2294363; 716529, 2294395; 716585, 2294452; 716619, 2294499; 716658, 2294508; 716683, 2294499; 716719, 2294550; 716756, 2294581; 716802, 2294587; 716811, 2294534.

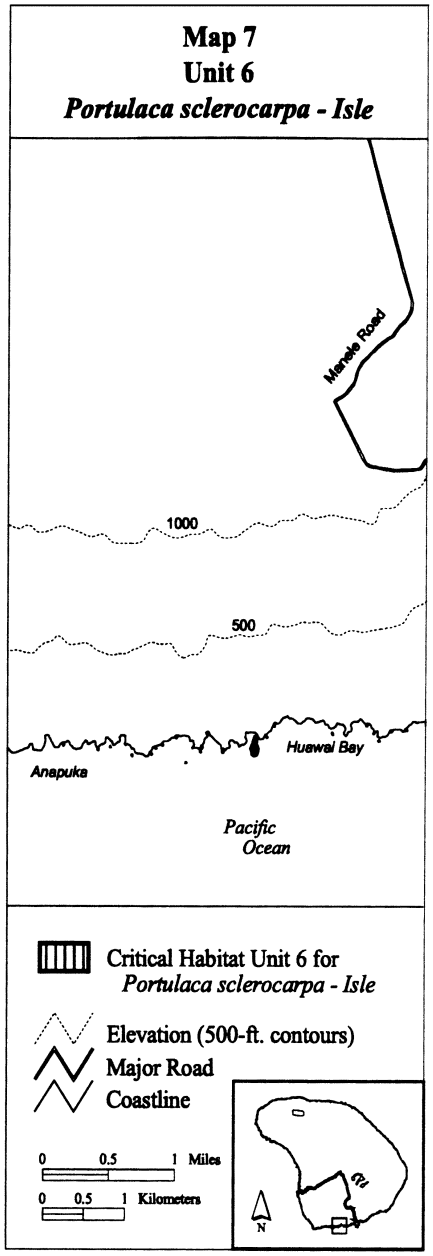
(B) NOTE: Map 6 follows:



(vii) Lanai 6—*Portulaca sclerocarpa*—Isle (1 ha; 2 ac)

(A) Area consists of the entire offshore island located at approximately: 716391, 2294222.

(B) NOTE: Map 7 follows:



(VIII) PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR LANAI

Unit name	Species occupied	Species unoccupied
Lanai 1—*Tetramolopium remyi*	.....	*Tetramolopium remyi.*
Lanai 2—*Bidens micrantha* ssp. *kalealaha*—North.	.....	*Bidens micrantha* ssp. *kalealaha.*
Lanai 3—*Bidens micrantha* ssp. *kalealaha*—Middle.	*Bidens micrantha* ssp. *kalealaha.*	
Lanai 4—*Bidens micrantha* ssp. *kalealaha*—South.	.....	*Bidens micrantha* ssp. *kalealaha.*
Lanai 5—*Portulaca sclerocarpa*—Coast	.....	*Portulaca sclerocarpa.*
Lanai 6—*Portulaca sclerocarpa*—Isle	*Portulaca sclerocarpa.*	

(2) *Hawaiian plants—Constituent elements; Flowering plants.*

Family Asteraceae: *Bidens micrantha* ssp. *kalealaha* (kookoolau)

Lanai 2—*Bidens micrantha* ssp. *kalealaha*—North, Lanai 3—*Bidens micrantha* ssp. *kalealaha*—Middle, and Lanai 4—*Bidens micrantha* ssp. *kalealaha*—South, identified in the legal descriptions in (b)(1)(iii), (b)(1)(iv), and (b)(1)(v) of this section, constitute critical habitat for *Bidens micrantha* ssp. *kalealaha* on Lanai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulch slopes in dry *Dodonaea viscosa* shrubland; and

(ii) Elevations between 409 and 691 m (1,342 and 2,267 ft).

Family Asteraceae: *Tetramolopium remyi* (NCN)

Lanai 1—*Tetramolopium remyi*, identified in the legal descriptions in (b)(1)(ii) of this section, constitutes critical habitat for *Tetramolopium remyi* on Lanai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Red, sandy, loam soil in dry *Dodonaea viscosa-Heteropogon contortus* communities with one or more of the following associated native species: *Bidens mauiensis, Waltheria indica, Wikstroemia oahuensis,* or *Melanthera lavarum;* and

(ii) Elevations between 90 and 481 m (295 and 1,578 ft).

Family Portulacaceae: *Portulaca sclerocarpa* (poe)

Lanai 5—*Portulaca sclerocarpa*—Coast and Lanai 6—*Portulaca sclerocarpa*—Isle, identified in the legal descriptions in (b)(1)(vi) and (b)(1)(vii) of this section, constitute critical habitat for *Portulaca sclerocarpa* on Lanai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Exposed ledges in thin soil in coastal communities; and

(ii) Elevations between 0 and 30 m (0 and 98 ft).

[43 FR 39043, Aug. 31, 1978]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §17.96, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

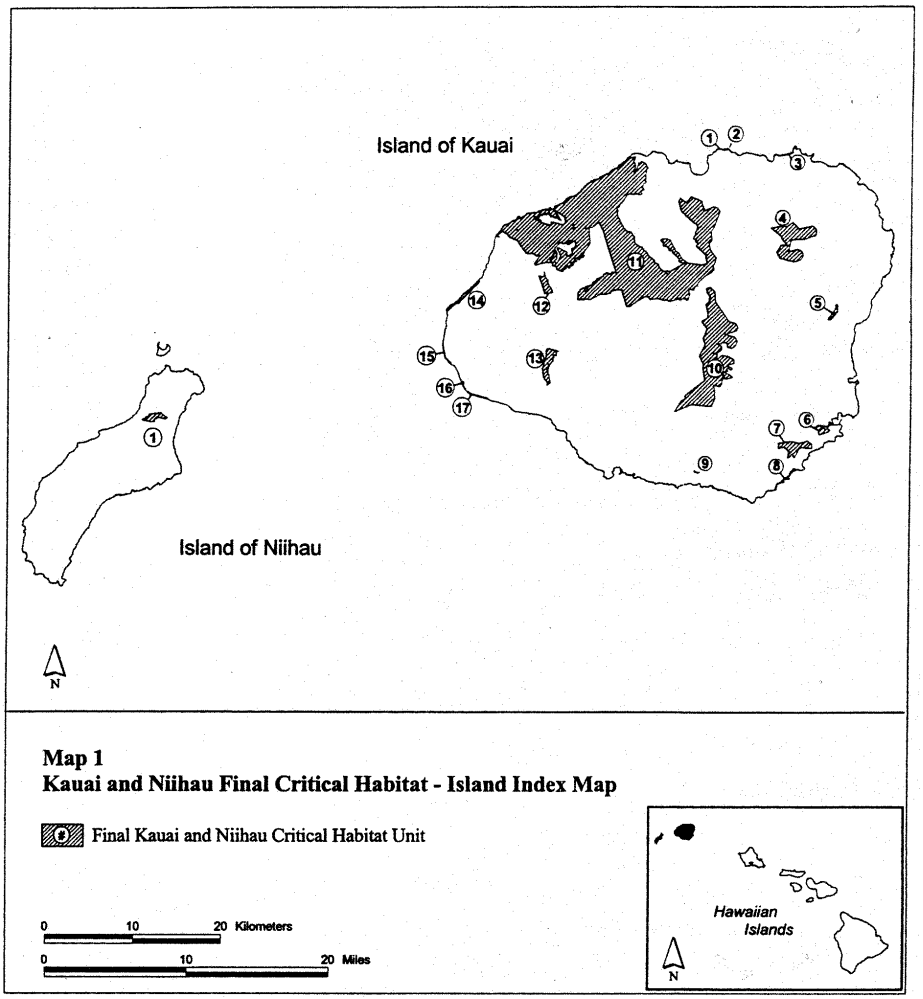
§ 17.99 Critical habitat; plants on the islands of Kauai, Niihau, Molokai, Maui, Kahoolawe, Oahu, and Hawaii, HI, and on the Northwestern Hawaiian Islands.

(a) *Maps and critical habitat unit descriptions for the islands of Kauai and Niihau, HI.* The following paragraphs contain the legal descriptions of the critical habitat units designated for the Hawaiian Islands of Kauai and Niihau. Existing manmade features and structures within the boundaries of the mapped areas, such as buildings; roads; aqueducts and other water system features, including but not limited to pumping stations, irrigation ditches, pipelines, siphons, tunnels, water tanks, gaging stations, intakes, reservoirs, diversions, flumes, and wells; existing trails; campgrounds and their immediate surrounding landscaped area; scenic lookouts; remote helicopter landing sites; existing fences; telecommunications equipment towers and associated structures and equipment; electrical power transmission lines and distribution, and communication facilities and regularly maintained associated rights-of-way and access ways; radars, telemetry antennas;

missile launch sites; arboreta and gardens; heiau (indigenous places of worship or shrines), and other archaeological sites; airports; other paved areas; and lawns and other rural residential landscaped areas do not contain one or more of the primary constituent elements described for each species in paragraph (b) of this section and therefore are not included in the critical habitat designations.

(1) *Kauai.* Critical habitat units are described below. Coordinates in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following map shows the general locations of the 219 critical habitat units designated on the island of Kauai.

(i) NOTE: Map 1—Index map follows:

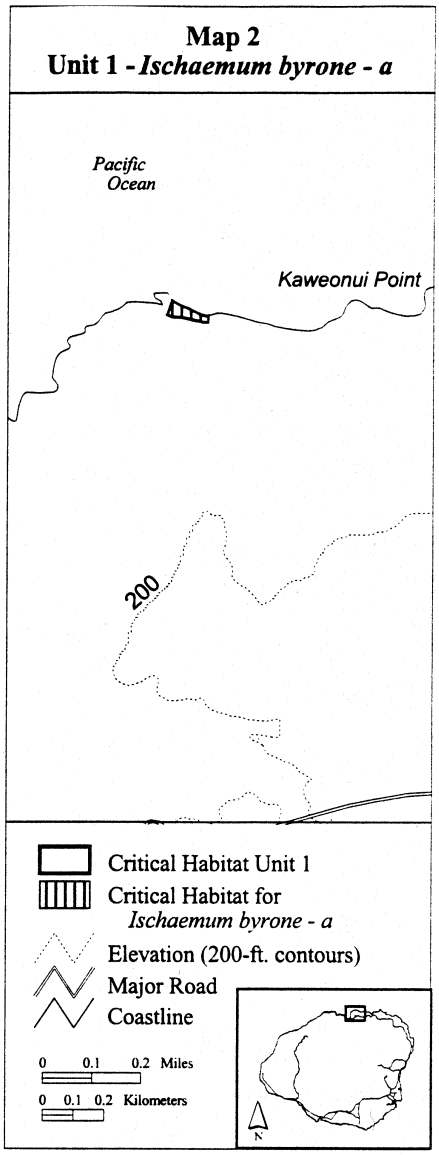


(ii) Kauai 1—*Ischaemum byrone*—a (1 ha; .4 ac)

(A) Unit consists of the following 9 boundary points: coastline; 449995,

2458285; 449999, 2458293; 450118, 2458243; 450116, 2458221; 450104, 2458221; 450032, 2458238; 449997, 2458240; 449981, 2458248; 449991, 2458273; coastline.

(B) NOTE: Map 2 follows:

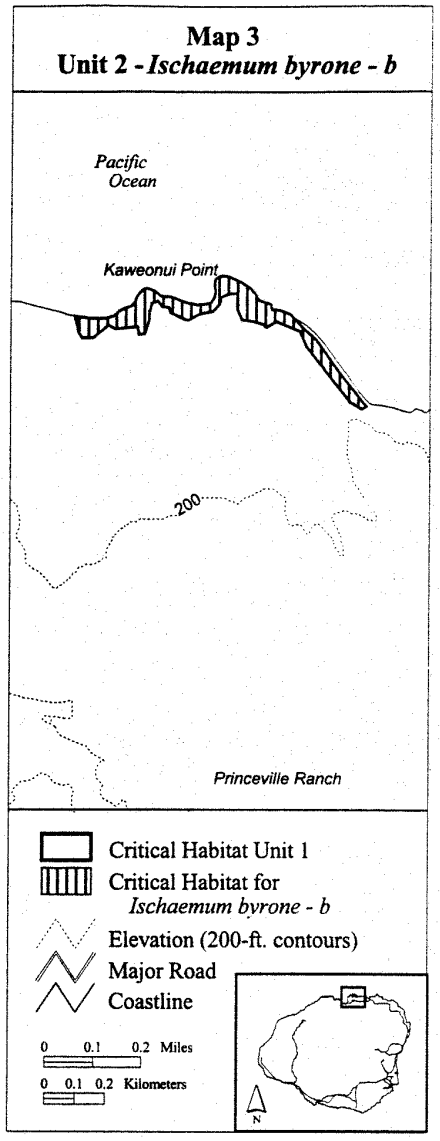


(iii) Kauai 2—*Ischaemum byrone*—b (6 ha; 14 ac)

(A) Unit consists of the following 59 boundary points: coastline; 451087,

2458201; 451120, 2458166; 451162, 2458127; 451246, 2458013; 451331, 2457904; 451317, 2457895; 451278, 2457919; 451277, 2457919; 451276, 2457920; 451190, 2458029; 451190, 2458032; 451175, 2458047; 451132, 2458101; 451110, 2458153; 451031, 2458185; 450999, 2458165; 450996, 2458166; 450987, 2458176; 450954, 2458185; 450916, 2458191; 450905, 2458216; 450900, 2458226; 450901, 2458242; 450902, 2458273; 450902, 2458273; 450902, 2458278; 450871, 2458277; 450848, 2458265; 450843, 2458242; 450818, 2458217; 450778, 2458211; 450737, 2458190; 450725, 2458194; 450679, 2458215; 450677, 2458215; 450673, 2458233; 450650, 2458236; 450636, 2458255; 450615, 2458247; 450612, 2458223; 450607, 2458222; 450607, 2458191; 450606, 2458185; 450592, 2458144; 450574, 2458143; 450568, 2458168; 450568, 2458168; 450568, 2458168; 450495, 2458159; 450472, 2458173; 450420, 2458129; 450420, 2458129; 450383, 2458129; 450372, 2458147; 450366, 2458173; 450361, 2458197; 450360, 2458202; 450361, 2458202; 451076, 2458209; coastline.

(B) NOTE: Map 3 follows:

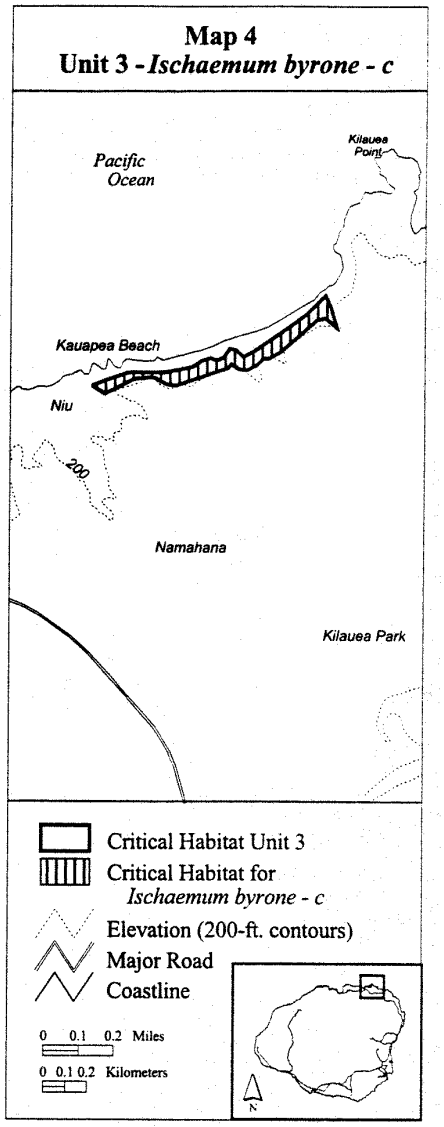


(iv) Kauai 3—*Ischaemum byrone*—c (7 ha; 17 ac)

(A) Unit consists of the following 51 boundary points: Start at 457168, 2457531; 457235, 2457554; 457342, 2457591; 457377, 2457591; 457421, 2457591; 457469, 2457591; 457503, 2457591; 457556, 2457600; 457625, 2457613; 457631, 2457617; 457674, 2457645; 457713, 2457657; 457739, 2457648; 457747, 2457650; 457754, 2457649; 457758, 2457653; 457769, 2457656; 457794, 2457692;

457801, 2457700; 457830, 2457691; 457865, 2457661; 457891, 2457678; 457913, 2457687; 457961, 2457722; 458074, 2457800; 458157, 2457861; 458240, 2457943; 458266, 2457887; 458291, 2457796; 458241, 2457839; 458199, 2457830; 458122, 2457761; 458032, 2457682; 457981, 2457654; 457958, 2457654; 457926, 2457624; 457883, 2457600; 457851, 2457604; 457835, 2457612; 457808, 2457629; 457794, 2457610; 457555, 2457530; 457515, 2457534; 457459, 2457567; 457441, 2457569; 457364, 2457561; 457364, 2457561; 457364, 2457561; 457329, 2457544; 457327, 2457542; 457230, 2457492; return to starting point.

(B) NOTE: Map 4 follows:

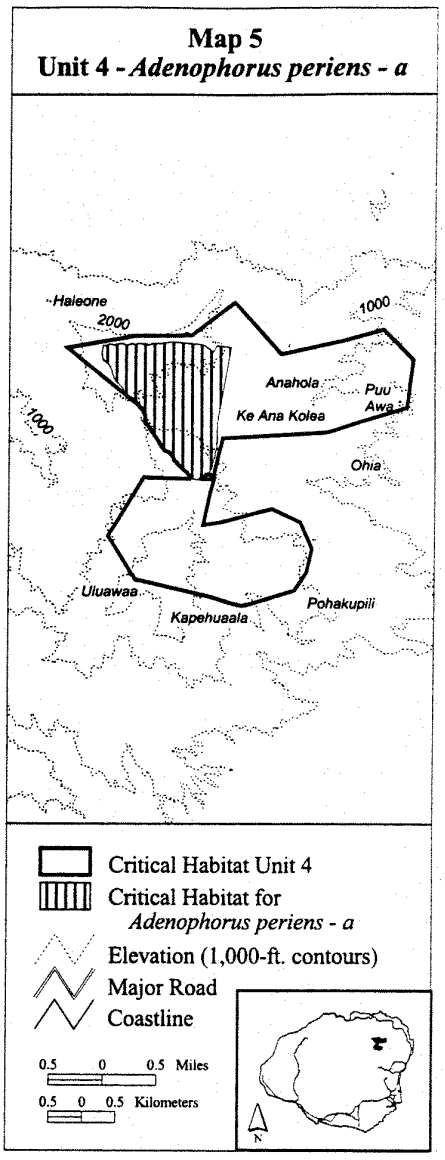


(v) Kauai 4—*Adenophorus periens*—a (237 ha; 585 ac)

(A) Unit consists of the following 183 boundary points: Start at 457883, 2449413; 457917, 2449393; 457954, 2449369; 458004, 2449331; 458025, 2449313; 458037, 2449307; 458058, 2449301; 458098, 2449392; 458308, 2449371; 458105, 2448250; 458095, 2447849; 458085, 2447839; 458077, 2447822; 458073, 2447793; 458073, 2447739; 458057, 2447694; 458046, 2447671; 458033, 2447617;

458027, 2447575; 458026, 2447556; 458023, 2447548; 458009, 2447525; 457998, 2447517; 457979, 2447491; 457946, 2447469; 457927, 2447446; 457899, 2447424; 457864, 2447408; 457850, 2447402; 457830, 2447399; 457801, 2447389; 457689, 2447425; 457690, 2447445; 457684, 2447466; 457667, 2447490; 457653, 2447503; 457639, 2447513; 457604, 2447540; 457587, 2447559; 457545, 2447595; 457538, 2447604; 457528, 2447615; 457505, 2447643; 457502, 2447650; 457473, 2447678; 457457, 2447706; 457446, 2447731; 457399, 2447802; 457389, 2447810; 457328, 2447832; 457310, 2447844; 457297, 2447860; 457274, 2447898; 457234, 2447967; 457193, 2448027; 457148, 2448093; 457124, 2448122; 457112, 2448143; 457089, 2448187; 457076, 2448209; 457048, 2448243; 457032, 2448261; 457029, 2448269; 457028, 2448278; 457031, 2448299; 457032, 2448323; 457031, 2448342; 457028, 2448361; 457016, 2448395; 457005, 2448416; 457002, 2448438; 456998, 2448448; 456991, 2448459; 456973, 2448474; 456957, 2448488; 456943, 2448512; 456930, 2448544; 456916, 2448568; 456896, 2448595; 456883, 2448609; 456870, 2448619; 456856, 2448627; 456832, 2448632; 456801, 2448644; 456771, 2448662; 456748, 2448682; 456733, 2448698; 456713, 2448726; 456697, 2448759; 456679, 2448787; 456671, 2448799; 456652, 2448821; 456635, 2448836; 456615, 2448849; 456596, 2448859; 456583, 2448874; 456572, 2448891; 456563, 2448911; 456551, 2448951; 456541, 2448985; 456535, 2449004; 456530, 2449029; 456526, 2449045; 456516, 2449067; 456504, 2449086; 456491, 2449106; 456476, 2449128; 456462, 2449139; 456446, 2449150; 456435, 2449153; 456419, 2449170; 456404, 2449186; 456395, 2449205; 456387, 2449236; 456386, 2449264; 456390, 2449313; 456395, 2449355; 456394, 2449367; 456394, 2449381; 456397, 2449394; 456401, 2449399; 456407, 2449399; 456420, 2449397; 456439, 2449398; 456457, 2449404; 456483, 2449414; 456501, 2449416; 456513, 2449416; 456533, 2449412; 456569, 2449406; 456586, 2449405; 456603, 2449410; 456620, 2449418; 456633, 2449423; 456647, 2449426; 456662, 2449428; 456681, 2449425; 456706, 2449417; 456733, 2449409; 456752, 2449403; 456769, 2449404; 456787, 2449409; 456807, 2449421; 456818, 2449430; 456826, 2449432; 456836, 2449428; 456852, 2449419; 456862, 2449411; 456869, 2449407; 456878, 2449407; 456889, 2449412; 456910, 2449422; 456924, 2449429; 456941, 2449429; 456969, 2449426; 456991, 2449421; 457000, 2449421; 457034, 2449425; 457042, 2449425; 457049, 2449422; 457064, 2449414; 457073, 2449409; 457083, 2449408; 457097, 2449407; 457107, 2449413; 457123, 2449423; 457132, 2449429; 457141, 2449431; 457168, 2449428; 457205, 2449431; 457229, 2449432; 457255, 2449429; 457276, 2449429; 457289, 2449431; 457300, 2449437; 457307, 2449440; 457314, 2449440; 457325, 2449437; 457352, 2449440; 457363, 2449443; 457395, 2449451; 457417, 2449451; 457451, 2449456; return to starting point.

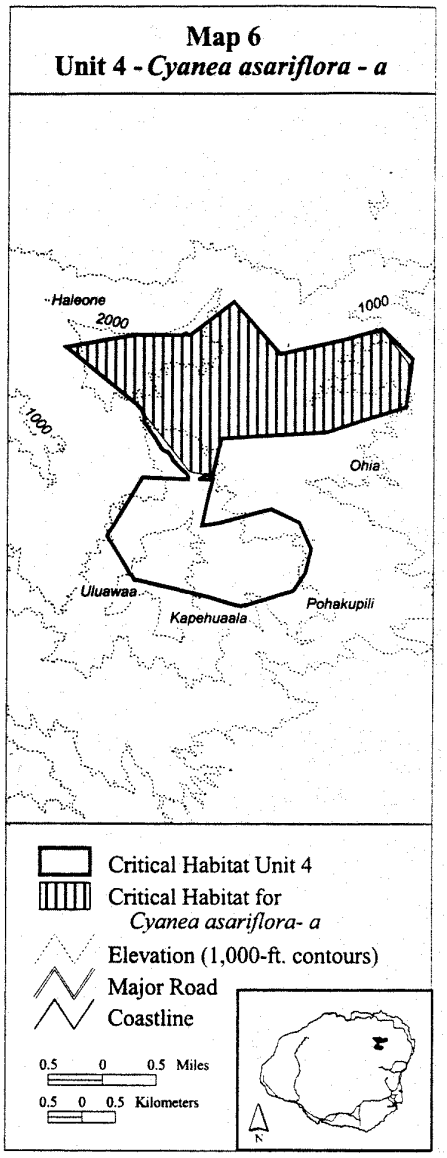
(B) NOTE: Map 5 follows:



(vi) Kauai 4—*Cyanea asarifolia*—a (654 ha; 1,616 ac)

(A) Unit consists of the following 18 boundary points: Start at 455868, 2449362; 456901, 2449549; 457715, 2449548; 458372, 2450048; 459061, 2449266; 460595, 2449609; 460596, 2449609; 461002, 2449077; 460947, 2448554; 460939, 2448483; 460904, 2448472; 460823, 2448447; 460270, 2448273; 459750, 2448109; 458184, 2448016; 458059, 2447453; 457715, 2447516; 456932, 2448517; return to starting point.

(B) NOTE: Map 6 follows:

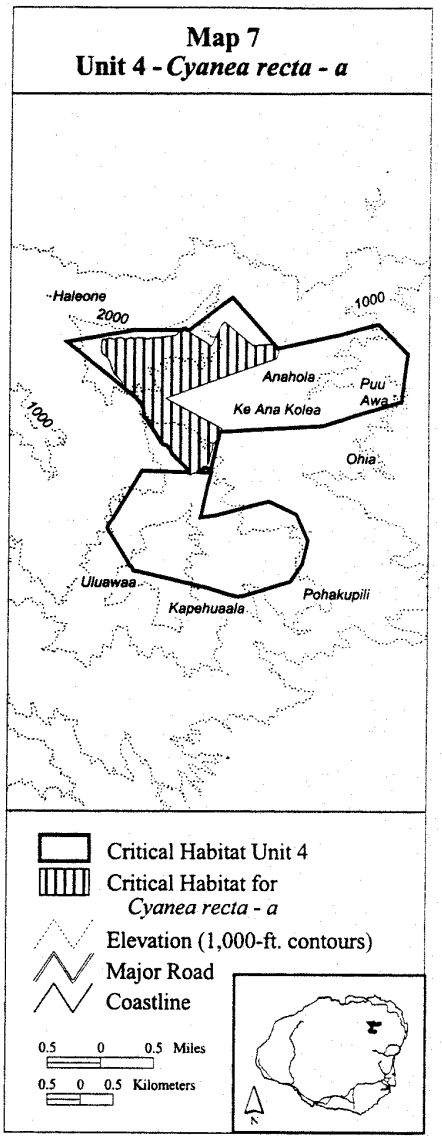


(vii) Kauai 4—*Cyanea recta*—a (252 ha; 622 ac)

(A) Unit consists of the following 217 boundary points: Start at 458254, 2449672; 458681, 2449311; 458976, 2449337; 459083, 2449224; 459041, 2449114; 458385, 2448885; 457368, 2448525; 458223, 2448067; 458204, 2448065; 458165, 2447893; 458096, 2447851; 458085, 2447839; 458077, 2447822; 458073, 2447793; 458073, 2447739; 458057,

2447694; 458046, 2447671; 458033, 2447617; 458027, 2447575; 458026, 2447556; 458023, 2447548; 458009, 2447525; 457998, 2447517; 457979, 2447491; 457946, 2447469; 457927, 2447446; 457899, 2447424; 457864, 2447408; 457850, 2447402; 457830, 2447399; 457797, 2447387; 457757, 2447362; 457741, 2447354; 457739, 2447359; 457725, 2447369; 457716, 2447375; 457694, 2447401; 457689, 2447425; 457690, 2447445; 457684, 2447466; 457667, 2447490; 457653, 2447503; 457639, 2447513; 457604, 2447540; 457587, 2447559; 457545, 2447595; 457538, 2447604; 457528, 2447615; 457505, 2447643; 457502, 2447650; 457473, 2447678; 457457, 2447706; 457446, 2447731; 457399, 2447802; 457389, 2447810; 457328, 2447832; 457310, 2447844; 457297, 2447860; 457274, 2447898; 457234, 2447967; 457193, 2448027; 457148, 2448093; 457124, 2448122; 457112, 2448143; 457089, 2448187; 457076, 2448209; 457048, 2448243; 457032, 2448261; 457029, 2448269; 457028, 2448278; 457031, 2448299; 457032, 2448323; 457031, 2448342; 457028, 2448361; 457016, 2448395; 457005, 2448416; 457002, 2448438; 456998, 2448448; 456991, 2448459; 456973, 2448474; 456957, 2448488; 456943, 2448512; 456930, 2448544; 456916, 2448568; 456896, 2448595; 456883, 2448609; 456870, 2448619; 456856, 2448627; 456832, 2448632; 456801, 2448644; 456771, 2448662; 456748, 2448682; 456733, 2448698; 456713, 2448726; 456697, 2448759; 456679, 2448787; 456671, 2448799; 456652, 2448821; 456635, 2448836; 456615, 2448849; 456596, 2448859; 456583, 2448874; 456572, 2448891; 456563, 2448911; 456551, 2448951; 456541, 2448985; 456535, 2449004; 456530, 2449029; 456526, 2449045; 456516, 2449067; 456504, 2449086; 456491, 2449106; 456476, 2449128; 456462, 2449139; 456446, 2449150; 456435, 2449153; 456419, 2449170; 456404, 2449186; 456395, 2449205; 456387, 2449236; 456386, 2449264; 456390, 2449313; 456395, 2449355; 456394, 2449367; 456394, 2449381; 456397, 2449394; 456401, 2449399; 456407, 2449399; 456420, 2449397; 456439, 2449398; 456457, 2449404; 456483, 2449414; 456501, 2449416; 456513, 2449416; 456533, 2449412; 456569, 2449406; 456586, 2449405; 456603, 2449410; 456620, 2449418; 456633, 2449423; 456647, 2449426; 456662, 2449428; 456681, 2449425; 456706, 2449417; 456733, 2449409; 456752, 2449403; 456769, 2449404; 456787, 2449409; 456807, 2449421; 456818, 2449430; 456826, 2449432; 456836, 2449428; 456852, 2449419; 456862, 2449411; 456869, 2449407; 456878, 2449407; 456889, 2449412; 456910, 2449422; 456924, 2449429; 456941, 2449429; 456969, 2449426; 456991, 2449421; 457000, 2449421; 457034, 2449425; 457042, 2449425; 457049, 2449422; 457064, 2449414; 457073, 2449409; 457083, 2449408; 457097, 2449407; 457107, 2449413; 457123, 2449423; 457132, 2449429; 457141, 2449431; 457168, 2449428; 457205, 2449431; 457229, 2449432; 457255, 2449429; 457276, 2449429; 457289, 2449431; 457300, 2449437; 457307, 2449440; 457314, 2449440; 457325, 2449437; 457352, 2449440; 457363, 2449443; 457395, 2449451; 457417, 2449451; 457492, 2449461; 457515, 2449471; 457522, 2449475; 457547, 2449505; 457592, 2449538; 457610, 2449548; 457618, 2449556; 457631, 2449564; 457646, 2449571; 457651, 2449568; 457672, 2449547; 457689, 2449529; 457699, 2449522; 457714, 2449515; 457742, 2449506; 457770, 2449483; 457776, 2449475; 457788, 2449467; 457825, 2449449; 457846, 2449433; 457856, 2449429; 457917, 2449393; 457954, 2449369; 458004, 2449331; 458025, 2449313; 458037, 2449307; 458058, 2449301; 458141, 2449491; 458199, 2449615; return to starting point.

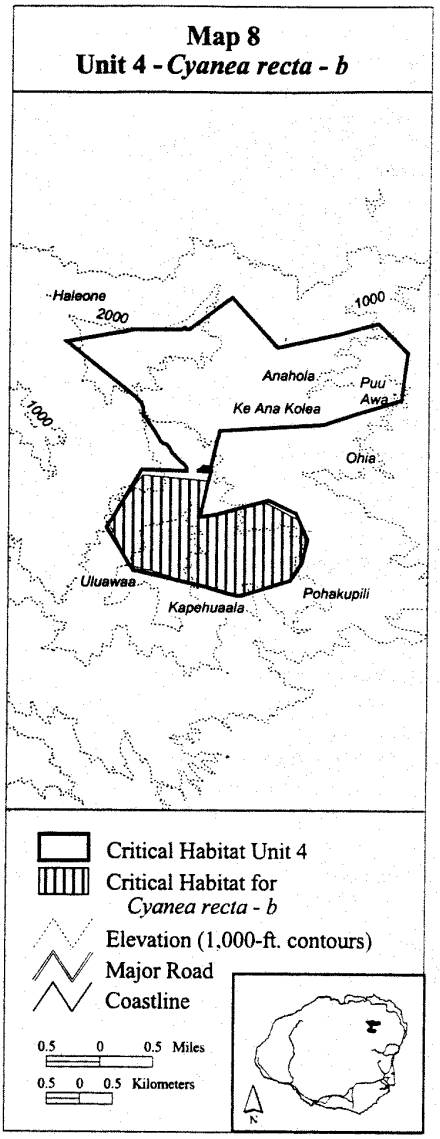
(B) NOTE: Map 7 follows:



(viii) Kauai 4—*Cyanea recta*—b (351 ha; 868 ac)

(A) Unit consists of the following 15 boundary points: Start at 458861, 2446942; 459372, 2446687; 459490, 2446382; 459454, 2446075; 459242, 2445757; 458486, 2445521; 457390, 2445835; 457139, 2445925; 457088, 2445921; 456838, 2445992; 456525, 2446628; 457027, 2447344; 458020, 2447254; 457900, 2446720; 458214, 2446760; return to starting point.

(B) NOTE: Map 8 follows:

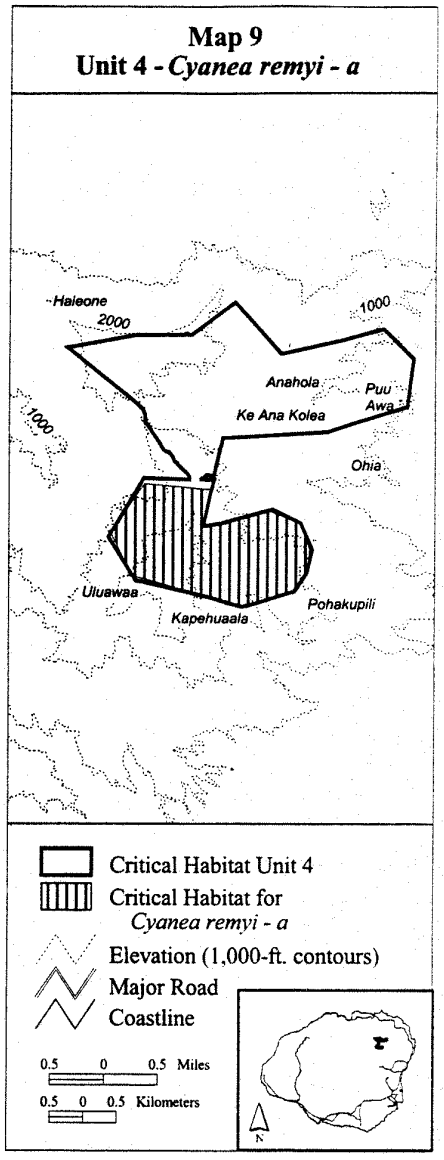


(ix) Kauai 4—*Cyanea remyi*—a (353 ha; 873 ac)

(A) Unit consists of the following 14 boundary points: Start at 457088, 2445921; 456838, 2445992; 456525, 2446628; 457027, 2447344; 458020, 2447254; 457900, 2446720; 458214, 2446760; 458887, 2446950; 459348, 2446748; 459490, 2446382; 459454,

2446075; 459242, 2445757; 458486, 2445521; 457390, 2445835; return to starting point.

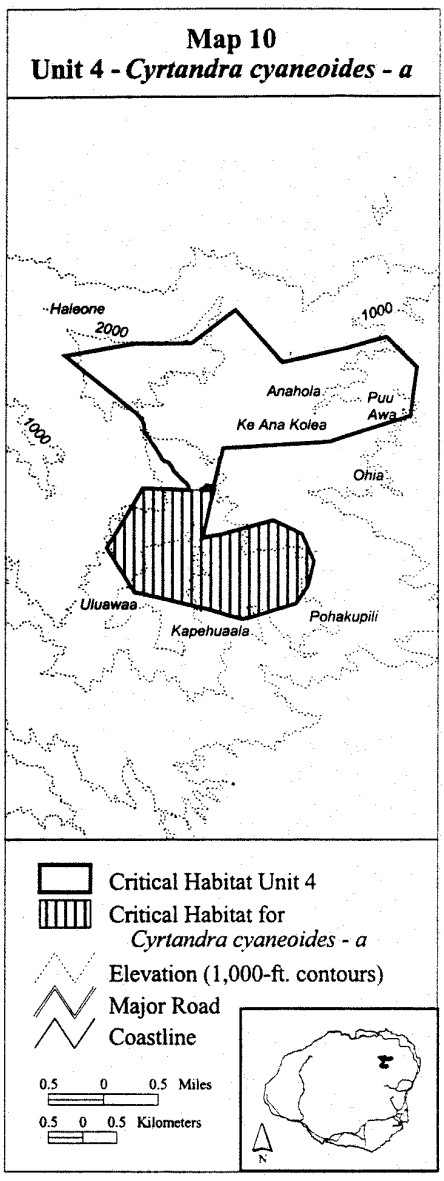
(B) NOTE: Map 9 follows:



(x) Kauai 4—*Cyrtandra cyaneoides*—a (376 ha; 928 ac)

(A) Unit consists of the following 13 boundary points: Start at 457013, 2447427; 458066, 2447394; 457852, 2446671; 458938, 2446966; 459350, 2446768; 459531, 2446374; 459449, 2446012; 459268, 2445749; 458544, 2445536; 457395, 2445800; 456955, 2445902; 456898, 2445915; 456486, 2446556; return to starting point.

(B) NOTE: Map 10 follows:

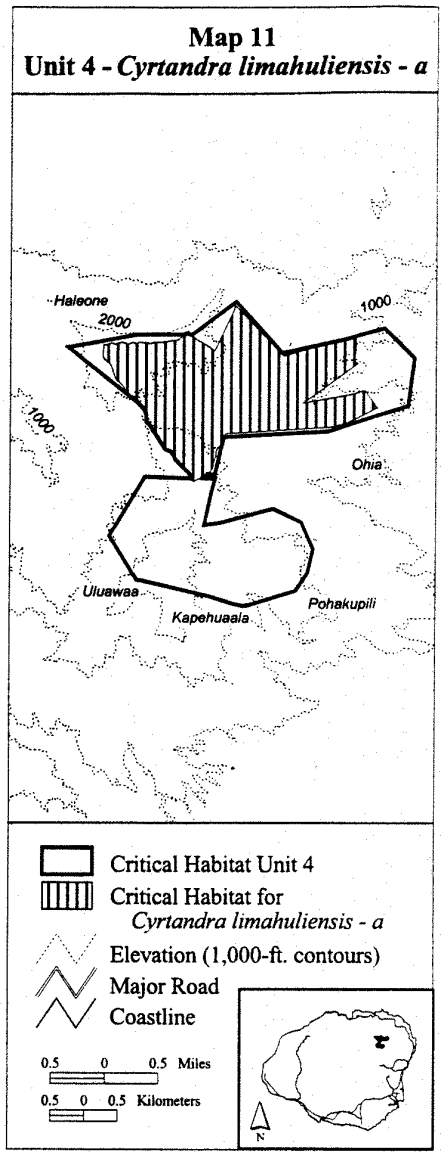


(xi) Kauai 4—*Cyrtandra limahuliensis*—a (501 ha; 1,237 ac)

(A) Unit consists of the following 225 boundary points: Start at 460167, 2449523; 460165, 2449520; 460143, 2449148;

460121, 2449133; 460190, 2449113; 459376, 2448529; 460097, 2448660; 460288, 2448720; 460453, 2448490; 460443, 2448485; 460474, 2448455; 460038, 2448238; 459811, 2448172; 458204, 2448065; 458165, 2447893; 458096, 2447851; 458085, 2447839; 458077, 2447822; 458073, 2447793; 458073, 2447739; 458057, 2447694; 458046, 2447671; 458033, 2447617; 458027, 2447575; 458026, 2447556; 458023, 2447548; 458009, 2447525; 457998, 2447517; 457979, 2447491; 457946, 2447469; 457927, 2447446; 457899, 2447424; 457864, 2447408; 457850, 2447402; 457830, 2447399; 457797, 2447387; 457757, 2447362; 457741, 2447354; 457739, 2447359; 457725, 2447369; 457716, 2447375; 457694, 2447401; 457689, 2447425; 457690, 2447445; 457684, 2447466; 457667, 2447490; 457653, 2447503; 457639, 2447513; 457604, 2447540; 457587, 2447559; 457545, 2447595; 457538, 2447604; 457528, 2447615; 457505, 2447643; 457502, 2447650; 457473, 2447678; 457457, 2447706; 457446, 2447731; 457399, 2447802; 457389, 2447810; 457328, 2447832; 457310, 2447844; 457297, 2447860; 457274, 2447898; 457234, 2447967; 457193, 2448027; 457148, 2448093; 457124, 2448122; 457112, 2448143; 457089, 2448187; 457076, 2448209; 457048, 2448243; 457032, 2448261; 457029, 2448269; 457028, 2448278; 457031, 2448299; 457032, 2448323; 457031, 2448342; 457028, 2448361; 457016, 2448395; 457005, 2448416; 457002, 2448438; 456998, 2448448; 456991, 2448459; 456973, 2448474; 456957, 2448488; 456943, 2448512; 456930, 2448544; 456916, 2448568; 456896, 2448595; 456883, 2448609; 456870, 2448619; 456856, 2448627; 456832, 2448632; 456801, 2448644; 456771, 2448662; 456748, 2448682; 456733, 2448698; 456713, 2448726; 456697, 2448759; 456679, 2448787; 456671, 2448799; 456652, 2448821; 456635, 2448836; 456615, 2448849; 456596, 2448859; 456583, 2448874; 456572, 2448891; 456563, 2448911; 456551, 2448951; 456541, 2448985; 456535, 2449004; 456530, 2449029; 456526, 2449045; 456516, 2449067; 456504, 2449086; 456491, 2449106; 456476, 2449128; 456462, 2449139; 456446, 2449150; 456435, 2449153; 456419, 2449170; 456404, 2449186; 456395, 2449205; 456387, 2449236; 456386, 2449264; 456390, 2449313; 456395, 2449355; 456394, 2449367; 456394, 2449381; 456397, 2449394; 456401, 2449399; 456407, 2449399; 456420, 2449397; 456439, 2449398; 456457, 2449404; 456483, 2449414; 456501, 2449416; 456513, 2449416; 456533, 2449412; 456569, 2449406; 456586, 2449405; 456603, 2449410; 456620, 2449418; 456633, 2449423; 456647, 2449426; 456662, 2449428; 456681, 2449425; 456706, 2449417; 456733, 2449409; 456752, 2449403; 456769, 2449404; 456787, 2449409; 456807, 2449421; 456818, 2449430; 456826, 2449432; 456836, 2449428; 456852, 2449419; 456862, 2449411; 456869, 2449407; 456878, 2449407; 456889, 2449412; 456910, 2449422; 456924, 2449429; 456941, 2449429; 456969, 2449426; 456991, 2449421; 457000, 2449421; 457034, 2449425; 457042, 2449425; 457049, 2449422; 457064, 2449414; 457073, 2449409; 457083, 2449408; 457097, 2449407; 457107, 2449413; 457123, 2449423; 457132, 2449429; 457141, 2449431; 457168, 2449428; 457205, 2449431; 457229, 2449432; 457255, 2449429; 457276, 2449429; 457289, 2449431; 457300, 2449437; 457307, 2449440; 457314, 2449440; 457325, 2449437; 457352, 2449440; 457363, 2449443; 457395, 2449451; 457417, 2449451; 457492, 2449461; 457515, 2449471; 457522, 2449475; 457547, 2449505; 457592, 2449538; 457610, 2449548; 457618, 2449556; 457631, 2449564; 457646, 2449571; 457651, 2449568; 457672, 2449547; 457689, 2449529; 457699, 2449522; 457714, 2449515; 457742, 2449506; 457770, 2449483; 457776, 2449475; 457788, 2449467; 457825, 2449449; 457846, 2449433; 457856, 2449429; 457917, 2449393; 457954, 2449369; 458004, 2449331; 458025, 2449313; 458037, 2449307; 458058, 2449301; 458141, 2449491; 458199, 2449615; 458316, 2449881; 458363, 2449984; 459083, 2449224; return to starting point.

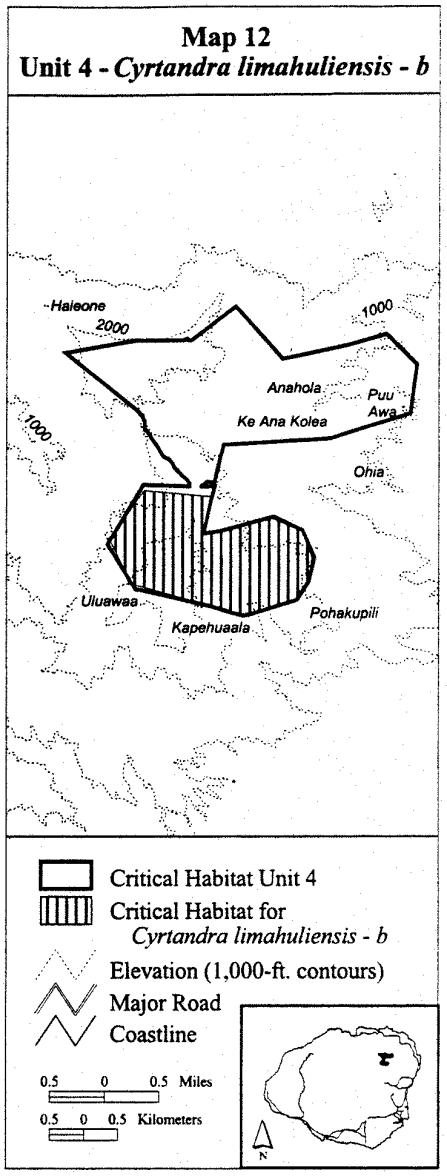
(B) NOTE: Map 11 follows:



(xii) Kauai 4—*Cyrtandra limahuliensis*—b (353 ha; 873 ac)

(A) Unit consists of the following 14 boundary points: Start at 457088, 2445921; 456838, 2445992; 456525, 2446628; 457027, 2447344; 458020, 2447254; 457900, 2446720; 458214, 2446760; 458887, 2446950; 459348, 2446748; 459490, 2446382; 459454, 2446075; 459242, 2445757; 458486, 2445521; 457390, 2445835; return to starting point.

(B) NOTE: Map 12 follows:

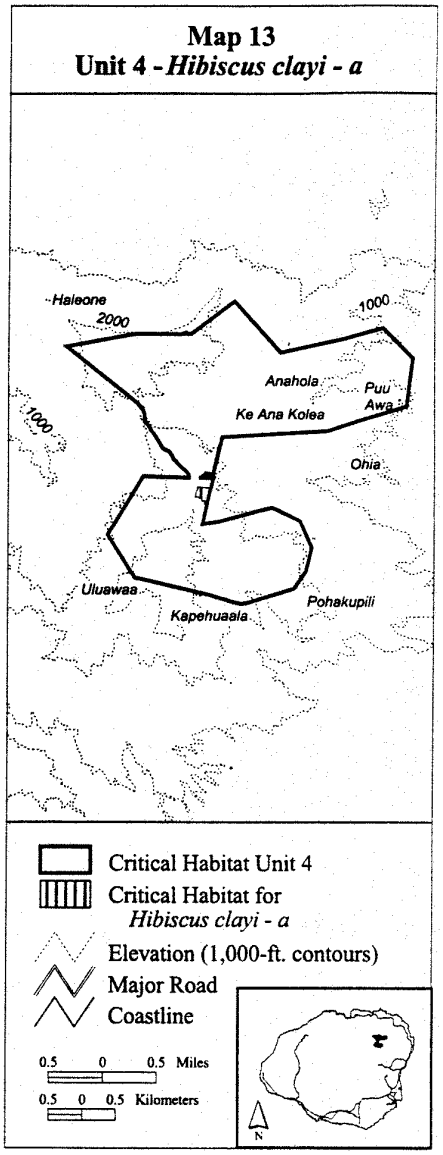


(xiii) Kauai 4—*Hibiscus clayi*—a (4 ha; 9 ac)

(A) Unit consists of the following 70 boundary points: Start at 457819, 2447272; 458020, 2447254; 457971, 2447038; 457967, 2447019; 457946, 2447009; 457942, 2447010; 457938, 2447011; 457936, 2447012; 457933, 2447015; 457932, 2447018; 457930,

2447025; 457932, 2447041; 457933, 2447055; 457933, 2447059; 457931, 2447065; 457930, 2447067; 457928, 2447067; 457921, 2447067; 457918, 2447067; 457917, 2447066; 457910, 2447062; 457908, 2447062; 457898, 2447060; 457896, 2447062; 457894, 2447065; 457893, 2447069; 457890, 2447077; 457888, 2447085; 457888, 2447086; 457887, 2447093; 457887, 2447095; 457884, 2447100; 457878, 2447105; 457871, 2447102; 457868, 2447102; 457858, 2447103; 457848, 2447108; 457844, 2447111; 457841, 2447115; 457838, 2447120; 457837, 2447123; 457835, 2447125; 457831, 2447127; 457828, 2447128; 457822, 2447128; 457818, 2447128; 457816, 2447127; 457810, 2447123; 457798, 2447118; 457794, 2447120; 457792, 2447125; 457792, 2447128; 457793, 2447135; 457795, 2447145; 457799, 2447165; 457800, 2447176; 457800, 2447183; 457800, 2447185; 457801, 2447192; 457803, 2447195; 457814, 2447209; 457818, 2447215; 457825, 2447224; 457826, 2447227; 457829, 2447234; 457829, 2447244; 457828, 2447246; 457825, 2447251; 457824, 2447254; 457823, 2447264; return to starting point.

(B) NOTE: Map 13 follows:



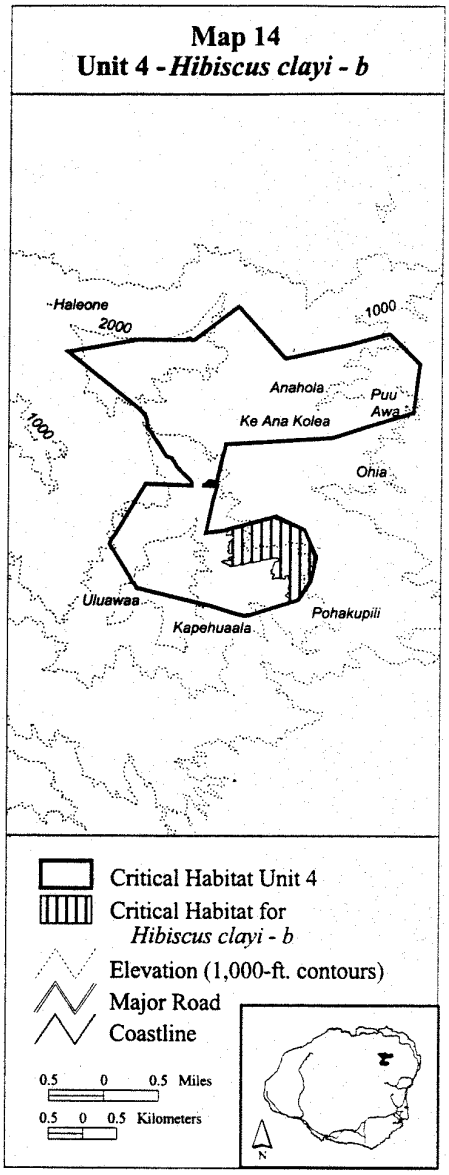
(xiv) Kauai 4—*Hibiscus clayi*—b (85 ha; 210 ac)

(A) Unit consists of the following 421 boundary points: Start at 458269,

2446775; 458887, 2446950; 459348, 2446748; 459490, 2446382; 459454, 2446075; 459242, 2445757; 459159, 2445731; 459158, 2445731; 459148, 2445734; 459138, 2445735; 459131, 2445738; 459126, 2445743; 459125, 2445745; 459127, 2445747; 459138, 2445755; 459142, 2445761; 459144, 2445765; 459142, 2445769; 459138, 2445772; 459135, 2445775; 459116, 2445793; 459112, 2445795; 459110, 2445797; 459106, 2445798; 459102, 2445799; 459095, 2445802; 459089, 2445805; 459085, 2445812; 459082, 2445815; 459087, 2445825; 459093, 2445831; 459103, 2445841; 459106, 2445845; 459111, 2445852; 459114, 2445859; 459118, 2445863; 459120, 2445863; 459128, 2445866; 459133, 2445871; 459134, 2445875; 459135, 2445882; 459135, 2445885; 459135, 2445892; 459135, 2445895; 459133, 2445900; 459131, 2445905; 459126, 2445913; 459123, 2445915; 459118, 2445921; 459117, 2445924; 459116, 2445925; 459114, 2445935; 459116, 2445938; 459118, 2445941; 459123, 2445945; 459126, 2445948; 459130, 2445953; 459132, 2445955; 459133, 2445965; 459132, 2445969; 459131, 2445975; 459133, 2446005; 459130, 2446025; 459130, 2446035; 459131, 2446045; 459131, 2446048; 459129, 2446055; 459124, 2446061; 459118, 2446068; 459116, 2446073; 459115, 2446075; 459118, 2446086; 459120, 2446095; 459120, 2446096; 459118, 2446102; 459117, 2446104; 459113, 2446105; 459109, 2446106; 459097, 2446106; 459088, 2446105; 459086, 2446105; 459080, 2446103; 459073, 2446100; 459068, 2446097; 459067, 2446096; 459067, 2446095; 459068, 2446086; 459069, 2446066; 459070, 2446065; 459070, 2446064; 459068, 2446060; 459066, 2446057; 459058, 2446057; 459048, 2446059; 459044, 2446061; 459038, 2446063; 459028, 2446067; 459018, 2446064; 459008, 2446062; 458998, 2446067; 458992, 2446069; 458988, 2446070; 458978, 2446070; 458968, 2446070; 458958, 2446069; 458948, 2446071; 458942, 2446072; 458938, 2446072; 458918, 2446064; 458908, 2446061; 458898, 2446057; 458889, 2446056; 458888, 2446056; 458884, 2446061; 458883, 2446065; 458887, 2446076; 458896, 2446097; 458900, 2446104; 458901, 2446105; 458905, 2446109; 458908, 2446112; 458911, 2446115; 458916, 2446125; 458913, 2446130; 458908, 2446135; 458898, 2446136; 458888, 2446135; 458878, 2446136; 458871, 2446137; 458863, 2446140; 458858, 2446143; 458857, 2446144; 458857, 2446145; 458861, 2446152; 458864, 2446165; 458863, 2446179; 458862, 2446182; 458861, 2446185; 458865, 2446189; 458868, 2446191; 458872, 2446191; 458875, 2446192; 458878, 2446192; 458885, 2446195; 458887, 2446196; 458888, 2446197; 458892, 2446202; 458894, 2446205; 458895, 2446215; 458894, 2446225; 458892, 2446231; 458891, 2446237; 458890, 2446245; 458892, 2446251; 458893, 2446255; 458896, 2446257; 458901, 2446262; 458904, 2446265; 458906, 2446267; 458912, 2446275; 458912, 2446281; 458912, 2446285; 458913, 2446295; 458914, 2446299; 458918, 2446302; 458920, 2446303; 458928, 2446305; 458938, 2446307; 458948, 2446311; 458968, 2446322; 458970, 2446323; 458971, 2446325; 458978, 2446335; 458982, 2446341; 458985, 2446345; 458983, 2446350; 458978, 2446355; 458969, 2446356; 458968, 2446356; 458953, 2446360; 458948, 2446361; 458938, 2446362; 458936, 2446362; 458931, 2446362; 458922, 2446361; 458918, 2446361; 458902, 2446361; 458888, 2446361; 458878, 2446358; 458871, 2446355; 458868, 2446354; 458858, 2446354; 458853, 2446355; 458848, 2446356; 458847, 2446356; 458838, 2446354; 458828, 2446349; 458820, 2446346; 458818, 2446346; 458798, 2446342; 458778, 2446337; 458768, 2446336; 458762, 2446338; 458758, 2446339; 458748, 2446341; 458738, 2446341; 458726, 2446338; 458718, 2446335; 458717, 2446335; 458712, 2446331; 458708, 2446327; 458707, 2446325; 458704, 2446319; 458700, 2446315; 458699, 2446314; 458698, 2446314; 458691, 2446312; 458688, 2446312; 458678, 2446311; 458668, 2446310; 458664, 2446309; 458658, 2446308; 458641, 2446303; 458617, 2446296; 458608, 2446294; 458588, 2446292; 458578, 2446291; 458568, 2446295; 458561, 2446298; 458558, 2446299; 458548, 2446300; 458545, 2446299; 458528, 2446290; 458508, 2446289; 458506, 2446287; 458503, 2446285; 458498, 2446282; 458494, 2446279; 458485, 2446275; 458480, 2446273; 458478, 2446273; 458468, 2446270; 458458, 2446271; 458453, 2446270; 458448, 2446269; 458444, 2446265; 458438, 2446262; 458434, 2446260; 458428, 2446259; 458417, 2446264; 458416, 2446265; 458412, 2446269; 458408, 2446271; 458398, 2446267; 458397, 2446265; 458388, 2446256; 458382, 2446251; 458378, 2446249; 458368, 2446249; 458358, 2446251; 458348, 2446249; 458345, 2446248; 458338, 2446246; 458328, 2446242; 458321, 2446243; 458308, 2446244; 458300, 2446243; 458298, 2446243; 458293, 2446241; 458288, 2446239; 458278, 2446236; 458270, 2446237; 458258, 2446241; 458256, 2446243; 458255, 2446245; 458251, 2446255; 458250, 2446257; 458248, 2446258; 458244, 2446260; 458228, 2446268; 458223, 2446270; 458218, 2446271; 458214, 2446271; 458208, 2446273; 458207, 2446274; 458205, 2446275; 458202, 2446279; 458198, 2446282; 458196, 2446283; 458187, 2446284; 458178, 2446285; 458172, 2446284; 458168, 2446284; 458167, 2446284; 458158, 2446289; 458155,

2446292; 458147, 2446300; 458145, 2446302; 458143, 2446305; 458148, 2446310; 458161, 2446315; 458178, 2446321; 458189, 2446325; 458196, 2446327; 458198, 2446328; 458218, 2446326; 458238, 2446326; 458248, 2446326; 458257, 2446326; 458268, 2446328; 458273, 2446331; 458278, 2446333; 458280, 2446335; 458278, 2446337; 458268, 2446345; 458261, 2446348; 458258, 2446349; 458248, 2446351; 458237, 2446354; 458232, 2446355; 458239, 2446365; 458252, 2446371; 458273, 2446380; 458278, 2446382; 458287, 2446385; 458294, 2446389; 458300, 2446395; 458308, 2446406; 458313, 2446411; 458315, 2446415; 458312, 2446419; 458308, 2446421; 458288, 2446427; 458278, 2446427; 458276, 2446427; 458269, 2446426; 458258, 2446425; 458258, 2446425; 458252, 2446429; 458248, 2446431; 458246, 2446433; 458244, 2446435; 458242, 2446439; 458239, 2446446; 458238, 2446447; 458235, 2446451; 458229, 2446455; 458226, 2446463; 458225, 2446465; 458228, 2446466; 458236, 2446468; 458243, 2446469; 458244, 2446469; 458248, 2446471; 458250, 2446473; 458250, 2446475; 458249, 2446486; 458246, 2446495; 458241, 2446505; 458240, 2446507; 458236, 2446513; 458234, 2446515; 458231, 2446525; 458233, 2446530; 458235, 2446535; 458238, 2446539; 458242, 2446541; 458245, 2446545; 458251, 2446553; 458252, 2446555; 458254, 2446559; 458257, 2446565; 458253, 2446575; 458250, 2446577; 458240, 2446585; 458243, 2446590; 458249, 2446595; 458255, 2446598; 458262, 2446602; 458268, 2446605; 458279, 2446615; 458288, 2446625; 458293, 2446630; 458298, 2446634; 458304, 2446639; 458311, 2446645; 458320, 2446655; 458321, 2446665; 458315, 2446672; 458312, 2446675; 458308, 2446677; 458302, 2446679; 458288, 2446682; 458286, 2446683; 458284, 2446685; 458282, 2446688; 458278, 2446693; 458277, 2446694; 458275, 2446695; 458268, 2446698; 458258, 2446697; 458248, 2446693; 458242, 2446691; 458238, 2446690; 458228, 2446690; 458224, 2446689; 458218, 2446687; 458212, 2446685; 458208, 2446684; 458207, 2446684; 458203, 2446685; 458200, 2446687; 458200, 2446688; 458201, 2446695; 458206, 2446707; 458208, 2446710; 458214, 2446719; 458228, 2446739; 458230, 2446741; 458247, 2446757; 458258, 2446772; return to starting point.

(B) NOTE: Map 14 follows:

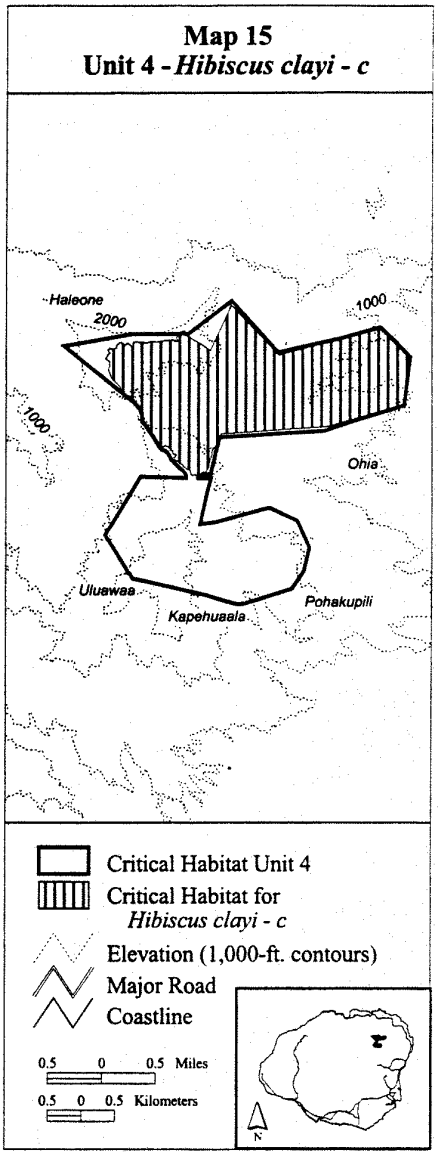


(xv) Kauai 4—*Hibiscus clayi*—c (590 ha; 1,458 ac)

(A) Unit consists of the following 192 boundary points: Start at 457668,

2449552; 457672, 2449547; 457689, 2449529; 457699, 2449522; 457714, 2449515; 457742, 2449506; 457770, 2449483; 457776, 2449475; 457788, 2449467; 457825, 2449449; 457846, 2449433; 457856, 2449429; 457917, 2449393; 457954, 2449369; 458004, 2449331; 458025, 2449313; 458037, 2449307; 458058, 2449301; 458141, 2449491; 458199, 2449615; 458316, 2449881; 458363, 2449984; 459083, 2449224; 460578, 2449637; 461026, 2449189; 460925, 2448495; 459811, 2448172; 458204, 2448065; 458165, 2447893; 458096, 2447851; 458085, 2447839; 458077, 2447822; 458073, 2447793; 458073, 2447739; 458057, 2447694; 458046, 2447671; 458033, 2447617; 458027, 2447575; 458026, 2447556; 458023, 2447548; 458009, 2447525; 457998, 2447517; 457979, 2447491; 457946, 2447469; 457927, 2447446; 457899, 2447424; 457864, 2447422; 457848, 2447449; 457822, 2447451; 457802, 2447444; 457771, 2447453; 457756, 2447462; 457757, 2447484; 457751, 2447506; 457752, 2447524; 457741, 2447534; 457689, 2447539; 457676, 2447562; 457651, 2447573; 457640, 2447603; 457586, 2447621; 457575, 2447659; 457553, 2447656; 457529, 2447667; 457502, 2447707; 457532, 2447722; 457544, 2447753; 457500, 2447771; 457492, 2447810; 457459, 2447812; 457439, 2447864; 457412, 2447879; 457371, 2447884; 457345, 2447859; 457332, 2447868; 457274, 2447898; 457234, 2447967; 457193, 2448027; 457148, 2448093; 457124, 2448122; 457112, 2448143; 457089, 2448187; 457076, 2448209; 457048, 2448243; 457032, 2448261; 457029, 2448269; 457028, 2448278; 457031, 2448299; 457032, 2448323; 457031, 2448342; 457028, 2448361; 457016, 2448395; 457005, 2448416; 457002, 2448438; 456998, 2448448; 456991, 2448459; 456973, 2448474; 456957, 2448488; 456943, 2448512; 456930, 2448544; 456916, 2448568; 456896, 2448595; 456883, 2448609; 456870, 2448619; 456856, 2448627; 456832, 2448632; 456801, 2448644; 456771, 2448662; 456748, 2448682; 456733, 2448698; 456713, 2448726; 456697, 2448759; 456679, 2448787; 456671, 2448799; 456652, 2448821; 456635, 2448836; 456615, 2448849; 456596, 2448859; 456583, 2448874; 456572, 2448891; 456563, 2448911; 456551, 2448951; 456541, 2448985; 456535, 2449004; 456530, 2449029; 456546, 2449060; 456540, 2449095; 456553, 2449134; 456490, 2449179; 456513, 2449208; 456520, 2449240; 456555, 2449262; 456524, 2449303; 456546, 2449327; 456600, 2449316; 456652, 2449333; 456652, 2449376; 456672, 2449396; 456706, 2449417; 456733, 2449409; 456778, 2449374; 456817, 2449409; 456862, 2449378; 456880, 2449352; 456895, 2449372; 456897, 2449409; 456924, 2449429; 456941, 2449429; 456969, 2449426; 456991, 2449421; 457000, 2449421; 457034, 2449425; 457042, 2449425; 457049, 2449422; 457064, 2449414; 457073, 2449409; 457083, 2449408; 457097, 2449407; 457107, 2449413; 457123, 2449423; 457132, 2449429; 457141, 2449431; 457168, 2449428; 457205, 2449431; 457229, 2449432; 457255, 2449429; 457276, 2449429; 457289, 2449431; 457300, 2449437; 457307, 2449440; 457314, 2449440; 457325, 2449437; 457352, 2449440; 457363, 2449443; 457395, 2449451; 457417, 2449451; 457492, 2449461; 457518, 2449446; 457527, 2449437; 457542, 2449435; 457550, 2449428; 457557, 2449434; 457555, 2449453; 457546, 2449470; 457543, 2449490; 457547, 2449505; 457592, 2449538; 457610, 2449548; 457619, 2449546; 457638, 2449550; 457649, 2449548; 457660, 2449547; return to starting point.

(B) NOTE: Map 15 follows:

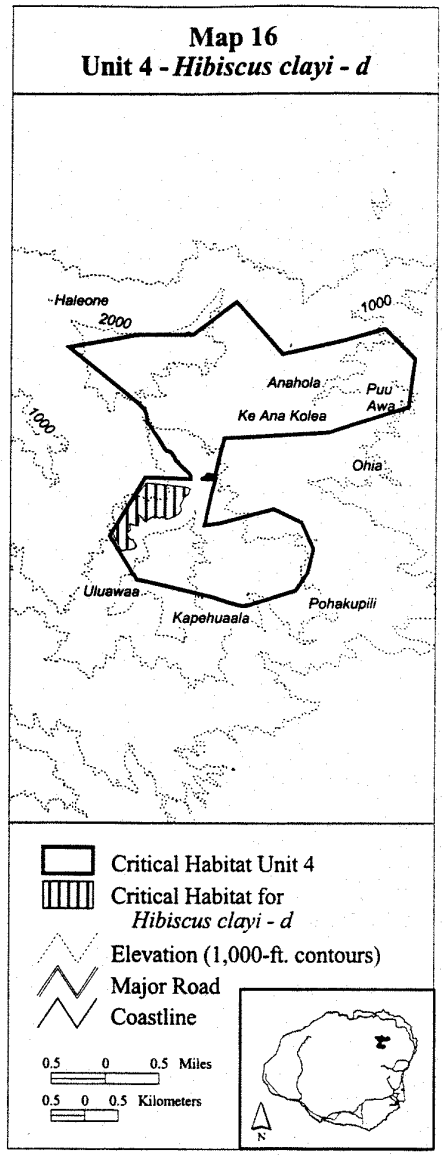


(xvi) Kauai 4—*Hibiscus clayi*—d (48 ha; 119 ac)

(A) Unit consists of the following 283 boundary points: Start at 457027, 2447344; 457644, 2447288; 457645, 2447282; 457658, 2447272; 457670, 2447265; 457675, 2447261; 457678, 2447259; 457680, 2447257; 457682, 2447255; 457680, 2447245; 457678, 2447241; 457676, 2447237; 457674, 2447235; 457669, 2447225; 457666, 2447215; 457663, 2447205; 457662, 2447195; 457661, 2447192; 457657, 2447185; 457651, 2447175; 457650, 2447173; 457648, 2447172; 457644, 2447169; 457638, 2447166; 457637, 2447166; 457631, 2447162; 457628, 2447160; 457625, 2447158; 457621, 2447152; 457618, 2447148; 457608, 2447139; 457605, 2447138; 457602, 2447135; 457600, 2447133; 457595, 2447128; 457591, 2447122; 457586, 2447115; 457584, 2447109; 457584, 2447105; 457582, 2447095; 457577, 2447086; 457576, 2447085; 457573, 2447075; 457571, 2447072; 457568, 2447068; 457564, 2447065; 457561, 2447062; 457556, 2447057; 457555, 2447055; 457552, 2447051; 457541, 2447032; 457537, 2447025; 457536, 2447017; 457536, 2447015; 457536, 2447012; 457537, 2447005; 457541, 2446995; 457545, 2446985; 457546, 2446983; 457557, 2446955; 457560, 2446945; 457558, 2446941; 457556, 2446937; 457551, 2446932; 457545, 2446928; 457540, 2446924; 457535, 2446919; 457531, 2446913; 457527, 2446906; 457524, 2446899; 457523, 2446895; 457522, 2446892; 457518, 2446887; 457517, 2446885; 457512, 2446881; 457508, 2446880; 457504, 2446879; 457497, 2446877; 457489, 2446874; 457483, 2446871; 457478, 2446868; 457471, 2446863; 457465, 2446858; 457458, 2446852; 457452, 2446845; 457448, 2446842; 457438, 2446838; 457428, 2446838; 457418, 2446837; 457408, 2446834; 457403, 2446831; 457398, 2446828; 457391, 2446823; 457385, 2446818; 457381, 2446815; 457379, 2446814; 457378, 2446814; 457371, 2446812; 457358, 2446810; 457354, 2446809; 457347, 2446807; 457344, 2446805; 457338, 2446803; 457336, 2446803; 457328, 2446805; 457327, 2446805; 457322, 2446809; 457319, 2446815; 457318, 2446825; 457308, 2446825; 457302, 2446828; 457298, 2446830; 457268, 2446834; 457258, 2446833; 457248, 2446831; 457244, 2446829; 457236, 2446825; 457228, 2446822; 457225, 2446822; 457218, 2446821; 457216, 2446823; 457213, 2446825; 457211, 2446828; 457208, 2446831; 457206, 2446833; 457200, 2446837; 457198, 2446838; 457191, 2446838; 457188, 2446838; 457168, 2446832; 457158, 2446831; 457155, 2446832; 457148, 2446834; 457138, 2446839; 457128, 2446839; 457118, 2446836; 457108, 2446831; 457088, 2446819; 457078, 2446813; 457068, 2446807; 457057, 2446796; 457044, 2446780; 457041, 2446775; 457038, 2446772; 457035, 2446769; 457028, 2446765; 457018, 2446765; 457013, 2446770; 457008, 2446774; 457007, 2446775; 457003, 2446780; 456994, 2446791; 456990, 2446797; 456982, 2446809; 456978, 2446816; 456968, 2446830; 456958, 2446844; 456950, 2446855; 456940, 2446867; 456938, 2446868; 456928, 2446872; 456918, 2446869; 456916, 2446867;

456914, 2446865; 456912, 2446861; 456911, 2446855; 456912, 2446845; 456914, 2446835; 456917, 2446825; 456919, 2446816; 456921, 2446808; 456924, 2446795; 456923, 2446785; 456920, 2446775; 456920, 2446774; 456920, 2446765; 456921, 2446758; 456921, 2446753; 456921, 2446745; 456920, 2446743; 456917, 2446725; 456916, 2446718; 456915, 2446715; 456912, 2446712; 456908, 2446710; 456898, 2446708; 456888, 2446707; 456882, 2446709; 456878, 2446710; 456868, 2446715; 456858, 2446720; 456854, 2446721; 456839, 2446726; 456823, 2446730; 456808, 2446732; 456800, 2446734; 456789, 2446735; 456788, 2446734; 456786, 2446728; 456785, 2446719; 456785, 2446706; 456786, 2446696; 456788, 2446686; 456791, 2446678; 456793, 2446676; 456794, 2446672; 456797, 2446664; 456798, 2446656; 456797, 2446647; 456797, 2446646; 456793, 2446641; 456777, 2446627; 456775, 2446626; 456771, 2446623; 456765, 2446619; 456758, 2446616; 456748, 2446610; 456746, 2446608; 456743, 2446606; 456736, 2446596; 456742, 2446586; 456748, 2446581; 456751, 2446579; 456753, 2446576; 456756, 2446566; 456763, 2446556; 456770, 2446546; 456768, 2446536; 456769, 2446527; 456770, 2446526; 456775, 2446522; 456778, 2446521; 456788, 2446518; 456791, 2446516; 456795, 2446512; 456798, 2446509; 456801, 2446508; 456808, 2446505; 456816, 2446504; 456838, 2446501; 456842, 2446499; 456844, 2446496; 456844, 2446486; 456843, 2446476; 456845, 2446472; 456850, 2446467; 456856, 2446463; 456863, 2446460; 456869, 2446456; 456870, 2446456; 456881, 2446439; 456882, 2446436; 456883, 2446426; 456882, 2446416; 456883, 2446406; 456883, 2446401; 456882, 2446396; 456881, 2446394; 456878, 2446392; 456852, 2446372; 456848, 2446370; 456845, 2446369; 456830, 2446364; 456822, 2446362; 456808, 2446358; 456788, 2446354; 456778, 2446355; 456768, 2446358; 456758, 2446360; 456748, 2446361; 456738, 2446360; 456728, 2446357; 456727, 2446356; 456716, 2446348; 456709, 2446345; 456708, 2446345; 456700, 2446344; 456698, 2446344; 456688, 2446342; 456678, 2446340; 456675, 2446339; 456668, 2446337; 456525, 2446628; return to starting point.

(B) NOTE: Map 16 follows:

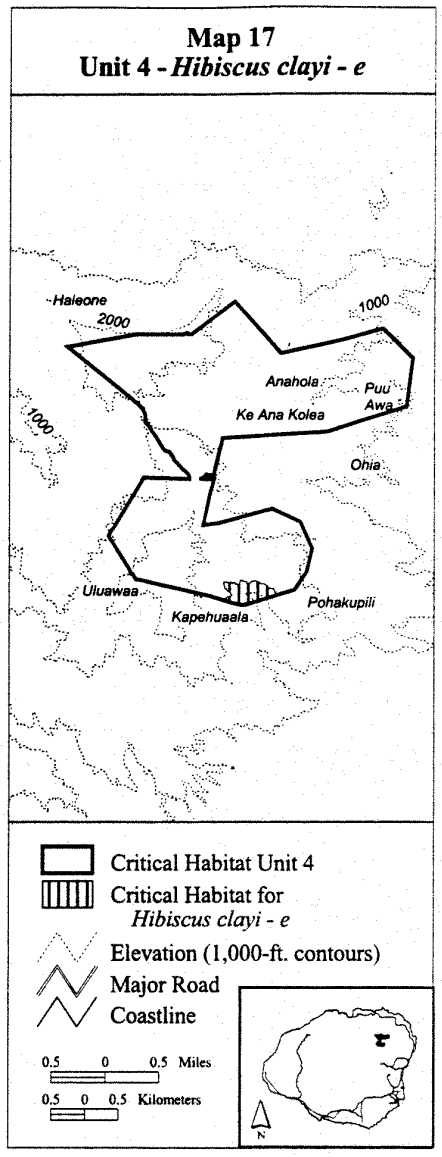


(xvii) Kauai 4—*Hibiscus clayi*—e (19 ha; 47 ac)

(A) Unit consists of the following 225 boundary points: Start at 459000,

2445681; 458500, 2445525; 458499, 2445526; 458498, 2445527; 458493, 2445530; 458488, 2445532; 458485, 2445533; 458478, 2445534; 458469, 2445547; 458468, 2445547; 458463, 2445550; 458458, 2445552; 458448, 2445549; 458440, 2445544; 458428, 2445540; 458422, 2445539; 458288, 2445578; 458285, 2445582; 458281, 2445586; 458273, 2445590; 458268, 2445593; 458266, 2445596; 458263, 2445601; 458259, 2445606; 458254, 2445611; 458248, 2445616; 458248, 2445616; 458244, 2445622; 458244, 2445626; 458248, 2445632; 458258, 2445645; 458259, 2445646; 458265, 2445649; 458268, 2445650; 458278, 2445651; 458283, 2445651; 458291, 2445653; 458306, 2445656; 458323, 2445661; 458328, 2445663; 458332, 2445666; 458333, 2445671; 458334, 2445676; 458328, 2445683; 458326, 2445686; 458318, 2445691; 458316, 2445693; 458312, 2445696; 458311, 2445698; 458307, 2445704; 458288, 2445726; 458283, 2445731; 458274, 2445736; 458271, 2445738; 458268, 2445740; 458265, 2445743; 458263, 2445746; 458261, 2445748; 458257, 2445754; 458255, 2445756; 458251, 2445758; 458248, 2445760; 458244, 2445766; 458242, 2445770; 458234, 2445782; 458230, 2445786; 458229, 2445787; 458228, 2445788; 458226, 2445793; 458225, 2445796; 458224, 2445806; 458222, 2445816; 458217, 2445836; 458212, 2445849; 458207, 2445855; 458207, 2445856; 458207, 2445857; 458211, 2445863; 458215, 2445866; 458217, 2445867; 458228, 2445872; 458232, 2445872; 458235, 2445872; 458245, 2445872; 458248, 2445872; 458253, 2445870; 458261, 2445866; 458266, 2445863; 458268, 2445862; 458278, 2445859; 458292, 2445862; 458302, 2445866; 458307, 2445867; 458311, 2445869; 458318, 2445870; 458327, 2445866; 458328, 2445865; 458332, 2445860; 458336, 2445854; 458338, 2445852; 458348, 2445850; 458351, 2445853; 458356, 2445858; 458358, 2445861; 458368, 2445866; 458375, 2445862; 458378, 2445860; 458388, 2445849; 458392, 2445846; 458398, 2445841; 458408, 2445836; 458418, 2445833; 458428, 2445833; 458431, 2445833; 458439, 2445835; 458446, 2445838; 458448, 2445841; 458450, 2445844; 458452, 2445852; 458454, 2445866; 458455, 2445876; 458457, 2445885; 458457, 2445887; 458458, 2445890; 458462, 2445892; 458468, 2445893; 458478, 2445892; 458482, 2445892; 458486, 2445893; 458488, 2445893; 458495, 2445892; 458498, 2445891; 458516, 2445883; 458523, 2445880; 458528, 2445876; 458536, 2445873; 458538, 2445872; 458548, 2445871; 458551, 2445868; 458552, 2445865; 458555, 2445862; 458558, 2445859; 458565, 2445855; 458567, 2445854; 458568, 2445854; 458578, 2445853; 458588, 2445849; 458598, 2445849; 458603, 2445851; 458608, 2445853; 458610, 2445855; 458618, 2445865; 458623, 2445871; 458625, 2445875; 458628, 2445879; 458632, 2445882; 458638, 2445885; 458647, 2445884; 458658, 2445884; 458663, 2445885; 458667, 2445886; 458688, 2445888; 458691, 2445888; 458698, 2445885; 458704, 2445881; 458708, 2445877; 458709, 2445876; 458718, 2445873; 458724, 2445871; 458728, 2445870; 458731, 2445868; 458735, 2445865; 458738, 2445863; 458743, 2445860; 458751, 2445858; 458758, 2445856; 458759, 2445855; 458768, 2445849; 458771, 2445848; 458778, 2445845; 458788, 2445844; 458798, 2445844; 458808, 2445842; 458818, 2445840; 458821, 2445838; 458825, 2445835; 458826, 2445834; 458828, 2445832; 458833, 2445830; 458840, 2445827; 458843, 2445825; 458858, 2445819; 458861, 2445818; 458864, 2445815; 458866, 2445813; 458870, 2445807; 458874, 2445801; 458878, 2445795; 458884, 2445791; 458891, 2445788; 458898, 2445786; 458900, 2445785; 458908, 2445781; 458915, 2445775; 458918, 2445773; 458928, 2445770; 458938, 2445770; 458948, 2445773; 458955, 2445772; 458958, 2445772; 458962, 2445769; 458963, 2445765; 458963, 2445755; 458964, 2445745; 458967, 2445735; 458971, 2445728; 458973, 2445725; 458975, 2445722; 458980, 2445717; 458983, 2445715; 458985, 2445712; 458988, 2445708; 458989, 2445706; 458992, 2445695; 458997, 2445685; return to starting point.

(B) NOTE: Map 17 follows:

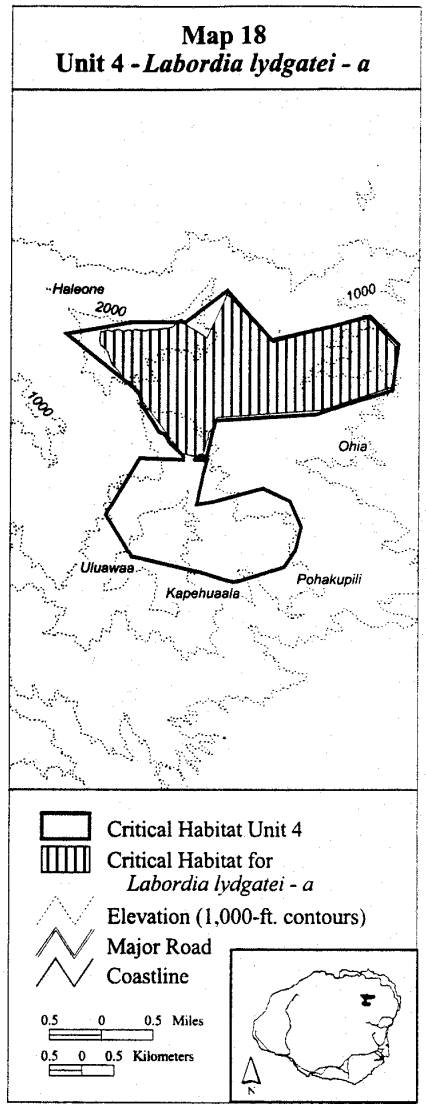


(xviii) Kauai 4—*Labordia lydgatei*—a (588 ha; 1,453 ac)

(A) Unit consists of the following 170 boundary points: Start at 457589, 2449536; 457687, 2449531; 457689, 2449529; 457699, 2449522; 457714, 2449515; 457742, 2449506; 457770, 2449483; 457776, 2449475; 457788, 2449467; 457825, 2449449; 457846, 2449433; 457856, 2449429; 457917, 2449393; 457954, 2449369; 458004, 2449331; 458025, 2449313; 458037, 2449307; 458058, 2449301; 458141, 2449491; 458199, 2449615; 458316, 2449881; 458363, 2449983; 458397, 2449949; 459083, 2449224; 460011, 2449480; 460567, 2449609; 461011, 2449133; 460921, 2448534; 459969, 2448218; 459811, 2448172; 458204, 2448065; 458165, 2447893; 458096, 2447851; 458085, 2447839; 458077, 2447822; 458073, 2447793; 458073, 2447739; 458057, 2447694; 458046, 2447671; 458033, 2447617; 458027, 2447575; 458026, 2447556; 458023, 2447548; 458009, 2447525; 457998, 2447517; 457979, 2447491; 457946, 2447469; 457930, 2447450; 457669, 2447502; 457031, 2448340; 457031, 2448342; 457028, 2448361; 457016, 2448395; 457005, 2448416; 457002, 2448438; 456998, 2448448; 456991, 2448459; 456973, 2448474; 456957, 2448488; 456943, 2448512; 456930, 2448544; 456916, 2448568; 456896, 2448595; 456883, 2448609; 456870, 2448619; 456856, 2448627; 456832, 2448632; 456801, 2448644; 456771, 2448662; 456748, 2448682; 456733, 2448698; 456713, 2448726; 456697, 2448759; 456679, 2448787; 456671, 2448799; 456652, 2448821; 456635, 2448836; 456615, 2448849; 456596, 2448859; 456583, 2448874; 456572, 2448891; 456563, 2448911; 456551, 2448951; 456541, 2448985; 456535, 2449004; 456530, 2449029; 456526, 2449045; 456516, 2449067; 456504, 2449086; 456491, 2449106; 456476, 2449128; 456462, 2449139; 456446, 2449150; 456435, 2449153; 456419, 2449170; 456404, 2449186; 456395, 2449205; 456387, 2449236; 456386, 2449264; 456390, 2449313; 456395, 2449355; 456394, 2449367; 456394, 2449381; 456397, 2449394; 456401, 2449399; 456407, 2449399; 456420, 2449397; 456439, 2449398; 456457, 2449404; 456483, 2449414; 456501, 2449416; 456513, 2449416; 456533, 2449412; 456569, 2449406; 456586, 2449405; 456603, 2449410; 456620, 2449418; 456633, 2449423; 456647, 2449426; 456662, 2449428; 456681, 2449425; 456706, 2449417; 456733, 2449409; 456752, 2449403; 456769, 2449404; 456787, 2449409; 456807, 2449421; 456818, 2449430; 456826, 2449432; 456836, 2449428; 456852, 2449419; 456862, 2449411; 456869, 2449407; 456878, 2449407; 456889, 2449412; 456910, 2449422; 456924, 2449429; 456941, 2449429; 456969, 2449426; 456991, 2449421; 457000, 2449421; 457034, 2449425; 457042, 2449425; 457049, 2449422; 457064, 2449414; 457073, 2449409; 457083, 2449408; 457097, 2449407; 457107, 2449413; 457123, 2449423; 457132, 2449429; 457141, 2449431; 457168, 2449428; 457205, 2449431; 457229, 2449432; 457255, 2449429; 457276, 2449429; 457289, 2449431; 457300, 2449437; 457307, 2449440; 457314, 2449440; 457325, 2449437; 457352, 2449440;

457363, 2449443; 457395, 2449451; 457417, 2449451; 457492, 2449461; 457515, 2449471; 457522, 2449475; 457547, 2449505; return to starting point.

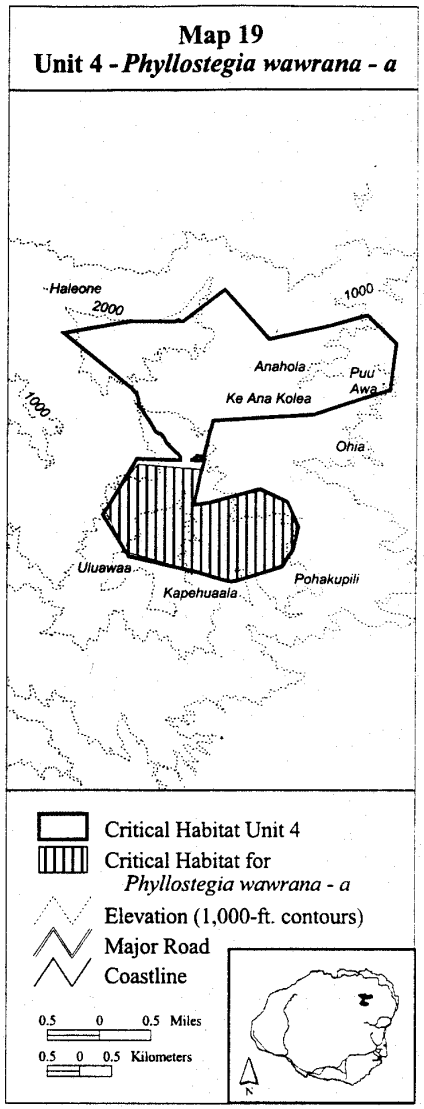
(B) NOTE: Map 18 follows:



(xix) Kauai 4—*Phyllostegia wawrana*—a (352 ha; 869 ac)

(A) Unit consists of the following 25 boundary points: Start at 457390, 2445835; 457088, 2445921; 456838, 2445992; 456709, 2446255; 456732, 2446269; 456702, 2446268; 456529, 2446620; 456709, 2446891; 457027, 2447344; 458020, 2447262; 457940, 2447000; 457957, 2446974; 457900, 2446720; 458214, 2446760; 458463, 2446830; 458936, 2446928; 459341, 2446751; 459365, 2446704; 459490, 2446382; 459454, 2446075; 459260, 2445784; 458941, 2445663; 458510, 2445529; 458255, 2445590; 458262, 2445585; return to starting point.

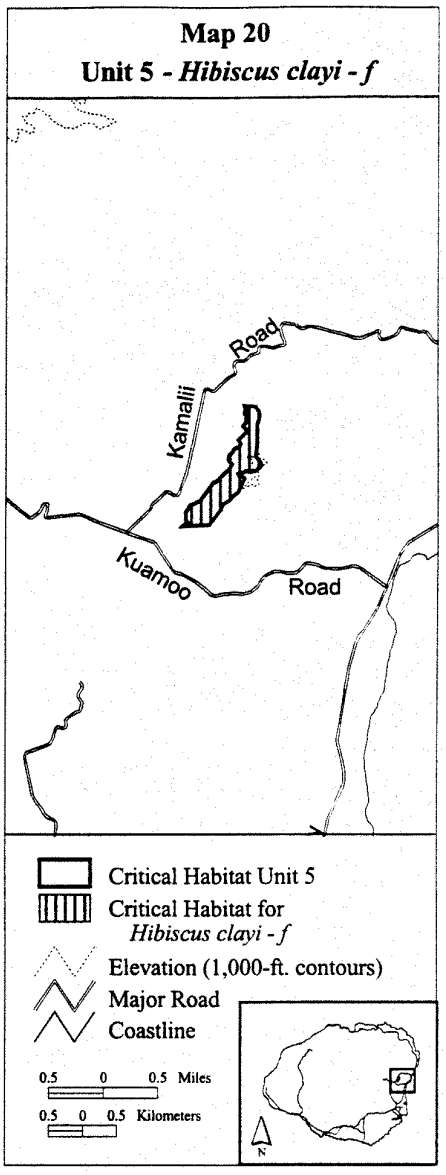
(B) NOTE: Map 19 follows:



(xx) Kauai 5—*Hibiscus clayi*—f (60 ha; 148 ac)

(A) Unit consists of the following 52 boundary points: Start at 462370, 2438990; 462438, 2439048; 462412, 2439074; 462412, 2439188; 462475, 2439287; 462548, 2439318; 462631, 2439365; 462709, 2439469; 462819, 2439625; 462845, 2439625; 463011, 2439781; 463043, 2439818; 463084, 2439885; 463074, 2439911; 463037, 2439953; 463048, 2440021; 463079, 2440042; 463121, 2440109; 463162, 2440140; 463194, 2440140; 463214, 2440192; 463183, 2440245; 463313, 2440375; 463246, 2440448; 463287, 2440505; 463298, 2440609; 463256, 2440635; 463287, 2440671; 463272, 2440744; 463433, 2440739; 463496, 2440650; 463491, 2440588; 463465, 2440479; 463459, 2440333; 463465, 2440187; 463438, 2440000; 463511, 2439916; 463517, 2439870; 463449, 2439802; 463360, 2439771; 463287, 2439792; 463256, 2439766; 463183, 2439745; 463194, 2439724; 463246, 2439703; 463272, 2439677; 463183, 2439474; 463126, 2439438; 463063, 2439365; 462954, 2439297; 462938, 2439230; 462756, 2439001; return to starting point.

(B) NOTE: Map 20 follows:

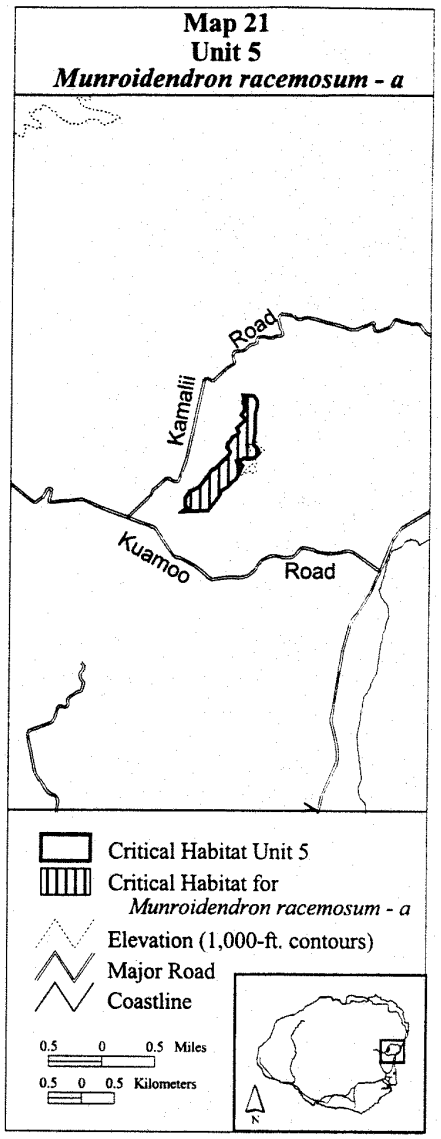


(xxi) Kauai 5—*Munroidendron racemosum*—a (60 ha; 148 ac)

(A) Unit consists of the following 52 boundary points: Start at 462370, 2438990; 462438, 2439048; 462412, 2439074; 462412, 2439188; 462475, 2439287; 462548, 2439318; 462631, 2439365; 462709, 2439469; 462819, 2439625; 462845, 2439625; 463011, 2439781; 463043, 2439818; 463084, 2439885;

463074, 2439911; 463037, 2439953; 463048, 2440021; 463079, 2440042; 463121, 2440109; 463162, 2440140; 463194, 2440140; 463214, 2440192; 463183, 2440245; 463313, 2440375; 463246, 2440448; 463287, 2440505; 463298, 2440609; 463256, 2440635; 463287, 2440671; 463272, 2440744; 463433, 2440739; 463496, 2440650; 463491, 2440588; 463465, 2440479; 463459, 2440333; 463465, 2440187; 463438, 2440000; 463511, 2439916; 463517, 2439870; 463449, 2439802; 463360, 2439771; 463287, 2439792; 463256, 2439766; 463183, 2439745; 463194, 2439724; 463246, 2439703; 463272, 2439677; 463183, 2439474; 463126, 2439438; 463063, 2439365; 462954, 2439297; 462938, 2439230; 462756, 2439001; return to starting point.

(B) NOTE: Map 21 follows:

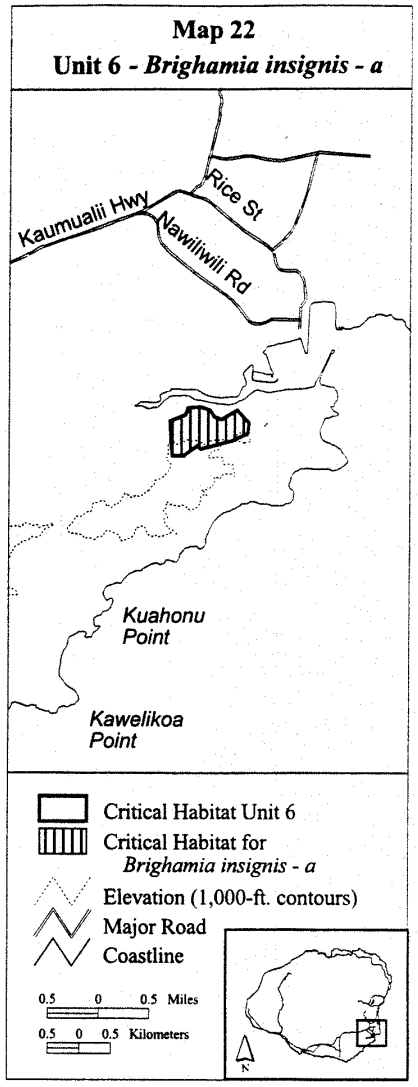


(xxii) Kauai 6—*Brighamia insignis*—a (63 ha; 156 ac)

(A) Unit consists of the following 22 boundary points: Start at 462682, 2426559; 462657, 2426391; 462532, 2426329; 462422, 2426274; 462417, 2426272; 462234, 2426225; 462055, 2426178; 461911, 2426141; 461862, 2426197; 461719, 2426089; 461655, 2426041; 461649, 2426036; 461464, 2426045; 461448, 2426165; 461433, 2426586; 461678, 2426687; 461714, 2426795; 461907, 2426808;

462068, 2426762; 462130, 2426658; 462247, 2426612; 462487, 2426760; return to starting point.

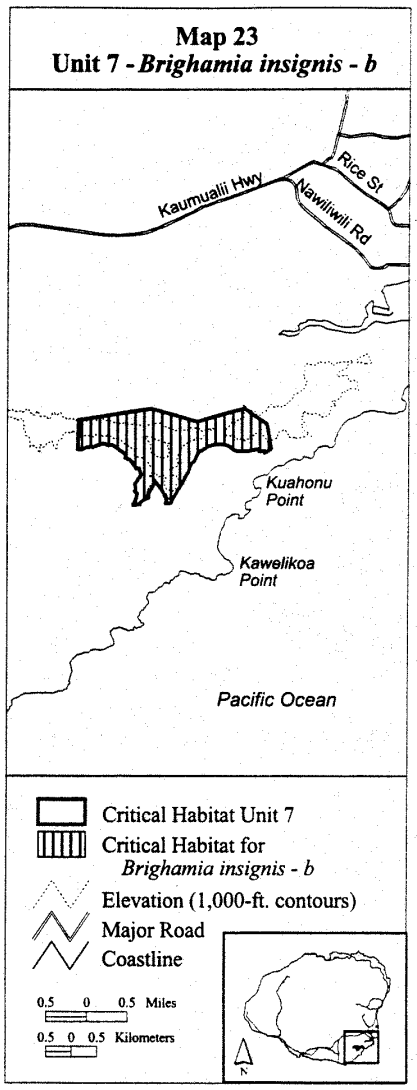
(B) NOTE: Map 22 follows:



(xxiii) Kauai 7—*Brighamia insignis*—b (341 ha; 842 ac)

(A) Unit consists of the following 118 boundary points: Start at 458142, 2423455; 458117, 2423452; 458106, 2423450; 458074, 2423446; 458031, 2423441; 458022, 2423439; 458014, 2423466; 458021, 2423472; 458036, 2423485; 458058, 2423560; 458086, 2423655; 458073, 2423681; 458043, 2423708; 458049, 2423751; 458049, 2423808; 458039, 2423854; 458066, 2423887; 458092, 2423928; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457321, 2424612; 457298, 2424612; 457252, 2424591; 457238, 2424585; 457218, 2424576; 457204, 2424580; 457203, 2424580; 457195, 2424582; 457148, 2424589; 457099, 2424582; 457036, 2424556; 457019, 2424549; 457006, 2424540; 456924, 2424561; 456949, 2425099; 458411, 2425339; 458609, 2425269; 459268, 2425094; 459490, 2425148; 460208, 2425361; 460651, 2425063; 460662, 2424997; 460736, 2424562; 460732, 2424559; 460721, 2424548; 460705, 2424534; 460688, 2424518; 460619, 2424484; 460594, 2424517; 460594, 2424517; 460495, 2424517; 460475, 2424550; 460373, 2424536; 460281, 2424513; 460170, 2424523; 460066, 2424516; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 458986, 2423894; 458939, 2423815; 458891, 2423732; 458854, 2423668; 458826, 2423618; 458786, 2423542; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199, 2423551; 458142, 2423478; return to starting point.

(B) NOTE: Map 23 follows:

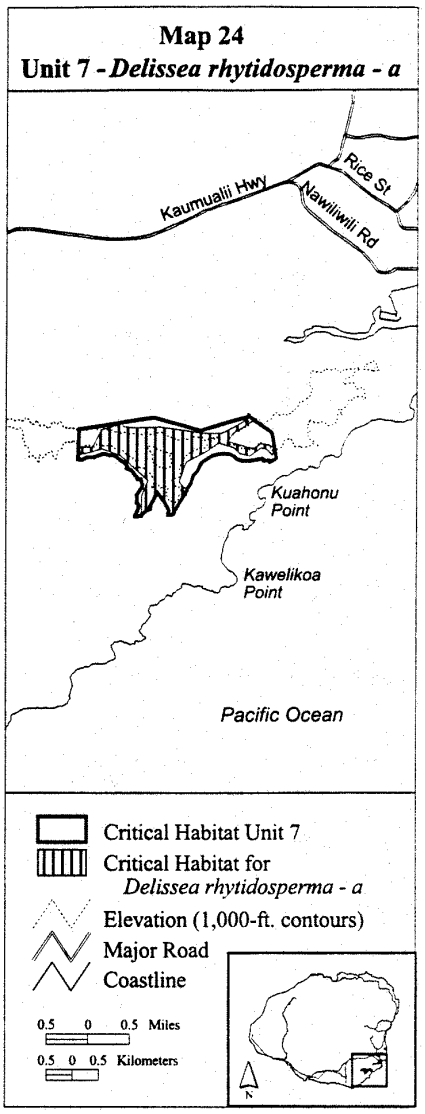


(xxiv) Kauai 7—*Delissea rhytidosperma*—a (221 ha; 545 ac)

(A) Unit consists of the following 53 boundary points: Start at 457776, 2425183; 457996, 2425162; 458503, 2425167; 459357, 2425044; 459695, 2425039; 459982, 2425193; 460156, 2425290; 460184, 2425357; 460210, 2425363; 460315, 2425300; 460202, 2425218; 460110, 2425157; 459890, 2425029;

459823, 2424886; 460294, 2424732; 460443, 2424844; 460683, 2424773; 460693, 2424691; 460663, 2424614; 460555, 2424732; 460443, 2424757; 460228, 2424599; 460038, 2424650; 459920, 2424768; 459634, 2424845; 459393, 2424691; 459009, 2424491; 458866, 2424113; 458958, 2423990; 459032, 2423977; 458955, 2423865; 458897, 2423775; 458840, 2423683; 458785, 2423540; 458756, 2423487; 458737, 2423478; 458661, 2423469; 458671, 2423560; 458523, 2423816; 458446, 2423913; 458293, 2423606; 458134, 2423468; 458139, 2423836; 458267, 2424138; 457955, 2424420; 457735, 2424620; 457371, 2424748; 457156, 2424676; 456952, 2424640; 456931, 2424789; 457197, 2424778; 457361, 2425116; 457765, 2425229; return to starting point.

(B) NOTE: Map 24 follows:

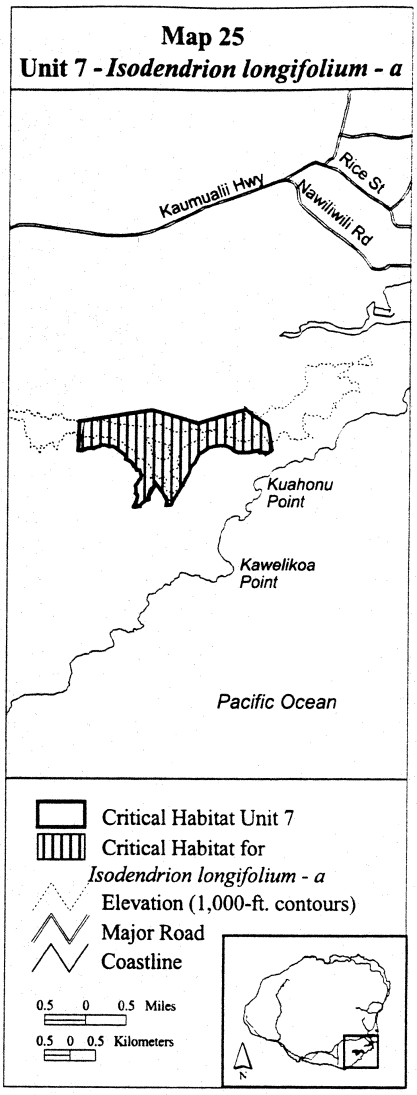


(xxv) Kauai 7—*Isodendrion longifolium*—a (337 ha; 833 ac)

(A) Unit consists of the following 127 boundary points: Start at 456913, 2424541; 457040, 2425134; 457651, 2425234; 458371, 2425346; 459277, 2425049; 460211, 2425364; 460651, 2425063; 460662, 2424997; 460736, 2424562; 460732, 2424559; 460721, 2424548; 460705, 2424534; 460602, 2424507; 460593, 2424514; 460496, 2424516; 460475, 2424550; 460373, 2424536; 460281, 2424513; 460213, 2424515; 460213, 2424515; 460213,

2424515; 460209, 2424517; 460185, 2424518; 460184, 2424516; 460184, 2424516; 460184, 2424516; 460169, 2424516; 460068, 2424515; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 458982, 2423888; 458939, 2423815; 458890, 2423741; 458869, 2423724; 458842, 2423663; 458811, 2423619; 458777, 2423544; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199, 2423551; 458142, 2423478; 458142, 2423455; 458117, 2423452; 458106, 2423450; 458058, 2423560; 458086, 2423655; 458073, 2423681; 458043, 2423708; 458049, 2423751; 458049, 2423808; 458039, 2423854; 458066, 2423887; 458092, 2423928; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457321, 2424612; 457298, 2424612; 457252, 2424591; 457238, 2424585; 457218, 2424576; 457204, 2424580; 457203, 2424580; 457195, 2424582; 457148, 2424589; 457099, 2424582; 457036, 2424556; 457019, 2424549; 456995, 2424533; 456994, 2424532; 456986, 2424527; 456979, 2424529; 456977, 2424529; 456926, 2424539; 456919, 2424552; 456919, 2424552; 456919, 2424552; 456917, 2424541; return to starting point.

(B) NOTE: Map 25 follows:

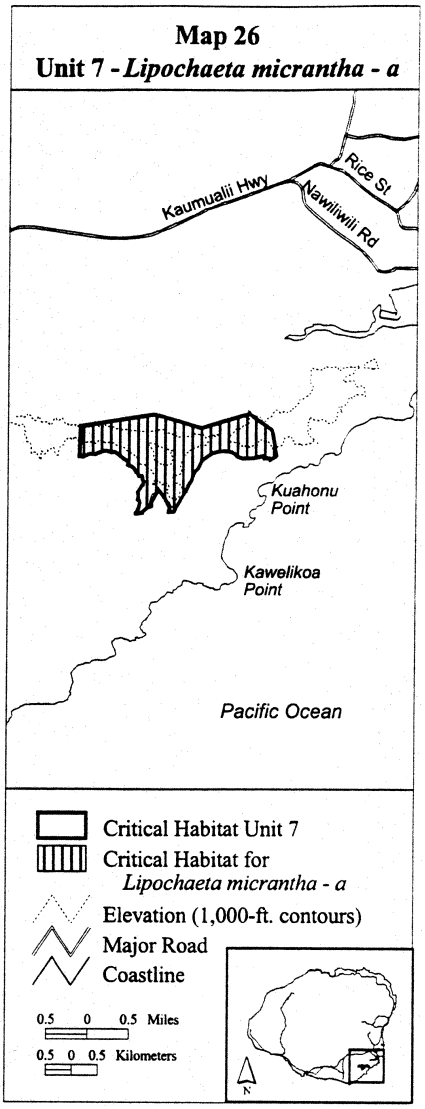


(xxvi) Kauai 7—*Lipochaeta micrantha*—a (341 ha; 842 ac)

(A) Unit consists of the following 125 boundary points: Start at 456916, 2424553; 456952, 2425094; 458386, 2425333; 459277, 2425098; 459948, 2425284; 460206, 2425358; 460327, 2425282; 460590, 2425104;

460617, 2425086; 460649, 2425064; 460662, 2424997; 460736, 2424562; 460732, 2424559; 460721, 2424548; 460705, 2424534; 460688, 2424518; 460619, 2424484; 460594, 2424518; 460497, 2424515; 460475, 2424550; 460373, 2424536; 460281, 2424513; 460213, 2424515; 460209, 2424517; 460185, 2424518; 460184, 2424516; 460178, 2424516; 460073, 2424516; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 458985, 2423890; 458939, 2423815; 458892, 2423732; 458852, 2423677; 458849, 2423670; 458825, 2423622; 458784, 2423557; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199, 2423551; 458142, 2423478; 458142, 2423455; 458117, 2423452; 458106, 2423450; 458074, 2423446; 458031, 2423441; 458021, 2423472; 458036, 2423485; 458058, 2423560; 458086, 2423655; 458073, 2423681; 458043, 2423708; 458049, 2423751; 458049, 2423808; 458039, 2423854; 458066, 2423887; 458092, 2423928; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457321, 2424612; 457298, 2424612; 457252, 2424591; 457238, 2424585; 457218, 2424576; 457204, 2424580; 457203, 2424580; 457195, 2424582; 457148, 2424589; 457099, 2424582; 457036, 2424556; 457019, 2424549; 456995, 2424533; 456919, 2424552; 456919, 2424552; 456919, 2424552; return to starting point.

(B) NOTE: Map 26 follows:

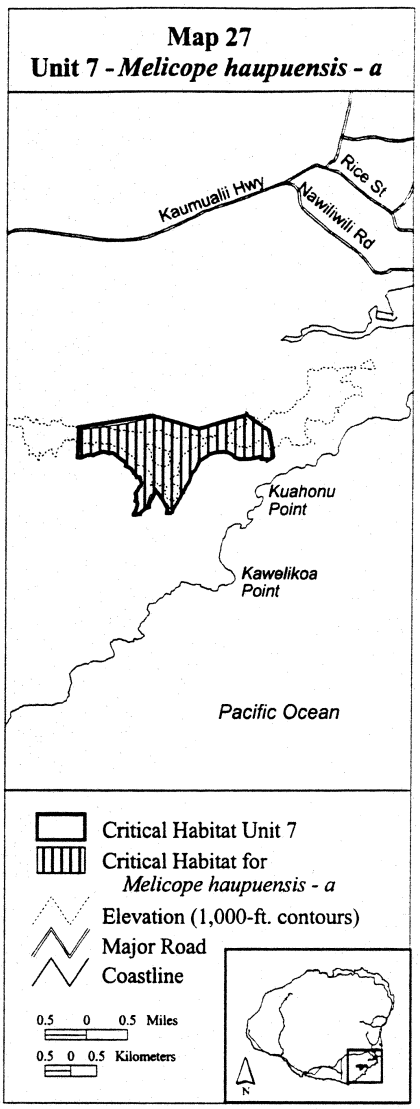


(xxvii) Kauai 7—*Melicope haupuensis*—a (330 ha; 816 ac)

(A) Unit consists of the following 115 boundary points: Start at 456977, 2424529; 456957, 2425070; 457830, 2425189; 458432, 2425322; 458875, 2425201; 459283,

2425089; 459699, 2425210; 459897, 2425266; 460048, 2425310; 460143, 2425340; 460188, 2425357; 460207, 2425364; 460327, 2425282; 460590, 2425104; 460615, 2425036; 460721, 2424548; 460705, 2424534; 460688, 2424518; 460617, 2424483; 460594, 2424517; 460497, 2424515; 460475, 2424550; 460373, 2424536; 460284, 2424515; 460212, 2424516; 460209, 2424517; 460185, 2424518; 460184, 2424516; 460179, 2424516; 460114, 2424515; 460051, 2424519; 460009, 2424534; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 458972, 2423889; 458939, 2423815; 458892, 2423732; 458845, 2423670; 458816, 2423623; 458792, 2423564; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199, 2423551; 458142, 2423478; 458142, 2423455; 458117, 2423452; 458106, 2423450; 458074, 2423446; 458042, 2423453; 458091, 2423660; 458086, 2423872; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457321, 2424612; 457298, 2424612; 457252, 2424591; 457203, 2424580; 457195, 2424582; 457148, 2424589; 457099, 2424582; 457036, 2424556; 457019, 2424549; 456995, 2424533; 456994, 2424532; 456979, 2424529; return to starting point.

(B) NOTE: Map 27 follows:

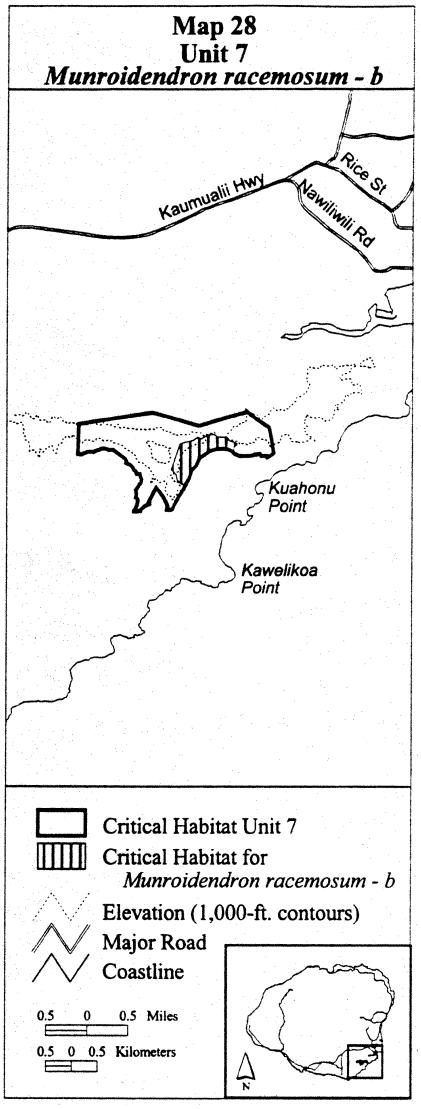


(xxviii) Kauai 7—*Munroidendron racemosum*—b (50 ha; 123 ac)

(A) Unit consists of the following 42 boundary points: Start at 460171, 2424516; 460070, 2424515; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740,

2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 459025, 2423961; 458943, 2423966; 458866, 2424034; 458846, 2424063; 458831, 2424156; 458744, 2424248; 458909, 2424734; 459045, 2424788; 459167, 2424803; 459201, 2424827; 459259, 2424875; 459327, 2424841; 459405, 2424890; 459507, 2424919; 459585, 2424919; 459643, 2424880; 459721, 2424875; 459838, 2424870; 459882, 2424802; 459964, 2424778; 460013, 2424759; 460023, 2424725; 459959, 2424666; 459964, 2424593; 460081, 2424530; 460149, 2424530; return to starting point.

(B) NOTE: Map 28 follows:

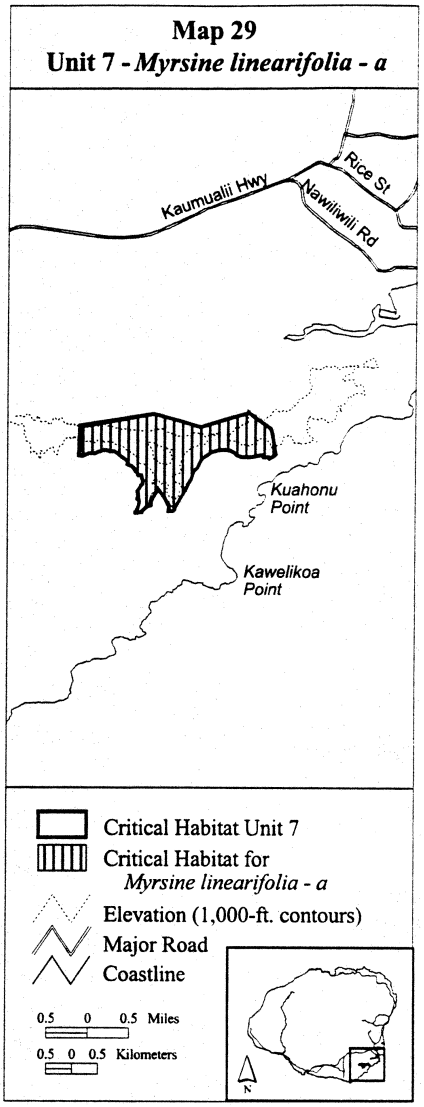


(xxix) Kauai 7—*Myrsine linearifolia*—a (334 ha; 826 ac)

(A) Unit consists of the following 109 boundary points: Start at 460009, 2424534; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 458985, 2423890; 458939, 2423815; 458893, 2423731; 458860, 2423681; 458827, 2423624; 458787,

2423540; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199, 2423551; 458142, 2423478; 458142, 2423455; 458117, 2423452; 458056, 2423466; 458103, 2423665; 458082, 2423889; 458092, 2423928; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458139, 2424114; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457321, 2424612; 457298, 2424612; 457252, 2424591; 457238, 2424585; 457204, 2424580; 457203, 2424580; 457195, 2424582; 457148, 2424589; 457099, 2424582; 457036, 2424556; 456975, 2424548; 456943, 2425070; 458384, 2425331; 459271, 2425086; 459894, 2425257; 460207, 2425364; 460327, 2425282; 460590, 2425104; 460617, 2425086; 460732, 2424559; 460721, 2424548; 460705, 2424534; 460688, 2424518; 460619, 2424484; 460594, 2424517; 460594, 2424517; 460495, 2424517; 460475, 2424550; 460373, 2424536; 460281, 2424513; 460213, 2424515; 460209, 2424517; 460185, 2424518; 460184, 2424516; 460176, 2424516; 460170, 2424523; 460118, 2424515; return to starting point.

(B) NOTE: Map 29 follows:

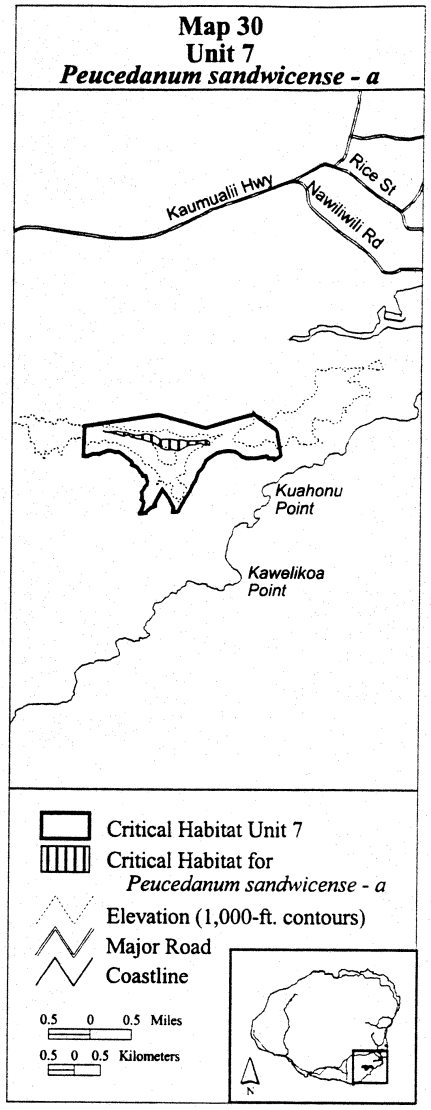


(xxx) Kauai 7—*Peucedanum sandwicense*—a (21 ha; 52 ac)

(A) Unit consists of the following 53 boundary points: Start at 457285, 2425044; 457378, 2425011; 457470, 2425024; 457559, 2425031; 457622, 2425008; 457671,

2425005; 457727, 2425005; 457806, 2424982; 457869, 2424952; 457961, 2424945; 458037, 2424958; 458110, 2424972; 458258, 2424958; 458301, 2424932; 458367, 2424889; 458417, 2424863; 458479, 2424866; 458568, 2424873; 458618, 2424876; 458680, 2424859; 458726, 2424853; 458789, 2424859; 458845, 2424853; 458888, 2424836; 458971, 2424836; 459043, 2424836; 459126, 2424836; 459182, 2424836; 459231, 2424853; 459304, 2424859; 459350, 2424823; 459353, 2424790; 459310, 2424764; 459251, 2424767; 459182, 2424797; 459060, 2424764; 458987, 2424764; 458888, 2424724; 458816, 2424681; 458756, 2424648; 458644, 2424671; 458499, 2424675; 458420, 2424698; 458360, 2424751; 458248, 2424803; 458050, 2424863; 457830, 2424909; 457787, 2424955; 457721, 2424949; 457691, 2424925; 457599, 2424958; 457421, 2425001; 457338, 2425005; return to starting point.

(B) NOTE: Map 30 follows:

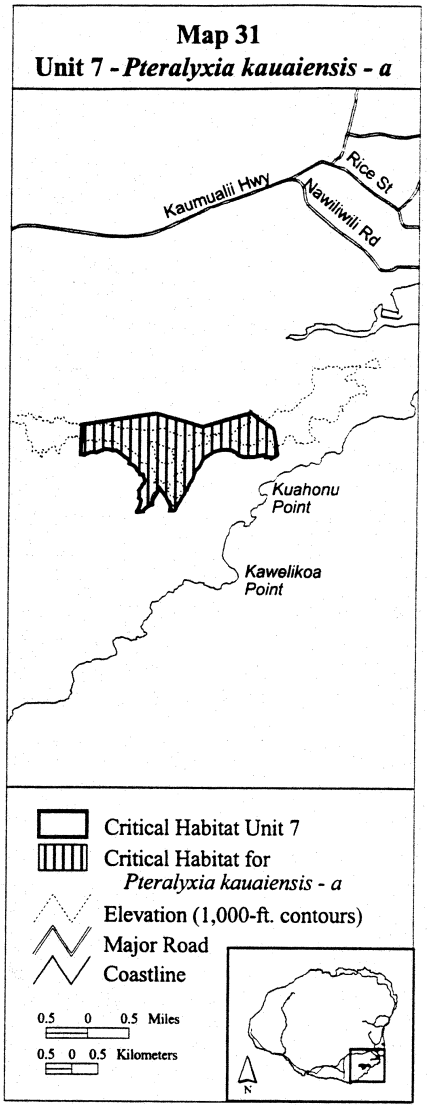


(xxxi) Kauai 7—*Pteralyxia kauaiensis*—a (346 ha; 854 ac)

(A) Unit consists of the following 149 boundary points: Start at 460212, 2424515; 460204, 2424515; 460183, 2424515; 460180, 2424516; 460074, 2424516; 460073, 2424516; 460066, 2424516; 460017, 2424532; 460009, 2424534; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105,

2424102; 459085, 2424072; 459037, 2423991; 458985, 2423890; 458939, 2423815; 458894, 2423737; 458893, 2423735; 458892, 2423732; 458890, 2423730; 458851, 2423668; 458827, 2423621; 458787, 2423543; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199, 2423551; 458142, 2423478; 458142, 2423455; 458117, 2423452; 458106, 2423450; 458074, 2423446; 458031, 2423441; 458029, 2423440; 458011, 2423438; 458009, 2423462; 458021, 2423472; 458021, 2423472; 458036, 2423485; 458058, 2423560; 458086, 2423655; 458073, 2423681; 458043, 2423708; 458049, 2423751; 458049, 2423808; 458039, 2423854; 458066, 2423887; 458092, 2423928; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457321, 2424612; 457298, 2424612; 457252, 2424591; 457238, 2424585; 457218, 2424576; 457204, 2424580; 457203, 2424580; 457195, 2424582; 457148, 2424589; 457099, 2424582; 457036, 2424556; 457019, 2424549; 456995, 2424533; 456994, 2424532; 456986, 2424527; 456979, 2424529; 456977, 2424529; 456926, 2424539; 456919, 2424552; 456919, 2424552; 456919, 2424552; 456917, 2424541; 456913, 2424541; 456912, 2424542; 456911, 2424542; 456922, 2424860; 456931, 2425122; 456931, 2425122; 458355, 2425346; 458360, 2425344; 458369, 2425346; 458371, 2425346; 458372, 2425346; 459274, 2425092; 460209, 2425362; 460217, 2425356; 460218, 2425356; 460651, 2425063; 460662, 2424997; 460736, 2424562; 460732, 2424559; 460721, 2424548; 460705, 2424534; 460688, 2424518; 460619, 2424484; 460596, 2424515; 460497, 2424515; 460495, 2424517; 460495, 2424517; 460475, 2424550; 460373, 2424536; 460281, 2424513; 460214, 2424515; return to starting point.

(B) NOTE: Map 31 follows:

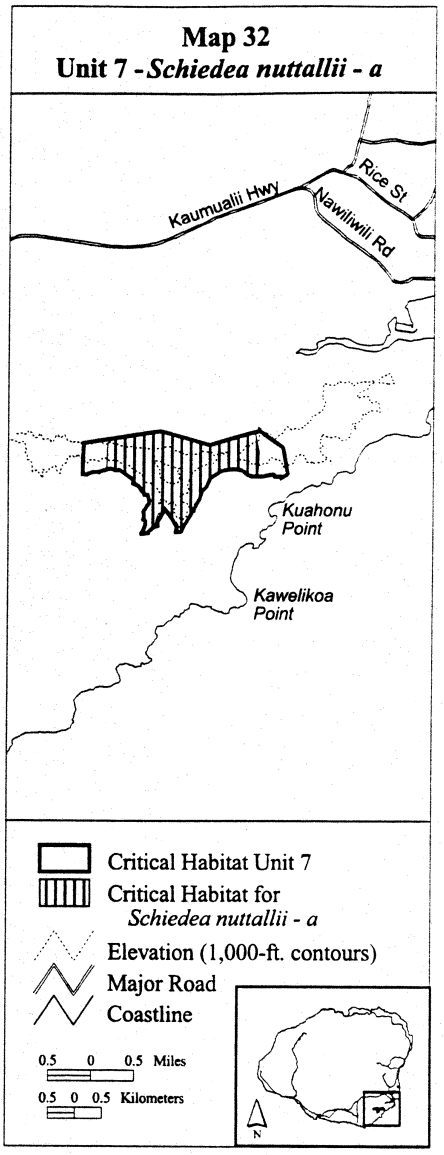


(xxxii) Kauai 7—*Schiedea nuttallii*—a (282 ha; 697 ac)

(A) Unit consists of the following 93 boundary points: Start at 460009, 2424534; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157,

2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 458985, 2423890; 458939, 2423815; 458893, 2423731; 458860, 2423681; 458827, 2423624; 458787, 2423540; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199, 2423551; 458142, 2423478; 458142, 2423455; 458117, 2423452; 458106, 2423450; 458074, 2423446; 458031, 2423441; 458029, 2423440; 458021, 2423472; 458036, 2423485; 458058, 2423560; 458086, 2423655; 458073, 2423681; 458043, 2423708; 458049, 2423751; 458049, 2423808; 458039, 2423854; 458066, 2423887; 458092, 2423928; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457377, 2425117; 457456, 2425204; 457651, 2425234; 458369, 2425346; 459306, 2425071; 460130, 2425340; 460207, 2424964; 460176, 2424516; 460170, 2424523; 460118, 2424515; 460074, 2424516; return to starting point.

(B) NOTE: Map 32 follows:

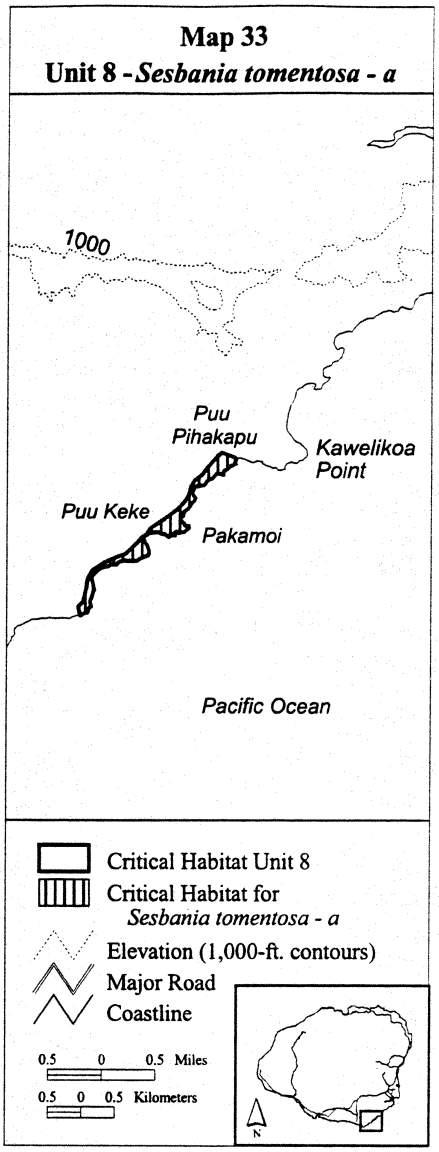


(xxxiii) Kauai 8—*Sesbania tomentosa*—a (47 ha; 117 ac)

(A) Unit consists of the following 26 boundary points: coastline; 458938,

2422136; 456613, 2419801; 456582, 2419934; 456653, 2420011; 456705, 2420236; 456722, 2420354; 456790, 2420479; 456952, 2420581; 457154, 2420676; 457284, 2420717; 457481, 2420921; 457534, 2420977; 457598, 2421003; 457649, 2421080; 457665, 2421106; 457862, 2421239; 458083, 2421412; 458182, 2421516; 458226, 2421605; 458262, 2421722; 458324, 2421821; 458434, 2421911; 458499, 2422001; 458665, 2422178; 458720, 2422231; 458912, 2422161; coastline.

(B) NOTE: Map 33 follows:

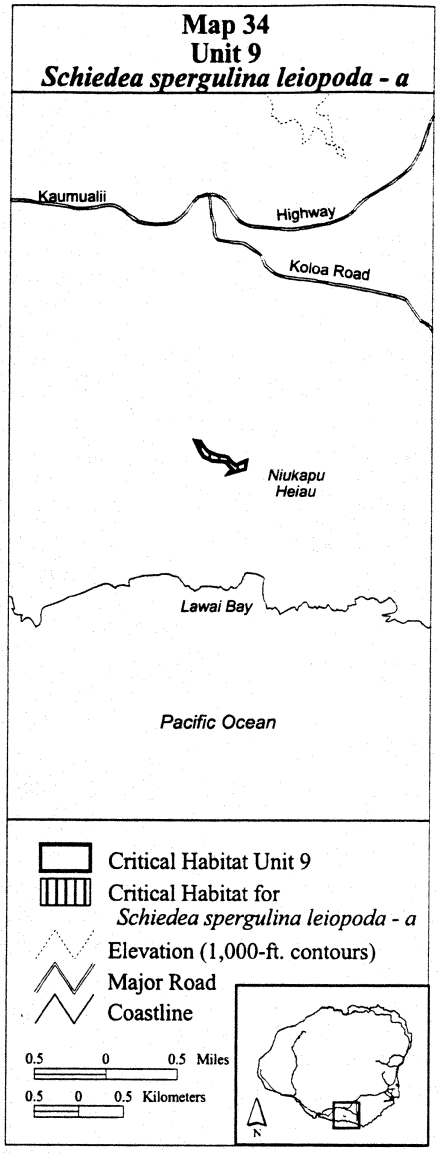


(xxxiv) Kauai 9—*Schiedea spergulina* var. *leiopoda*—a (5 ha; 11 ac)

(A) Unit consists of the following 23 boundary points: Start at 447953, 2421713; 447951, 2421694; 447757, 2421647; 447804, 2421699; 447721, 2421781; 447613, 2421788; 447569, 2421791; 447544, 2421803; 447473, 2421836; 447445, 2421889; 447380, 2422014; 447420, 2422010; 447443, 2422008; 447482, 2421943; 447527, 2421894; 447574,

2421872; 447636, 2421848; 447702, 2421846; 447752, 2421830; 447806, 2421767; 447843, 2421739; 447843, 2421739; 447961, 2421793; return to starting point.

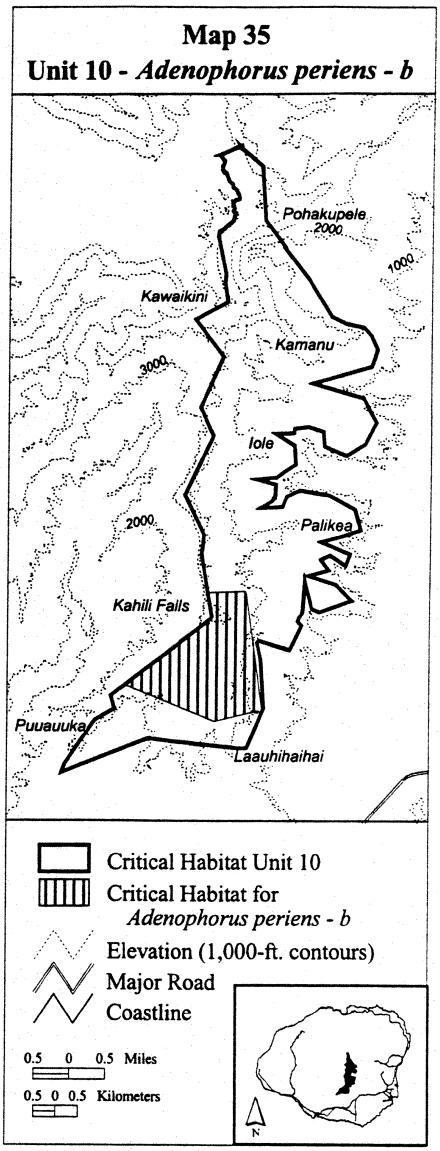
(B) NOTE: Map 34 follows:



(xxxv) Kauai 10—*Adenophorus periens*—b (491 ha; 1,215 ac)

(A) Unit consists of the following 13 boundary points: Start at 448417, 2432669; 449262, 2432700; 449291, 2432590; 449659, 2430034; 449634, 2429983; 449569, 2430034; 448593, 2429793; 446563, 2430607; 447808, 2431562; 448023, 2431693; 448011, 2431718; 448515, 2432105; 448503, 2432172; return to starting point.

(B) NOTE: Map 35 follows:

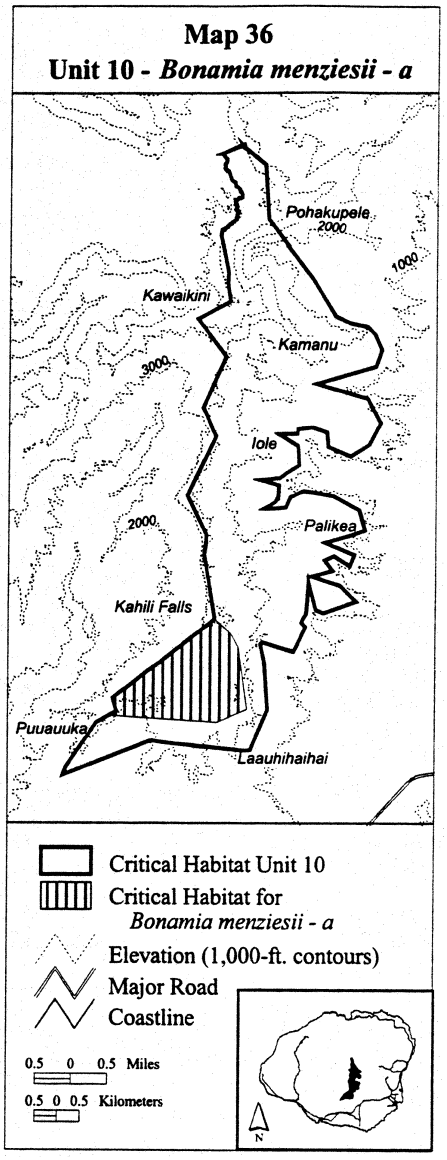


(xxxvi) Kauai 10—*Bonamia menziesii*—a (421 ha; 1,039 ac)

(A) Unit consists of the following 8 boundary points: Start at 448513,

2432103; 448882, 2431783; 449031, 2431495; 449240, 2430109; 448586, 2429812; 446148, 2429968; 446327, 2430072; 446237, 2430356; return to starting point.

(B) NOTE: Map 36 follows:

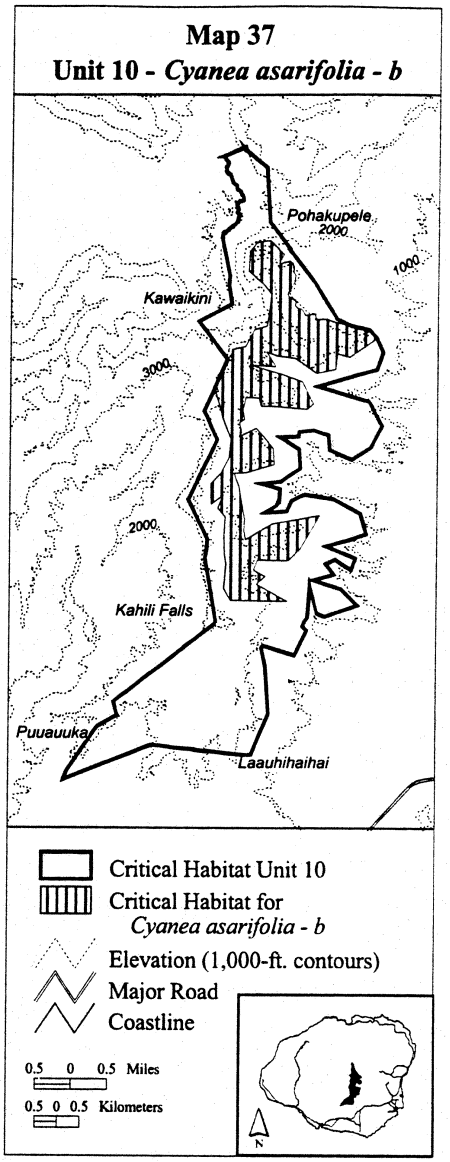


(xxxvii) Kauai 10—*Cyanea asarifolia*—b (903 ha; 2,232 ac)

(A) Unit consists of the following 103 boundary points: Start at 451083,

2438783; 451901, 2438605; 452064, 2438426; 451856, 2438263; 451455, 2437996; 451187, 2438070; 451143, 2437728; 450727, 2437639; 450252, 2437966; 449850, 2438026; 449613, 2438100; 449806, 2437788; 449271, 2437818; 449925, 2437625; 450415, 2437446; 450653, 2436956; 450519, 2436837; 449776, 2436897; 449494, 2436897; 449449, 2437090; 449152, 2437105; 449093, 2436808; 449122, 2436615; 449018, 2436541; 449063, 2436318; 449018, 2436229; 449390, 2436422; 449628, 2436125; 449761, 2435976; 449791, 2435605; 449167, 2435427; 448900, 2435412; 449018, 2435115; 449078, 2434773; 449137, 2434416; 449122, 2434149; 449167, 2433956; 449761, 2434298; 450816, 2434491; 450400, 2433763; 450118, 2433481; 449449, 2433495; 449345, 2433287; 449613, 2433139; 449420, 2432961; 450088, 2432589; 448840, 2432604; 448677, 2432872; 448706, 2433154; 448736, 2433421; 448692, 2433629; 448677, 2434030; 448706, 2434461; 448543, 2434654; 448662, 2434921; 448394, 2434743; 448380, 2435189; 448617, 2435427; 448781, 2435753; 448825, 2436169; 448647, 2436630; 448544, 2437006; 448458, 2437328; 448714, 2437911; 448825, 2438056; 448840, 2438160; 449137, 2438219; 449330, 2438605; 449613, 2438679; 449712, 2439392; 449522, 2439625; 449191, 2439915; 449211, 2440336; 449375, 2440536; 449671, 2440580; 449971, 2440270; 449870, 2440076; 449899, 2440063; 450011, 2440098; 450059, 2440101; 450106, 2440129; 450147, 2440093; 450162, 2440075; 450162, 2440075; 450185, 2440030; 450190, 2440016; 450203, 2439969; 450175, 2439897; 450247, 2439815; 450203, 2439630; 450115, 2439486; 450071, 2439407; 450084, 2439338; 450175, 2439294; 450238, 2439250; 450252, 2439220; 450237, 2439156; 450297, 2439075; 450379, 2439062; 450463, 2438924; 450671, 2438949; 450714, 2438836; 450940, 2438833; return to starting point.

(B) NOTE: Map 37 follows:

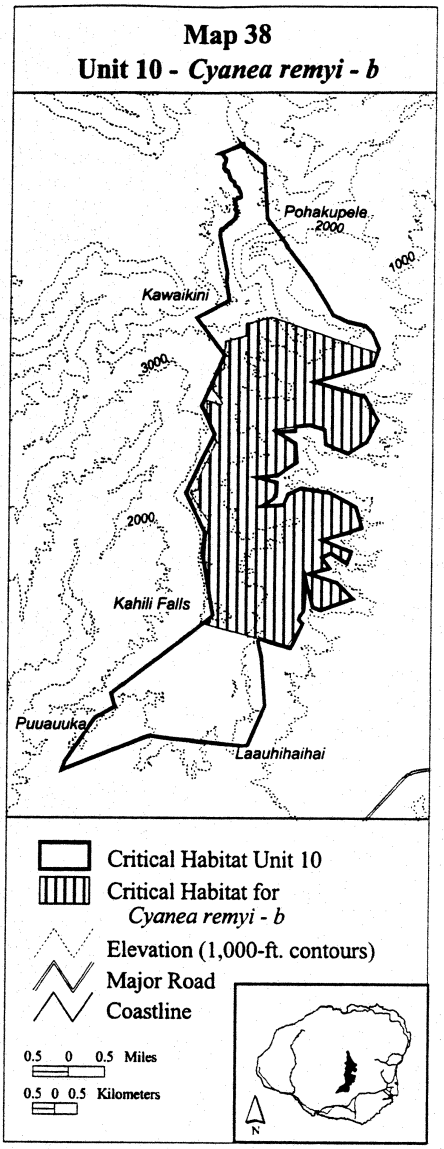


(xxxviii) Kauai 10—*Cyanea remyi*—b (1,904 ha; 4,705 ac)

(A) Unit consists of the following 71 boundary points: Start at 449428,

2431642; 448291, 2431933; 448515, 2432105; 448503, 2432172; 448417, 2432669; 448308, 2433302; 448343, 2433782; 448405, 2434199; 447967, 2434846; 448155, 2434909; 448176, 2435180; 448551, 2435973; 448503, 2436133; 448515, 2436159; 448453, 2436296; 448343, 2436661; 448343, 2436932; 448656, 2436828; 448697, 2436870; 448489, 2437141; 448465, 2437344; 448553, 2437544; 448718, 2437621; 448739, 2438246; 449198, 2438372; 449198, 2438643; 449782, 2438789; 452161, 2437996; 452078, 2437725; 450763, 2437349; 451890, 2437015; 452182, 2436473; 451932, 2435993; 451514, 2435722; 451014, 2435931; 450993, 2436264; 450659, 2436369; 449845, 2436265; 450346, 2435952; 450367, 2435514; 449908, 2435222; 449490, 2435201; 449929, 2435075; 449908, 2434825; 449845, 2434700; 449595, 2434554; 450075, 2434575; 450179, 2434804; 450471, 2434950; 451118, 2434846; 451723, 2434533; 451848, 2434074; 451431, 2433928; 450972, 2433803; 451619, 2433532; 451514, 2433281; 451160, 2433511; 450951, 2433406; 451139, 2433177; 450680, 2433052; 451285, 2432864; 451660, 2432488; 450930, 2432238; 450763, 2432322; 450596, 2432927; 450555, 2432217; 450429, 2432050; 450533, 2431929; 450459, 2431769; 450429, 2431800; 450200, 2431445; return to starting point.

(B) NOTE: Map 38 follows:

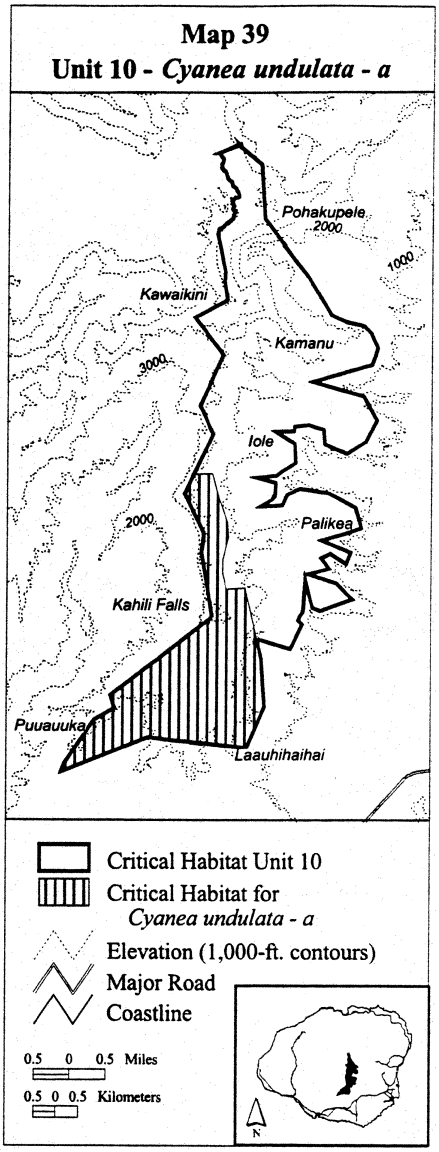


(xxxix) Kauai 10—*Cyanea undulata*—a (1,005 ha; 2,484 ac)

(A) Unit consists of the following 28 boundary points: Start at 448088,

2435267; 448504, 2435281; 448661, 2434734; 448844, 2434201; 448877, 2433868; 448746, 2433374; 448740, 2433286; 448740, 2433060; 448779, 2432916; 448823, 2432729; 449256, 2432753; 449617, 2431161; 449696, 2430088; 449318, 2429191; 447115, 2429408; 447101, 2429410; 447100, 2429410; 447092, 2429411; 445133, 2428627; 445203, 2428817; 445869, 2429806; 446327, 2430072; 446237, 2430356; 448515, 2432105; 448503, 2432172; 448267, 2433542; 448319, 2433974; 447886, 2434845; return to starting point.

(B) NOTE: Map 39 follows:

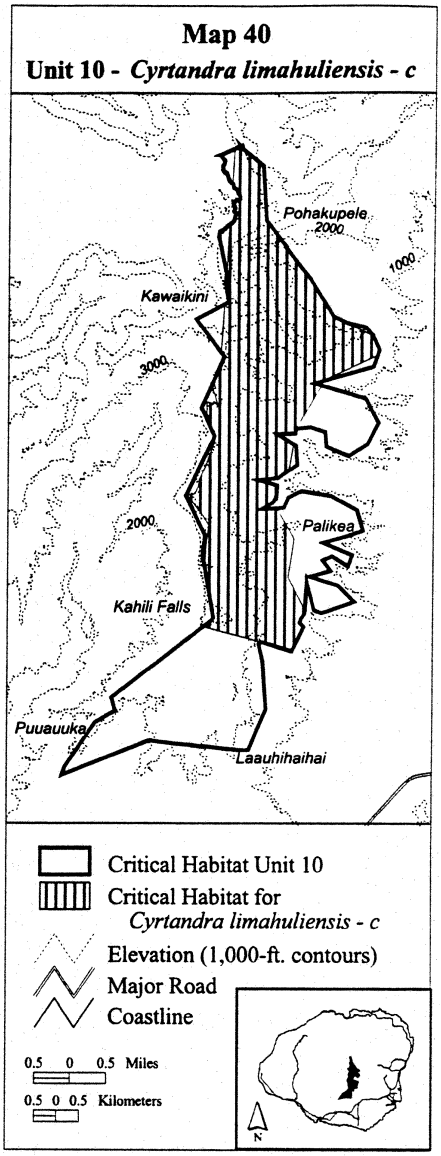


(xl) Kauai 10—*Cyrtandra limahuliensis*—c (2,013 ha; 4,975 ac)

(A) Unit consists of the following 172 boundary points: Start at 450986, 2437413; 450763, 2437349; 450920, 2437303; 450356, 2436356; 450332, 2436229; 449924, 2436215; 450288, 2435988; 450188, 2435455; 450167, 2435387; 450091, 2435338; 449939, 2435224; 449909, 2435222; 449908, 2435222; 449889, 2435221; 449520, 2435192; 449929,

2435075; 449908, 2434825; 449890, 2434790; 449906, 2434762; 449866, 2434742; 449845, 2434700; 449602, 2434558; 449641, 2434556; 449926, 2434568; 450308, 2433891; 450180, 2433045; 450561, 2432319; 450555, 2432217; 450489, 2432130; 450442, 2432036; 450533, 2431929; 450364, 2431564; 450270, 2431394; 449620, 2431593; 449428, 2431642; 448291, 2431933; 448515, 2432105; 448503, 2432172; 448417, 2432669; 448308, 2433302; 448343, 2433782; 448405, 2434199; 448223, 2434468; 447893, 2434860; 447894, 2434861; 448013, 2434861; 448101, 2434891; 448168, 2435077; 448176, 2435180; 448299, 2435441; 448519, 2436050; 448518, 2436082; 448503, 2436133; 448515, 2436159; 448453, 2436296; 448343, 2436661; 448343, 2436932; 448488, 2436884; 448486, 2436941; 448585, 2436875; 448512, 2437111; 448489, 2437141; 448480, 2437211; 448450, 2437310; 448728, 2437943; 448662, 2438032; 448728, 2439126; 448819, 2439175; 448756, 2439586; 448770, 2439804; 448837, 2440912; 448841, 2440914; 448861, 2440927; 448877, 2440939; 448918, 2440982; 448940, 2441006; 448941, 2441024; 448943, 2441044; 448943, 2441053; 448943, 2441063; 448944, 2441075; 448948, 2441084; 448954, 2441097; 448964, 2441109; 448969, 2441116; 448971, 2441119; 448972, 2441136; 448973, 2441143; 448972, 2441150; 448967, 2441159; 448961, 2441163; 448949, 2441170; 448941, 2441177; 448933, 2441184; 448930, 2441194; 448926, 2441212; 448934, 2441230; 448940, 2441238; 448944, 2441250; 448946, 2441259; 448948, 2441264; 448948, 2441273; 448948, 2441281; 448944, 2441291; 448935, 2441302; 448928, 2441313; 448925, 2441322; 448920, 2441333; 448919, 2441341; 448917, 2441357; 448916, 2441369; 448918, 2441381; 448922, 2441392; 448930, 2441400; 448936, 2441403; 448940, 2441404; 448945, 2441411; 448948, 2441420; 448952, 2441427; 448964, 2441441; 448971, 2441443; 449003, 2441449; 449032, 2441461; 449040, 2441466; 449049, 2441471; 449053, 2441472; 449060, 2441481; 449064, 2441492; 449065, 2441502; 449066, 2441511; 449061, 2441528; 449050, 2441561; 449046, 2441569; 449043, 2441578; 449037, 2441588; 449030, 2441595; 449017, 2441611; 449012, 2441616; 449009, 2441625; 449006, 2441639; 449004, 2441650; 449000, 2441660; 448995, 2441668; 448986, 2441677; 448972, 2441689; 448957, 2441700; 448939, 2441710; 448933, 2441715; 448925, 2441722; 448915, 2441738; 448913, 2441753; 448914, 2441760; 448913, 2441774; 448915, 2441796; 448910, 2441807; 448900, 2441814; 448892, 2441817; 448898, 2441915; 448939, 2442579; 449163, 2442553; 449589, 2442203; 449662, 2441006; 449663, 2440988; 450101, 2440409; 450094, 2440396; 450653, 2439686; 451170, 2438845; 452064, 2438419; 452203, 2438108; 452189, 2438063; 452160, 2437988; 451002, 2437441; return to starting point.

(B) NOTE: Map 40 follows:

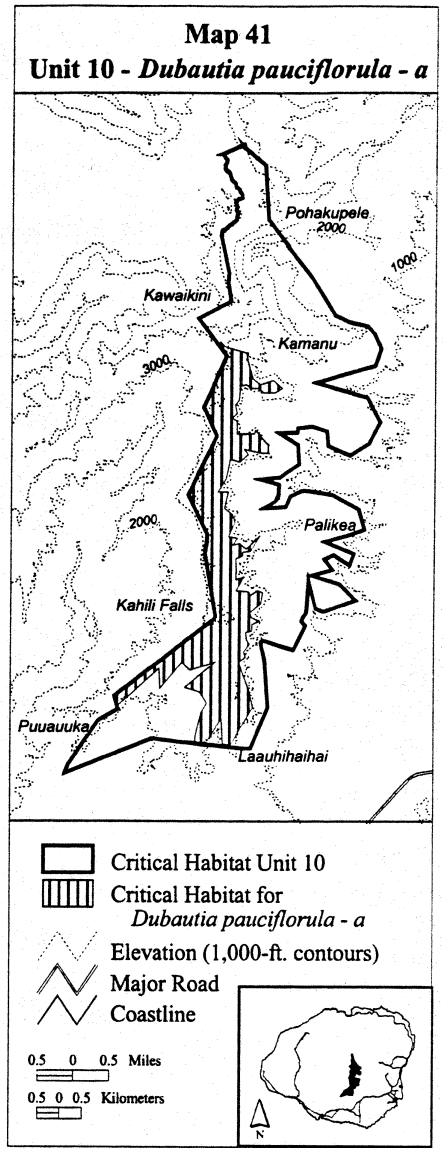


(xli) Kauai 10—*Dubautia pauciflorula*—a (814 ha; 2,012 ac)

(A) Unit consists of the following 96 boundary points: Start at 448697,

2438146; 449173, 2438007; 449213, 2437809; 449273, 2437571; 449312, 2437432; 449491, 2437293; 449788, 2437392; 449987, 2437214; 449808, 2437114; 449570, 2437114; 449451, 2437214; 449273, 2437214; 449174, 2437313; 449054, 2437273; 449015, 2436936; 448935, 2436857; 448975, 2436658; 448856, 2436559; 448975, 2436500; 448975, 2436202; 449372, 2436202; 449392, 2436281; 449669, 2435944; 449669, 2435766; 449550, 2435766; 449134, 2435865; 449233, 2435746; 449035, 2435567; 448816, 2435627; 448737, 2435191; 448559, 2434913; 448777, 2434913; 448697, 2434556; 448876, 2434417; 448935, 2434219; 448797, 2433921; 448995, 2433881; 448896, 2433723; 449055, 2433762; 449193, 2433643; 449511, 2433941; 449293, 2433584; 449114, 2433564; 449114, 2433485; 448955, 2433405; 448975, 2433167; 448955, 2432949; 449154, 2433009; 448975, 2432711; 449253, 2432691; 449273, 2432592; 449451, 2432711; 449570, 2432671; 449531, 2432414; 449273, 2432215; 449312, 2432116; 449511, 2432037; 449332, 2431957; 449332, 2431819; 449193, 2431779; 449213, 2431600; 449273, 2431521; 449154, 2431342; 449193, 2431223; 449035, 2431104; 449154, 2430787; 449273, 2430450; 449352, 2430093; 448856, 2429259; 448678, 2429299; 448658, 2429855; 448283, 2429271; 448109, 2429291; 448055, 2429297; 448063, 2429438; 448201, 2429974; 448320, 2430192; 448162, 2430450; 447825, 2430549; 448499, 2431104; 447944, 2430926; 447765, 2431104; 447269, 2430529; 447249, 2430966; 446310, 2430125; 446237, 2430356; 448515, 2432105; 448503, 2432172; 448267, 2433542; 448319, 2433974; 447886, 2434845; 448515, 2436159; 448226, 2436801; 448728, 2437943; 448612, 2438099; 448598, 2438245; return to starting point.

(B) NOTE: Map 41 follows:

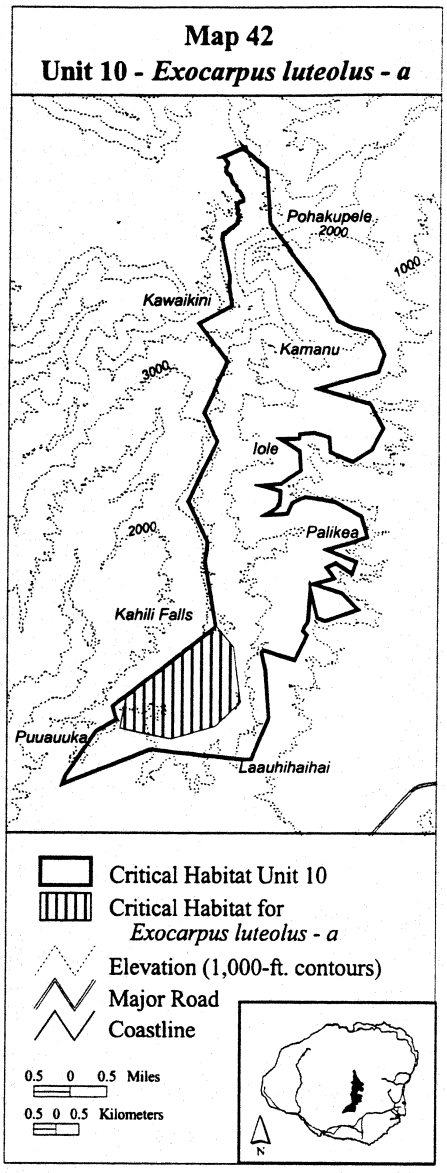


(xlii) Kauai 10—*Exocarpos luteolus*—a (401 ha; 991 ac)

(A) Unit consists of the following 10 boundary points: Start at 448504,

2432168; 448908, 2431685; 449077, 2430445; 448532, 2429929; 447543, 2429635; 446414, 2429881; 446462, 2430141; 446530, 2430532; 446530, 2430581; 448515, 2432105; return to starting point.

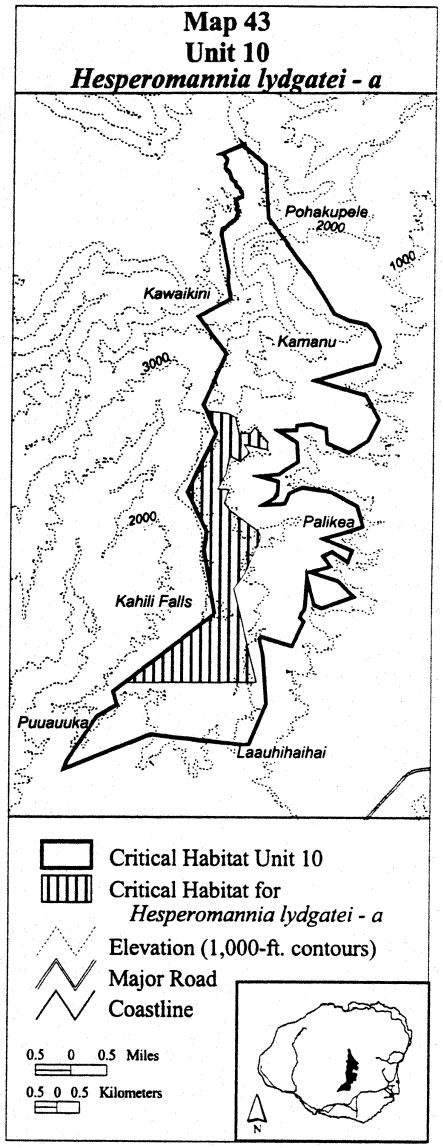
(B) NOTE: Map 42 follows:



(xliii) Kauai 10—*Hesperomannia lydgatei*—a (646 ha; 1,596 ac)

(A) Unit consists of the following 29 boundary points: Start at 448286, 2436668; 448802, 2436599; 448953, 2436524; 449029, 2436158; 449294, 2436158; 449395, 2436284; 449672, 2435981; 449672, 2435780; 449155, 2435893; 449281, 2435704; 449067, 2435527; 448840, 2435641; 448751, 2435237; 448562, 2434909; 448827, 2434897; 448713, 2434594; 448877, 2434417; 449496, 2433951; 449559, 2433825; 449193, 2433005; 448953, 2432677; 449466, 2430577; 446508, 2430564; 448515, 2432105; 448503, 2432172; 448267, 2433542; 448319, 2433974; 447886, 2434845; 448515, 2436159; return to starting point.

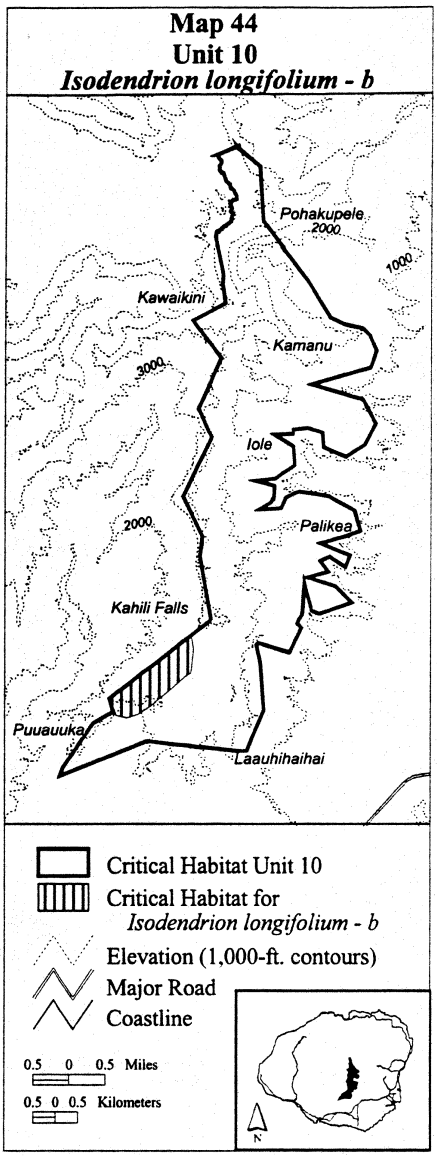
(B) NOTE: Map 43 follows:



(xliv) Kauai 10—*Isodendrion longifolium*—b (142 ha; 350 ac)

(A) Unit consists of the following 14 boundary points: Start at 448057, 2430921; 448043, 2430923; 447940, 2430853; 447794, 2430722; 447574, 2430543; 447170, 2430191; 446888, 2429999; 446635, 2429933; 446414, 2429985; 446295, 2430053; 446327, 2430072; 446237, 2430356; 448077, 2431769; 448127, 2431466; return to starting point.

(B) NOTE: Map 44 follows:

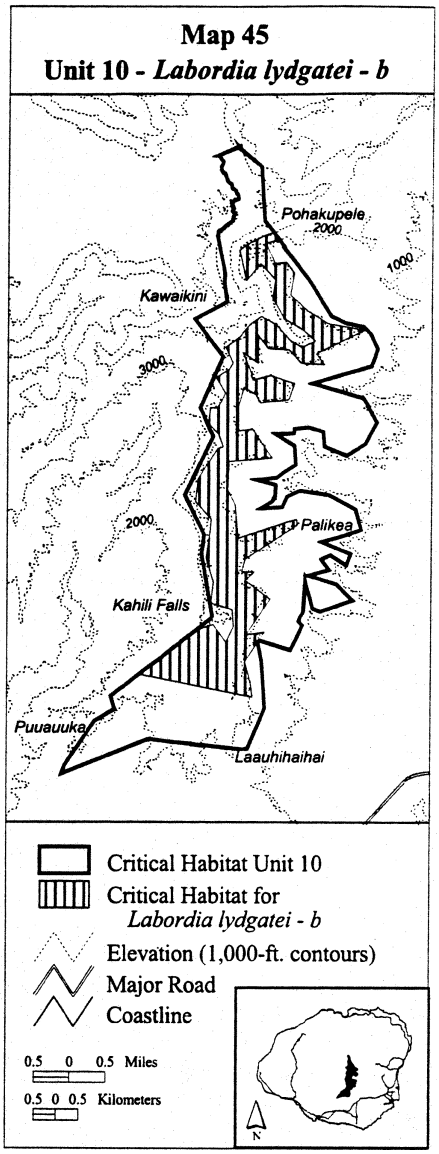


(xlv) Kauai 10—*Labordia lydgatei*—b (1,035 ha; 2,558 ac)

(A) Unit consists of the following 97 boundary points: Start at 449391, 2431894; 449279, 2431726; 449412, 2431749; 449690, 2431798; 449457, 2431436; 449255, 2431122; 449376, 2430639; 449421, 2430343; 446873, 2430844; 448170, 2431840; 448531,

2431943; 448820, 2431557; 448989, 2431895; 448965, 2432281; 448482, 2432426; 448508, 2432672; 448531, 2432885; 448362, 2433440; 448458, 2434020; 448482, 2434310; 448120, 2434696; 448168, 2435203; 448627, 2435903; 448748, 2435927; 448627, 2436217; 448410, 2436458; 448458, 2436796; 448603, 2436796; 448724, 2436965; 448796, 2437134; 448579, 2437473; 448869, 2437666; 448965, 2437810; 448796, 2438149; 449110, 2438390; 449327, 2438655; 449593, 2438848; 449931, 2438655; 450245, 2438317; 450511, 2438148; 450801, 2438293; 450535, 2438535; 450100, 2438800; 449835, 2439259; 449907, 2439669; 449773, 2439813; 449569, 2440031; 449255, 2439645; 449122, 2440175; 449086, 2440321; 449255, 2440442; 449617, 2440635; 449861, 2440726; 449987, 2440561; 449690, 2440490; 449823, 2440174; 449883, 2440031; 449894, 2440032; 450149, 2440055; 450318, 2439814; 450245, 2439331; 450632, 2438969; 450873, 2438824; 451090, 2438679; 451911, 2438534; 450825, 2438003; 451018, 2437762; 450487, 2437810; 450221, 2438100; 449762, 2438124; 449521, 2438414; 449521, 2437810; 449183, 2438028; 449352, 2437617; 449400, 2437424; 449810, 2437521; 450342, 2437352; 450221, 2436989; 449569, 2436917; 449472, 2437110; 449207, 2437255; 449086, 2436845; 449086, 2436555; 449086, 2436289; 449400, 2436314; 449835, 2435686; 448869, 2435589; 448844, 2434961; 449014, 2434623; 449086, 2433875; 450390, 2434309; 450414, 2434165; 449255, 2433416; 449158, 2433126; 449448, 2433126; 449255, 2432933; 449810, 2432523; return to starting point.

(B) NOTE: Map 45 follows:

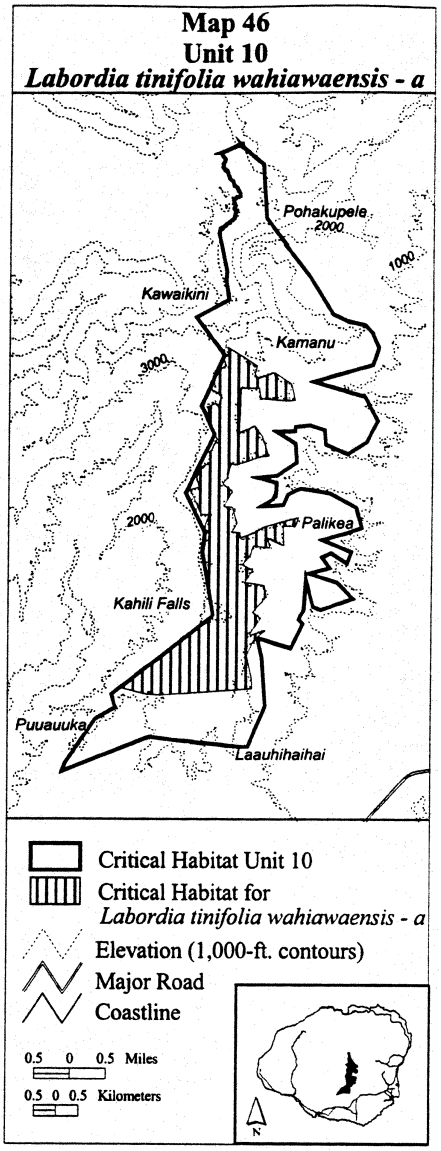


(xlvi) Kauai 10—*Labordia tinifolia* var. *wahiawaensis*—a (913 ha; 2,255 ac)

(A) Unit consists of the following 89 boundary points: Start at 448798,

2438127; 449165, 2437887; 449468, 2437696; 449420, 2437473; 449516, 2437425; 449867, 2437552; 450250, 2437297; 450329, 2436930; 450170, 2436914; 449563, 2436962; 449516, 2437201; 449117, 2437201; 449101, 2436627; 449069, 2436196; 449436, 2436356; 449579, 2436132; 449739, 2435670; 449579, 2435654; 449021, 2435463; 448893, 2435494; 448814, 2435175; 448718, 2435048; 448941, 2434888; 448750, 2434537; 448941, 2434521; 449037, 2434154; 448941, 2433963; 449101, 2433963; 449117, 2433835; 449468, 2433979; 449659, 2434090; 450425, 2434298; 450361, 2434106; 450074, 2434106; 450090, 2433676; 449739, 2433835; 449771, 2433628; 449420, 2433660; 449324, 2433436; 449165, 2433245; 449404, 2433133; 449228, 2432846; 449420, 2432830; 449659, 2432782; 449707, 2432527; 449420, 2432192; 449595, 2432048; 449340, 2431713; 449356, 2431681; 449675, 2431777; 449404, 2431506; 449276, 2431218; 449388, 2430692; 449404, 2430484; 449404, 2430484; 447362, 2430345; 447060, 2430364; 446435, 2430508; 448515, 2432105; 448503, 2432172; 448267, 2433542; 448294, 2433768; 448383, 2433787; 448415, 2433963; 448303, 2434059; 448415, 2434362; 448223, 2434362; 448111, 2434649; 447968, 2434904; 448191, 2434968; 448127, 2435159; 448207, 2435415; 448415, 2435510; 448415, 2435750; 448574, 2436037; 448494, 2436244; 448462, 2436277; 448367, 2436488; 448367, 2436771; 448526, 2436866; 448606, 2436787; 448670, 2437058; 448446, 2437186; 448510, 2437313; 448510, 2437448; 448571, 2437587; 448766, 2437696; 448718, 2437856; 448829, 2437999; return to starting point.

(B) NOTE: Map 46 follows:

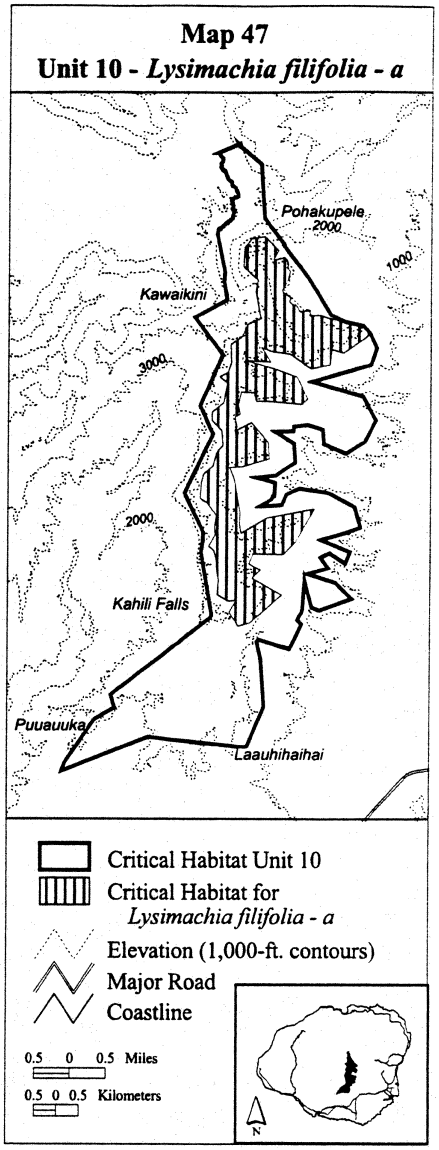


(xlvii) Kauai 10—*Lysimachia filifolia*—a (995 ha; 2,458 ac)

(A) Unit consists of the following 113 boundary points: Start at 451083,

2438783; 451901, 2438605; 452064, 2438426; 451856, 2438263; 451455, 2437996; 451187, 2438070; 451143, 2437728; 450727, 2437639; 450252, 2437966; 449850, 2438026; 449613, 2438100; 449806, 2437788; 449271, 2437818; 449925, 2437625; 450415, 2437446; 450653, 2436956; 450519, 2436837; 449776, 2436897; 449494, 2436897; 449449, 2437090; 449152, 2437105; 449093, 2436808; 449122, 2436615; 449018, 2436541; 449063, 2436318; 449018, 2436229; 449390, 2436422; 449628, 2436125; 449761, 2435976; 449791, 2435605; 449167, 2435427; 448900, 2435412; 449018, 2435115; 449078, 2434773; 449137, 2434416; 449122, 2434149; 449167, 2433956; 449761, 2434298; 450816, 2434491; 450400, 2433763; 450118, 2433481; 449449, 2433495; 449345, 2433287; 449613, 2433139; 449420, 2432961; 450088, 2432589; 449381, 2431977; 449117, 2431900; 448904, 2432197; 449065, 2432473; 448889, 2432462; 448635, 2432590; 448650, 2432917; 448613, 2433130; 448599, 2433373; 448547, 2433571; 448444, 2433659; 448580, 2433916; 448573, 2434107; 448610, 2434346; 448386, 2434622; 448239, 2434732; 448261, 2435063; 448312, 2435268; 448522, 2435445; 448610, 2435753; 448749, 2435904; 448720, 2436242; 448496, 2436469; 448485, 2436660; 448753, 2436862; 448830, 2437318; 448669, 2437450; 448845, 2437549; 448922, 2437766; 448915, 2438166; 449164, 2438353; 449293, 2438629; 449580, 2438754; 449469, 2439364; 449522, 2439625; 449191, 2439915; 449211, 2440336; 449375, 2440536; 449671, 2440580; 449971, 2440270; 449870, 2440076; 449899, 2440063; 450011, 2440098; 450059, 2440101; 450106, 2440129; 450147, 2440093; 450162, 2440075; 450162, 2440075; 450185, 2440030; 450190, 2440016; 450203, 2439969; 450175, 2439897; 450247, 2439815; 450203, 2439630; 450115, 2439486; 450071, 2439407; 450084, 2439338; 450175, 2439294; 450238, 2439250; 450252, 2439220; 450237, 2439156; 450297, 2439075; 450379, 2439062; 450463, 2438924; 450671, 2438949; 450714, 2438836; 450940, 2438833; return to starting point.

(B) NOTE: Map 47 follows:

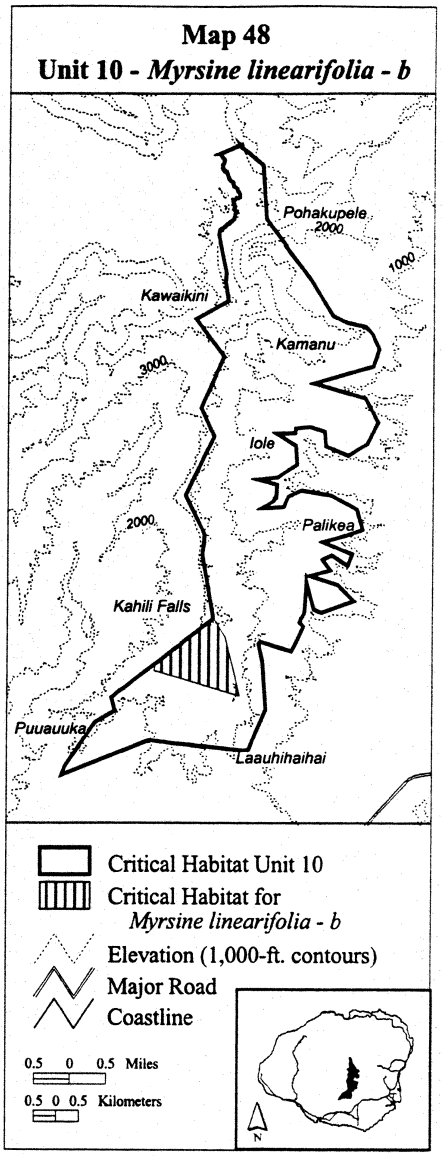


(xlviii) Kauai 10—Myrsine linearifolia—b (167 ha; 413 ac)

(A) Unit consists of the following 6 boundary points: Start at 448507,

2432148; 448782, 2431712; 449112, 2430394; 447193, 2430959; 447222, 2431112; 448515, 2432105; return to starting point.

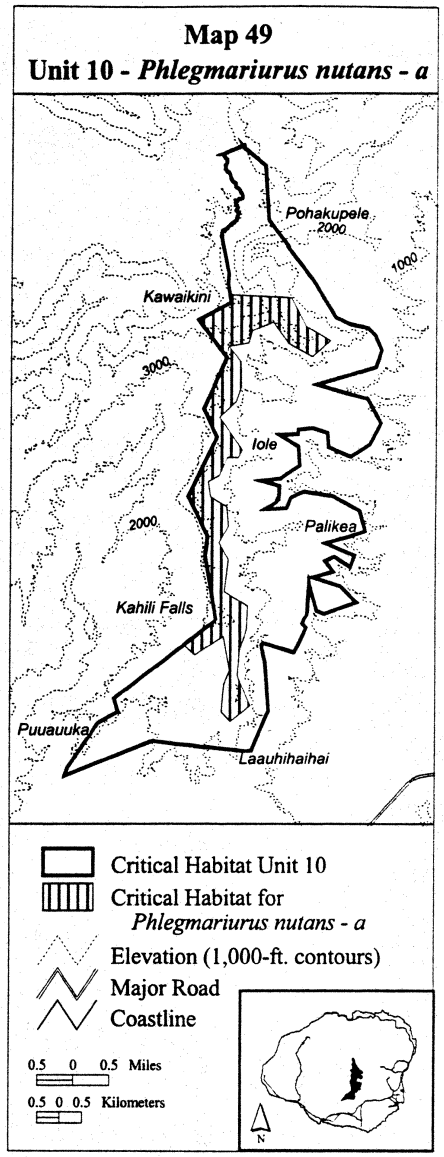
(B) NOTE: Map 48 follows:



(xlix) Kauai 10—*Phlegmariurus nutans*—a (620 ha; 1,533 ac)

(A) Unit consists of the following 47 boundary points: Start at 448793, 2439345; 450186, 2439278; 450512, 2438647; 451062, 2438321; 450655, 2437974; 450105, 2438280; 449779, 2438728; 449310, 2438545; 449228, 2438280; 448780, 2438199; 449045, 2437852; 449065, 2437302; 448943, 2436956; 448576, 2436610; 449086, 2435876; 449004, 2435713; 448760, 2435713; 448576, 2435306; 448332, 2435163; 448373, 2434837; 448739, 2434613; 448780, 2434165; 448576, 2433818; 448780, 2433452; 448699, 2432739; 449229, 2432413; 449208, 2431903; 449045, 2431434; 449004, 2430864; 449290, 2430212; 448841, 2429845; 448638, 2430069; 448699, 2430681; 448821, 2430986; 448678, 2431740; 448047, 2431333; 447800, 2431556; 448515, 2432105; 448503, 2432172; 448267, 2433542; 448319, 2433974; 447886, 2434845; 448515, 2436159; 448226, 2436801; 448728, 2437943; 448103, 2438785; 448819, 2439175; return to starting point.

(B) NOTE: Map 49 follows:

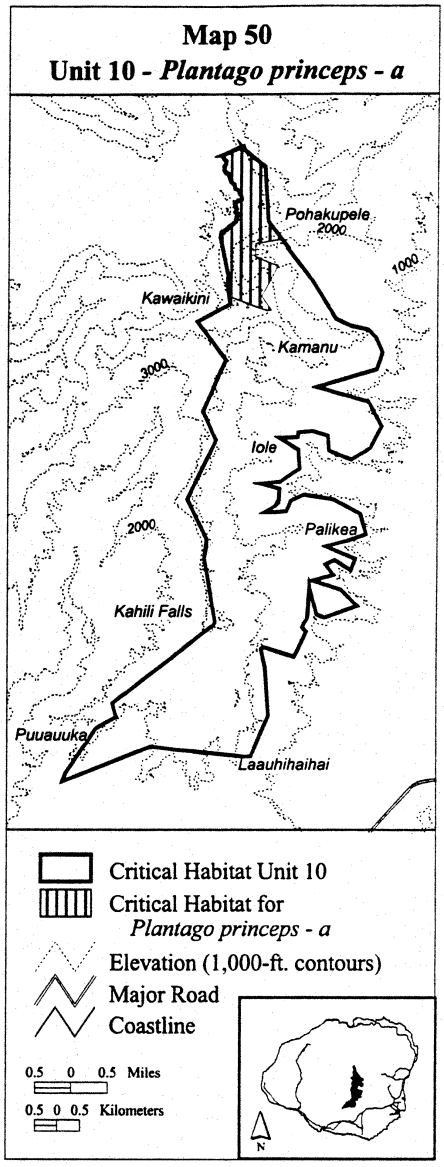


(l) Kauai 10—*Plantago princeps*—a (276 ha; 683 ac)

(A) Unit consists of the following 195 boundary points: Start at 449378, 2440492; 449378, 2440219; 449753, 2440049; 449884, 2440014; 449514, 2439343; 449731, 2439042; 449653, 2439026; 448873, 2439316; 448605, 2440582; 448605, 2440585; 448604, 2440594; 448603, 2440603; 448601, 2440618; 448600, 2440627; 448599, 2440637; 448600,

2440668; 448601, 2440679; 448606, 2440704; 448612, 2440722; 448615, 2440731; 448619, 2440740; 448622, 2440749; 448630, 2440759; 448638, 2440764; 448650, 2440769; 448663, 2440773; 448678, 2440780; 448691, 2440790; 448711, 2440806; 448720, 2440813; 448727, 2440820; 448735, 2440829; 448745, 2440841; 448764, 2440857; 448788, 2440878; 448802, 2440889; 448811, 2440896; 448841, 2440914; 448861, 2440927; 448877, 2440939; 448918, 2440982; 448940, 2441006; 448941, 2441024; 448943, 2441044; 448943, 2441053; 448943, 2441063; 448944, 2441075; 448948, 2441084; 448954, 2441097; 448964, 2441109; 448969, 2441116; 448971, 2441119; 448972, 2441136; 448973, 2441143; 448972, 2441150; 448967, 2441159; 448961, 2441163; 448949, 2441170; 448941, 2441177; 448933, 2441184; 448930, 2441194; 448926, 2441212; 448934, 2441230; 448940, 2441238; 448944, 2441250; 448946, 2441259; 448948, 2441264; 448948, 2441273; 448948, 2441281; 448944, 2441291; 448935, 2441302; 448928, 2441313; 448925, 2441322; 448920, 2441333; 448919, 2441341; 448917, 2441357; 448916, 2441369; 448918, 2441381; 448922, 2441392; 448930, 2441400; 448936, 2441403; 448940, 2441404; 448945, 2441411; 448948, 2441420; 448952, 2441427; 448964, 2441441; 448971, 2441443; 449003, 2441449; 449032, 2441461; 449040, 2441466; 449049, 2441471; 449053, 2441472; 449060, 2441481; 449064, 2441492; 449065, 2441502; 449066, 2441511; 449061, 2441528; 449050, 2441561; 449046, 2441569; 449043, 2441578; 449037, 2441588; 449030, 2441595; 449017, 2441611; 449012, 2441616; 449009, 2441625; 449006, 2441639; 449004, 2441650; 449000, 2441660; 448995, 2441668; 448986, 2441677; 448972, 2441689; 448957, 2441700; 448939, 2441710; 448933, 2441715; 448925, 2441722; 448915, 2441738; 448913, 2441753; 448914, 2441760; 448913, 2441774; 448915, 2441796; 448910, 2441807; 448900, 2441814; 448890, 2441818; 448884, 2441820; 448877, 2441825; 448850, 2441844; 448840, 2441852; 448831, 2441859; 448820, 2441871; 448817, 2441884; 448814, 2441894; 448813, 2441900; 448803, 2441914; 448789, 2441938; 448787, 2441967; 448781, 2441990; 448777, 2442002; 448773, 2442013; 448768, 2442019; 448764, 2442029; 448755, 2442041; 448746, 2442051; 448736, 2442055; 448728, 2442058; 448723, 2442061; 448718, 2442069; 448710, 2442077; 448694, 2442089; 448683, 2442101; 448677, 2442115; 448675, 2442123; 448677, 2442140; 448682, 2442148; 448684, 2442157; 448680, 2442169; 448674, 2442187; 448671, 2442202; 448673, 2442209; 448678, 2442221; 448684, 2442226; 448692, 2442233; 448699, 2442238; 448705, 2442250; 448706, 2442257; 448707, 2442267; 448712, 2442283; 448718, 2442295; 448722, 2442303; 448723, 2442309; 448724, 2442320; 448721, 2442331; 448711, 2442341; 448697, 2442342; 448682, 2442350; 448677, 2442356; 448673, 2442365; 448671, 2442369; 448665, 2442379; 448657, 2442387; 448648, 2442399; 448643, 2442410; 448642, 2442430; 448642, 2442440; 448640, 2442451; 448637, 2442455; 449104, 2442662; 449108, 2442589; 449074, 2442637; 449099, 2442572; 449576, 2442210; 449620, 2441513; 449654, 2441008; 449662, 2441006; 449663, 2440988; 449955, 2440602; return to starting point.

(B) NOTE: Map 50 follows:

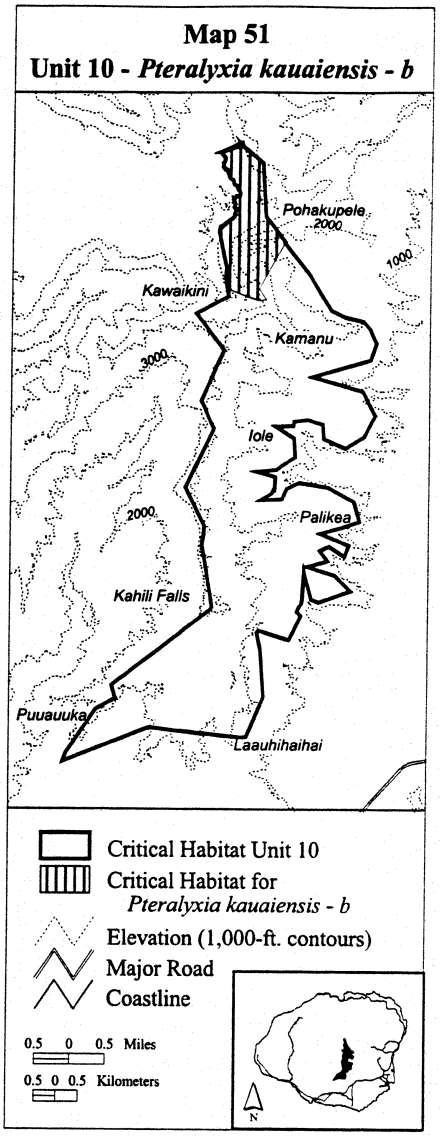


(li) Kauai 10—*Pteralyxia kauaiensis*—b (304 ha; 751 ac)

(A) Unit consists of the following 183 boundary points: Start at 448642, 2442419; 449125, 2442584; 449589, 2442203; 449662, 2441006; 449663, 2440988; 450101, 2440409; 449514, 2439343; 449691, 2439097; 449529, 2439072; 448873, 2439316; 448605, 2440582; 448605, 2440585; 448604, 2440594; 448603, 2440603; 448601, 2440618; 448600, 2440627; 448599, 2440637; 448600, 2440668; 448601, 2440679; 448606, 2440704; 448612, 2440722; 448615, 2440731; 448619, 2440740; 448622, 2440749; 448630, 2440759; 448638, 2440764; 448650, 2440769; 448663, 2440773; 448678, 2440780; 448691, 2440790; 448711, 2440806; 448720, 2440813; 448727, 2440820; 448735, 2440829; 448745, 2440841; 448764, 2440857; 448788, 2440878; 448802, 2440889; 448811, 2440896; 448841, 2440914; 448861, 2440927; 448877, 2440939; 448918, 2440982; 448940, 2441006; 448941, 2441024; 448943, 2441044; 448943, 2441053; 448943, 2441063; 448944, 2441075; 448948, 2441084; 448954, 2441097; 448964, 2441109; 448969, 2441116; 448971, 2441119; 448972, 2441136; 448973, 2441143; 448972, 2441150; 448967, 2441159; 448961, 2441163; 448949, 2441170; 448941, 2441177; 448933, 2441184; 448930, 2441194; 448926, 2441212; 448934, 2441230; 448940, 2441238; 448944, 2441250; 448946, 2441259; 448948, 2441264; 448948, 2441273; 448948, 2441281; 448944, 2441291; 448935, 2441302; 448928, 2441313; 448925, 2441322; 448920, 2441333; 448919, 2441341; 448917, 2441357; 448916, 2441369; 448918, 2441381; 448922, 2441392; 448930, 2441400; 448936, 2441403; 448940, 2441404; 448945, 2441411; 448948, 2441420; 448952, 2441427; 448964, 2441441; 448971, 2441443; 449003, 2441449; 449032, 2441461; 449040, 2441466; 449049, 2441471; 449053, 2441472; 449060, 2441481; 449064, 2441492; 449065, 2441502; 449066, 2441511; 449061, 2441528; 449050, 2441561; 449046, 2441569; 449043, 2441578; 449037, 2441588; 449030, 2441595; 449017, 2441611; 449012, 2441616; 449009, 2441625; 449006, 2441639; 449004, 2441650; 449000, 2441660; 448995, 2441668; 448986, 2441677; 448972, 2441689; 448957, 2441700; 448939, 2441710; 448933, 2441715; 448925, 2441722; 448915, 2441738; 448913, 2441753; 448914, 2441760; 448913, 2441774; 448915, 2441796; 448910, 2441807; 448900, 2441814; 448890, 2441818; 448884, 2441820; 448877, 2441825; 448850, 2441844; 448840, 2441852; 448831, 2441859; 448820, 2441871; 448817, 2441884; 448814, 2441894; 448813, 2441900; 448803, 2441914; 448789, 2441938; 448787, 2441967; 448781, 2441990; 448777, 2442002; 448773, 2442013; 448768, 2442019; 448764, 2442029; 448755, 2442041; 448746, 2442051; 448736, 2442055; 448728, 2442058; 448723, 2442061; 448718, 2442069; 448710, 2442077; 448694, 2442089; 448683, 2442101; 448677, 2442115; 448675, 2442123; 448677, 2442140; 448682, 2442148; 448684, 2442157; 448680, 2442169; 448674, 2442187; 448671, 2442202; 448673, 2442209; 448678,

2442221; 448684, 2442226; 448692, 2442233; 448699, 2442238; 448705, 2442250; 448706, 2442257; 448707, 2442267; 448712, 2442283; 448718, 2442295; 448722, 2442303; 448723, 2442309; 448724, 2442320; 448721, 2442331; 448711, 2442341; 448697, 2442342; 448682, 2442350; 448677, 2442356; 448673, 2442365; 448671, 2442369; 448665, 2442379; 448657, 2442387; 448648, 2442399; 448643, 2442410; return to starting point.

(B) NOTE: Map 51 follows:

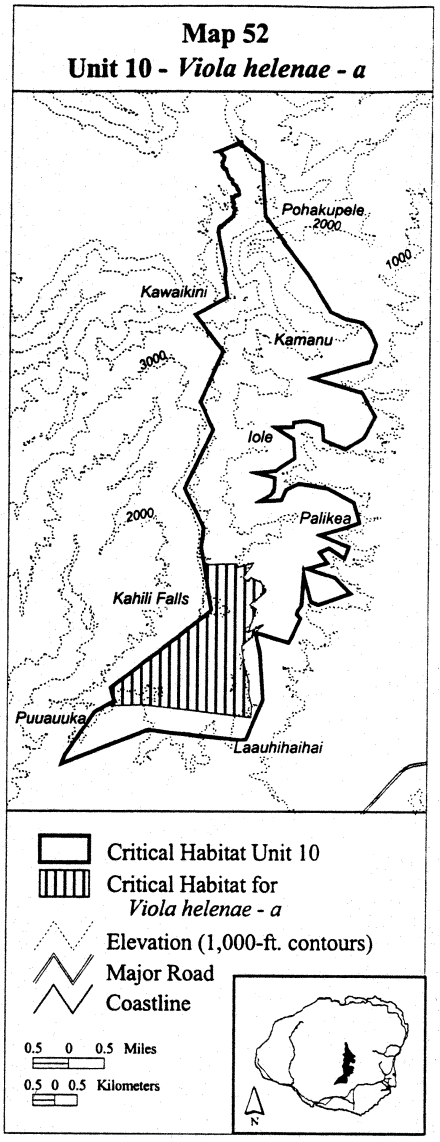


(lii) Kauai 10—*Viola helenae*—a (611 ha; 1,510 ac)

(A) Unit consists of the following 31 boundary points: Start at 448328, 2433188; 448454, 2433140; 449088, 2433152; 449076, 2433067; 449466, 2433177; 449222, 2432836; 449320, 2432763; 449405, 2432848; 449636, 2432738; 449746, 2432531; 449527, 2432361; 449380, 2432239; 449551, 2432153; 449344, 2431617; 449685, 2431800; 449417, 2431508; 449198, 2431301; 449234, 2431142;

449271, 2430923; 449320, 2430692; 449380, 2430484; 449380, 2430229; 449441, 2429961; 449429, 2429693; 446980, 2429985; 446274, 2429948; 446193, 2429994; 446327, 2430072; 446237, 2430356; 448515, 2432105; 448503, 2432172; return to starting point.

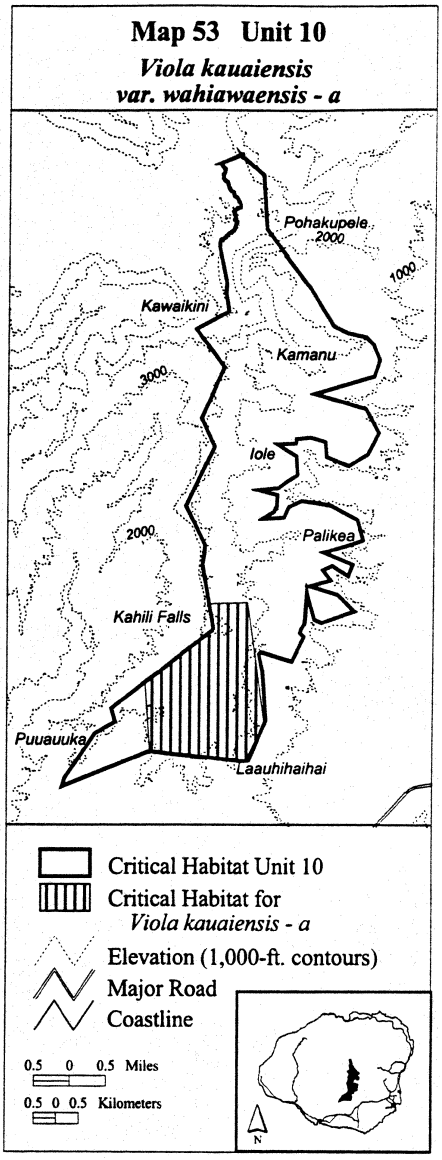
(B) NOTE: Map 52 follows:



(liii) Kauai 10—*Viola kauaiensis* var. *wahiawaensis*—a (657 ha; 1,623 ac)

(A) Unit consists of the following 10 boundary points: Start at 448417, 2432669; 449275, 2432700; 449659, 2430034; 449241, 2429178; 447613, 2429349; 447532, 2429359; 447101, 2429410; 446996, 2430939; 448515, 2432105; 448503, 2432172; return to starting point.

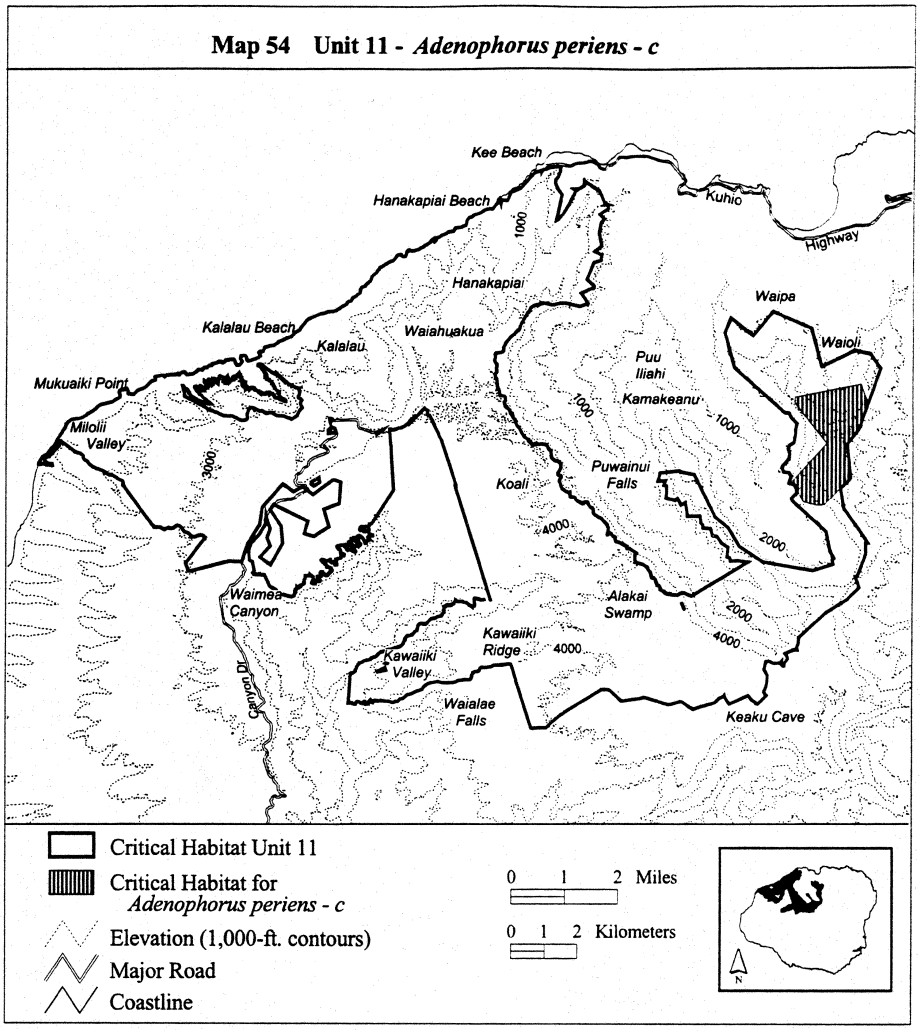
(B) NOTE: Map 53 follows:



(liv) Kauai 11—*Adenophorus periens*—c (469 ha; 1,158 ac)

(A) Unit consists of the following 14 boundary points: Start at 449704, 2450172; 449432, 2449395; 449073, 2448923; 449147, 2447868; 448881, 2447609; 448393, 2447136; 448172, 2447124; 447753, 2447224; 447428, 2447829; 448470, 2448968; 447485, 2450219; 447507, 2450366; 449486, 2450747; 449649, 2450316; return to starting point.

(B) NOTE: Map 54 follows:

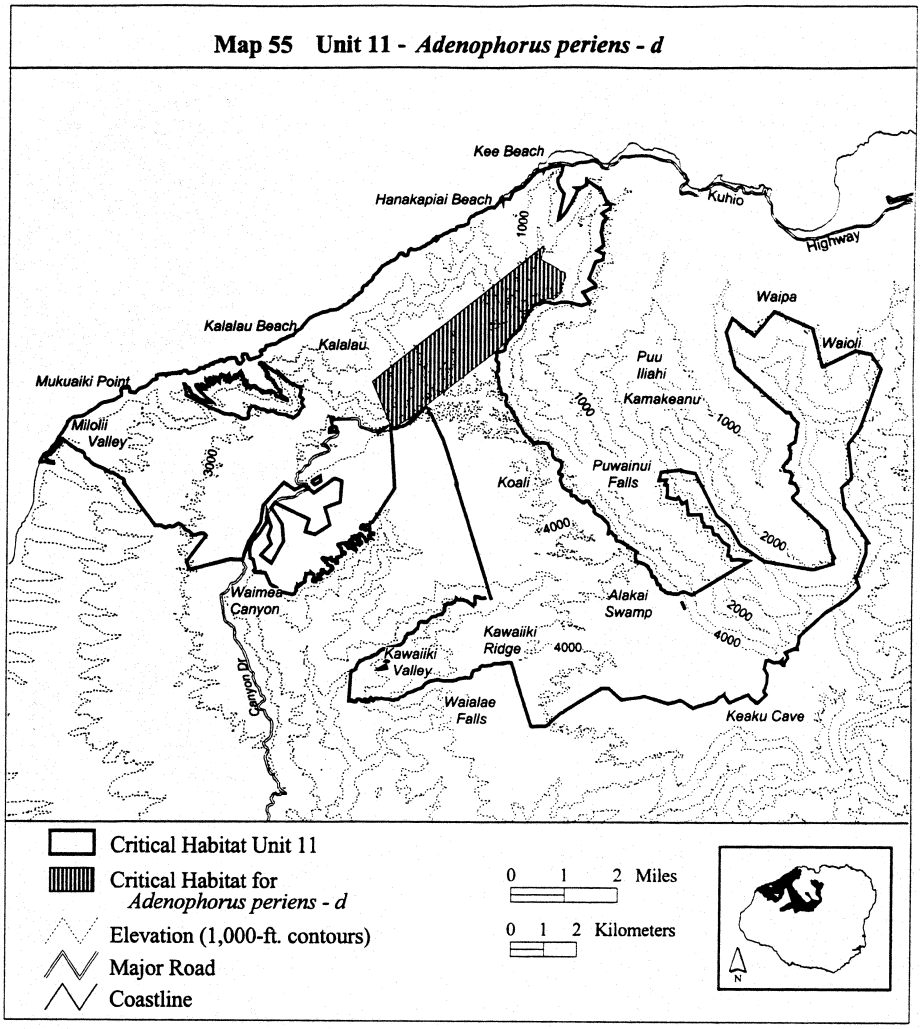


(lv) Kauai 11—*Adenophorus periens*—d (1,006 ha; 2,485 ac)

(A) Unit consists of the following 82 boundary points: Start at 439347, 2452789; 439324, 2452794; 439098, 2452402; 438924, 2452225; 438478, 2451772; 438422, 2451715; 438390, 2451682; 436328, 2450087; 436296, 2450046; 436244, 2450016; 436213, 2450009; 436203, 2450009; 436111, 2449924; 436104, 2449902; 436086, 2449869; 436075,

2449855; 436058, 2449842; 436017, 2449817; 436001, 2449805; 435988, 2449789; 435985, 2449783; 435308, 2449368; 435292, 2449379; 435269, 2449384; 435247, 2449385; 434652, 2450774; 434814, 2450917; 434829, 2450928; 435956, 2451815; 438144, 2453533; 438500, 2453813; 439711, 2454765; 439738, 2454786; 439842, 2454868; 439760, 2454456; 440303, 2454155; 440294, 2454127; 440436, 2454081; 440496, 2454047; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; 439355, 2452801; return to starting point.

(B) NOTE: Map 55 follows:



(lvi) Kauai 11—*Alectryon macrococcus*—a (382 ha; 943 ac)

(A) Unit consists of the following 292 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435596, 2442883; 435624, 2442882; 435632, 2442910; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993,

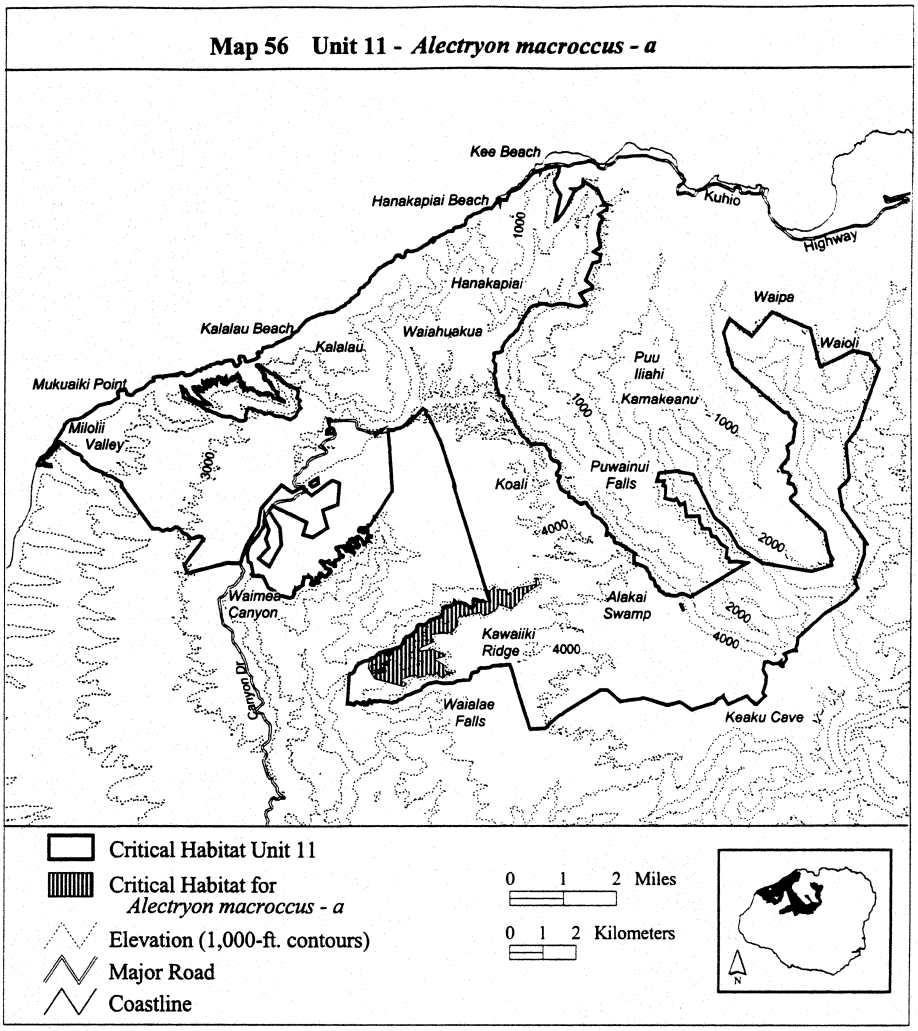
2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2443995; 436943, 2444066; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437129, 2444107; 437182, 2444088; 437303, 2444229; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437365, 2444221; 437566, 2444182; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 438238, 2444515; 438251, 2444591; 438333, 2444564; 438464, 2444701; 438540, 2444598; 438837, 2444584; 438878, 2444453; 438982, 2444481; 439071, 2444639; 439712, 2444756; 439712, 2444935; 439774, 2444949; 439816, 2444749; 439747, 2444687; 439395, 2444474; 439271, 2444301; 438988, 2444026; 438609, 2444178; 438554, 2444019; 438154, 2443806; 438037, 2443916; 437368, 2443785; 437354, 2443668; 437354, 2443516; 437203, 2443323; 436548, 2443254; 436617, 2443027; 436224, 2442848; 436210, 2442751; 436637, 2442799; 436982, 2442606; 436644, 2442510; 437023, 2442303; 436989, 2442144; 437223, 2442103; 436975, 2442027; 436975, 2441958; 436803, 2441986; 436734, 2442110; 436672, 2442034; 436623, 2442034; 436389, 2442076; 436375, 2441993; 436175, 2441965; 436072, 2442041; 435879, 2441972; 435617, 2441890; 435810, 2441766; 435755, 2441683; 434852, 2441917; 434645, 2442255; 434684, 2442495; 434700, 2442502; 434713, 2442515; 434725, 2442524; 434735, 2442532; 434755, 2442542; 434775, 2442551; 434800, 2442556; 434822, 2442562; 434842, 2442574; 434862, 2442596; 434883, 2442613; 434896, 2442626; 434916, 2442647; 434934, 2442668; 434949, 2442681; 434972, 2442699; 434986, 2442705; 434997, 2442708; 435006, 2442713; 435012, 2442717; 435026, 2442719; 435039, 2442722; 435061, 2442727; 435081, 2442733; 435100, 2442739; 435119, 2442747; 435135, 2442754; 435150, 2442764; 435164, 2442771; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; 435237, 2442643; 435284, 2442631; return to starting point.

(B) Excluding 2 areas:

(*1*) Bounded by the following 3 points (1 ha; 3 ac): Start at 435132, 2442248; 435160, 2442164; 434848, 2442098; return to starting point; and

(*2*) Bounded by the following 4 points: (0 ha; 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

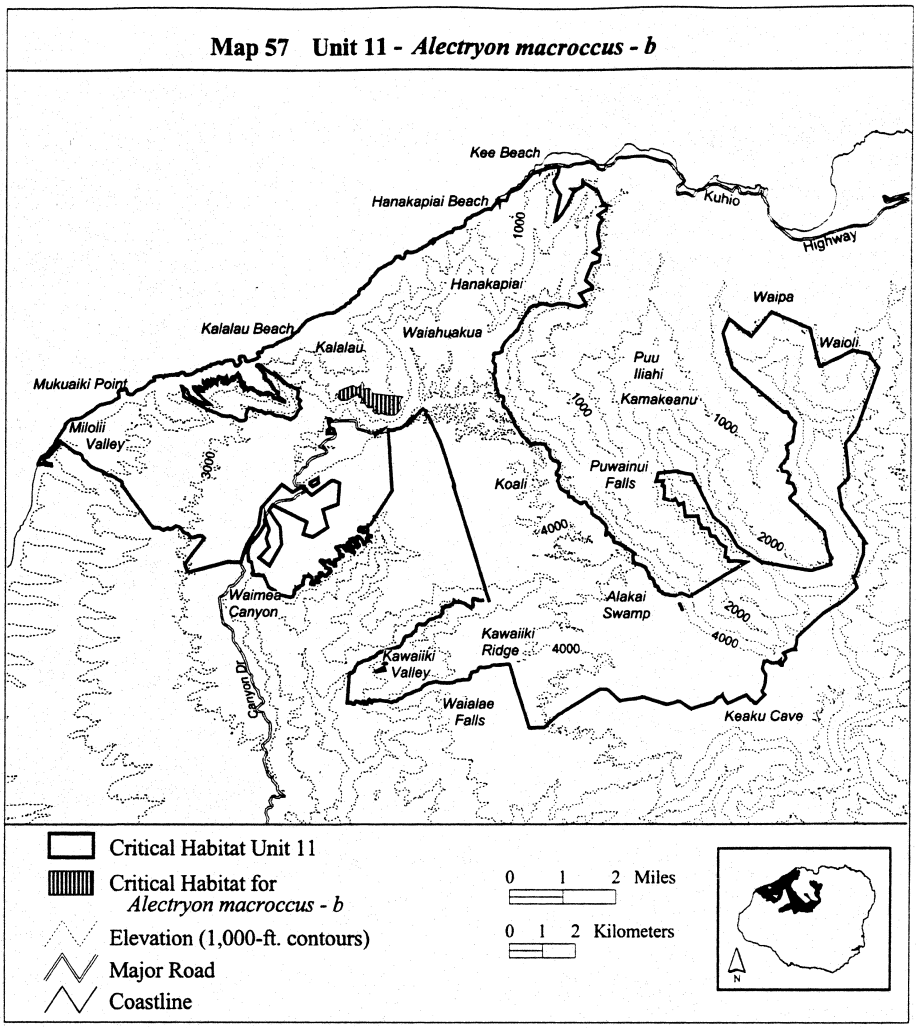
(C) NOTE: Map 56 follows:



(lvii) Kauai 11—*Alectryon macrococcus*—b (90 ha; 222 ac)

(A) Unit consists of the following 42 boundary points: Start at 434114, 2450720; 434166, 2450751; 434206, 2450682; 434246, 2450687; 434293, 2450650; 434374, 2450717; 434437, 2450858; 434504, 2450749; 434475, 2450619; 434648, 2450659; 434778, 2450484; 435695, 2450389; 435608, 2450327; 435588, 2450199; 435632, 2450023; 435535, 2449928; 435447, 2449835; 435182, 2449829; 435011, 2449895; 434939, 2449841; 434894, 2449891; 434816, 2449871; 434773, 2449947; 434755, 2449958; 434787, 2450016; 434784, 2450052; 434742, 2450070; 434609, 2450052; 434578, 2450109; 434543, 2450151; 434504, 2450195; 434399, 2450200; 434430, 2450325; 434417, 2450370; 434363, 2450363; 434331, 2450386; 434320, 2450475; 434145, 2450379; 433991, 2450281; 433804, 2450277; 433704, 2450352; 433744, 2450570; return to starting point.

(B) NOTE: Map 57 follows:

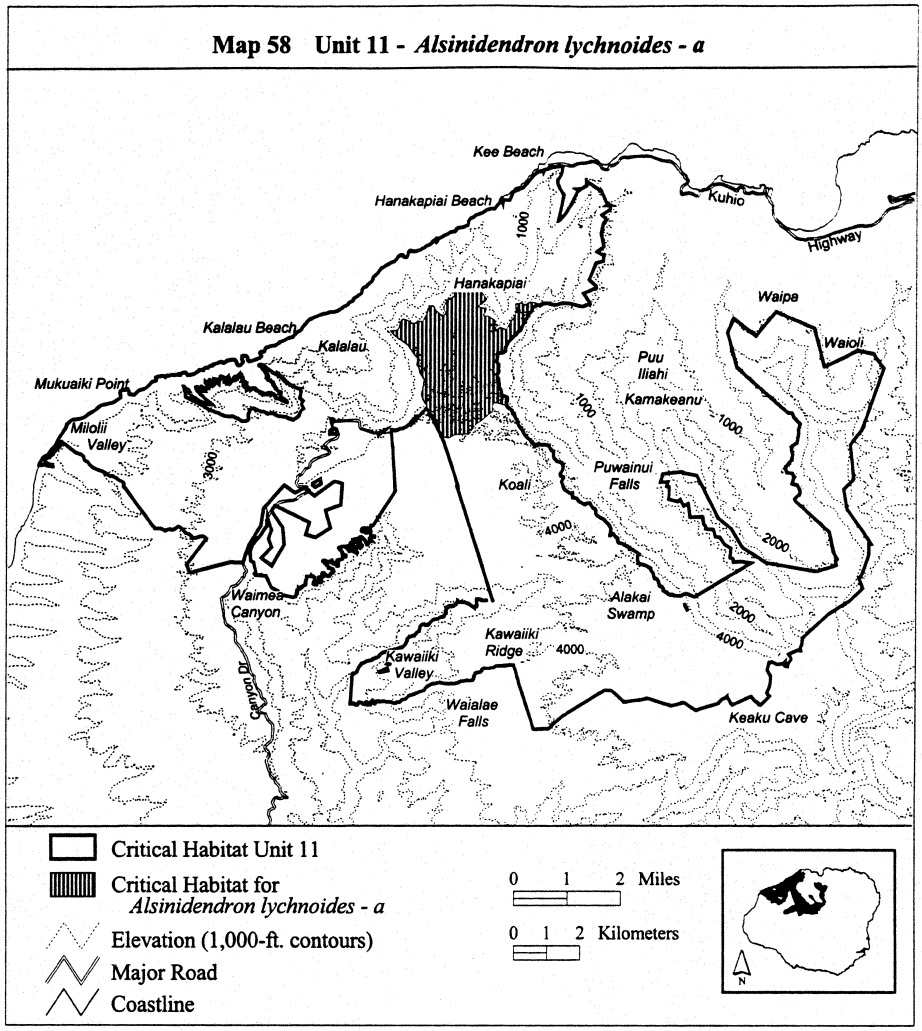


(lviii) Kauai 11—*Alsinidendron lychnoides*—a (993 ha; 2,455 ac)

(A) Unit consists of the following 192 boundary points: Start at 439360, 2452812; 439283, 2452730; 439242, 2452604; 439217, 2452559; 439144, 2452406; 439128, 2452379; 439125, 2452373; 439120, 2452368; 439061, 2452327; 439037, 2452297; 439020, 2452266; 438997, 2452241; 438936, 2452213; 438888, 2452163; 438833, 2452090; 438761, 2452013; 438715, 2451908; 438680, 2451858; 438680, 2451783; 438675, 2451766; 438670, 2451754; 438657, 2451738; 438599, 2451708; 438529, 2451692; 438484, 2451690; 438442, 2451682; 438429, 2451670; 438425, 2451652; 438440, 2451600; 438435, 2451571; 438419, 2451509; 438410, 2451464; 438422, 2451414; 438454, 2451380; 438478, 2451359; 438485, 2451346; 438481, 2451287; 438472, 2451261; 438467, 2451228; 438472, 2451209; 438481, 2451188; 438486, 2451163; 438484, 2451141; 438475, 2451113; 438455, 2451089; 438434, 2451069; 438425, 2451047; 438435, 2450985; 438427, 2450964; 438472, 2450910; 438501, 2450796; 438488, 2450686; 438554, 2450559; 438576, 2450448; 438571, 2450438; 438578,

2450438; 438581, 2450423; 438621, 2450415; 438690, 2450392; 438715, 2450373; 438731, 2450342; 438736, 2450325; 438737, 2450311; 438732, 2450286; 438717, 2450241; 438713, 2450206; 438716, 2450162; 438717, 2450158; 438658, 2450128; 438536, 2450165; 438407, 2450217; 438314, 2450210; 438311, 2450196; 438281, 2450069; 438277, 2449915; 438166, 2449844; 438107, 2449793; 437960, 2449667; 437875, 2449601; 437812, 2449579; 437668, 2449383; 437627, 2449302; 437550, 2449262; 437413, 2449247; 437247, 2449258; 437125, 2449214; 436955, 2449122; 436770, 2449170; 436737, 2449184; 436566, 2449559; 436578, 2449579; 436604, 2449675; 436575, 2449727; 436490, 2449760; 436423, 2449793; 436375, 2449838; 436375, 2449882; 436386, 2449952; 436334, 2449989; 436253, 2450044; 436310, 2450116; 436170, 2450294; 436132, 2450455; 436191, 2450690; 436218, 2450861; 436154, 2451005; 436084, 2451096; 436071, 2451235; 435999, 2451347; 436020, 2451545; 435900, 2451671; 435731, 2451919; 435437, 2452127; 435277, 2452266; 435202, 2452357; 435383, 2452379; 435442, 2452416; 435523, 2452667; 435587, 2452715; 435731, 2452662; 435859, 2452597; 435945, 2452592; 436009, 2452651; 436175, 2452641; 436293, 2452859; 436368, 2453095; 436491, 2453121; 436571, 2452971; 436699, 2452864; 436801, 2452816; 436876, 2452886; 436795, 2453040; 436902, 2453276; 437116, 2453404; 437116, 2453510; 437234, 2453580; 437239, 2453681; 437346, 2453810; 437426, 2453991; 437640, 2454012; 437710, 2453996; 437678, 2453943; 437635, 2453900; 437742, 2453809; 437849, 2453788; 437929, 2453799; 437993, 2453676; 437983, 2453510; 438004, 2453441; 438116, 2453323; 438079, 2453254; 437956, 2453184; 437844, 2453099; 437988, 2453045; 438100, 2453045; 438082, 2452951; 438047, 2452880; 438009, 2452858; 438009, 2452826; 438172, 2452798; 438248, 2452739; 438336, 2452682; 438357, 2452597; 438378, 2452559; 438453, 2452532; 438373, 2452458; 438368, 2452410; 438368, 2452361; 438512, 2452447; 438603, 2452442; 438705, 2452399; 438844, 2452644; 438928, 2452744; 439013, 2452928; 438986, 2453175; 439084, 2453179; 439154, 2453195; 439272, 2453141; 439389, 2453216; 439491, 2453221; 439576, 2453193; 439635, 2453173; 439658, 2453123; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; return to starting point.

(B) NOTE: Map 58 follows:

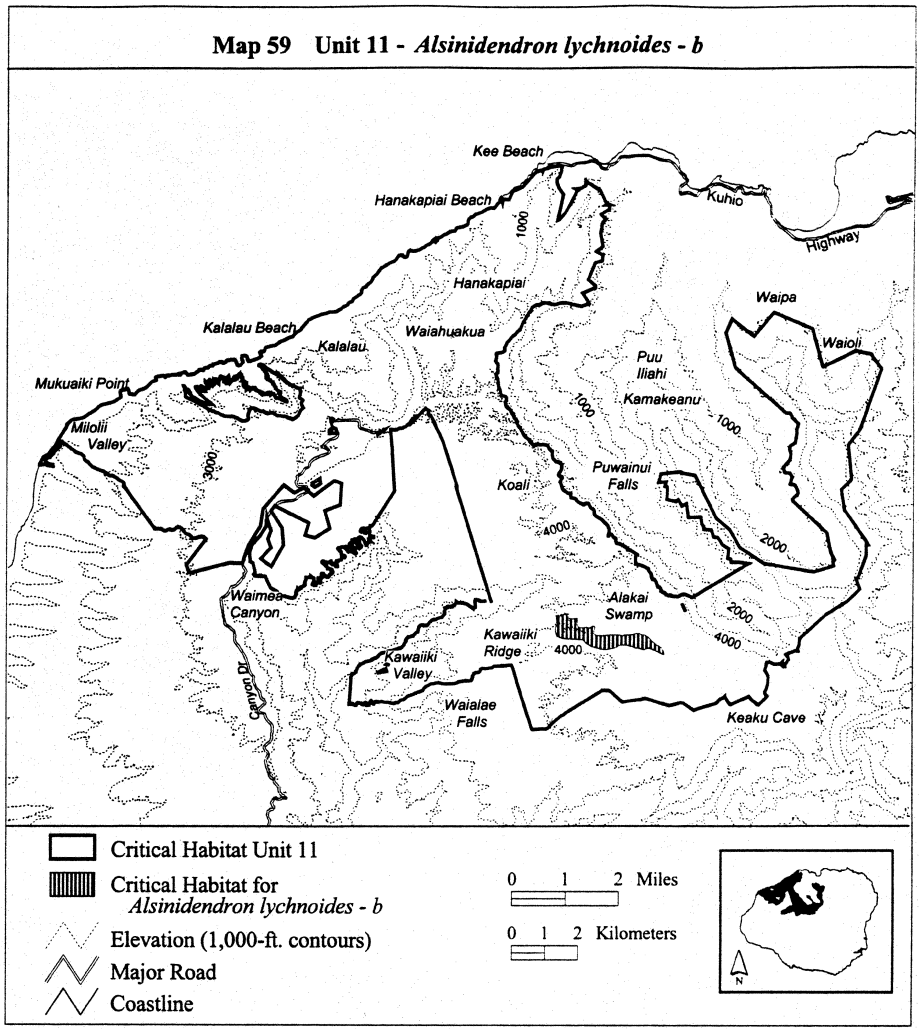


(lix) Kauai 11—*Alsinidendron lychnoides*—b (138 ha; 340 ac)

(A) Unit consists of the following 69 boundary points: Start at 442522, 2443254; 442609, 2443267; 442692, 2443312; 442829, 2443300; 442867, 2443258; 442962, 2443258; 443104, 2443163; 443187, 2443067; 443307, 2442972; 443473, 2442880; 443531, 2442768; 443548, 2442664; 443133, 2442864; 443045, 2442860; 442933, 2442822; 442746, 2442880; 442717, 2442860; 442622, 2442897; 442605, 2442901; 442522, 2442930; 442414, 2442951; 442265, 2442959; 442182, 2442935; 442099, 2442876; 441804, 2442823; 441629, 2442831; 441355, 2442906; 441177, 2443010; 441098, 2443101; 440998, 2443113; 440811, 2443118; 440487, 2443134; 440400, 2443172; 440350, 2443202; 440371, 2443201; 440305, 2443230; 440350, 2443202; 440309, 2443205; 440251, 2443371; 440271, 2443487; 440309, 2443591; 440300, 2443720; 440275, 2443832; 440346, 2443811; 440496, 2443865; 440579, 2443877; 440616, 2443852; 440633, 2443769; 440753, 2443736; 440923, 2443749; 440919, 2443678; 440919, 2443541; 440994, 2443479; 441127, 2443466; 441181, 2443487; 441280,

2443462; 441393, 2443516; 441451, 2443508; 441434, 2443437; 441417, 2443358; 441417, 2443288; 441488, 2443242; 441679, 2443229; 441775, 2443242; 441908, 2443263; 442020, 2443258; 442153, 2443263; 442298, 2443225; 442373, 2443262; return to starting point.

(B) NOTE: Map 59 follows:

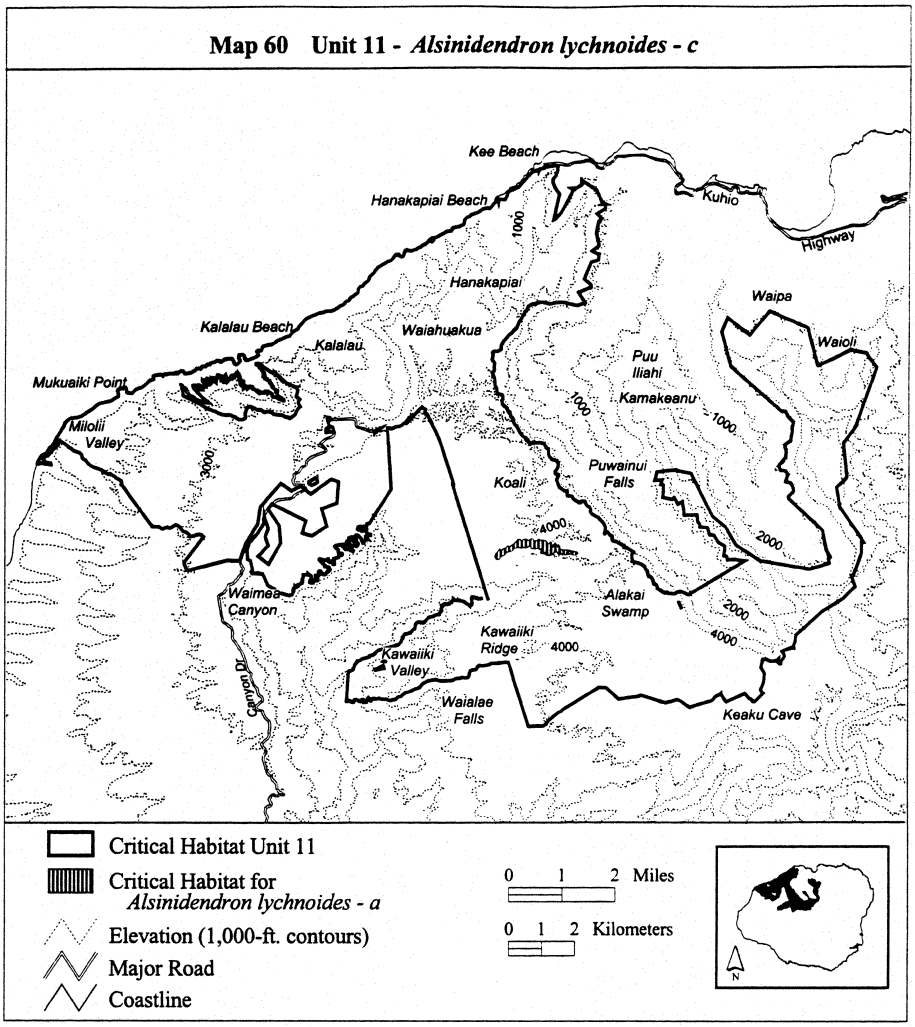


(lx) Kauai 11—*Alsinidendron lychnoides*—c (55 ha; 136 ac)

(A) Unit consists of the following 113 boundary points: Start at 438531, 2445488; 438506, 2445513; 438506, 2445542; 438552, 2445621; 438610, 2445684; 438656, 2445758; 438656, 2445742; 438677, 2445713; 438697, 2445708; 438739, 2445721; 438760, 2445758; 438805, 2445779; 438847, 2445791; 438863, 2445825; 438913, 2445854; 438959, 2445820; 439001, 2445850; 439071, 2445899; 439129, 2445953; 439175, 2446007; 439208, 2446045; 439279, 2446045; 439329, 2446007; 439374, 2446028; 439441, 2446061; 439474,

2446044; 439511, 2446020; 439540, 2446020; 439582, 2446049; 439632, 2446069; 439665, 2446044; 439694, 2446011; 439810, 2446007; 439819, 2446049; 439860, 2446065; 439881, 2446036; 439931, 2446015; 440010, 2446019; 440084, 2445994; 440084, 2445957; 440109, 2445903; 440163, 2445932; 440192, 2445978; 440226, 2445978; 440230, 2445932; 440213, 2445828; 440259, 2445808; 440284, 2445837; 440313, 2445874; 440325, 2445924; 440359, 2445936; 440359, 2445882; 440363, 2445849; 440396, 2445857; 440462, 2445870; 440479, 2445791; 440512, 2445749; 440574, 2445716; 440658, 2445716; 440728, 2445729; 440765, 2445708; 440861, 2445683; 440911, 2445683; 441011, 2445670; 441035, 2445621; 440961, 2445579; 440869, 2445571; 440807, 2445604; 440753, 2445587; 440641, 2445571; 440591, 2445588; 440579, 2445612; 440491, 2445621; 440417, 2445608; 440412, 2445646; 440375, 2445671; 440342, 2445662; 440313, 2445633; 440255, 2445583; 440093, 2445567; 440047, 2445592; 440047, 2445654; 439985, 2445625; 439906, 2445621; 439893, 2445642; 439914, 2445696; 439922, 2445762; 439914, 2445779; 439881, 2445733; 439848, 2445758; 439806, 2445791; 439765, 2445754; 439690, 2445754; 439603, 2445779; 439603, 2445824; 439574, 2445849; 439507, 2445808; 439449, 2445787; 439399, 2445791; 439370, 2445837; 439366, 2445812; 439316, 2445775; 439254, 2445800; 439212, 2445808; 439100, 2445771; 439063, 2445700; 438947, 2445663; 438888, 2445663; 438805, 2445563; 438731, 2445542; 438710, 2445538; 438664, 2445459; 438589, 2445434; return to starting point.

(B) NOTE: Map 60 follows:

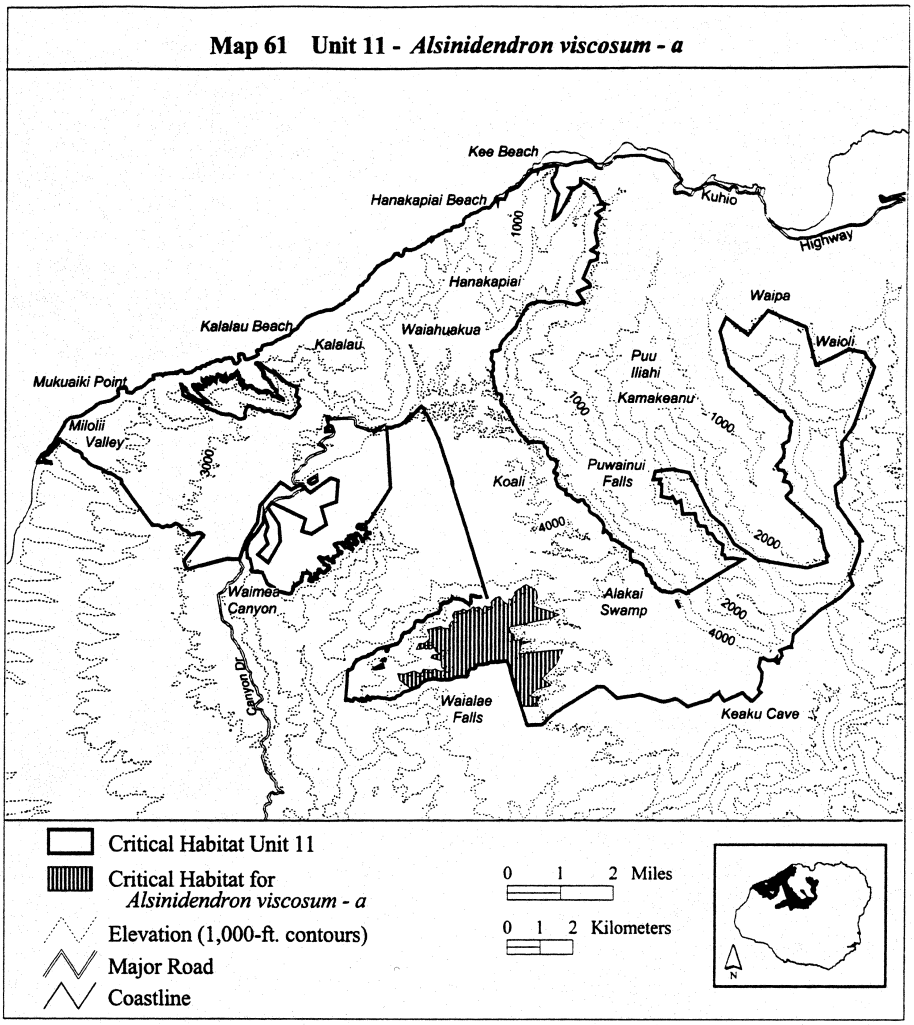


(lxi) Kauai 11—*Alsinidendron viscosum*—a (736 ha; 1,819 ac)

(A) Unit consists of the following 208 boundary points: Start at 439373, 2440983; 438934, 2442351; 438866, 2442347; 438838, 2442340; 438821, 2442339; 438757, 2442331; 438721, 2442329; 438704, 2442326; 438694, 2442327; 438679, 2442324; 438656, 2442321; 438626, 2442315; 438609, 2442314; 438561, 2442316; 438535, 2442314; 438523, 2442310; 438517, 2442310; 438496, 2442310; 438460, 2442320; 438453, 2442321; 438436, 2442321; 438433, 2442319; 438418, 2442311; 438392, 2442294; 438376, 2442278; 438355, 2442265; 438305, 2442256; 438254, 2442248; 438238, 2442248; 438219, 2442244; 438157, 2442234; 438130, 2442234; 438114, 2442232; 438098, 2442237; 438065, 2442246; 438049, 2442246; 438030, 2442243; 438012, 2442229; 438000, 2442216; 437998, 2442205; 437996, 2442188; 437984, 2442167; 437973, 2442147; 437954, 2442136; 437939, 2442128; 437926, 2442125; 437912, 2442123; 437873, 2442121; 437839, 2442110; 437826, 2442106; 437806, 2442092; 437791, 2442074; 437777, 2442052; 437766, 2442017; 437758, 2441998; 437754,

2441991; 437751, 2441981; 437745, 2441950; 437740, 2441938; 437736, 2441928; 437717, 2441899; 437711, 2441887; 437705, 2441878; 437689, 2441877; 437674, 2441875; 437647, 2441866; 437635, 2441866; 437617, 2441866; 437602, 2441867; 437566, 2441876; 437532, 2441880; 437522, 2441879; 437495, 2441869; 437460, 2441862; 437391, 2441858; 437366, 2441852; 437346, 2441845; 437332, 2441842; 437317, 2441835; 437287, 2441816; 437274, 2441809; 437240, 2441796; 437224, 2441791; 437181, 2441781; 437150, 2441777; 437111, 2441777; 437096, 2441779; 437062, 2441776; 437008, 2441775; 436960, 2441776; 436912, 2441780; 436895, 2441784; 436825, 2441795; 436799, 2441801; 436777, 2441809; 436730, 2441820; 436695, 2441811; 436666, 2441808; 436638, 2441803; 436618, 2441796; 436593, 2441792; 436583, 2441789; 436541, 2441785; 436492, 2441773; 436453, 2441759; 436419, 2441739; 436408, 2441737; 436374, 2441718; 436357, 2441708; 436342, 2441700; 436319, 2441681; 436285, 2441639; 436272, 2441618; 436247, 2441590; 436228, 2441575; 436203, 2441564; 436181, 2441558; 436167, 2441552; 436155, 2441546; 436121, 2441536; 436070, 2441515; 436039, 2441504; 436033, 2441502; 435654, 2441777; 435600, 2441959; 435782, 2441952; 436106, 2442053; 436248, 2441979; 436335, 2441979; 436369, 2442121; 436450, 2442100; 436659, 2442080; 436740, 2442121; 436915, 2442033; 437084, 2442087; 436936, 2442161; 436922, 2442363; 436625, 2442458; 436666, 2442525; 436888, 2442559; 436740, 2442647; 436720, 2442755; 436558, 2442714; 436524, 2442748; 436450, 2442707; 436403, 2442761; 436302, 2442714; 436160, 2442701; 436248, 2442883; 436410, 2442883; 436571, 2443011; 436551, 2443078; 436558, 2443159; 436504, 2443294; 436916, 2443395; 437003, 2443335; 437192, 2443314; 437152, 2443409; 437226, 2443523; 437327, 2443564; 437266, 2443705; 437320, 2443827; 437523, 2443847; 437583, 2443901; 437718, 2443833; 437921, 2443989; 437948, 2443935; 438062, 2443982; 438170, 2443867; 438251, 2444002; 438366, 2443955; 438447, 2444009; 438440, 2444117; 438575, 2444231; 438710, 2444285; 438804, 2444143; 438959, 2444042; 438986, 2444211; 439047, 2444184; 439074, 2444224; 439162, 2444325; 439155, 2444400; 439499, 2444649; 439823, 2444453; 439850, 2444238; 439735, 2444008; 440518, 2443732; 440241, 2443624; 439007, 2443361; 438993, 2443220; 439155, 2443132; 439128, 2442977; 439283, 2442970; 439405, 2443051; 439357, 2442916; 439668, 2442943; 439364, 2442849; 439283, 2442552; 440646, 2442700; 440437, 2442248; 440005, 2441810; 440281, 2441608; 439863, 2441513; 439641, 2441304; 439769, 2441257; 439964, 2441257; 439769, 2441055; 439904, 2440980; return to starting point.

(B) NOTE: Map 61 follows:

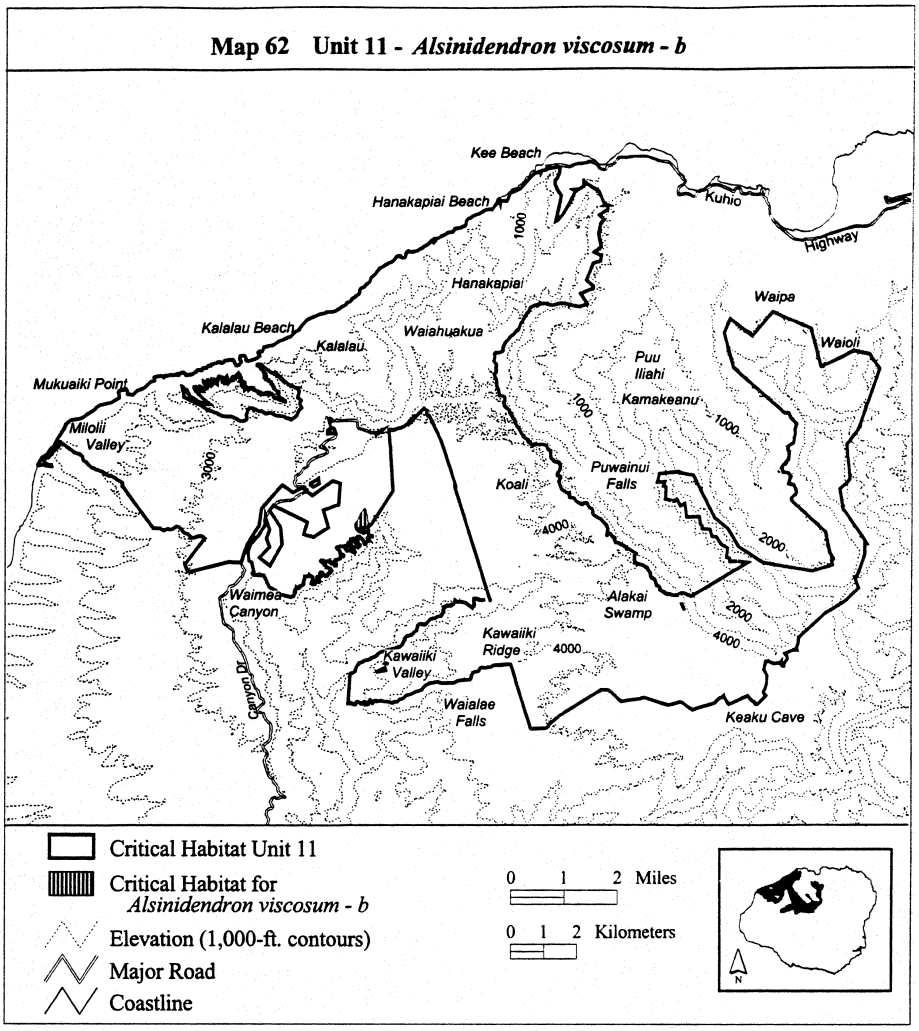


(lxii) Kauai 11—*Alsinidendron viscosum*—b (17 ha; 42 ac)

(A) Unit consists of the following 106 boundary points: Start at 434696, 2446537; 434683, 2446522; 434681, 2446520; 434675, 2446517; 434668, 2446521; 434668, 2446521; 434668, 2446522; 434668, 2446522; 434668, 2446522; 434668, 2446523; 434668, 2446523; 434668, 2446523; 434668, 2446524; 434668, 2446524; 434668, 2446525; 434668, 2446525; 434668, 2446525; 434668, 2446526; 434652, 2446530; 434615, 2446532; 434610, 2446511; 434615, 2446491; 434606, 2446463; 434569, 2446454; 434550, 2446470; 434504, 2446463; 434476, 2446440; 434460, 2446433; 434442, 2446465; 434423, 2446465; 434391, 2446428; 434366, 2446435; 434338, 2446426; 434320, 2446403; 434320, 2446371; 434336, 2446358; 434340, 2446352; 434353, 2446346; 434357, 2446343; 434387, 2446345; 434407, 2446334; 434435, 2446292; 434481, 2446285; 434479, 2446232; 434377, 2446272; 434294, 2446325; 434230, 2446392; 434193, 2446470; 434195, 2446546; 434211, 2446580; 434287, 2446652; 434320, 2446721; 434377, 2446857; 434453, 2446984; 434516, 2447023; 434534,

2447011; 434555, 2446861; 434573, 2446827; 434571, 2446746; 434587, 2446615; 434631, 2446567; 434684, 2446543; 434684, 2446543; 434684, 2446543; 434685, 2446543; 434685, 2446543; 434685, 2446543; 434686, 2446543; 434686, 2446543; 434686, 2446543; 434687, 2446543; 434687, 2446543; 434687, 2446543; 434688, 2446543; 434688, 2446543; 434689, 2446543; 434689, 2446543; 434689, 2446543; 434690, 2446543; 434690, 2446543; 434690, 2446543; 434691, 2446543; 434691, 2446543; 434691, 2446543; 434692, 2446543; 434692, 2446543; 434692, 2446543; 434693, 2446543; 434693, 2446543; 434693, 2446543; 434694, 2446543; 434694, 2446543; 434695, 2446542; 434695, 2446542; 434695, 2446542; 434696, 2446542; 434696, 2446542; 434696, 2446542; 434697, 2446542; 434697, 2446542; 434697, 2446541; 434698, 2446541; 434698, 2446541; 434698, 2446541; 434698, 2446541; 434699, 2446541; return to starting point.

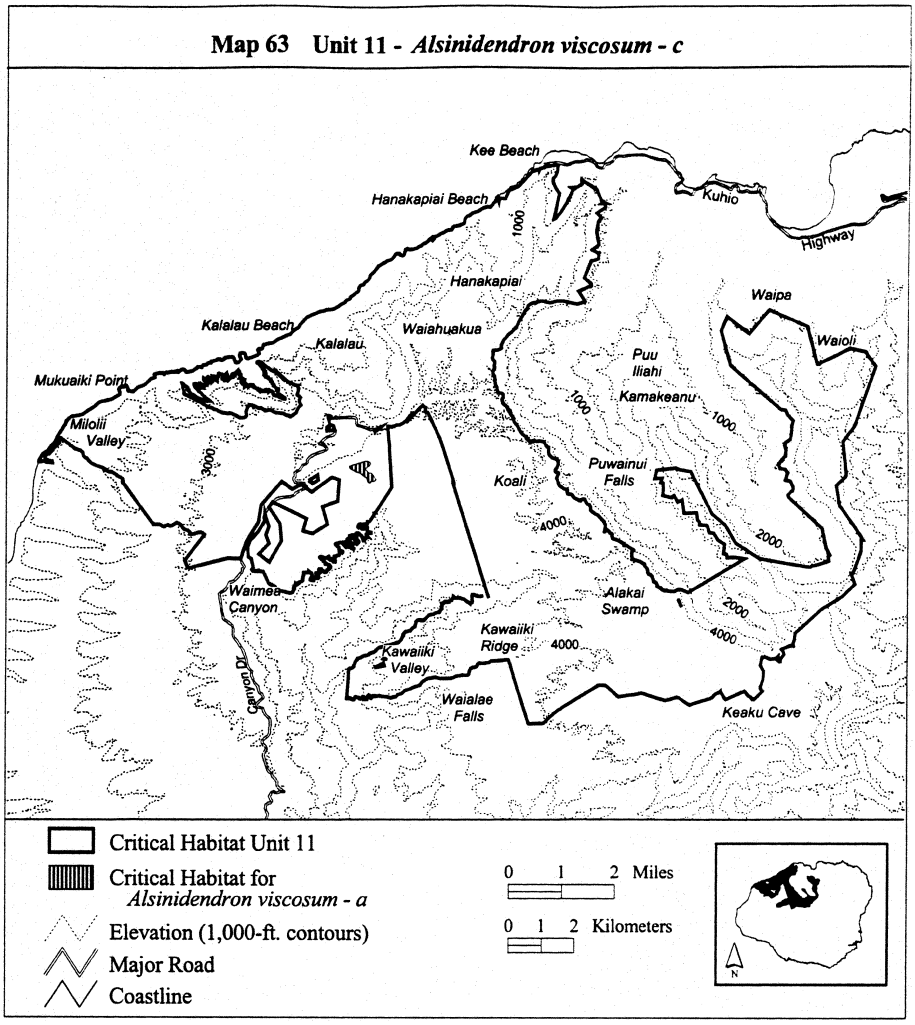
(B) NOTE: Map 62 follows:



(lxiii) Kauai 11—*Alsinidendron viscosum*—c (22 ha; 55 ac)

(A) Unit consists of the following 27 boundary points: Start at 434055, 2448131; 434055, 2448166; 434207, 2448223; 434407, 2448288; 434564, 2448338; 434672, 2448322; 434718, 2448272; 434714, 2448223; 434679, 2448184; 434610, 2448154; 434550, 2448092; 434580, 2448043; 434656, 2447972; 434725, 2447970; 434765, 2447954; 434880, 2447767; 434825, 2447721; 434767, 2447721; 434714, 2447719; 434716, 2447684; 434672, 2447682; 434626, 2447707; 434610, 2447749; 434612, 2447797; 434400, 2447965; 434283, 2447995; 434151, 2448076; return to starting point.

(B) NOTE: Map 63 follows:

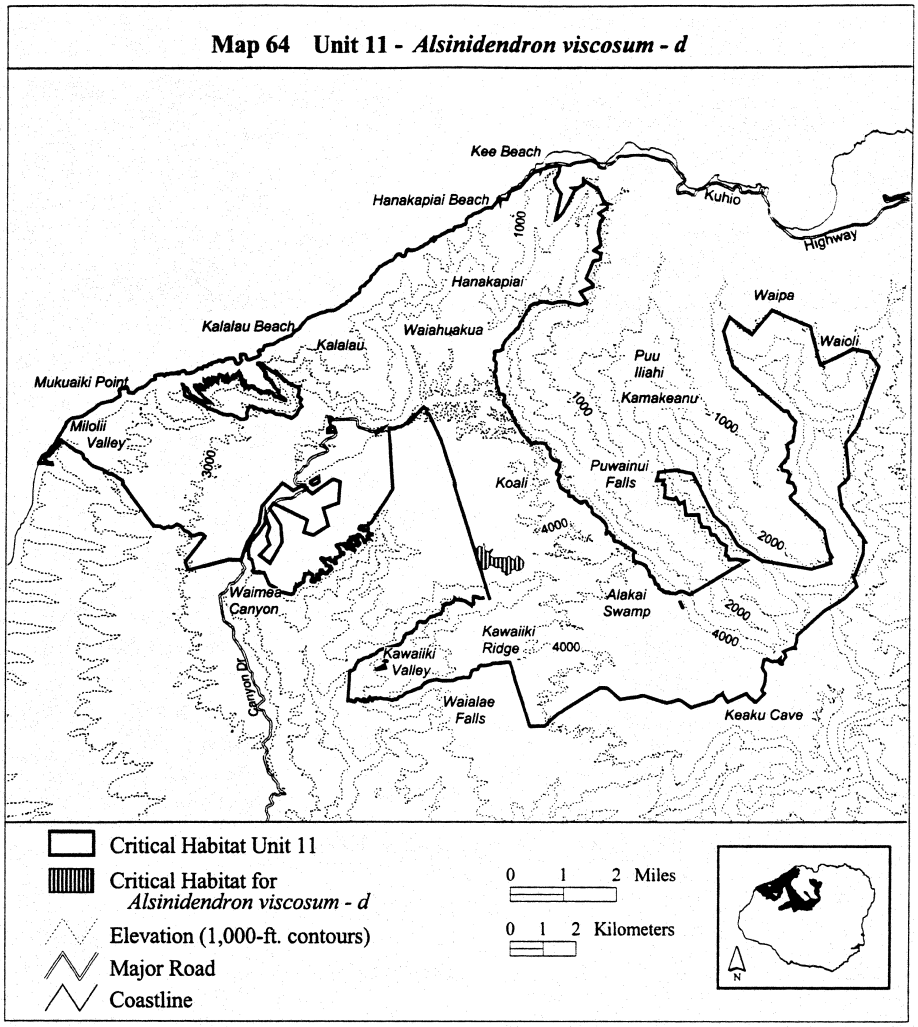


(lxiv) Kauai 11—*Alsinidendron viscosum*—d (61 ha; 150 ac)

(A) Unit consists of the following 63 boundary points: Start at 438024,

2445182; 437858, 2445698; 437863, 2445701; 437907, 2445735; 437930, 2445790; 437989, 2445842; 438041, 2445816; 438078, 2445809; 438112, 2445868; 438115, 2445913; 438130, 2445931; 438175, 2445835; 438156, 2445794; 438152, 2445742; 438193, 2445686; 438275, 2445657; 438297, 2445664; 438375, 2445727; 438401, 2445742; 438401, 2445709; 438368, 2445664; 438312, 2445590; 438312, 2445556; 438353, 2445523; 438464, 2445467; 438546, 2445489; 438609, 2445482; 438732, 2445482; 438814, 2445463; 438892, 2445541; 438929, 2445515; 438981, 2445441; 438999, 2445463; 439066, 2445397; 439137, 2445530; 439200, 2445534; 439330, 2445396; 439352, 2445333; 439333, 2445192; 439274, 2445133; 439192, 2445088; 439125, 2445088; 439085, 2445140; 438996, 2445126; 438970, 2445100; 438962, 2445018; 438921, 2445007; 438825, 2444947; 438784, 2444988; 438762, 2445062; 438713, 2445051; 438680, 2445055; 438680, 2445170; 438602, 2445196; 438535, 2445178; 438476, 2445204; 438431, 2445244; 438364, 2445267; 438286, 2445237; 438268, 2445185; 438219, 2445118; 438141, 2445118; 438030, 2445174; return to starting point.

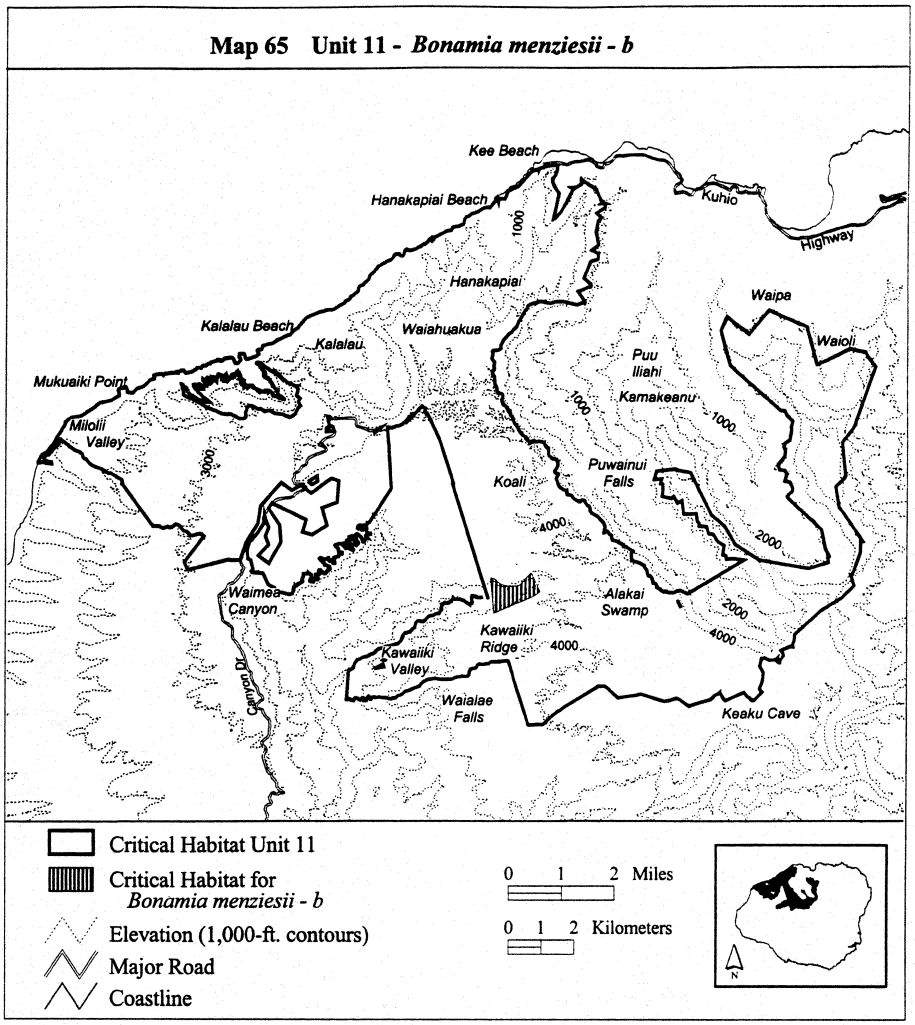
(B) NOTE: Map 64 follows:



(lxv) Kauai 11—*Bonamia menziesii*—b (93 ha; 229 ac)

(A) Unit consists of the following 12 boundary points: Start at 438424, 2444853; 438550, 2444811; 438668, 2444697; 438924, 2444597; 439252, 2444612; 439616, 2444997; 439629, 2445010; 439911, 2444437; 439905, 2444434; 439701, 2444298; 438490, 2443789; 438404, 2444823; return to starting point.

(B) NOTE: Map 65 follows:



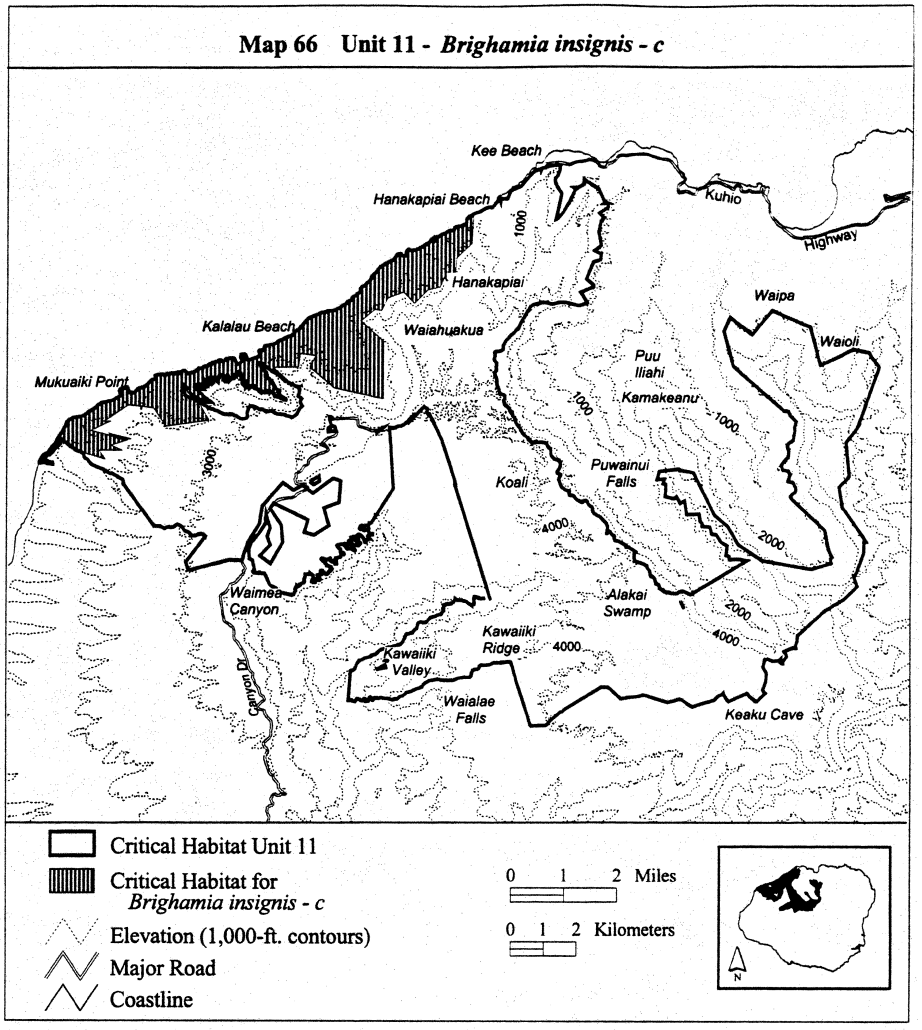
(lxvi) Kauai 11—*Brighamia insignis*—c (1,645 ha; 4,066 ac)

(A) Unit consists of the following 807 boundary points: coastline; 430380, 2450816; 430372, 2450803; 430368, 2450818; 430364, 2450833; 430362, 2450842; 430355, 2450855; 430348, 2450863; 430335, 2450873; 430331, 2450883; 430328, 2450897; 430326, 2450922; 430319, 2450953; 430305, 2450972; 430295, 2450980; 430285, 2450982; 430281, 2450979; 430276, 2450975; 430272, 2450958; 430273, 2450938; 430261, 2450933; 430250, 2450924; 430246, 2450905; 430251, 2450875; 430256, 2450842; 430268, 2450786; 430261, 2450779; 430252, 2450779; 430249, 2450795; 430246, 2450807; 430242, 2450821; 430234, 2450838; 430217, 2450857; 430209, 2450860; 430204, 2450855; 430197, 2450844; 430193, 2450832; 430172, 2450844; 430173, 2450865; 430175, 2450880; 430183, 2450896; 430192, 2450910; 430197, 2450925; 430197, 2450937; 430194, 2450949; 430187, 2450962; 430177, 2450971; 430166, 2450974; 430154, 2450976; 430132, 2450976; 430116, 2450985; 430107, 2450980; 430091, 2450975; 430078, 2450990; 430069, 2450993; 430061, 2450978; 430054,

2450938; 430051, 2450920; 430030, 2450915; 430016, 2450914; 430010, 2450909; 430009, 2450885; 430018, 2450854; 430024, 2450828; 430018, 2450825; 430011, 2450820; 430009, 2450808; 430013, 2450787; 430022, 2450756; 430002, 2450778; 429994, 2450795; 429984, 2450820; 429965, 2450849; 429939, 2450888; 429927, 2450906; 429914, 2450914; 429910, 2450911; 429907, 2450899; 429909, 2450889; 429915, 2450875; 429923, 2450865; 429926, 2450848; 429926, 2450827; 429923, 2450820; 429918, 2450819; 429909, 2450824; 429905, 2450835; 429897, 2450849; 429889, 2450860; 429879, 2450871; 429869, 2450875; 429863, 2450868; 429863, 2450852; 429861, 2450836; 429866, 2450814; 429870, 2450799; 429879, 2450785; 429885, 2450774; 429883, 2450763; 429879, 2450756; 429874, 2450750; 429875, 2450744; 429873, 2450736; 429866, 2450746; 429861, 2450753; 429854, 2450754; 429848, 2450756; 429843, 2450769; 429841, 2450785; 429827, 2450802; 429816, 2450819; 429797, 2450845; 429773, 2450868; 429738, 2450896; 429724, 2450899; 429720, 2450887; 429726, 2450875; 429733, 2450856; 429739, 2450832; 429742, 2450813; 429746, 2450791; 429752, 2450769; 429754, 2450756; 429748, 2450755; 429737, 2450753; 429731, 2450750; 429731, 2450739; 429734, 2450732; 429745, 2450721; 429750, 2450701; 429741, 2450701; 429728, 2450698; 429722, 2450692; 429718, 2450681; 429709, 2450676; 429702, 2450682; 429696, 2450693; 429691, 2450714; 429680, 2450743; 429664, 2450781; 429652, 2450802; 429639, 2450818; 429619, 2450828; 429603, 2450830; 429601, 2450825; 429604, 2450812; 429619, 2450793; 429637, 2450771; 429654, 2450750; 429664, 2450735; 429667, 2450717; 429663, 2450706; 429661, 2450673; 429666, 2450641; 429663, 2450621; 429654, 2450603; 429645, 2450601; 429634, 2450610; 429619, 2450622; 429602, 2450633; 429558, 2450656; 429505, 2450692; 429490, 2450702; 429483, 2450698; 429478, 2450692; 429480, 2450680; 429489, 2450657; 429496, 2450634; 429503, 2450613; 429524, 2450599; 429556, 2450569; 429569, 2450555; 429569, 2450546; 429560, 2450541; 429535, 2450540; 429510, 2450541; 429489, 2450546; 429478, 2450553; 429468, 2450566; 429461, 2450574; 429450, 2450580; 429440, 2450580; 429434, 2450588; 429432, 2450595; 429422, 2450604; 429410, 2450609; 429389, 2450622; 429387, 2450629; 429384, 2450638; 429377, 2450656; 429371, 2450661; 429365, 2450670; 429363, 2450681; 429359, 2450689; 429352, 2450687; 429345, 2450685; 429330, 2450677; 429319, 2450668; 429311, 2450657; 429310, 2450642; 429317, 2450633; 429334, 2450615; 429346, 2450600; 429359, 2450581; 429365, 2450564; 429372, 2450543; 429389, 2450532; 429400, 2450531; 429410, 2450517; 429420, 2450504; 429431, 2450485; 429450, 2450463; 429462, 2450449; 429482, 2450434; 429500, 2450421; 429523, 2450406; 429541, 2450384; 429554, 2450363; 429577, 2450344; 429599, 2450324; 429622, 2450305; 429645, 2450292; 429669, 2450271; 429686, 2450258; 429712, 2450243; 429745, 2450217; 429770, 2450202; 429788, 2450184; 429802, 2450172; 429815, 2450154; 429808, 2450151; 429791, 2450150; 429770, 2450151; 429738, 2450152; 429713, 2450155; 429686, 2450161; 429656, 2450168; 429622, 2450179; 429571, 2450198; 429538, 2450212; 429503, 2450229; 429460, 2450248; 429433, 2450259; 429404, 2450268; 429391, 2450277; 429371, 2450289; 429356, 2450303; 429342, 2450315; 429321, 2450332; 429294, 2450343; 429269, 2450357; 429244, 2450363; 429212, 2450380; 429205, 2450394; 429200, 2450405; 429193, 2450416; 429174, 2450426; 429162, 2450435; 429161, 2450444; 429158, 2450455; 429152, 2450468; 429143, 2450481; 429128, 2450496; 429115, 2450512; 429114, 2450524; 429113, 2450540; 429110, 2450557; 429103, 2450577; 429091, 2450594; 429077, 2450605; 429060, 2450608; 429041, 2450610; 429026, 2450609; 429013, 2450623; 429009, 2450638; 429000, 2450655; 428990, 2450676; 428979, 2450690; 428972, 2450701; 428962, 2450707; 428952, 2450706; 428952, 2450704; 428964, 2450654; 428990, 2450584; 429000, 2450551; 429015, 2450477; 429016, 2450451; 429013, 2450421; 429012, 2450380; 429036, 2450360; 429089, 2450331; 429147, 2450304; 429258, 2450260; 429555, 2450103; 429469, 2450103; 429750, 2449605; 428442, 2449419; 428068, 2449979; 427321, 2450072; 426573, 2449574; 426760, 2449574; 426168, 2449294; 427289, 2449014; 426791, 2448859; 427103, 2448703; 426418, 2448703; 426604, 2448423; 425798, 2448673; 425792, 2448676; 425765, 2448685; 425735, 2448700; 425708, 2448709; 425675, 2448727; 425654, 2448744; 425621, 2448768; 425591, 2448786; 425552, 2448813; 425528, 2448834; 425487, 2448867; 425460, 2448891; 425421, 2448924; 425388, 2448948; 425334, 2448975; 425322, 2448984; 425310, 2448993; 425272, 2449039; 425267, 2449033; 425258, 2449022; 425253, 2449013; 425252, 2449003; 425253, 2448996; 425251, 2448992; 425242, 2448981; 425239, 2448972; 425231, 2448956; 425224, 2448934; 425222, 2448911; 425223, 2448900; 425224, 2448891; 425223, 2448883; 425218, 2448877; 425212, 2448878; 425208, 2448876; 425201, 2448872; 425192, 2448867; 425181, 2448859; 425172, 2448853; 425162, 2448844; 425158, 2448833; 425157, 2448818; 425153, 2448809; 425148,

2448807; 425136, 2448801; 425124, 2448795; 425120, 2448790; 425112, 2448785; 425100, 2448774; 425094, 2448768; 425081, 2448757; 425070, 2448745; 425062, 2448734; 425053, 2448723; 425044, 2448711; 425043, 2448695; 425029, 2448684; 425024, 2448675; 425017, 2448667; 425011, 2448659; 424999, 2448650; 424991, 2448642; 424980, 2448628; 424973, 2448615; 424956, 2448592; 424936, 2448587; 424929, 2448581; 424924, 2448574; 424917, 2448569; 424910, 2448561; 424906, 2448551; 424898, 2448552; 424886, 2448554; 424877, 2448554; 424871, 2448552; 424863, 2448548; 424849, 2448543; 424840, 2448538; 424824, 2448534; 424811, 2448524; 424803, 2448521; 424795, 2448511; 424785, 2448498; 424778, 2448484; 424774, 2448461; 424778, 2448445; 424791, 2448421; 424819, 2448402; 424832, 2448389; 424848, 2448376; 424871, 2448368; 424900, 2448356; 424929, 2448346; 424953, 2448337; 424973, 2448335; 424990, 2448333; 424997, 2448333; 425003, 2448327; 425006, 2448318; 425009, 2448308; 425011, 2448298; 425013, 2448289; 425015, 2448280; 425010, 2448272; 424998, 2448277; 424991, 2448284; 424983, 2448288; 424971, 2448291; 424957, 2448291; 424948, 2448290; 424933, 2448287; 424927, 2448284; 424915, 2448289; 424892, 2448299; 424874, 2448301; 424841, 2448311; 424823, 2448330; 424803, 2448337; 424777, 2448336; 424735, 2448339; 424711, 2448334; 424677, 2448333; 424664, 2448328; 424648, 2448323; 424633, 2448323; 424626, 2448324; 437770, 2455823; coastline.

(B) NOTE: Map 66 follows:

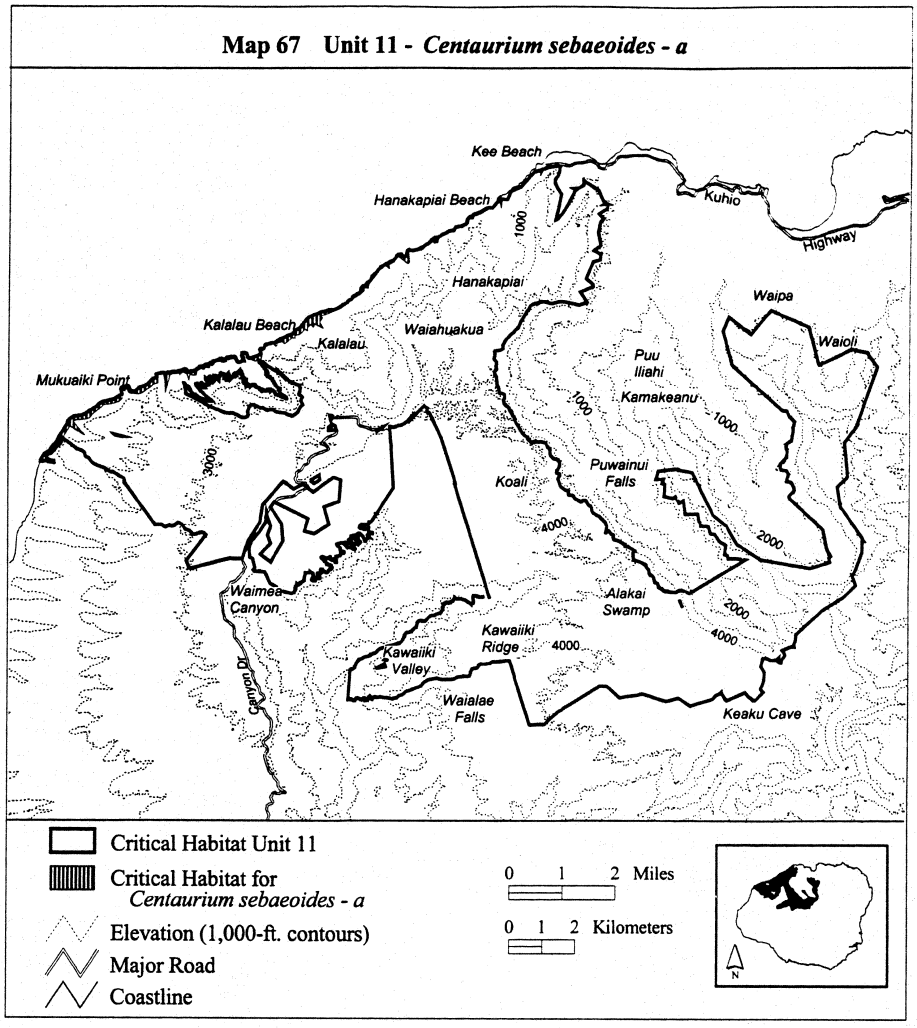


(lxvii) Kauai 11—*Centaurium sebaeoides*—a (157 ha; 389 ac)

(A) Unit consists of the following 146 boundary points: coastline; 427095, 2450498; 427122, 2450315; 427060, 2450219; 426989, 2450139; 426899, 2450102; 426842, 2450083; 426718, 2450054; 426533, 2450045; 426396, 2449902; 426196, 2449751; 426078, 2449627; 425945, 2449585; 425683, 2449570; 425603, 2449523; 425935, 2449124; 425484, 2449385; 425361, 2449167; 425290, 2449017; 425272, 2449039; 425267, 2449033; 425259, 2449024; 425156, 2449046; 438151, 2455997; 438175, 2455951; 437980, 2455838; 437781, 2455767; 437748, 2455684; 437624, 2455686; 437596, 2455530; 437415, 2455416; 437353, 2455428; 437240, 2455402; 437187, 2455293; 437121, 2455312; 436893, 2455212; 436694, 2455108; 436670, 2454975; 436518, 2455013; 436186, 2454752; 435963, 2454705; 435782, 2454719; 435815, 2454383; 435773, 2454345; 435478, 2454572; 435355, 2454397; 435189, 2454316; 435198, 2454193; 435103, 2454269; 435087, 2454279; 435049, 2454273; 434968, 2454196; 434917, 2454149; 434823, 2454030; 434759, 2453950; 434695, 2453852; 434572,

2453716; 434563, 2453601; 434440, 2453605; 434431, 2453507; 434325, 2453410; 434159, 2453307; 434061, 2453235; 433716, 2452967; 433290, 2452789; 433133, 2452729; 433175, 2452661; 433086, 2452542; 433195, 2452368; 432916, 2452476; 432886, 2452378; 432815, 2452468; 432720, 2452373; 432710, 2452264; 432639, 2452321; 432487, 2452178; 432316, 2452117; 432330, 2452036; 432264, 2452055; 432008, 2451880; 431946, 2451956; 431789, 2451885; 431789, 2451823; 431756, 2451804; 431666, 2451899; 431447, 2451795; 431371, 2451676; 431286, 2451695; 431329, 2451576; 431310, 2451429; 431134, 2451353; 430963, 2451410; 430947, 2451439; 430893, 2451445; 430807, 2451586; 430761, 2451556; 430837, 2451309; 430777, 2451319; 430643, 2451285; 430595, 2451285; 430534, 2451345; 430495, 2451419; 430434, 2451441; 430326, 2451403; 430237, 2451411; 430239, 2451337; 430191, 2451306; 430126, 2451313; 430037, 2451352; 429905, 2451309; 429887, 2451259; 429807, 2451199; 429764, 2451267; 429734, 2451147; 429623, 2451176; 429575, 2451098; 429475, 2451133; 429351, 2451050; 429310, 2450929; 429219, 2450929; 429128, 2450959; 429108, 2450786; 429041, 2450972; 428972, 2451024; 428929, 2451037; 428857, 2450999; 428824, 2450925; 428797, 2450999; 428715, 2450981; 428640, 2450994; 428546, 2450948; 428384, 2450446; 428376, 2450782; 428325, 2450973; 428231, 2450952; 428150, 2450948; 428164, 2450704; 428047, 2450665; 427934, 2450565; 427801, 2450484; 427669, 2450378; 427543, 2450370; 427401, 2450386; 427318, 2450387; 427257, 2450448; 427213, 2450548; 427171, 2450463; coastline.

(B) NOTE: Map 67 follows:

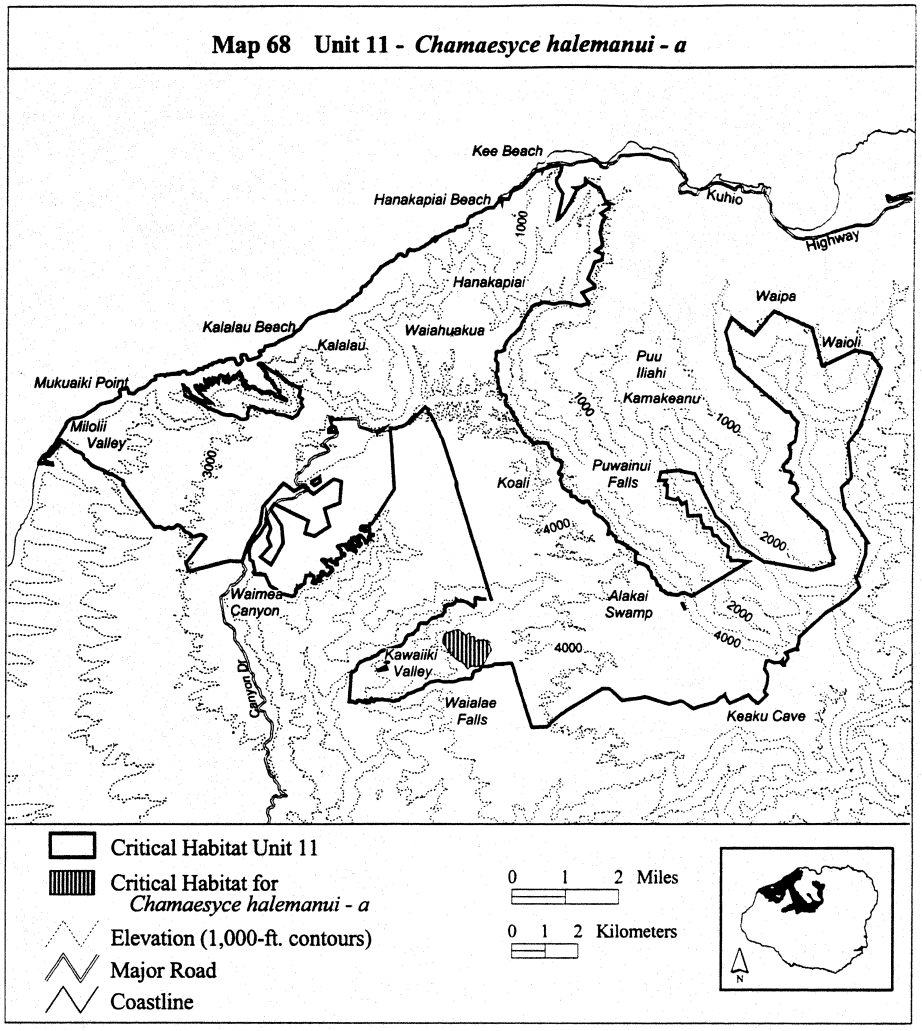


(lxviii) Kauai 11—*Chamaesyce halemanui*—a (108 ha; 267 ac)

(A) Unit consists of the following 69 boundary points: Start at 437683, 2443241; 437679, 2443194; 437679, 2443137; 437726, 2443130; 437800, 2443150; 437817, 2443127; 437817, 2443080; 437803, 2443033; 437834, 2443009; 437887, 2443019; 437907, 2443056; 437948, 2443043; 437974, 2443036; 438008, 2443046; 438042, 2443036; 438082, 2443070; 438122, 2443033; 438162, 2443003; 438196, 2443043; 438216, 2443029; 438223, 2442992; 438246, 2442986; 438280, 2442986; 438280, 2442952; 438246, 2442915; 438283, 2442821; 438310, 2442764; 438307, 2442707; 438273, 2442644; 438199, 2442520; 438176, 2442479; 438139, 2442419; 438109, 2442349; 438065, 2442285; 438066, 2442260; 438008, 2442239; 437971, 2442255; 437914, 2442255; 437830, 2442245; 437776, 2442271; 437676, 2442224; 437629, 2442167; 437572, 2442198; 437505, 2442302; 437438, 2442355; 437394, 2442392; 437314, 2442416; 437203, 2442506; 437015, 2442694; 436914, 2442875; 436847, 2442946; 436844, 2442986; 436847, 2443070; 436877, 2443160; 436901, 2443231; 436991,

2443258; 437062, 2443285; 437119, 2443301; 437186, 2443335; 437287, 2443345; 437334, 2443345; 437407, 2443308; 437428, 2443274; 437478, 2443264; 437485, 2443221; 437505, 2443184; 437579, 2443197; 437615, 2443237; 437652, 2443261; return to starting point.

(B) NOTE: Map 68 follows:

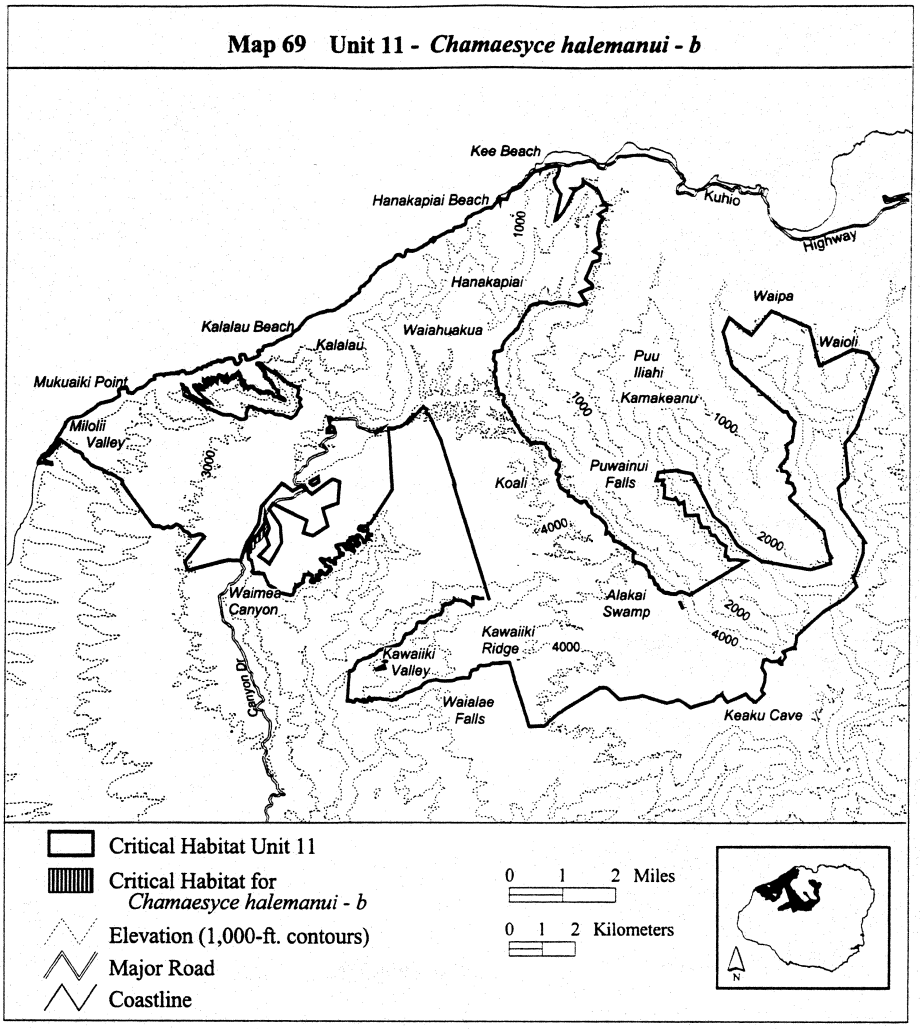


(lxix) Kauai 11—*Chamaesyce halemanui*—b (17 ha; 43 ac)

(A) Unit consists of the following 26 boundary points: Start at 431534, 2446637; 431530, 2446604; 431553, 2446538; 431557, 2446483; 431526, 2446397; 431495, 2446365; 431522, 2446303; 431518, 2446216; 431487, 2446158; 431420, 2446115; 431408, 2446048; 431322, 2445985; 431256, 2445938; 431193, 2445891; 431201, 2445817; 431177, 2445766; 431099, 2445738; 431079, 2445703; 431079, 2445652; 431040, 2445613; 430985, 2445601; 430977, 2445767; 431060, 2445963;

431278, 2446215; 431483, 2446536; 431491, 2446759; return to starting point.

(B) NOTE: Map 69 follows:

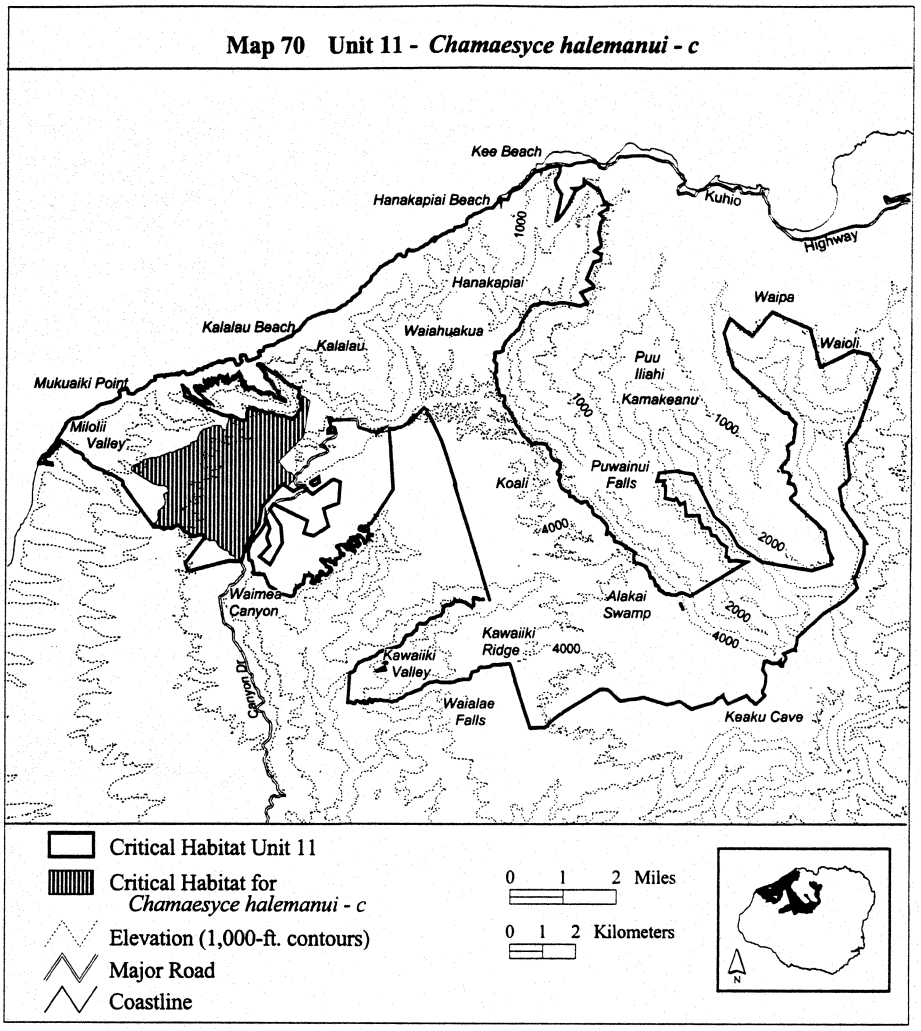


(lxx) Kauai 11—*Chamaesyce halemanui*—c (1,283 ha; 3,171 ac)

(A) Unit consists of the following 195 boundary points: Start at 430306, 2449349; 430289, 2449399; 430307, 2449482; 430312, 2449517; 430313, 2449532; 430320, 2449553; 430331, 2449565; 430346, 2449596; 430354, 2449622; 430355, 2449641; 430348, 2449666; 430376, 2449750; 430384, 2449766; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657,

2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432217, 2449712; 432259, 2449679; 432344, 2449744; 432419, 2449806; 432471, 2449904; 432504, 2449961; 432579, 2450036; 432551, 2450083; 432523, 2450130; 432523, 2450182; 432565, 2450262; 432523, 2450304; 432475, 2450313; 432452, 2450337; 432461, 2450375; 432480, 2450426; 432490, 2450478; 432501, 2450529; 432504, 2450523; 432515, 2450503; 432528, 2450468; 432550, 2450412; 432573, 2450385; 432591, 2450373; 432650, 2450343; 432692, 2450330; 432709, 2450317; 432733, 2450275; 432745, 2450272; 432752, 2450270; 432768, 2450266; 432797, 2450260; 432826, 2450224; 432630, 2449144; 431875, 2448395; 432139, 2448086; 432281, 2448051; 432381, 2447879; 432133, 2447631; 432001, 2447726; 431369, 2447027; 431298, 2446522; 430955, 2445963; 430827, 2445619; 430786, 2445492; 430766, 2445492; 430727, 2445433; 430705, 2445408; 430574, 2445414; 430574, 2445437; 430570, 2445519; 430534, 2445558; 430444, 2445594; 430409, 2445613; 430386, 2445672; 430350, 2445711; 430264, 2445727; 430174, 2445786; 430060, 2445860; 430029, 2445923; 429990, 2446009; 429904, 2446040; 429857, 2446017; 429790, 2446025; 429708, 2446076; 429602, 2446170; 429547, 2446209; 429441, 2446185; 429335, 2446142; 429226, 2446146; 429202, 2446185; 429182, 2446221; 429128, 2446264; 429026, 2446295; 428990, 2446326; 428967, 2446373; 428920, 2446424; 428842, 2446479; 428791, 2446491; 428744, 2446448; 428669, 2446393; 428622, 2446381; 428548, 2446393; 428532, 2446420; 428469, 2446389; 428414, 2446358; 428359, 2446389; 428293, 2446424; 428242, 2446424; 428164, 2446424; 428093, 2446436; 428069, 2446495; 428101, 2446534; 428144, 2446534; 428218, 2446636; 428230, 2446734; 428226, 2446804; 428234, 2446918; 428312, 2446965; 428450, 2447079; 428450, 2447153; 428450, 2447216; 428422, 2447306; 428383, 2447376; 428407, 2447404; 428528, 2447466; 428548, 2447479; 428507, 2447592; 428472, 2447639; 428405, 2447665; 428282, 2447665; 428095, 2447725; 427746, 2447921; 427530, 2448058; 427416, 2448140; 427416, 2448207; 427479, 2448257; 427571, 2448308; 427733, 2448372; 427790, 2448451; 427901, 2448451; 427977, 2448483; 428009, 2448498; 428069, 2448498; 428158, 2448508; 428240, 2448527; 428266, 2448530; 428351, 2448581; 428421, 2448590; 428564, 2448666; 428694, 2448666; 428830, 2448749; 428948, 2448780; 429037, 2448822; 429113, 2448860; 429170, 2448891; 429208, 2448873; 429198, 2448944; 429399, 2449015; 429429, 2449039; 429423, 2449098; 429476, 2449205; 429494, 2449275; 429571, 2449358; 429683, 2449388; 429801, 2449435; 429819, 2449400; 429867, 2449476; 429991, 2449500; 430109, 2449500; 430156, 2449376; 430233, 2449358; 430287, 2449352; return to starting point.

(B) NOTE: Map 70 follows:

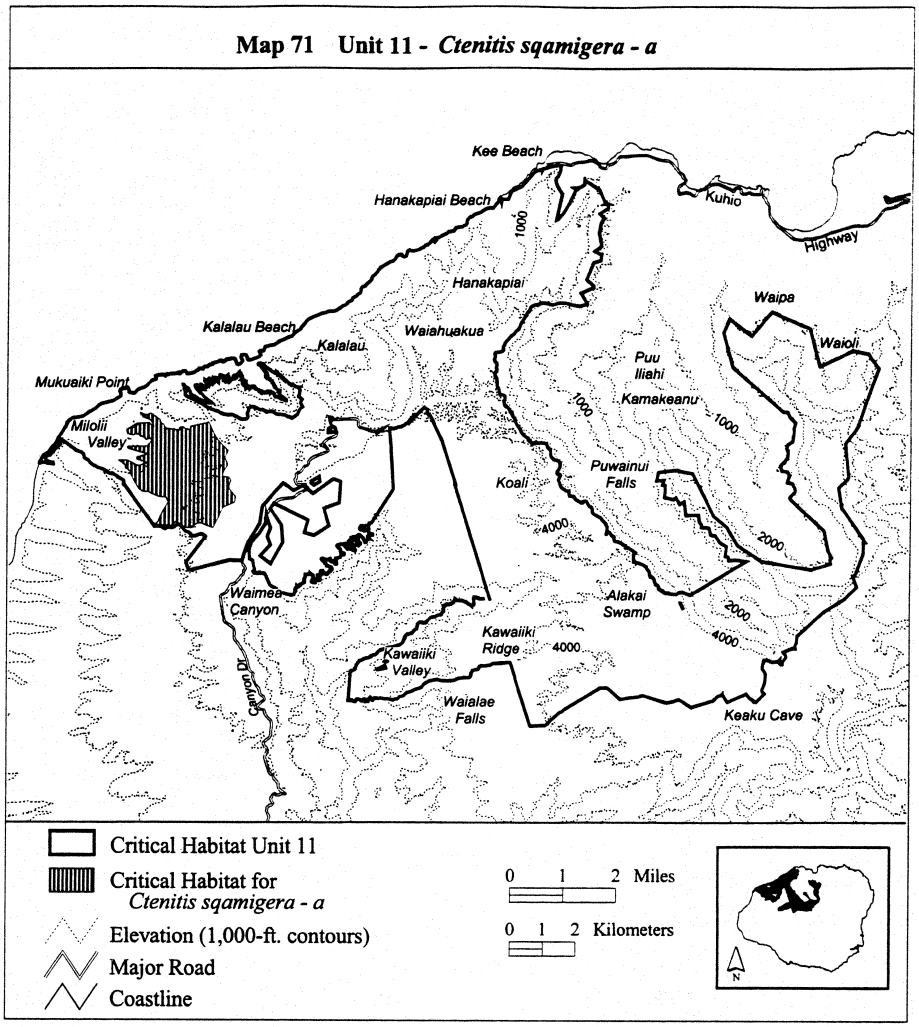


(lxxi) Kauai 11—*Ctenitis squamigera*—a (735 ha; 1,817 ac)

(A) Unit consists of the following 95 boundary points: Start at 429915, 2449188; 429965, 2449062; 430201, 2448831; 430327, 2448700; 430306, 2448648; 430232, 2448495; 430290, 2448327; 430311, 2448243; 430232, 2448128; 430180, 2448034; 430159, 2447929; 430359, 2447892; 430411, 2447803; 430380, 2447729; 430348, 2447629; 430353, 2447566; 430558, 2447320; 430527, 2447152; 430190, 2446989; 430070, 2446732; 429881, 2446390; 429644, 2446469; 429497, 2446543; 429366, 2446511; 429303, 2446427; 429257, 2446389; 429094, 2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428656, 2446475; 428599, 2446448; 428476, 2446463; 428396, 2446447; 428285, 2446458; 428164, 2446469; 428132, 2446490; 428200, 2446564; 428331, 2446837; 428510, 2447146; 428442, 2447304; 428247, 2447309; 428011, 2447409; 427922, 2447451; 427738, 2447467; 427607, 2447561; 427533, 2447692; 427386, 2447950; 427387, 2447965; 427327, 2448019; 427380, 2448042; 427201, 2448195; 427217, 2448242; 427012, 2448409; 427258,

2448415; 427607, 2448226; 427862, 2448339; 427544, 2448453; 427563, 2448503; 427874, 2448588; 427289, 2448764; 427276, 2448805; 427868, 2448846; 428032, 2449016; 427928, 2449075; 427852, 2449025; 427777, 2449101; 427632, 2449142; 427604, 2449204; 427487, 2449201; 427456, 2449157; 427267, 2449217; 427242, 2449308; 427289, 2449362; 427563, 2449519; 427915, 2449547; 428063, 2449431; 427988, 2449619; 427758, 2449701; 427651, 2449852; 427830, 2449773; 427975, 2449824; 428258, 2449632; 428274, 2449547; 428356, 2449494; 428447, 2449371; 428840, 2449311; 428840, 2449396; 428957, 2449415; 428994, 2449368; 429164, 2449330; 429174, 2449437; 429740, 2449559; 429916, 2449188; return to starting point.

(B) NOTE: Map 71 follows:

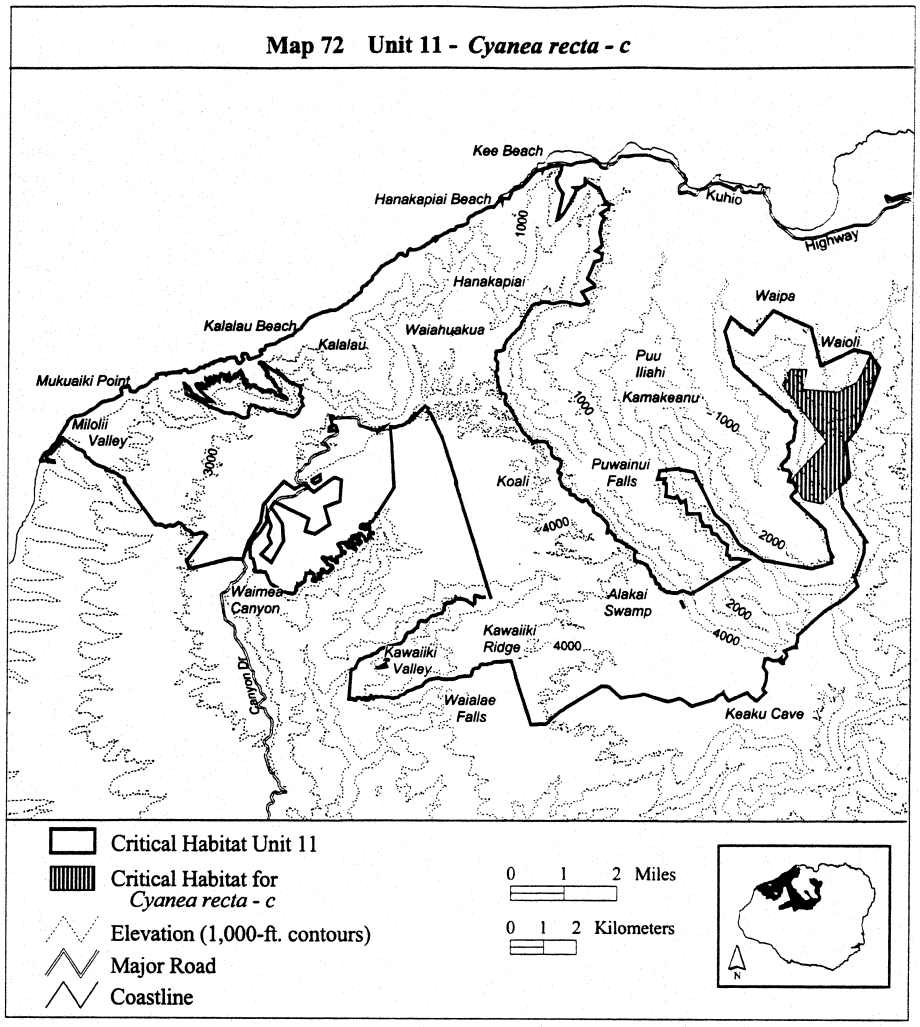


(lxxii) Kauai 11—*Cyanea recta*—c (553 ha; 1,367 ac)

(A) Unit consists of the following 21 boundary points: Start at 449858,

2451521; 450073, 2451227; 449432, 2449395; 449073, 2448923; 449139, 2447988; 449020, 2447860; 448992, 2447717; 448881, 2447609; 448339, 2447084; 447861, 2447198; 447734, 2447260; 447428, 2447829; 448470, 2448968; 447125, 2450677; 447365, 2451166; 447874, 2451166; 447753, 2450562; 448823, 2450472; 449385, 2450762; 449623, 2451217; 449789, 2451615; return to starting point.

(B) NOTE: Map 72 follows:

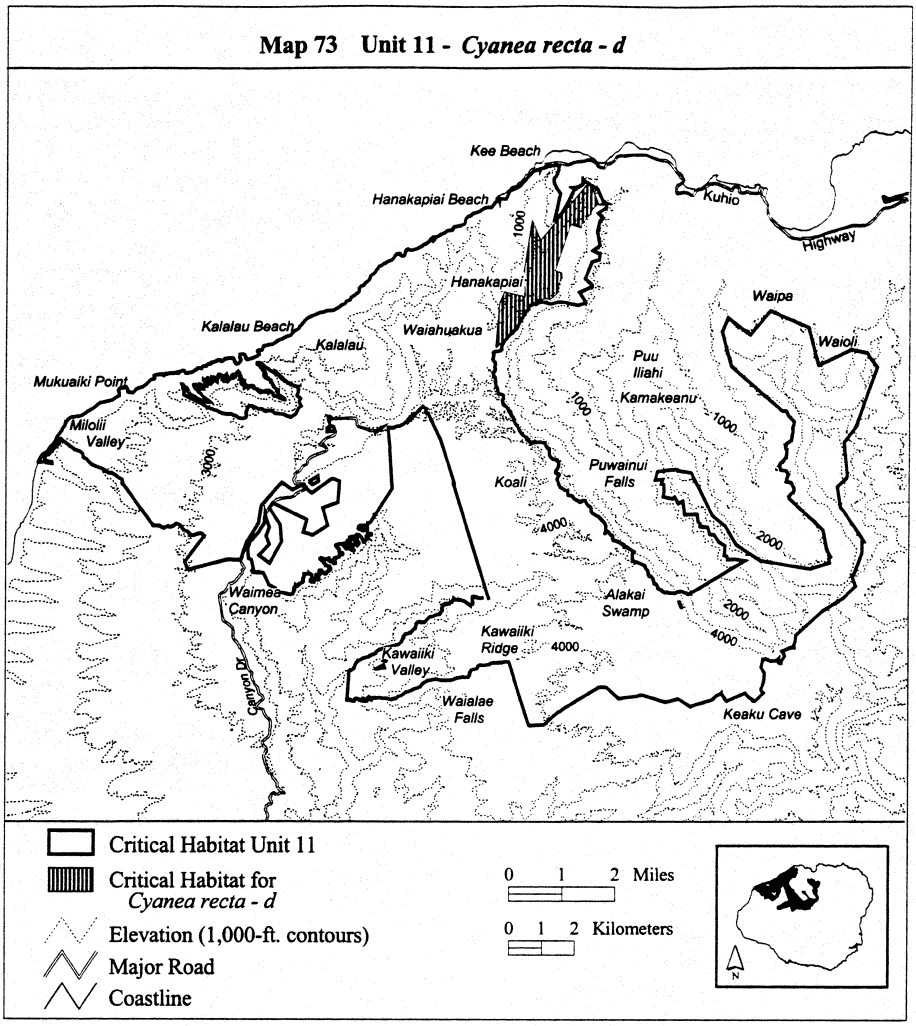


(lxxiii) Kauai 11—*Cyanea recta*—d (397 ha; 981 ac)

(A) Unit consists of the following 95 boundary points: Start at 439347, 2452789; 439324, 2452794; 439098, 2452402; 438924, 2452225; 438576, 2451872; 438558, 2451853; 438541, 2451836; 438516, 2451811; 438493, 2451829; 438494, 2451843; 438496, 2451871; 438498, 2451889; 438597, 2453123; 438761, 2453483; 439385, 2453352; 439352, 2454138; 439582, 2455646; 439652, 2455480; 439844, 2455023; 441271, 2456733; 441363,

2456677; 441568, 2456107; 441546, 2456104; 441531, 2456098; 441511, 2456077; 441498, 2456050; 441482, 2456033; 441462, 2456017; 441414, 2455967; 441393, 2455942; 441365, 2455913; 441354, 2455880; 441351, 2455829; 441342, 2455800; 441333, 2455787; 441292, 2455760; 441264, 2455739; 441233, 2455700; 441199, 2455663; 441185, 2455633; 441176, 2455603; 441164, 2455584; 441148, 2455564; 441094, 2455523; 441060, 2455488; 441059, 2455449; 441071, 2455421; 441074, 2455406; 441073, 2455402; 440747, 2455513; 440294, 2454127; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; 439355, 2452801; return to starting point.

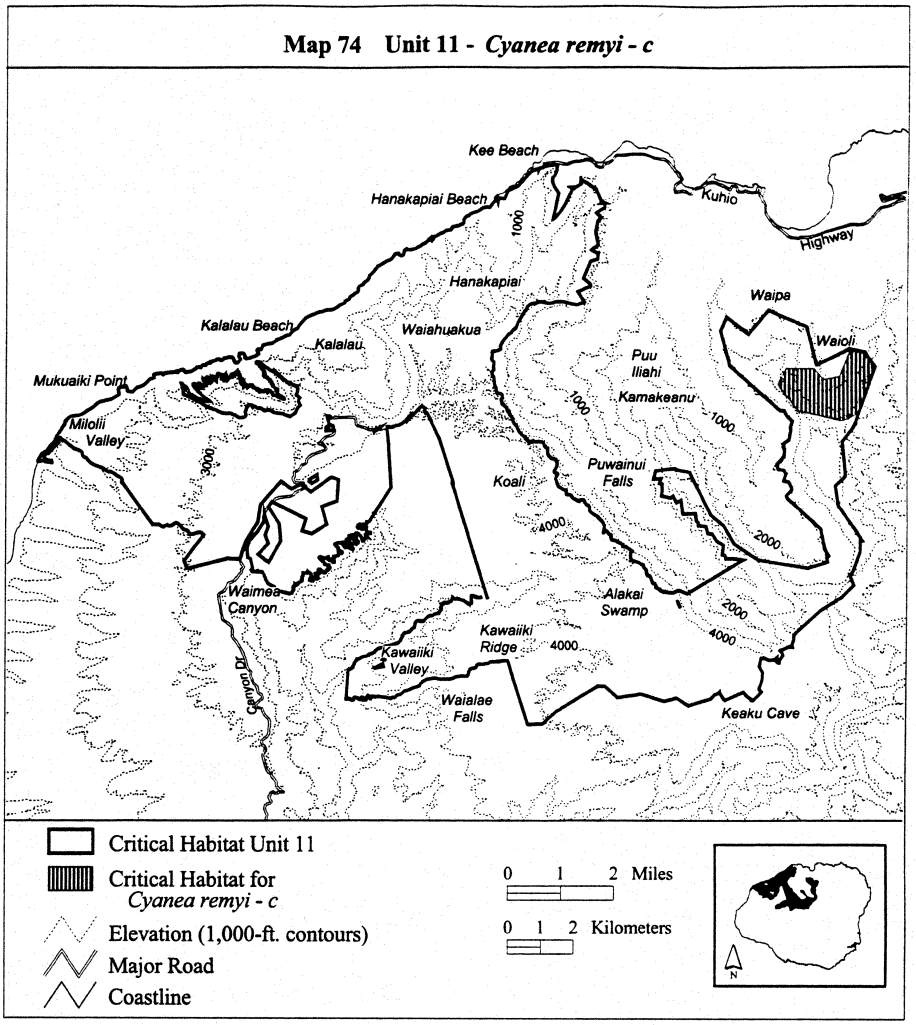
(B) NOTE: Map 73 follows:



(lxxiv) Kauai 11—*Cyanea remyi*—c (365 ha; 901 ac)

(A) Unit consists of the following 15 boundary points: Start at 448511, 2450831; 449003, 2450929; 449335, 2451756; 449751, 2451666; 449858, 2451521; 450073, 2451227; 449580, 2449817; 449301, 2449658; 449293, 2449649; 449066, 2449578; 448089, 2449815; 447754, 2449877; 447125, 2450677; 447365, 2451166; 448229, 2451166; return to starting point.

(B) NOTE: Map 74 follows:

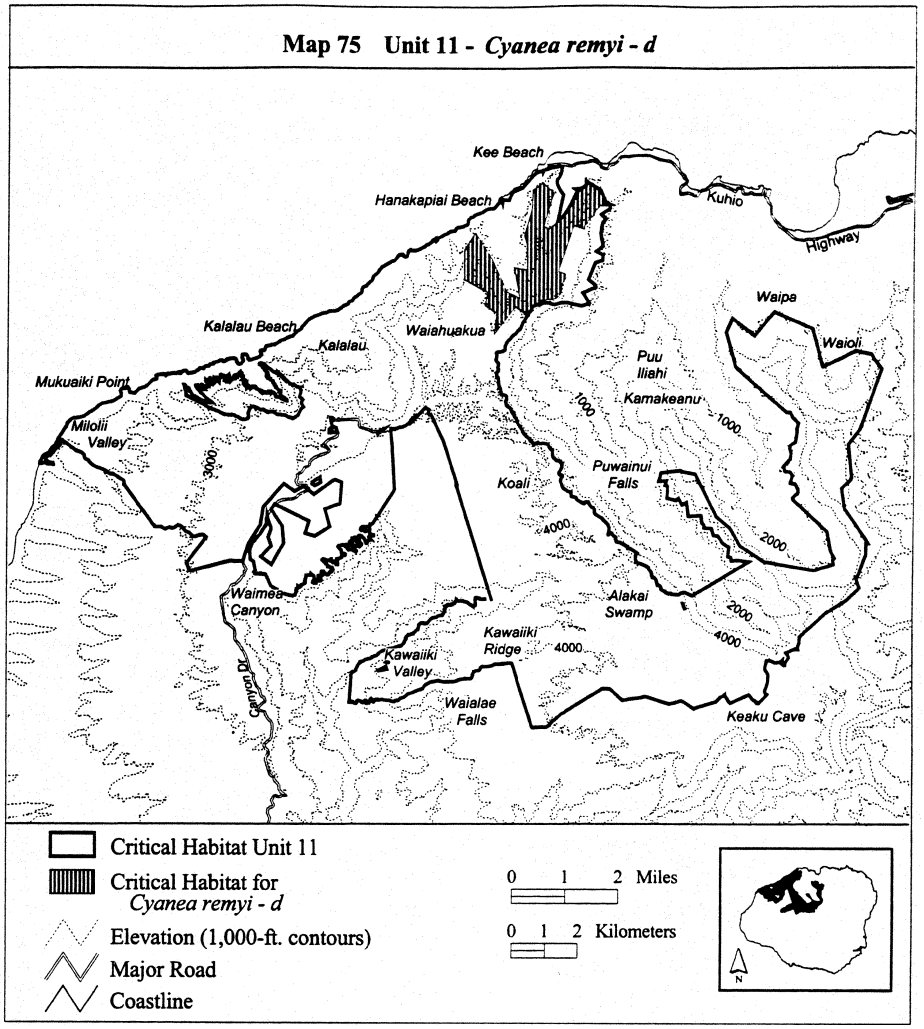


(lxxv) Kauai 11—*Cyanea remyi*—d (663 ha; 1,638 ac)

(A) Unit consists of the following 105 boundary points: Start at 439352, 2452796; 439259, 2452867; 439254, 2452860; 438991, 2453057; 438335, 2452205; 438433, 2452860; 438072, 2453090; 438138, 2453483; 437449, 2453877; 437449, 2454762; 437777, 2455286; 438302, 2454467; 438728, 2453516; 439122, 2453319; 438958, 2454237; 439352, 2454171; 439352, 2454892; 439253, 2455220; 439483, 2456007; 439516, 2456564; 439800, 2456784; 439811, 2456793; 440139, 2456498; 439844, 2455482; 440008, 2455417; 440468, 2455777; 440829, 2456531; 441205, 2456774; 441506, 2456588; 441691, 2456118; 441663, 2456114; 441635, 2456115; 441546, 2456104; 441531, 2456098; 441511, 2456077; 441498, 2456050; 441482, 2456033; 441462, 2456017; 441414, 2455967; 441393, 2455942; 441365, 2455913; 441354, 2455880; 441351, 2455829; 441342, 2455800; 441333, 2455787; 441292, 2455760; 441264, 2455739; 441233, 2455700; 441199, 2455663; 441185, 2455633; 441176, 2455603; 441164, 2455584; 441148, 2455564; 441094, 2455523; 441060, 2455488; 441059,

2455449; 441071, 2455421; 441074, 2455406; 441073, 2455402; 440747, 2455513; 440294, 2454127; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; 439355, 2452801; return to starting point.

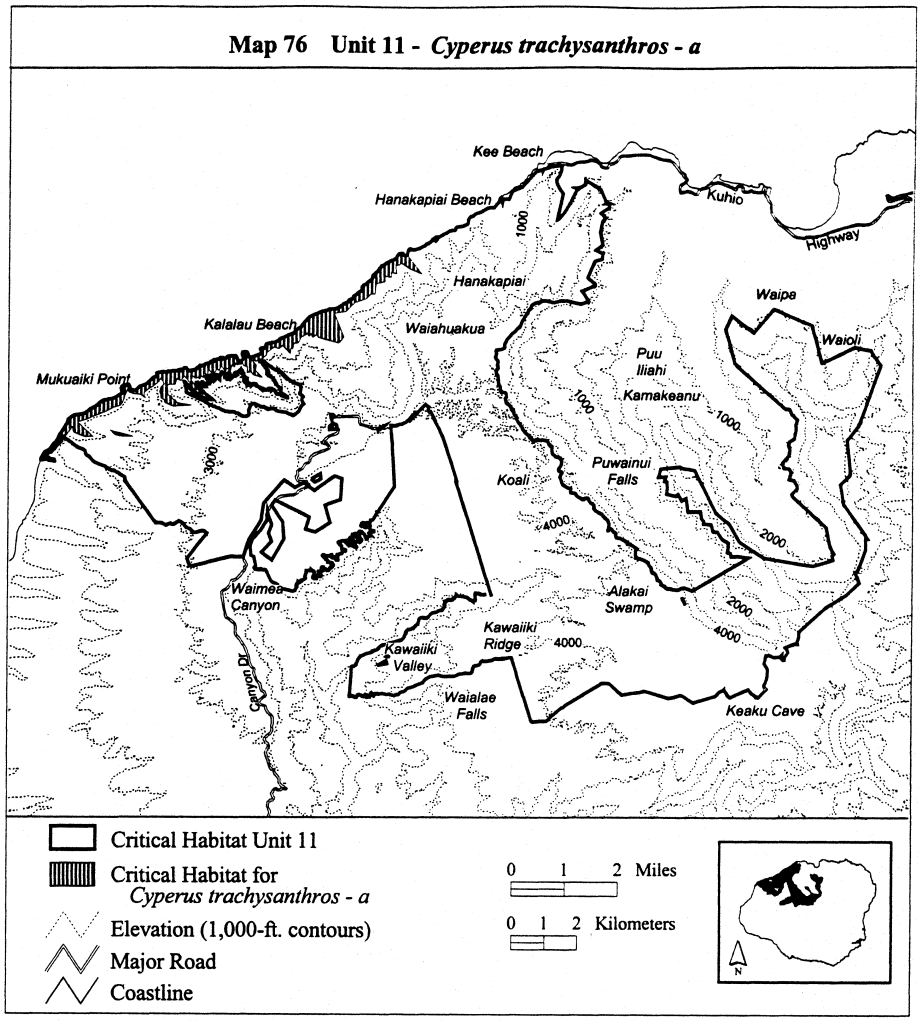
(B) NOTE: Map 75 follows:



(lxxvi) Kauai 11—*Cyperus trachysanthos*—a (434 ha; 1,071 ac)

(A) Unit consists of the following 243 boundary points: coastline; 436143, 2454005; 435790, 2454155; 435524, 2454345; 435470, 2454260; 435347, 2454246; 435388, 2454013; 435219, 2454036; 435223, 2453904; 435026, 2453931; 435040, 2453758; 434757, 2453703; 434734, 2453379; 434601, 2453383; 434455, 2453232; 434121, 2453118; 433837, 2452844; 433499, 2452785; 433778, 2452049; 433636, 2451866; 433009, 2452049; 432973, 2452150; 432840, 2452050; 432813, 2452159; 432735, 2452082; 432689, 2452182; 432483, 2452063; 432424, 2451917; 432378, 2451881; 432273, 2451876; 432232, 2451707; 432173, 2451699; 432163, 2451570; 431916, 2451812; 431811, 2451702; 431683, 2451766; 431518, 2451629; 431445, 2451593; 431440, 2451515; 431326, 2451415; 431115, 2451323; 430997, 2451374; 431134, 2451200; 431102, 2451054; 431303, 2450848; 431051, 2450912; 430942, 2451017; 430859, 2450994; 430850, 2451168; 430745, 2451186; 430713, 2451255; 430544, 2451223; 430489, 2451269; 430475, 2451150; 430379, 2451209; 430352, 2451045; 430237, 2451109; 430201, 2451040; 430141, 2451068; 430068, 2451200; 429995, 2451049; 429908, 2451100; 429899, 2451013; 429862, 2450990; 429807, 2451031; 429798, 2450944; 429670, 2451086; 429647, 2450908; 429519, 2450985; 429524, 2450839; 429441, 2450876; 429428, 2450775; 429368, 2450839; 429295, 2450803; 429194, 2450889; 429176, 2450832; 429167, 2450752; 429341, 2450469; 429501, 2450314; 429277, 2450419; 429121, 2450684; 429066, 2450711; 429016, 2450803; 428947, 2450867; 428852, 2450725; 428718, 2450784; 428677, 2450629; 428494, 2450620; 428439, 2450574; 428467, 2450286; 428563, 2450254; 428577, 2450181; 428696, 2450131; 428718, 2450058; 429126, 2449985; 428627, 2449953; 428357, 2450071; 428348, 2450154; 428247, 2450209; 428256, 2450282; 428202, 2450373; 428234, 2450515; 428334, 2450643; 428229, 2450807; 428192, 2450711; 428032, 2450579; 427849, 2450474; 427735, 2450364; 427730, 2450273; 427767, 2450222; 427607, 2450314; 427424, 2450332; 427278, 2450382; 427232, 2450464; 427187, 2450350; 427044, 2450030; 426976, 2449971; 426802, 2449921; 426583, 2449806; 426111, 2449624; 426084, 2449592; 425722, 2449473; 425854, 2449326; 426171, 2449034; 425960, 2449029; 425741, 2449098; 425576, 2449176; 425548, 2449331; 425490, 2449258; 425402, 2449098; 425340, 2449032; 425322, 2448983; 425322, 2448984; 425310, 2448993; 425272, 2449039; 425267, 2449033; 425258, 2449022; 425253, 2449013; 425252, 2449003; 425253, 2448996; 425251, 2448992; 425242, 2448981; 425239, 2448972; 425231, 2448956; 425224, 2448934; 425222, 2448911; 425223, 2448900; 425224, 2448891; 425223, 2448883; 425218, 2448877; 425212, 2448878; 425208, 2448876; 425201, 2448872; 425192, 2448867; 425181, 2448859; 425172, 2448853; 425162, 2448844; 425158, 2448833; 425157, 2448818; 425153, 2448809; 425148, 2448807; 425136, 2448801; 425124, 2448795; 425120, 2448790; 425112, 2448785; 425100, 2448774; 425094, 2448768; 425081, 2448757; 425070, 2448745; 425062, 2448734; 425053, 2448723; 425044, 2448711; 425043, 2448695; 425029, 2448684; 425024, 2448675; 425017, 2448667; 425011, 2448659; 424999, 2448650; 424991, 2448642; 424980, 2448628; 424973, 2448615; 424956, 2448592; 424936, 2448587; 424929, 2448581; 424924, 2448574; 424917, 2448569; 424910, 2448561; 424906, 2448551; 424898, 2448552; 424886, 2448554; 424877, 2448554; 424871, 2448552; 424863, 2448548; 424849, 2448543; 424840, 2448538; 424824, 2448534; 424811, 2448524; 424803, 2448521; 424795, 2448511; 424785, 2448498; 424778, 2448484; 424774, 2448461; 424778, 2448445; 424791, 2448421; 424819, 2448402; 424832, 2448389; 424848, 2448376; 424871, 2448368; 424900, 2448356; 424929, 2448346; 424953, 2448337; 424973, 2448335; 424990, 2448333; 424997, 2448333; 425003, 2448327; 425006, 2448318; 425009, 2448308; 425011, 2448298; 425013, 2448289; 425015, 2448280; 425010, 2448272; 424998, 2448277; 424991, 2448284; 424983, 2448288; 424971, 2448291; 424957, 2448291; 424948, 2448290; 424933, 2448287; 424927, 2448284; 424915, 2448289; 424892, 2448299; 424874, 2448301; 424841, 2448311; 424823, 2448330; 424803, 2448337; 424777, 2448336; 424735, 2448339; 424711, 2448334; 424677, 2448333; 424664, 2448328; 424648, 2448323; 424633, 2448323; 424603, 2448328; 435703, 2454582; coastline.

(B) NOTE: Map 76 follows:

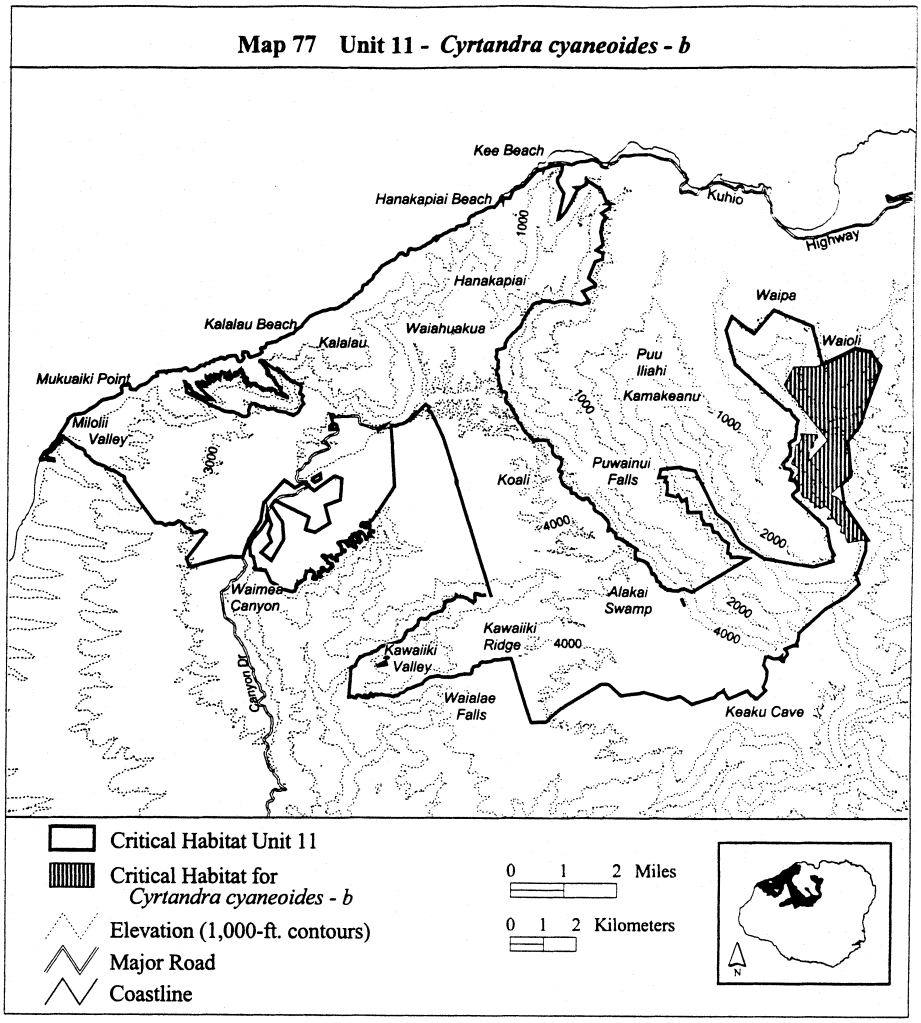


(lxxvii) Kauai 11—*Cyrtandra cyaneoides*—b (848 ha; 2,095 ac)

(A) Unit consists of the following 75 boundary points: Start at 449861, 2451529; 450084, 2451212; 449426, 2449387; 449074, 2448967; 449179, 2447924; 448876, 2447641; 448557, 2447345; 448557, 2447312; 448681, 2447286; 448798, 2447208; 448908, 2447104; 448960, 2446994; 448980, 2446982; 449012, 2446961; 449637, 2446073; 449643, 2446064; 449701, 2445980; 449643, 2445970; 449090, 2445877; 449051, 2445968; 449012, 2446098; 448993, 2446163; 448869, 2446202; 448902, 2446403; 448798, 2446409; 448720, 2446481; 448694, 2446585; 448629, 2446617; 448460, 2446578; 448603, 2446812; 448408, 2446975; 448219, 2446884; 448174, 2446975; 448076, 2446916; 448076, 2447072; 447927, 2447098; 447912, 2447199; 447715, 2447234; 447448, 2447822; 447569, 2447951; 447569, 2448073; 447563, 2448144; 447368, 2448248; 447394, 2448358; 447465, 2448443; 447459, 2448592; 447472, 2448677; 447491, 2448806; 447615, 2448891; 447680, 2449047; 447621, 2449157; 448135, 2449124; 448161, 2449040; 448102, 2449001; 448089, 2448962; 448044,

2448930; 448044, 2448891; 448037, 2448845; 448037, 2448793; 448011, 2448754; 447992, 2448715; 447946, 2448722; 447914, 2448618; 447901, 2448514; 447888, 2448371; 447903, 2448341; 448447, 2448963; 447139, 2450654; 447435, 2451197; 448110, 2451196; 448295, 2451280; 448295, 2451280; 448306, 2451285; 449344, 2451755; 449772, 2451656; return to starting point.

(B) NOTE: Map 77 follows:

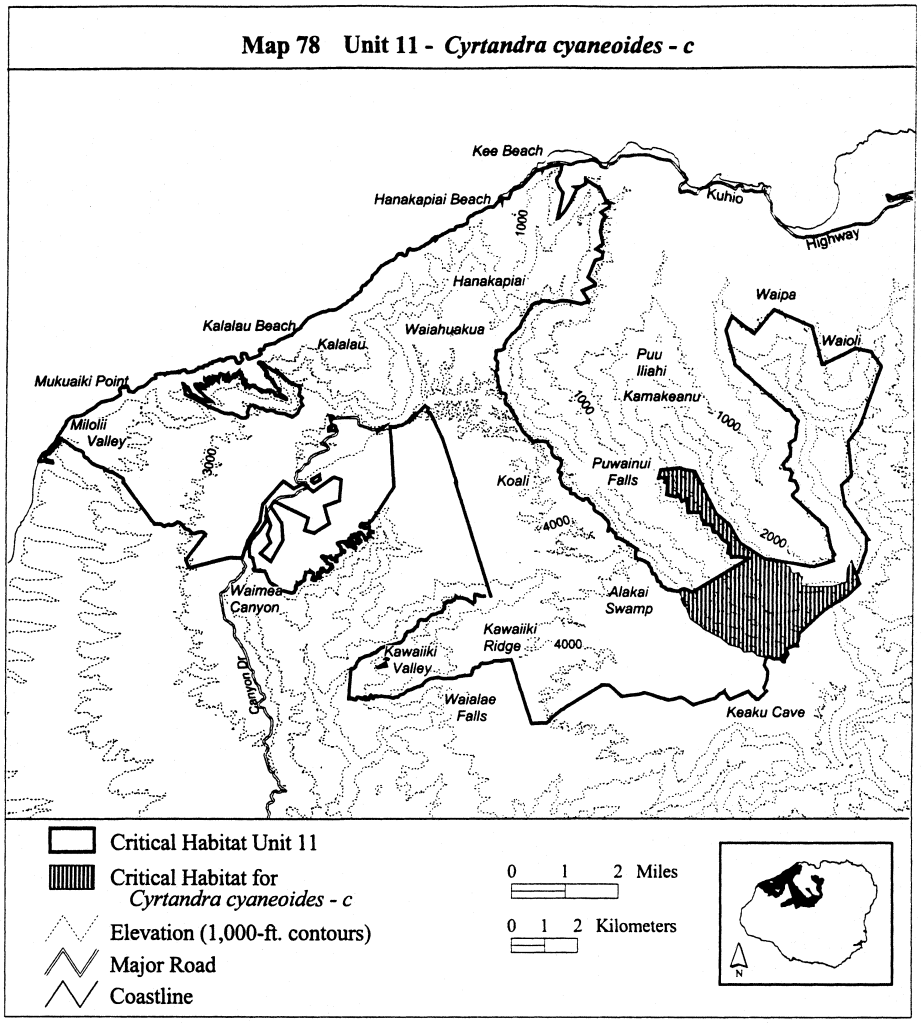


(lxxviii) Kauai 11—*Cyrtandra cyaneoides*—c (1,118 ha; 2,763 ac)

(A) Unit consists of the following 94 boundary points: Start at 449346, 2444938; 449459, 2444635; 449081, 2444273; 448798, 2444099; 448808, 2444095; 448479, 2443895; 448470, 2443888; 448470, 2443889; 448458, 2443882; 447645, 2443146; 447630, 2442948; 447577, 2442842; 447599, 2442773; 447508, 2442781; 447227, 2442660; 447295, 2442584; 447303, 2442515; 447197, 2442356; 447197, 2442303; 447151, 2442303; 447113,

2442348; 447128, 2442447; 447060, 2442386; 446885, 2442379; 446771, 2442439; 446645, 2442430; 446392, 2442475; 446233, 2442597; 445958, 2442590; 445854, 2442727; 445527, 2442820; 445264, 2443031; 445101, 2443109; 444763, 2443280; 444640, 2443388; 444336, 2443592; 444214, 2443918; 444073, 2444237; 443984, 2444419; 444071, 2444486; 444162, 2444498; 444398, 2444392; 446102, 2445409; 445791, 2445455; 445563, 2445432; 445555, 2445554; 445464, 2445569; 445495, 2445850; 445297, 2445979; 445160, 2446184; 445023, 2446199; 444955, 2446412; 444727, 2446435; 444727, 2446518; 444674, 2446572; 444636, 2446799; 444256, 2446777; 444203, 2447187; 444066, 2447118; 443960, 2447308; 443876, 2447248; 443595, 2447316; 443618, 2447460; 443610, 2447688; 443542, 2447696; 443580, 2447840; 443352, 2447817; 443420, 2448068; 444020, 2448144; 444089, 2448098; 444454, 2448029; 445092, 2446769; 445495, 2446450; 445821, 2445880; 446566, 2445401; 446809, 2445363; 446811, 2445362; 447161, 2445302; 447195, 2445249; 447262, 2445171; 447352, 2445171; 447396, 2444981; 447463, 2444948; 447564, 2444981; 447631, 2444981; 447665, 2444858; 447754, 2444858; 447676, 2444668; 447682, 2444602; 448036, 2444548; 448629, 2444567; 449056, 2444698; 449077, 2445069; 449193, 2445350; return to starting point.

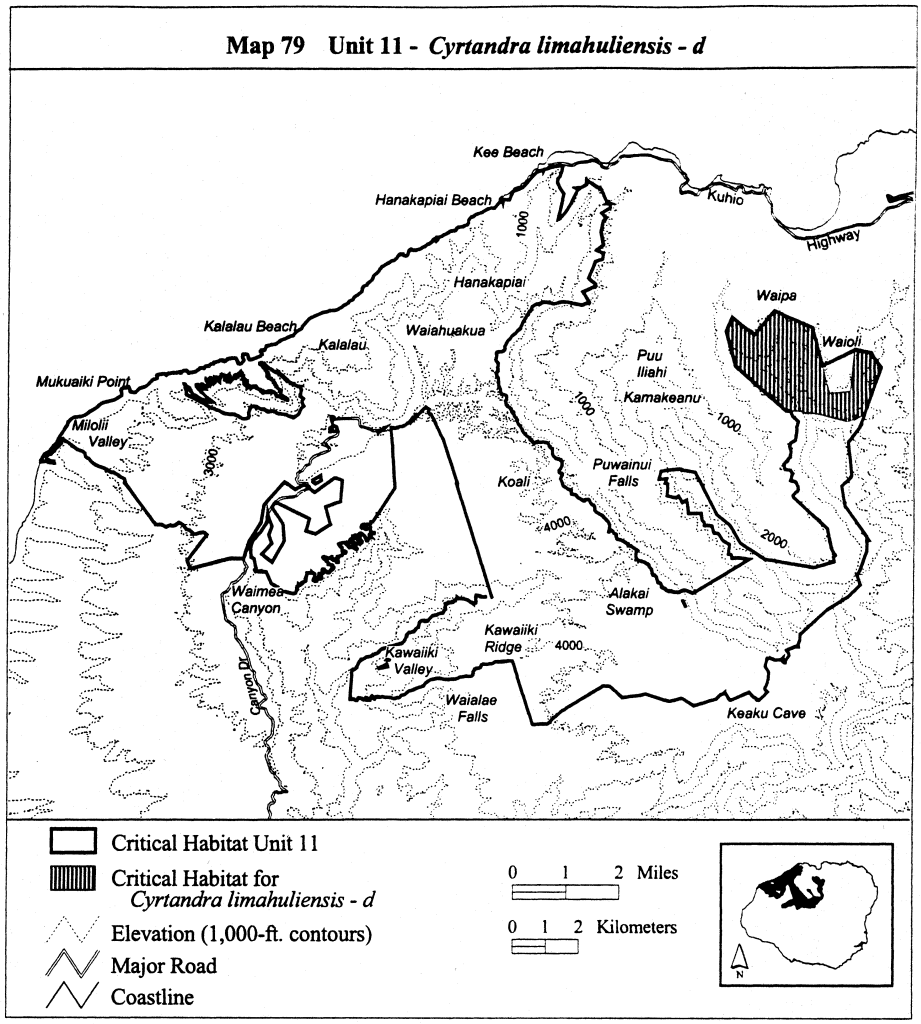
(B) NOTE: Map 78 follows:



(lxxix) Kauai 11—*Cyrtandra limahuliensis*—d (816 ha; 2,016 ac)

(A) Unit consists of the following 33 boundary points: Start at 448313, 2451213; 448519, 2450440; 448878, 2450478; 449147, 2450506; 449269, 2451755; 449288, 2451766; 449751, 2451666; 449858, 2451521; 450073, 2451227; 449575, 2449805; 449289, 2449638; 449295, 2449676; 449206, 2449638; 449066, 2449578; 448845, 2449631; 448232, 2449780; 447892, 2449847; 447888, 2449814; 447596, 2449889; 447198, 2449897; 445666, 2451248; 445376, 2452300; 445547, 2452722; 446226, 2452194; 446834, 2452923; 446988, 2452850; 447991, 2452420; 448004, 2452370; 448015, 2452365; 448045, 2452217; 448294, 2451285; 448295, 2451280; 448295, 2451280; return to starting point.

(B) NOTE: Map 79 follows:

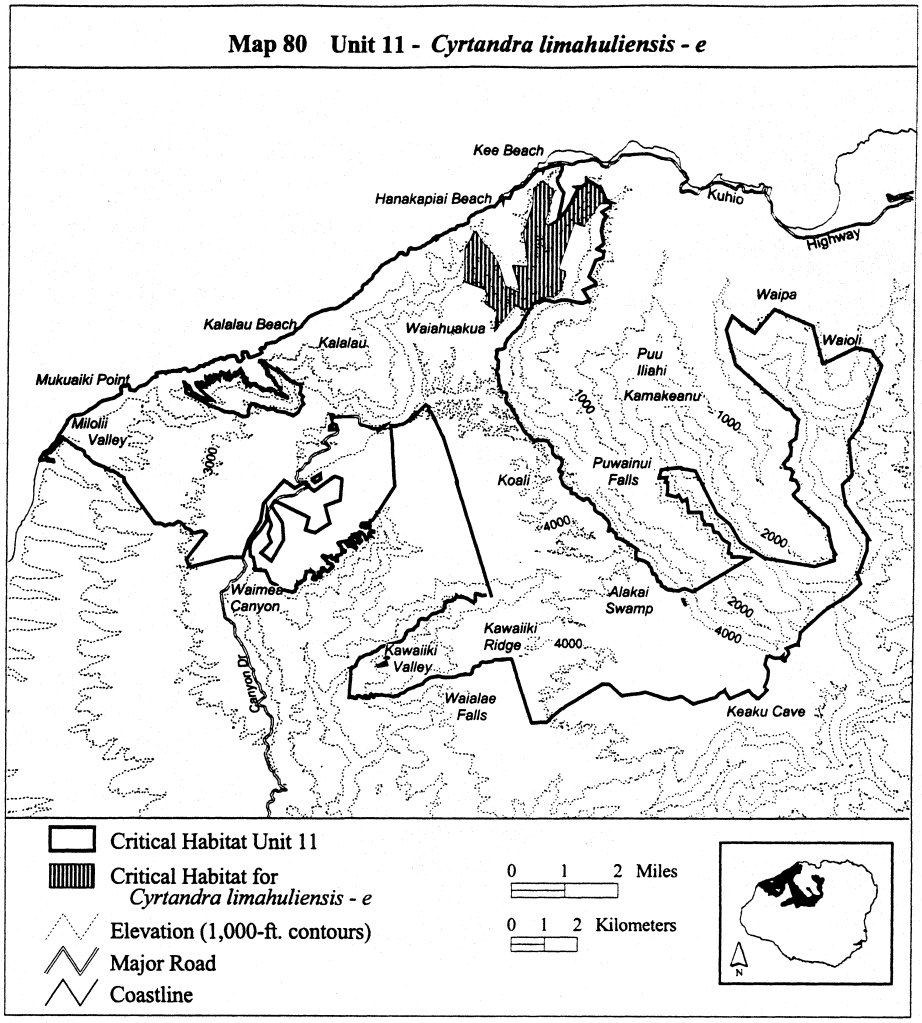


(lxxx) Kauai 11—*Cyrtandra limahuliensis*—e (693 ha; 1,712 ac)

(A) Unit consists of the following 132 boundary points: Start at 439377, 2452849; 439385, 2452892; 439375, 2452895; 439303, 2452917; 439254, 2452860; 439091, 2452982; 438975, 2453018; 438381, 2452259; 438382, 2452266; 438335, 2452205; 438433, 2452860; 438072, 2453090; 438113, 2453336; 438084, 2453513; 437456, 2453744; 437460, 2453870; 437449, 2453877; 437449, 2454762; 437600, 2455005; 437720, 2455261; 437744, 2455234; 437777, 2455286; 437998, 2454941; 438150, 2454766; 438447, 2454337; 438660, 2453669; 438688, 2453607; 439106, 2453412; 439045, 2453751; 438876, 2454238; 438959, 2454233; 438958, 2454237; 439001, 2454230; 439352, 2454206; 439352, 2454221; 439352, 2454326; 439206, 2455228; 439438, 2455920; 439489, 2456098; 439516, 2456564; 439685, 2456695; 439735, 2456777; 439762, 2456755; 439800, 2456784; 439811, 2456793; 440139, 2456498; 440126, 2456452; 440131, 2456448; 440083, 2456303; 439860, 2455537; 439966, 2455458; 440428, 2455755; 440674, 2456209; 440829, 2456531; 441205, 2456774; 441566,

2456551; 441751, 2456130; 441694, 2456118; 441663, 2456114; 441635, 2456115; 441546, 2456104; 441531, 2456098; 441511, 2456077; 441498, 2456050; 441482, 2456033; 441462, 2456017; 441414, 2455967; 441393, 2455942; 441365, 2455913; 441354, 2455880; 441351, 2455829; 441342, 2455800; 441333, 2455787; 441292, 2455760; 441264, 2455739; 441233, 2455700; 441199, 2455663; 441185, 2455633; 441176, 2455603; 441164, 2455584; 441148, 2455564; 441094, 2455523; 441060, 2455488; 441059, 2455449; 441071, 2455421; 441074, 2455406; 441073, 2455402; 440747, 2455513; 440294, 2454127; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; return to starting point.

(B) NOTE: Map 80 follows:

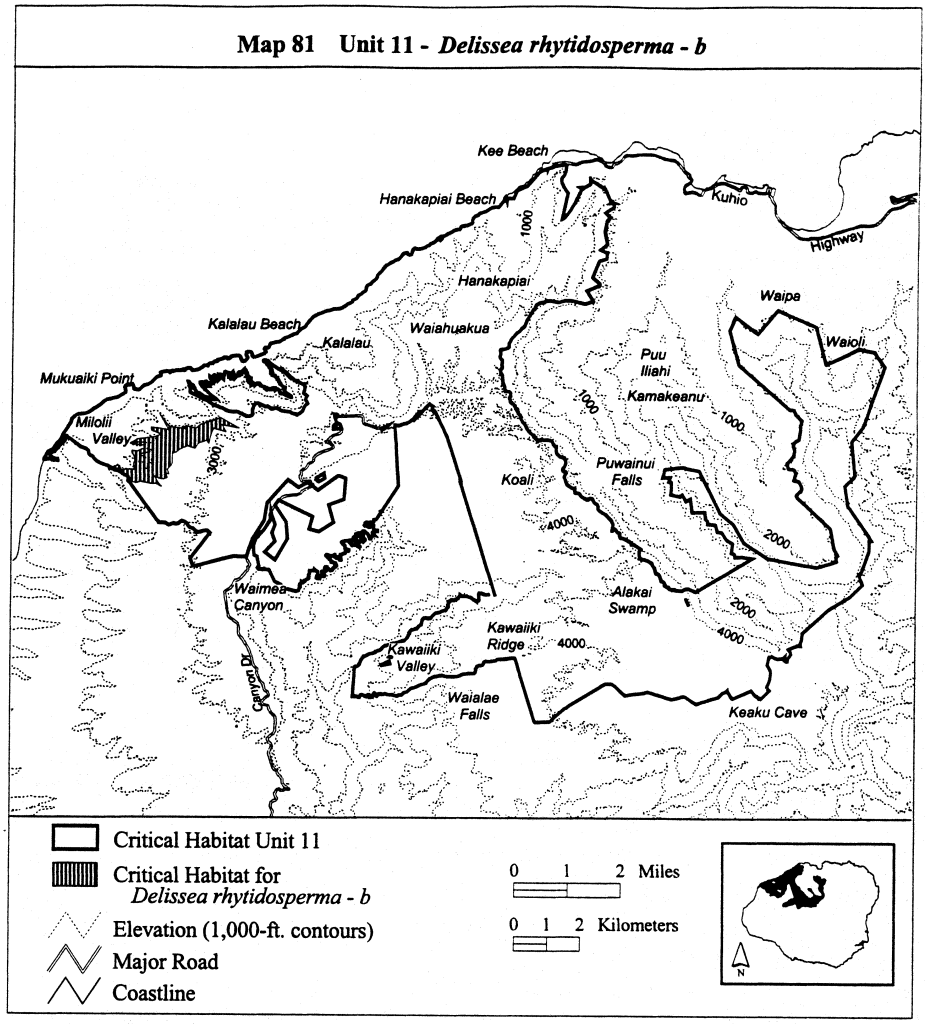


(lxxxi) Kauai 11—*Delissea rhytidosperma*—b (258 ha; 638 ac)

(A) Unit consists of the following 68 boundary points: Start at 427512, 2447661; 427401, 2447626; 427168, 2447697; 427158, 2447803; 427006, 2447889; 426818, 2448021; 426691, 2448046; 426610, 2448067; 426798, 2448132; 426899, 2448153; 426955, 2448021; 427229, 2448036; 427289, 2448036; 427386, 2448046; 427325, 2448122; 427325, 2448229; 427355, 2448249; 427355, 2448360; 427300, 2448487; 427259, 2448528; 427269, 2448599; 427446, 2448578; 427558, 2448644; 427624, 2448639; 427634, 2448766; 427502, 2448766; 427208, 2448806; 427418, 2448938; 427406, 2448942; 428005, 2449021; 428147, 2449092; 427847, 2449218; 427847, 2449312; 428375, 2449234; 428131, 2449675; 428399, 2449328; 428880, 2449265; 428888, 2449352; 429187, 2449281; 429353, 2449407; 429952, 2449596; 430487, 2449296; 429983, 2449391; 430109, 2449178; 429723, 2449281; 429636, 2449029; 429597, 2448816; 429534, 2448918; 429282, 2448824; 429179, 2448666; 428958, 2448753; 428730, 2448635; 428596, 2448556; 428509, 2448525; 428496, 2448530; 428491,

2448254; 428475, 2448168; 428338, 2448036; 428389, 2447899; 428298, 2447925; 428338, 2447788; 428237, 2447742; 428115, 2447757; 427948, 2447828; 428060, 2447646; 428161, 2447535; 427999, 2447606; 427867, 2447600; return to starting point.

(B) NOTE: Map 81 follows:

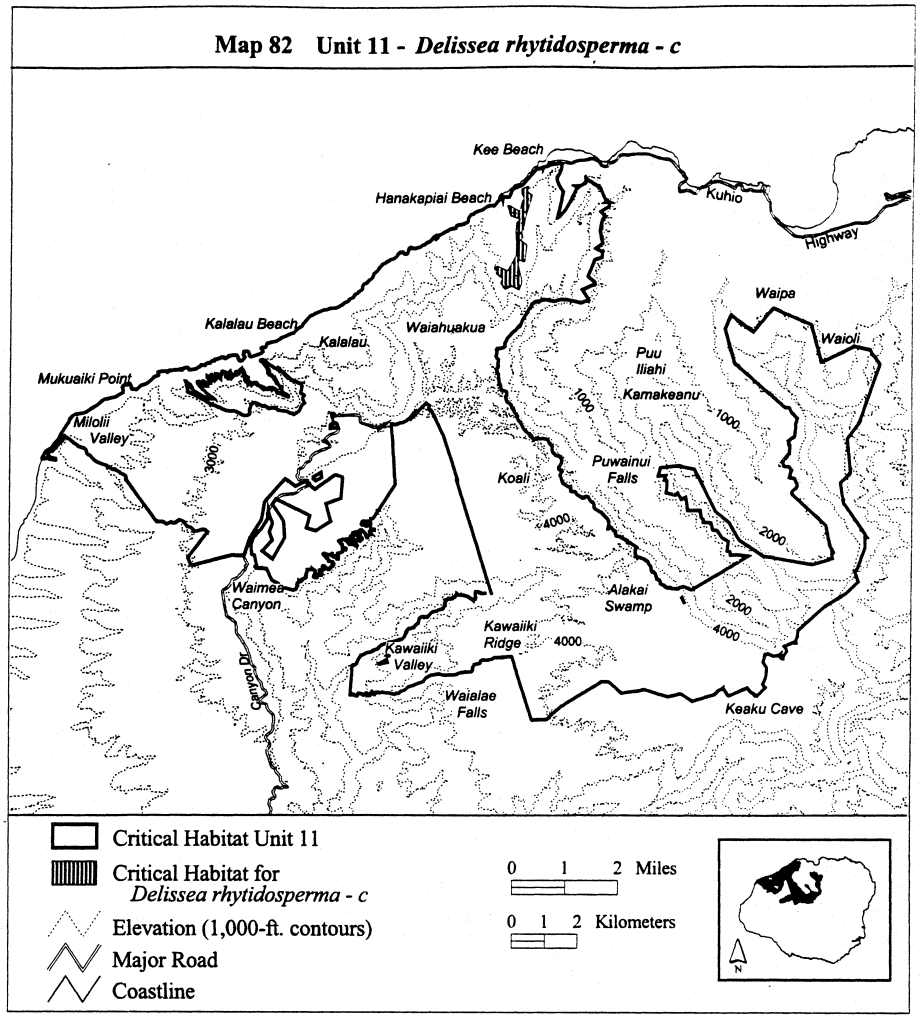


(lxxxii) Kauai 11—*Delissea rhytidosperma*—c (103 ha; 254 ac)

(A) Unit consists of the following 39 boundary points: Start at 438364, 2454097; 438437, 2454207; 438755, 2454060; 439018, 2454506; 439006, 2454940; 438994, 2455239; 439012, 2455501; 439122, 2455605; 438829, 2455709; 438743, 2456014; 438786, 2456026; 439085, 2455849; 439128, 2455935; 439177, 2456124; 439244, 2456234; 439165, 2456393; 439165, 2456515; 439361, 2456606; 439367, 2456521; 439336, 2456441; 439489, 2456325; 439275, 2455605; 439238, 2455397; 439159, 2455226; 439208, 2455062; 439153,

2454964; 439336, 2454829; 439275, 2454329; 439092, 2454390; 439067, 2454286; 439073, 2454201; 439189, 2453737; 439104, 2453474; 438878, 2453590; 438676, 2453486; 438560, 2453682; 438596, 2453822; 438413, 2453981; 438468, 2454054; return to starting point.

(B) NOTE: Map 82 follows:

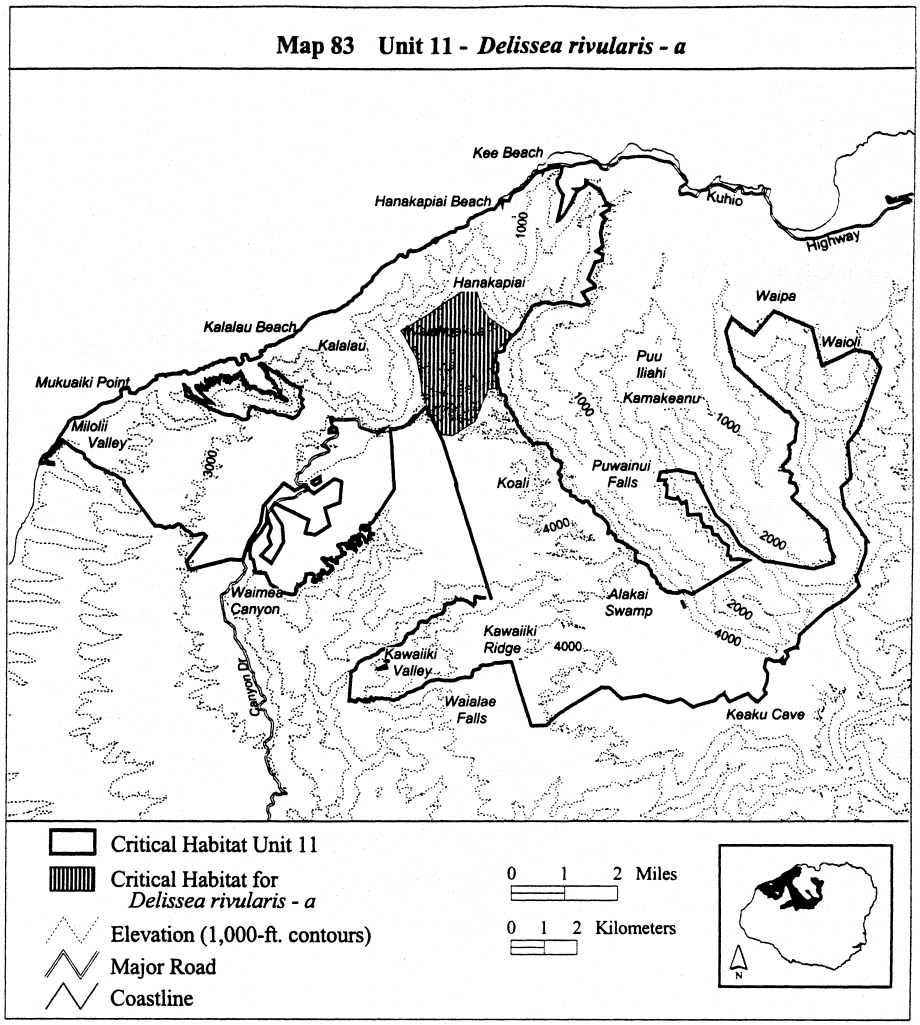


(lxxxiii) Kauai 11—*Delissea rivularis*—a (850 ha; 2,100 ac)

(A) Unit consists of the following 31 boundary points: Start at 438480, 2450624; 438190, 2450564; 438025, 2450154; 437804, 2449609; 437124, 2449170; 436726, 2449208; 436361, 2450013; 436328, 2450087; 436322, 2450079; 436197, 2450481; 436114, 2451018; 436027, 2451473; 435769, 2451955; 435533, 2452339; 435549, 2452356; 435856, 2452536; 436367, 2452827; 436965, 2453265; 437639, 2453676; 437771, 2453681; 437810, 2453604; 437963, 2453122; 438210, 2452738; 438819, 2452300; 438913, 2452214; 438478, 2451772; 438422, 2451715; 438390, 2451682;

438377, 2451065; 438401, 2450962; 438479, 2450630; return to starting point.

(B) NOTE: Map 83 follows:

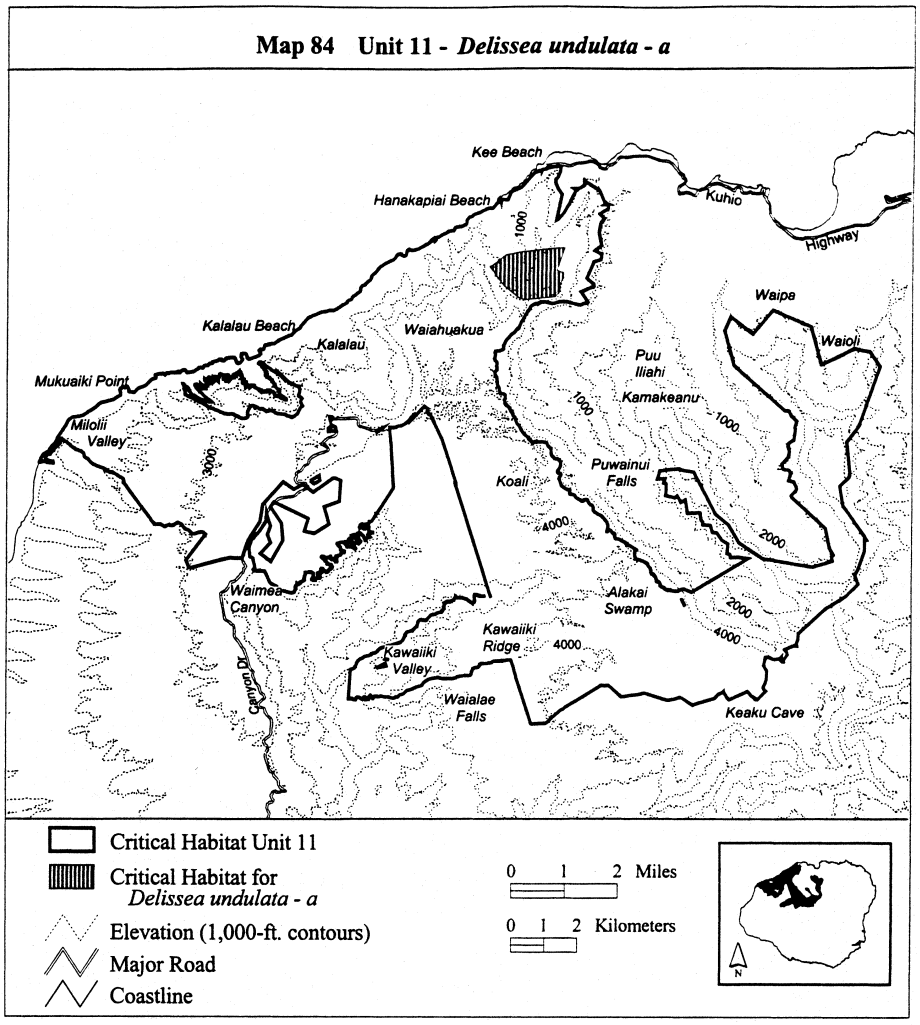


(lxxxiv) Kauai 11—*Delissea undulata*—a (257 ha; 635 ac)

(A) Unit consists of the following 35 boundary points: Start at 440245, 2453335; 439623, 2453274; 439296, 2453242; 439152, 2453286; 438673, 2453669; 438255, 2454243; 438351, 2454304; 438747, 2454599; 439309, 2454708; 439737, 2454756; 440202, 2454807; 440517, 2454810; 440294, 2454127; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408;

440288, 2453388; 440275, 2453381; return to starting point.

(B) NOTE: Map 84 follows:

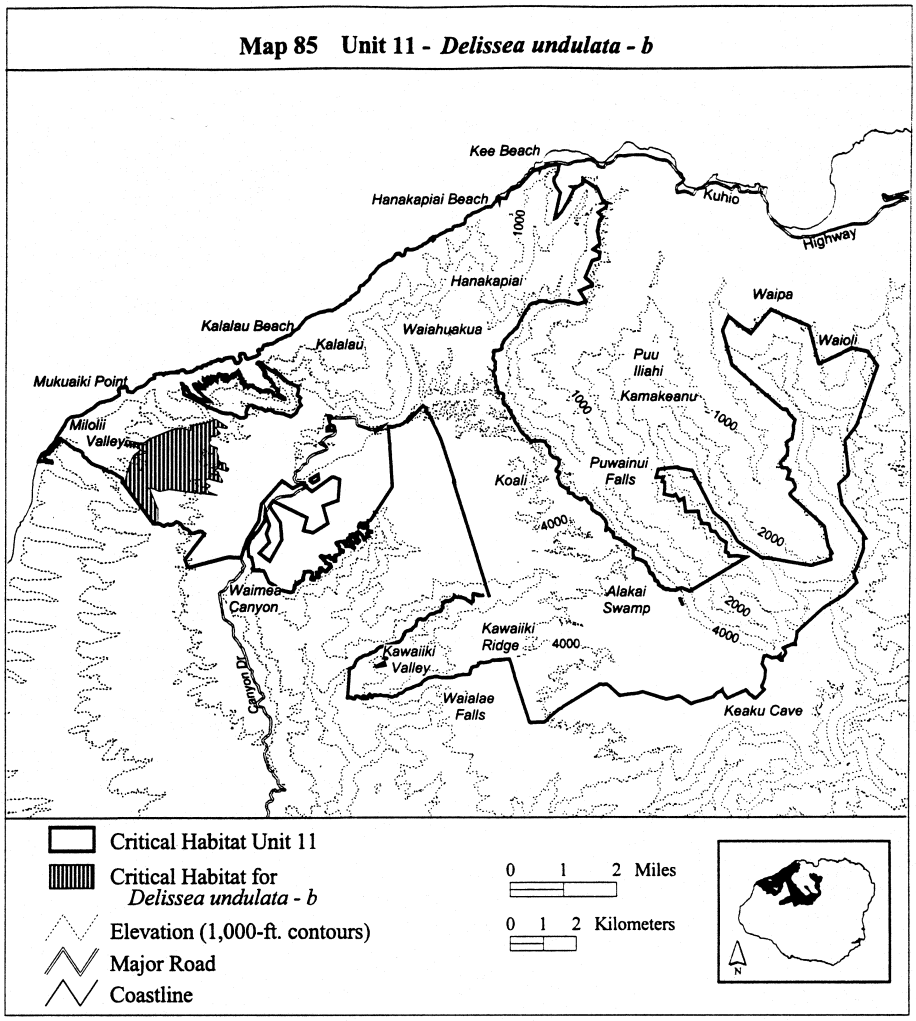


(lxxxv) Kauai 11—*Delissea undulata*—b (532 ha; 1,314 ac)

(A) Unit consists of the following 90 boundary points: Start at 428237, 2446901; 428241, 2446462; 428116, 2446474; 428047, 2446484; 427205, 2447633; 427225, 2447691; 427222, 2447694; 427270, 2447855; 427313, 2448038; 427392, 2448290; 427457, 2448429; 427496, 2448503; 427596, 2448586; 427679, 2448656; 427688, 2448708; 427671, 2448747; 427596, 2448756; 427401, 2448799; 427039, 2448843; 426991, 2448882; 426969, 2448912; 426987, 2448952; 427057, 2449030; 427122, 2449004; 427666, 2448886; 427814, 2448886; 427954, 2448999; 428083, 2449050; 428079, 2449052; 428687, 2449290; 428949, 2449350; 429218, 2449266; 429218, 2449403; 429731, 2449517; 429987, 2449618; 430333,

2449379; 430316, 2449326; 430059, 2449379; 429970, 2449362; 430029, 2449298; 430122, 2449180; 429949, 2449083; 429883, 2449088; 429820, 2449047; 429848, 2448974; 429795, 2448931; 429797, 2448840; 429892, 2448775; 429896, 2448772; 430004, 2448754; 430046, 2448712; 430016, 2448610; 430076, 2448477; 430058, 2448363; 430137, 2448297; 430251, 2448279; 430299, 2448243; 430287, 2448141; 430377, 2448105; 430383, 2448063; 430347, 2448021; 430191, 2448063; 430076, 2448105; 429998, 2448093; 429974, 2448039; 430064, 2448003; 430076, 2447949; 430203, 2447726; 430179, 2447678; 429758, 2447786; 429662, 2447744; 429692, 2447648; 429818, 2447594; 429824, 2447540; 429740, 2447522; 429722, 2447504; 429770, 2447396; 429860, 2447366; 430010, 2447294; 429000, 2447414; 428586, 2447474; 428465, 2447432; 428291, 2447414; 428039, 2447510; 427984, 2447510; 427984, 2447511; 427980, 2447502; 427934, 2447525; 427983, 2447490; 428217, 2446900; return to starting point.

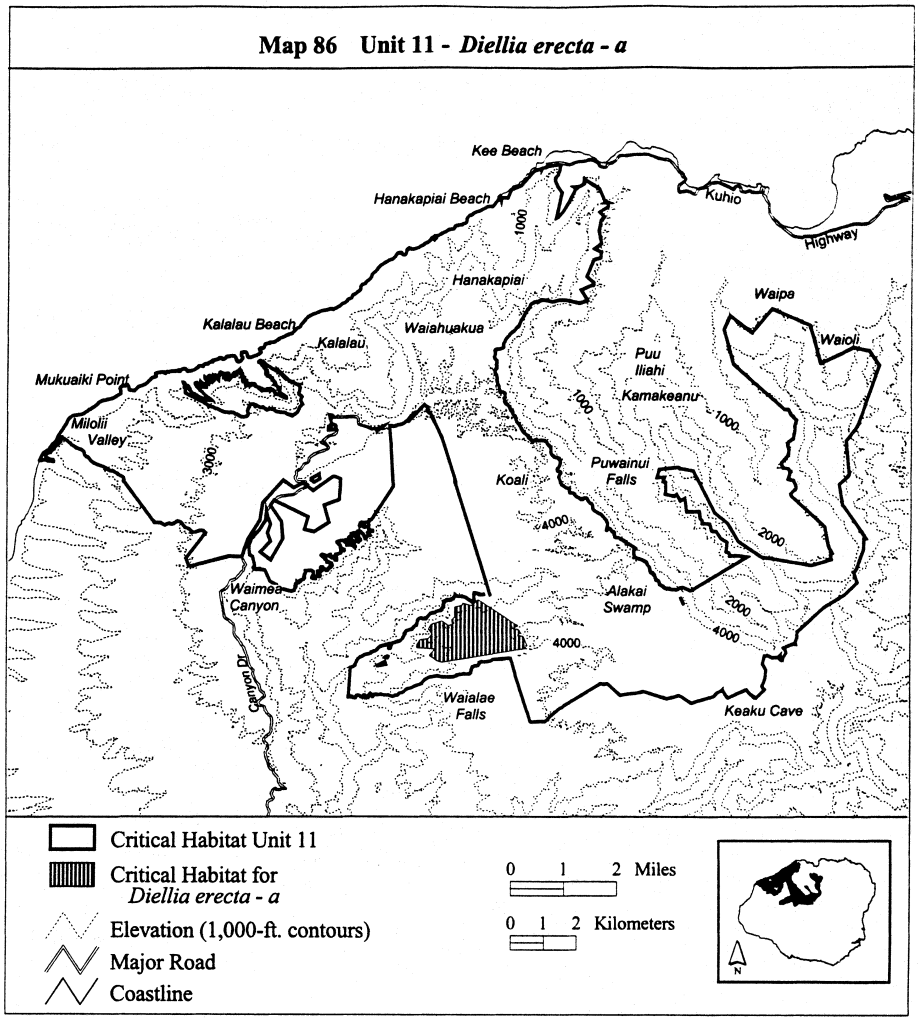
(B) NOTE: Map 85 follows:



(lxxxvi) Kauai 11—*Diellia erecta*—a (364 ha; 901 ac)

(A) Unit consists of the following 30 boundary points: Start at 437962, 2444106; 439160, 2443328; 439020, 2443250; 439191, 2443203; 439238, 2443125; 439168, 2443024; 439316, 2443017; 439440, 2442729; 439378, 2442635; 436857, 2442223; 436732, 2442270; 436483, 2442441; 436654, 2442636; 436102, 2442659; 436086, 2442721; 436188, 2442916; 436452, 2442939; 436553, 2443095; 436444, 2443235; 436522, 2443367; 436857, 2443468; 437067, 2443336; 437176, 2443359; 437160, 2443499; 437246, 2443585; 437246, 2443733; 437246, 2443888; 437479, 2443943; 437487, 2444013; 437760, 2443935; return to starting point.

(B) NOTE: Map 86 follows:

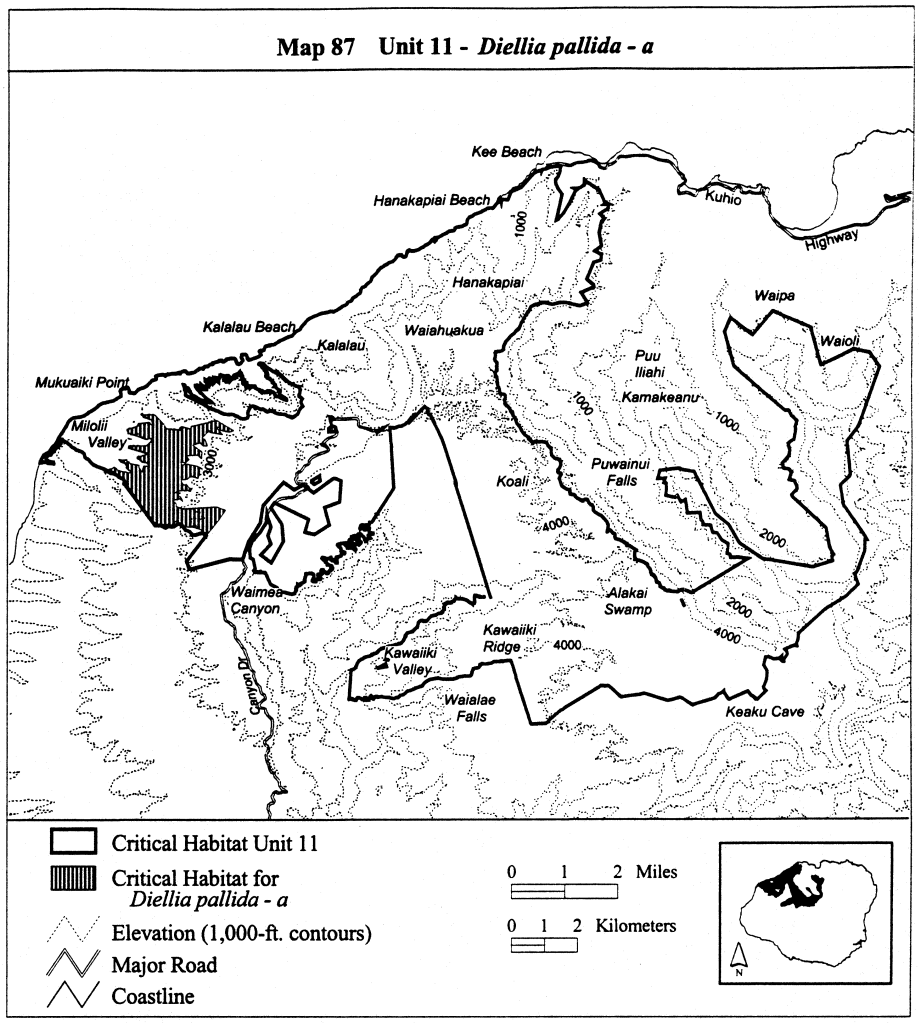


(lxxxvii) Kauai 11—*Diellia pallida*—a (601 ha; 1,485 ac)

(A) Unit consists of the following 181 boundary points: Start at 426612,

2448093; 426664, 2448093; 426740, 2448131; 426778, 2448146; 426847, 2448184; 426900, 2448169; 426968, 2448086; 427044, 2448078; 427082, 2448063; 427143, 2448040; 427196, 2448048; 427280, 2448010; 427341, 2448010; 427402, 2448025; 427402, 2448040; 427303, 2448093; 427219, 2448169; 427227, 2448222; 427196, 2448314; 427136, 2448314; 427037, 2448359; 426999, 2448420; 427067, 2448390; 427120, 2448390; 427219, 2448405; 427288, 2448352; 427348, 2448298; 427394, 2448291; 427463, 2448268; 427599, 2448238; 427615, 2448154; 427653, 2448101; 427698, 2448048; 427729, 2448040; 427744, 2448055; 427721, 2448108; 427713, 2448146; 427774, 2448222; 427827, 2448215; 427881, 2448200; 427919, 2448200; 427852, 2448318; 427706, 2448338; 427555, 2448483; 427878, 2448586; 427308, 2448763; 427308, 2448817; 427841, 2448838; 428023, 2449021; 427927, 2449075; 427846, 2449021; 427287, 2449220; 427243, 2449338; 427421, 2449381; 427604, 2449467; 427572, 2449510; 427905, 2449553; 428050, 2449424; 427970, 2449634; 427749, 2449709; 427706, 2449768; 427841, 2449784; 428077, 2449779; 428249, 2449634; 428352, 2449494; 428448, 2449360; 428868, 2449317; 428836, 2449381; 428932, 2449419; 429158, 2449338; 429196, 2449430; 429702, 2449537; 429922, 2449601; 429955, 2449612; 430471, 2449300; 430347, 2449252; 430067, 2449311; 430030, 2449397; 429955, 2449392; 430143, 2449177; 429739, 2449258; 429729, 2449301; 429508, 2449075; 429605, 2449037; 429675, 2448822; 429562, 2448817; 429465, 2448924; 429239, 2448849; 429508, 2448650; 429492, 2448446; 429406, 2448553; 429045, 2448542; 429126, 2448408; 429019, 2448317; 428868, 2448344; 428916, 2448236; 429013, 2448295; 429379, 2448214; 429675, 2448059; 429417, 2447935; 429411, 2447843; 429234, 2447908; 429226, 2447910; 429150, 2447895; 429112, 2447865; 429105, 2447827; 429014, 2447812; 428899, 2447797; 428884, 2447766; 428922, 2447721; 428945, 2447675; 428983, 2447645; 429021, 2447645; 429044, 2447683; 429067, 2447652; 429097, 2447607; 429120, 2447569; 429173, 2447538; 429242, 2447553; 429166, 2447447; 429105, 2447500; 428983, 2447470; 428960, 2447493; 428854, 2447477; 428709, 2447417; 428793, 2447417; 428869, 2447401; 428793, 2447371; 428808, 2447310; 428869, 2447295; 428915, 2447181; 428854, 2447234; 428778, 2447204; 428694, 2447204; 428641, 2447173; 428737, 2447103; 428743, 2447006; 428931, 2446939; 429484, 2446970; 429961, 2446989; 430253, 2446887; 430028, 2446579; 429664, 2446148; 429580, 2446182; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476, 2446463; 428396, 2446447; 428285, 2446458; 428116, 2446474; 428047, 2446484; 427185, 2447661; 427161, 2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 426997, 2447892; 426981, 2447902; 426958, 2447923; 426944, 2447941; 426907, 2447965; 426847, 2447992; 426819, 2447998; 426798, 2448010; 426758, 2448005; 426737, 2448009; 426722, 2448015; 426613, 2448093; return to starting point.

(B) NOTE: Map 87 follows:

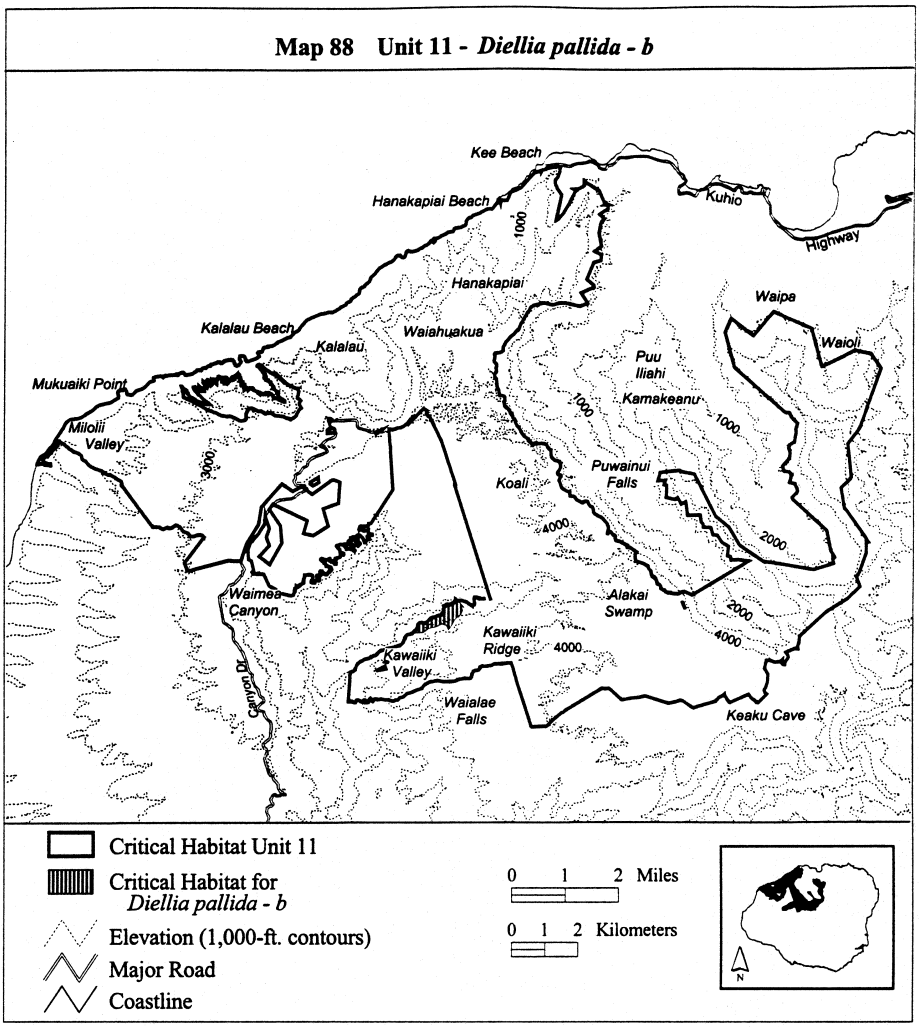


(lxxxviii) Kauai 11—*Diellia pallida*—b (55 ha; 136 ac)

(A) Unit consists of the following 120 boundary points: Start at 437314, 2444224; 437517, 2444006; 437424, 2443802; 437257, 2443672; 437121, 2443437; 437053, 2443332; 436979, 2443480; 436849, 2443518; 436688, 2443443; 436465, 2443375; 436280, 2443264; 435945, 2443237; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497,

2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436910, 2443981; 436979, 2444055; 437013, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; return to starting point.

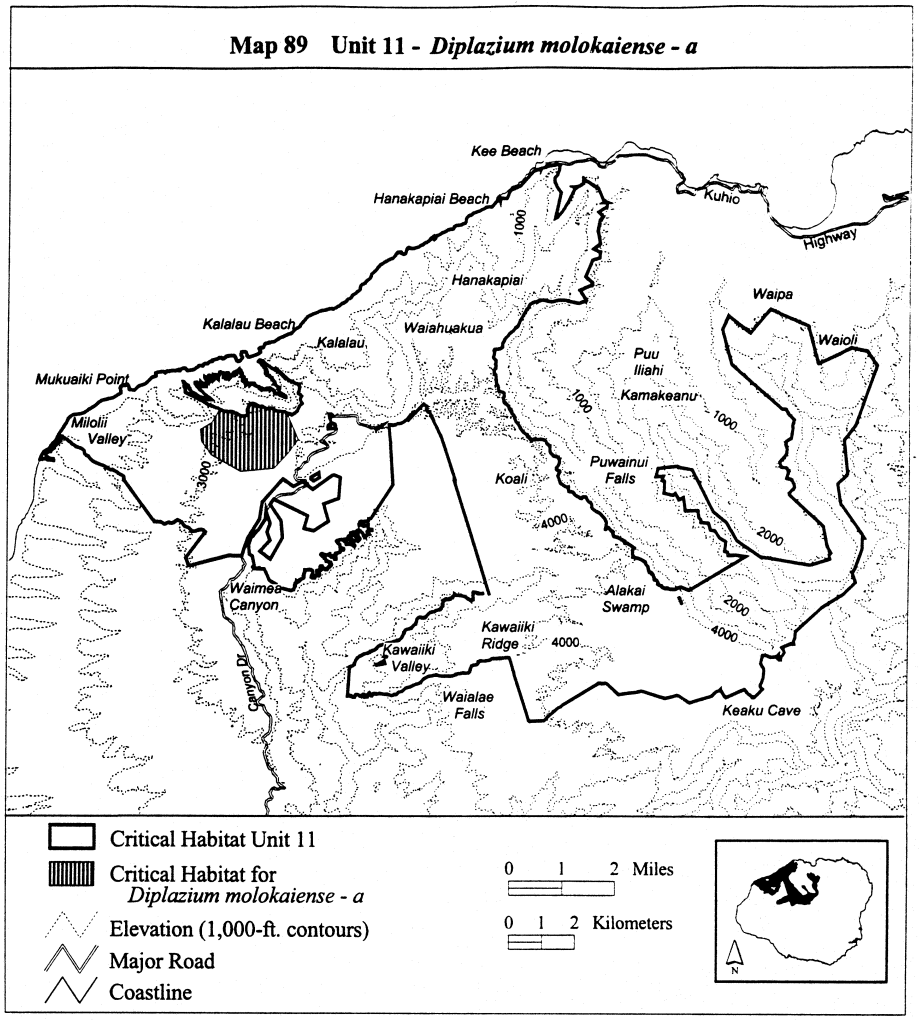
(B) NOTE: Map 88 follows:



(lxxxix) Kauai 11—*Diplazium molokaiense*—a (430 ha; 1,062 ac)

(A) Unit consists of the following 48 boundary points: Start at 429805, 2448471; 429520, 2448889; 429479, 2449236; 429836, 2449450; 430021, 2449760; 430088, 2449848; 430172, 2449815; 430207, 2449804; 430261, 2449795; 430317, 2449781; 430340, 2449778; 430365, 2449787; 430392, 2449798; 430408, 2449802; 430410, 2449802; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432456, 2448919; 432171, 2448512; 431732, 2448053; 430713, 2447962; return to starting point.

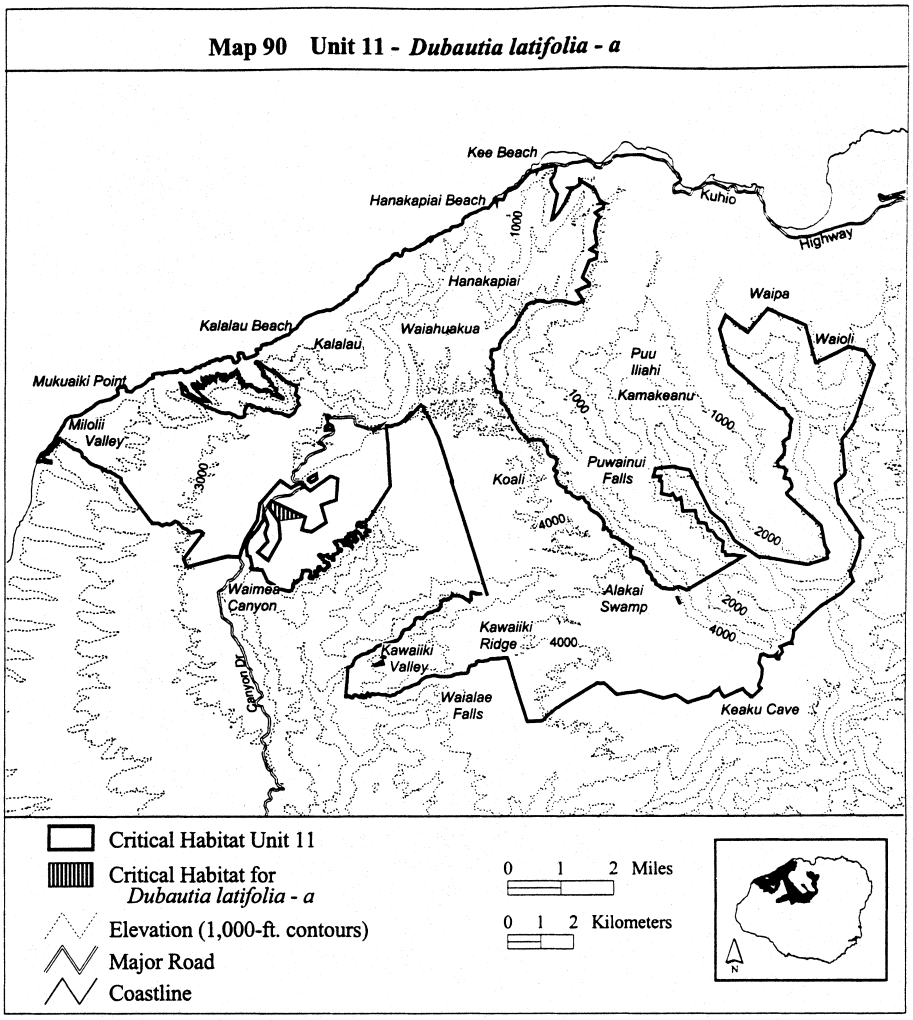
(B) NOTE: Map 89 follows:



(xc) Kauai 11—*Dubautia latifolia*—a (31 ha; 76 ac)

(A) Unit consists of the following 6 boundary points: Start at 432758, 2446605; 432729, 2446601; 431947, 2446508; 431624, 2446959; 431732, 2447115; 432759, 2446609; return to starting point.

(B) NOTE: Map 90 follows:



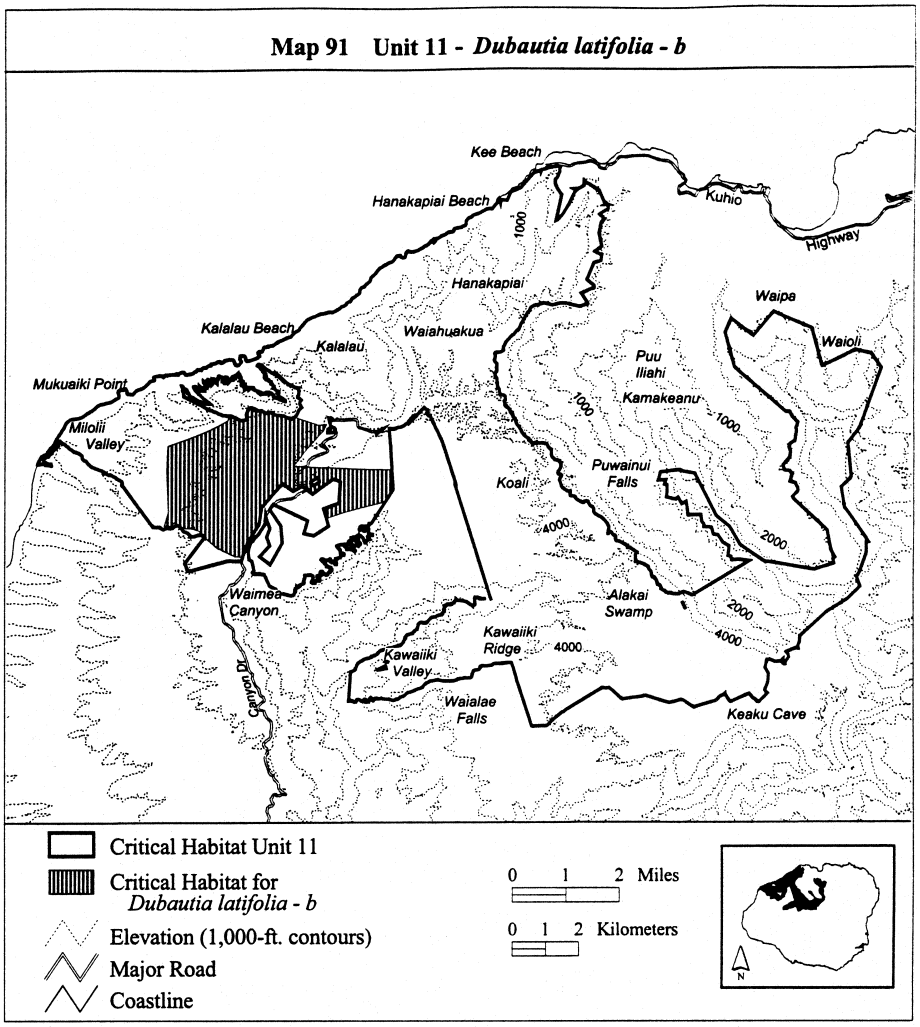
(xci) Kauai 11—*Dubautia latifolia*—b (1,522 ha; 3,761 ac)

(A) Unit consists of the following 95 boundary points: Start at 431300, 2446537; 431298, 2446522; 431294, 2446516; 430955, 2445963; 430827, 2445619; 430800, 2445534; 430575, 2445540; 430038, 2445808; 429654, 2446125; 429591, 2446167; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476, 2446463; 428438, 2446456; 428548, 2446851; 428540, 2447350; 428511, 2448118; 428533, 2448848; 429226, 2449093; 429778, 2449324; 430158, 2449533; 430352, 2449651; 430348, 2449666; 430376, 2449750; 430384, 2449766; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113,

2449740; 432217, 2449712; 432259, 2449679; 432344, 2449744; 432716, 2449615; 432716, 2449616; 432975, 2449532; 433094, 2449480; 433347, 2449509; 433235, 2449316; 432751, 2448757; 432364, 2448281; 432337, 2448239; 433100, 2448204; 433370, 2448192; 434350, 2448157; 435242, 2448139; 435320, 2448130; 435360, 2447538; 435147, 2447216; 435091, 2447171; 434274, 2446962; 433872, 2446863; 433405, 2446700; 433330, 2446689; 433257, 2446958; 433706, 2447138; 433746, 2447766; 433527, 2447856; 432918, 2447407; 432609, 2447647; 432320, 2447497; 432136, 2447629; 432001, 2447726; 431369, 2447027; return to starting point.

(B) Excluding 1 area bounded by the following 4 points (3 ha, 8 ac): Start at 433109, 2447775; 432932, 2447668; 432827, 2447751; 433094, 2447922; return to starting point.

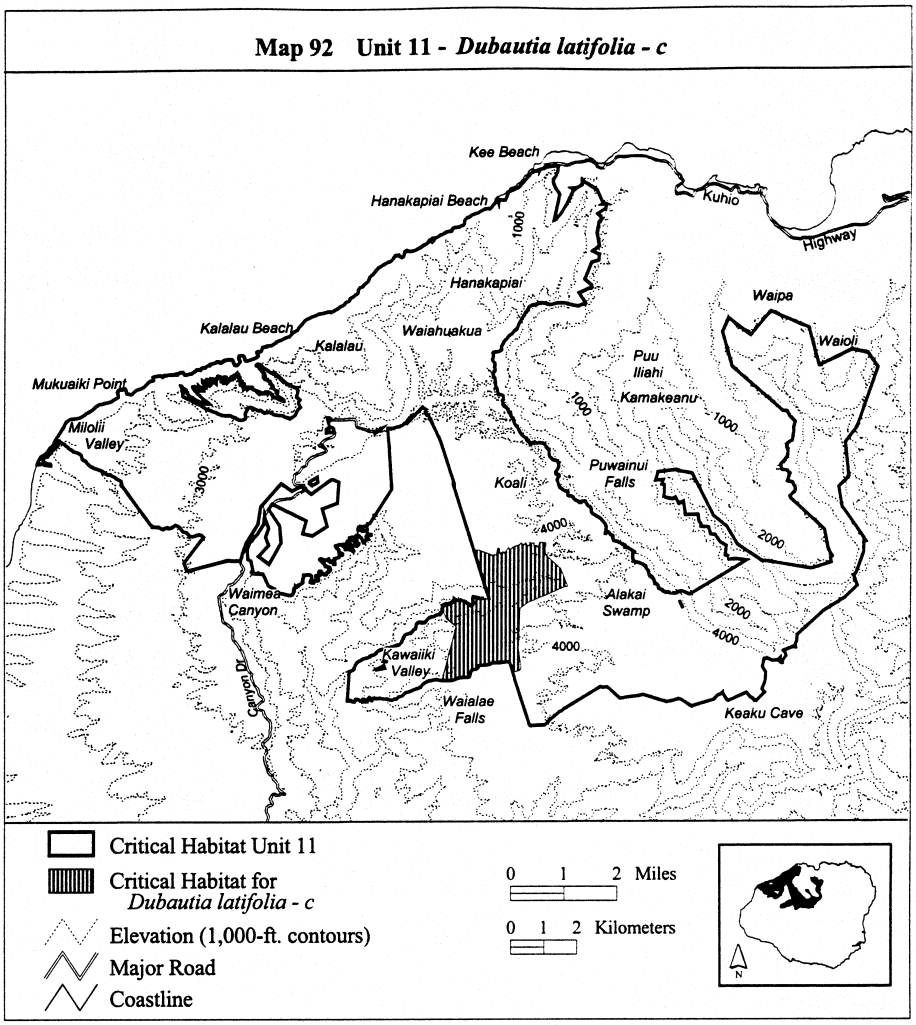
(C) NOTE: Map 91 follows:



(xcii) Kauai 11—*Dubautia latifolia*—c (809 ha; 1,999 ac)

(A) Unit consists of the following 263 boundary points: Start at 436896, 2441784; 437321, 2443428; 437328, 2443431; 437033, 2443650; 436902, 2443906; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 437851, 2445719; 438006, 2445710; 438168, 2445654; 438335, 2445593; 438342, 2445599; 438397, 2445569; 438522, 2445580; 438541, 2445610; 438552, 2445665; 438574, 2445746; 438592, 2445779; 438625, 2445761; 438633, 2445658; 438633, 2445614; 438647, 2445614; 438695, 2445639; 438721, 2445676; 438740, 2445676; 438758, 2445628; 438802, 2445647; 438839, 2445698; 438872, 2445765; 438905, 2445783; 438928, 2445776; 438931, 2445765; 438942, 2445724; 438961, 2445728; 438983, 2445765; 439020, 2445798; 439112, 2445842; 439215, 2445864; 439234, 2445879; 439274, 2445915; 439289, 2445949; 439300, 2445934; 439333, 2445879; 439363, 2445875; 439403, 2445904; 439422, 2445938; 439440, 2445934; 439436, 2445897; 439444, 2445864; 439492, 2445853; 439539, 2445871; 439539, 2445974; 439580, 2445934; 439680, 2445941; 439661, 2445860; 439694, 2445831; 439739, 2445860; 439772, 2445827; 439820, 2445842; 439838, 2445897; 439856, 2445963; 439904, 2445960; 440033, 2445941; 440026, 2445595; 440472, 2445178; 440708, 2444629; 440605, 2444611; 440155, 2444412; 439514, 2444151; 439264, 2443956; 439218, 2442724; 439294, 2442160; 439259, 2442078; 439037, 2442031; 438934, 2442351; 438866, 2442347; 438838, 2442340; 438821, 2442339; 438757, 2442331; 438721, 2442329; 438704, 2442326; 438694, 2442327; 438679, 2442324; 438656, 2442321; 438626, 2442315; 438609, 2442314; 438561, 2442316; 438535, 2442314; 438523, 2442310; 438517, 2442310; 438496, 2442310; 438460, 2442320; 438453, 2442321; 438436, 2442321; 438433, 2442319; 438418, 2442311; 438392, 2442294; 438376, 2442278; 438355, 2442265; 438305, 2442256; 438254, 2442248; 438238, 2442248; 438219, 2442244; 438157, 2442234; 438130, 2442234; 438114, 2442232; 438098, 2442237; 438065, 2442246; 438049, 2442246; 438030, 2442243; 438012, 2442229; 438000, 2442216; 437998, 2442205; 437996, 2442188; 437984, 2442167; 437973, 2442147; 437954, 2442136; 437939, 2442128; 437926, 2442125; 437912, 2442123; 437873, 2442121; 437839, 2442110; 437826, 2442106; 437806, 2442092; 437791, 2442074; 437777, 2442052; 437766, 2442017; 437758, 2441998; 437754, 2441991; 437751, 2441981; 437745, 2441950; 437740, 2441938; 437736, 2441928; 437717, 2441899; 437711, 2441887; 437705, 2441878; 437689, 2441877; 437674, 2441875; 437647, 2441866; 437635, 2441866; 437617, 2441866; 437602, 2441867; 437566, 2441876; 437532, 2441880; 437522, 2441879; 437495, 2441869; 437460, 2441862; 437391, 2441858; 437366, 2441852; 437346, 2441845; 437332, 2441842; 437317, 2441835; 437287, 2441816; 437274, 2441809; 437240, 2441796; 437224, 2441791; 437181, 2441781; 437150, 2441777; 437111, 2441777; 437096, 2441779; 437062, 2441776; 437008, 2441775; 436960, 2441776; 436912, 2441780; return to starting point.

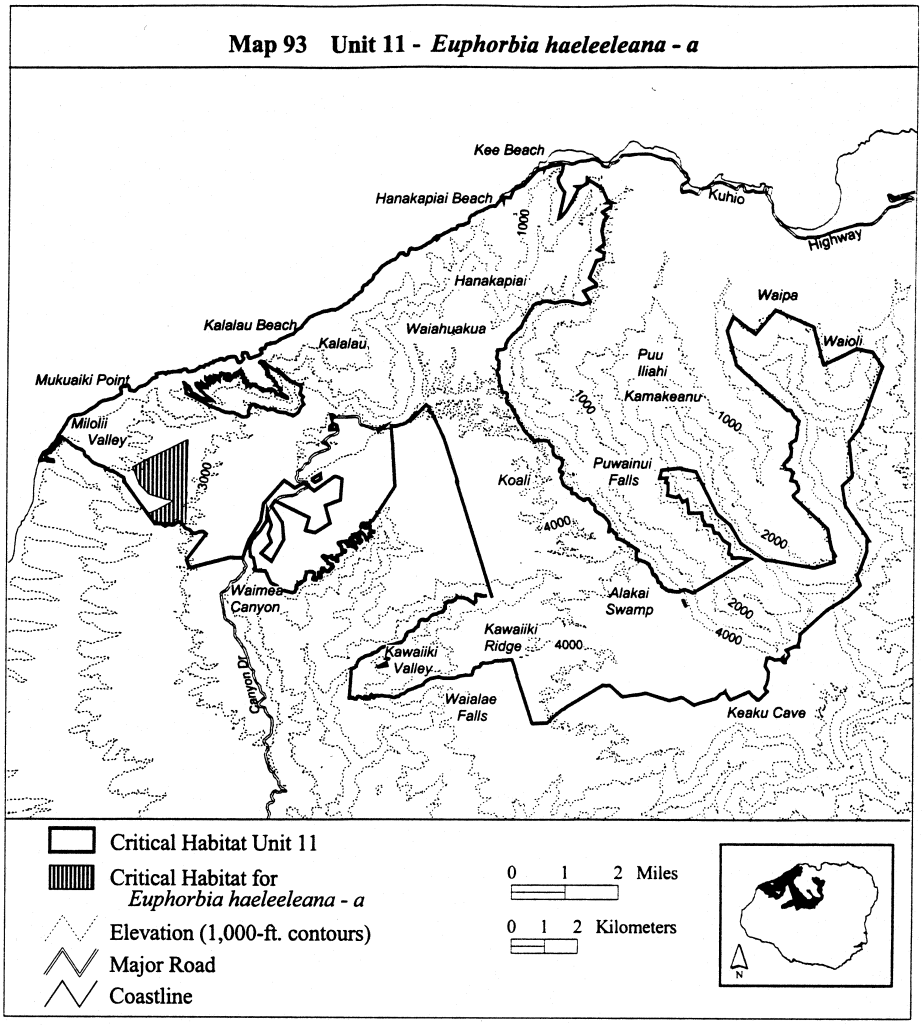
(B) NOTE: Map 92 follows:



(xciii) Kauai 11—*Euphorbia haeleeleana*—a (263 ha; 649 ac)

(A) Unit consists of the following 23 boundary points: Start at 429092, 2448965; 429045, 2446580; 429011, 2446411; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476, 2446463; 428396, 2446447; 428285, 2446458; 428116, 2446474; 428047, 2446484; 427870, 2446726; 428195, 2446854; 428654, 2447111; 428405, 2447158; 427917, 2447317; 427606, 2447620; 427403, 2448126; 427935, 2448397; 428502, 2448676; return to starting point.

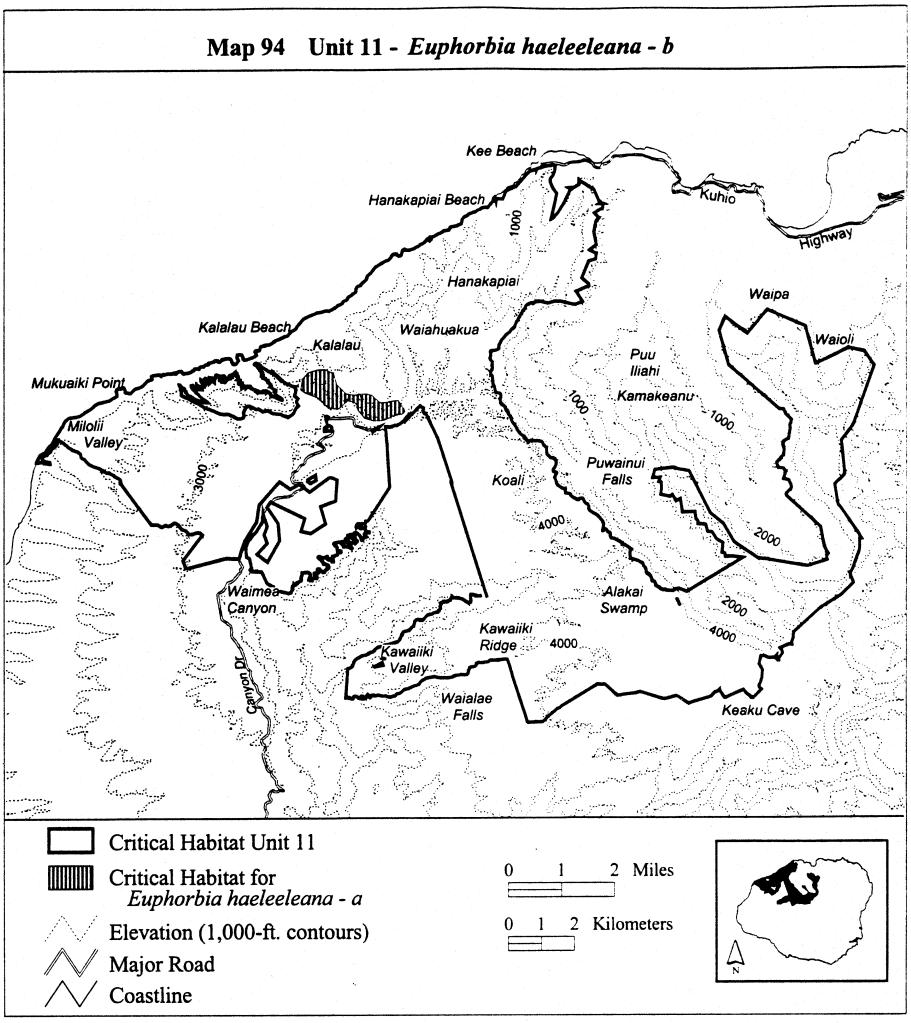
(B) NOTE: Map 93 follows:



(xciv) Kauai 11—*Euphorbia haeleeleana*—b (192 ha; 476 ac)

(A) Unit consists of the following 35 boundary points: Start at 432645, 2450526; 432703, 2450873; 432886, 2451057; 433147, 2451134; 433370, 2451144; 433640, 2451018; 433737, 2450690; 434027, 2450400; 434288, 2450342; 434607, 2450400; 434801, 2450351; 434926, 2450235; 435062, 2450119; 435226, 2450119; 435458, 2450167; 435613, 2450187; 435777, 2449935; 435816, 2449848; 435748, 2449771; 435603, 2449733; 435468, 2449704; 435187, 2449569; 434888, 2449559; 434598, 2449646; 434395, 2449888; 434346, 2450061; 434279, 2450139; 434095, 2450177; 433911, 2450033; 433786, 2449917; 433505, 2449975; 433379, 2450081; 433234, 2450216; 433138, 2450294; 432770, 2450448; return to starting point.

(B) NOTE: Map 94 follows:



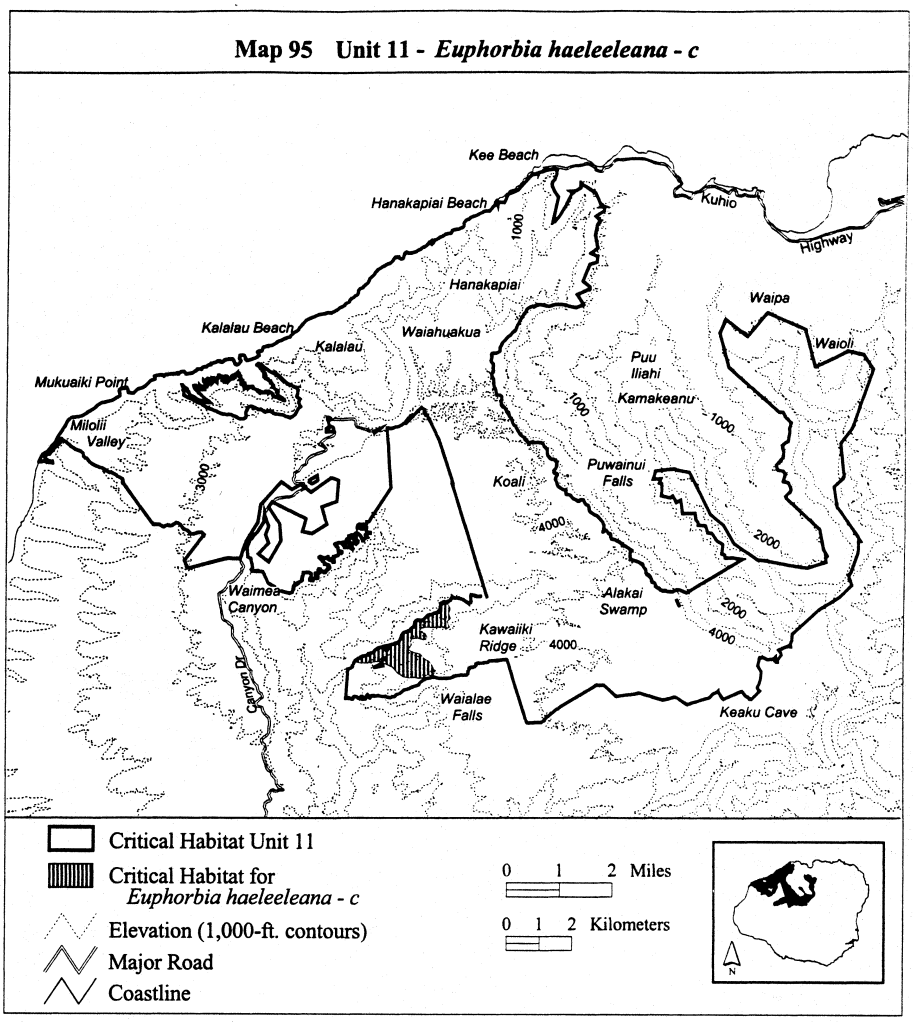
(xcv) Kauai 11—*Euphorbia haeleeleana*—c (204 ha; 505 ac)

(A) Unit consists of the following 270 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979,

2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437064, 2444094; 437157, 2443993; 437206, 2443914; 437183, 2443812; 437147, 2443756; 437174, 2443690; 437210, 2443612; 437151, 2443552; 437114, 2443520; 437128, 2443441; 437177, 2443342; 437124, 2443309; 437022, 2443322; 436940, 2443353; 436940, 2443345; 436805, 2443342; 436677, 2443316; 436579, 2443332; 436440, 2443336; 436368, 2443326; 436312, 2443306; 436273, 2443227; 436447, 2443119; 436496, 2443046; 436463, 2442974; 436401, 2442954; 436289, 2442981; 436187, 2443010; 436056, 2442984; 436006, 2442968; 435980, 2442889; 436016, 2442826; 436000, 2442774; 435924, 2442695; 435964, 2442629; 436105, 2442566; 436286, 2442527; 436339, 2442465; 436408, 2442386; 436585, 2442277; 436671, 2442169; 436726, 2442037; 436746, 2441942; 436703, 2441893; 436592, 2441879; 436526, 2441902; 436467, 2441866; 436368, 2441797; 436250, 2441781; 436079, 2441817; 435970, 2441801; 435786, 2441830; 435592, 2441942; 435438, 2442126; 435398, 2442152; 435296, 2442192; 435145, 2442261; 435109, 2442300; 434964, 2442304; 434672, 2442248; 434484, 2442248; 434320, 2442284; 434307, 2442297; 434298, 2442319; 434308, 2442329; 434330, 2442350; 434344, 2442361; 434355, 2442368; 434370, 2442378; 434395, 2442387; 434416, 2442397; 434439, 2442410; 434458, 2442423; 434486, 2442437; 434504, 2442450; 434522, 2442454; 434537, 2442457; 434563, 2442460; 434590, 2442462; 434610, 2442464; 434628, 2442472; 434643, 2442483; 434664, 2442490; 434680, 2442493; 434700, 2442502; 434713, 2442515; 434725, 2442524; 434735, 2442532; 434755, 2442542; 434775, 2442551; 434800, 2442556; 434822, 2442562; 434842, 2442574; 434862, 2442596; 434883, 2442613; 434896, 2442626; 434916, 2442647; 434934, 2442668; 434949, 2442681; 434972, 2442699; 434986, 2442705; 434997, 2442708; 435006, 2442713; 435012, 2442717; 435026, 2442719; 435039, 2442722; 435061, 2442727; 435081, 2442733; 435100, 2442739; 435119, 2442747; 435135, 2442754; 435150, 2442764; 435164, 2442771; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; 435237, 2442643; 435284, 2442631; return to starting point.

(B) Excluding 1 area bounded by the following 4 points (0 ha, 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

(C) NOTE: Map 95 follows:

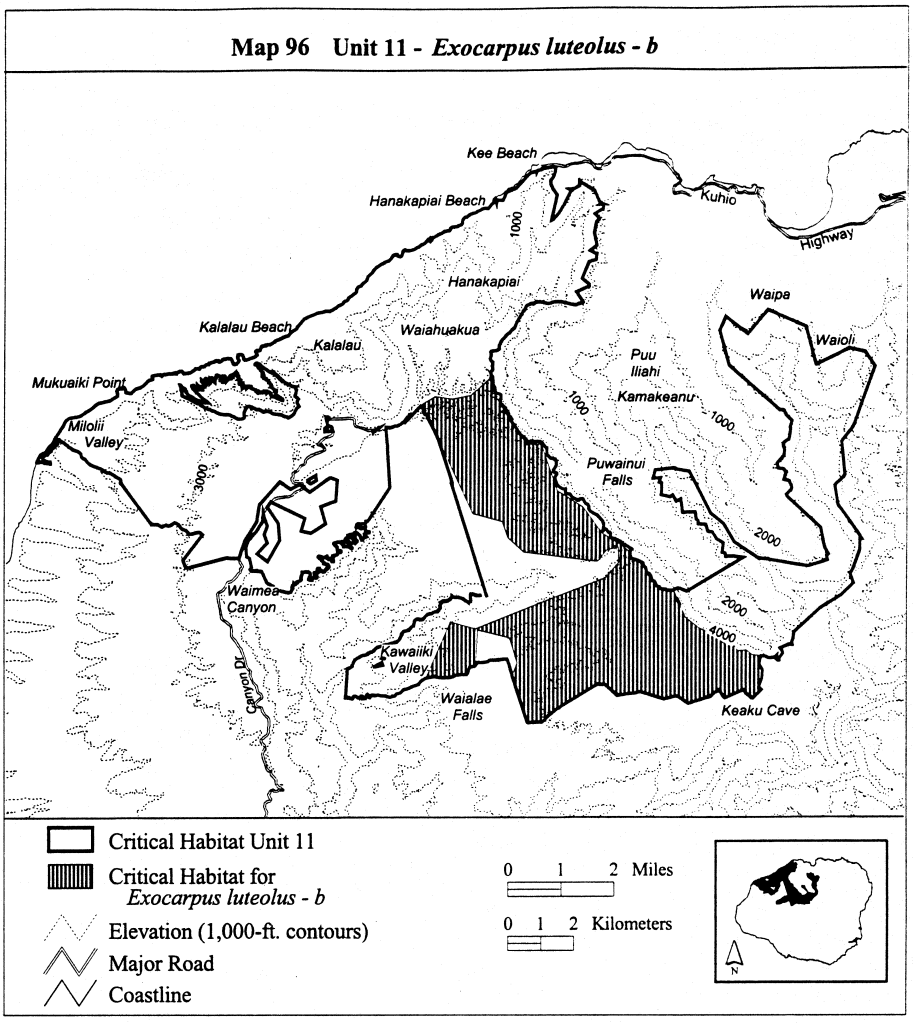


(xcvi) Kauai 11—*Exocarpos luteolus*—b (3,799 ha; 9,387 ac)

(A) Unit consists of the following 284 boundary points: Start at 443067, 2445215; 443066, 2445209; 443066, 2445190; 443083, 2445171; 443103, 2445152; 443122, 2445132; 443135, 2445115; 443140, 2445105; 443144, 2445096; 443150, 2445078; 443152, 2445059; 443153, 2445040; 443153, 2445020; 443156, 2445003; 443158, 2444995; 443163, 2444984; 443175, 2444965; 443177, 2444962; 443193, 2444946; 443196, 2444944; 443215, 2444938; 443234, 2444932; 443240, 2444927; 443252, 2444914; 443260, 2444907; 443271, 2444898; 443281, 2444890; 443290, 2444876; 443294, 2444870; 443301, 2444851; 443307, 2444833; 443309, 2444829; 443313, 2444815; 443320, 2444796; 443327, 2444778; 443333, 2444758; 443341, 2444740; 443346, 2444728; 443352, 2444721; 443366, 2444706; 443373, 2444702; 443385, 2444699; 443403, 2444695; 443423, 2444686; 443435, 2444664; 443440, 2444655; 443443, 2444647; 443444, 2444627; 443447, 2444608; 443452, 2444591; 443459, 2444579; 443464, 2444570; 443478, 2444555; 443483, 2444551; 443497, 2444548; 443516, 2444546; 443534, 2444543; 443553, 2444537; 443557, 2444532; 443571, 2444521; 443579,

2444514; 443598, 2444493; 443610, 2444483; 443617, 2444477; 443628, 2444469; 443647, 2444460; 443666, 2444456; 443677, 2444459; 443685, 2444463; 443703, 2444469; 443722, 2444464; 443732, 2444458; 443740, 2444454; 443760, 2444446; 443769, 2444440; 443987, 2444415; 444047, 2444337; 444117, 2444107; 444210, 2443933; 444299, 2443729; 444347, 2443603; 444425, 2443555; 444600, 2443428; 444759, 2443295; 445253, 2443054; 445513, 2442838; 445854, 2442734; 445951, 2442593; 446214, 2442612; 446381, 2442489; 446652, 2442437; 446591, 2442195; 446694, 2442007; 446686, 2441764; 446640, 2441627; 446587, 2441543; 446587, 2441501; 446641, 2441436; 446651, 2441424; 446673, 2441408; 446400, 2441154; 446228, 2441279; 446214, 2441291; 446122, 2441415; 445886, 2441308; 445551, 2441162; 445510, 2441194; 445395, 2441389; 445392, 2441392; 445380, 2441414; 445344, 2441376; 444480, 2440997; 444455, 2440990; 444124, 2441223; 444113, 2441221; 444109, 2441224; 444083, 2441215; 444062, 2441230; 443889, 2441172; 443707, 2441132; 443023, 2441344; 443016, 2441342; 442976, 2441356; 442843, 2441314; 442723, 2441295; 442384, 2441249; 441968, 2441515; 441900, 2441576; 441774, 2441575; 441672, 2441599; 441656, 2441573; 441650, 2441573; 441637, 2441552; 440469, 2440833; 440464, 2440832; 440457, 2440826; 440236, 2440690; 440188, 2440625; 440119, 2440532; 440075, 2440494; 440035, 2440463; 439551, 2440431; 439093, 2441857; 439236, 2442224; 439011, 2442986; 438032, 2443222; 437997, 2442203; 437913, 2442147; 437887, 2442121; 437873, 2442121; 437839, 2442110; 437826, 2442106; 437806, 2442092; 437791, 2442074; 437777, 2442052; 437766, 2442017; 437758, 2441998; 437754, 2441991; 437751, 2441981; 437747, 2441961; 437697, 2441878; 437689, 2441877; 437674, 2441875; 437647, 2441866; 437635, 2441866; 437617, 2441866; 437602, 2441867; 437566, 2441876; 437532, 2441880; 437522, 2441879; 437495, 2441869; 437460, 2441862; 437391, 2441858; 437366, 2441852; 437346, 2441845; 437332, 2441842; 437317, 2441835; 437287, 2441816; 437274, 2441809; 437240, 2441796; 437224, 2441791; 437181, 2441781; 437150, 2441777; 437111, 2441777; 437096, 2441779; 437062, 2441776; 437008, 2441775; 436960, 2441776; 436912, 2441780; 436895, 2441784; 436825, 2441795; 436799, 2441801; 436777, 2441809; 436730, 2441820; 436695, 2441811; 436666, 2441808; 436638, 2441803; 436618, 2441796; 436593, 2441792; 436583, 2441789; 436541, 2441785; 436492, 2441773; 436474, 2441767; 437185, 2443389; 437209, 2443474; 437983, 2443266; 440213, 2444149; 441921, 2444804; 442324, 2445260; 442300, 2445723; 441960, 2445633; 441686, 2445291; 439436, 2445571; 438948, 2446021; 438786, 2446508; 437886, 2446746; 436739, 2449180; 436361, 2450013; 436335, 2450071; 436340, 2450096; 436658, 2450273; 436694, 2450293; 436737, 2450317; 437249, 2450242; 437337, 2450259; 437337, 2450259; 437824, 2450354; 437835, 2450364; 437999, 2450507; 438000, 2450508; 438124, 2450616; 438399, 2450871; 438418, 2450889; 438479, 2450630; 438530, 2450411; 438960, 2449644; 438961, 2449642; 438964, 2449637; 439170, 2449270; 439197, 2449222; 439463, 2448950; 439523, 2448880; 439531, 2448880; 439559, 2448851; 439829, 2448862; 439943, 2448855; 439948, 2448855; 439955, 2448835; 440448, 2447444; 441222, 2446944; 441810, 2446157; 442167, 2445934; 442409, 2445783; 442668, 2445560; 442673, 2445515; 442668, 2445494; 442667, 2445490; 442671, 2445471; 442675, 2445453; 442682, 2445433; 442689, 2445419; 442694, 2445414; 442709, 2445399; 442727, 2445386; 442743, 2445378; 442747, 2445377; 442765, 2445370; 442785, 2445364; 442798, 2445359; 442804, 2445357; 442821, 2445353; 442842, 2445347; 442858, 2445342; 442862, 2445341; 442877, 2445336; 442898, 2445330; 442915, 2445323; 442934, 2445314; 442952, 2445303; 442956, 2445301; 442972, 2445292; 442981, 2445284; 442990, 2445276; 443006, 2445268; return to starting point.

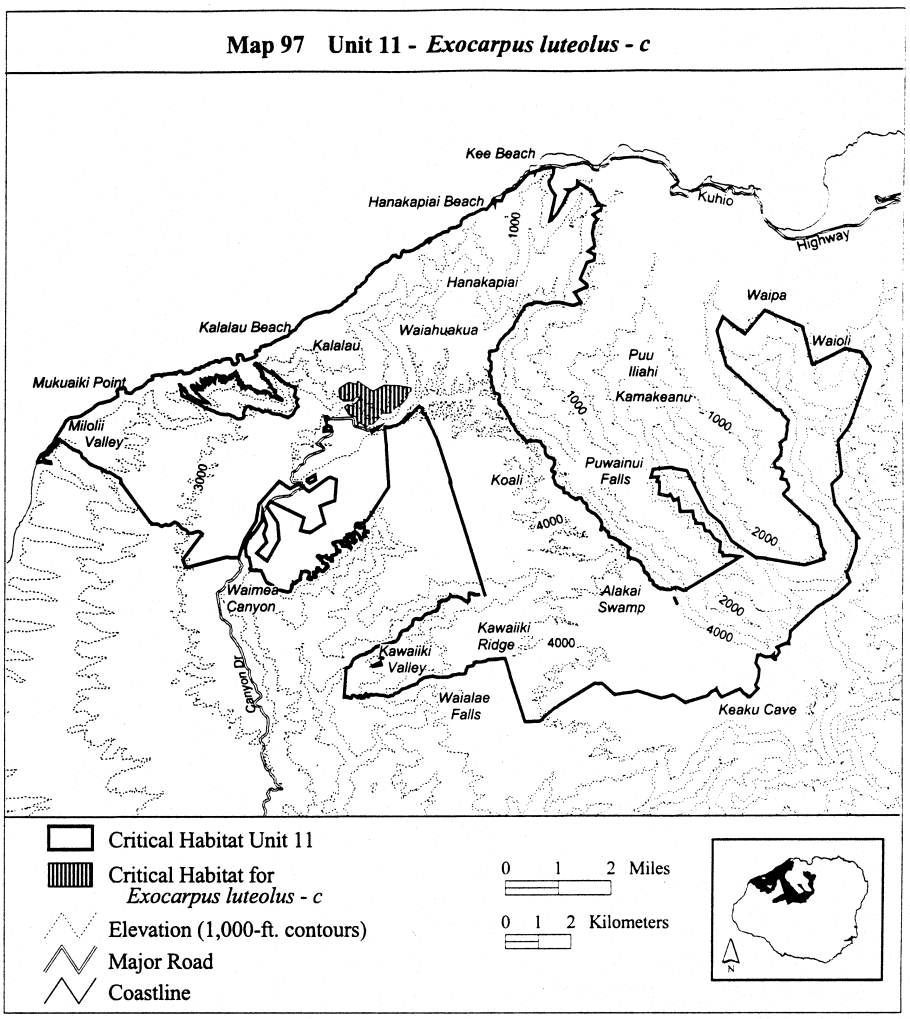
(B) NOTE: Map 96 follows:



(xcvii) Kauai 11—*Exocarpos luteolus*—c (177 ha; 438 ac)

(A) Unit consists of the following 38 boundary points: Start at 435446, 2449836; 435434, 2449822; 435414, 2449822; 435150, 2449822; 435055, 2449650; 434888, 2449475; 434758, 2449469; 434652, 2449371; 434451, 2449532; 434408, 2449452; 434362, 2449581; 434342, 2449704; 434239, 2449705; 434124, 2449782; 434000, 2449989; 434081, 2450086; 434224, 2450046; 434405, 2450190; 434405, 2450226; 434486, 2450310; 434354, 2450310; 434265, 2450198; 434026, 2450187; 433839, 2450267; 433808, 2450497; 433845, 2450589; 434133, 2450756; 434359, 2450700; 434398, 2450813; 434864, 2450480; 435213, 2450674; 435667, 2450661; 436040, 2450572; 436040, 2450490; 435945, 2450427; 435907, 2450263; 435749, 2450093; 435554, 2449961; return to starting point.

(B) NOTE: Map 97 follows:

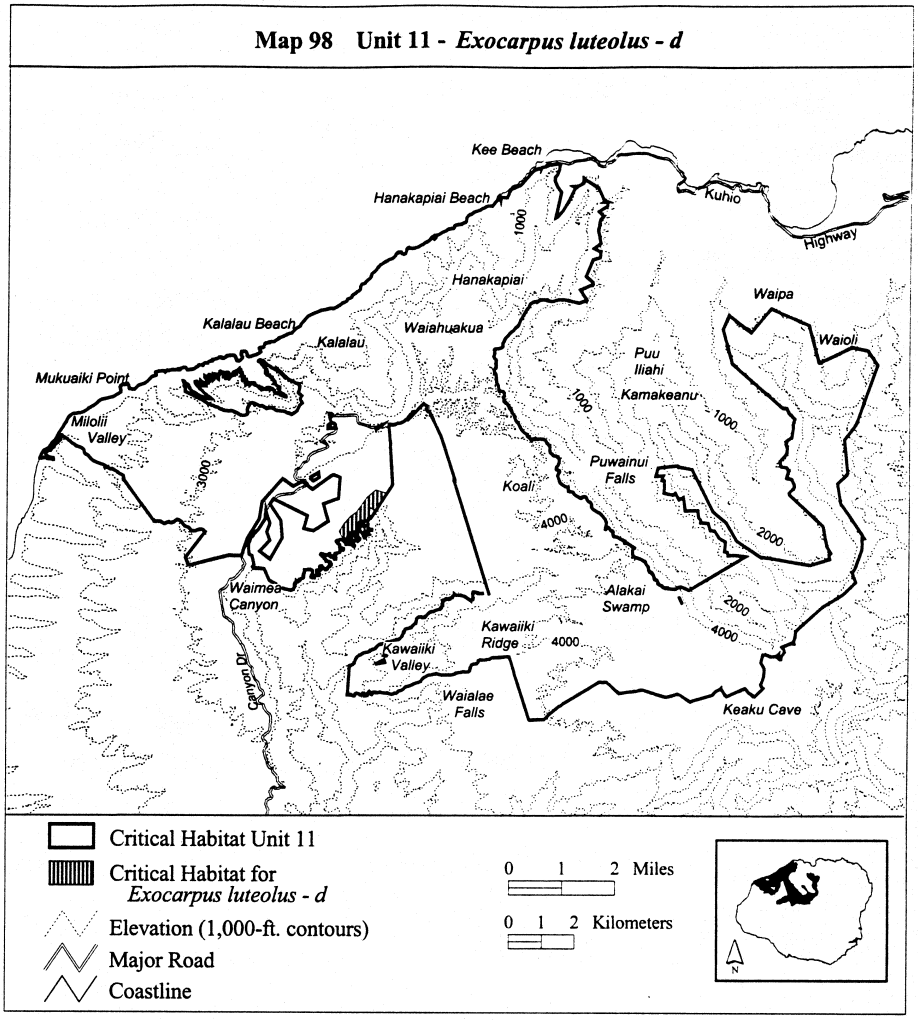


(xcviii) Kauai 11—*Exocarpos luteolus*—d (83 ha; 206 ac)

(A) Unit consists of the following 185 boundary points: Start at 434845, 2446760; 434768, 2446801; 434674, 2446862; 434650, 2446703; 434674, 2446584; 434706, 2446552; 434700, 2446542; 434681, 2446520; 434675, 2446517; 434664, 2446523; 434636, 2446529; 434623, 2446526; 434620, 2446512; 434628, 2446479; 434625, 2446467; 434618, 2446459; 434582, 2446443; 434558, 2446439; 434533, 2446441; 434514, 2446449; 434500, 2446448; 434471, 2446422; 434457, 2446416; 434447, 2446420; 434434, 2446428; 434423, 2446441; 434416, 2446441; 434403, 2446435; 434400, 2446429; 434386, 2446417; 434371, 2446414; 434363, 2446417; 434355, 2446417; 434351, 2446414; 434333, 2446375; 434335, 2446361; 434340, 2446352; 434353, 2446346; 434368, 2446352; 434403, 2446359; 434411, 2446354; 434417, 2446344; 434421, 2446327; 434434, 2446306; 434469, 2446291; 434479, 2446288; 434499, 2446297; 434514, 2446317; 434528, 2446325; 434559, 2446322; 434568, 2446320; 434585, 2446324; 434595, 2446329; 434614, 2446349; 434620, 2446349; 434621,

2446342; 434611, 2446321; 434609, 2446262; 434614, 2446240; 434625, 2446221; 434647, 2446210; 434667, 2446205; 434694, 2446206; 434717, 2446208; 434723, 2446192; 434729, 2446169; 434717, 2446164; 434599, 2446152; 434582, 2446145; 434576, 2446128; 434582, 2446114; 434603, 2446087; 434642, 2446062; 434647, 2446055; 434645, 2446046; 434604, 2446029; 434573, 2446022; 434556, 2446012; 434542, 2445989; 434482, 2445992; 434482, 2445989; 434477, 2446004; 434469, 2446036; 434437, 2446093; 434413, 2446116; 434381, 2446163; 434367, 2446175; 434336, 2446186; 434315, 2446192; 434302, 2446189; 434283, 2446179; 434270, 2446164; 434263, 2446144; 434271, 2446125; 434305, 2446079; 434308, 2446060; 434307, 2446049; 434301, 2446035; 434289, 2446026; 434273, 2446018; 434244, 2446023; 434235, 2446033; 434230, 2446049; 434232, 2446066; 434225, 2446086; 434215, 2446102; 434204, 2446112; 434185, 2446122; 434162, 2446123; 434150, 2446121; 434115, 2446106; 434097, 2446102; 434080, 2446091; 434072, 2446078; 434077, 2446064; 434091, 2446053; 434110, 2446044; 434160, 2446032; 434179, 2446026; 434195, 2446010; 434209, 2445991; 434227, 2445977; 434247, 2445969; 434271, 2445965; 434324, 2445970; 434336, 2445961; 434340, 2445952; 434341, 2445940; 434355, 2445930; 434361, 2445922; 434358, 2445902; 434337, 2445880; 434326, 2445859; 434311, 2445845; 434298, 2445842; 434283, 2445847; 434262, 2445859; 434230, 2445868; 434184, 2445859; 434167, 2445860; 434147, 2445871; 434110, 2445908; 434089, 2445947; 434074, 2445985; 434062, 2445995; 434039, 2446003; 434031, 2446004; 434014, 2445998; 434001, 2445989; 433994, 2445980; 434002, 2445963; 434016, 2445942; 434022, 2445924; 434035, 2445898; 434077, 2445846; 434186, 2445754; 434202, 2445733; 434205, 2445721; 434204, 2445697; 434190, 2445688; 434158, 2445694; 434142, 2445707; 434130, 2445726; 434108, 2445744; 434086, 2445750; 434053, 2445750; 434008, 2445764; 433994, 2445763; 433947, 2445788; 433945, 2445790; 433946, 2445837; 433944, 2445864; 433927, 2445891; 433905, 2445911; 433891, 2445905; 433882, 2445891; 433879, 2445879; 433845, 2445926; 433743, 2446143; 433882, 2446368; 434094, 2446596; 434249, 2446723; 434580, 2447160; 434858, 2447393; 435197, 2447292; return to starting point.

(B) NOTE: Map 98 follows:



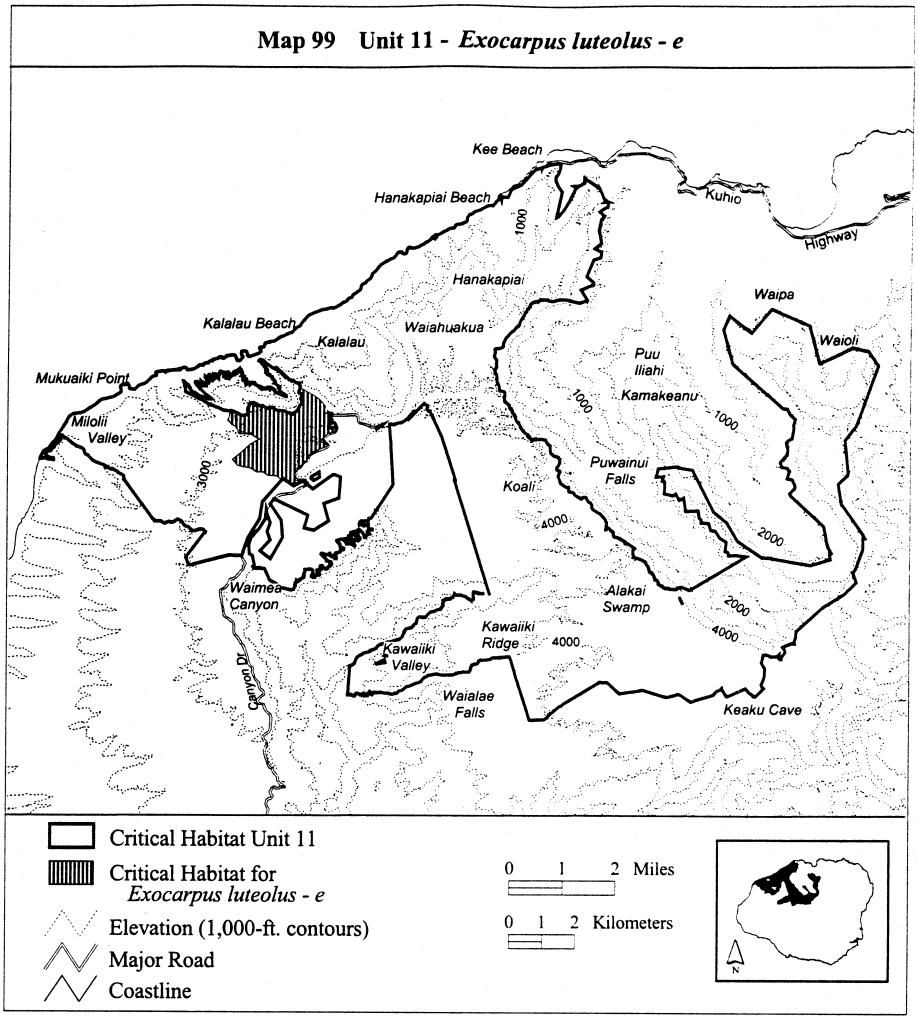
(xcix) Kauai 11—*Exocarpos luteolus*—e (523 ha; 1,290 ac)

(A) Unit consists of the following 153 boundary points: Start at 431279, 2448913; 431273, 2448922; 431027, 2449068; 431020, 2449089; 431006, 2449097; 430984, 2449094; 430970, 2449080; 430815, 2449080; 430799, 2449081; 430797, 2449080; 430686, 2449080; 430677, 2449084; 430643, 2449106; 430629, 2449119; 430619, 2449138; 430616, 2449156; 430623, 2449173; 430623, 2449194; 430616, 2449214; 430604, 2449229; 430559, 2449254; 430545, 2449277; 430533, 2449310; 430527, 2449321; 430485, 2449333; 430474, 2449342; 430463, 2449355; 430451, 2449363; 430430, 2449364; 430437, 2449371; 430418, 2449395; 430369, 2449433; 430355, 2449451; 430349, 2449466; 430335, 2449474; 430318, 2449477; 430307, 2449482; 430312, 2449517; 430313, 2449532; 430320, 2449553; 430331, 2449565; 430346, 2449596; 430354, 2449622; 430355, 2449641; 430348, 2449666; 430376, 2449750; 430384, 2449766; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899,

2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432217, 2449712; 432259, 2449679; 432344, 2449744; 432419, 2449806; 432471, 2449904; 432504, 2449961; 432579, 2450036; 432551, 2450083; 432523, 2450130; 432523, 2450182; 432565, 2450262; 432523, 2450304; 432475, 2450313; 432452, 2450337; 432461, 2450375; 432480, 2450426; 432490, 2450478; 432501, 2450529; 432504, 2450523; 432515, 2450503; 432523, 2450483; 432671, 2450388; 432937, 2450257; 433110, 2450122; 433260, 2449930; 433339, 2449809; 433405, 2449720; 433407, 2449708; 433399, 2449709; 433419, 2449599; 433426, 2449556; 433437, 2449592; 433549, 2449510; 433671, 2449267; 433615, 2449141; 433358, 2449090; 433236, 2448950; 433199, 2448903; 433176, 2448898; 433386, 2448749; 433344, 2448697; 433119, 2448609; 432890, 2448469; 432746, 2448300; 432657, 2448221; 432521, 2448030; 432395, 2447960; 432395, 2447894; 432372, 2447829; 432381, 2447775; 432386, 2447745; 432456, 2447707; 432610, 2447684; 432685, 2447670; 432661, 2447623; 432720, 2447605; 432719, 2447599; 432672, 2447598; 432609, 2447647; 432507, 2447594; 432195, 2447587; 432136, 2447629; 432001, 2447726; 431937, 2447655; 431895, 2447735; 431816, 2447810; 431535, 2447815; 431395, 2447918; 431213, 2447932; 430998, 2448049; 430820, 2448072; 430610, 2448119; 430460, 2448306; 430741, 2448535; 430998, 2448759; 431263, 2448926; 431275, 2448914; return to starting point.

(B) Excluding 1 area bounded by the following 10 points (3 ha, 8 ac): Start at 433368, 2449292; 433367, 2449352; 433448, 2449426; 433546, 2449412; 433567, 2449398; 433589, 2449323; 433612, 2449262; 433588, 2449244; 433567, 2449260; 433369, 2449255; return to starting point.

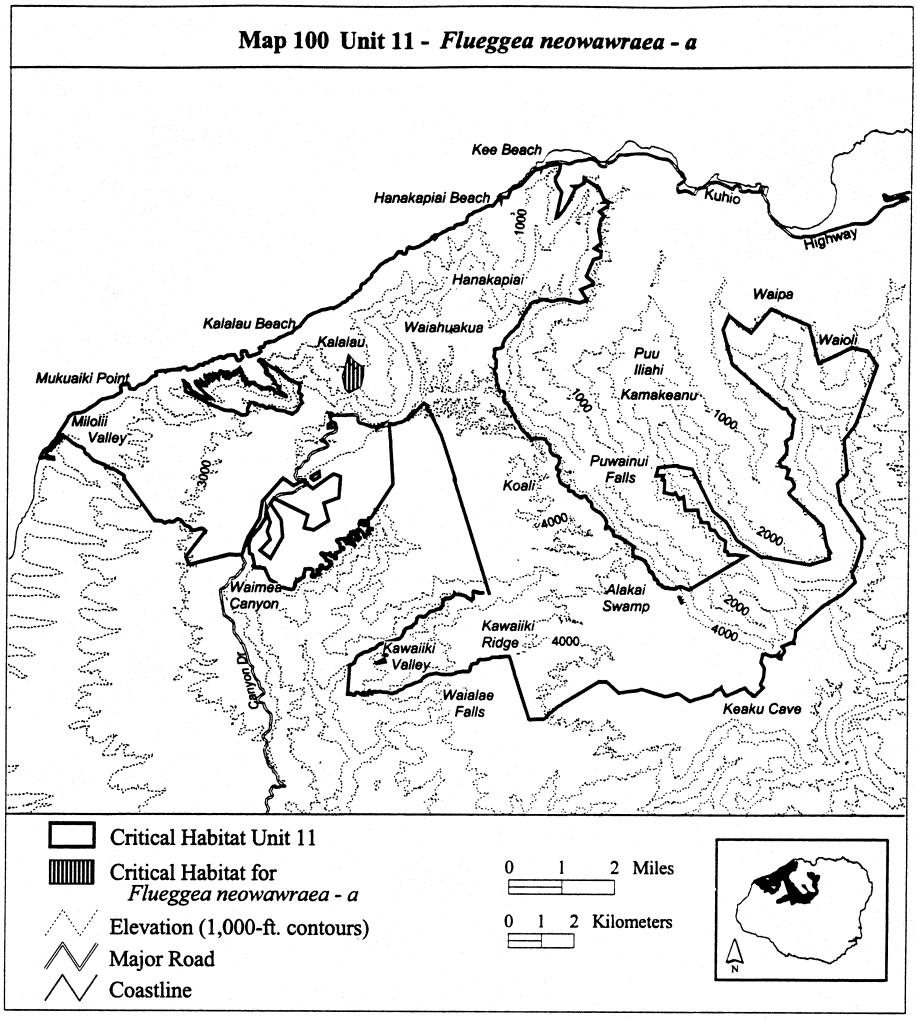
(C) NOTE: Map 99 follows:



(c) Kauai 11—*Flueggea neowawraea*—a (51 ha; 126 ac)

(A) Unit consists of the following 12 boundary points: Start at 434000, 2450312; 433949, 2450368; 433864, 2450473; 433785, 2450832; 433850, 2451030; 433910, 2451245; 433941, 2451386; 433969, 2451525; 434153, 2451307; 434439, 2451106; 434442, 2450846; 434368, 2450518; return to starting point.

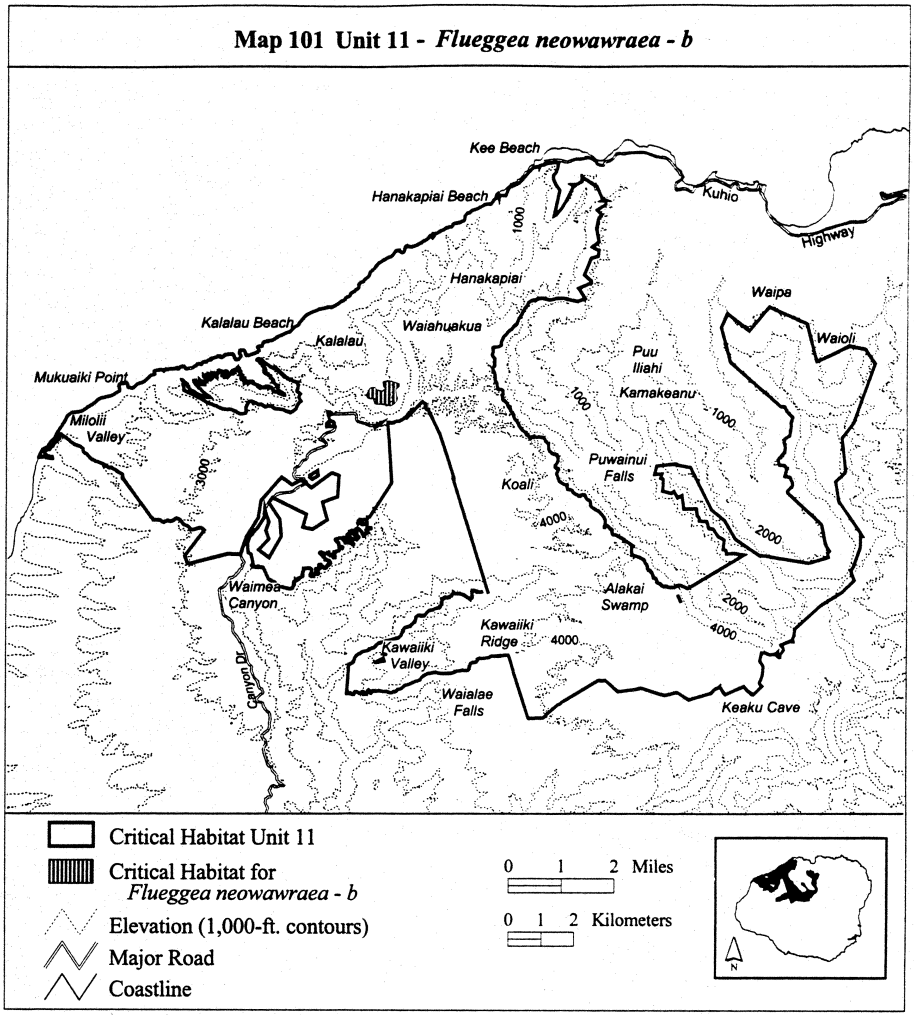
(B) NOTE: Map 100 follows:



(ci) Kauai 11—*Flueggea neowawraea*—b (47 ha; 117 ac)

(A) Unit consists of the following 28 boundary points: Start at 435053, 2450333; 435166, 2450421; 435094, 2450487; 435075, 2450618; 435179, 2450654; 435308, 2450654; 435574, 2450555; 435574, 2450470; 435476, 2450413; 435470, 2450325; 435489, 2450207; 435514, 2450108; 435498, 2450032; 435434, 2449958; 435330, 2449897; 435215, 2449903; 435042, 2449944; 434910, 2449936; 434836, 2449952; 434773, 2450128; 434628, 2450122; 434573, 2450194; 434633, 2450366; 434705, 2450440; 434776, 2450462; 434839, 2450454; 434883, 2450386; 434935, 2450358; return to starting point.

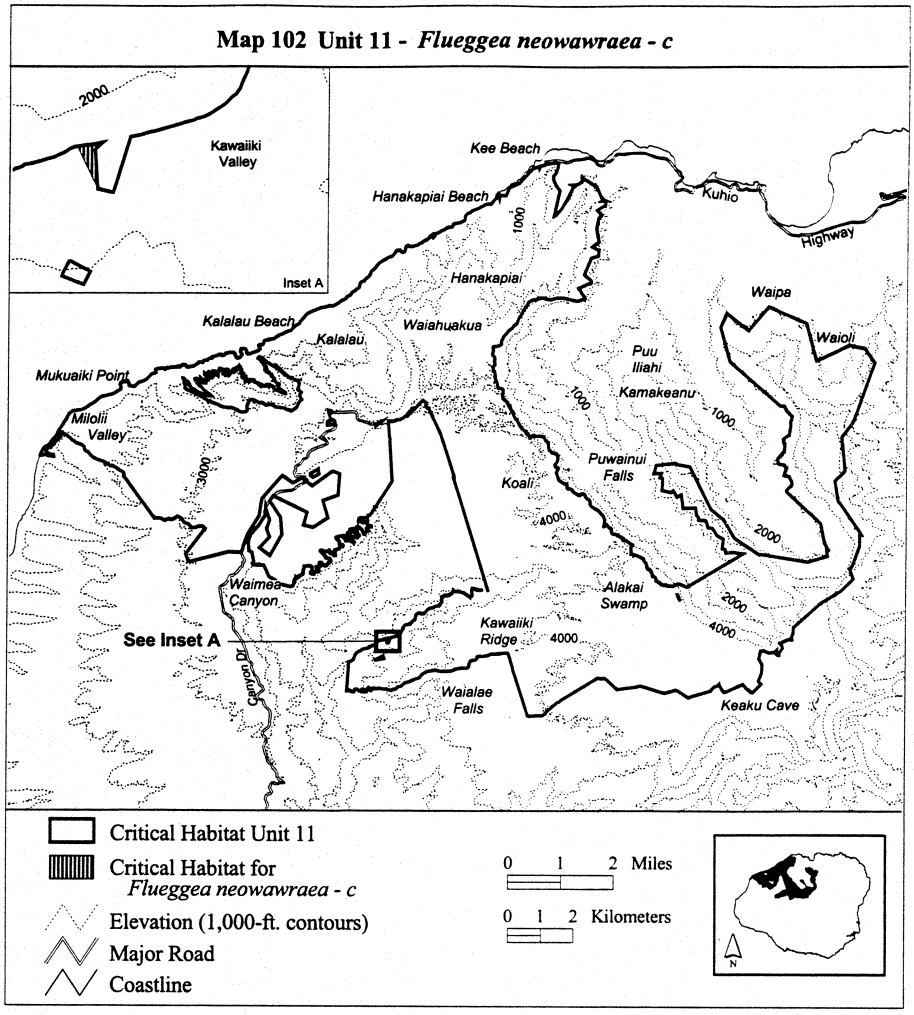
(B) NOTE: Map 101 follows:



(cii) Kauai 11—*Flueggea neowawraea*—c (152 ha; 376 ac)

(A) Unit consists of the following 8 boundary points: Start at 435236, 2442644; 435172, 2442772; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; return to starting point.

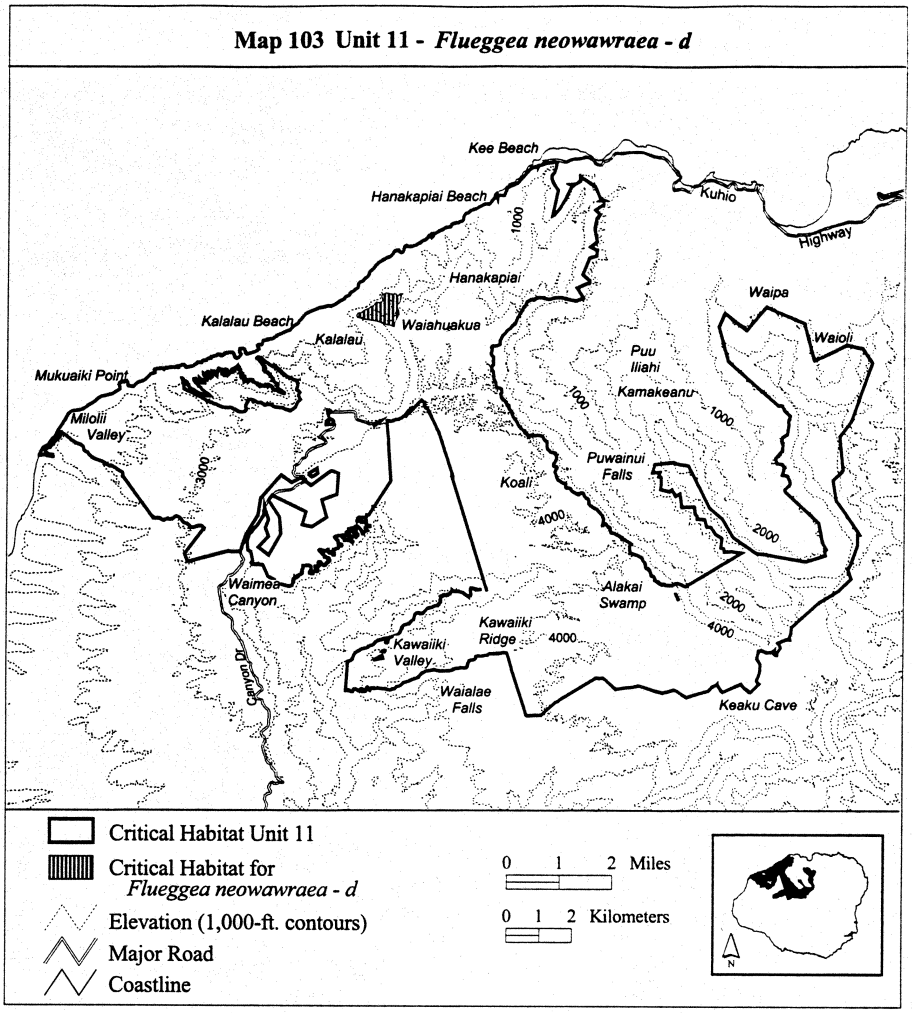
(B) NOTE: Map 102 follows:



(ciii) Kauai 11—*Flueggea neowawraea*—d (77 ha; 191 ac)

(A) Unit consists of the following 51 boundary points: Start at 435601, 2453022; 435552, 2452987; 435543, 2452967; 435543, 2452858; 435585, 2452742; 435585, 2452645; 435523, 2452533; 435465, 2452417; 435436, 2452291; 435369, 2452311; 435179, 2452369; 435037, 2452423; 434866, 2452465; 434660, 2452501; 434508, 2452517; 434392, 2452562; 434308, 2452585; 434282, 2452639; 434331, 2452707; 434382, 2452717; 434437, 2452733; 434476, 2452758; 434508, 2452794; 434534, 2452807; 434647, 2452852; 434698, 2452881; 434724, 2452926; 434798, 2452942; 434853, 2453003; 434901, 2453042; 434934, 2453038; 434966, 2453025; 434995, 2453025; 435062, 2453058; 435072, 2453103; 435066, 2453164; 435043, 2453238; 435069, 2453273; 435104, 2453293; 435143, 2453296; 435156, 2453306; 435169, 2453344; 435278, 2453315; 435401, 2453280; 435417, 2453296; 435459, 2453315; 435488, 2453286; 435511, 2453247; 435556, 2453251; 435610, 2453302; 435675, 2453302; return to starting point.

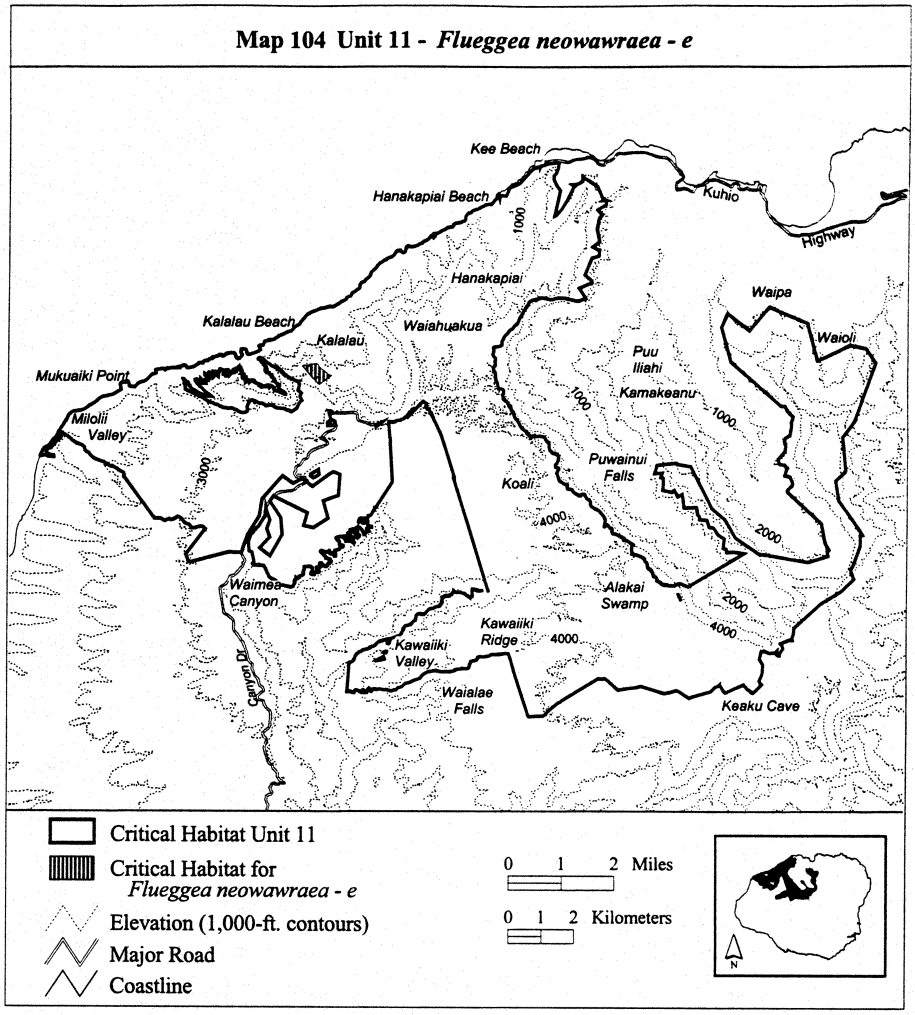
(B) NOTE: Map 103 follows:



(civ) Kauai 11—*Flueggea neowawraea*—e (27 ha; 67 ac)

(A) Unit consists of the following 14 boundary points: Start at 432615, 2451107; 432699, 2451108; 433006, 2451176; 433021, 2451179; 433036, 2451174; 433144, 2451038; 433233, 2450957; 433419, 2450821; 433475, 2450808; 433290, 2450648; 433095, 2450524; 432852, 2450782; 432650, 2451016; 432594, 2451102; return to starting point.

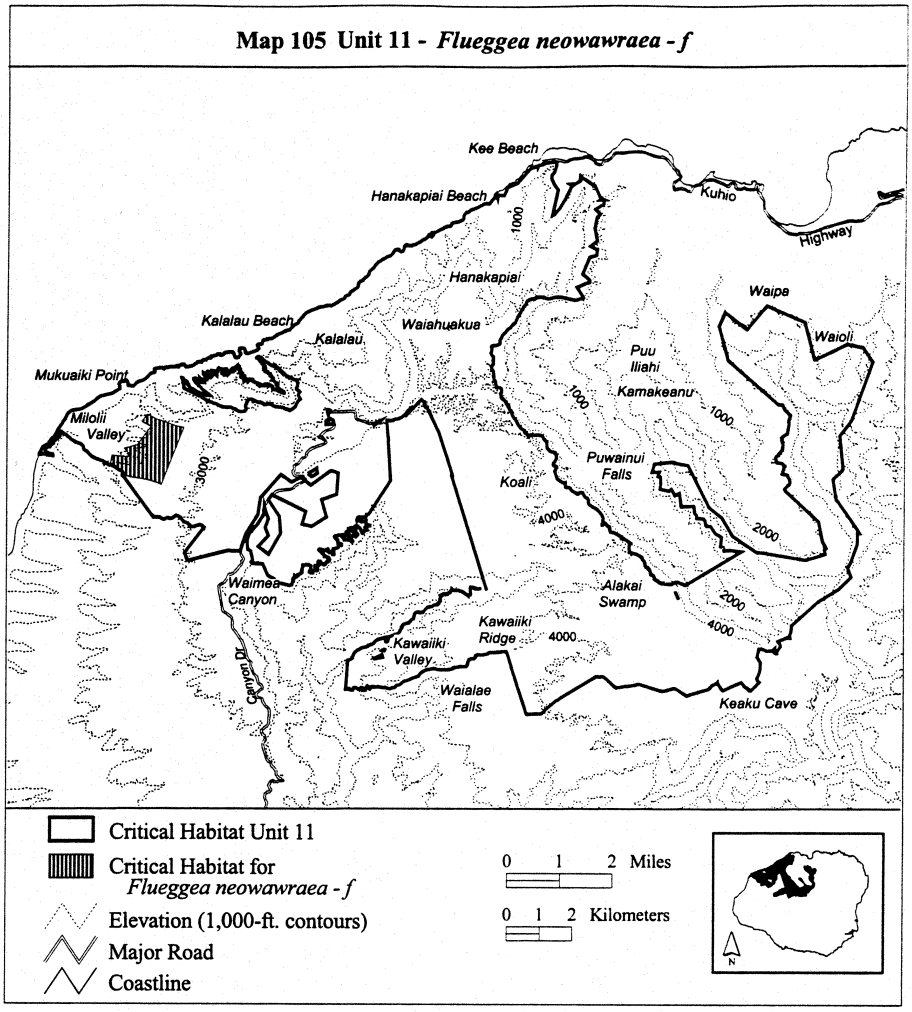
(B) NOTE: Map 104 follows:



(cv) Kauai 11—*Flueggea neowawraea*—f (240 ha; 594 ac)

(A) Unit consists of the following 27 boundary points: Start at 426767, 2448021; 426831, 2448310; 427314, 2448265; 427337, 2448374; 427206, 2448518; 427613, 2448631; 428020, 2449196; 427749, 2449350; 427898, 2449558; 427966, 2449562; 428160, 2449427; 428391, 2449359; 428802, 2449205; 429028, 2449155; 428345, 2447429; 428165, 2447501; 427884, 2447569; 427464, 2447641; 427418, 2447641; 427233, 2447691; 427161, 2447827; 427130, 2447833; 427124, 2447837; 427084, 2447847; 427065, 2447855; 426993, 2447931; 426885, 2447998; return to starting point.

(B) NOTE: Map 105 follows:

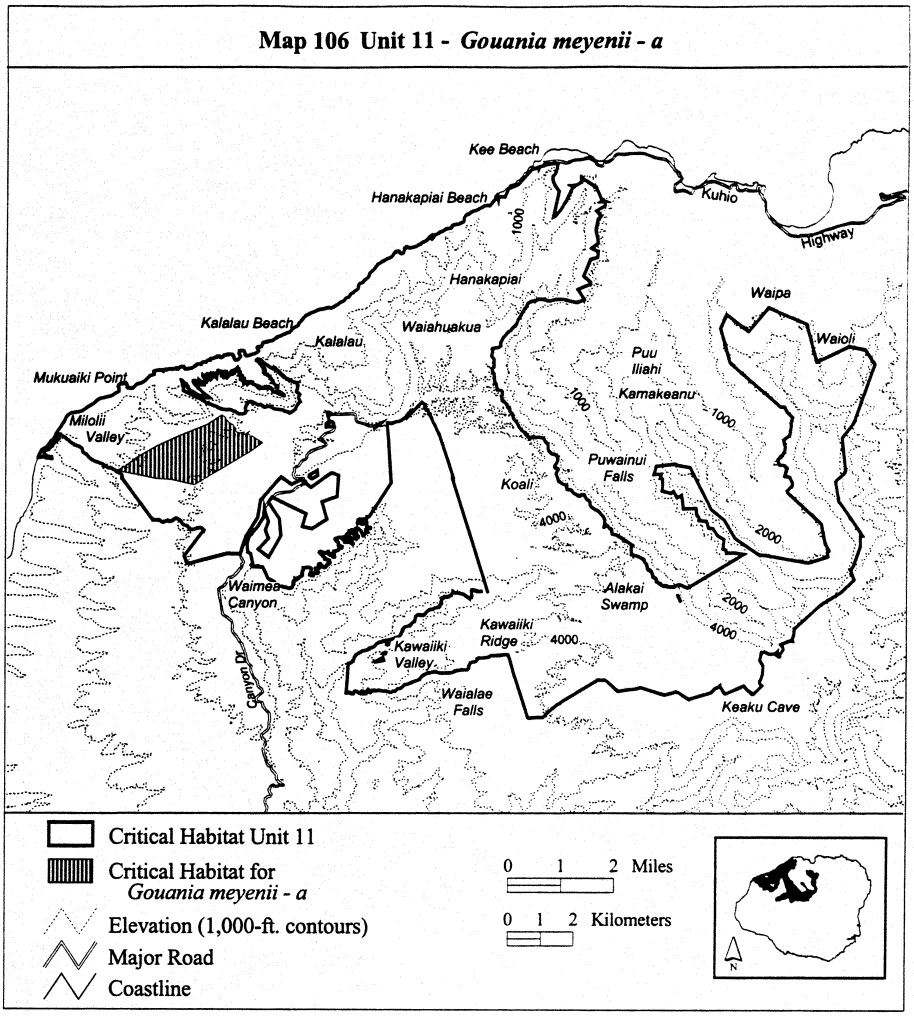


(cvi) Kauai 11—*Gouania meyenii*—a (443 ha; 1,094 ac)

(A) Unit consists of the following 61 boundary points: Start at 429367, 2447493; 428683, 2447645; 428241, 2447686; 427018, 2447921; 427281, 2448080; 427605, 2448322; 428213, 2448667; 428883, 2448977; 429740, 2449322; 430202, 2449633; 430314, 2449534; 430313, 2449532; 430312, 2449517; 430307, 2449482; 430318, 2449477; 430335, 2449474; 430349, 2449466; 430355, 2449451; 430369, 2449433; 430418, 2449395; 430437, 2449371; 430430, 2449364; 430451, 2449363; 430463, 2449355; 430474, 2449342; 430485, 2449333; 430527, 2449321; 430533, 2449310; 430545, 2449277; 430559, 2449254; 430604, 2449229; 430616, 2449214; 430623, 2449194; 430623, 2449173; 430616, 2449156; 430619, 2449138; 430629, 2449119; 430643, 2449106; 430677, 2449084; 430699, 2449074; 430717, 2449071; 430748, 2449070; 430773, 2449073; 430799, 2449081; 430825, 2449080; 430875, 2449032; 430881, 2449027; 430905, 2449022; 430921, 2449029; 430944, 2449045; 430955, 2449058; 431025, 2449016; 431024, 2449005; 431035, 2448975; 431050, 2448960; 431066, 2448956; 431086, 2448957; 431093, 2448962;

431099, 2448970; 431432, 2448770; 431052, 2448487; return to starting point.

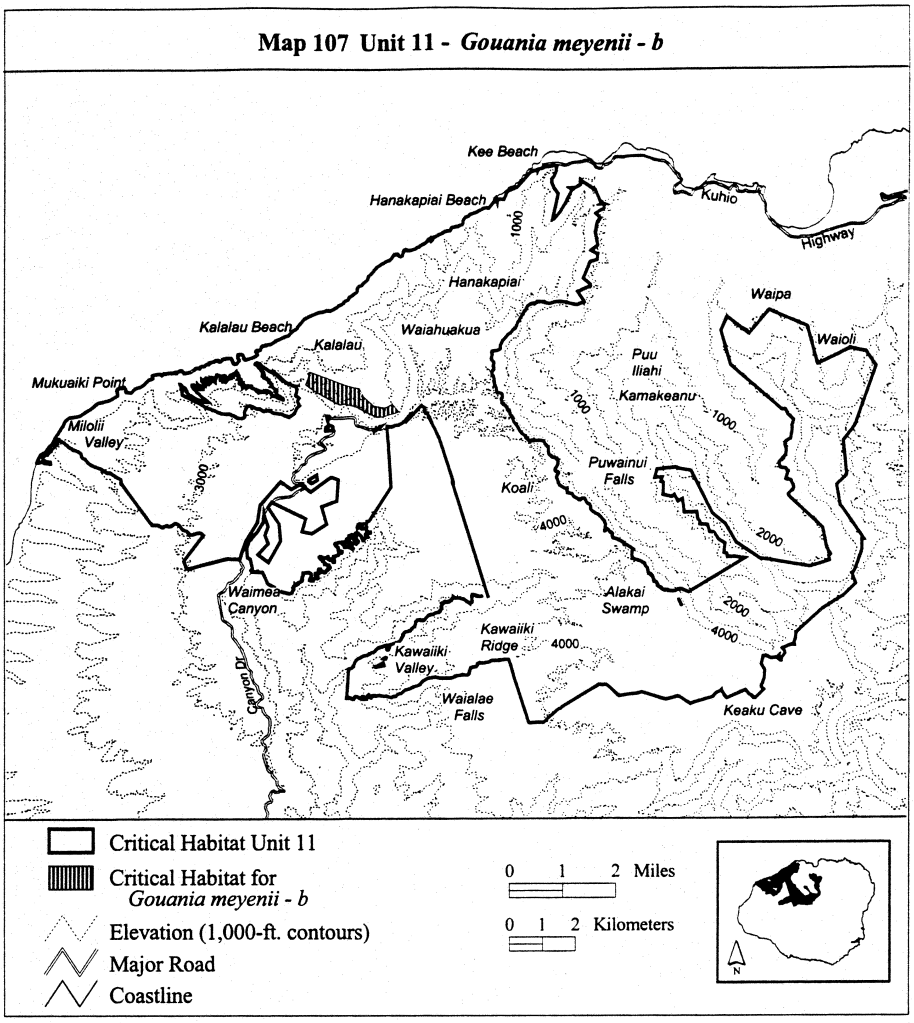
(B) NOTE: Map 106 follows:



(cvii) Kauai 11—*Gouania meyenii*—b (128 ha; 316 ac)

(A) Unit consists of the following 20 boundary points: Start at 432908, 2451056; 433375, 2450880; 433953, 2450654; 434234, 2450563; 434395, 2450548; 434531, 2450292; 434832, 2450011; 435169, 2449930; 435405, 2450056; 435596, 2449830; 435124, 2449679; 434943, 2449669; 434611, 2449820; 434330, 2449971; 434234, 2450006; 433943, 2450071; 433807, 2450051; 433641, 2450127; 433053, 2450458; 432767, 2450674; return to starting point.

(B) NOTE: Map 107 follows:

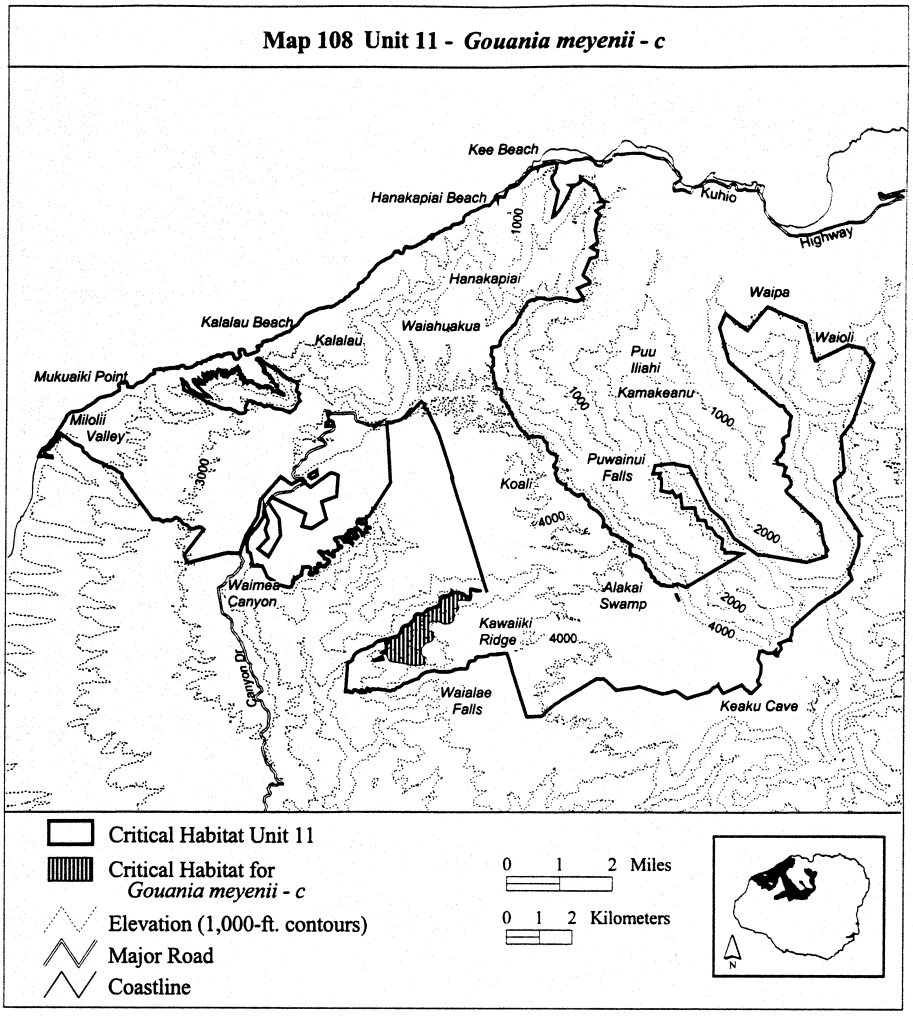


(cviii) Kauai 11—*Gouania meyenii*—c (215 ha; 532 ac)

(A) Unit consists of the following 246 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979,

2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437801, 2444076; 437842, 2444038; 437854, 2443995; 437806, 2443948; 437692, 2443963; 437605, 2443975; 437466, 2443983; 437423, 2443920; 437450, 2443829; 437474, 2443766; 437454, 2443683; 437383, 2443608; 437340, 2443533; 437320, 2443410; 437265, 2443311; 437193, 2443264; 437047, 2443248; 436838, 2443339; 436581, 2443312; 436553, 2443248; 436553, 2443153; 436557, 2443035; 436660, 2443003; 436727, 2442849; 436672, 2442719; 436470, 2442644; 436351, 2442513; 436324, 2442387; 436363, 2442276; 436462, 2442225; 436506, 2442150; 436450, 2442031; 436280, 2441980; 435996, 2441980; 435723, 2442051; 435675, 2442051; 435351, 2442106; 435304, 2442181; 435245, 2442312; 435181, 2442774; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; 435237, 2442643; 435284, 2442631; return to starting point.

(B) NOTE: Map 108 follows:

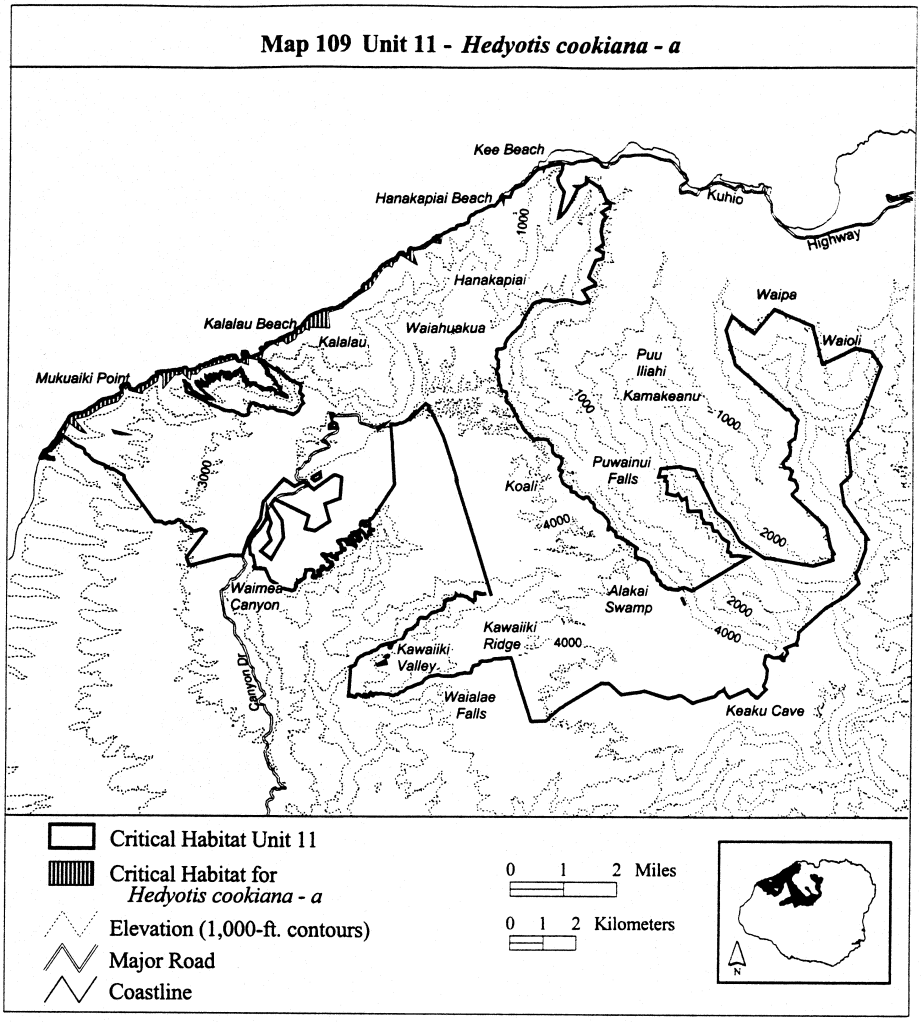


(cix) Kauai 11—*Hedyotis cookiana*—a (771 ha; 1,905 ac)

(A) Unit consists of the following 197 boundary points: Start at 439564, 2456133; 439459, 2455948; 439445, 2455829; 439379, 2455816; 439379, 2455578; 439326, 2455446; 439326, 2455300; 439234, 2455208; 439247, 2455089; 439234, 2455036; 439459, 2454944; 439459, 2454838; 439393, 2454745; 439445, 2454666; 439379, 2454560; 439393, 2454455; 439419, 2454402; 439393, 2454296; 439287, 2454177; 439088, 2454296; 439075, 2454164; 439022, 2454138; 439154, 2454006; 439115, 2453913; 439221, 2453847; 439168, 2453741; 439181, 2453517; 439207, 2453332; 439181, 2453279; 439075, 2453345; 439022, 2453451; 438810, 2453530; 438652, 2453477; 438533, 2453649; 438519, 2453808; 438506, 2453860; 438400, 2453860; 438400, 2453913; 438347, 2453953; 438387, 2454045; 438281, 2454072; 438321, 2454204; 438228, 2454217; 438374, 2454323; 438427, 2454455; 438334, 2454468; 438281, 2454482; 438268, 2454574; 438109, 2454535; 438136, 2454653; 438109, 2454772; 438017, 2454746; 437964, 2454812; 437964, 2454931; 437884, 2454931; 437884, 2455090; 437937, 2455129; 438017, 2455142; 437924, 2455195; 437858, 2455208; 437818,

2455354; 437739, 2455354; 437765, 2455169; 437752, 2455010; 437739, 2454944; 437646, 2454931; 437607, 2454878; 437527, 2454839; 437593, 2454733; 437514, 2454707; 437421, 2454733; 437421, 2454680; 437342, 2454680; 437316, 2454601; 437236, 2454707; 437197, 2454693; 437144, 2454839; 437130, 2454799; 437117, 2454614; 437144, 2454561; 437197, 2454469; 437157, 2454416; 437223, 2454284; 437091, 2454218; 437091, 2453993; 437011, 2453980; 436853, 2454112; 436800, 2454046; 436747, 2454086; 436707, 2454297; 436707, 2454363; 436562, 2454429; 436376, 2454601; 436310, 2454548; 436495, 2454350; 436482, 2454244; 436535, 2454191; 436482, 2454099; 436562, 2453954; 436694, 2453663; 436694, 2453557; 436522, 2453584; 436165, 2453637; 436138, 2453518; 435979, 2453214; 435834, 2453267; 435834, 2453425; 435808, 2453690; 435794, 2453822; 435702, 2454020; 435649, 2453861; 435636, 2453637; 435530, 2453531; 435530, 2453399; 435397, 2453412; 435080, 2453373; 435120, 2453254; 435001, 2453254; 435053, 2453108; 434908, 2453082; 434233, 2452673; 434339, 2452355; 434432, 2452250; 434604, 2452210; 434710, 2451866; 434842, 2451470; 434815, 2451020; 434802, 2450875; 434207, 2450875; 433545, 2450836; 433162, 2450968; 433029, 2451206; 433096, 2451589; 432699, 2451761; 432633, 2452197; 432778, 2452092; 432924, 2452105; 433016, 2452052; 433201, 2452052; 433532, 2451801; 433810, 2452012; 433704, 2452224; 433612, 2452514; 433519, 2452699; 433532, 2452792; 433850, 2452845; 434127, 2453135; 434432, 2453228; 434590, 2453412; 434776, 2453346; 434762, 2453637; 434802, 2453743; 435040, 2453756; 435001, 2453914; 435225, 2453928; 435186, 2454073; 435384, 2454020; 435358, 2454218; 435503, 2454324; 436019, 2454086; 436151, 2453993; 436112, 2454337; 436085, 2454482; 436032, 2454641; 436284, 2454720; 436482, 2454813; 436839, 2454627; 436853, 2454799; 436813, 2454971; 436800, 2455143; 437091, 2455235; 437263, 2455024; 437316, 2455195; 437514, 2455275; 437448, 2455354; 437660, 2455592; 437805, 2455605; 437924, 2455750; 438215, 2455895; 438281, 2455591; 438242, 2455433; 438467, 2455235; 438519, 2454944; 438705, 2454719; 438797, 2454534; 438903, 2454812; 438916, 2455076; 438837, 2455287; 438916, 2455406; 438850, 2455604; 438758, 2455671; 438731, 2455803; 438678, 2455895; 438638, 2456146; 438691, 2456199; 439022, 2456067; 439022, 2456278; return to starting point.

(B) NOTE: Map 109 follows:

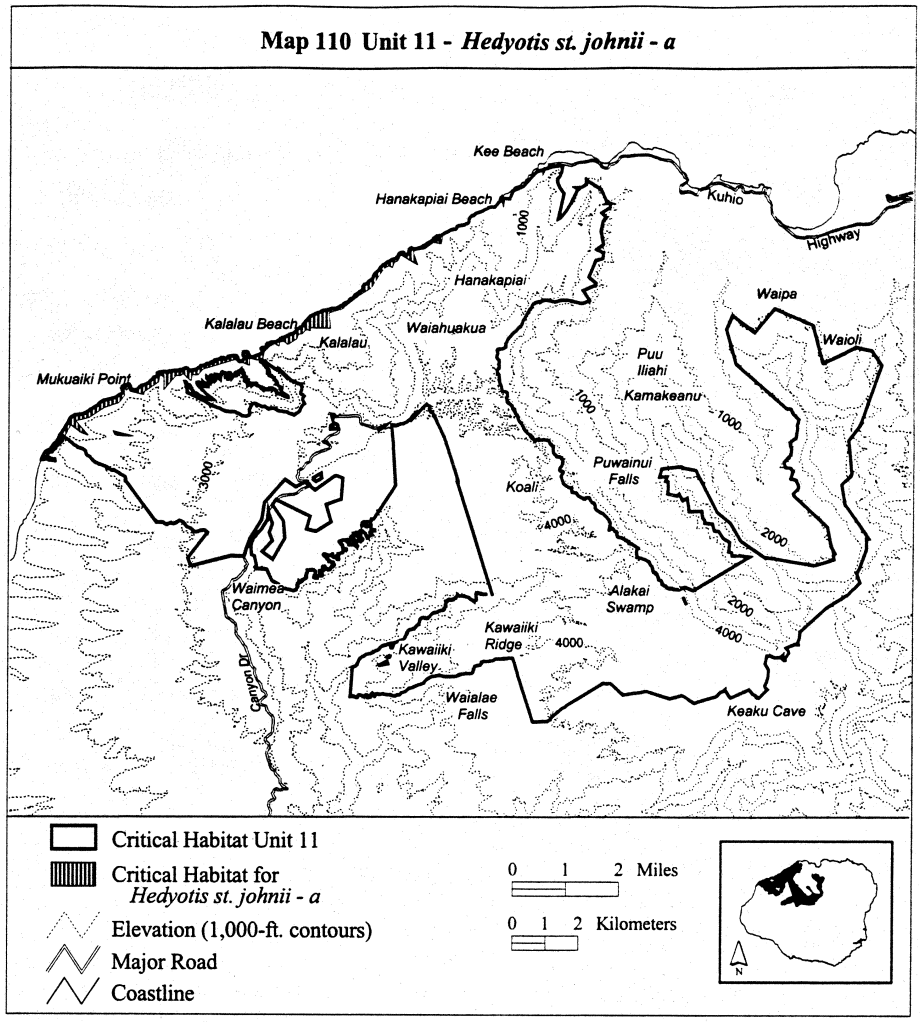


(cx) Kauai 11—*Hedyotis st. johnii*—a (240 ha; 593 ac)

(A) Unit consists of the following 183 boundary points: coastline; 436761, 2455184; 436712, 2454892; 436479, 2454944; 436221, 2454738; 435934, 2454699; 435854, 2454648; 435988, 2454247; 435497, 2454557; 435394, 2454376; 435291, 2454325; 435239, 2454170; 435110, 2454222; 434981, 2454144; 434803, 2453887; 434586, 2453544; 434231, 2453319; 433798, 2452984; 433752, 2452923; 433308, 2452782; 433353, 2452312; 432747, 2452333; 432742, 2452243; 432641, 2452288; 432573, 2452247; 432525, 2452167; 432394, 2452127; 432333, 2452001; 432061, 2451822; 431939, 2451935; 431794, 2451884; 431798, 2451784; 431661, 2451854; 431544, 2451797; 431338, 2451616; 431318, 2451426; 431183, 2451358; 430888, 2451421; 430898, 2451203; 430666, 2451294; 430535, 2451320; 430469, 2451390; 430149, 2451281; 429503, 2451074; 429338, 2450901; 429167, 2450919; 429131, 2450729; 429064, 2450790; 428883, 2450945; 428817, 2450876; 428676, 2450881; 428314, 2450455; 428314, 2450842; 428181, 2450916; 428156, 2450755; 428141, 2450689; 427991,

2450578; 427711, 2450396; 427696, 2450306; 427356, 2450395; 427289, 2450413; 427226, 2450518; 427181, 2450422; 427120, 2450518; 427099, 2450470; 427120, 2450270; 426959, 2450063; 426506, 2449913; 426060, 2449619; 425852, 2449550; 425640, 2449518; 426014, 2449089; 425788, 2449164; 425489, 2449387; 425301, 2449004; 425272, 2449039; 425267, 2449033; 425258, 2449022; 425253, 2449013; 425252, 2449003; 425253, 2448996; 425251, 2448992; 425242, 2448981; 425239, 2448972; 425231, 2448956; 425224, 2448934; 425222, 2448911; 425223, 2448900; 425224, 2448891; 425223, 2448883; 425218, 2448877; 425212, 2448878; 425208, 2448876; 425201, 2448872; 425192, 2448867; 425181, 2448859; 425172, 2448853; 425162, 2448844; 425158, 2448833; 425157, 2448818; 425153, 2448809; 425148, 2448807; 425136, 2448801; 425124, 2448795; 425120, 2448790; 425112, 2448785; 425100, 2448774; 425094, 2448768; 425081, 2448757; 425070, 2448745; 425062, 2448734; 425053, 2448723; 425044, 2448711; 425043, 2448695; 425029, 2448684; 425024, 2448675; 425017, 2448667; 425011, 2448659; 424999, 2448650; 424991, 2448642; 424980, 2448628; 424973, 2448615; 424956, 2448592; 424936, 2448587; 424929, 2448581; 424924, 2448574; 424917, 2448569; 424910, 2448561; 424906, 2448551; 424898, 2448552; 424886, 2448554; 424877, 2448554; 424871, 2448552; 424863, 2448548; 424849, 2448543; 424840, 2448538; 424824, 2448534; 424811, 2448524; 424803, 2448521; 424795, 2448511; 424785, 2448498; 424778, 2448484; 424774, 2448461; 424778, 2448445; 424791, 2448421; 424819, 2448402; 424832, 2448389; 424848, 2448376; 424871, 2448368; 424900, 2448356; 424929, 2448346; 424953, 2448337; 424973, 2448335; 424990, 2448333; 424997, 2448333; 425003, 2448327; 425006, 2448318; 425009, 2448308; 425011, 2448298; 425013, 2448289; 425015, 2448280; 425010, 2448272; 424998, 2448277; 424991, 2448284; 424983, 2448288; 424971, 2448291; 424957, 2448291; 424948, 2448290; 424933, 2448287; 424927, 2448284; 424915, 2448289; 424892, 2448299; 424874, 2448301; 424841, 2448311; 424823, 2448330; 424803, 2448337; 424777, 2448336; 424735, 2448339; 424711, 2448334; 424677, 2448333; 424664, 2448328; 424648, 2448323; 424633, 2448323; 424603, 2448328; coastline.

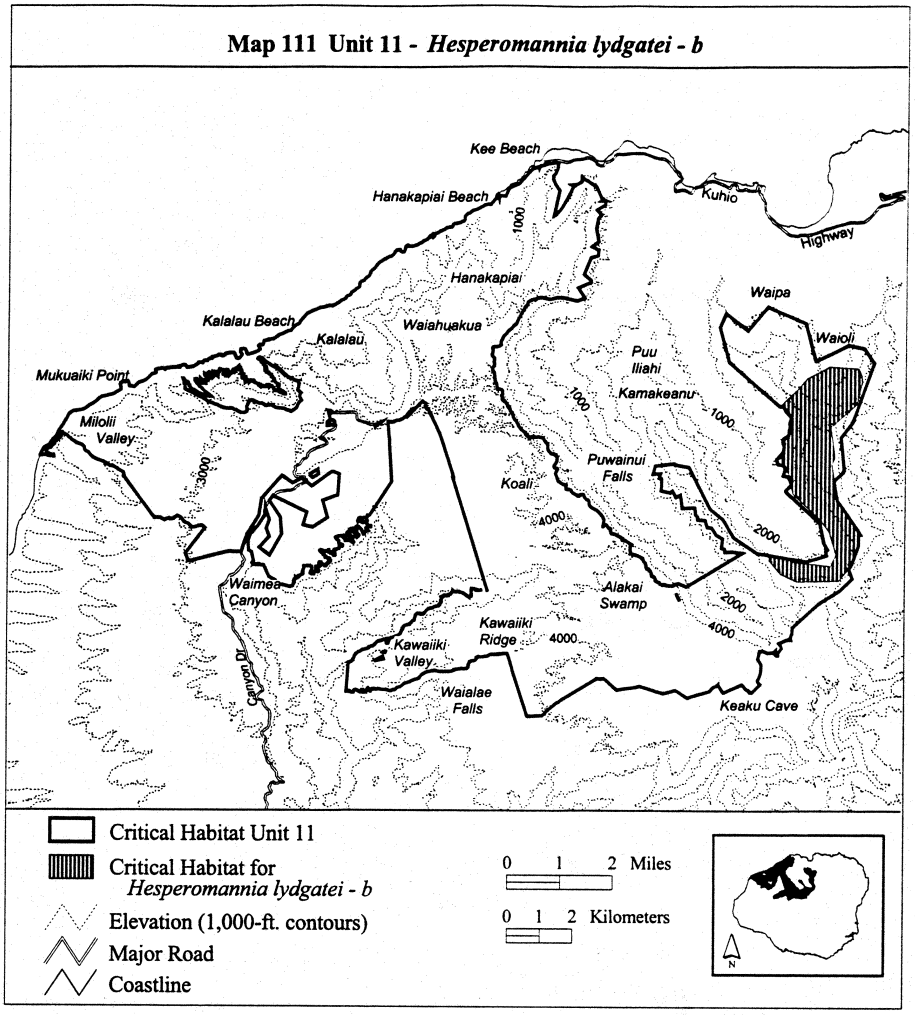
(B) NOTE: Map 110 follows:



(cxi) Kauai 11—*Hesperomannia lydgatei*—b (913 ha; 2,257 ac)

(A) Unit consists of the following 40 boundary points: Start at 449025, 2444558; 449034, 2444577; 447785, 2444536; 447265, 2444785; 446918, 2445192; 446929, 2445275; 446911, 2445345; 447532, 2445239; 447640, 2445139; 448264, 2445076; 448784, 2445014; 448951, 2445367; 448722, 2446074; 448431, 2446449; 447619, 2447218; 447515, 2447780; 447265, 2448196; 447369, 2448840; 447577, 2449152; 447500, 2449383; 447568, 2449571; 447383, 2449734; 447307, 2449963; 447288, 2449973; 447777, 2450446; 448043, 2450744; 448734, 2451117; 449607, 2451049; 449711, 2450800; 449711, 2450644; 449545, 2449954; 449353, 2449767; 448773, 2449272; 448893, 2448312; 448803, 2448103; 448983, 2446963; 449643, 2446064; 449643, 2445644; 449433, 2445045; 449043, 2444565; return to starting point.

(B) NOTE: Map 111 follows:

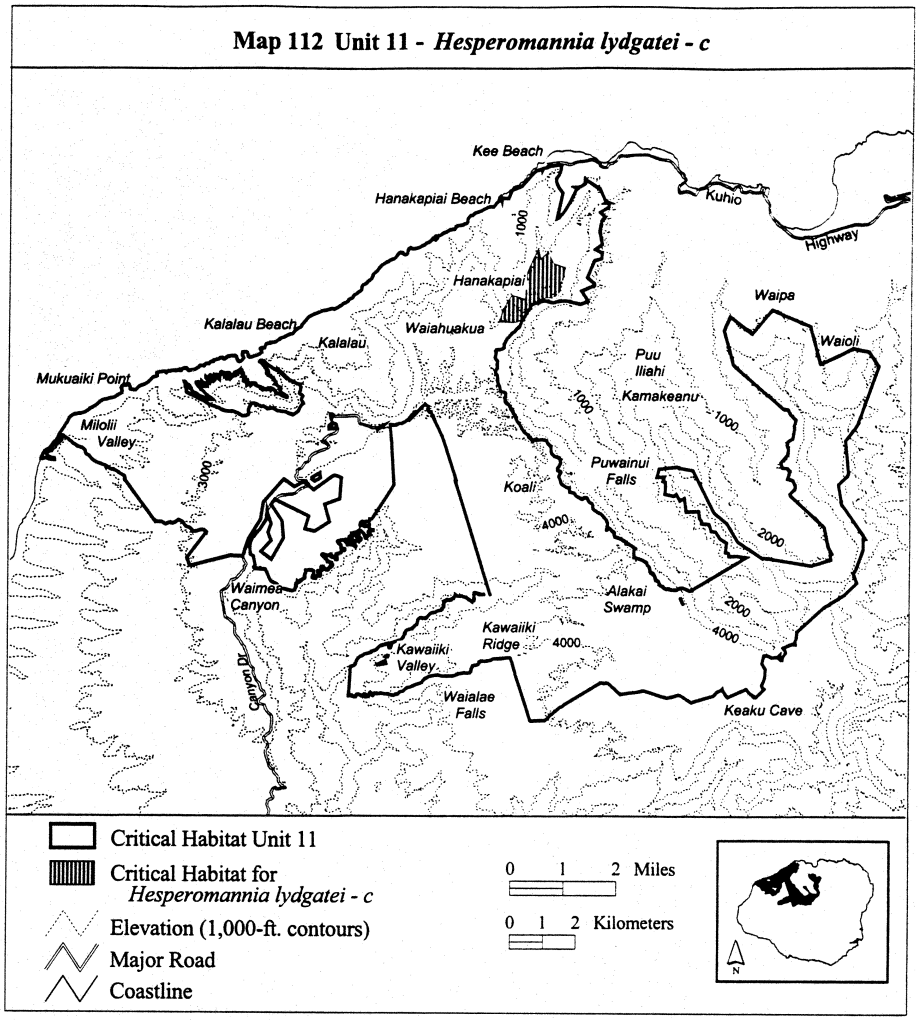


(cxii) Kauai 11—*Hesperomannia lydgatei*—c (180 ha; 444 ac)

(A) Unit consists of the following 63 boundary points: Start at 439257, 2452630; 439170, 2452590; 439025, 2452523; 438546, 2452544; 438629, 2452877; 438900, 2453355; 439316, 2453230; 439378, 2454041; 439711, 2454768; 439733, 2454651; 439774, 2454435; 440003, 2454643; 440169, 2454310; 440536, 2454173; 440533, 2454158; 440523, 2454133; 440509, 2454110; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; 439355, 2452801; 439333,

2452769; 439311, 2452745; 439279, 2452669; return to starting point.

(B) NOTE: Map 112 follows:

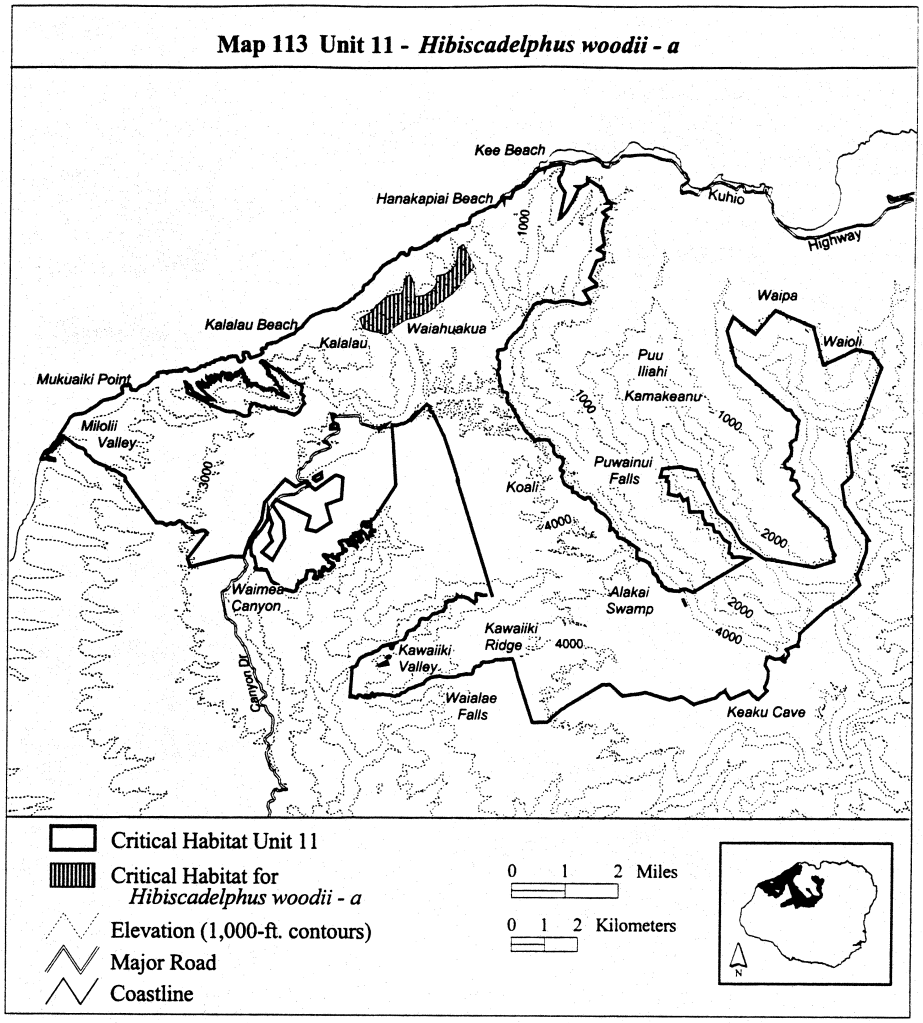


(cxiii) Kauai 11—*Hibiscadelphus woodii*—a (278 ha; 686 ac)

(A) Unit consists of the following 52 boundary points: Start at 437363, 2454888; 437482, 2454647; 437699, 2454229; 437302, 2453742; 437228, 2453583; 437134, 2453505; 437048, 2453382; 437011, 2453374; 436831, 2453251; 436638, 2453088; 436478, 2452949; 436290, 2452826; 435970, 2452683; 435913, 2452666; 435671, 2452621; 435413, 2452470; 435265, 2452364; 435195, 2452253; 435054, 2452153; 434912, 2452191; 434801, 2452221; 434628, 2452243; 434335, 2452343; 434224, 2452634; 434569, 2452839; 434769, 2453060; 434970, 2453248; 435142, 2453350; 435318, 2453395; 435486, 2453407; 435556, 2453530; 435568, 2453678; 435614, 2453870; 435741, 2453972; 435818, 2453862; 435872, 2453677; 435892, 2453485; 435900, 2453366; 435925, 2453325; 436187, 2453346; 436376,

2453473; 436503, 2453604; 436544, 2453710; 436552, 2453845; 436560, 2453947; 436650, 2453964; 436822, 2453996; 436995, 2454115; 437117, 2454254; 437167, 2454479; 437179, 2454676; 437232, 2454790; return to starting point.

(B) NOTE: Map 113 follows:

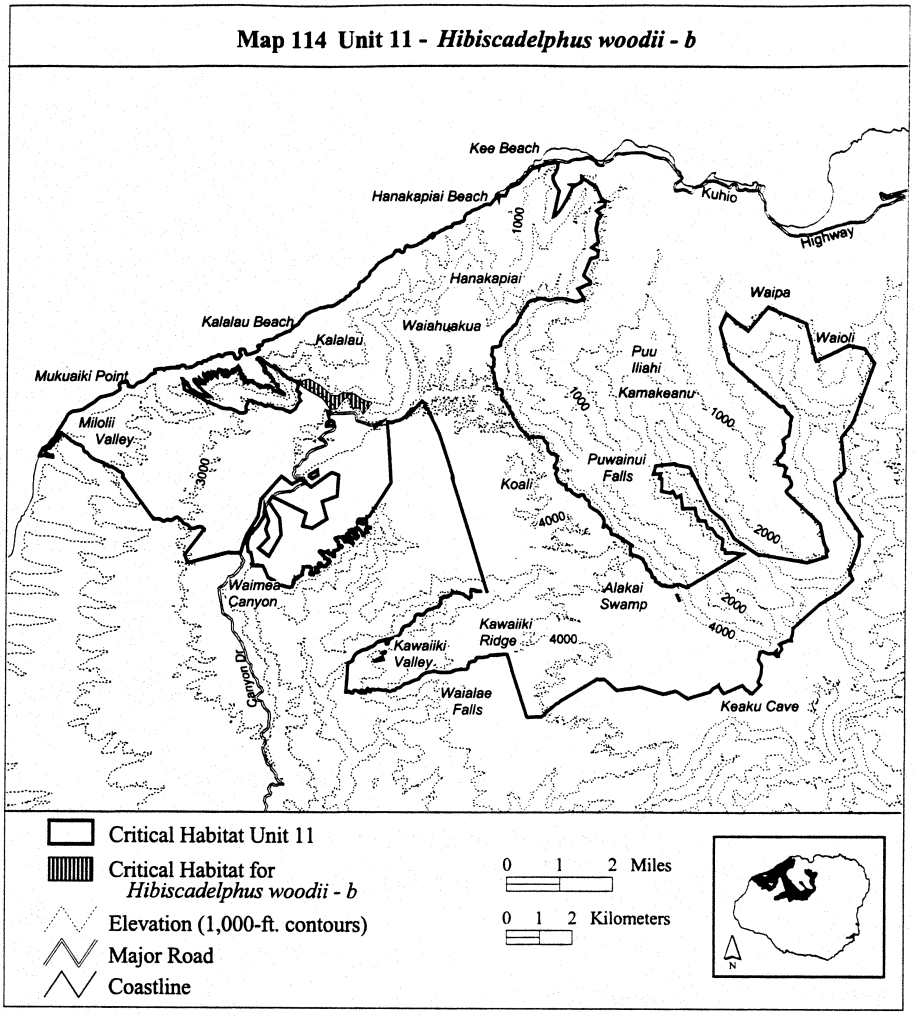


(cxiv) Kauai 11—*Hibiscadelphus woodii*—b (72 ha; 177 ac)

(A) Unit consists of the following 43 boundary points: Start at 432520, 2450579; 432692, 2450669; 432843, 2450694; 432979, 2450628; 433167, 2450501; 433306, 2450399; 433446, 2450268; 433511, 2450202; 433704, 2450174; 433839, 2450268; 434081, 2450272; 434290, 2450198; 434437, 2450087; 434577, 2450030; 434737, 2449985; 434753, 2449956; 434716, 2449895; 434642, 2449793; 434536, 2449666; 434478, 2449604; 434388, 2449772; 434360, 2449817; 434245, 2449793; 434155, 2449817; 434097, 2449952; 434069,

2450079; 434007, 2450116; 433933, 2450104; 433876, 2450039; 433806, 2449940; 433753, 2449875; 433720, 2449817; 433667, 2449777; 433573, 2449772; 433495, 2449768; 433429, 2449830; 433376, 2449928; 433323, 2449994; 433233, 2450104; 433085, 2450194; 432839, 2450334; 432704, 2450432; 432589, 2450481; return to starting point.

(B) NOTE: Map 114 follows:

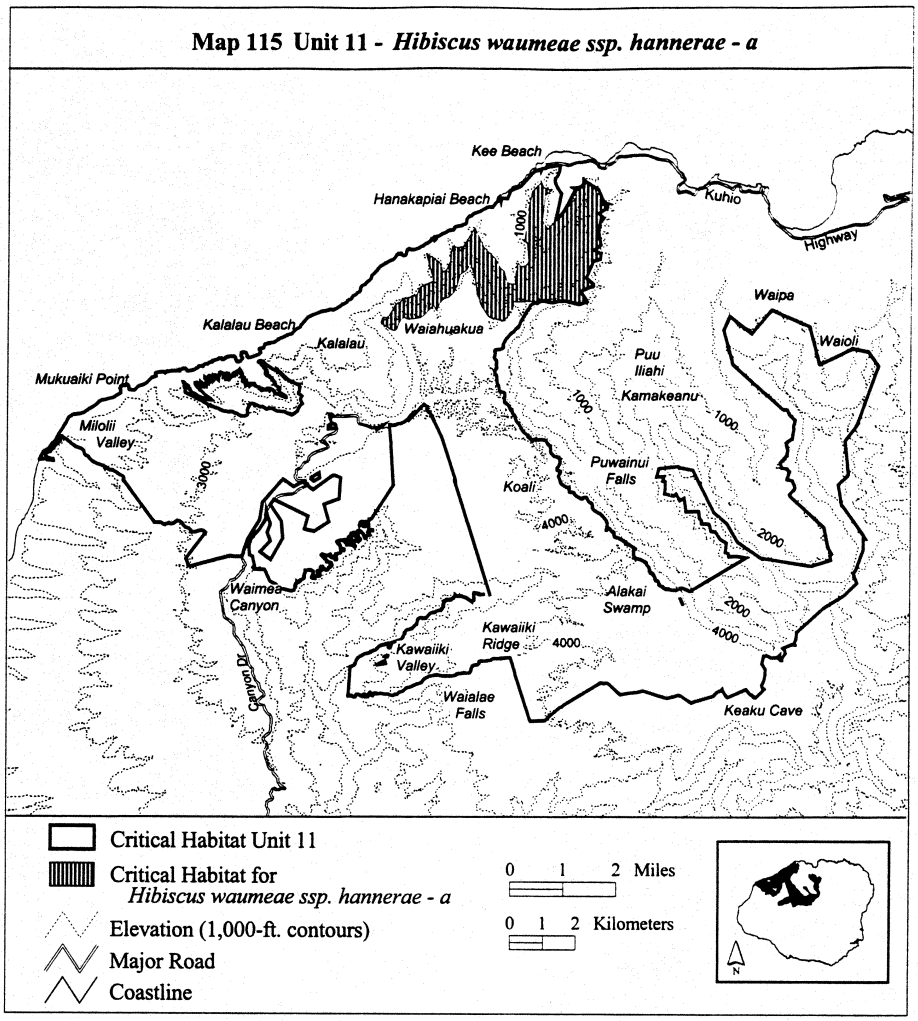


(cxv) Kauai 11—*Hibiscus waimeae ssp. hannerae*—a (1,119 ha; 2,765 ac)

(A) Unit consists of the following 180 boundary points: Start at 439800, 2453173; 439754, 2453167; 439692, 2453157; 439557, 2453163; 439532, 2453165; 439441, 2453172; 439409, 2453191; 439363, 2453165; 439230, 2453162; 439059, 2453162; 438983, 2453175; 438983, 2453064; 438942, 2452919; 438866, 2452802; 438796, 2452700; 438701, 2452574; 438505, 2452615; 438362, 2452644; 438261, 2452688; 438188, 2452770; 438014, 2453046; 437944, 2453242; 437874, 2453406; 437858, 2453641; 437801, 2453891; 437763,

2454052; 437719, 2454160; 437675, 2454356; 437584, 2454153; 437374, 2454005; 437347, 2453974; 437348, 2453973; 437291, 2453729; 437199, 2453502; 437184, 2453467; 437047, 2453328; 436790, 2453211; 436648, 2452900; 436559, 2453068; 436417, 2452923; 436281, 2452768; 436157, 2452689; 435967, 2452657; 435831, 2452635; 435770, 2452632; 435698, 2452682; 435644, 2452701; 435488, 2452477; 435444, 2452338; 435397, 2452296; 435352, 2452293; 435251, 2452328; 434963, 2452515; 434978, 2452588; 435029, 2452702; 435086, 2452679; 435131, 2452688; 435131, 2452688; 435131, 2452688; 435132, 2452688; 435132, 2452689; 435132, 2452689; 435133, 2452689; 435133, 2452689; 435134, 2452690; 435134, 2452690; 435135, 2452690; 435135, 2452690; 435135, 2452690; 435136, 2452690; 435136, 2452691; 435137, 2452691; 435137, 2452691; 435138, 2452691; 435138, 2452691; 435138, 2452691; 435139, 2452691; 435139, 2452692; 435140, 2452692; 435140, 2452692; 435141, 2452692; 435141, 2452692; 435142, 2452692; 435142, 2452692; 435143, 2452692; 435143, 2452692; 435191, 2452717; 435270, 2452863; 435321, 2452945; 435403, 2453072; 435454, 2453129; 435495, 2453141; 435542, 2453151; 435609, 2453249; 435774, 2453290; 436053, 2453389; 436152, 2453608; 436563, 2453790; 436329, 2454620; 436719, 2454372; 436832, 2454059; 436960, 2454143; 436959, 2454144; 437063, 2454388; 437095, 2454691; 437123, 2454847; 437299, 2454806; 437456, 2454831; 437810, 2455391; 438080, 2454797; 438434, 2454464; 438587, 2454169; 438692, 2454087; 438723, 2453966; 438774, 2453808; 438828, 2453723; 438942, 2453681; 439028, 2453685; 439066, 2454067; 439088, 2454131; 439085, 2454138; 439096, 2454216; 439096, 2454271; 439119, 2454321; 439151, 2454295; 439187, 2454235; 439234, 2454221; 439271, 2454221; 439370, 2454258; 439422, 2454331; 439438, 2454388; 439444, 2454416; 439440, 2454421; 439391, 2454938; 439235, 2455037; 439299, 2455455; 439412, 2455858; 439540, 2456495; 439815, 2456763; 439823, 2456771; 439894, 2456601; 440128, 2456530; 439944, 2456367; 439859, 2455603; 440015, 2455348; 440865, 2456289; 440893, 2456544; 441127, 2456650; 441142, 2456810; 441443, 2456623; 441460, 2456466; 441609, 2456381; 441609, 2456254; 441799, 2456137; 441783, 2456137; 441761, 2456132; 441835, 2456125; 441835, 2456004; 441578, 2455834; 441704, 2455698; 441624, 2455592; 441558, 2455280; 441634, 2454883; 441432, 2454722; 441629, 2454611; 441614, 2454455; 441412, 2454395; 441196, 2453892; 441412, 2453696; 441402, 2453646; 441025, 2453470; 441231, 2453168; 440989, 2453082; 440546, 2453183; 440390, 2453178; 440234, 2453133; 440153, 2453118; 439932, 2453184; 439811, 2453179; 439809, 2453180; return to starting point.

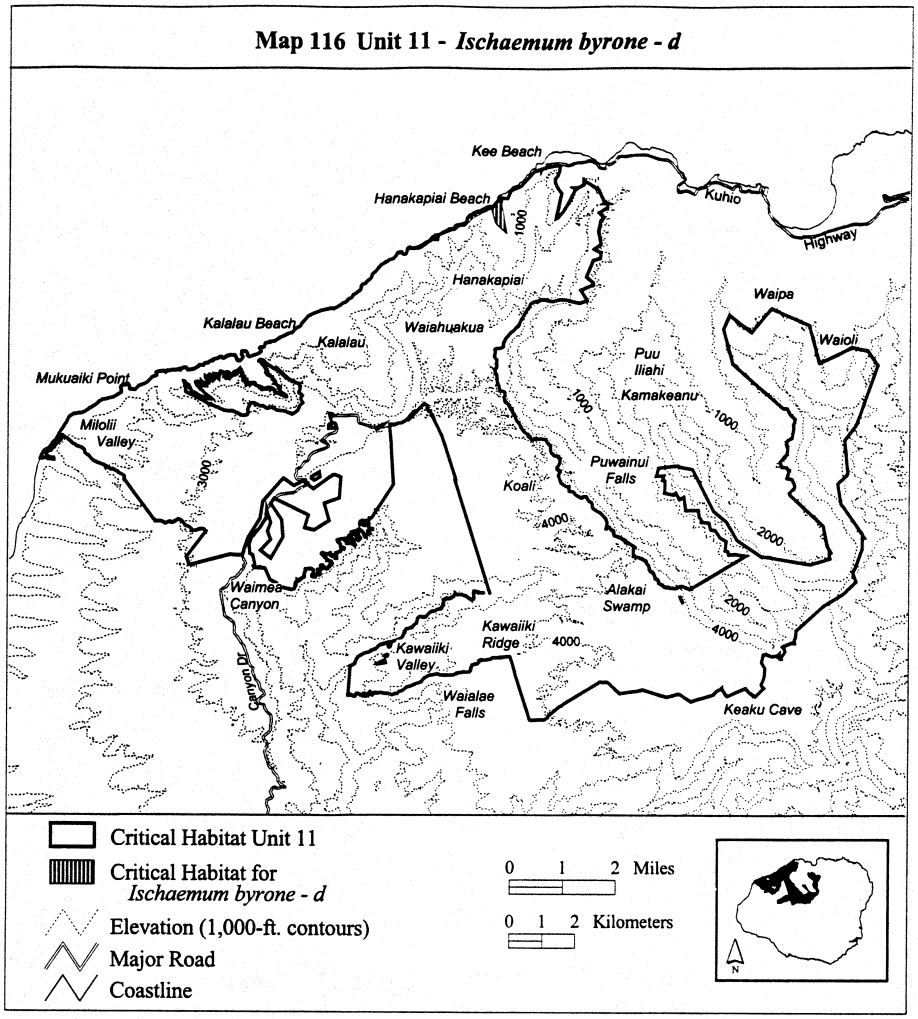
(B) NOTE: Map 115 follows:



(cxvi) Kauai 11—*Ischaemum byrone*—d (45 ha; 111 ac)

(A) Unit consists of the following 16 boundary points: coastline; 438535, 2456321; 438601, 2456128; 438762, 2455202; 438425, 2455523; 438279, 2455967; 437712, 2455654; 437482, 2455417; 437305, 2455401; 437190, 2455271; 437106, 2455279; 436707, 2455118; 436684, 2454957; 436524, 2454988; 436179, 2454736; 436046, 2454695; 436030, 2454762; coastline.

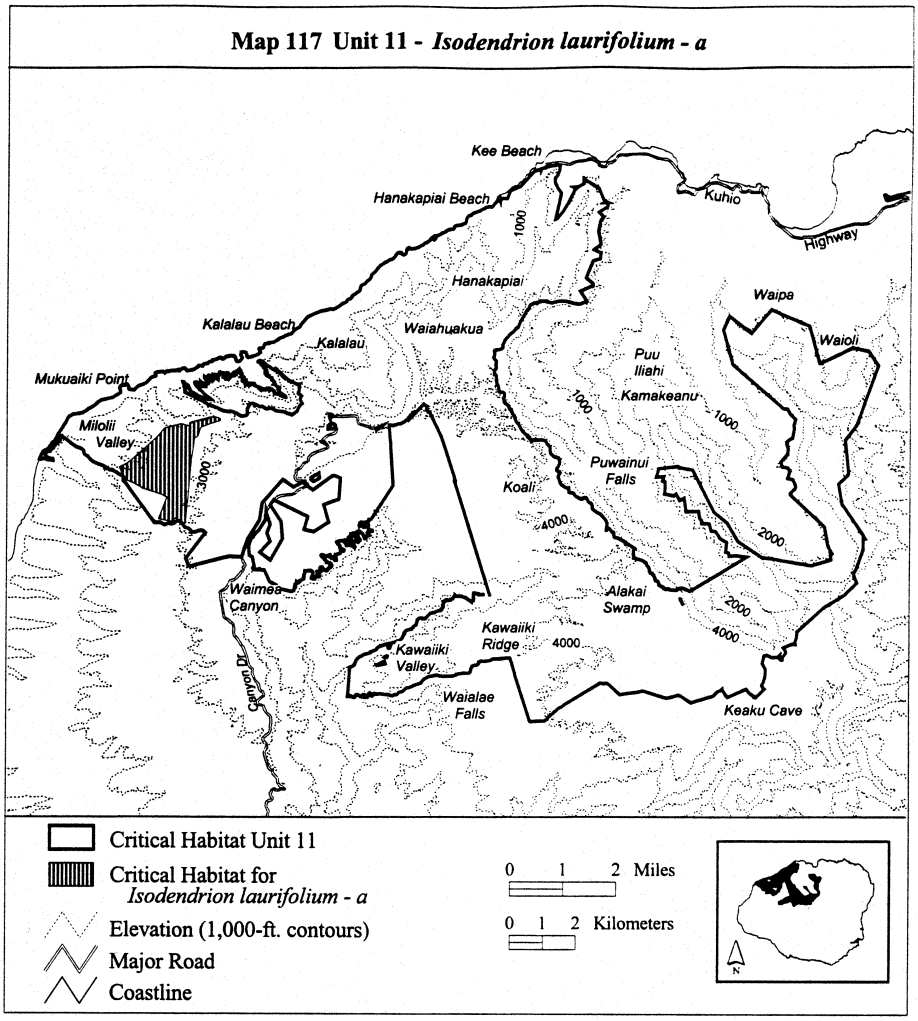
(B) NOTE: Map 116 follows:



(cxvii) Kauai 11—*Isodendrion laurifolium*—a (401 ha; 991 ac)

(A) Unit consists of the following 39 boundary points: Start at 428398, 2449289; 428405, 2449288; 428911, 2449402; 429148, 2449342; 429159, 2449457; 429516, 2449545; 429785, 2449616; 429961, 2449622; 430088, 2449567; 430093, 2449517; 429829, 2449413; 429500, 2449298; 429428, 2449040; 429329, 2448974; 429323, 2448976; 429220, 2448345; 429046, 2446402; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428632, 2446462; 428222, 2446540; 428481, 2447196; 428330, 2447269; 427752, 2447450; 427517, 2447597; 427171, 2447746; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427131, 2447833; 427028, 2448086; 427253, 2448194; 427464, 2448370; 427811, 2448673; 428207, 2449040; return to starting point.

(B) NOTE: Map 117 follows:

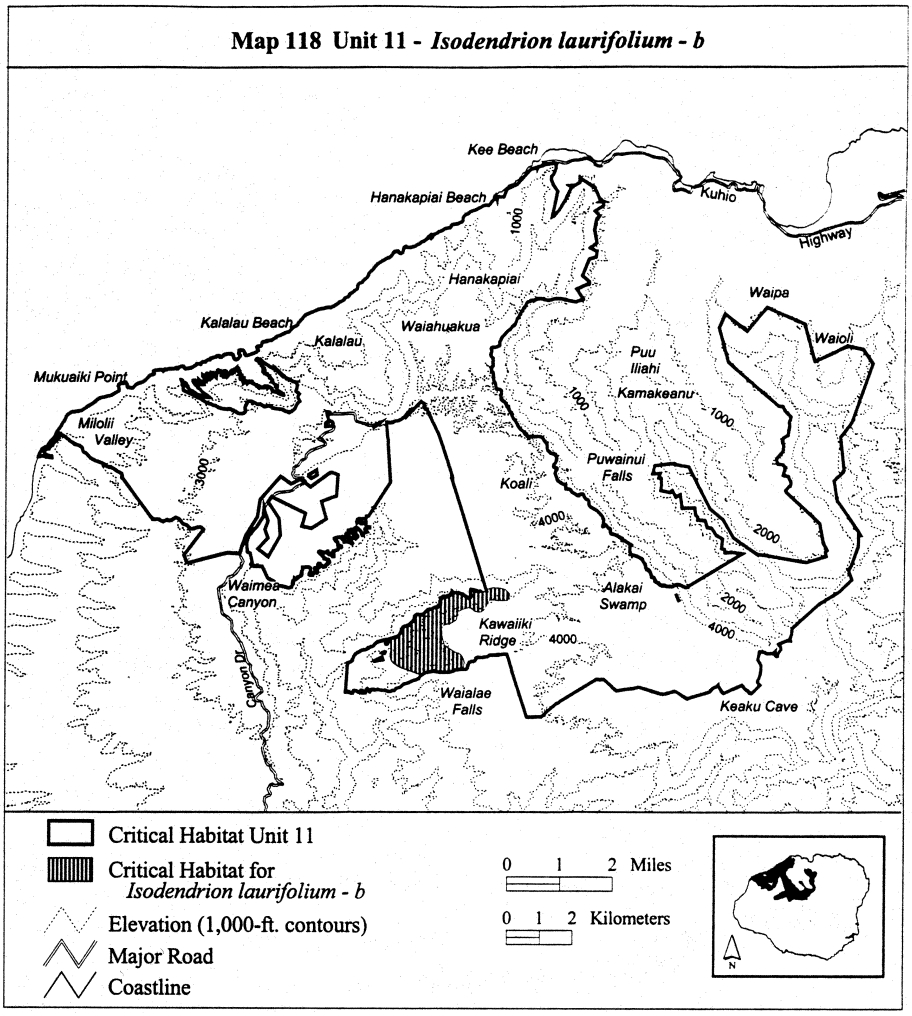


(cxviii) Kauai 11—*Isodendrion laurifolium*—b (400 ha; 988 ac)

(A) Unit consists of the following 320 boundary points: Start at 439006, 2444193; 438997, 2444039; 438903, 2443983; 438775, 2443979; 438637, 2443979; 438509, 2444013; 438402, 2443987; 438346, 2443863; 438269, 2443722; 438175, 2443641; 438098, 2443628; 437961, 2443649; 437871, 2443726; 437815, 2443769; 437772, 2443769; 437614, 2443714; 437438, 2443645; 437421, 2443559; 437412, 2443448; 437391, 2443384; 437228, 2443294; 437009, 2443230; 436941, 2443114; 436949, 2443011; 436962, 2442891; 436988, 2442758; 437031, 2442613; 437146, 2442527; 437356, 2442407; 437494, 2442356; 437569, 2442295; 437605, 2442210; 437648, 2442107; 437613, 2441906; 437601, 2441867; 437566, 2441876; 437532, 2441880; 437522, 2441879; 437495, 2441869; 437460, 2441862; 437391, 2441858; 437366, 2441852; 437346, 2441845; 437332, 2441842; 437317, 2441835; 437287, 2441816; 437274, 2441809; 437240, 2441796; 437224, 2441791; 437181, 2441781; 437150, 2441777; 437111, 2441777; 437096, 2441779; 437062, 2441776; 437008, 2441775; 436960,

2441776; 436912, 2441780; 436895, 2441784; 436825, 2441795; 436799, 2441801; 436777, 2441809; 436730, 2441820; 436695, 2441811; 436666, 2441808; 436638, 2441803; 436618, 2441796; 436593, 2441792; 436583, 2441789; 436541, 2441785; 436492, 2441773; 436453, 2441759; 436419, 2441739; 436408, 2441737; 436374, 2441718; 436362, 2441711; 436277, 2441726; 435977, 2441829; 435771, 2441906; 435621, 2441970; 435488, 2442048; 435398, 2442150; 435364, 2442279; 435368, 2442352; 435394, 2442442; 435390, 2442519; 435390, 2442630; 435386, 2442776; 435382, 2442812; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 438294, 2444342; 438355, 2444334; 438488, 2444377; 438732, 2444360; 438787, 2444347; 438895, 2444313; return to starting point.

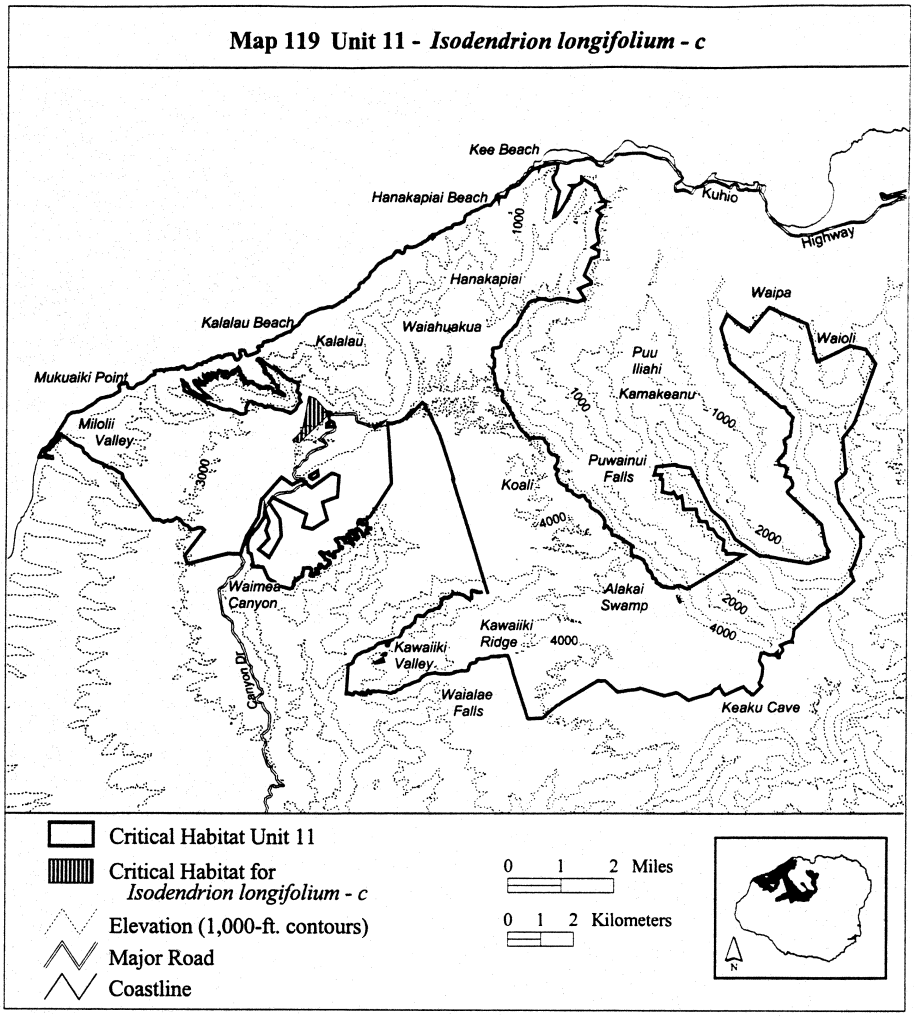
(B) NOTE: Map 118 follows:



(cxix) Kauai 11—*Isodendrion longifolium*—c (59 ha; 146 ac)

(A) Unit consists of the following 12 boundary points: Start at 432793, 2450043; 432799, 2450073; 432822, 2450200; 432971, 2450144; 433043, 2450118; 433310, 2449821; 433426, 2449707; 433399, 2449709; 433414, 2449628; 432530, 2448758; 432335, 2448851; 432630, 2449144; return to starting point.

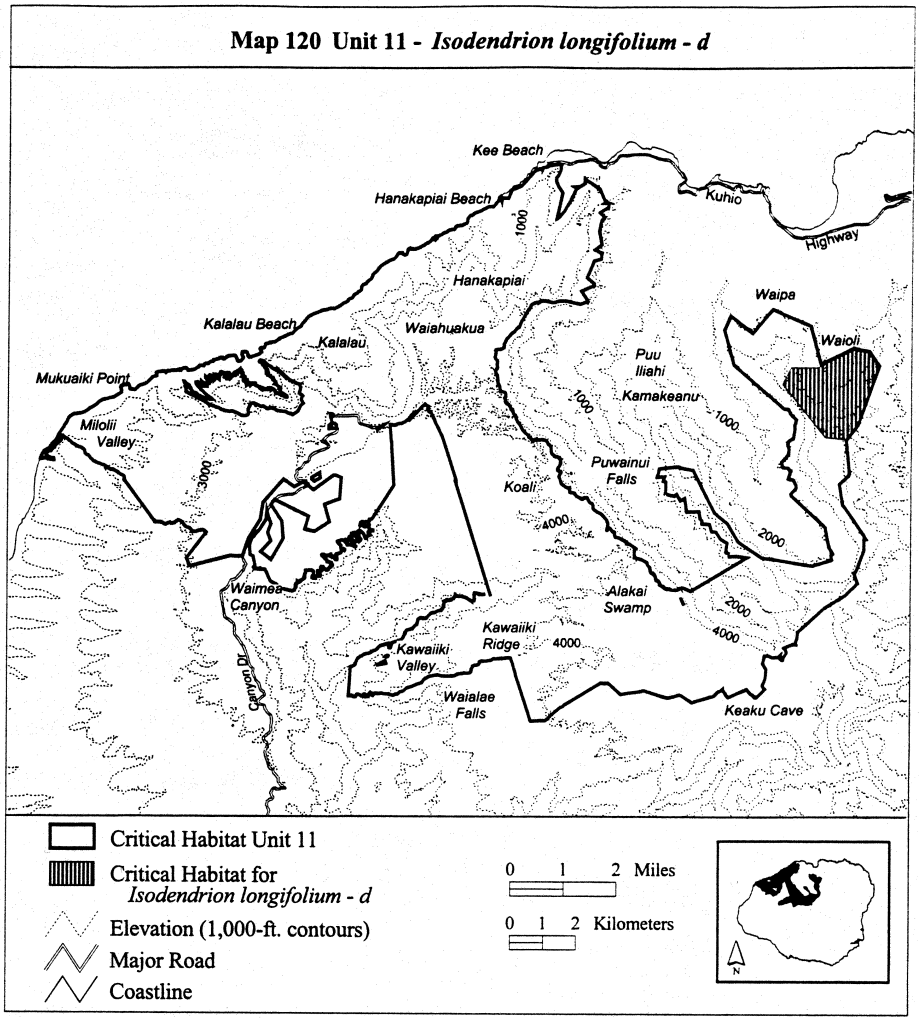
(B) NOTE: Map 119 follows:



(cxx) Kauai 11—*Isodendrion longifolium*—d (493 ha; 1,218 ac)

(A) Unit consists of the following 16 boundary points: Start at 449855, 2451511; 450071, 2451219; 449928, 2450811; 449449, 2449480; 449073, 2448969; 449073, 2448966; 448431, 2449017; 447240, 2450530; 447143, 2450657; 447406, 2451160; 447518, 2451166; 448229, 2451166; 448981, 2451592; 449257, 2451734; 449665, 2451685; 449738, 2451669; return to starting point.

(B) NOTE: Map 120 follows:

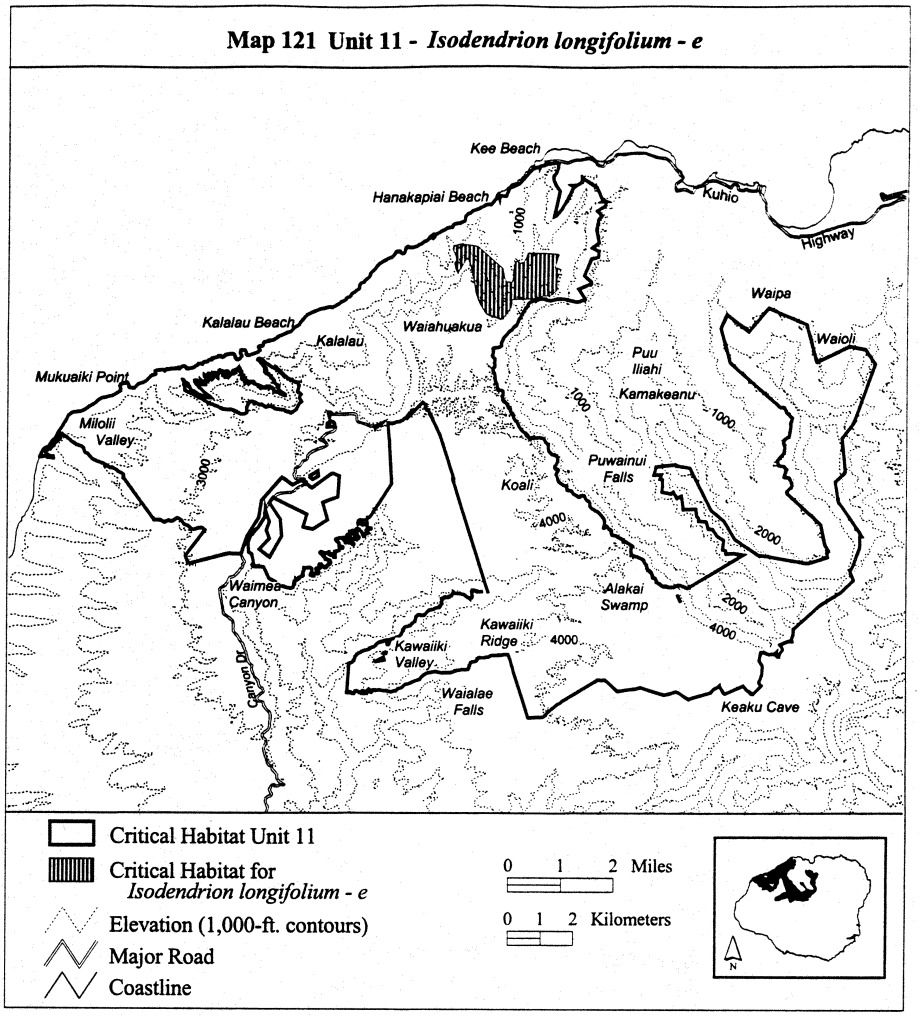


(cxxi) Kauai 11—*Isodendrion longifolium*—e (381 ha; 941 ac)

(A) Unit consists of the following 68 boundary points: Start at 439819, 2453189; 439579, 2453181; 439568, 2453181; 438996, 2453168; 438990, 2453040; 438932, 2452880; 438715, 2452573; 438651, 2452573; 438247, 2452701; 438151, 2452817; 438029, 2453034; 437888, 2453367; 437856, 2453610; 437760, 2454032; 437658, 2454372; 437626, 2454410; 437568, 2454359; 437427, 2454103; 437389, 2454054; 437334, 2453949; 437268, 2454075; 437222, 2454245; 437297, 2454346; 437277, 2454462; 437175, 2454700; 437209, 2454781; 437465, 2454839; 437933, 2454775; 438708, 2454103; 438727, 2453962; 438766, 2453795; 438830, 2453706; 439003, 2453693; 439035, 2453846; 439035, 2454026; 439080, 2454269; 439150, 2454345; 439208, 2454256; 439355, 2454288; 439445, 2454461; 439464, 2454563; 439730, 2454563; 440002, 2454563; 440423, 2454521; 440294, 2454127; 440493, 2454062; 440438, 2453967; 440361, 2453776; 440361, 2453571; 440372, 2453534; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199,

2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; return to starting point.

(B) NOTE: Map 121 follows:

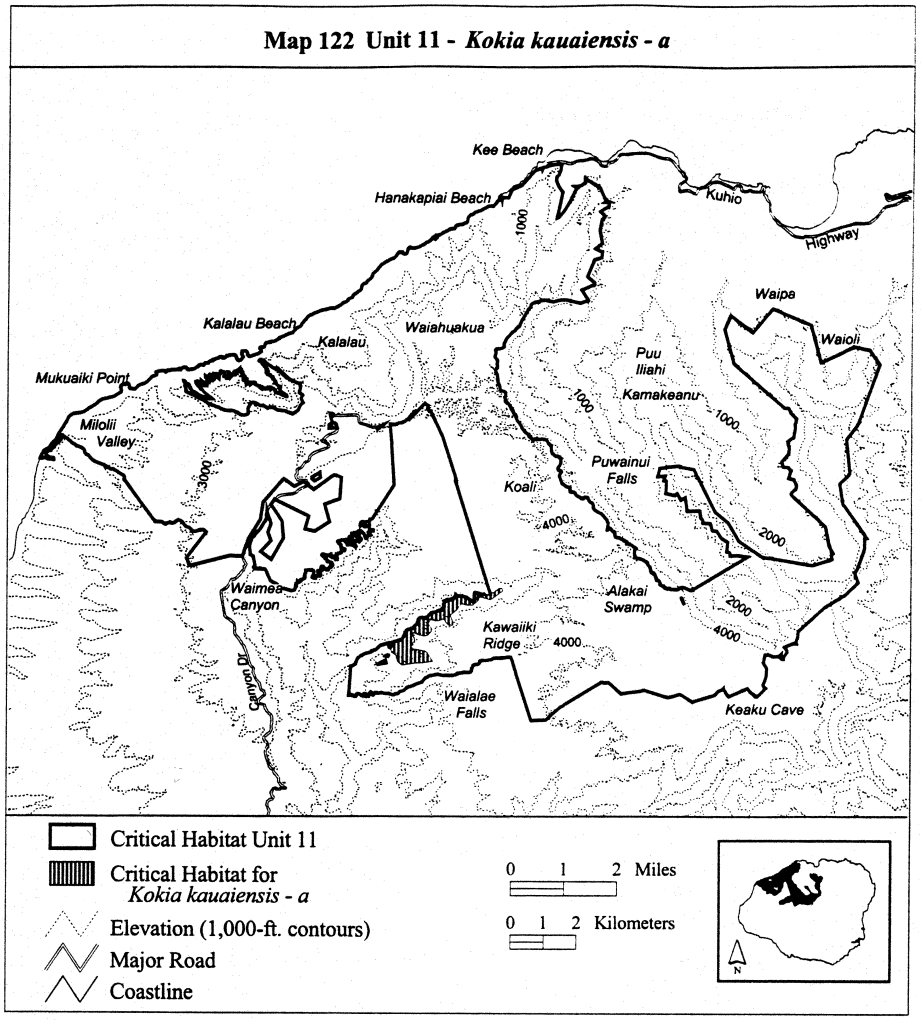


(cxxii) Kauai 11—*Kokia kauaiensis*—a (155 ha; 384 ac)

(A) Unit consists of the following 287 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738,

2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 438301, 2444319; 438397, 2444313; 438592, 2444451; 438657, 2444444; 438672, 2444357; 438317, 2444096; 438078, 2444169; 437969, 2444183; 437940, 2444089; 437897, 2444038; 437759, 2443930; 437658, 2443937; 437505, 2443959; 437433, 2443973; 437310, 2443806; 437194, 2443712; 437092, 2443618; 437136, 2443502; 437179, 2443386; 437165, 2443328; 437056, 2443328; 436969, 2443401; 436933, 2443437; 436911, 2443517; 436730, 2443459; 436643, 2443452; 436513, 2443510; 436433, 2443372; 436428, 2443340; 436447, 2443339; 436521, 2443215; 436516, 2443118; 436436, 2443037; 436319, 2442983; 436198, 2443018; 436044, 2443075; 435968, 2443092; 435954, 2443025; 436027, 2442845; 435961, 2442776; 435920, 2442719; 435916, 2442648; 435965, 2442591; 436089, 2442570; 436229, 2442546; 436345, 2442534; 436417, 2442451; 436557, 2442214; 436200, 2442166; 436089, 2442159; 435837, 2442138; 435657, 2442104; 435578, 2442135; 435488, 2442216; 435441, 2442399; 435320, 2442501; 435244, 2442641; 435284, 2442631; return to starting point.

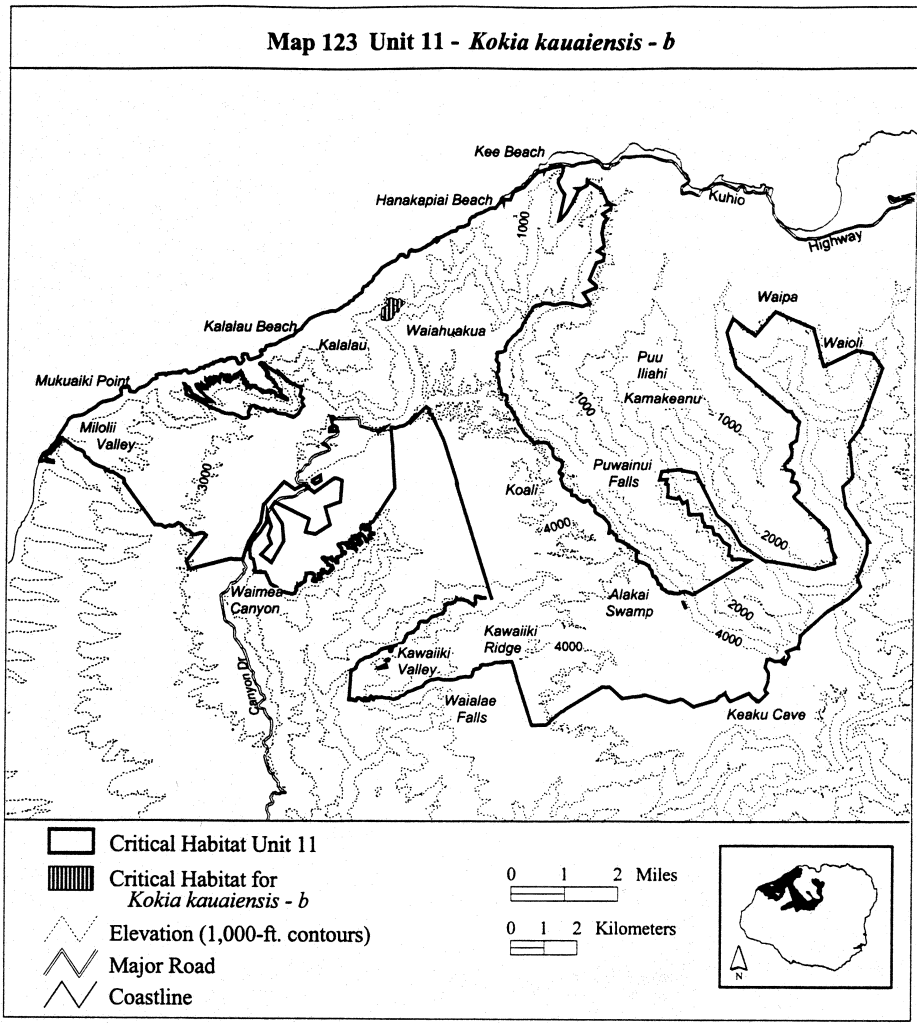
(B) NOTE: Map 122 follows:



(cxxiii) Kauai 11—*Kokia kauaiensis*—b (30 ha; 74 ac)

(A) Unit consists of the following 54 boundary points: Start at 435047, 2453176; 435038, 2453207; 435043, 2453230; 435058, 2453257; 435101, 2453291; 435145, 2453300; 435165, 2453304; 435176, 2453317; 435166, 2453322; 435166, 2453344; 435180, 2453345; 435202, 2453340; 435247, 2453319; 435294, 2453296; 435330, 2453290; 435354, 2453284; 435385, 2453266; 435395, 2453260; 435412, 2453266; 435433, 2453285; 435451, 2453304; 435463, 2453300; 435533, 2453250; 435651, 2453203; 435601, 2453135; 435551, 2453094; 435476, 2453038; 435457, 2452994; 435458, 2452931; 435428, 2452886; 435384, 2452889; 435354, 2452910; 435334, 2452903; 435320, 2452860; 435308, 2452793; 435265, 2452778; 435249, 2452760; 435231, 2452714; 435212, 2452666; 435180, 2452651; 435149, 2452645; 435048, 2452639; 434944, 2452655; 434906, 2452674; 434899, 2452697; 434904, 2452924; 434927, 2453016; 434958, 2453016; 435012, 2453066; 435029, 2453085; 435052, 2453083; 435086, 2453084; 435092, 2453120; 435071, 2453148; return to starting point.

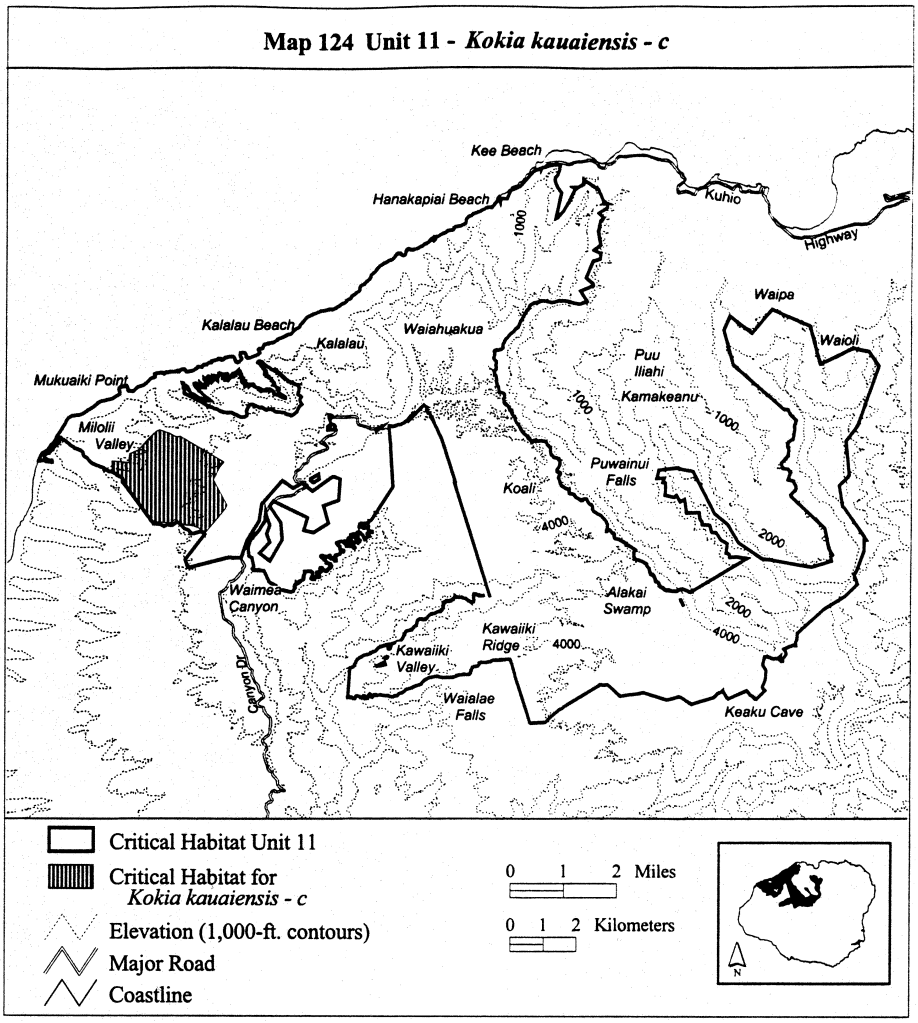
(B) NOTE: Map 123 follows:



(cxxiv) Kauai 11—*Kokia kauaiensis*—c (667 ha; 1,647 ac)

(A) Unit consists of the following 43 boundary points: Start at 426834, 2447995; 426824, 2448315; 427350, 2448274; 427355, 2448413; 427360, 2448542; 427618, 2448645; 427973, 2449036; 428190, 2449221; 428282, 2449268; 428566, 2449160; 428787, 2449046; 428885, 2449062; 428912, 2449075; 430225, 2448294; 430075, 2448099; 429914, 2447762; 430322, 2447000; 430283, 2446894; 429631, 2446128; 429468, 2446319; 429267, 2446382; 429075, 2446396; 428941, 2446434; 428749, 2446569; 428619, 2446458; 428049, 2446487; 427178, 2447664; 427161, 2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 426997, 2447892; 426981, 2447902; 426958, 2447923; 426944, 2447941; 426907, 2447965; 426847, 2447992; return to starting point.

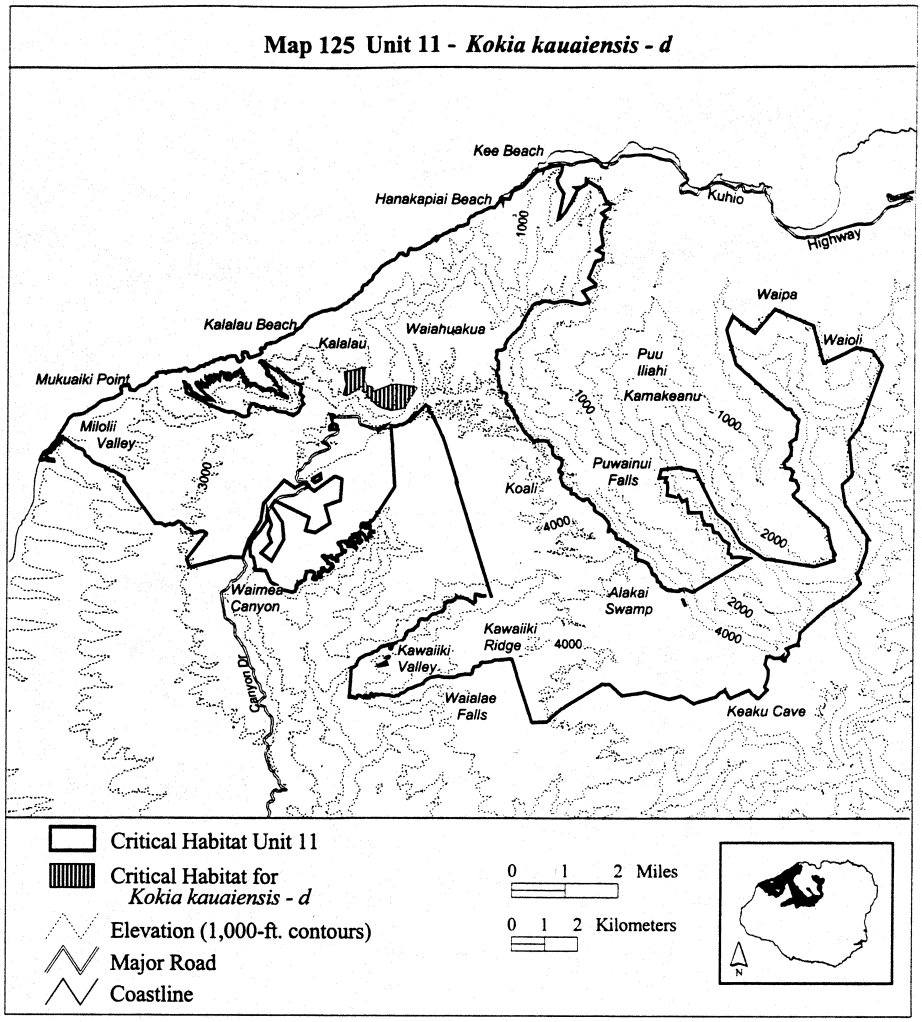
(B) NOTE: Map 124 follows:



(cxxv) Kauai 11—*Kokia kauaiensis*—d (126 ha; 312 ac)

(A) Unit consists of the following 39 boundary points: Start at 433942, 2450326; 433919, 2450316; 433897, 2450291; 433798, 2450316; 433790, 2450354; 433815, 2450483; 433861, 2450632; 433808, 2450794; 433798, 2451025; 434439, 2451161; 434407, 2450754; 434451, 2450695; 434487, 2450604; 434546, 2450588; 434662, 2450569; 434676, 2450537; 434681, 2450418; 435237, 2450644; 435423, 2450648; 435669, 2450630; 435811, 2450601; 436011, 2450551; 436007, 2450518; 435652, 2449941; 435563, 2449909; 435229, 2449844; 434917, 2449931; 434795, 2450008; 434633, 2450148; 434626, 2450212; 434566, 2450245; 434481, 2450245; 434512, 2450334; 434526, 2450381; 434443, 2450405; 434392, 2450424; 434382, 2450448; 434359, 2450589; 434355, 2450584; return to starting point.

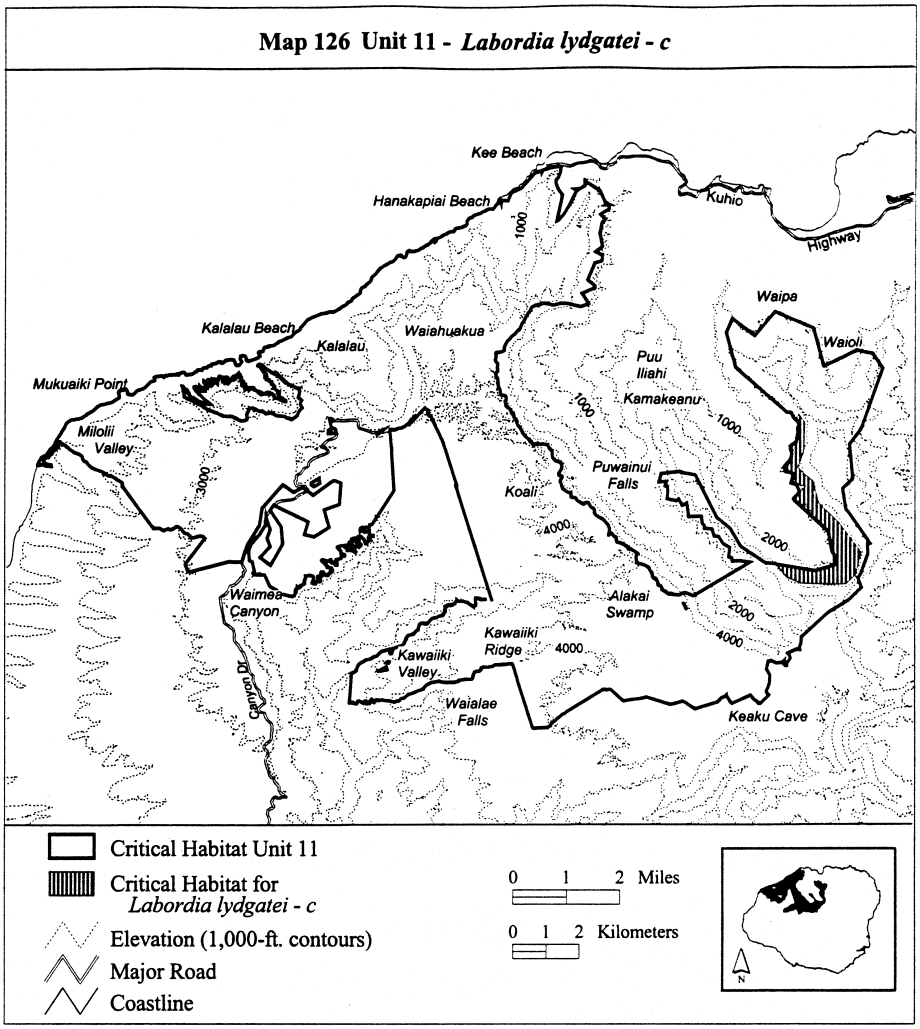
(B) NOTE: Map 125 follows:



(cxxvi) Kauai 11—*Labordia lydgatei*—c (325 ha; 803 ac)

(A) Unit consists of the following 37 boundary points: Start at 447594, 2447520; 447758, 2447683; 447472, 2447746; 447323, 2447780; 447420, 2448093; 447153, 2448108; 447107, 2448255; 447371, 2448552; 447293, 2448807; 447329, 2448906; 447468, 2449010; 447589, 2449589; 447461, 2449701; 447554, 2449852; 447733, 2449589; 447709, 2448696; 447516, 2448238; 447673, 2448097; 447975, 2447828; 448168, 2447176; 448240, 2447107; 448748, 2446621; 449448, 2445704; 449279, 2445028; 448989, 2444738; 448289, 2444739; 447637, 2444763; 447202, 2444956; 446885, 2445349; 448070, 2445147; 448658, 2445334; 448629, 2445470; 448699, 2445511; 448577, 2445718; 448450, 2446319; 447413, 2447271; 447397, 2447323; return to starting point.

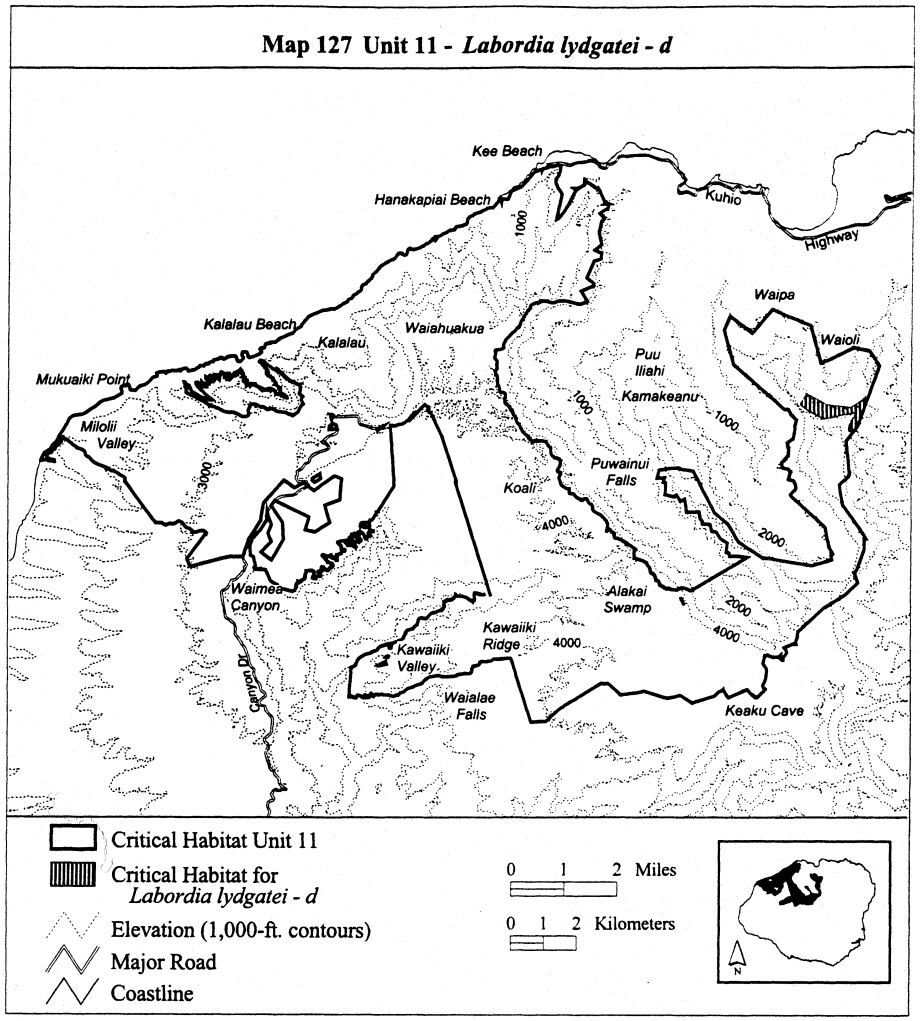
(B) NOTE: Map 126 follows:



(cxxvii) Kauai 11—*Labordia lydgatei*—d (82 ha; 203 ac)

(A) Unit consists of the following 18 boundary points: Start at 447872, 2450364; 448482, 2450047; 449119, 2449962; 449207, 2449950; 449624, 2450214; 449665, 2450240; 449712, 2450194; 449432, 2449395; 449310, 2449234; 449214, 2449211; 449158, 2449396; 449395, 2449797; 449400, 2449806; 449060, 2449740; 448772, 2449685; 448385, 2449589; 447902, 2449855; 447675, 2450047; return to starting point.

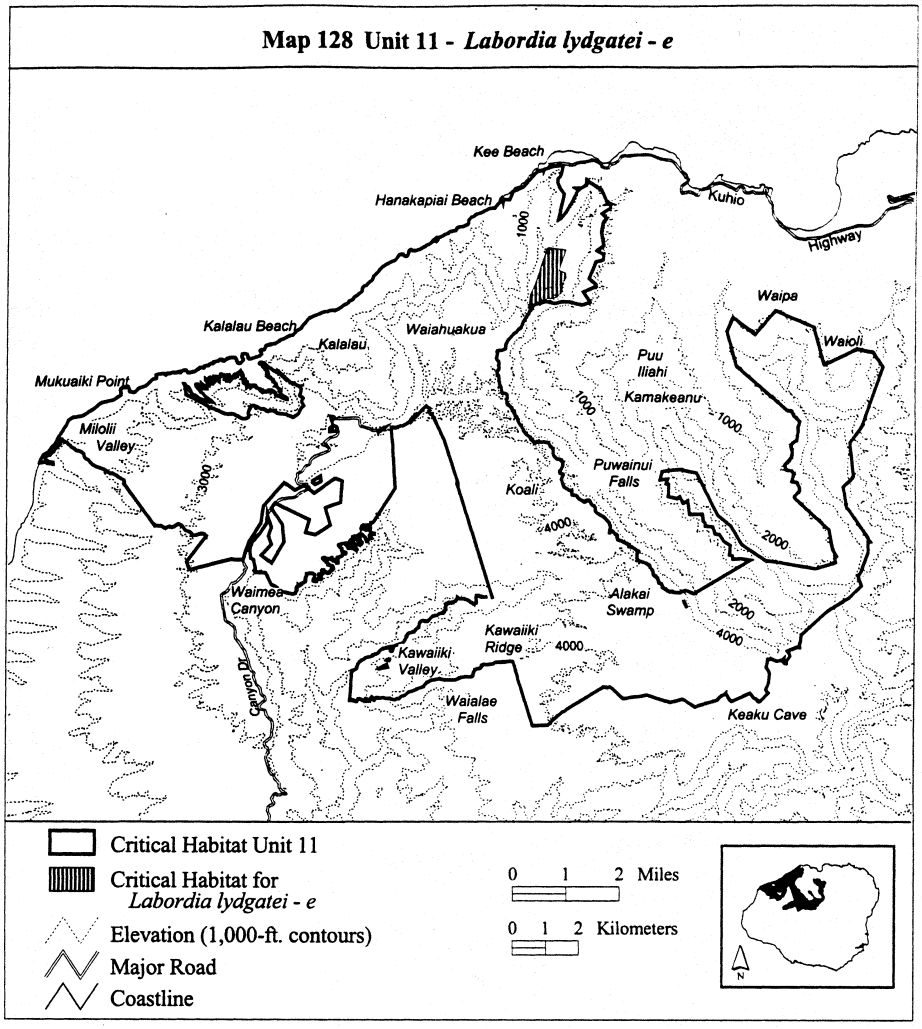
(B) NOTE: Map 127 follows:



(cxxviii) Kauai 11—*Labordia lydgatei*—e (117 ha; 290 ac)

(A) Unit consists of the following 54 boundary points: Start at 439373, 2452840; 439379, 2452900; 439425, 2453389; 439571, 2453718; 439601, 2453807; 439697, 2454089; 439714, 2454139; 439933, 2454779; 439960, 2454816; 440497, 2454749; 440294, 2454127; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; return to starting point.

(B) NOTE: Map 128 follows:

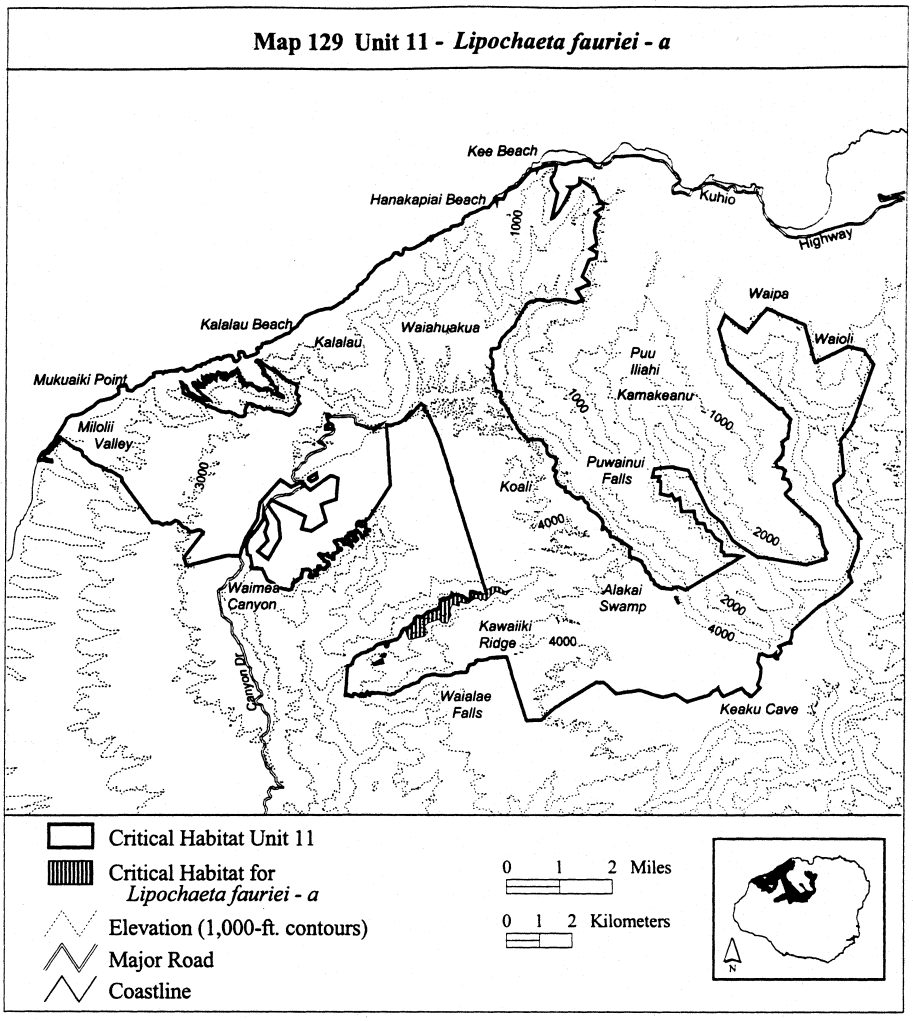


(cxxix) Kauai 11—*Lipochaeta fauriei*—a (106 ha; 262 ac)

(A) Unit consists of the following 221 boundary points: Start at 438277, 2444393; 438400, 2444405; 438465, 2444470; 438698, 2444457; 438880, 2444314; 439087, 2444392; 438906, 2444224; 438607, 2444328; 438374, 2444120; 438296, 2444042; 438205, 2444094; 438153, 2444042; 438063, 2444107; 437959, 2444094; 437738, 2443939; 437492, 2444004; 437492, 2443874; 437271, 2443926; 437206, 2443731; 437245, 2443576; 437168, 2443472; 437129, 2443355; 436973, 2443368; 436869, 2443472; 436545, 2443368; 436428, 2443265; 436532, 2443070; 436454, 2442966; 436363, 2442940; 436221, 2442927; 436182, 2442914; 435948, 2442863; 435883, 2442979; 435812, 2443191; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933,

2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436914, 2443952; 436916, 2443955; 436913, 2443964; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; return to starting point.

(B) NOTE: Map 129 follows:

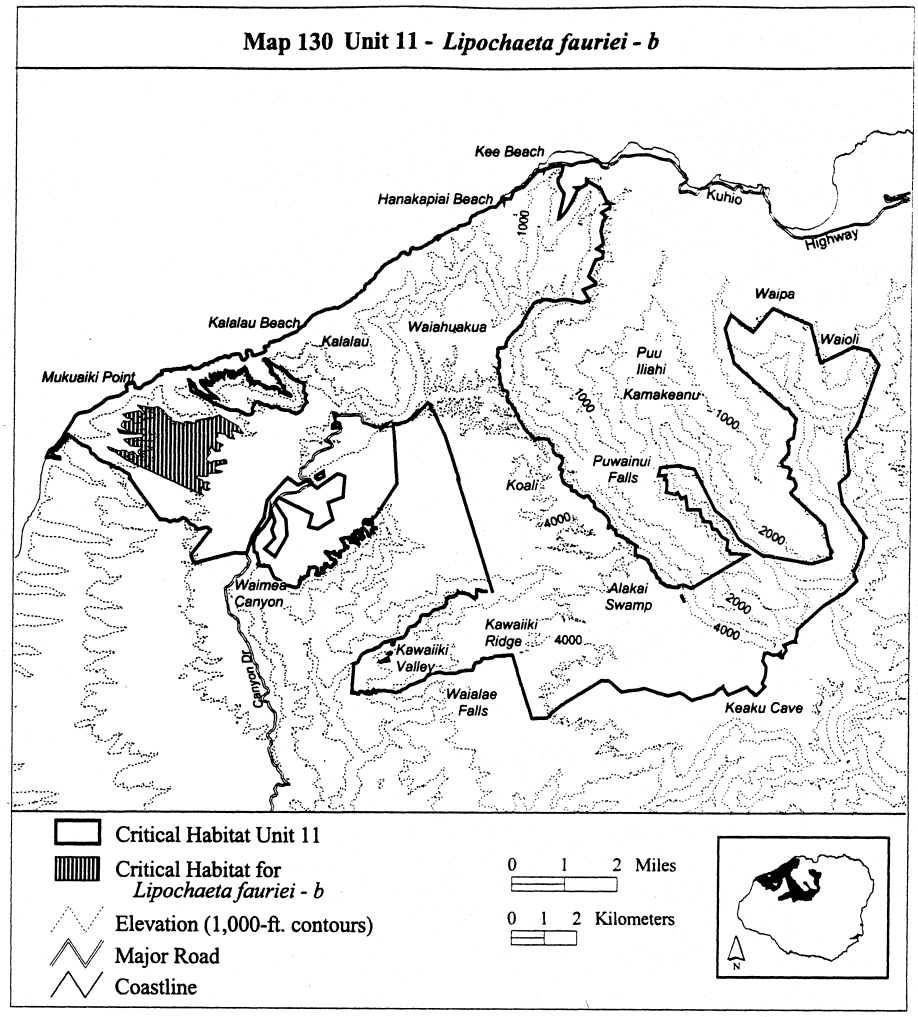


(cxxx) Kauai 11—*Lipochaeta fauriei—b* (545 ha; 1,347 ac)

(A) Unit consists of the following 125 boundary points: Start at 427560, 2448644; 427186, 2448690; 426974, 2448883; 427525, 2448944; 427595, 2449029; 427167, 2449118; 426897, 2449284; 426885, 2449330; 426974, 2449445; 427105, 2449399; 427240, 2449511; 427082, 2449526; 426943, 2449646; 427440, 2449757; 427583, 2449646; 427618, 2449680; 427398, 2449919; 427865, 2449846; 428011, 2449885; 428188, 2449777; 428304, 2449623; 428428, 2449542; 428420, 2449472; 428694, 2449411; 428790, 2449353; 428825, 2449426; 428917, 2449457; 429041, 2449399; 429145, 2449376; 429160, 2449464; 429287, 2449491; 429446, 2449526; 429623, 2449565; 429696, 2449549; 429769, 2449595; 429912, 2449630; 430487, 2449303; 430645, 2449087; 430564, 2449079; 430271, 2449172; 430271, 2449087; 430359, 2448921; 430174, 2448944; 430082, 2449056; 429816, 2449094; 429870, 2448987; 429781, 2448929; 429816, 2448813; 430016, 2448736; 429893, 2448636; 429939, 2448528; 429789, 2448524; 429634, 2448671; 429604, 2448543; 429650, 2448482; 429496, 2448297; 429634, 2448176; 429739, 2448229; 429966, 2448239; 430066, 2448292; 430130,

2448260; 430145, 2448155; 430019, 2448139; 429813, 2448076; 429761, 2447976; 430019, 2447912; 429913, 2447865; 429676, 2447849; 429565, 2447833; 429560, 2447786; 429555, 2447760; 429397, 2447754; 429323, 2447754; 429281, 2447807; 429223, 2447749; 429244, 2447681; 429307, 2447686; 429397, 2447639; 429418, 2447591; 429497, 2447581; 429544, 2447612; 429623, 2447549; 429555, 2447517; 429550, 2447459; 429550, 2447407; 429634, 2447375; 429587, 2447349; 429539, 2447328; 429486, 2447338; 429423, 2447380; 429386, 2447438; 429349, 2447422; 429355, 2447338; 429349, 2447307; 429381, 2447238; 429415, 2447204; 429378, 2447191; 427051, 2448261; 426945, 2448329; 426845, 2448398; 426782, 2448408; 426734, 2448482; 426608, 2448535; 426534, 2448566; 426465, 2448640; 426518, 2448645; 426603, 2448608; 426766, 2448550; 426866, 2448524; 426908, 2448556; 427040, 2448556; 427124, 2448471; 427277, 2448524; 427330, 2448445; 427356, 2448398; 427393, 2448376; 427441, 2448376; 427483, 2448366; 427552, 2448329; 427573, 2448329; 427536, 2448387; 427462, 2448424; 427425, 2448466; 427409, 2448508; 427409, 2448540; return to starting point.

(B) NOTE: Map 130 follows:

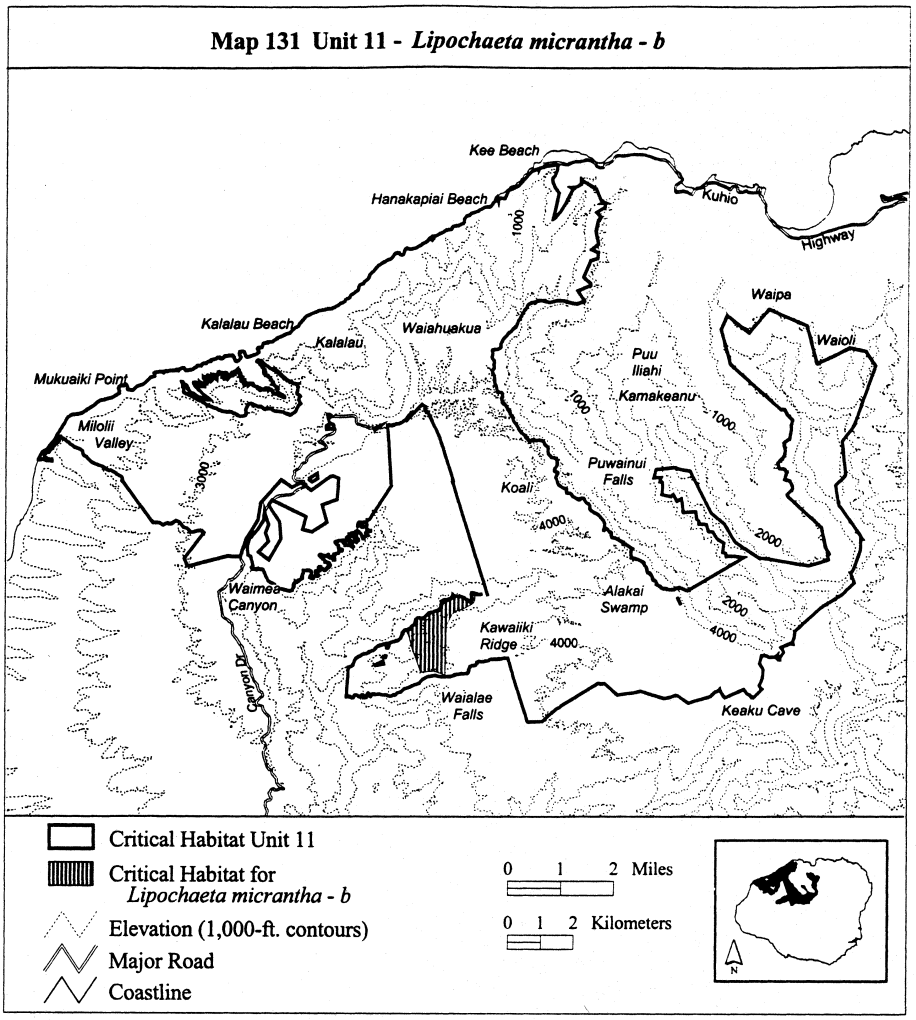


(cxxxi) Kauai 11—*Lipochaeta micrantha*—b (212 ha; 523 ac)

(A) Unit consists of the following 161 boundary points: Start at 437819, 2444222; 437929, 2444255; 437929, 2444124; 437901, 2444021; 437814, 2443944; 437514, 2443802; 437432, 2443802; 437241, 2443671; 437055, 2443306; 437028, 2441843; 436689, 2441952; 436285, 2441925; 436029, 2442618; 435914, 2442984; 435859, 2443120; 435831, 2443197; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337,

2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436909, 2443918; 436968, 2443955; 437037, 2444102; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; return to starting point.

(B) NOTE: Map 131 follows:

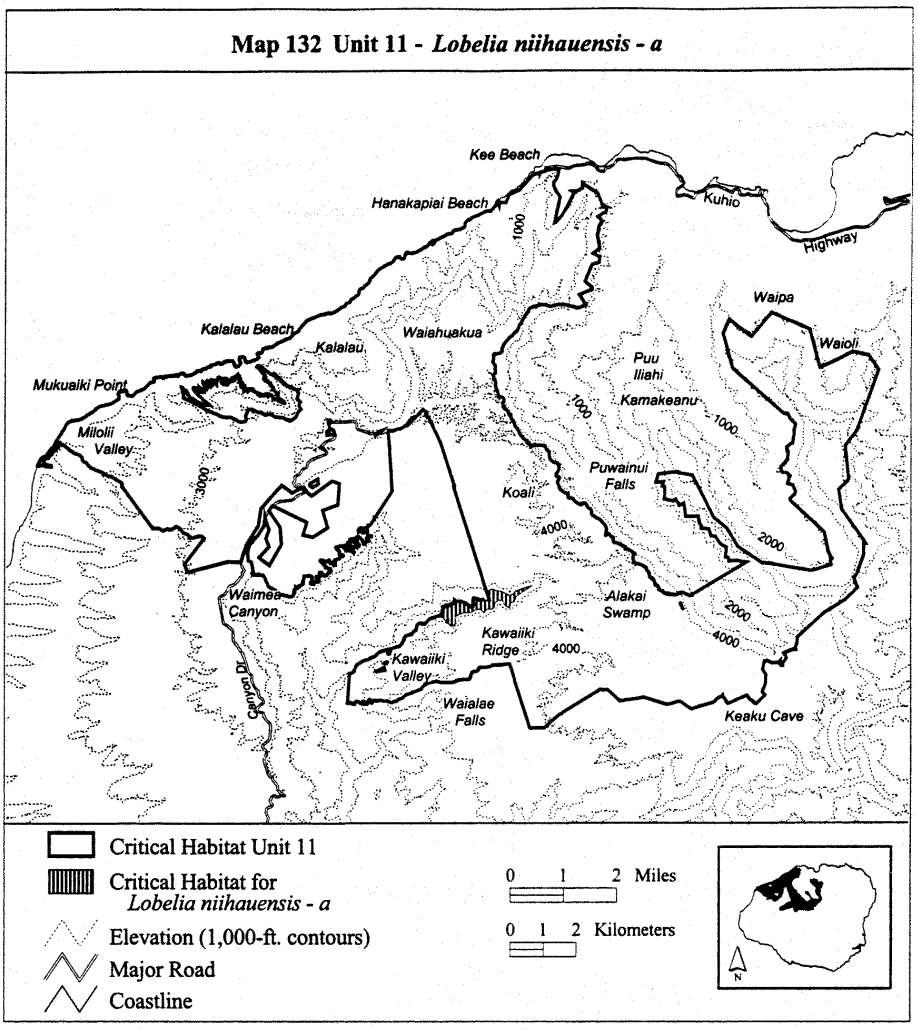


(cxxxii) Kauai 11—*Lobelia niihauensis*—a (89 ha; 220 ac)

(A) Unit consists of the following 143 boundary points: Start at 438259, 2444449; 438306, 2444552; 438419, 2444604; 438532, 2444542; 438686, 2444532; 438810, 2444470; 438933, 2444398; 439036, 2444449; 439108, 2444521; 439344, 2444614; 439611, 2444696; 439313, 2444501; 439149, 2444388; 439077, 2444223; 438974, 2444162; 438943, 2444018; 438769, 2444131; 438707, 2444254; 438584, 2444254; 438481, 2444152; 438460, 2444028; 438378, 2443977; 438255, 2443977; 438152, 2443864; 438059, 2443987; 437905, 2443957; 437782, 2443885; 437535, 2443874; 437361, 2443813; 437268, 2443741; 437299, 2443546; 437179, 2443460; 436834, 2443794; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961,

2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; return to starting point.

(B) NOTE: Map 132 follows:

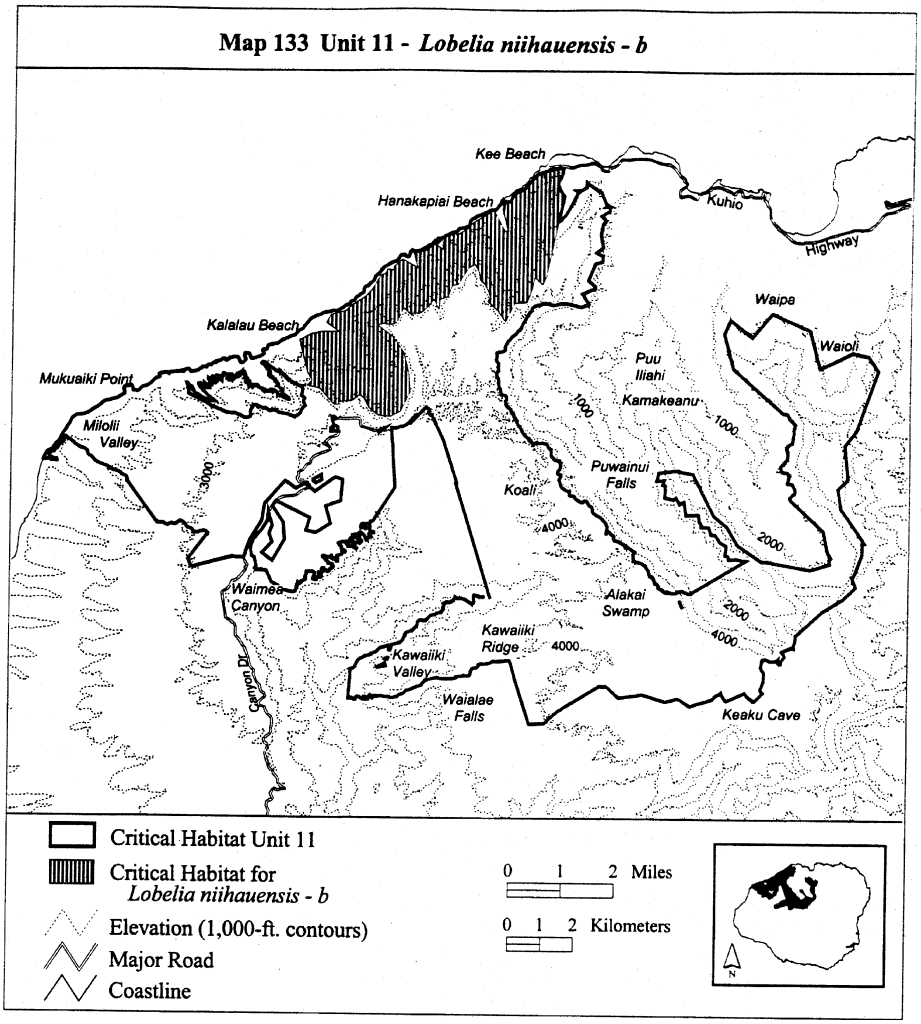


(cxxxiii) Kauai 11—*Lobelia niihauensis*—b (2,001 ha; 4,945 ac)

(A) Unit consists of the following 117 boundary points: Start at 432783, 2450812; 432645, 2451038; 432384, 2452020; 432426, 2452045; 432733, 2452216; 433075, 2452284; 433587, 2452284; 433211, 2452557; 433337, 2452799; 433777, 2452923; 433907, 2453037; 433997, 2453103; 434388, 2453374; 434591, 2453578; 434851, 2454007; 434988, 2454058; 435043, 2454198; 435247, 2454164; 435227, 2454251; 435315, 2454323; 435507, 2454503; 435959, 2454232; 435835, 2454695; 436208, 2454763; 436490, 2454954; 436731, 2454808; 436705, 2455135; 437089, 2455293; 437180, 2455248; 437507, 2455462; 437653, 2455627; 438253, 2455970; 438308, 2455956; 438616, 2455368; 438704, 2455385; 438649, 2455642; 438547, 2456015; 438604, 2456274; 438785, 2456263; 438898, 2456511; 439191, 2456650; 439587, 2457085; 439610, 2457109; 439815, 2457168; 439822, 2457153; 439835, 2457174; 439931, 2457201; 439939, 2457196; 439951, 2457207; 440098, 2457249; 440099, 2457249; 440144, 2457261; 440144, 2457262; 440197, 2457277; 440250, 2457274; 440289,

2457294; 440298, 2457298; 440390, 2457272; 440371, 2457184; 440366, 2457125; 440313, 2456964; 440227, 2456872; 440225, 2456766; 440259, 2456708; 440304, 2456601; 440437, 2456434; 439892, 2453948; 439806, 2453749; 439595, 2453953; 439565, 2453982; 439486, 2453621; 439327, 2453203; 439067, 2453192; 438952, 2453169; 438672, 2452605; 438425, 2452972; 438107, 2453238; 438208, 2453351; 438166, 2453511; 438016, 2453768; 437892, 2453870; 437851, 2454115; 437722, 2454364; 437530, 2454243; 437406, 2454051; 437236, 2453746; 437038, 2453682; 436908, 2453374; 436671, 2453283; 436628, 2452965; 436479, 2453283; 436174, 2452934; 436013, 2452829; 435877, 2452897; 435808, 2452795; 435552, 2453013; 435360, 2452572; 435224, 2452516; 435055, 2452516; 434958, 2452552; 434761, 2452505; 435236, 2452144; 435569, 2451669; 435740, 2451054; 435774, 2450474; 435501, 2449893; 435193, 2449723; 434817, 2449757; 434510, 2449996; 434373, 2450269; 434241, 2450382; 433992, 2450213; 433632, 2450160; 433584, 2450069; 433449, 2450088; 433020, 2450563; 432625, 2450654; return to starting point.

(B) NOTE: Map 133 follows:

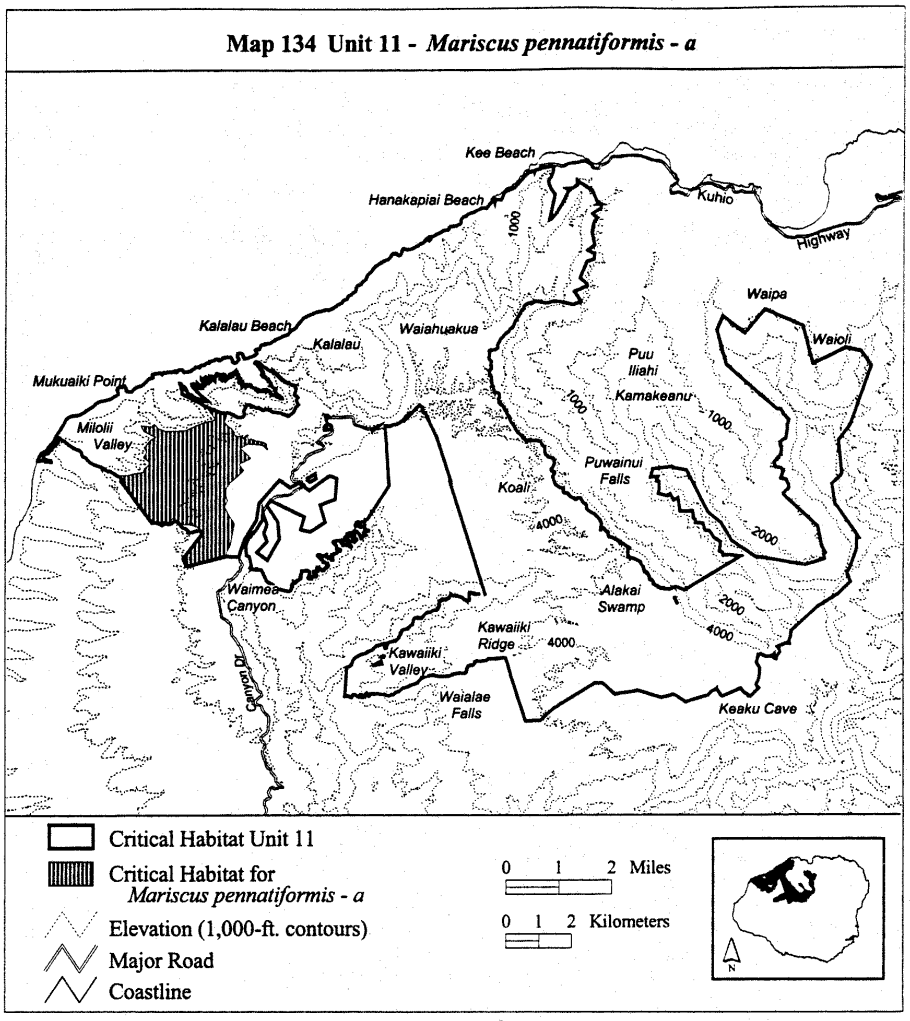


(cxxxiv) Kauai 11—*Mariscus pennatiformis*—a (1,003 ha; 2,479 ac)

(A) Unit consists of the following 166 boundary points: Start at 427069, 2447857; 427386, 2447885; 427526, 2447931; 427834, 2447978; 427862, 2448071; 428021, 2448192; 427974, 2448332; 427853, 2448416; 427937, 2448603; 427862, 2448724; 428021, 2448910; 428207, 2449050; 427853, 2449237; 427778, 2449386; 428095, 2449358; 428179, 2449442; 428300, 2449311; 428534, 2449218; 428860, 2449237; 429131, 2449246; 429532, 2449432; 429765, 2449516; 429970, 2449563; 430036, 2449609; 429812, 2449908; 430269, 2449740; 430316, 2449740; 430365, 2449716; 430348, 2449666; 430355, 2449641; 430354, 2449622; 430346, 2449596; 430331, 2449565; 430320, 2449553; 430313, 2449532; 430312, 2449517; 430307, 2449482; 430318, 2449477; 430335, 2449474; 430349, 2449466; 430355, 2449451; 430369, 2449433; 430418, 2449395; 430437, 2449371; 430430, 2449364; 430451, 2449363; 430463, 2449355; 430474, 2449342; 430485, 2449333; 430527, 2449321; 430533, 2449310; 430545, 2449277; 430559, 2449254; 430604, 2449229; 430616, 2449214; 430623,

2449194; 430623, 2449173; 430616, 2449156; 430619, 2449138; 430629, 2449119; 430643, 2449106; 430677, 2449084; 430699, 2449074; 430717, 2449071; 430748, 2449070; 430773, 2449073; 430799, 2449081; 430825, 2449080; 430875, 2449032; 430881, 2449027; 430905, 2449022; 430921, 2449029; 430944, 2449045; 430958, 2449061; 430967, 2449077; 430984, 2449094; 431006, 2449097; 431020, 2449089; 431028, 2449064; 431024, 2449005; 431035, 2448975; 431050, 2448960; 431066, 2448956; 431086, 2448957; 431093, 2448962; 431116, 2448991; 431124, 2448994; 431134, 2448988; 431138, 2448981; 431147, 2448955; 431158, 2448950; 431170, 2448954; 431195, 2448966; 431208, 2448969; 431223, 2448964; 431228, 2448960; 431275, 2448914; 431290, 2448911; 431310, 2448912; 431339, 2448927; 431358, 2448923; 431376, 2448914; 431407, 2448903; 431463, 2448902; 431473, 2448899; 431479, 2448891; 431501, 2448872; 431538, 2448867; 431545, 2448867; 431567, 2448859; 431580, 2448844; 431596, 2448824; 431611, 2448789; 431609, 2448764; 431601, 2448750; 431600, 2448733; 431627, 2448682; 431633, 2448663; 431482, 2448789; 431043, 2448845; 430810, 2448705; 431043, 2448490; 431118, 2448378; 430764, 2448220; 430903, 2448015; 430680, 2447800; 430512, 2447661; 430362, 2447493; 430353, 2447260; 430418, 2447101; 430325, 2446914; 430456, 2446653; 430624, 2446420; 430540, 2446010; 430484, 2445730; 430381, 2445543; 430396, 2445420; 429224, 2445116; 429062, 2445354; 429654, 2446125; 429591, 2446167; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476, 2446463; 428396, 2446447; 428285, 2446458; 428116, 2446474; 428047, 2446484; 427185, 2447661; 427161, 2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427070, 2447853; return to starting point.

(B) NOTE: Map 134 follows:

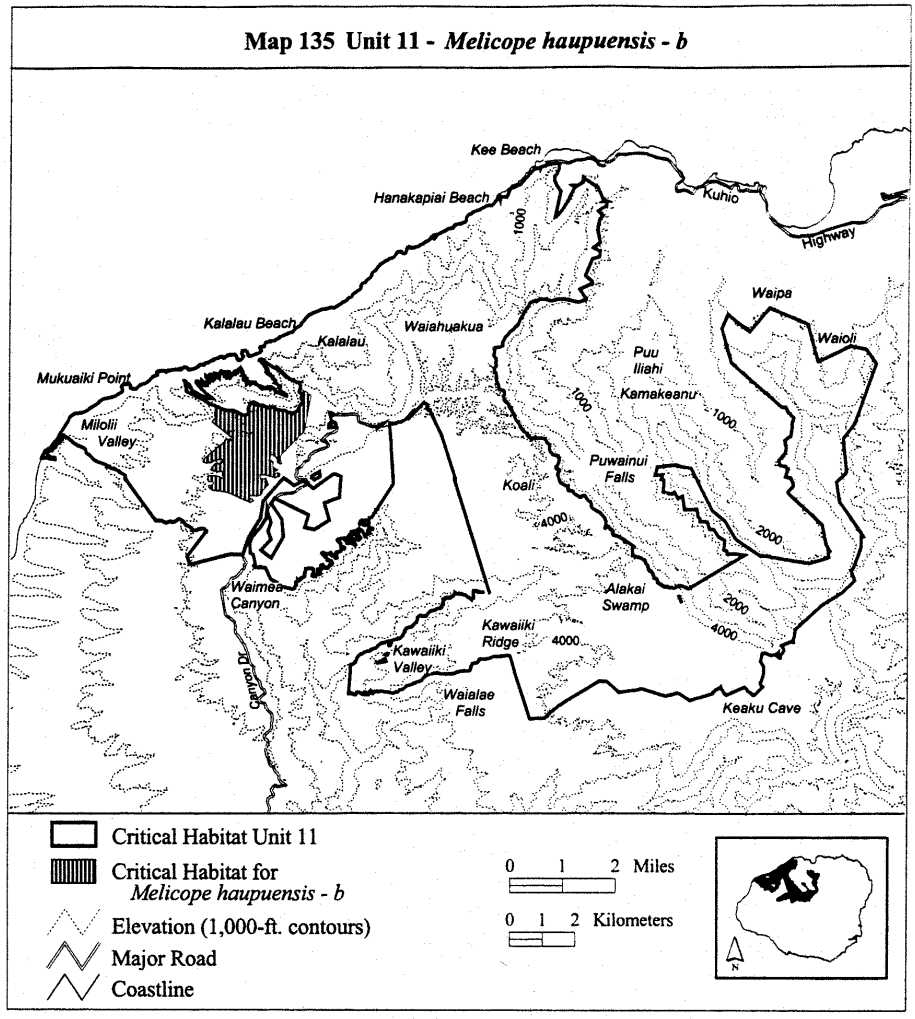


(cxxxv) Kauai 11—*Melicope haupuensis*—b (574 ha; 1,418 ac)

(A) Unit consists of the following 198 boundary points: Start at 431912, 2448420; 431913, 2448409; 431890, 2448340; 431898, 2448263; 431898, 2448254; 431900, 2448247; 431922, 2448193; 431934, 2448181; 431929, 2448176; 431931, 2448173; 431918, 2448148; 431909, 2448152; 431904, 2448146; 431867, 2448164; 431806, 2448187; 431806, 2448233; 431806, 2448249; 431788, 2448341; 431653, 2448421; 431645, 2448424; 431625, 2448424; 431570, 2448341; 431570, 2448273; 431668, 2448210; 431668, 2448205; 431682, 2448198; 431669, 2448173; 431667, 2448147; 431676, 2448133; 431662, 2448106; 431657, 2448061; 431812, 2447974; 431789, 2447963; 431806, 2447957; 431745, 2447927; 431713, 2447927; 431682, 2447912; 431713, 2447862; 431862, 2447874; 431900, 2447812; 431862, 2447756; 431800, 2447769; 431750, 2447725; 431607, 2447769; 431427, 2447825; 431371, 2447818; 431271, 2447819; 431284, 2447719; 431408, 2447694; 431452, 2447725; 431526, 2447520; 431396, 2447383; 431340, 2447315; 431327, 2447259; 431290, 2447215; 431197,

2447172; 430948, 2447197; 430948, 2447135; 431060, 2447066; 431085, 2447029; 431035, 2447023; 431016, 2446985; 430736, 2447091; 430493, 2447209; 430388, 2447253; 430325, 2447290; 430027, 2447346; 429877, 2447340; 429722, 2447421; 429697, 2447495; 429821, 2447520; 429859, 2447576; 429834, 2447620; 429772, 2447626; 429728, 2447607; 429678, 2447645; 429660, 2447676; 429691, 2447725; 429672, 2447775; 429716, 2447806; 429741, 2447788; 429797, 2447806; 429965, 2447794; 430039, 2447769; 430126, 2447725; 430176, 2447719; 430176, 2447750; 430120, 2447788; 430120, 2447931; 430008, 2447931; 429865, 2447956; 429803, 2447962; 429790, 2448012; 429853, 2448080; 429896, 2448155; 429958, 2448179; 430052, 2448148; 430139, 2448211; 430139, 2448298; 430033, 2448304; 429865, 2448242; 429778, 2448186; 429548, 2448204; 429548, 2448279; 429653, 2448385; 429716, 2448422; 429772, 2448497; 429877, 2448559; 430014, 2448702; 430108, 2448758; 430151, 2448795; 430195, 2448888; 430257, 2448913; 430338, 2448876; 430400, 2448882; 430425, 2448913; 430420, 2448957; 429806, 2449454; 429896, 2449552; 429879, 2449729; 429905, 2449923; 429915, 2449923; 429944, 2449910; 429968, 2449904; 430016, 2449884; 430068, 2449856; 430172, 2449815; 430207, 2449804; 430261, 2449795; 430317, 2449781; 430340, 2449778; 430365, 2449787; 430392, 2449798; 430408, 2449802; 430410, 2449802; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432217, 2449712; 432259, 2449679; 432344, 2449744; 432419, 2449806; 432471, 2449904; 432504, 2449961; 432579, 2450036; 432551, 2450083; 432523, 2450130; 432523, 2450182; 432565, 2450262; 432523, 2450304; 432475, 2450313; 432452, 2450337; 432461, 2450375; 432480, 2450426; 432490, 2450478; 432501, 2450529; 432504, 2450523; 432515, 2450503; 432528, 2450468; 432550, 2450412; 432573, 2450385; 432591, 2450373; 432650, 2450343; 432692, 2450330; 432709, 2450317; 432733, 2450275; 432745, 2450272; 432752, 2450270; 432768, 2450266; 432797, 2450260; 432826, 2450224; 432630, 2449144; return to starting point.

(B) NOTE: Map 135 follows:

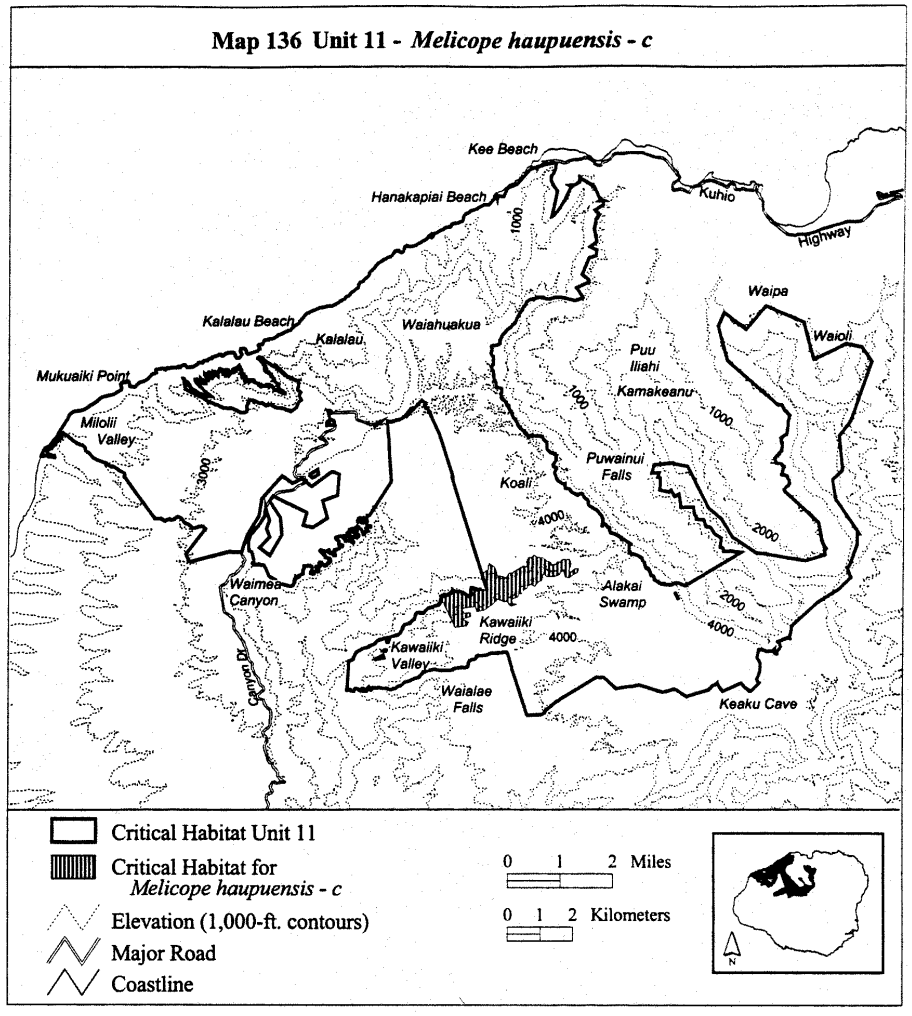


(cxxxvi) Kauai 11—*Melicope haupuensis*—c (290 ha; 716 ac)

(A) Unit consists of the following 184 boundary points: Start at 438165, 2444743; 438359, 2444869; 438336, 2444973; 438382, 2445065; 438532, 2444973; 438590, 2444869; 438634, 2444680; 438740, 2444673; 438913, 2444615; 438993, 2444767; 439086, 2444765; 439144, 2444811; 439421, 2444984; 439559, 2444972; 439524, 2445099; 439594, 2445249; 439686, 2445238; 439755, 2445318; 439836, 2445261; 439940, 2445249; 440032, 2445238; 440067, 2445203; 440101, 2445203; 440136, 2445145; 440263, 2445099; 440286, 2445007; 440344, 2445030; 440424, 2445041; 440459, 2445111; 440540, 2445099; 440586, 2445099; 440586, 2445157; 440644, 2445203; 440713, 2445180; 440840, 2445191; 440886, 2445099; 440886, 2444984; 440828, 2444891; 440840, 2444765; 440932, 2444834; 441013, 2444903; 441117, 2444903; 441105, 2444799; 440955, 2444707; 440851, 2444638; 440713, 2444649; 440655, 2444857; 440551, 2444788; 440551, 2444718; 440378, 2444661; 440147, 2444661; 440044, 2444788; 440044, 2444730; 439997, 2444696; 440032, 2444615; 439997,

2444534; 439905, 2444511; 439790, 2444361; 439663, 2444430; 439559, 2444361; 439547, 2444292; 439467, 2444280; 439386, 2444131; 439294, 2444142; 439271, 2444038; 439086, 2443981; 439074, 2443935; 439109, 2443831; 439224, 2443831; 439109, 2443762; 439040, 2443762; 438924, 2443912; 438855, 2443877; 438659, 2443969; 438486, 2443808; 438255, 2443635; 438001, 2443600; 437978, 2443727; 437863, 2443727; 437678, 2443716; 437551, 2443670; 437632, 2443531; 437805, 2443543; 437817, 2443450; 437551, 2443358; 437759, 2443266; 437701, 2443150; 437332, 2443104; 436908, 2444000; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; return to starting point.

(B) NOTE: Map 136 follows:

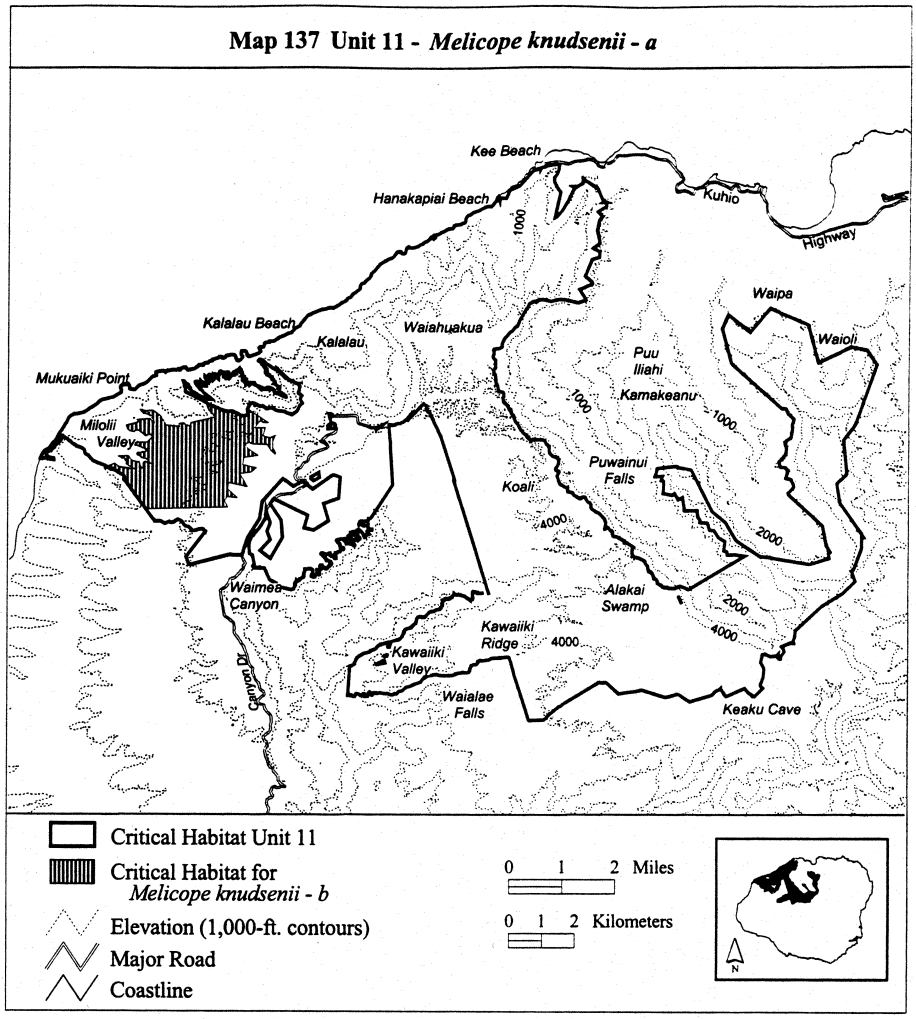


(cxxxvii) Kauai 11—*Melicope knudsenii*—a (966 ha; 2,388 ac)

(A) Unit consists of the following 146 boundary points: Start at 431708, 2448615; 431773, 2448514; 431767, 2448519; 431773, 2448510; 431773, 2448476; 431619, 2448589; 431507, 2448763; 431066, 2448773; 430954, 2448845; 430861, 2448773; 430913, 2448650; 431230, 2448425; 430810, 2448364; 430759, 2448149; 431199, 2448046; 431036, 2447923; 430687, 2447883; 430923, 2447483; 430339, 2447606; 430319, 2447401; 430605, 2447145; 430308, 2447176; 430237, 2447043; 430329, 2446859; 427820, 2446794; 427748, 2446893; 427778, 2446910; 427739, 2446905; 427185, 2447661; 427161, 2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 426997, 2447892; 426981, 2447902; 426958, 2447923; 426944, 2447941; 426907, 2447965; 426847, 2447992; 426819, 2447998; 426798, 2448010; 426758, 2448005; 426737, 2448009; 426722, 2448015; 426635, 2448077; 426856, 2448180; 427000, 2448088; 427461, 2448016; 427235, 2448159; 427184,

2448333; 427000, 2448395; 427287, 2448415; 427389, 2448282; 427604, 2448221; 427686, 2448036; 427778, 2448067; 427737, 2448159; 427788, 2448241; 427963, 2448180; 427829, 2448333; 427707, 2448354; 427543, 2448487; 427881, 2448569; 427748, 2448661; 427512, 2448743; 427287, 2448774; 427287, 2448815; 427870, 2448845; 428045, 2449030; 427942, 2449081; 427809, 2449019; 427604, 2449193; 427502, 2449193; 427471, 2449152; 427276, 2449183; 427215, 2449347; 427635, 2449459; 427553, 2449521; 427932, 2449552; 428065, 2449429; 427993, 2449644; 427727, 2449726; 427635, 2449838; 427819, 2449787; 428014, 2449818; 428270, 2449644; 428424, 2449357; 428823, 2449316; 428833, 2449398; 428966, 2449439; 429038, 2449357; 429171, 2449326; 429182, 2449429; 429940, 2449613; 429735, 2449817; 429642, 2450043; 429648, 2450043; 429717, 2449996; 429751, 2449978; 429791, 2449963; 429830, 2449956; 429860, 2449947; 429944, 2449910; 429968, 2449904; 430016, 2449884; 430068, 2449856; 430172, 2449815; 430207, 2449804; 430261, 2449795; 430317, 2449781; 430340, 2449778; 430365, 2449787; 430392, 2449798; 430408, 2449802; 430410, 2449802; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430913, 2449863; 431548, 2449428; 431415, 2449428; 431292, 2449490; 431138, 2449285; 431445, 2449275; 431384, 2449039; 431589, 2448957; 431763, 2449039; 431681, 2448855; 431681, 2448656; 431678, 2448658; 431680, 2448656; 431681, 2448656; return to starting point.

(B) NOTE: Map 137 follows:



(cxxxviii) Kauai 11—*Melicope knudsenii*—b (374 ha; 922 ac)

(A) Unit consists of the following 305 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979,

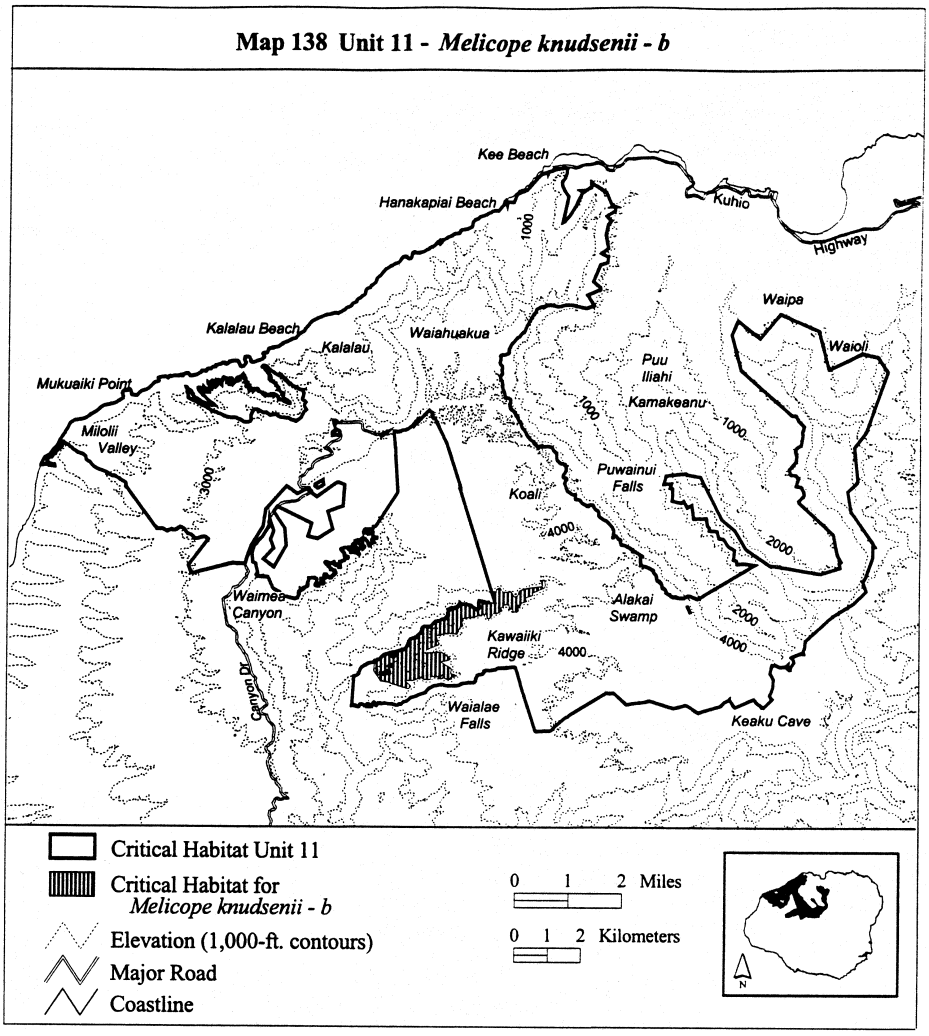
2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443994; 436945, 2444067; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437118, 2444096; 437169, 2444079; 437282, 2444210; 437602, 2444165; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 438237, 2444518; 438277, 2444604; 438343, 2444567; 438362, 2444642; 438465, 2444708; 438550, 2444576; 438803, 2444586; 438897, 2444426; 439001, 2444463; 439038, 2444614; 439282, 2444689; 439733, 2444745; 439696, 2444914; 439789, 2444951; 439818, 2444801; 439799, 2444707; 439423, 2444538; 439433, 2444482; 439226, 2444407; 439273, 2444294; 439104, 2444248; 439066, 2444135; 439019, 2444210; 439010, 2444003; 438878, 2443975; 438832, 2444088; 438747, 2444060; 438719, 2444201; 438597, 2444201; 438493, 2444097; 438503, 2444013; 438362, 2443929; 438277, 2443947; 438174, 2443797; 438080, 2443797; 438052, 2443929; 437695, 2443844; 437348, 2443788; 437319, 2443656; 437357, 2443572; 437263, 2443516; 437188, 2443328; 436916, 2443356; 436549, 2443281; 436634, 2442999; 436277, 2442859; 436221, 2442755; 436709, 2442793; 436991, 2442586; 436944, 2442549; 436690, 2442502; 437019, 2442304; 436981, 2442154; 437188, 2442088; 436981, 2442032; 436981, 2441966; 436812, 2441995; 436746, 2442117; 436681, 2441995; 436624, 2442051; 436390, 2442070; 436380, 2441957; 436211, 2441957; 436098, 2442042; 435864, 2441929; 435619, 2441938; 435798, 2441769; 435723, 2441685; 435178, 2441863; 435122, 2441882; 434877, 2441920; 434784, 2442061; 434661, 2442239; 434702, 2442503; 434713, 2442515; 434725, 2442524; 434735, 2442532; 434755, 2442542; 434775, 2442551; 434800, 2442556; 434822, 2442562; 434842, 2442574; 434862, 2442596; 434883, 2442613; 434896, 2442626; 434916, 2442647; 434934, 2442668; 434949, 2442681; 434972, 2442699; 434986, 2442705; 434997, 2442708; 435006, 2442713; 435012, 2442717; 435026, 2442719; 435039, 2442722; 435061, 2442727; 435081, 2442733; 435100, 2442739; 435119, 2442747; 435135, 2442754; 435150, 2442764; 435164, 2442771; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; 435237, 2442643; 435284, 2442631; return to starting point.

(B) Excluding 2 areas:

(*1*) Bounded by the following 3 points (1 ha, 3 ac): Start at 435132, 2442248; 435160, 2442164; 434848, 2442098; return to starting point; and

(*2*) Bounded by the following 4 points (0 ha, 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

(C) NOTE: Map 138 follows:

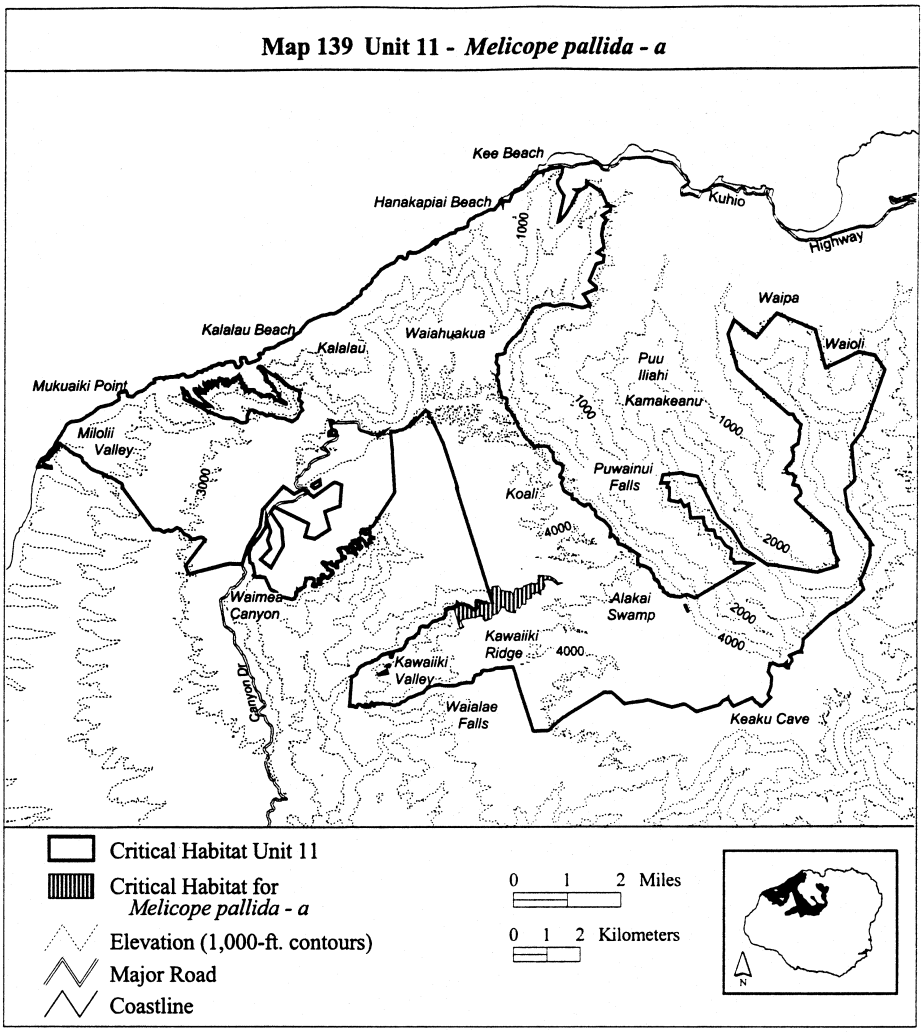


(cxxxix) Kauai 11—*Melicope pallida*—a (143 ha, 353 ac)

(A) Unit consists of the following 124 boundary points: Start at 438204, 2444622; 438280, 2444652; 438296, 2444737; 438496, 2444768; 438565, 2444637; 438888, 2444575; 438934, 2444498; 438996, 2444683; 439180, 2444675; 439288, 2444760; 439465, 2444837; 439527, 2444829; 439673, 2444821; 439696, 2445067; 440050, 2445044; 440219, 2444944; 440280, 2444844; 440419, 2444844; 440265, 2444783; 440142, 2444906; 439957, 2444952; 439834, 2444913; 439896, 2444760; 439850, 2444644; 439780, 2444637; 439773, 2444483; 439665, 2444560; 439488, 2444521; 439504, 2444445; 439457, 2444368; 439319, 2444360; 439334, 2444283; 439319, 2444199; 439211, 2444214; 439150, 2444076; 439050, 2444122; 439011, 2443953; 438765, 2444014; 438696, 2444099; 438596, 2444129; 438496, 2443945; 438296, 2443883; 438296, 2443791; 438080, 2443699; 438011, 2443868; 437404, 2443753; 437365, 2443676; 437457, 2443530; 437342, 2443476; 437133, 2444113; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191,

2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; return to starting point.

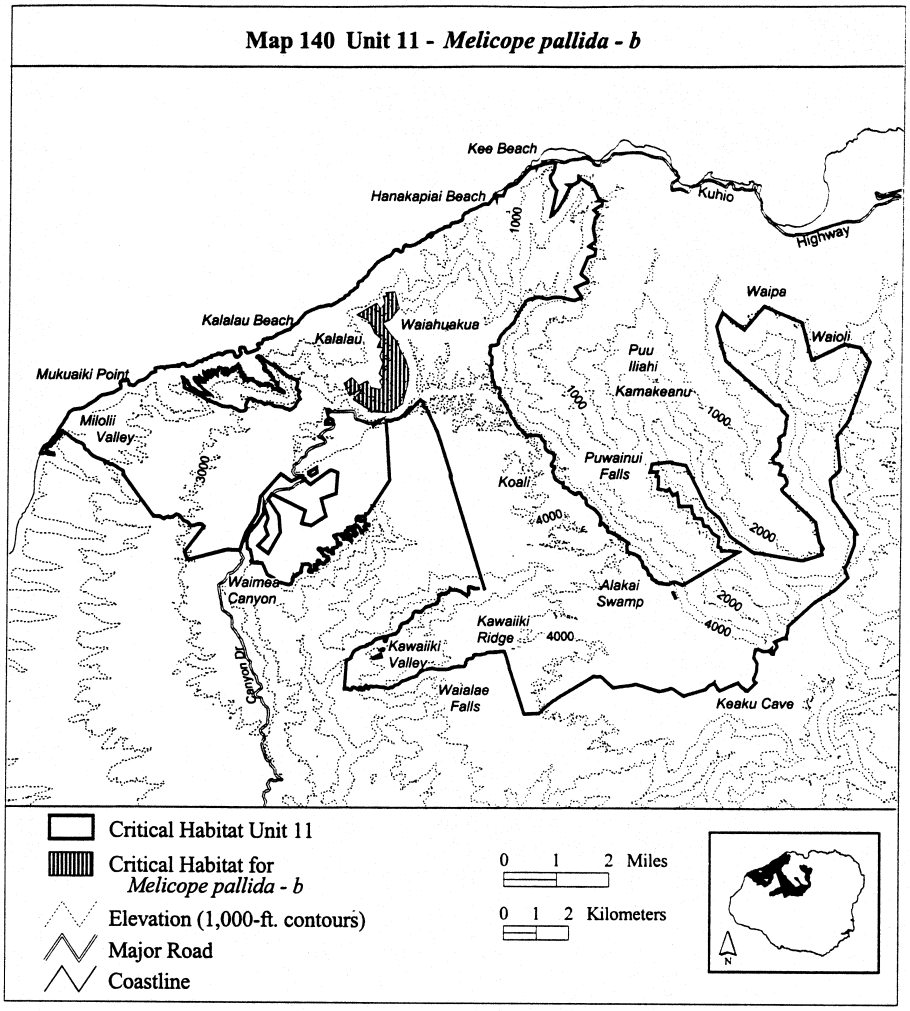
(B) NOTE: Map 139 follows:



(cxl) Kauai 11—*Melicope pallida*—b (310 ha; 765 ac)

(A) Unit consists of the following 47 boundary points: Start at 433925, 2450539; 433966, 2450539; 434164, 2450698; 434310, 2450565; 434385, 2450461; 434654, 2450605; 434760, 2450393; 435051, 2450327; 435117, 2450433; 435011, 2450592; 435131, 2450697; 434998, 2450816; 435131, 2451147; 435011, 2451359; 435131, 2451610; 435063, 2451636; 434945, 2451623; 435064, 2451901; 434850, 2452083; 434786, 2452232; 434648, 2452469; 434310, 2452642; 434932, 2452999; 435038, 2452813; 435170, 2452999; 435117, 2453223; 435236, 2453223; 435183, 2453329; 435475, 2453355; 435607, 2452840; 435316, 2452470; 435104, 2452390; 435316, 2452086; 435541, 2451835; 435660, 2451544; 435806, 2451279; 435898, 2450975; 435912, 2450671; 435845, 2450287; 435740, 2449890; 435316, 2449626; 434786, 2449653; 434588, 2449785; 434217, 2450036; 434486, 2450322; 434391, 2450299; 434111, 2450143; return to starting point.

(B) NOTE: Map 140 follows:



(cxli) Kauai 11—*Munroidendron racemosum*—c (1,950 ha; 4,819 ac)

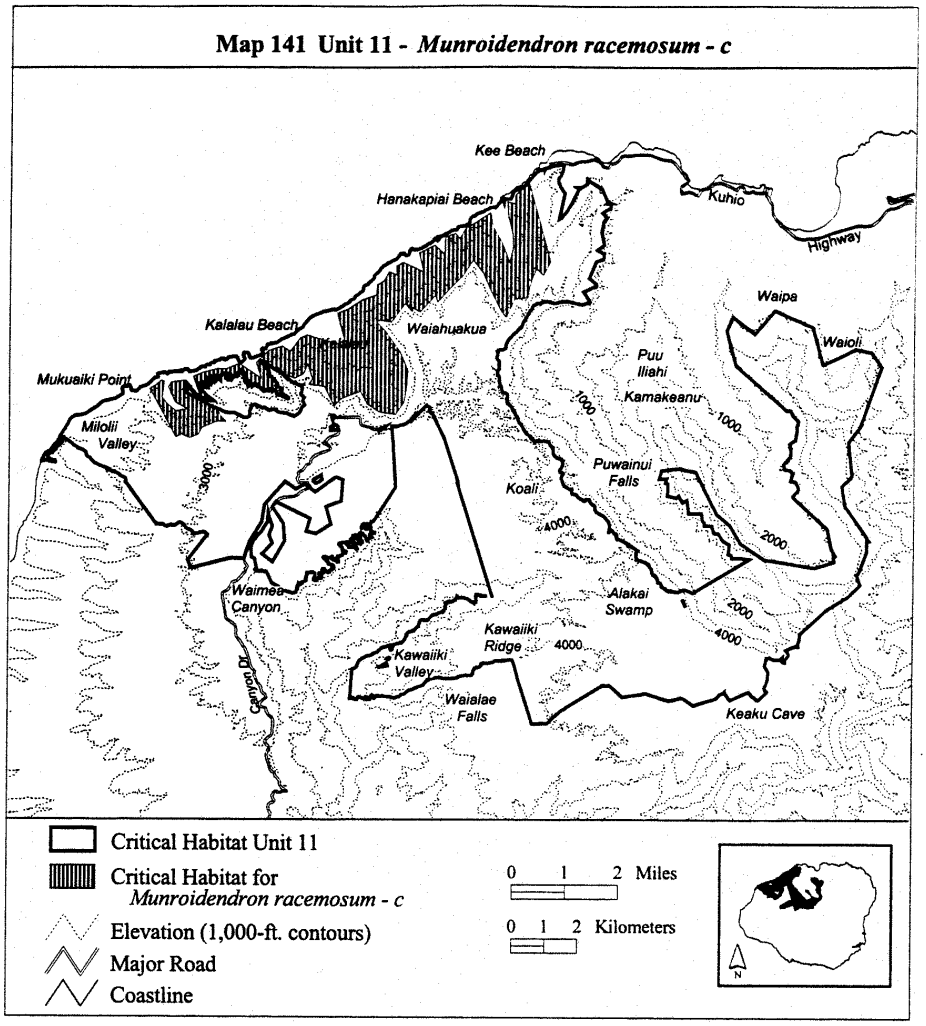
(A) Unit consists of the following 761 boundary points: Start at 439647, 2455689; 440015, 2454370; 439805, 2453982; 439692, 2454086; 439594, 2454176; 439465, 2453901; 439303, 2453287; 438947, 2453255; 438672, 2452689; 438477, 2452980; 438186, 2453562; 437975, 2454047; 437668, 2454436; 437376, 2453983; 437020, 2453611; 436583, 2453158; 436535, 2453369; 436065, 2452851; 435839, 2452981; 435822, 2452868; 435612, 2453110; 435207, 2452544; 434851, 2452609; 434738, 2452561; 435013, 2452253; 435466, 2451639; 435709, 2451072; 435677, 2450587; 435580, 2450086; 435337, 2449746; 434851, 2449811; 434462, 2450070; 434268, 2450442; 433702, 2450232; 433459, 2450006; 433167, 2450588; 432698, 2450653; 432811, 2450814; 432649, 2451267; 432536, 2450960; 432277, 2450831; 431872, 2451009; 431914, 2450942; 431912, 2450944; 431844, 2451002; 431798, 2451034; 431748, 2451072; 431700, 2451088; 431641, 2451117; 431591, 2451154; 431525, 2451187; 431489, 2451219; 431446, 2451247; 431433, 2451261; 431373, 2451329; 431370,

2451323; 431360, 2451314; 431351, 2451321; 431337, 2451323; 431318, 2451324; 431304, 2451317; 431293, 2451316; 431287, 2451322; 431281, 2451336; 431277, 2451355; 431264, 2451350; 431245, 2451336; 431233, 2451323; 431242, 2451310; 431267, 2451297; 431294, 2451278; 431312, 2451246; 431348, 2451203; 431384, 2451176; 431402, 2451170; 431407, 2451149; 431415, 2451137; 431428, 2451129; 431432, 2451109; 431442, 2451094; 431457, 2451086; 431456, 2451081; 431450, 2451067; 431455, 2451053; 431467, 2451047; 431486, 2451047; 431488, 2451038; 431482, 2451029; 431481, 2451010; 431487, 2450998; 431505, 2450987; 431504, 2450980; 431486, 2450974; 431476, 2450971; 431456, 2450971; 431449, 2450963; 431452, 2450955; 431457, 2450948; 431476, 2450934; 431497, 2450922; 431502, 2450903; 431509, 2450895; 431530, 2450888; 431555, 2450880; 431580, 2450878; 431577, 2450867; 431580, 2450848; 431591, 2450839; 431606, 2450830; 431626, 2450824; 431655, 2450815; 431653, 2450800; 431650, 2450792; 431645, 2450777; 431653, 2450764; 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431882, 2450301; 431864, 2450315; 431840, 2450325; 431808, 2450327; 431770, 2450328; 431762, 2450341; 431752, 2450353; 431730, 2450369; 431726, 2450392; 431720, 2450403; 431709, 2450416; 431692, 2450418; 431691, 2450429; 431687, 2450439; 431677, 2450453; 431664, 2450465; 431652, 2450468; 431635, 2450468; 431615, 2450468; 431608, 2450462; 431598, 2450460; 431597, 2450472; 431596, 2450476; 431591, 2450488; 431585, 2450499; 431576, 2450494; 431566, 2450502; 431549, 2450505; 431537, 2450505; 431516, 2450496; 431511, 2450486; 431505, 2450470; 431499, 2450454; 431488, 2450449; 431479, 2450454; 431467, 2450462; 431459, 2450467; 431443, 2450470; 431425, 2450469; 431409, 2450466; 431404, 2450459; 431392, 2450462; 431381, 2450464; 431372, 2450459; 431358, 2450458; 431339, 2450460; 431334, 2450462; 431330, 2450466; 431328, 2450478; 431323, 2450490; 431313, 2450497; 431303, 2450494; 431299, 2450488; 431292, 2450476; 431283, 2450480; 431281, 2450486; 431278, 2450497; 431272, 2450502; 431263, 2450505; 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429927, 2450906; 429914, 2450914; 429910, 2450911; 429907, 2450899; 429909, 2450889; 429915, 2450875; 429923, 2450865; 429926, 2450848; 429926, 2450827; 429923, 2450820; 429918, 2450819; 429909, 2450824; 429905, 2450835; 429897, 2450849; 429889, 2450860; 429879, 2450871; 429869, 2450875; 429863, 2450868; 429863, 2450852; 429861, 2450836; 429866, 2450814; 429870, 2450799; 429879, 2450785; 429885, 2450774; 429883, 2450763; 429879, 2450756; 429874, 2450750; 429875, 2450744; 429873, 2450736; 429866, 2450746; 429861, 2450753; 429854, 2450754; 429848, 2450756; 429843, 2450769; 429841, 2450785; 429827, 2450802; 429816, 2450819; 429797, 2450845; 429773, 2450868; 429738, 2450896; 429724, 2450899; 429720, 2450887; 429726, 2450875; 429733, 2450856; 429739, 2450832; 429742, 2450813; 429746, 2450791; 429752, 2450769; 429754, 2450756; 429748, 2450755; 429737, 2450753; 429731, 2450750; 429731, 2450739; 429734, 2450732; 429745, 2450721; 429750, 2450701; 429741, 2450701; 429728, 2450698; 429722, 2450692; 429718, 2450681; 429709, 2450676; 429702, 2450682; 429696, 2450693; 429691, 2450714; 429680, 2450743; 429664, 2450781; 429652, 2450802; 429639, 2450818; 429619, 2450828; 429603, 2450830; 429601, 2450825; 429604, 2450812; 429619, 2450793; 429637, 2450771; 429654, 2450750; 429664, 2450735; 429667, 2450717; 429663, 2450706; 429661, 2450673; 429666, 2450641; 429663, 2450621; 429654, 2450603; 429645, 2450601; 429634, 2450610; 429619, 2450622; 429602, 2450633; 429558, 2450656; 429505, 2450692; 429490, 2450702; 429483, 2450698; 429478, 2450692; 429480, 2450680; 429489, 2450657; 429496, 2450634; 429503, 2450613; 429524, 2450599; 429556, 2450569; 429569, 2450555; 429569, 2450546; 429560, 2450541; 429535, 2450540; 429510, 2450541; 429489, 2450546; 429478, 2450553; 429468, 2450566; 429461, 2450574; 429450, 2450580; 429440, 2450580; 429434, 2450588; 429432, 2450595; 429422, 2450604; 429410, 2450609; 429389, 2450622; 429387, 2450629; 429384, 2450638; 429377, 2450656; 429371, 2450661; 429365, 2450670; 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2450357; 429244, 2450363; 429212, 2450380; 429205, 2450394; 429200, 2450405; 429193, 2450416; 429174, 2450426; 429162, 2450435; 429161, 2450444; 429158, 2450455; 429152, 2450468; 429143, 2450481; 429128, 2450496; 429115, 2450512; 429114, 2450524; 429113, 2450540; 429110, 2450557; 429103, 2450577; 429091, 2450594; 429077, 2450605; 429060, 2450608; 429041, 2450610; 429026, 2450609; 429013, 2450623; 429009, 2450638; 429000, 2450655; 428990, 2450676; 428979, 2450690; 428972, 2450701; 428962, 2450707; 428952, 2450706; 428952, 2450704; 428964, 2450654; 428990, 2450584; 429000, 2450551; 429015, 2450477; 429016, 2450451; 429013, 2450421; 429012, 2450380; 429036, 2450360; 429089, 2450331; 429147, 2450304; 429258, 2450260; 429576, 2450092; 429717, 2449996; 429751, 2449978; 429791, 2449963; 429830, 2449956; 429860, 2449947; 429888, 2449935; 430027, 2449699; 430188, 2449521; 429929, 2449537; 429476, 2449343; 429363, 2449149; 429104, 2449036; 428845, 2449149; 428683, 2449052; 427889, 2450524; 428068, 2450621; 428213, 2450767; 428310, 2450751; 428246, 2450265; 428408, 2450055; 428683, 2449845; 429007, 2449909; 428650, 2450120; 428440, 2450557; 428537, 2450718; 428958, 2450783; 429427, 2450265; 429201, 2450880; 429492, 2451025; 429946, 2451122; 430188, 2451106; 430593, 2451284; 431257, 2450831; 431095, 2451316; 431484, 2451672; 431888, 2451818; 432115, 2451640; 432244, 2451801; 432423, 2452044; 432633, 2452141; 433604, 2451866; 433766, 2452011; 433556, 2452804; 433863, 2452933; 434301, 2453208; 434721, 2453369; 434754, 2453676; 434964, 2453790; 435126, 2454064; 435353, 2453984; 435337, 2454242; 435531, 2454355; 436162, 2454064; 436017, 2454630; 436502, 2454873; 436794, 2454598; 436810, 2455115; 437117, 2455228; 437263, 2455082; 437441, 2455390; 437733, 2455567; 438186, 2455874; 438267, 2455454; 438526, 2454985; 438769, 2454354; 438882, 2454807; 438866, 2455244; 438720, 2455745; 438688, 2456181; 438931, 2456133; 438931, 2456391; 439352, 2456747; return to starting point.

(B) NOTE: Map 141 follows:

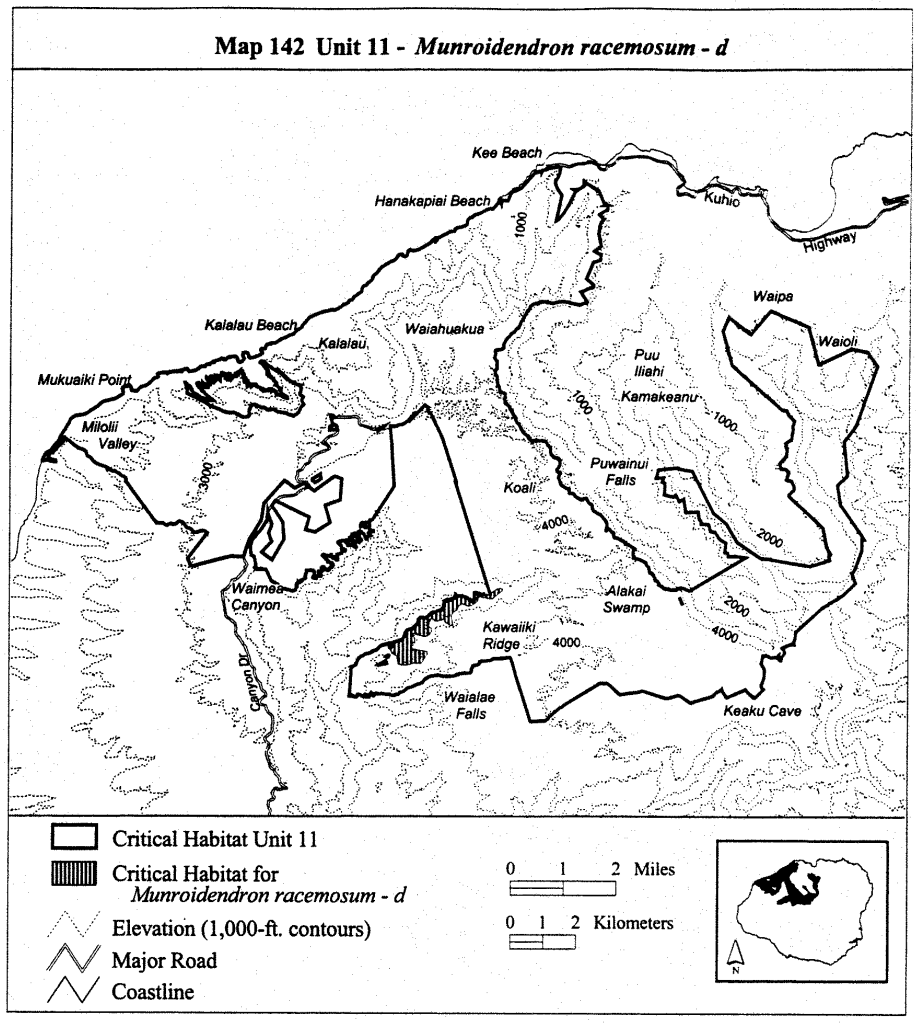


(cxlii) Kauai 11—*Munroidendron racemosum*—d (153 ha; 379 ac)

(A) Unit consists of the following 285 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979,

2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 438303, 2444314; 438357, 2444311; 438545, 2444430; 438620, 2444455; 438689, 2444411; 438677, 2444367; 438369, 2444110; 438043, 2444185; 437955, 2444185; 437924, 2444047; 437774, 2443928; 437661, 2443897; 437460, 2443978; 437341, 2443897; 437303, 2443797; 437203, 2443715; 437140, 2443634; 437121, 2443571; 437184, 2443308; 437096, 2443314; 436921, 2443427; 436914, 2443515; 436801, 2443471; 436670, 2443446; 436507, 2443533; 436469, 2443421; 436431, 2443295; 436507, 2443232; 436519, 2443113; 436463, 2443038; 436312, 2442963; 435955, 2443082; 435942, 2443026; 436030, 2442844; 435904, 2442731; 435930, 2442618; 436099, 2442574; 436369, 2442530; 436413, 2442455; 436212, 2442160; 435973, 2442179; 435785, 2442110; 435641, 2442110; 435509, 2442141; 435453, 2442361; 435447, 2442399; 435309, 2442486; 435169, 2442771; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; 435237, 2442643; 435284, 2442631; return to starting point.

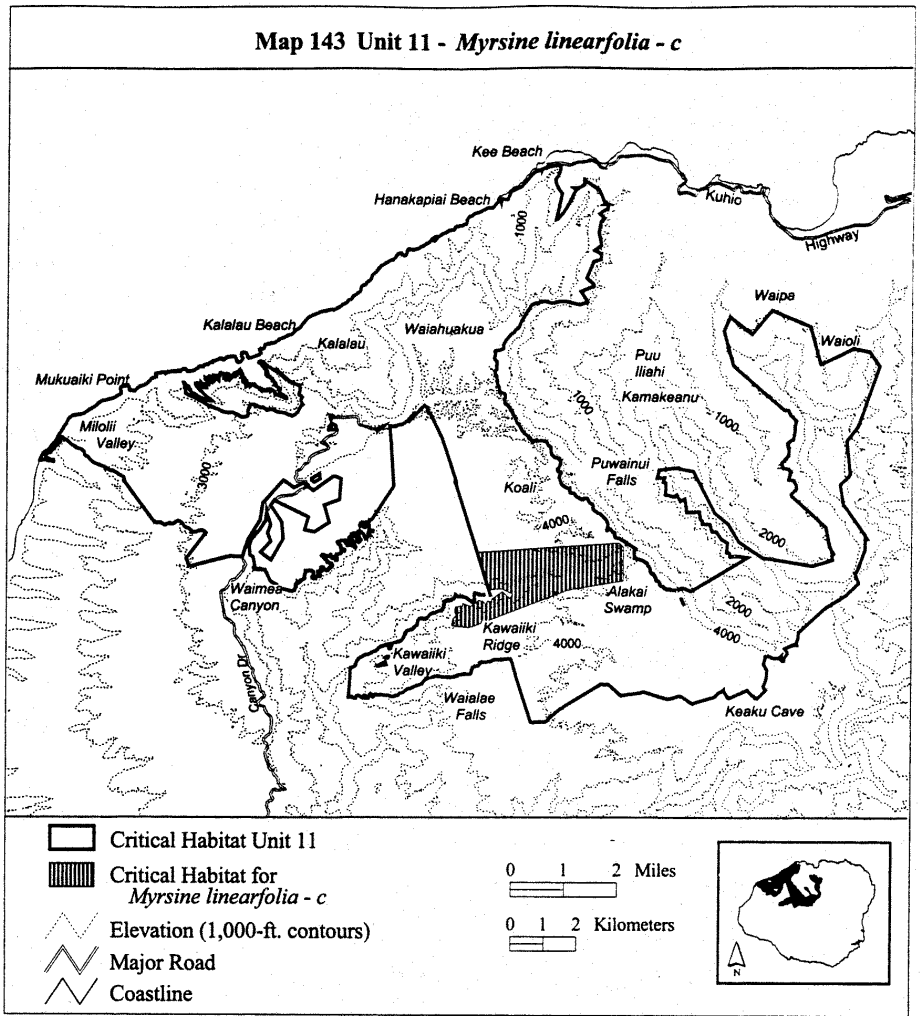
(B) NOTE: Map 142 follows:



(cxliii) Kauai 11—*Myrsine linearifolia*—c (684 ha; 1,691 ac)

(A) Unit consists of the following 28 boundary points: Start at 442333, 2445731; 442333, 2444698; 440696, 2444413; 437673, 2443278; 437145, 2443341; 437172, 2443520; 437271, 2443636; 437235, 2443770; 437262, 2443895; 437467, 2443931; 437476, 2444011; 437718, 2443913; 437915, 2444047; 437977, 2444118; 438031, 2444065; 438076, 2444083; 438174, 2443957; 438237, 2444083; 438353, 2444038; 438362, 2444127; 438675, 2444351; 438907, 2444154; 438997, 2444297; 438675, 2444449; 438344, 2444431; 438272, 2444411; 437909, 2445539; 442203, 2445834; return to starting point.

(B) NOTE: Map 143 follows:

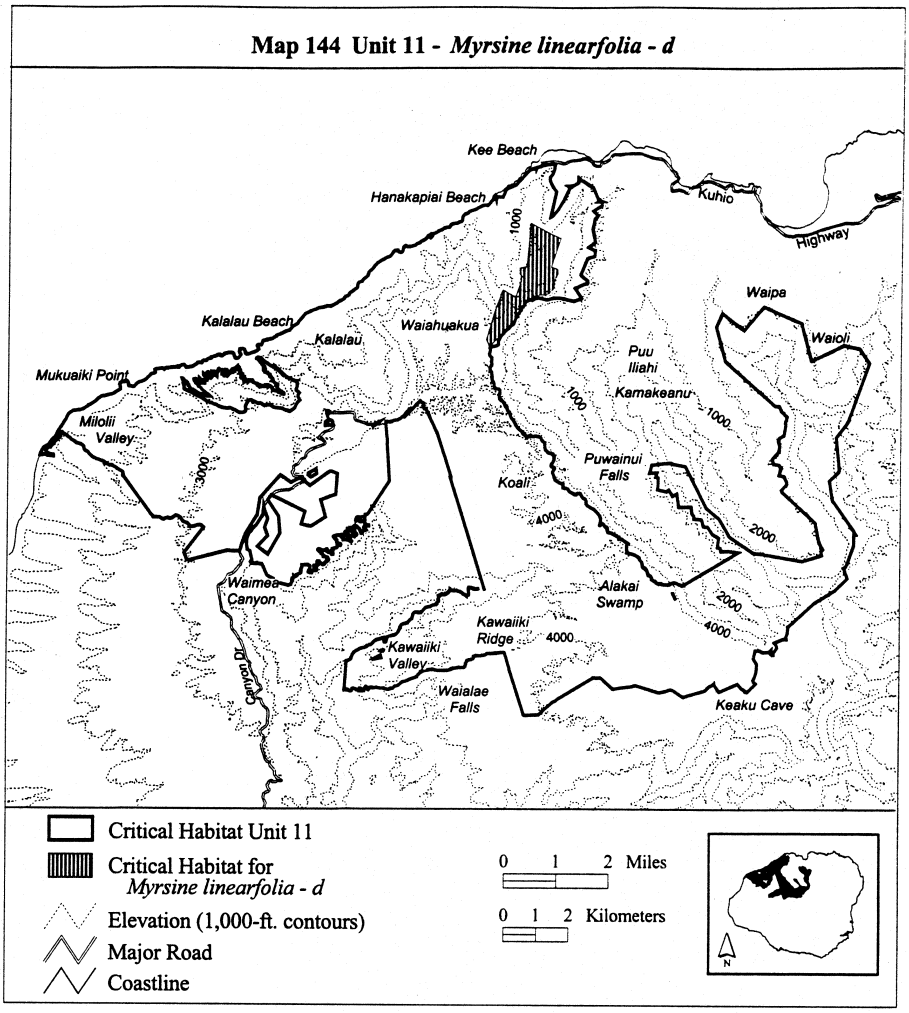


(cxliv) Kauai 11—*Myrsine linearifolia*—d (286 ha; 707 ac)

(A) Unit consists of the following 63 boundary points: Start at 439347, 2452789; 439324, 2452794; 439098, 2452402; 438924, 2452225; 438478, 2451772; 438422, 2451715; 438396, 2451689; 438313, 2451903; 438586, 2452835; 438813, 2453426; 439200, 2453198; 439382, 2453721; 439337, 2454084; 439541, 2454152; 439654, 2455463; 439655, 2455470; 440286, 2455134; 440577, 2454992; 440294, 2454127; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553,

2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; 439355, 2452801; return to starting point.

(B) NOTE: Map 144 follows:



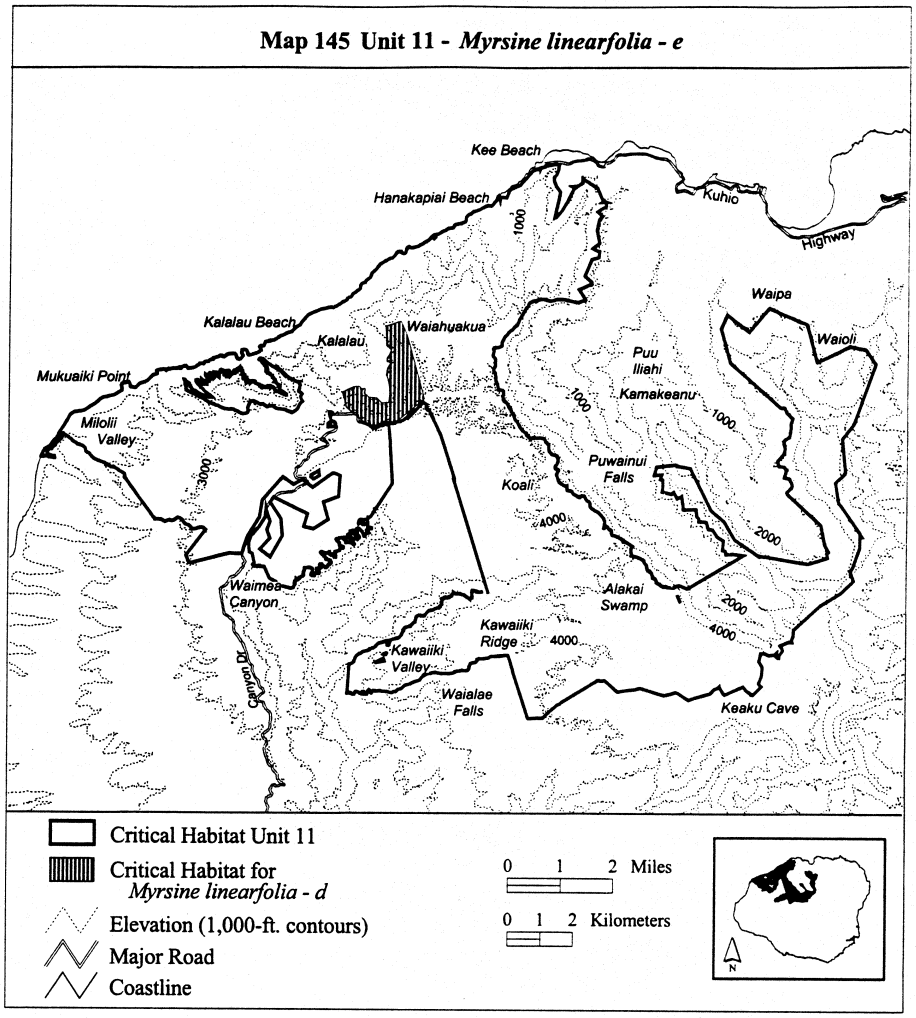
(cxlv) Kauai 11—*Myrsine linearifolia*—e (346 ha; 854 ac)

(A) Unit consists of the following 37 boundary points: Start at 435236, 2449351; 435214, 2449343; 434747, 2449168; 434654, 2449245; 433915, 2449865; 433804, 2450325; 434145, 2450488; 434338, 2450503; 434390, 2450429; 434502, 2450436; 434502, 2450273; 434628, 2450169; 434865, 2450147; 435006, 2450006; 435214, 2450013; 435244, 2450221; 435251, 2450473; 435185, 2450740; 435133, 2450859; 435177, 2451044; 435274, 2451237; 435162, 2451259; 435162, 2451370; 435244, 2451497; 435296, 2451623; 435140, 2451756; 435140, 2451934; 435128, 2452353; 435588, 2452504; 435771, 2452090; 436320,

2450124; 435496, 2449449; 435298, 2449375; 435292, 2449379; 435269, 2449384; 435247, 2449385; 435234, 2449384; return to starting point.

(B) Excluding 1 area bounded by the following 11 points (<1 ha, 1 ac): Start at 434908, 2449290; 434890, 2449251; 434848, 2449239; 434839, 2449258; 434834, 2449277; 434833, 2449281; 434881, 2449297; 435011, 2449352; 435005, 2449310; 434948, 2449300; 434908, 2449290; return to starting point.

(C) NOTE: Map 145 follows:

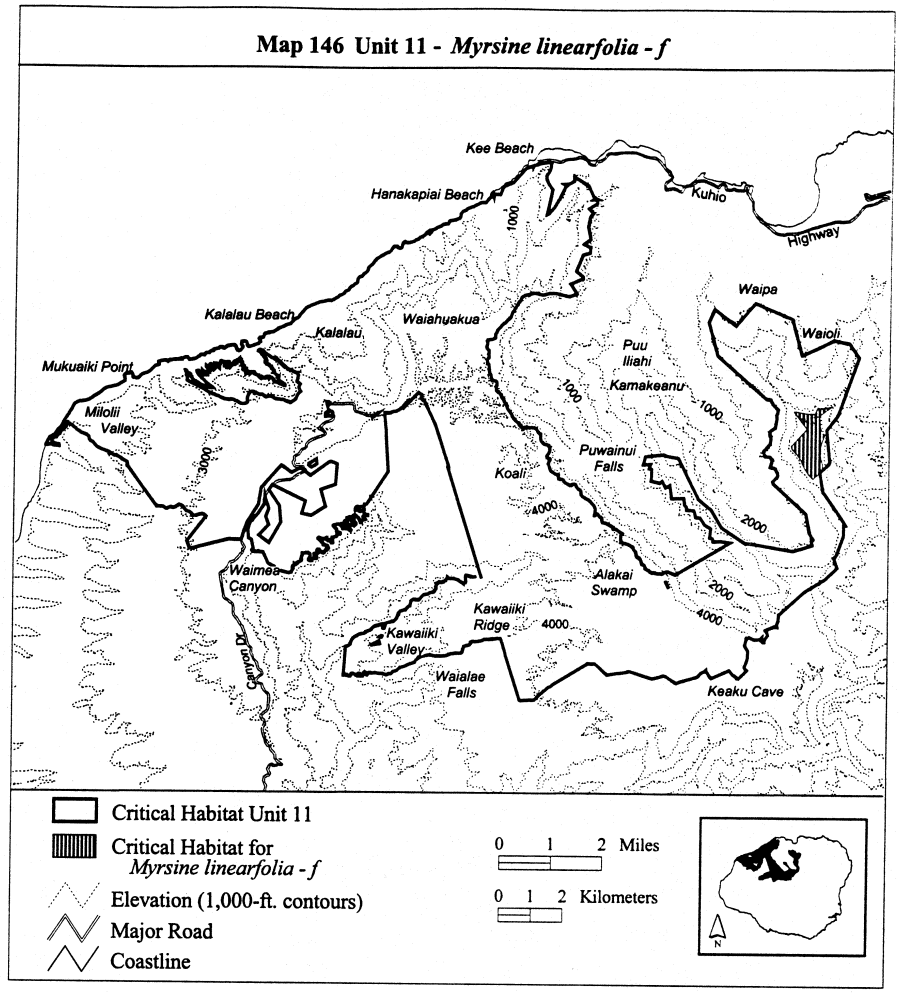


(cxlvi) Kauai 11—*Myrsine linearifolia*—f (135 ha; 334 ac)

(A) Unit consists of the following 30 boundary points: Start at 448856, 2449342; 448879, 2449102; 448899, 2448999; 449002, 2448742; 448894, 2448428; 448894, 2448078; 448920, 2447996; 448961, 2447831; 448961, 2447718; 448964, 2447690; 448881, 2447609; 448665, 2447400; 448662, 2447404; 448498, 2447589; 448384, 2447738; 448322,

2447877; 448286, 2448006; 448147, 2448186; 447988, 2448356; 447981, 2448434; 448470, 2448968; 448049, 2449503; 448160, 2449510; 448320, 2449476; 448515, 2449449; 448732, 2449449; 448783, 2449616; 448980, 2449613; 449250, 2449685; 448853, 2449375; return to starting point.

(B) NOTE: Map 146 follows:



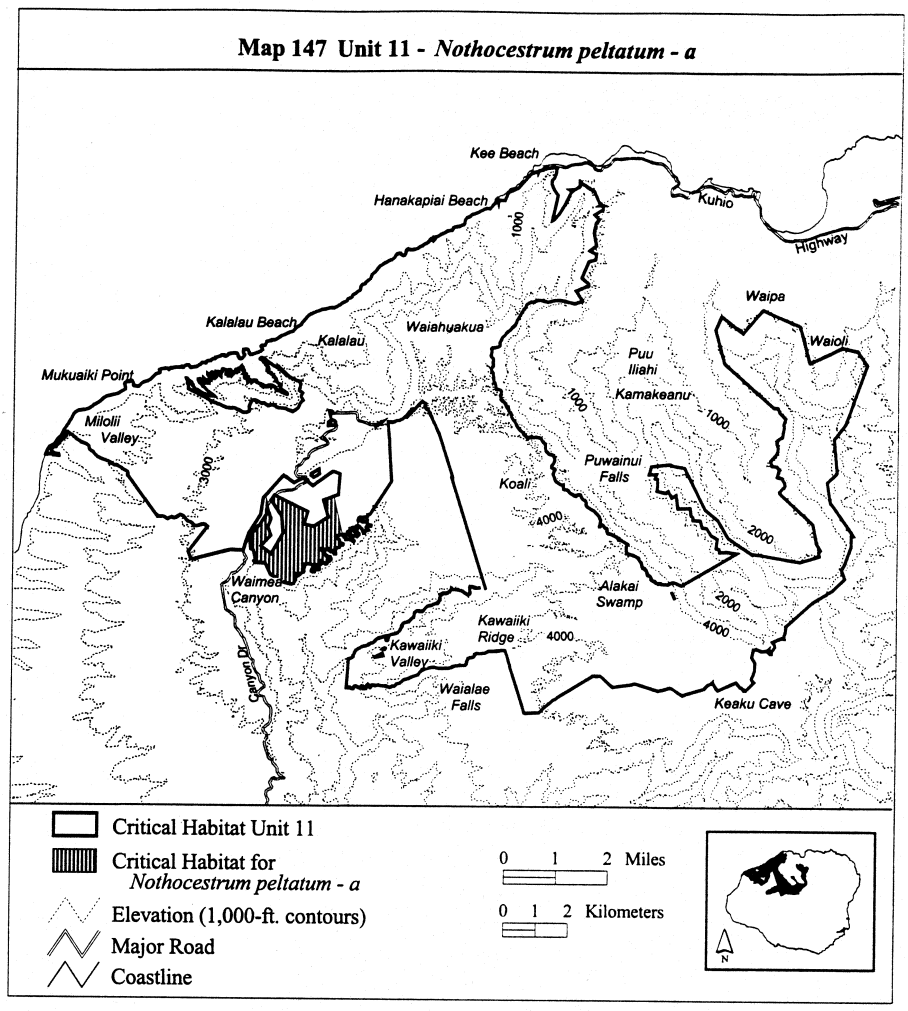
(cxlvii) Kauai 11—*Nothocestrum peltatum*—a (427 ha; 1,056 ac)

(A) Unit consists of the following 418 boundary points: Start at 433577, 2447086; 433840, 2445888; 433837, 2445891; 433826, 2445896; 433791, 2445897; 433775, 2445901; 433758, 2445896; 433730, 2445871; 433708, 2445866; 433689, 2445873; 433675, 2445873; 433653, 2445857; 433650, 2445838; 433656, 2445820; 433690, 2445778; 433718, 2445762; 433735, 2445756; 433750, 2445748; 433756, 2445723; 433755, 2445706; 433759, 2445665; 433764, 2445656; 433781, 2445647; 433824, 2445642; 433851, 2445636; 433868, 2445628; 433879, 2445615; 433881, 2445595; 433867, 2445582; 433854, 2445582; 433827,

2445587; 433805, 2445594; 433787, 2445596; 433772, 2445590; 433763, 2445575; 433770, 2445538; 433773, 2445524; 433772, 2445519; 433762, 2445509; 433749, 2445500; 433732, 2445496; 433717, 2445497; 433708, 2445498; 433696, 2445499; 433686, 2445494; 433668, 2445480; 433655, 2445475; 433647, 2445474; 433635, 2445470; 433628, 2445467; 433621, 2445463; 433616, 2445456; 433609, 2445448; 433604, 2445445; 433598, 2445437; 433595, 2445433; 433595, 2445428; 433599, 2445420; 433611, 2445391; 433614, 2445376; 433620, 2445365; 433629, 2445356; 433637, 2445346; 433639, 2445336; 433641, 2445327; 433641, 2445319; 433637, 2445311; 433625, 2445307; 433619, 2445305; 433611, 2445307; 433604, 2445309; 433600, 2445313; 433591, 2445329; 433586, 2445341; 433582, 2445346; 433577, 2445353; 433573, 2445358; 433568, 2445366; 433567, 2445374; 433565, 2445381; 433564, 2445388; 433563, 2445395; 433562, 2445398; 433561, 2445399; 433556, 2445403; 433548, 2445403; 433527, 2445398; 433494, 2445388; 433477, 2445386; 433469, 2445388; 433463, 2445394; 433459, 2445402; 433456, 2445410; 433455, 2445416; 433452, 2445424; 433452, 2445436; 433451, 2445445; 433450, 2445450; 433449, 2445457; 433448, 2445461; 433446, 2445465; 433442, 2445467; 433438, 2445470; 433431, 2445468; 433426, 2445464; 433420, 2445459; 433413, 2445452; 433405, 2445444; 433396, 2445440; 433373, 2445432; 433344, 2445421; 433332, 2445422; 433317, 2445424; 433307, 2445428; 433288, 2445435; 433272, 2445440; 433260, 2445444; 433247, 2445450; 433242, 2445455; 433237, 2445459; 433233, 2445462; 433226, 2445466; 433221, 2445464; 433201, 2445464; 433193, 2445466; 433187, 2445464; 433181, 2445460; 433179, 2445455; 433179, 2445445; 433180, 2445437; 433192, 2445424; 433199, 2445416; 433225, 2445390; 433249, 2445376; 433262, 2445366; 433268, 2445357; 433274, 2445351; 433279, 2445342; 433287, 2445336; 433298, 2445333; 433312, 2445324; 433316, 2445313; 433323, 2445297; 433334, 2445273; 433342, 2445263; 433353, 2445252; 433362, 2445247; 433375, 2445242; 433386, 2445238; 433401, 2445232; 433411, 2445227; 433422, 2445223; 433432, 2445221; 433450, 2445220; 433460, 2445216; 433471, 2445210; 433482, 2445197; 433506, 2445166; 433514, 2445158; 433515, 2445153; 433512, 2445142; 433510, 2445136; 433508, 2445133; 433505, 2445128; 433500, 2445122; 433495, 2445122; 433487, 2445127; 433480, 2445134; 433474, 2445142; 433469, 2445149; 433467, 2445153; 433464, 2445154; 433457, 2445154; 433455, 2445147; 433452, 2445137; 433446, 2445124; 433444, 2445112; 433441, 2445104; 433438, 2445101; 433432, 2445099; 433423, 2445093; 433413, 2445082; 433395, 2445069; 433387, 2445061; 433382, 2445052; 433380, 2445044; 433380, 2445034; 433381, 2445023; 433380, 2445014; 433379, 2445000; 433377, 2444996; 433370, 2444993; 433363, 2444994; 433357, 2444996; 433351, 2444997; 433345, 2444992; 433337, 2444989; 433330, 2444988; 433322, 2444991; 433307, 2444999; 433290, 2445012; 433274, 2445023; 433259, 2445036; 433236, 2445061; 433216, 2445082; 433207, 2445091; 433201, 2445098; 433195, 2445100; 433189, 2445105; 433182, 2445104; 433177, 2445100; 433173, 2445094; 433172, 2445090; 433168, 2445082; 433164, 2445076; 433159, 2445071; 433154, 2445066; 433147, 2445060; 433142, 2445051; 433139, 2445045; 433140, 2445035; 433142, 2445021; 433156, 2444993; 433163, 2444982; 433166, 2444972; 433166, 2444968; 433160, 2444959; 433153, 2444957; 433144, 2444955; 433138, 2444957; 433130, 2444960; 433105, 2444969; 433093, 2444973; 433082, 2444973; 433074, 2444972; 433066, 2444967; 433062, 2444959; 433058, 2444952; 433059, 2444943; 433060, 2444935; 433064, 2444920; 433069, 2444904; 433075, 2444892; 433078, 2444882; 433084, 2444873; 433092, 2444865; 433104, 2444854; 433113, 2444850; 433129, 2444843; 433138, 2444838; 433143, 2444831; 433144, 2444823; 433144, 2444816; 433143, 2444809; 433135, 2444804; 433124, 2444798; 433119, 2444799; 433108, 2444802; 433094, 2444809; 433077, 2444818; 433063, 2444822; 433054, 2444823; 433052, 2444823; 433047, 2444824; 433039, 2444823; 433028, 2444822; 433019, 2444816; 433011, 2444803; 433002, 2444794; 432993, 2444790; 432986, 2444785; 432986, 2444775; 432988, 2444765; 432993, 2444751; 432985, 2444746; 432976, 2444744; 432960, 2444745; 432951, 2444751; 432948, 2444755; 432944, 2444759; 432939, 2444764; 432936, 2444764; 432925, 2444762; 432914, 2444760; 432908, 2444760; 432899, 2444762; 432891, 2444767; 432887, 2444774; 432887, 2444783; 432892, 2444797; 432903, 2444816; 432916, 2444838; 432921, 2444848; 432923, 2444864; 432929, 2444881; 432933, 2444897; 432934, 2444908; 432933, 2444926; 432933, 2444939; 432932, 2444945; 432930, 2444950; 432927, 2444958; 432921, 2444964; 432915, 2444967; 432907, 2444971; 432897, 2444974; 432883, 2444981; 432878, 2444986; 432872, 2444994; 432865, 2444999; 432855, 2445005; 432846, 2445005; 432838, 2445004; 432830, 2445001; 432821, 2444996; 432812, 2444993; 432801, 2444987; 432788, 2444983; 432772, 2444979; 432761, 2444976; 432744, 2444977; 432730, 2444975; 432714, 2444977; 432710, 2444979; 432706, 2444980; 432698,

2444983; 432692, 2444979; 432689, 2444973; 432688, 2444963; 432681, 2444920; 432680, 2444909; 432670, 2444895; 432664, 2444887; 432659, 2444878; 432657, 2444870; 432657, 2444858; 432655, 2444834; 432653, 2444828; 432648, 2444816; 432642, 2444806; 432640, 2444794; 432644, 2444781; 432650, 2444769; 432655, 2444759; 432657, 2444744; 432652, 2444736; 432645, 2444730; 432634, 2444723; 432606, 2444708; 432584, 2444702; 432554, 2444687; 432542, 2444682; 432534, 2444675; 432528, 2444668; 432520, 2444659; 432513, 2444645; 432507, 2444636; 432500, 2444628; 432490, 2444621; 432480, 2444618; 432473, 2444616; 432465, 2444617; 432453, 2444622; 432444, 2444625; 432437, 2444621; 432427, 2444610; 432417, 2444591; 432405, 2444574; 432401, 2444563; 432401, 2444556; 432401, 2444546; 432400, 2444539; 432399, 2444527; 432393, 2444513; 432387, 2444505; 432387, 2444498; 432388, 2444489; 432389, 2444479; 432386, 2444468; 432379, 2444452; 432369, 2444432; 432357, 2444408; 432350, 2444397; 432346, 2444391; 432343, 2444389; 432340, 2444387; 432336, 2444386; 432313, 2444377; 432297, 2444371; 432275, 2444356; 431885, 2444462; 431820, 2444555; 431615, 2444657; 431445, 2445015; 431137, 2445031; 431104, 2445078; 431153, 2445133; 431083, 2445402; 430991, 2445457; 430977, 2445767; 431060, 2445963; 431278, 2446215; 431483, 2446536; 431491, 2446759; 431622, 2446390; 431522, 2446121; 431622, 2445871; 431312, 2445542; 431632, 2445303; 432001, 2445941; 431961, 2446460; 431624, 2446959; 431732, 2447115; 432759, 2446609; 432659, 2446240; 432948, 2446150; 433397, 2446440; 433257, 2446958; return to starting point.

(B) NOTE: Map 147 follows:



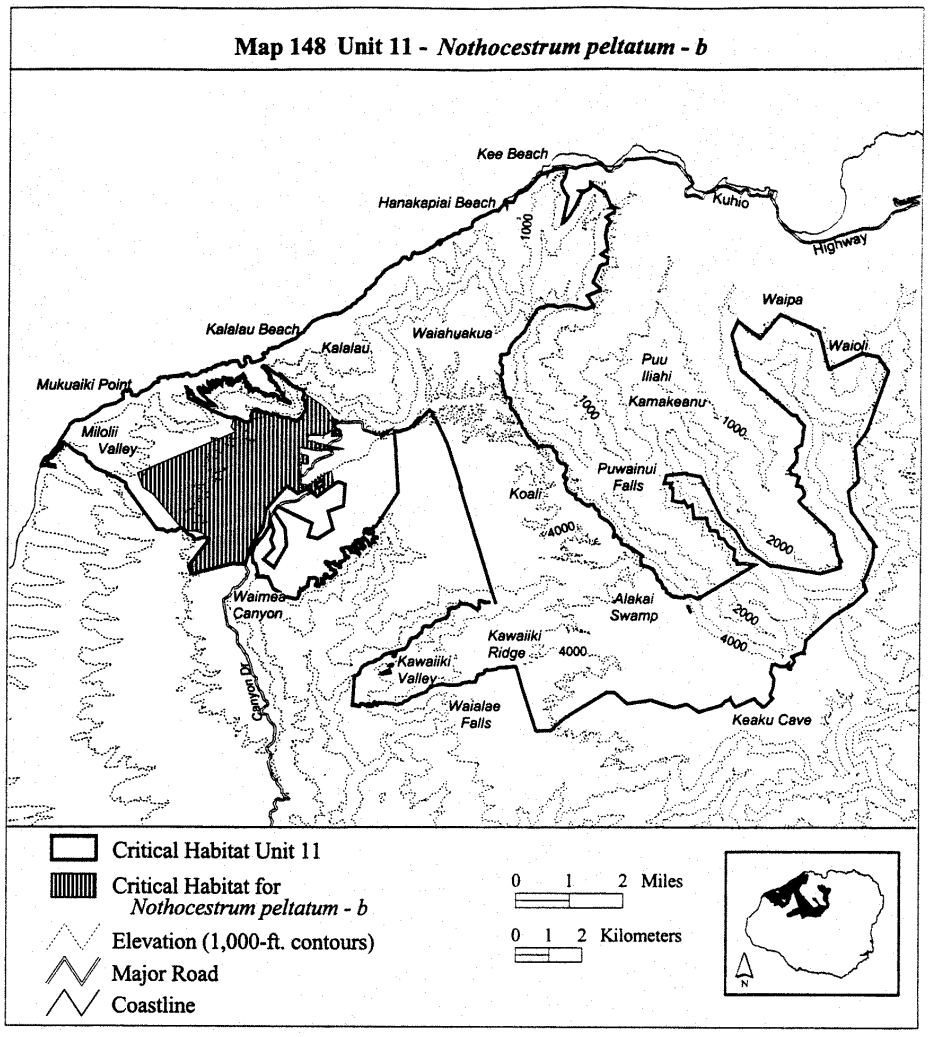
(cxlviii) Kauai 11—*Nothocestrum peltatum*—b (1,464 ha; 3,617 ac)

(A) Unit consists of the following 125 boundary points: Start at 433416, 2449553; 433413, 2449527; 433251, 2449306; 433081, 2449255; 432650, 2449255; 432630, 2449144; 432587, 2449098; 433711, 2448846; 432893, 2448778; 432382, 2448880; 432382, 2448693; 432638, 2448625; 432638, 2448387; 432433, 2448387; 432416, 2447995; 432432, 2447806; 432433, 2447791; 432672, 2447739; 432961, 2447978; 433336, 2448182; 433424, 2447780; 432918, 2447407; 432609, 2447647; 432320, 2447497; 432136, 2447629; 432001, 2447726; 431369, 2447027; 431298, 2446522; 430955, 2445963; 430827, 2445619; 430759, 2445406; 430405, 2445422; 429257, 2445126; 429144, 2445121; 429062, 2445354; 429654, 2446125; 429591, 2446167; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428912, 2446468; 428912, 2446468; 428911, 2446468; 428904, 2446474; 428793, 2446542; 428773, 2446550; 428747, 2446566; 427960, 2447503; 427660, 2447675; 427505, 2448103; 429733, 2449052; 429708, 2449170; 429968, 2449152; 430437, 2449352; 430418, 2449395; 430369, 2449433; 430355, 2449451; 430349, 2449466; 430335, 2449474; 430318,

2449477; 430307, 2449482; 430312, 2449517; 430313, 2449532; 430320, 2449553; 430331, 2449565; 430346, 2449596; 430354, 2449622; 430355, 2449641; 430348, 2449666; 430376, 2449750; 430384, 2449766; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432217, 2449712; 432259, 2449679; 432344, 2449744; 432419, 2449806; 432471, 2449904; 432504, 2449961; 432579, 2450036; 432551, 2450083; 432523, 2450130; 432523, 2450182; 432565, 2450262; 432523, 2450304; 432475, 2450313; 432452, 2450337; 432461, 2450375; 432480, 2450426; 432490, 2450478; 432501, 2450529; 432504, 2450525; 432504, 2450527; 433152, 2450085; 433399, 2449754; 433399, 2449709; 433419, 2449599; return to starting point.

(B) Excluding 1 area bounded by the following 4 points (3 ha, 8 ac): Start at 433109, 2447775; 432932, 2447668; 432827, 2447751; 433094, 2447922; return to starting point.

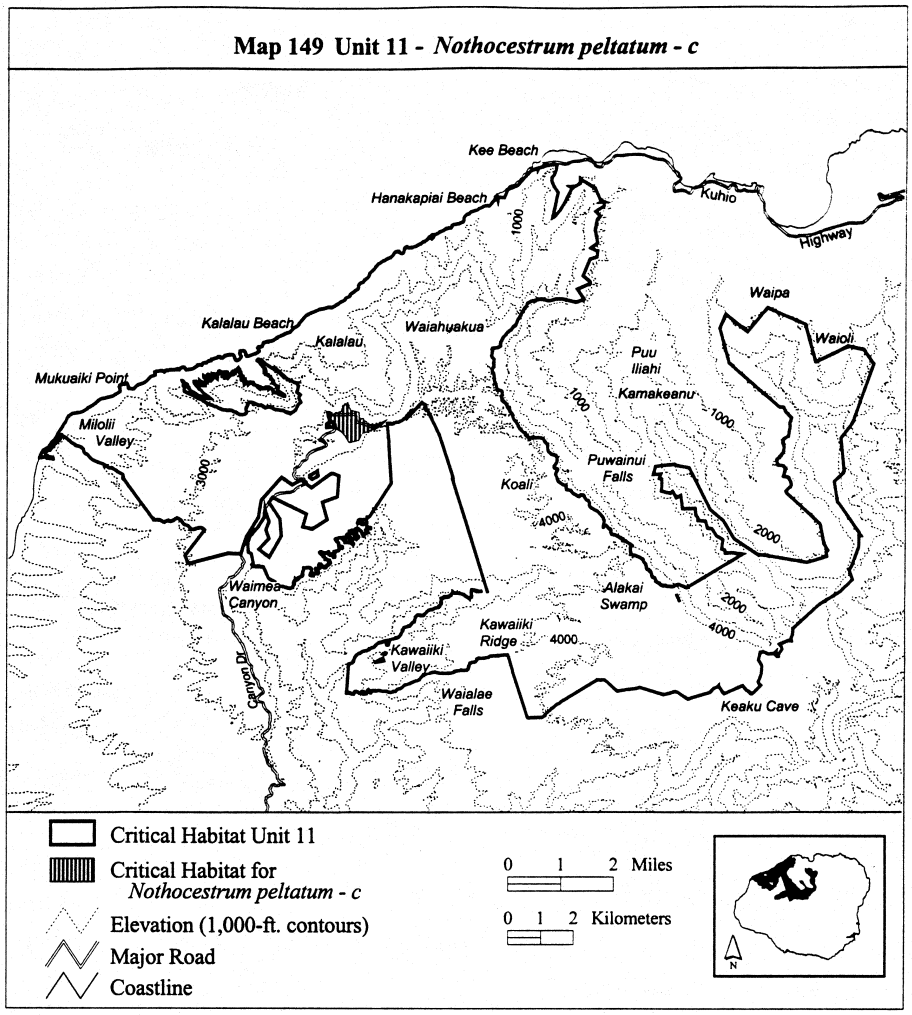
(C) NOTE: Map 148 follows:



(cxlix) Kauai 11—*Nothocestrum peltatum*—c (80 ha; 198 ac)

(A) Unit consists of the following 36 boundary points: Start at 433467, 2449537; 433459, 2449601; 433480, 2449629; 433550, 2449670; 433792, 2449721; 433887, 2449924; 434015, 2449995; 434094, 2449780; 434354, 2449721; 434409, 2449470; 434457, 2449541; 434688, 2449346; 434987, 2449346; 434991, 2449346; 434991, 2449344; 434988, 2449343; 434881, 2449297; 434833, 2449281; 434834, 2449277; 434839, 2449258; 434842, 2449253; 434844, 2449248; 434839, 2449242; 434833, 2449239; 434684, 2449151; 434469, 2449071; 434362, 2448856; 434336, 2448850; 434055, 2448781; 433923, 2449012; 433812, 2449135; 433688, 2449191; 433660, 2449263; 433664, 2449351; 433588, 2449442; 433509, 2449482; return to starting point.

(B) NOTE: Map 149 follows:

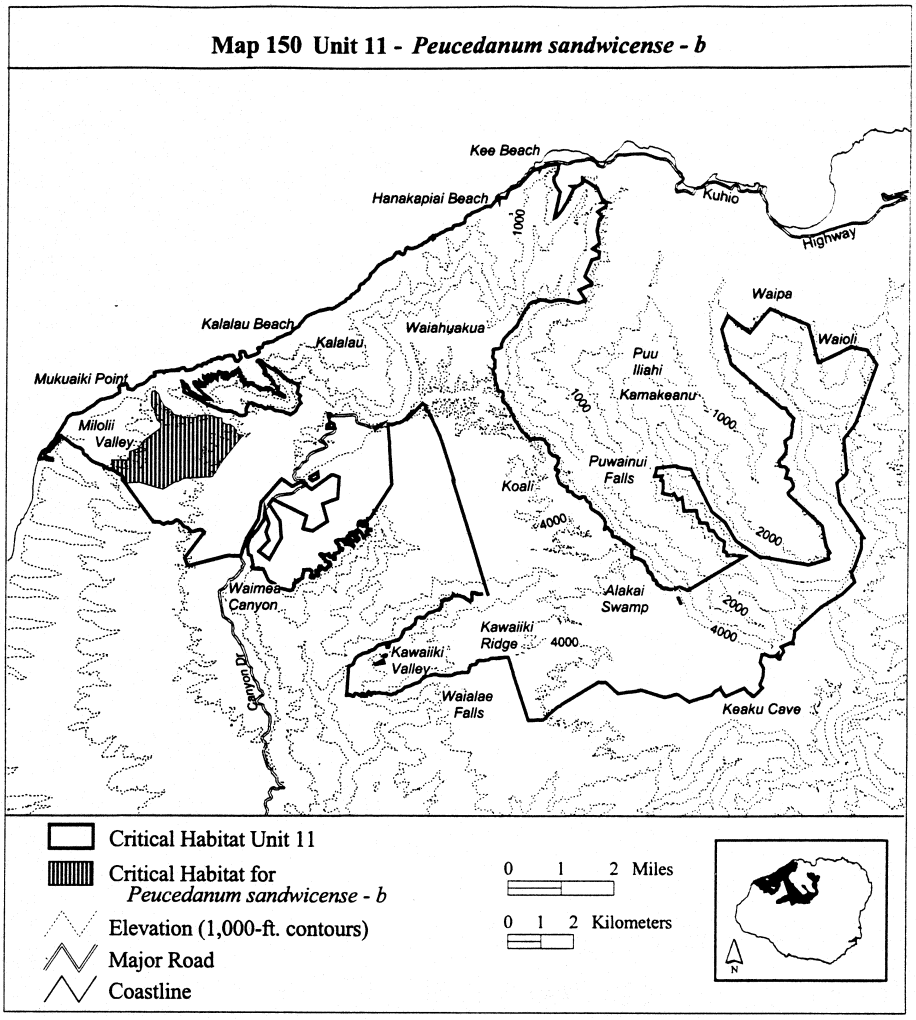


(cl) Kauai 11—*Peucedanum sandwicense*—b (579 ha; 1,430 ac)

(A) Unit consists of the following 91 boundary points: Start at 426832, 2447995; 426843, 2448011; 426810, 2448288; 427346, 2448293; 427357, 2448542; 427623, 2448630; 427799, 2448868; 428291, 2449244; 428313, 2449309; 428313, 2449411; 428205, 2449507; 428142, 2449672; 428131, 2449814; 428029, 2449922; 428017, 2449990; 428017, 2450120; 428017, 2450279; 428034, 2450399; 428142, 2450404; 428245, 2450302; 428302, 2450155; 428364, 2450024; 428409, 2449944; 428523, 2449882; 428637, 2449819; 428705, 2449689; 428847, 2449649; 429000, 2449604; 429194, 2449587; 429341, 2449592; 429501, 2449649; 429677, 2449672; 429876, 2449649; 430006, 2449598; 430009, 2449587; 430011, 2449592; 430066, 2449586; 430177, 2449564; 430182, 2449481; 430221, 2449420; 430359, 2449371; 430420, 2449392; 430437, 2449371; 430430, 2449364; 430451, 2449363; 430463, 2449355; 430474, 2449342; 430485, 2449333; 430527, 2449321; 430531, 2449315; 430531, 2449310; 430534, 2449307; 430545, 2449277; 430559, 2449254; 430604, 2449229; 430616,

2449214; 430623, 2449194; 430623, 2449173; 430616, 2449156; 430619, 2449138; 430629, 2449119; 430643, 2449106; 430666, 2449092; 430680, 2449072; 430824, 2449050; 430232, 2448299; 429895, 2447790; 429381, 2447752; 429032, 2447740; 428839, 2447641; 428767, 2447635; 428380, 2447414; 427650, 2447613; 427235, 2447592; 427185, 2447661; 427161, 2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 426997, 2447892; 426981, 2447902; 426958, 2447923; 426944, 2447941; 426907, 2447965; 426847, 2447992; return to starting point.

(B) NOTE: Map 150 follows:

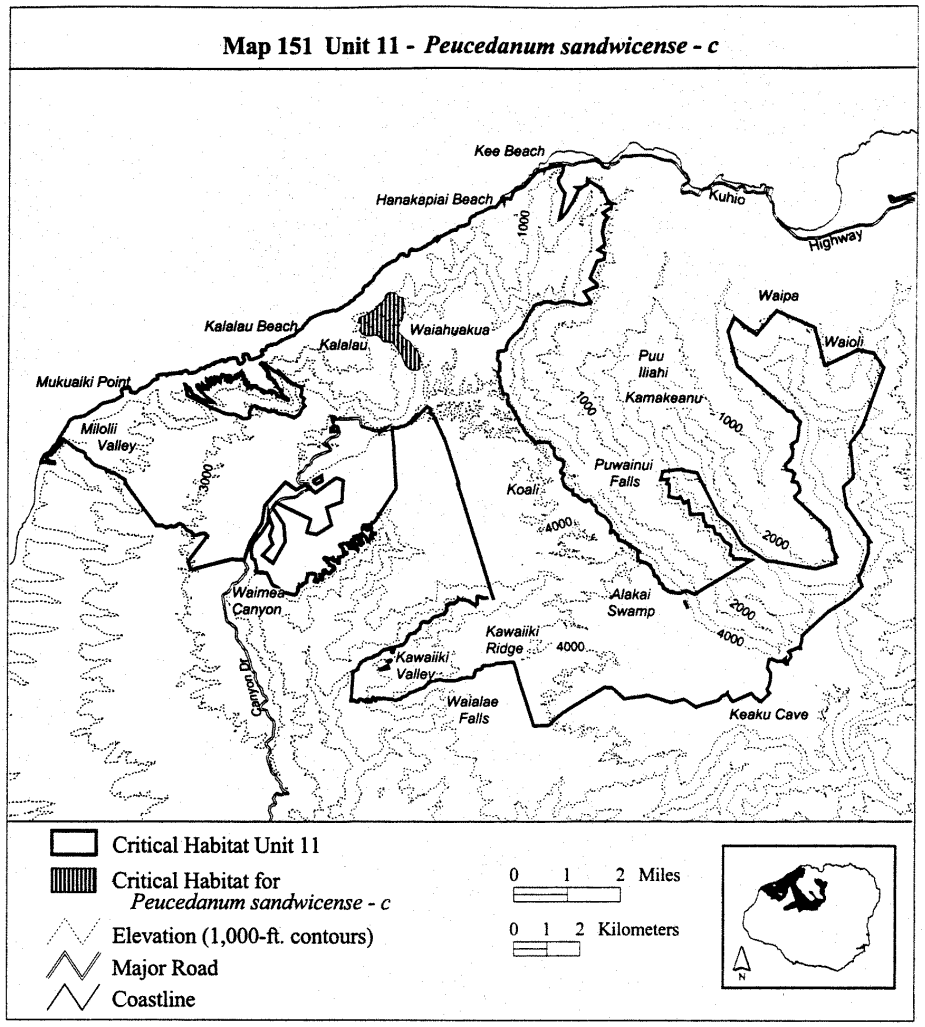


(cli) Kauai 11—*Peucedanum sandwicense*—c (181 ha; 447 ac)

(A) Unit consists of the following 48 boundary points: Start at 435634, 2452896; 435550, 2452817; 435535, 2452664;

435497, 2452553; 435413, 2452410; 435407, 2452304; 435487, 2452193; 435630, 2452061; 435773, 2451976; 435831, 2451875; 435969, 2451706; 436054, 2451547; 436080, 2451431; 436043, 2451304; 436064, 2451177; 435995, 2451108; 435757, 2451140; 435619, 2451272; 435503, 2451574; 435376, 2451759; 435270, 2451902; 435206, 2451981; 434989, 2451976; 434904, 2452029; 434851, 2452114; 434745, 2452198; 434544, 2452161; 434438, 2452167; 434295, 2452225; 434226, 2452320; 434258, 2452437; 434306, 2452516; 434216, 2452564; 434189, 2452680; 434269, 2452749; 434385, 2452775; 434512, 2452849; 434629, 2452913; 434714, 2452971; 434804, 2453108; 434909, 2453188; 434989, 2453272; 435010, 2453389; 435090, 2453452; 435301, 2453468; 435423, 2453341; 435552, 2453315; 435559, 2453209; return to starting point.

(B) NOTE: Map 151 follows:

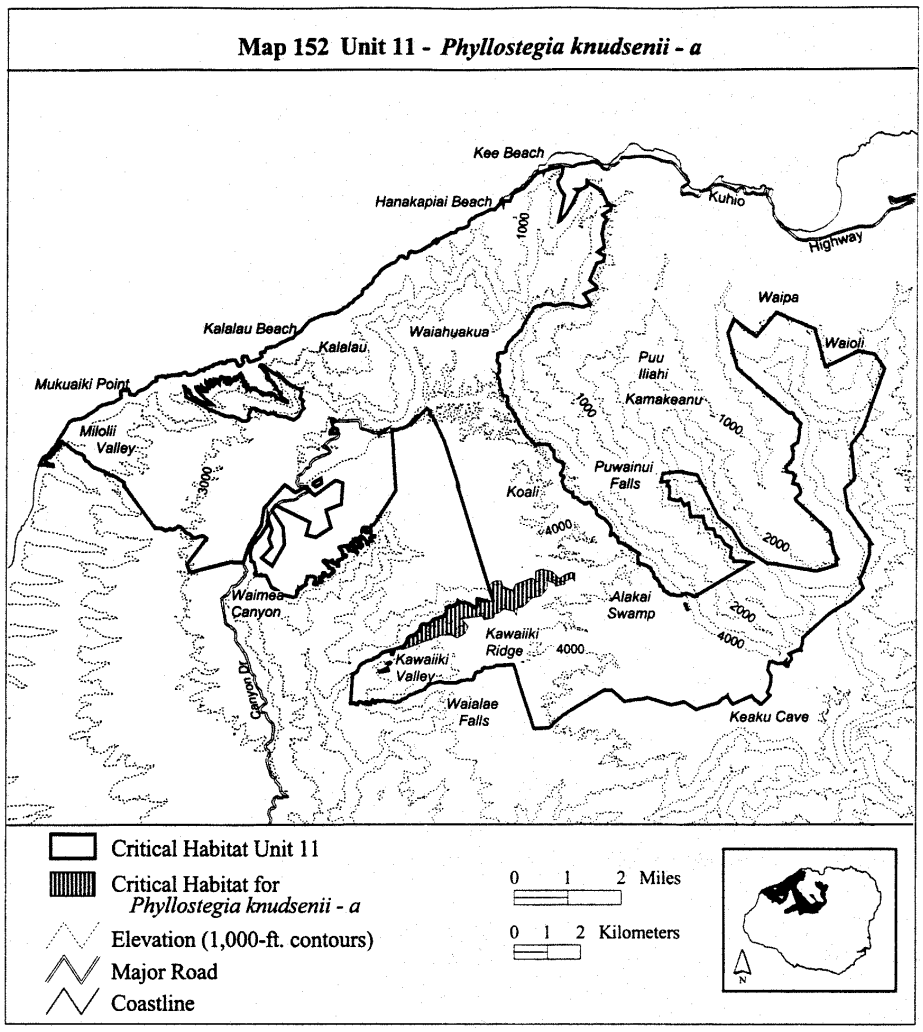


(clii) Kauai 11—*Phyllostegia knudsenii*—a (297 ha, 735 ac)

(A) Unit consists of the following 265 boundary points: Start at 438184,

2444684; 438270, 2444792; 438407, 2444861; 438555, 2444861; 438624, 2444693; 438899, 2444575; 438978, 2444733; 439185, 2444831; 439490, 2444929; 439598, 2444880; 439598, 2445136; 439795, 2445214; 440110, 2445136; 440316, 2444919; 440503, 2445047; 440661, 2445106; 440788, 2445096; 440759, 2444831; 440720, 2444949; 440474, 2444850; 440493, 2444762; 440188, 2444693; 440188, 2444791; 439933, 2444880; 439962, 2444723; 439933, 2444605; 439775, 2444418; 439490, 2444349; 439362, 2444202; 439195, 2444064; 439037, 2444054; 439027, 2443818; 438949, 2443946; 438634, 2444025; 438516, 2443897; 438358, 2443858; 438348, 2443749; 438034, 2443681; 437984, 2443808; 437384, 2443720; 437571, 2443494; 437473, 2443268; 437227, 2443140; 437069, 2443228; 436774, 2443228; 435545, 2442770; 435532, 2442855; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; return to starting point.

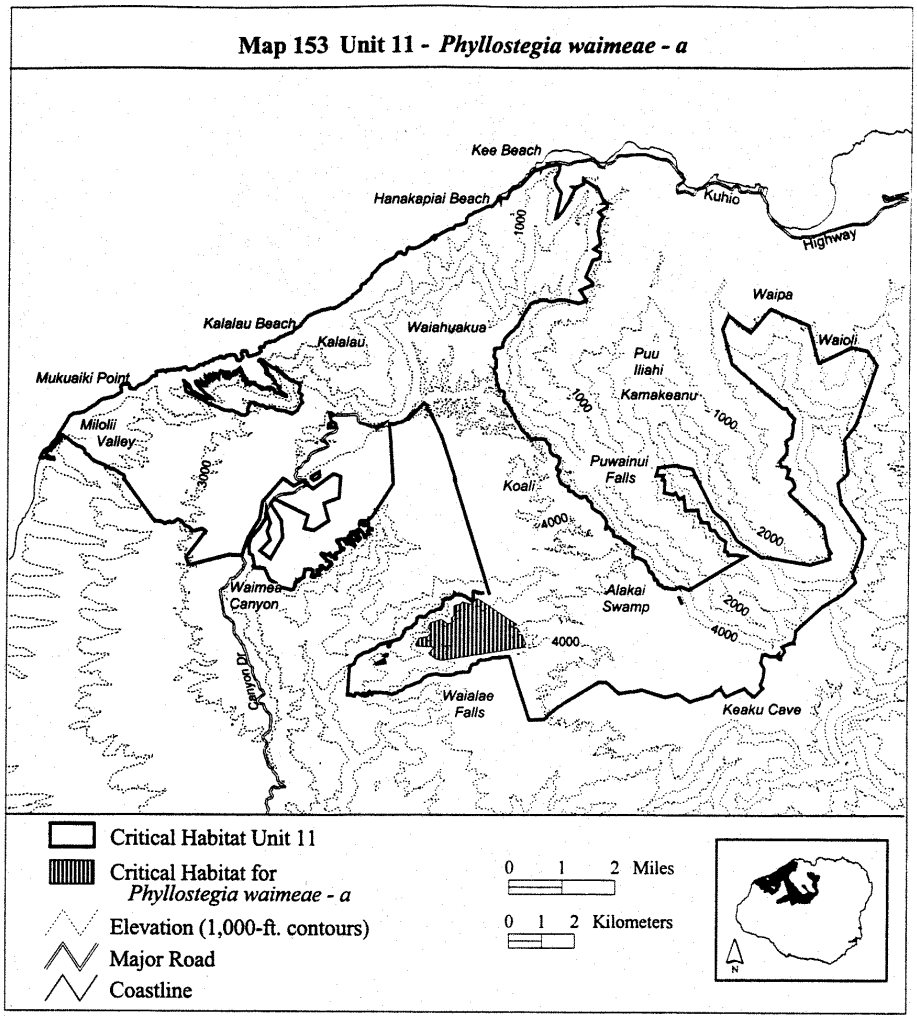
(B) NOTE: Map 152 follows:



(cliii) Kauai 11—*Phyllostegia waimeae*—a (364 ha; 901 ac)

(A) Unit consists of the following 30 boundary points: Start at 437962, 2444106; 439160, 2443328; 439020, 2443250; 439191, 2443203; 439238, 2443125; 439168, 2443024; 439316, 2443017; 439440, 2442729; 439378, 2442635; 436857, 2442223; 436732, 2442270; 436483, 2442441; 436654, 2442636; 436102, 2442659; 436086, 2442721; 436188, 2442916; 436452, 2442939; 436553, 2443095; 436444, 2443235; 436522, 2443367; 436857, 2443468; 437067, 2443336; 437176, 2443359; 437160, 2443499; 437246, 2443585; 437246, 2443733; 437246, 2443888; 437479, 2443943; 437487, 2444013; 437760, 2443935; return to starting point.

(B) NOTE: Map 153 follows:

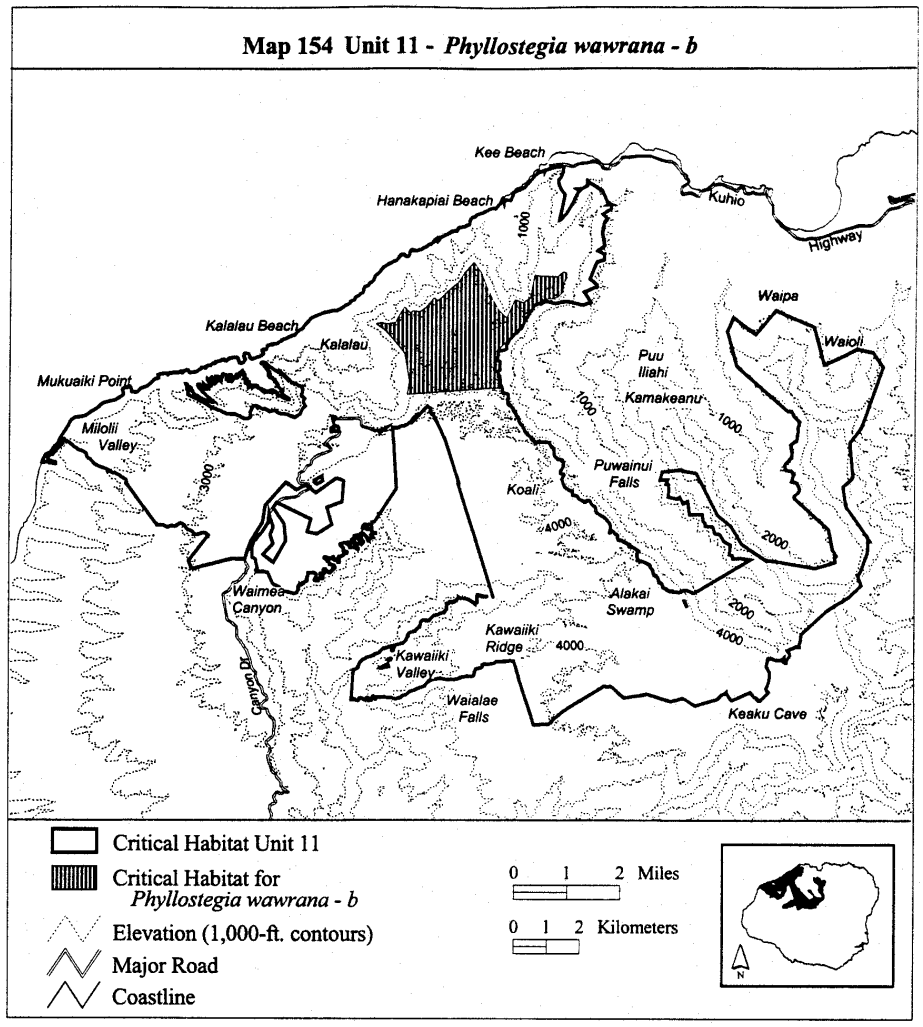


(cliv) Kauai 11—*Phyllostegia wawrana*—b (1,037 ha; 2,562 ac)

(A) Unit consists of the following 94 boundary points: Start at 439347, 2452789; 439324, 2452794; 439098, 2452402; 438924, 2452225; 438478, 2451772; 438422, 2451715; 438390, 2451682; 438377, 2451065; 438401, 2450962; 438479, 2450630; 438493, 2450567; 438089, 2450541; 438089, 2450541; 435680, 2450387; 435730, 2450798; 435638, 2451327; 435579, 2451630; 435259, 2452025; 435007, 2452319; 434729, 2452520; 434889, 2452579; 435015, 2452520; 435301, 2452562; 435394, 2452747; 435579, 2453033; 435772, 2452831; 435822, 2452915; 436041, 2452881; 436234, 2453024; 436487, 2453309; 436579, 2453217; 436697, 2453301; 436915, 2453528; 437235, 2453788; 437412, 2454065; 437681, 2454384; 437891, 2454115; 438067, 2453662; 438261, 2453250; 438446, 2452906; 438681, 2452687; 438942, 2453241; 439186, 2453157; 439387, 2453291; 439530, 2453988; 439594, 2453984; 439867, 2453963; 440228, 2453946; 440337, 2454039; 440401, 2454092; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404,

2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; 439355, 2452801; return to starting point.

(B) NOTE: Map 154 follows:

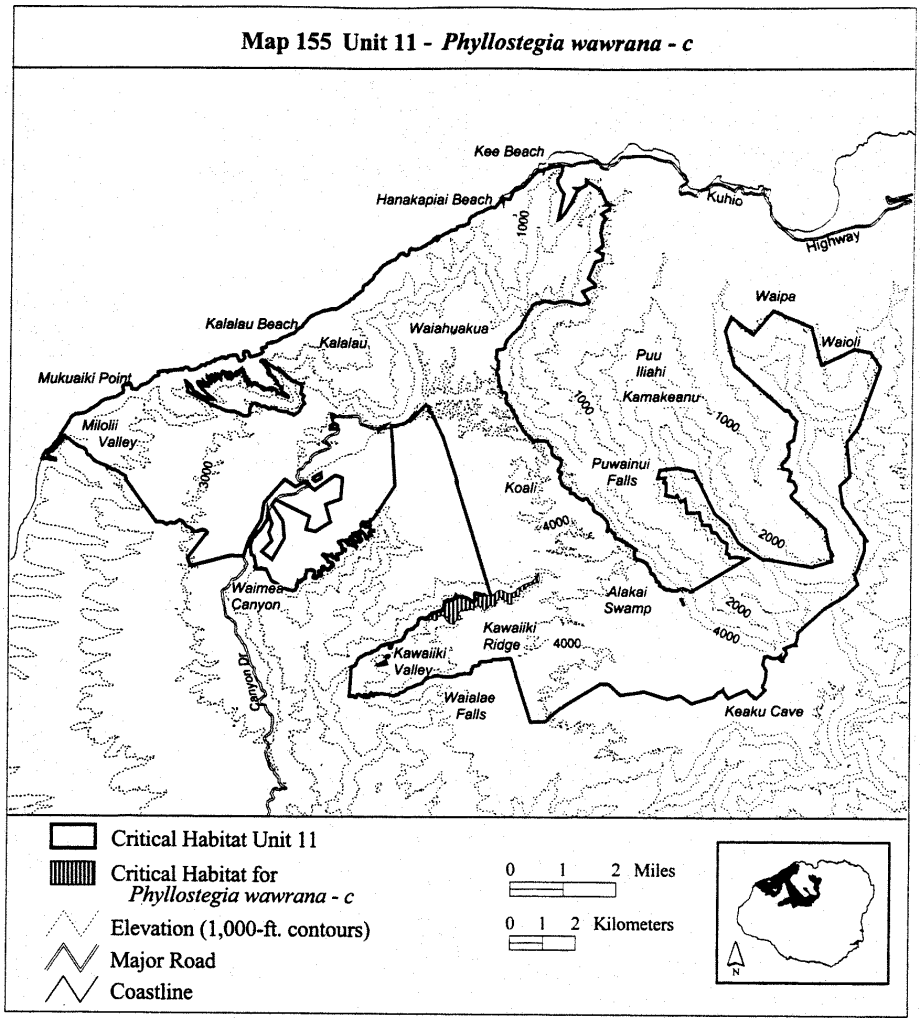


(clv) Kauai 11—*Phyllostegia wawrana*—c (108 ha; 268 ac)

(A) Unit consists of the following 254 boundary points: Start at 436283, 2443540; 436283, 2443542; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380,

2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 438331, 2444225; 438331, 2444225; 438361, 2444238; 438459, 2444323; 438527, 2444400; 438642, 2444421; 438749, 2444353; 438817, 2444310; 438876, 2444310; 438957, 2444306; 439085, 2444387; 439102, 2444455; 439230, 2444515; 439302, 2444566; 439379, 2444595; 439562, 2444668; 439660, 2444766; 439694, 2444817; 439715, 2444893; 439770, 2444944; 439770, 2444872; 439787, 2444795; 439787, 2444706; 439779, 2444668; 439707, 2444651; 439447, 2444532; 439400, 2444506; 439396, 2444438; 439336, 2444455; 439285, 2444370; 439242, 2444408; 439187, 2444357; 439208, 2444306; 439217, 2444276; 439187, 2444263; 439132, 2444221; 439093, 2444246; 439072, 2444238; 439051, 2444204; 439055, 2444187; 439025, 2444191; 438995, 2444204; 438949, 2444195; 438949, 2444144; 438966, 2444093; 438974, 2443991; 438906, 2443970; 438846, 2444012; 438812, 2444072; 438757, 2444076; 438655, 2444170; 438604, 2444200; 438553, 2444178; 438519, 2444115; 438472, 2444072; 438480, 2443983; 438412, 2443927; 438370, 2443923; 438272, 2443949; 438229, 2443855; 438191, 2443851; 438174, 2443808; 438118, 2443800; 438054, 2443864; 438059, 2443932; 437991, 2443893; 437974, 2443898; 437927, 2443928; 437871, 2443910; 437782, 2443813; 437744, 2443830; 437688, 2443842; 437637, 2443825; 437586, 2443787; 437497, 2443796; 437467, 2443774; 437412, 2443770; 437343, 2443719; 437343, 2443659; 437382, 2443625; 437416, 2443523; 437373, 2443510; 437305, 2443523; 437254, 2443481; 437207, 2443366; 437143, 2443374; 437071, 2443387; 437028, 2443434; 436922, 2443549; 436871, 2443647; 436815, 2443634; 436786, 2443613; 436709, 2443621; 436692, 2443553; 436692, 2443515; 436637, 2443468; 436594, 2443485; 436547, 2443515; 436496, 2443515; 436445, 2443485; 436390, 2443485; 436309, 2443477; 436279, 2443506; return to starting point.

(B) NOTE: Map 155 follows:



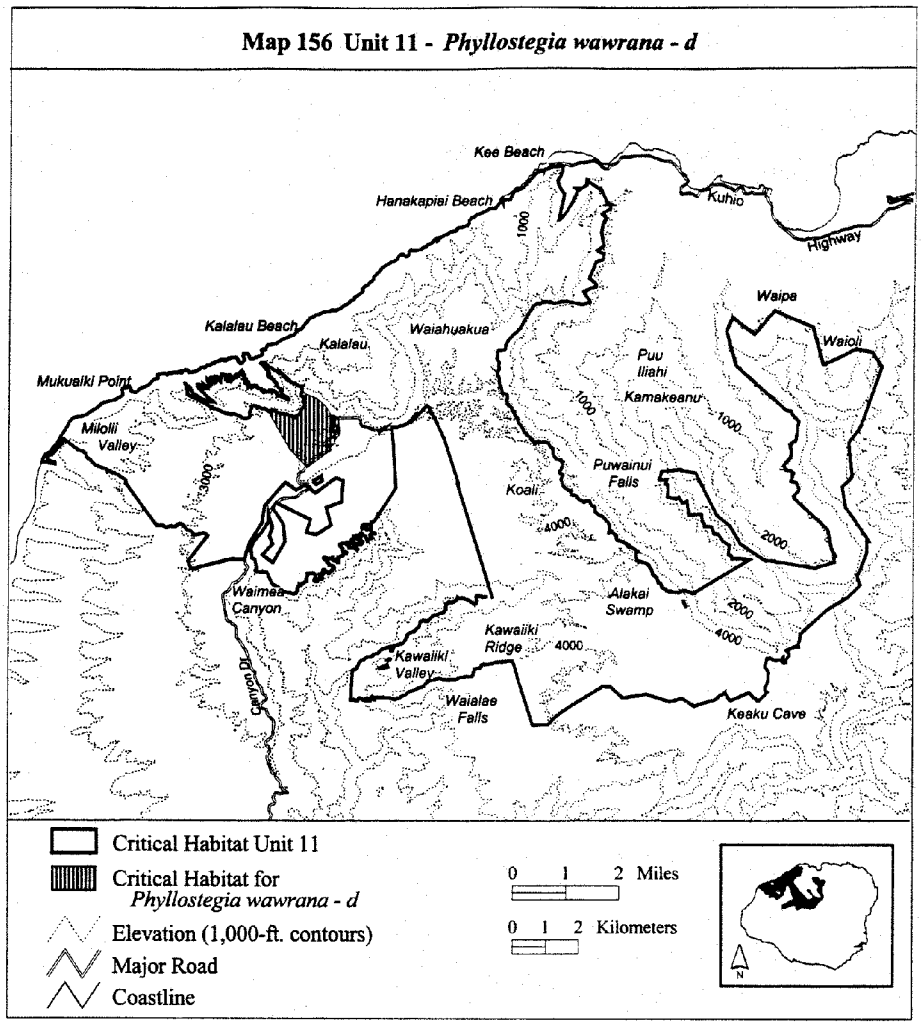
(clvi) Kauai 11—*Phyllostegia wawrana*—d (251 ha; 619 ac)

(A) Unit consists of the following 46 boundary points: Start at 433484, 2449698; 433602, 2449656; 433646, 2449236; 433339, 2448655; 432657, 2448174; 432163, 2448681; 432122, 2448722; 431444, 2449890; 431449, 2449886; 431497, 2449867; 431510, 2449870; 431519, 2449867; 431617, 2449892; 431723, 2449853; 431765, 2449810; 431860, 2449801; 432043, 2449733; 432311, 2449650; 432411, 2449775; 432545, 2449959; 432548, 2450005; 432579, 2450036; 432552, 2450080; 432553, 2450092; 432527, 2450190; 432565, 2450262; 432523, 2450304; 432495, 2450310; 432495, 2450310; 432489, 2450474; 432490, 2450478; 432500, 2450525; 432509, 2450514; 432509, 2450514; 432595, 2450402; 432946, 2450251; 433218, 2450018; 433402, 2449727; 433458, 2449707; 433436, 2449707; 433399, 2449709; 433419, 2449599; 433426, 2449556; 433440, 2449604; 433457, 2449622; 433480, 2449629; return to starting point.

(B) Excluding 1 area bounded by the following 10 points (3 ha, 8 ac): Start at 433368, 2449292; 433367, 2449352; 433448, 2449426; 433546, 2449412; 433567, 2449398; 433589, 2449323; 433612, 2449262; 433588,

2449244; 433567, 2449260; 433369, 2449255; return to starting point.

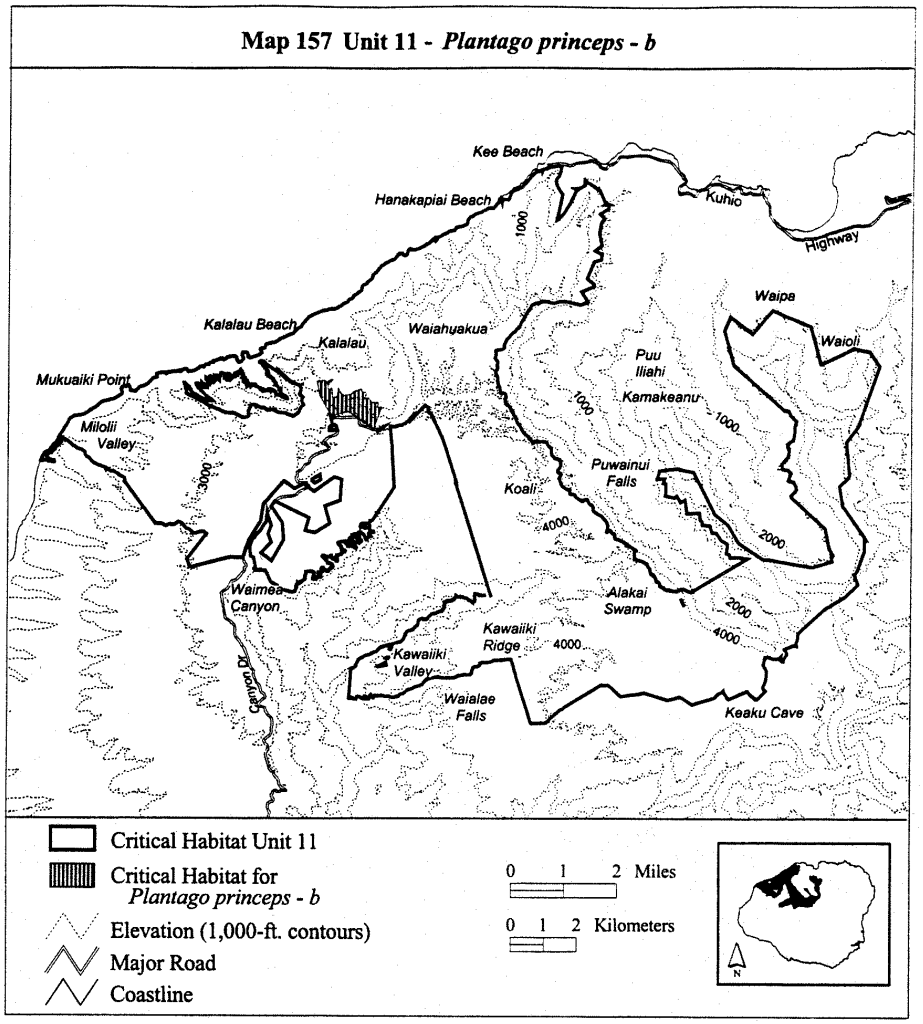
(C) NOTE: Map 156 follows:



(clvii) Kauai 11—*Plantago princeps*—b (126 ha; 312 ac)

(A) Unit consists of the following 29 boundary points: Start at 433417, 2449712; 433064, 2450297; 432997, 2450736; 433229, 2450755; 433295, 2450698; 433400, 2450797; 433470, 2450783; 433314, 2450641; 433343, 2450467; 433433, 2450528; 433461, 2450230; 433598, 2450268; 433631, 2450528; 433787, 2450301; 434024, 2450348; 434104, 2450433; 434336, 2450509; 434374, 2450391; 434454, 2450424; 434502, 2450339; 434426, 2450225; 434563, 2450244; 434648, 2450102; 434847, 2450097; 434833, 2449960; 434956, 2449946; 434719, 2449299; 433953, 2449833; 433457, 2449709; return to starting point.

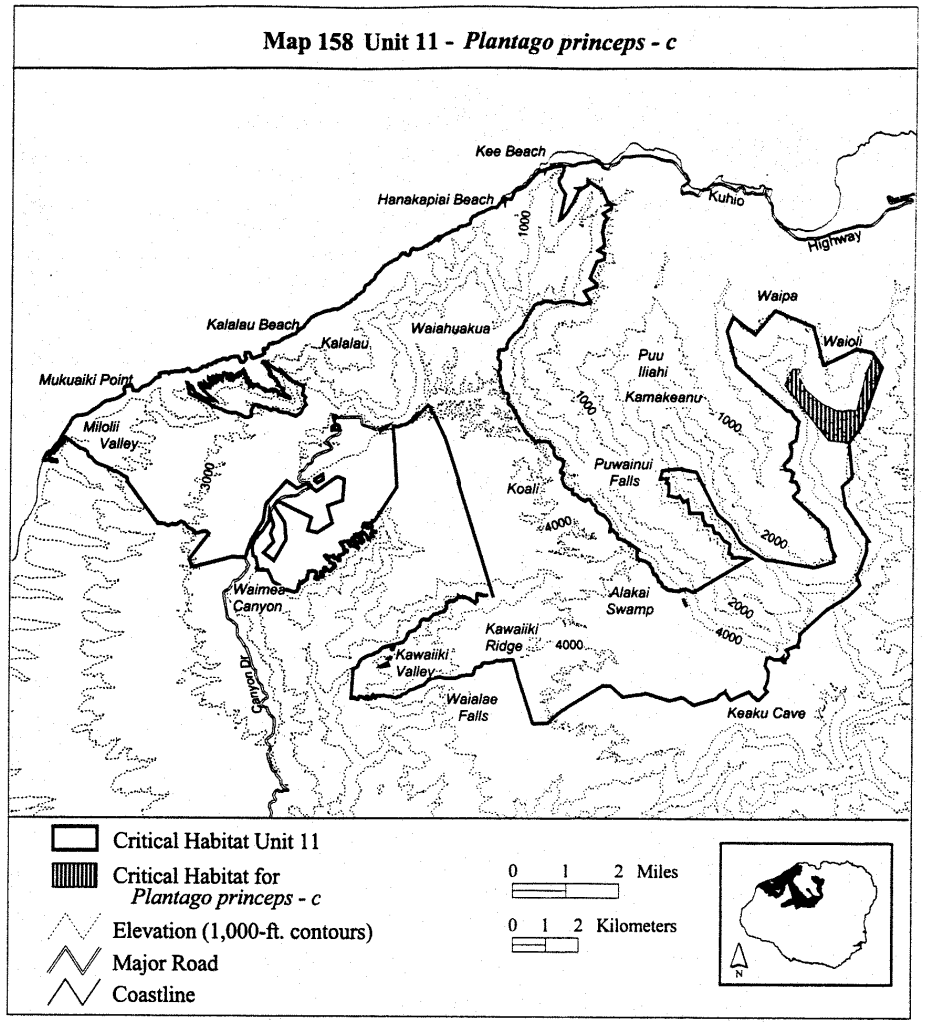
(B) NOTE: Map 157 follows:



(clviii) Kauai 11—*Plantago princeps*—c (244 ha; 603 ac)

(A) Unit consists of the following 17 boundary points: Start at 448456, 2448986; 447125, 2450677; 447365, 2451166; 447582, 2451166; 447538, 2450979; 447777, 2450536; 448254, 2450127; 448731, 2449889; 449310, 2449923; 449617, 2451148; 449833, 2451517; 450063, 2451208; 449872, 2450704; 449708, 2450232; 449423, 2449382; 449245, 2449149; 449068, 2448933; return to starting point.

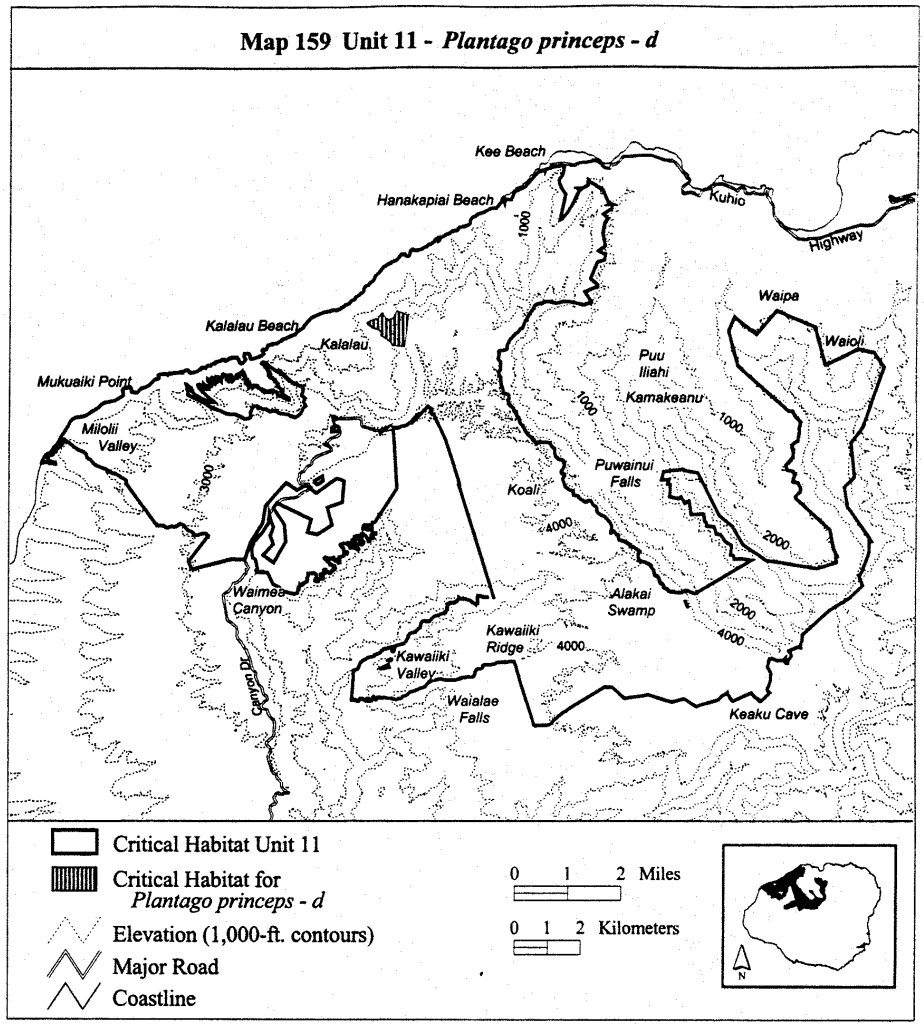
(B) NOTE: Map 158 follows:



(clix) Kauai 11—*Plantago princeps*—d (77 ha; 189 ac)

(A) Unit consists of the following 17 boundary points: Start at 434421, 2452541; 434634, 2452659; 434776, 2452663; 434894, 2452862; 434993, 2452692; 435074, 2452644; 435221, 2452678; 435334, 2452914; 435626, 2452805; 435684, 2452743; 435571, 2451808; 435202, 2451855; 435126, 2452002; 434852, 2452163; 434885, 2452271; 434757, 2452352; 434587, 2452394; return to starting point.

(B) NOTE: Map 159 follows:



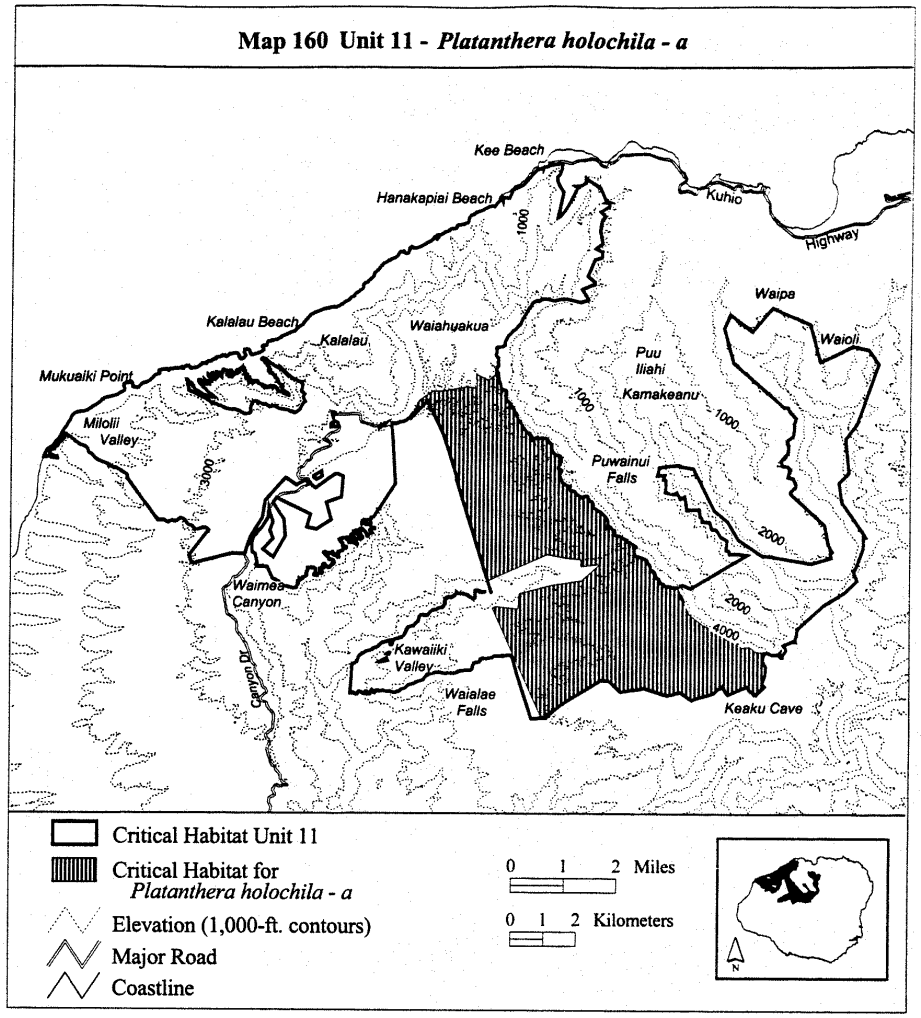
(clx) Kauai 11—*Platanthera holochila*—a (4,149 ha; 10,253 ac)

(A) Unit consists of the following 419 boundary points: Start at 443067, 2445215; 443066, 2445209; 443066, 2445190; 443083, 2445171; 443103, 2445152; 443122, 2445132; 443135, 2445115; 443140, 2445105; 443144, 2445096; 443150, 2445078; 443152, 2445059; 443153, 2445040; 443153, 2445020; 443156, 2445003; 443158, 2444995; 443163, 2444984; 443175, 2444965; 443177, 2444962; 443193, 2444946; 443196, 2444944; 443215, 2444938; 443234, 2444932; 443240, 2444927; 443252, 2444914; 443260, 2444907; 443271, 2444898; 443281, 2444890; 443290, 2444876; 443294, 2444870; 443301, 2444851; 443307, 2444833; 443309, 2444829; 443313, 2444815; 443320, 2444796; 443327, 2444778; 443333, 2444758; 443341, 2444740; 443346, 2444728; 443352, 2444721; 443366, 2444706; 443373, 2444702; 443385, 2444699; 443403, 2444695; 443423, 2444686; 443435, 2444664; 443440, 2444655; 443443, 2444647; 443444, 2444627; 443447, 2444608; 443452, 2444591; 443459, 2444579; 443464, 2444570; 443478, 2444555; 443483, 2444551; 443497, 2444548; 443516, 2444546; 443534, 2444543; 443553, 2444537; 443557, 2444532; 443571, 2444521; 443579,

2444514; 443598, 2444493; 443610, 2444483; 443617, 2444477; 443628, 2444469; 443647, 2444460; 443666, 2444456; 443677, 2444459; 443685, 2444463; 443703, 2444469; 443722, 2444464; 443732, 2444458; 443740, 2444454; 443760, 2444446; 443769, 2444440; 443987, 2444415; 444047, 2444337; 444117, 2444107; 444210, 2443933; 444299, 2443729; 444347, 2443603; 444425, 2443555; 444600, 2443428; 444759, 2443295; 445253, 2443054; 445513, 2442838; 445854, 2442734; 445951, 2442593; 446214, 2442612; 446381, 2442489; 446652, 2442437; 446591, 2442195; 446694, 2442007; 446686, 2441764; 446640, 2441627; 446587, 2441543; 446587, 2441501; 446641, 2441436; 446560, 2441376; 446348, 2441177; 446122, 2441415; 445543, 2441183; 445413, 2441371; 445395, 2441421; 445382, 2441433; 445261, 2441357; 445124, 2441205; 444465, 2441003; 444154, 2441263; 443699, 2441176; 442976, 2441356; 442310, 2441249; 441883, 2441603; 441623, 2441574; 440236, 2440690; 440188, 2440625; 439852, 2440461; 438358, 2443756; 438446, 2443829; 439134, 2443741; 439178, 2444225; 440174, 2444473; 441068, 2444619; 441639, 2445117; 441039, 2445044; 441039, 2445264; 440672, 2445293; 440013, 2445410; 438234, 2444610; 438008, 2445343; 436790, 2449091; 436517, 2449722; 436337, 2450061; 436433, 2450077; 436359, 2450114; 435843, 2449559; 435838, 2449570; 436073, 2450082; 436483, 2450345; 436849, 2450360; 437537, 2450491; 437845, 2450462; 437816, 2450886; 438167, 2450681; 438372, 2450842; 438403, 2451013; 438416, 2451091; 438463, 2451098; 438455, 2451089; 438434, 2451069; 438425, 2451047; 438435, 2450985; 438427, 2450964; 438472, 2450910; 438501, 2450796; 438488, 2450686; 438554, 2450559; 438581, 2450423; 438621, 2450415; 438690, 2450392; 438715, 2450373; 438731, 2450342; 438736, 2450325; 438737, 2450311; 438732, 2450286; 438717, 2450241; 438713, 2450206; 438716, 2450162; 438730, 2450109; 438744, 2450081; 438765, 2450051; 438791, 2450036; 438816, 2450028; 438831, 2450010; 438850, 2449982; 438884, 2449918; 438894, 2449879; 438904, 2449863; 438919, 2449853; 438944, 2449813; 438965, 2449767; 438974, 2449738; 438999, 2449702; 439016, 2449687; 439025, 2449671; 439037, 2449642; 439044, 2449631; 439065, 2449586; 439076, 2449548; 439102, 2449480; 439114, 2449463; 439146, 2449435; 439167, 2449414; 439200, 2449362; 439220, 2449318; 439230, 2449287; 439244, 2449261; 439260, 2449242; 439277, 2449220; 439307, 2449169; 439330, 2449145; 439361, 2449126; 439382, 2449107; 439399, 2449097; 439421, 2449088; 439433, 2449078; 439437, 2449066; 439437, 2449023; 439451, 2449000; 439508, 2448984; 439516, 2448971; 439526, 2448944; 439539, 2448922; 439553, 2448909; 439578, 2448906; 439611, 2448928; 439633, 2448940; 439656, 2448949; 439678, 2448950; 439697, 2448941; 439733, 2448930; 439761, 2448926; 439788, 2448929; 439830, 2448945; 439853, 2448941; 439875, 2448932; 439900, 2448928; 439922, 2448928; 439941, 2448924; 439961, 2448915; 439982, 2448899; 440000, 2448878; 440036, 2448815; 440073, 2448762; 440089, 2448747; 440112, 2448732; 440121, 2448718; 440125, 2448690; 440124, 2448663; 440120, 2448633; 440125, 2448578; 440136, 2448537; 440157, 2448511; 440179, 2448496; 440190, 2448485; 440198, 2448467; 440218, 2448446; 440237, 2448434; 440254, 2448428; 440307, 2448418; 440331, 2448411; 440350, 2448395; 440375, 2448361; 440391, 2448353; 440402, 2448352; 440411, 2448336; 440416, 2448314; 440415, 2448290; 440421, 2448239; 440413, 2448216; 440401, 2448191; 440384, 2448138; 440374, 2448123; 440341, 2448084; 440331, 2448061; 440325, 2448033; 440329, 2448016; 440343, 2448005; 440409, 2447991; 440426, 2447974; 440435, 2447959; 440436, 2447941; 440395, 2447896; 440384, 2447871; 440378, 2447845; 440377, 2447819; 440383, 2447794; 440413, 2447711; 440451, 2447620; 440468, 2447593; 440487, 2447571; 440540, 2447539; 440579, 2447511; 440599, 2447501; 440674, 2447485; 440693, 2447475; 440703, 2447461; 440703, 2447452; 440695, 2447430; 440693, 2447407; 440699, 2447389; 440710, 2447368; 440722, 2447354; 440740, 2447346; 440800, 2447339; 440842, 2447328; 440858, 2447311; 440865, 2447286; 440873, 2447265; 440888, 2447250; 440941, 2447230; 440969, 2447210; 441039, 2447168; 441058, 2447153; 441083, 2447147; 441095, 2447154; 441113, 2447170; 441133, 2447183; 441148, 2447188; 441172, 2447190; 441201, 2447195; 441219, 2447195; 441231, 2447186; 441240, 2447171; 441268, 2447104; 441283, 2447083; 441317, 2447043; 441363, 2447030; 441373, 2447026; 441398, 2446997; 441399, 2446995; 441403, 2446972; 441402, 2446899; 441405, 2446869; 441434, 2446820; 441455, 2446804; 441476, 2446797; 441521, 2446777; 441532, 2446763; 441549, 2446752; 441584, 2446741; 441620, 2446723; 441648, 2446705; 441674, 2446682; 441829, 2446505; 441829, 2446501; 441836, 2446475; 441847, 2446451; 441864, 2446424; 441868, 2446401; 441856, 2446328; 441855, 2446295; 441848, 2446265; 441834, 2446230; 441838, 2446221; 441852, 2446219; 441879, 2446263; 441897, 2446273; 441929, 2446268; 441943, 2446256; 441963, 2446219; 441982, 2446194; 442005, 2446171; 442019, 2446165; 442039, 2446165; 442059,

2446159; 442071, 2446146; 442073, 2446121; 442067, 2446082; 442072, 2446052; 442082, 2446029; 442100, 2446007; 442175, 2445995; 442202, 2445986; 442261, 2445949; 442273, 2445945; 442301, 2445924; 442317, 2445917; 442372, 2445885; 442381, 2445882; 442428, 2445851; 442430, 2445827; 442435, 2445813; 442444, 2445807; 442467, 2445799; 442492, 2445803; 442501, 2445803; 442711, 2445664; 442713, 2445661; 442710, 2445647; 442674, 2445604; 442668, 2445590; 442666, 2445576; 442668, 2445560; 442673, 2445515; 442668, 2445494; 442667, 2445490; 442671, 2445471; 442675, 2445453; 442682, 2445433; 442689, 2445419; 442694, 2445414; 442709, 2445399; 442727, 2445386; 442743, 2445378; 442747, 2445377; 442765, 2445370; 442785, 2445364; 442798, 2445359; 442804, 2445357; 442821, 2445353; 442842, 2445347; 442858, 2445342; 442862, 2445341; 442877, 2445336; 442898, 2445330; 442915, 2445323; 442934, 2445314; 442952, 2445303; 442956, 2445301; 442972, 2445292; 442981, 2445284; 442990, 2445276; 443006, 2445268; 443009, 2445266; 443029, 2445263; 443047, 2445260; 443065, 2445247; 443068, 2445227; return to starting point.

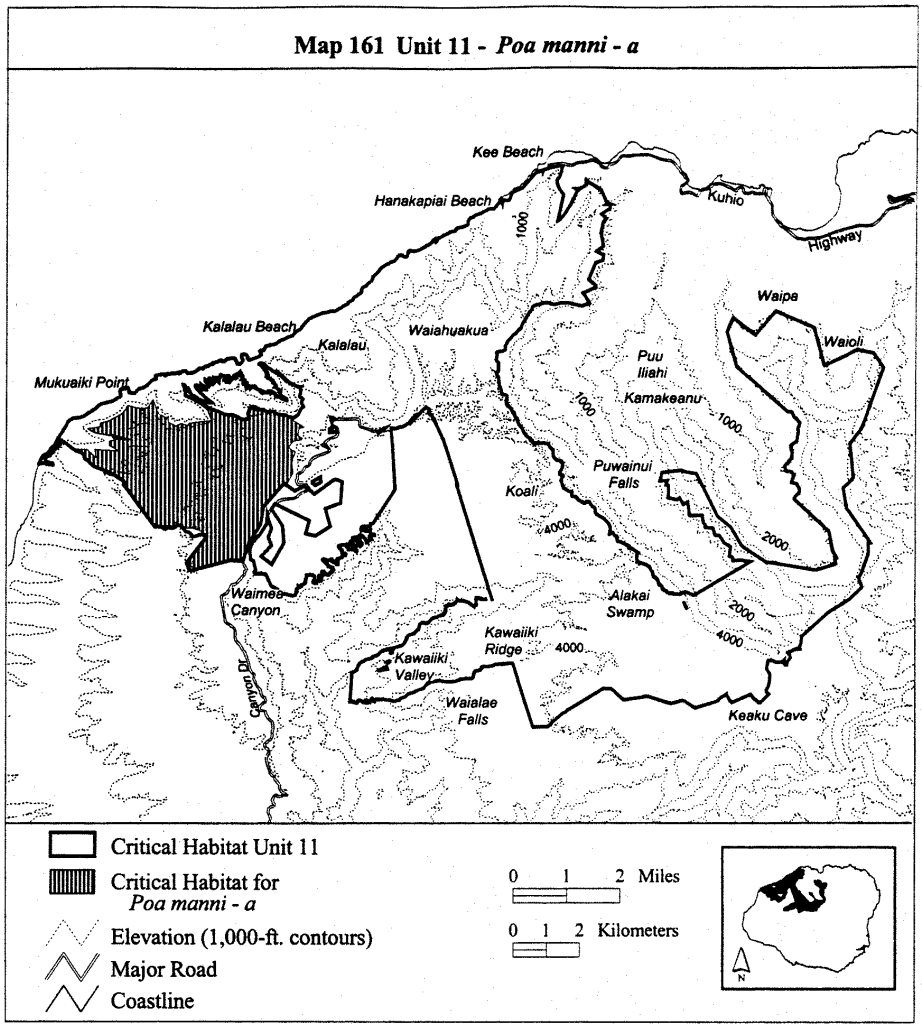
(B) NOTE: Map 160 follows:



(clxi) Kauai 11—*Poa mannii*—a (1,871 ha; 4,624 ac)

(A) Unit consists of the following 174 boundary points: Start at 425642, 2448753; 426032, 2448753; 426313, 2448497; 426288, 2448753; 426735, 2448715; 427004, 2448702; 426723, 2448868; 426723, 2448996; 427068, 2449085; 426697, 2449175; 426288, 2449252; 426070, 2449379; 426428, 2449430; 426428, 2449545; 426697, 2449609; 427068, 2449801; 427196, 2449942; 427273, 2450069; 427708, 2449967; 427887, 2449993; 428040, 2450235; 428168, 2449878; 428232, 2449788; 428488, 2449673; 428488, 2449571; 428718, 2449443; 428910, 2449533; 429089, 2449443; 429115, 2449532; 429549, 2449584; 429805, 2449609; 429677, 2449941; 429283, 2450247; 429576, 2450092; 429717, 2449996; 429751, 2449978; 429791, 2449963; 429830, 2449956; 429860, 2449947; 429944, 2449910; 429968, 2449904; 430016, 2449884; 430068, 2449856; 430172, 2449815; 430207, 2449804; 430261, 2449795; 430317, 2449781; 430340, 2449778; 430365, 2449787; 430392, 2449798; 430408, 2449802; 430410, 2449802; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 431993, 2449791; 432594, 2449404; 432440, 2449378; 432415, 2449161; 432550, 2449064; 432514, 2449029; 432286, 2448988; 432120, 2448816; 432217, 2448734; 432331, 2448670; 432248, 2448433; 432235, 2448305; 432261, 2448075; 432248, 2447985; 432082, 2447678; 432073, 2447674; 432001, 2447726; 431869, 2447580; 431749, 2447525; 431686, 2447378; 431369, 2447027; 431298, 2446522; 430955, 2445963; 430837, 2445645; 430679, 2445410; 430405, 2445422; 429367, 2445154; 429077, 2445312; 429062, 2445354; 429654, 2446125; 429591, 2446167; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476, 2446463; 428396, 2446447; 428285, 2446458; 428116, 2446474; 428047, 2446484; 427185, 2447661; 427161, 2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 426997, 2447892; 426981, 2447902; 426958, 2447923; 426944, 2447941; 426907, 2447965; 426847, 2447992; 426819, 2447998; 426798, 2448010; 426758, 2448005; 426737, 2448009; 426722, 2448015; 426613, 2448093; 426561, 2448116; 426517, 2448133; 426478, 2448151; 426432, 2448166; 426398, 2448180; 426338, 2448196; 426281, 2448222; 426223, 2448260; 426138, 2448319; 426097, 2448378; 426063, 2448412; 426051, 2448421; 426007, 2448440; 425989, 2448455; 425969, 2448492; 425954, 2448543; 425949, 2448584; 425923, 2448613; 425884, 2448631; 425855, 2448652; 425837, 2448658; 425792, 2448676; 425765, 2448685; 425735, 2448700; 425708, 2448709; 425675, 2448727; 425654, 2448744; return to starting point.

(B) NOTE: Map 161 follows:

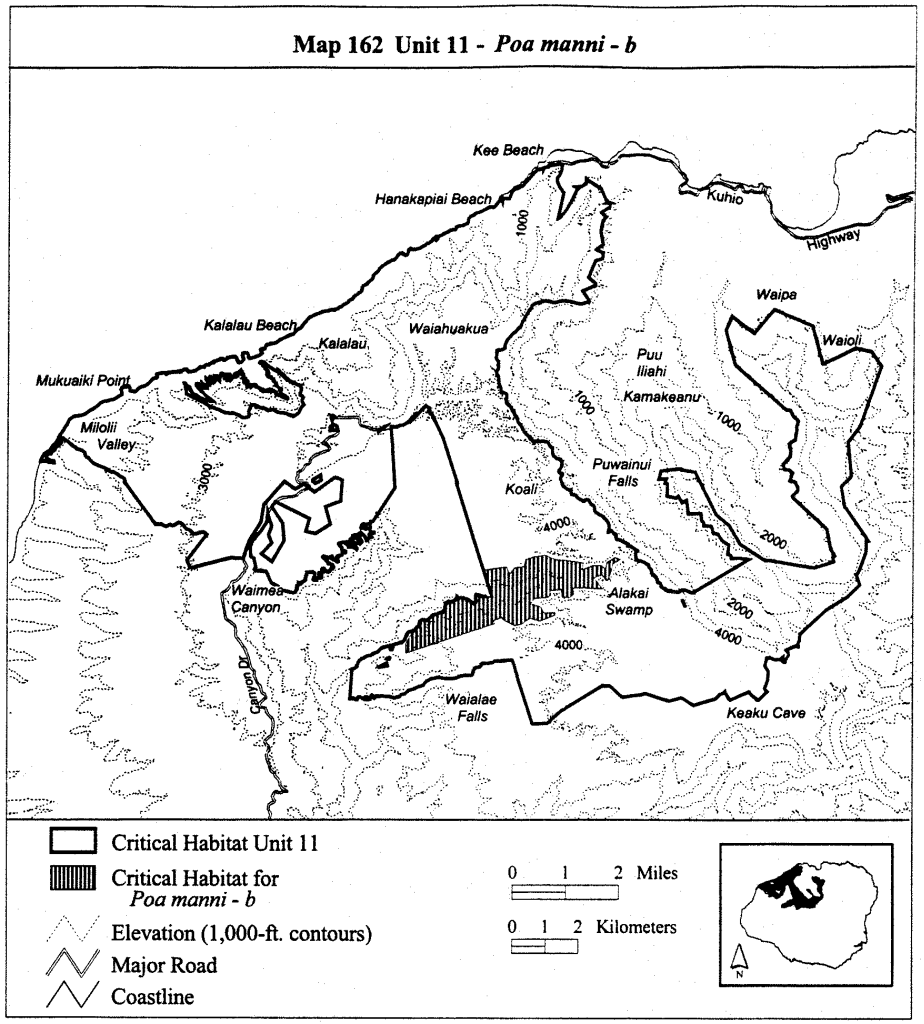


(clxii) Kauai 11—*Poa mannii*—b (677 ha; 1,673 ac)

(A) Unit consists of the following 234 boundary points: Start at 438751, 2445160; 438842, 2444944; 439024, 2445148; 439285, 2445160; 439353, 2445398; 439637, 2445466; 439933, 2445511; 440148, 2445421; 440273, 2445375; 440512, 2445375; 441091, 2445284; 441046, 2445068; 441387, 2445216; 441625, 2445204; 441750, 2445102; 441807, 2445307; 441909, 2445363; 442045, 2445454; 442204, 2445397; 441966, 2445250; 441943, 2445068; 441841, 2444784; 441784, 2444750; 441648, 2444921; 441409, 2444841; 441659, 2444489; 441148, 2444523; 440784, 2444523; 440796, 2444330; 440682, 2444240; 440444, 2444251; 440421, 2444478; 440216, 2444455; 440069, 2444455; 440092, 2444296; 439989, 2444240; 439603, 2444206; 439478, 2444047; 439808, 2443945; 439910, 2443763; 440239, 2443785; 440239, 2443695; 440035, 2443627; 439773, 2443513; 439467, 2443615; 439217, 2443422; 439012, 2443388; 438638, 2443581; 438638, 2443638; 438376, 2443536; 438399, 2443445; 435707, 2442537; 435707, 2442855; 435926, 2443221; 435933, 2443223; 435942,

2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 438062, 2445062; return to starting point.

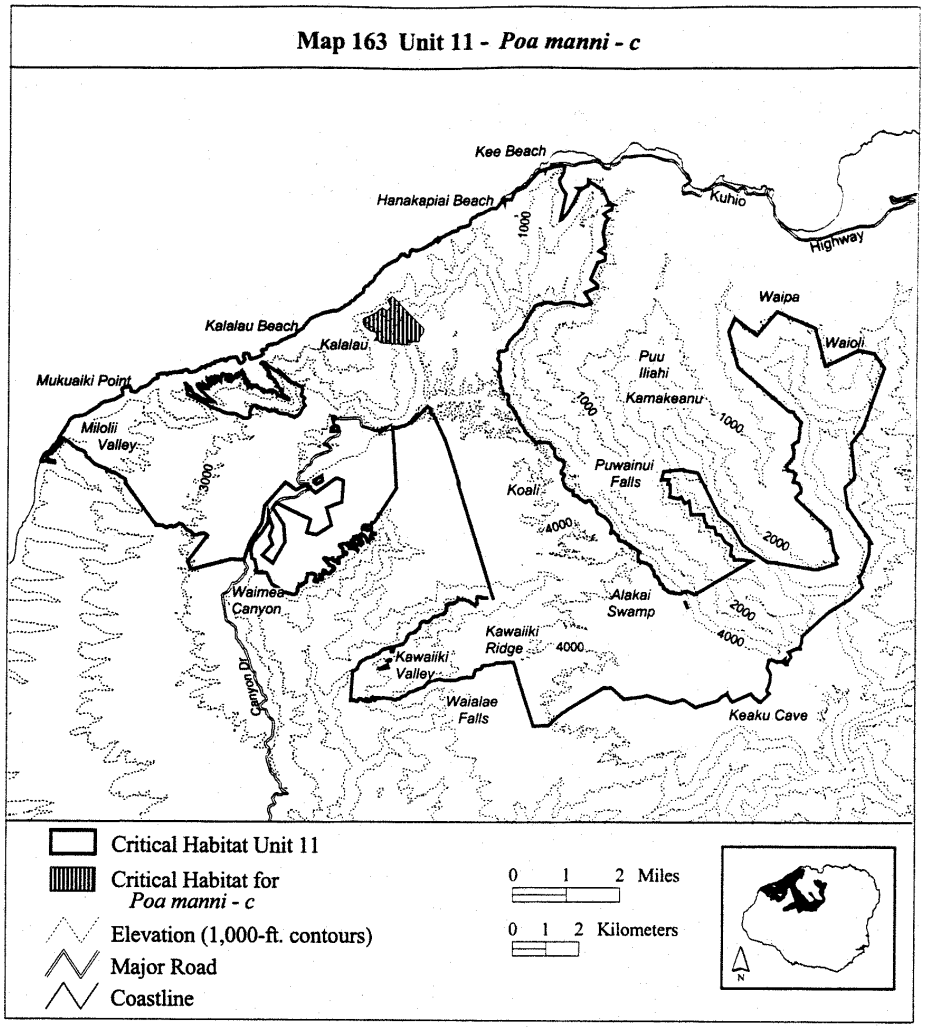
(B) NOTE: Map 162 follows:



(clxiii) Kauai 11—*Poa mannii*—c (155 ha; 382 ac)

(A) Unit consists of the following 25 boundary points: Start at 435195, 2453363; 436166, 2452375; 436126, 2452230; 436044, 2452097; 436021, 2451986; 435829, 2451986; 435788, 2451934; 435672, 2452056; 435753, 2451876; 434846, 2451952; 434765, 2452045; 434660, 2452010; 434742, 2452144; 434695, 2452271; 434556, 2452306; 434463, 2452370; 434381, 2452440; 434329, 2452515; 434317, 2452661; 434474, 2452748; 434701, 2452846; 434893, 2453015; 435044, 2452916; 435155, 2453055; 435062, 2453241; return to starting point.

(B) NOTE: Map 163 follows:

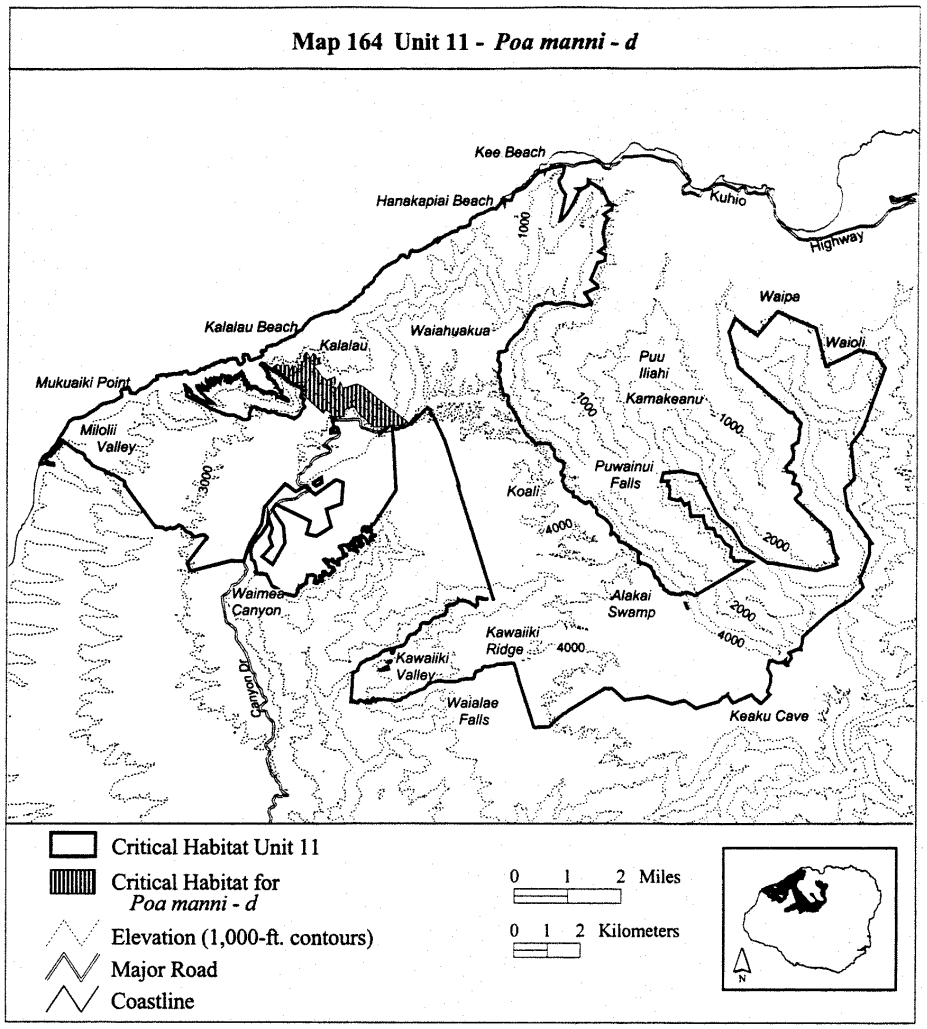


(clxiv) Kauai 11—*Poa mannii*—d (307 ha; 758 ac)

(A) Unit consists of the following 77 boundary points: Start at 433153, 2449843; 432813, 2450152; 432485, 2450450; 432490, 2450478; 432501, 2450529; 432494, 2450543; 432477, 2450580; 432468, 2450593; 432464, 2450611; 432465, 2450623; 432450, 2450624; 432408, 2450635; 432380, 2450644; 432335, 2450666; 432281, 2450696; 432235, 2450718; 432200, 2450735; 432172, 2450746; 432145, 2450759; 431625, 2451231; 431758, 2451328; 431849, 2451245; 431911, 2451384; 431960, 2451272; 432072, 2451300; 432121, 2451098; 432191, 2451293; 432246, 2451224; 432267, 2451286; 432386, 2451112; 432365, 2451307; 432477, 2451286; 432456, 2451398; 432532, 2451384; 432553, 2451481; 432539, 2451572; 432630, 2451691; 432742, 2451495; 432825, 2451642; 432909, 2451579; 432902, 2451481; 433035, 2451523; 433000, 2451405; 433063, 2451335; 432902, 2451300; 432867, 2451237; 433000, 2451098; 433084, 2450965; 433181, 2450896; 433244, 2450833; 433481, 2450937; 433516, 2450868; 433516, 2450756; 433411, 2450624; 433509, 2450638; 433509,

2450491; 433642, 2450798; 433718, 2450603; 433893, 2450638; 434102, 2450721; 434172, 2450728; 434256, 2450679; 434339, 2450672; 435693, 2449591; 435532, 2449494; 435330, 2449466; 435107, 2449452; 434681, 2449431; 434430, 2449661; 434207, 2449836; 434046, 2450073; 433795, 2449947; 433774, 2449752; 433565, 2449738; 433404, 2449759; 433321, 2449885; 433195, 2449955; return to starting point.

(B) NOTE: Map 164 follows:

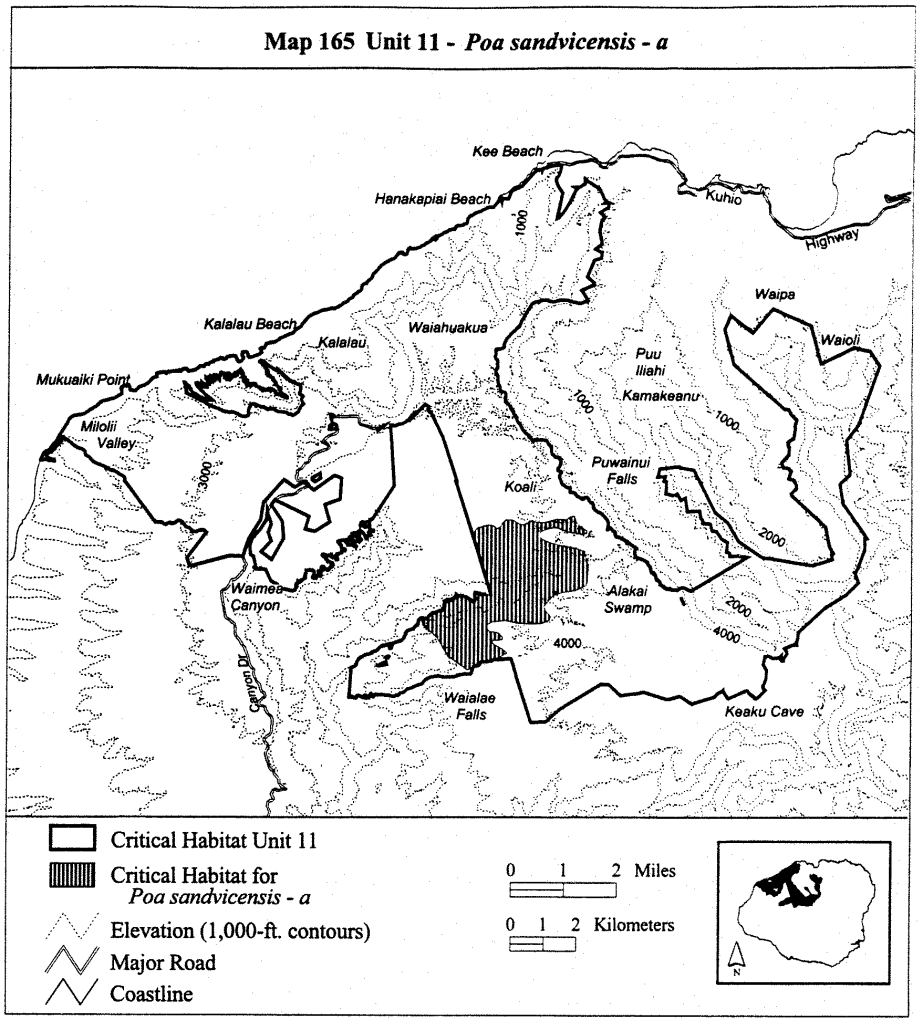


(clxv) Kauai 11—*Poa sandvicensis*—a (1,111 ha; 2,745 ac)

(A) Unit consists of the following 244 boundary points: Start at 438161, 2444755; 437857, 2445701; 437748, 2446041; 437745, 2446059; 437889, 2446251; 438216, 2446357; 438389, 2446328; 438476, 2446232; 438601, 2446290; 438649, 2446405; 438755, 2446501; 438966, 2446501; 439168, 2446386; 439294, 2446357; 439544, 2446472; 439717, 2446433; 439938, 2446424; 440169, 2446491; 440304, 2446539; 440592, 2446529; 440736,

2446616; 440823, 2446635; 440890, 2446472; 440948, 2446375; 441227, 2446173; 441179, 2446097; 441102, 2446058; 440861, 2446106; 440669, 2446145; 440438, 2446231; 440275, 2446279; 440053, 2446251; 439851, 2446174; 439774, 2446049; 439842, 2445943; 440111, 2445828; 440582, 2445702; 440890, 2445654; 441169, 2445568; 441169, 2445462; 441246, 2445185; 441265, 2445173; 441265, 2445020; 441246, 2444808; 441246, 2444654; 441188, 2444529; 440861, 2444395; 440506, 2444328; 440227, 2444251; 440034, 2444030; 439928, 2443895; 439996, 2443760; 440121, 2443607; 440073, 2443482; 439851, 2443395; 439534, 2443376; 439101, 2443414; 438774, 2443482; 438351, 2443443; 438226, 2443367; 438206, 2443261; 438264, 2443155; 438437, 2443136; 438562, 2443107; 438668, 2443001; 438659, 2442905; 438476, 2442895; 438341, 2442886; 438389, 2442780; 438697, 2442616; 438813, 2442520; 438543, 2442357; 438226, 2442261; 438088, 2442240; 438065, 2442246; 438049, 2442246; 438030, 2442243; 438012, 2442229; 438000, 2442216; 437999, 2442211; 437937, 2442174; 437860, 2442155; 437754, 2442068; 437629, 2442001; 437283, 2442222; 437004, 2442443; 436687, 2442963; 436235, 2443367; 436198, 2443561; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; return to starting point.

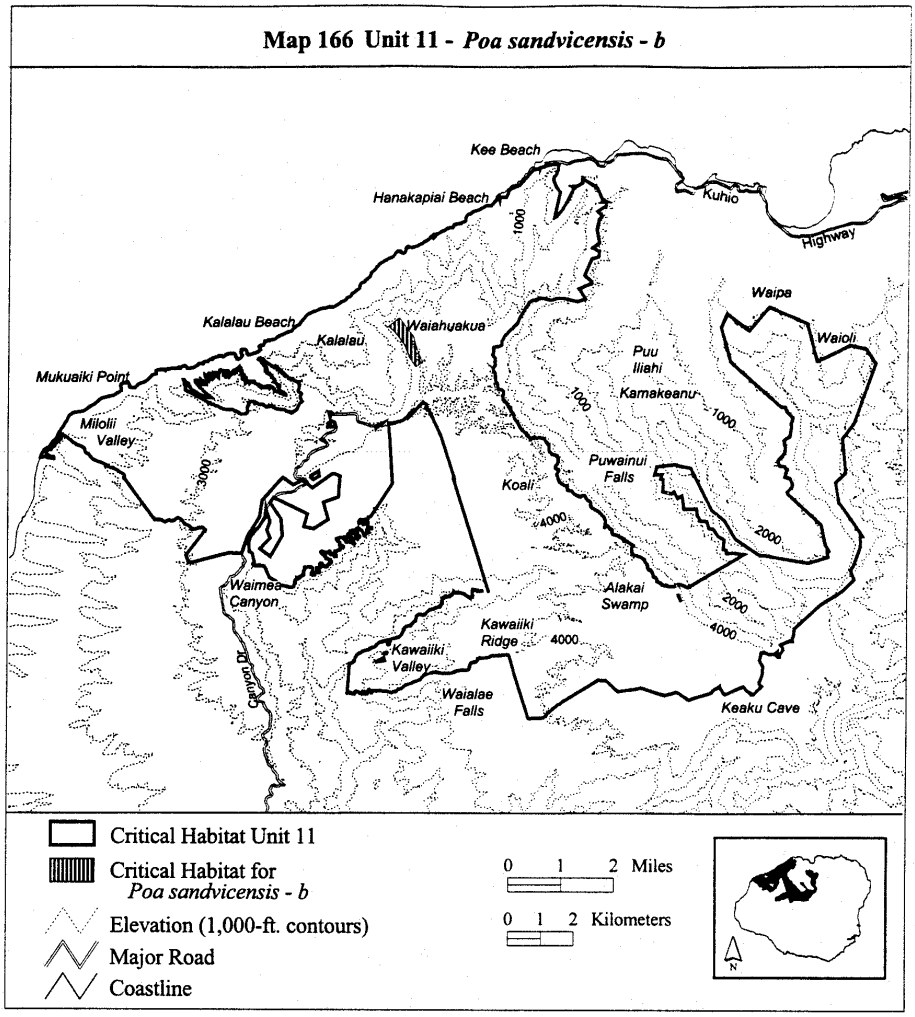
(B) NOTE: Map 165 follows:



(clxvi) Kauai 11—*Poa sandvicensis*—b (52 ha; 129 ac)

(A) Unit consists of the following 10 boundary points: Start at 436055, 2451082; 435856, 2451368; 435690, 2451778; 435398, 2452143; 435211, 2452317; 435557, 2452588; 435790, 2452218; 435961, 2452034; 436121, 2451531; 436275, 2451227; return to starting point.

(B) NOTE: Map 166 follows:



(clxvii) Kauai 11—*Poa siphonoglossa*—a (1,621 ha; 4,006 ac)

(A) Unit consists of the following 227 boundary points: Start at 435318, 2449361; 435292, 2449379; 435269, 2449384; 435247, 2449385; 435234, 2449384; 435236, 2449347; 435272, 2448835; 434926, 2448514; 433562, 2447841; 433527, 2447856; 433396, 2447759; 433345, 2447734; 433014, 2447717; 433109, 2447775; 433094, 2447922; 432827, 2447751; 432878, 2447710; 432213, 2447675; 432081, 2447668; 432001, 2447726; 431942, 2447661; 431912, 2447659; 431752, 2448070; 431709, 2447946; 431586, 2447682; 431454, 2447418; 431304, 2447145; 431119, 2446952; 430635, 2447101; 430494, 2447093; 430327, 2446996; 430019, 2446697; 429904, 2446433; 429975, 2446274; 430168, 2446168; 430432, 2446063; 430573, 2445940; 430564, 2445728; 430432, 2445675; 430115, 2445737; 429790, 2445931; 429684, 2446063; 429618, 2446078; 429654, 2446125; 429591, 2446167; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476, 2446463; 428396, 2446447; 428285, 2446458; 428116, 2446474; 428047, 2446484; 427185, 2447661; 427161,

2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427130, 2447833; 427219, 2448070; 427360, 2448281; 427360, 2448404; 427360, 2448527; 427457, 2448571; 427800, 2448633; 427967, 2448650; 427932, 2448712; 428038, 2448765; 428135, 2448800; 428126, 2448862; 428038, 2448932; 428038, 2448985; 428205, 2449073; 428363, 2449038; 428399, 2449011; 428504, 2448958; 428592, 2448967; 428601, 2448932; 428645, 2448932; 428733, 2449046; 428821, 2449073; 428989, 2449055; 429112, 2449117; 429182, 2449169; 429323, 2449161; 429350, 2449178; 429314, 2449284; 429350, 2449310; 429675, 2449345; 429790, 2449398; 429878, 2449425; 430080, 2449345; 430212, 2449328; 430354, 2449452; 430355, 2449451; 430369, 2449433; 430418, 2449395; 430437, 2449371; 430430, 2449364; 430451, 2449363; 430463, 2449355; 430474, 2449342; 430485, 2449333; 430527, 2449321; 430533, 2449310; 430545, 2449277; 430559, 2449254; 430604, 2449229; 430616, 2449214; 430623, 2449194; 430623, 2449173; 430616, 2449156; 430619, 2449138; 430629, 2449119; 430643, 2449106; 430677, 2449084; 430699, 2449074; 430717, 2449071; 430748, 2449070; 430773, 2449073; 430799, 2449081; 430825, 2449080; 430875, 2449032; 430881, 2449027; 430905, 2449022; 430921, 2449029; 430944, 2449045; 430958, 2449061; 430967, 2449077; 430984, 2449094; 431006, 2449097; 431020, 2449089; 431028, 2449064; 431024, 2449005; 431035, 2448975; 431050, 2448960; 431066, 2448956; 431086, 2448957; 431093, 2448962; 431116, 2448991; 431124, 2448994; 431134, 2448988; 431138, 2448981; 431147, 2448955; 431158, 2448950; 431170, 2448954; 431195, 2448966; 431208, 2448969; 431223, 2448964; 431228, 2448960; 431275, 2448914; 431290, 2448911; 431310, 2448912; 431339, 2448927; 431358, 2448923; 431376, 2448914; 431407, 2448903; 431463, 2448902; 431473, 2448899; 431479, 2448891; 431501, 2448872; 431538, 2448867; 431545, 2448867; 431567, 2448859; 431580, 2448844; 431596, 2448824; 431611, 2448789; 431609, 2448764; 431601, 2448750; 431600, 2448733; 431627, 2448682; 431636, 2448653; 431677, 2448576; 431702, 2448563; 431763, 2448526; 431788, 2448486; 431824, 2448430; 431830, 2448417; 431840, 2448395; 431847, 2448368; 432630, 2449144; 432749, 2449800; 433222, 2450264; 433345, 2450115; 433481, 2450031; 433526, 2449921; 433637, 2449927; 433624, 2450096; 434143, 2450303; 434279, 2450225; 434207, 2450160; 434331, 2450037; 434460, 2449992; 434590, 2449927; 434558, 2449797; 434635, 2449823; 434713, 2449765; 434707, 2449674; 434772, 2449609; 434849, 2449694; 435011, 2449713; 435148, 2449616; 435414, 2449661; 435666, 2449525; 435669, 2449472; 435664, 2449469; 435598, 2449429; 435576, 2449421; 435549, 2449426; 435517, 2449423; 435501, 2449420; 435469, 2449405; 435418, 2449387; 435390, 2449374; 435390, 2449374; 435368, 2449361; 435334, 2449356; 435319, 2449360; return to starting point.

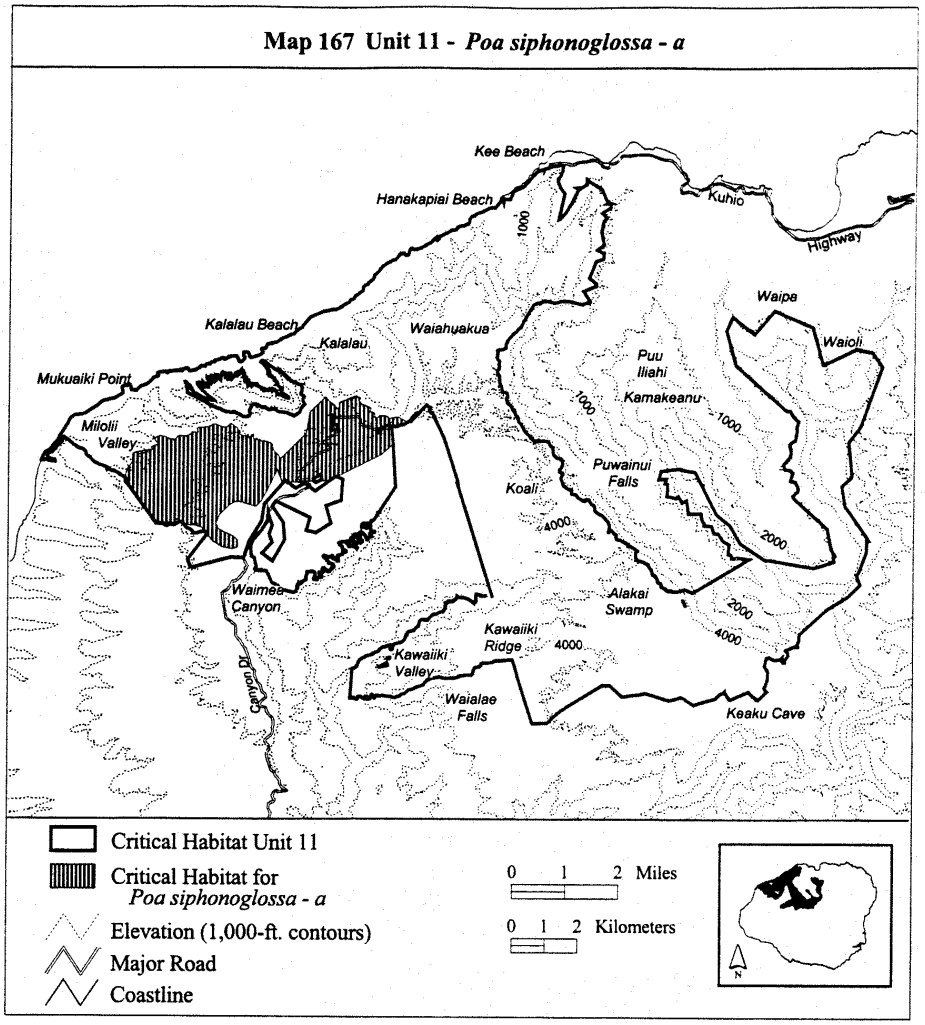
(B) Excluding 3 areas:

(*1*) Bounded by the following 10 points (3 ha, 8 ac): Start at 433368, 2449292; 433367, 2449352; 433448, 2449426; 433546, 2449412; 433567, 2449398; 433589, 2449323; 433612, 2449262; 433588, 2449244; 433567, 2449260; 433369, 2449255; return to starting point; and

(*2*) Bounded by the following 9 points (1 ha, 2 ac): Start at 433484, 2449703; 433480, 2449629; 433457, 2449622; 433440, 2449604; 433426, 2449556; 433419, 2449599; 433399, 2449709; 433436, 2449707; 433460, 2449707; return to starting point; and

(*3*) Bounded by the following 11 points (1 ha, 1 ac): Start at 434908, 2449290; 434890, 2449251; 434848, 2449239; 434839, 2449258; 434834, 2449277; 434833, 2449281; 434881, 2449297; 435011, 2449352; 435005, 2449310; 434948, 2449300; 434908, 2449290; return to starting point.

(C) NOTE: Map 167 follows:



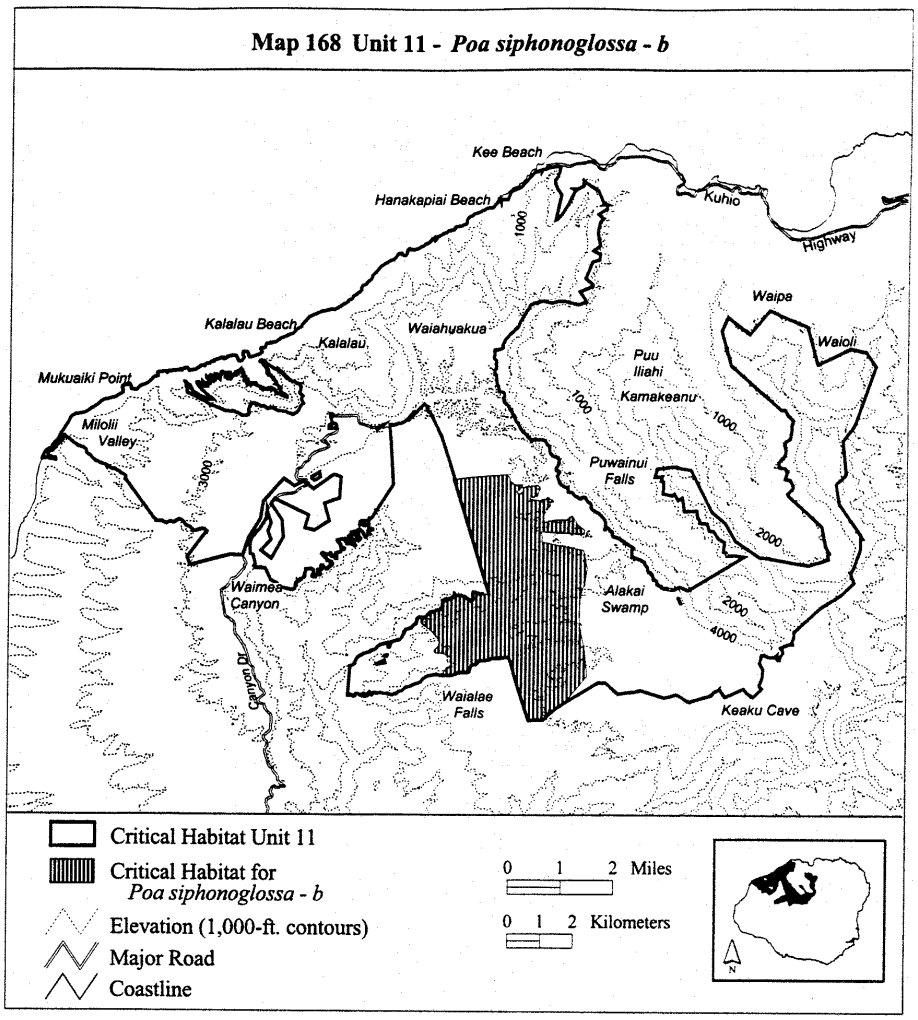
(clxviii) Kauai 11—*Poa siphonoglossa*—b (2,190 ha; 5,411 ac)

(A) Unit consists of the following 372 boundary points: Start at 439906, 2445836; 441198, 2445593; 441314, 2445048; 441237, 2444601; 441237, 2444504; 441186, 2444474; 441100, 2444115; 441081, 2443396; 441256, 2442501; 441334, 2441762; 440770, 2441101; 440528, 2440844; 440464, 2440832; 440113, 2440527; 440014, 2440441; 440002, 2440430; 439931, 2440426; 439832, 2440430; 439556, 2440414; 439491, 2440617; 439088, 2441871; 438934, 2442351; 438866, 2442347; 438838, 2442340; 438821, 2442339; 438757, 2442331; 438721, 2442329; 438704, 2442326; 438694, 2442327; 438679, 2442324; 438656, 2442321; 438626, 2442315; 438609, 2442314; 438561, 2442316; 438536, 2442314; 438535, 2442314; 438523, 2442310; 438517, 2442310; 438496, 2442310; 438460, 2442320; 438453, 2442321; 438436, 2442321; 438433, 2442319; 438418, 2442311; 438392, 2442294; 438376, 2442278; 438373, 2442277; 438355, 2442265; 438305, 2442256; 438254, 2442248; 438238, 2442248; 438219, 2442244; 438157, 2442234; 438130, 2442234; 438114, 2442232; 438098,

2442237; 438095, 2442238; 438065, 2442246; 438049, 2442246; 438030, 2442243; 438012, 2442229; 438000, 2442216; 437998, 2442205; 437998, 2442202; 437996, 2442188; 437984, 2442167; 437973, 2442147; 437954, 2442136; 437939, 2442128; 437926, 2442125; 437912, 2442123; 437873, 2442121; 437839, 2442110; 437826, 2442106; 437806, 2442092; 437799, 2442084; 437791, 2442074; 437777, 2442052; 437766, 2442017; 437758, 2441998; 437754, 2441991; 437751, 2441981; 437745, 2441950; 437740, 2441938; 437736, 2441928; 437717, 2441899; 437711, 2441887; 437705, 2441878; 437689, 2441877; 437674, 2441875; 437647, 2441866; 437635, 2441866; 437617, 2441866; 437602, 2441867; 437566, 2441876; 437532, 2441880; 437522, 2441879; 437495, 2441869; 437460, 2441862; 437432, 2441860; 437391, 2441858; 437366, 2441852; 437346, 2441845; 437332, 2441842; 437317, 2441835; 437287, 2441816; 437274, 2441809; 437240, 2441796; 437224, 2441791; 437181, 2441781; 437150, 2441777; 437111, 2441777; 437096, 2441779; 437062, 2441776; 437008, 2441775; 436960, 2441776; 436912, 2441780; 436895, 2441784; 436825, 2441795; 436815, 2441798; 436852, 2441813; 436924, 2441863; 436993, 2441942; 437047, 2442023; 437118, 2442056; 437171, 2442113; 437171, 2442160; 437157, 2442174; 437141, 2442230; 437152, 2442320; 437149, 2442340; 436951, 2442456; 436868, 2442470; 436852, 2442472; 436744, 2442467; 436670, 2442497; 436670, 2442552; 436772, 2442671; 436792, 2442676; 436802, 2442716; 436797, 2442862; 436782, 2442872; 436607, 2443105; 436238, 2443377; 436257, 2443513; 436291, 2443539; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 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437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437592, 2444171; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437819, 2444215; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437963, 2444287; 437984, 2444274; 438007, 2444260; 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2447167; 440144, 2447179; 440141, 2447143; 440146, 2447140; 440234, 2447108; 440263, 2447052; 440170, 2447045; 440174, 2446941; 440148, 2446878; 440115, 2446879; 440108, 2446857; 439975, 2446650; 439979, 2446414; 440303, 2446507; 440653, 2446507; 440848, 2446623; 441003, 2446351; 441217, 2446195; 441178, 2446059; 439894, 2446138; 439903, 2446071; 439927, 2445971; return to starting point.

(B) NOTE: Map 168 follows:

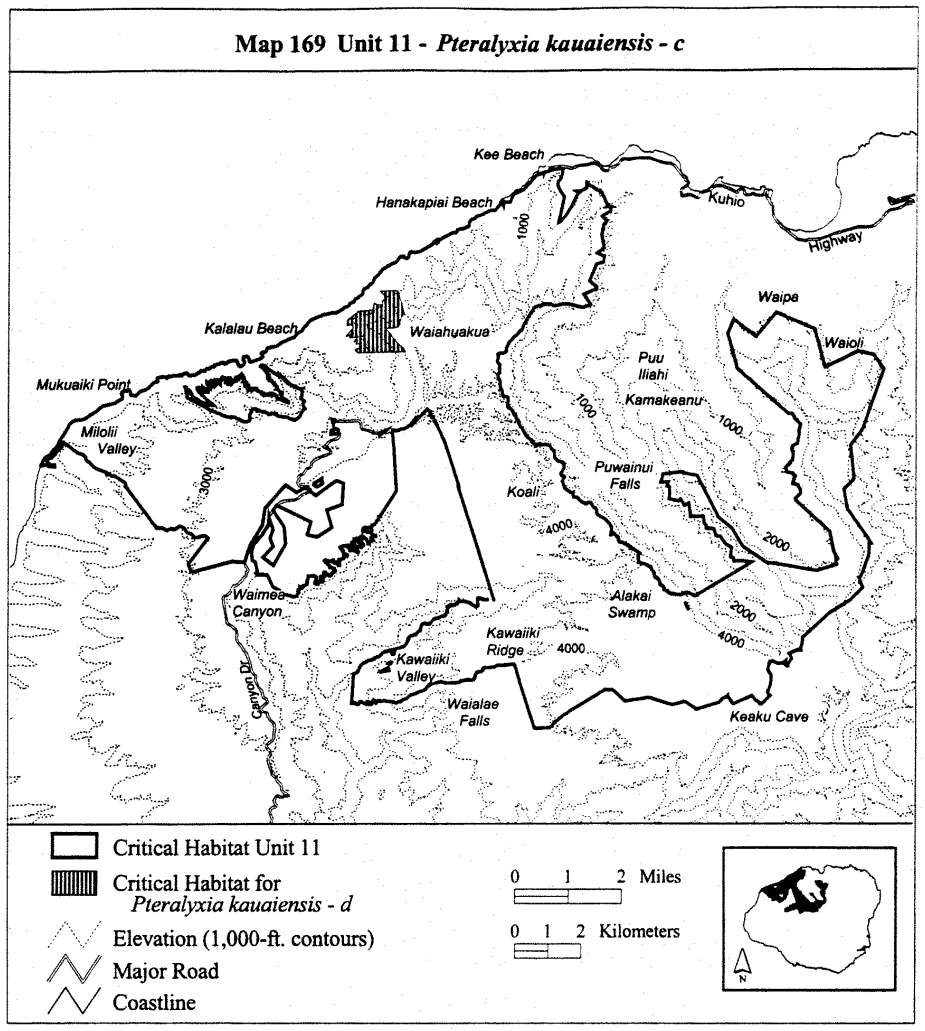


(clxix) Kauai 11—*Pteralyxia kauaiensis*—c (209 ha; 516 ac)

(A) Unit consists of the following 44 boundary points: Start at 435602, 2452865; 435551, 2452875; 435510, 2452794; 435460, 2452713; 435460, 2452612; 435409, 2452500; 435288, 2452470; 435024, 2452460; 435176, 2452288; 435217, 2452207; 435277, 2452126; 435419, 2451974; 435551, 2451852; 435592, 2451741; 434183, 2451701; 434102, 2451792; 434264, 2451873; 434213, 2451893; 434254, 2451984; 434112, 2451984; 434163,

2452065; 434051, 2452045; 434173, 2452187; 433940, 2452157; 433940, 2452248; 433828, 2452207; 433940, 2452339; 434041, 2452481; 433960, 2452582; 433838, 2452531; 433858, 2452693; 434051, 2452845; 434193, 2452966; 434517, 2452997; 434629, 2453017; 434669, 2453219; 434781, 2453169; 434933, 2453169; 434912, 2453280; 434983, 2453320; 434994, 2453452; 434872, 2453584; 435186, 2453594; 435379, 2453594; return to starting point.

(B) NOTE: Map 169 follows:

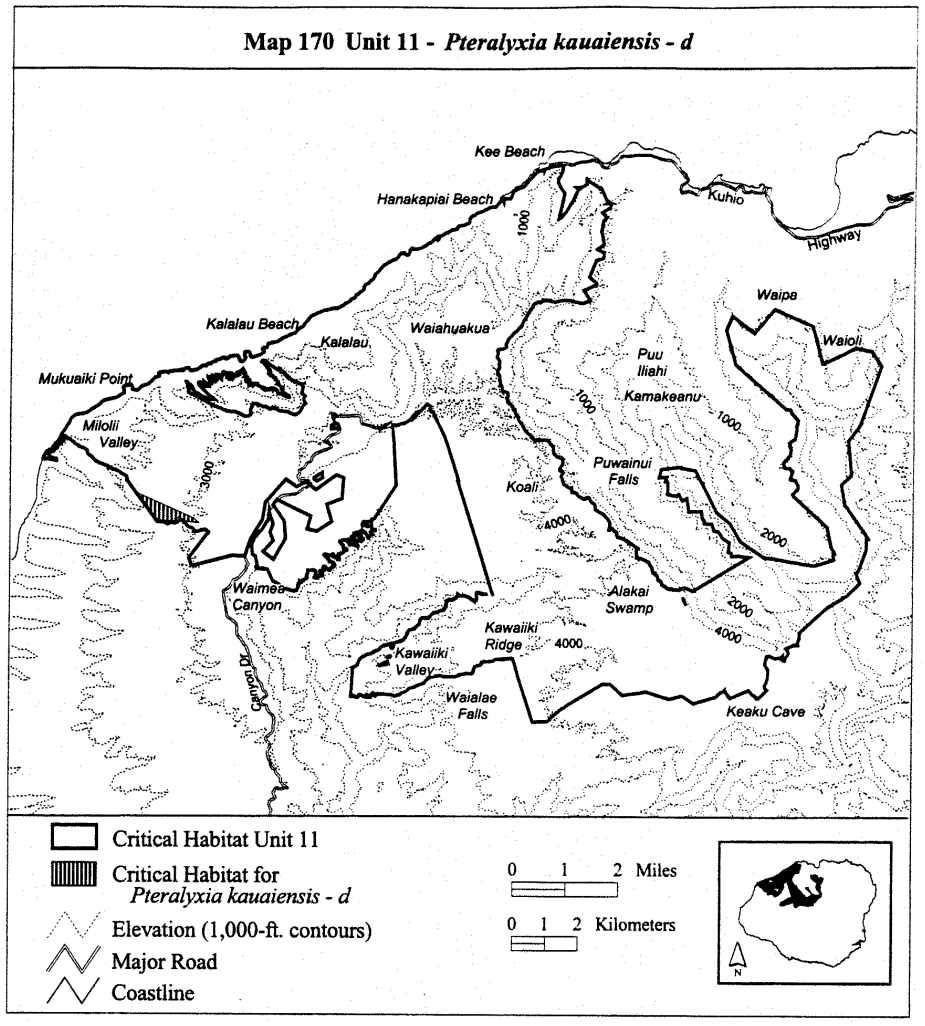


(clxx) Kauai 11—*Pteralyxia kauaiensis*—d (57 ha; 141 ac)

(A) Unit consists of the following 15 boundary points: Start at 427428, 2447329; 429224, 2446536; 429347, 2446394; 428978, 2446451; 428955, 2446435; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476, 2446463; 428396, 2446447; 428285, 2446458;

428116, 2446474; 428047, 2446484; return to starting point.

(B) NOTE: Map 170 follows:

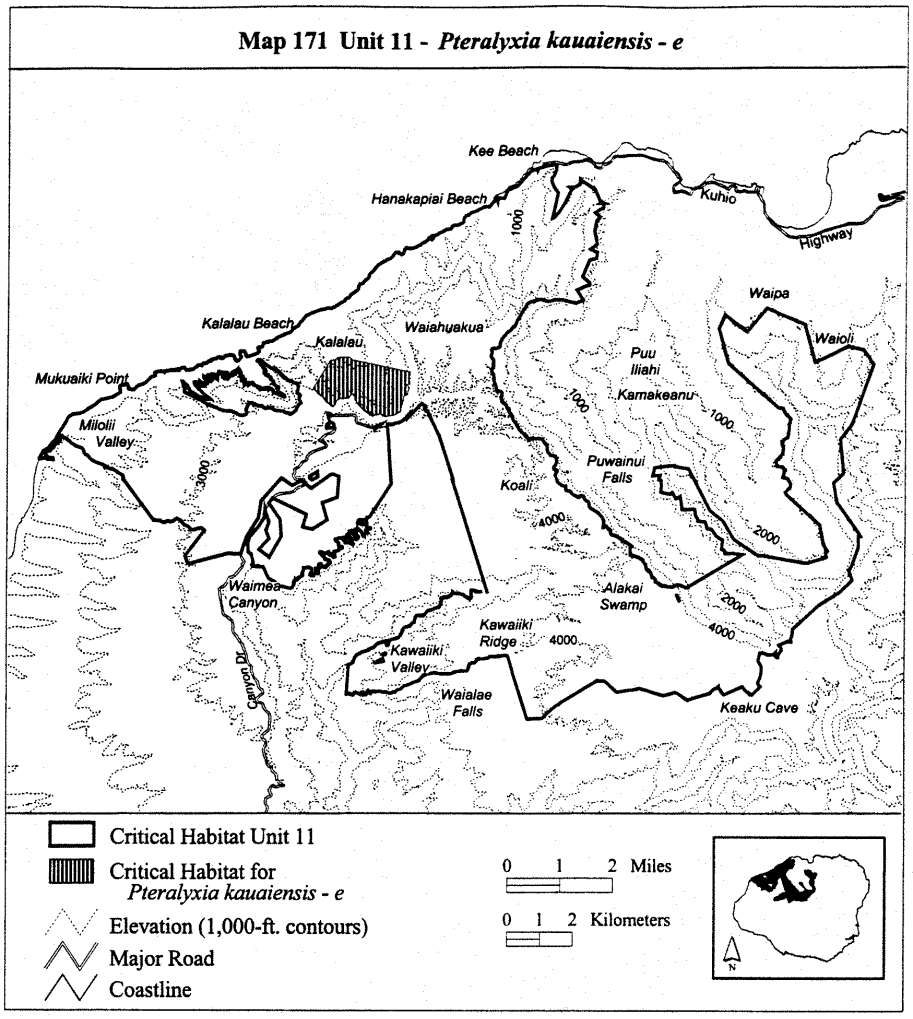


(clxxi) Kauai 11—*Pteralyxia kauaiensis*—e (353 ha; 872 ac)

(A) Unit consists of the following 42 boundary points: Start at 434264, 2451326; 435936, 2450971; 435875, 2450799; 435916, 2450657; 435835, 2450586; 435906, 2450505; 435855, 2450364; 435855, 2450293; 435733, 2450252; 435723, 2450121; 435693, 2450040; 435642, 2449908; 435642, 2449766; 435531, 2449706; 435389, 2449645; 435156, 2449635; 435105, 2449625; 435024, 2449716; 434913, 2449685; 434771, 2449635; 434659, 2449716; 434507, 2449817; 434355, 2449969; 434213, 2450182; 434274, 2450222; 434142, 2450324; 434031, 2450172; 433737, 2450162; 433676, 2450091; 433615, 2449969; 433554, 2449909; 433483, 2449970; 433362, 2450071; 433190, 2450273; 433088, 2450334; 432967, 2450466; 433473, 2451326; 433615, 2451337;

433717, 2451418; 433869, 2451428; 434061, 2451428; 434163, 2451346; return to starting point.

(B) NOTE: Map 171 follows:



(clxxii) Kauai 11—*Pteralyxia kauaiensis*—f (589 ha; 1,453 ac)

(A) Unit consists of the following 463 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738,

2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 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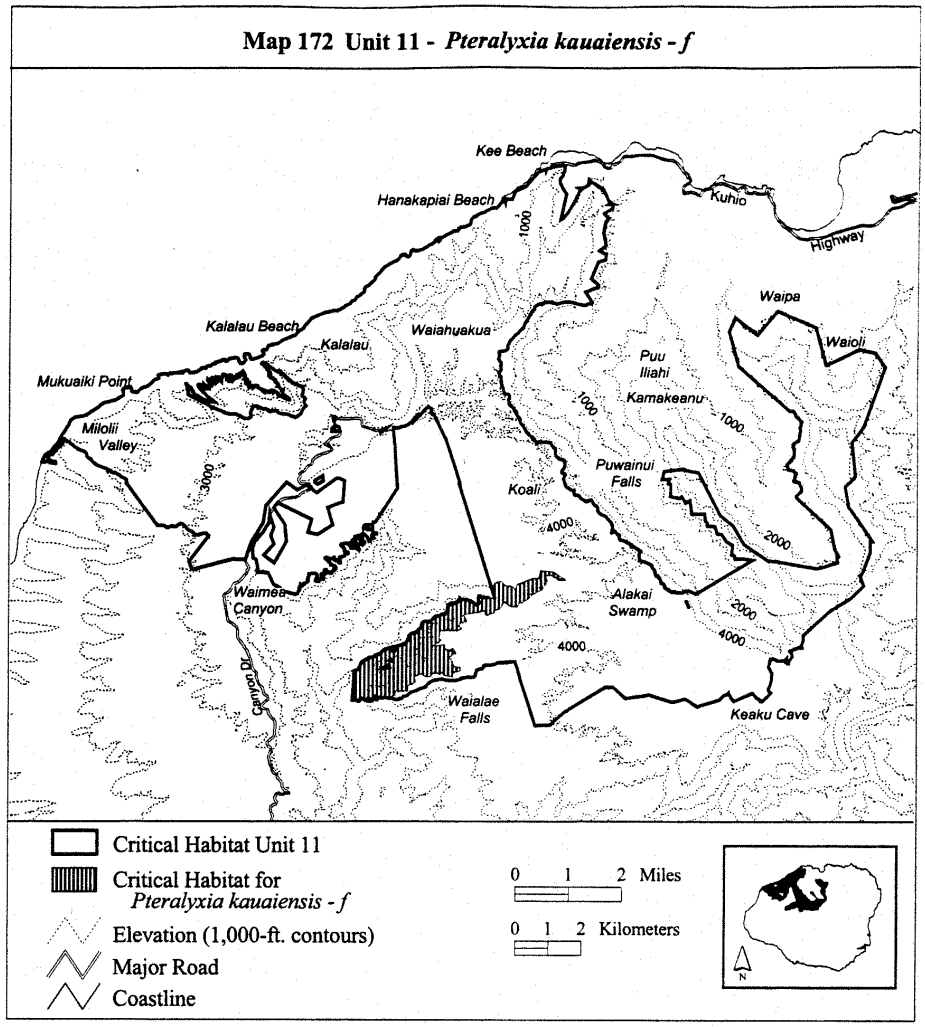
2441286; 434676, 2441286; 434669, 2441281; 434661, 2441273; 434653, 2441254; 434641, 2441213; 434631, 2441186; 434629, 2441175; 434626, 2441167; 434615, 2441161; 434592, 2441168; 434580, 2441170; 434570, 2441168; 434563, 2441163; 434556, 2441145; 434551, 2441140; 434542, 2441137; 434538, 2441144; 434535, 2441154; 434536, 2441173; 434530, 2441201; 434523, 2441222; 434520, 2441227; 434516, 2441230; 434508, 2441229; 434501, 2441223; 434489, 2441216; 434475, 2441203; 434448, 2441190; 434424, 2441176; 434397, 2441178; 434359, 2441197; 434333, 2441217; 434325, 2441222; 434308, 2441229; 434293, 2441229; 434280, 2441225; 434259, 2441212; 434253, 2441203; 434240, 2441177; 434228, 2441152; 434223, 2441147; 434216, 2441143; 434190, 2441144; 434174, 2441147; 434155, 2441156; 434145, 2441157; 434130, 2441163; 434110, 2441175; 434097, 2441181; 434079, 2441193; 434069, 2441192; 434062, 2441188; 434026, 2441177; 434018, 2441178; 434073, 2442051; 434078, 2442055; 434086, 2442062; 434103, 2442070; 434112, 2442076; 434126, 2442080; 434139, 2442083; 434144, 2442086; 434153, 2442092; 434175, 2442105; 434192, 2442116; 434203, 2442127; 434215, 2442141; 434220, 2442151; 434229, 2442173; 434247, 2442208; 434253, 2442234; 434261, 2442257; 434269, 2442282; 434282, 2442299; 434295, 2442316; 434308, 2442329; 434330, 2442350; 434344, 2442361; 434355, 2442368; 434370, 2442378; 434395, 2442387; 434416, 2442397; 434439, 2442410; 434458, 2442423; 434486, 2442437; 434504, 2442450; 434522, 2442454; 434537, 2442457; 434563, 2442460; 434590, 2442462; 434610, 2442464; 434628, 2442472; 434643, 2442483; 434664, 2442490; 434680, 2442493; 434700, 2442502; 434713, 2442515; 434725, 2442524; 434735, 2442532; 434755, 2442542; 434775, 2442551; 434800, 2442556; 434822, 2442562; 434842, 2442574; 434862, 2442596; 434883, 2442613; 434896, 2442626; 434916, 2442647; 434934, 2442668; 434949, 2442681; 434972, 2442699; 434986, 2442705; 434997, 2442708; 435006, 2442713; 435012, 2442717; 435026, 2442719; 435039, 2442722; 435061, 2442727; 435081, 2442733; 435100, 2442739; 435119, 2442747; 435135, 2442754; 435150, 2442764; 435164, 2442771; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; 435237, 2442643; 435284, 2442631; return to starting point.

(B) Excluding 2 areas:

(*1*) Bounded by the following 3 points (1 ha; 3 ac): Start at 435132, 2442248; 435160, 2442164; 434848, 2442098; return to starting point; and

(*2*) Bounded by the following 4 points (0 ha; 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

(C) NOTE: Map 172 follows:

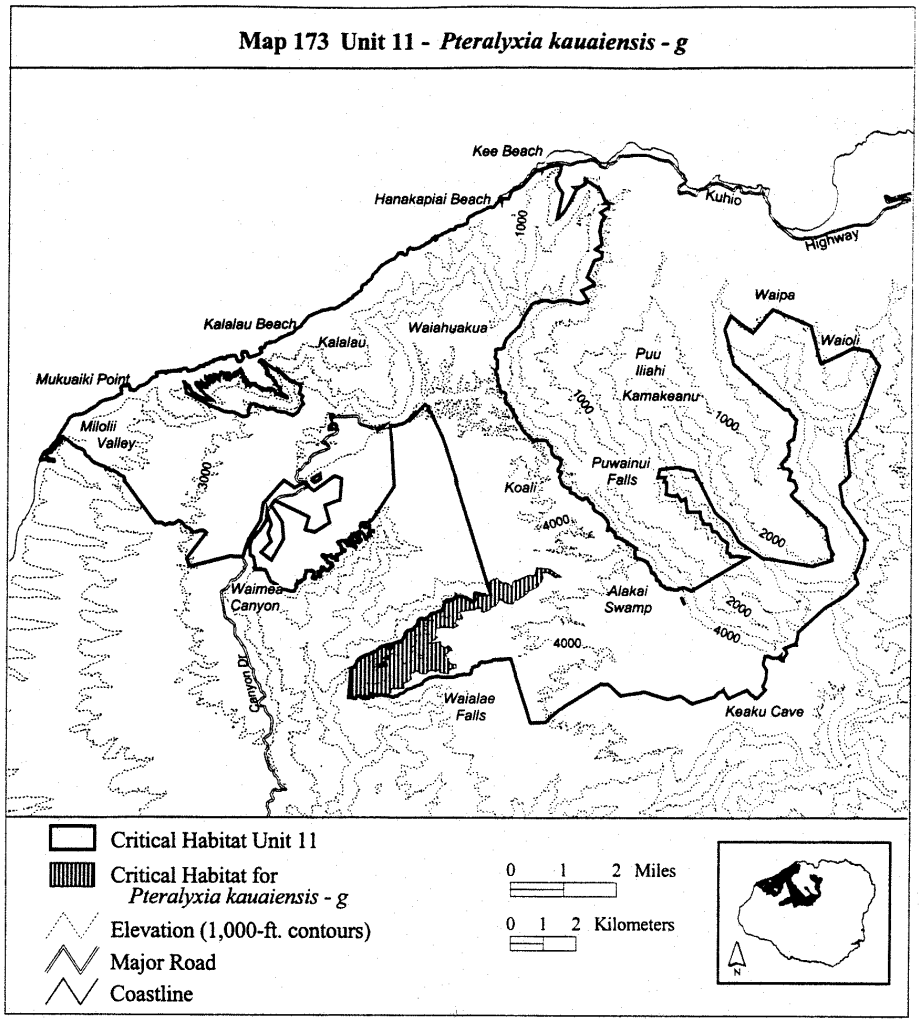


(clxxiii) Kauai 11—*Pteralyxia kauaiensis*—g (445 ha; 1,100 ac)

(A) Unit consists of the following 136 boundary points: Start at 426830, 2448935; 426830, 2448946; 426865, 2448996; 426916, 2449001; 426976, 2448996; 427021, 2449001; 427096, 2449031; 427131, 2449051; 427237, 2449021; 427372, 2449006; 427513, 2449041; 427578, 2449031; 427638, 2449051; 427679, 2449061; 427814, 2449036; 427884, 2449056; 427894, 2449132; 427844, 2449202; 427799, 2449282; 427623, 2449312; 427463, 2449317; 427307, 2449292; 427227, 2449302; 427131, 2449342; 427041, 2449398; 427081, 2449468; 427257, 2449498; 427407, 2449548; 427583, 2449668; 427679, 2449709; 427759, 2449663; 427834, 2449663; 427935, 2449678; 428040, 2449588; 428145, 2449377; 428271, 2449272; 428396, 2449237; 428452, 2449197; 428422, 2449177; 428301, 2449147; 428321, 2449086; 428376, 2449051; 428376, 2449016; 428452, 2448961; 428462, 2448896; 428442, 2448800; 428321, 2448775; 428266, 2448795; 428241, 2448785; 428216, 2448730; 428271, 2448660; 428306, 2448600; 428306, 2448582; 429490, 2448299; 429651, 2448166; 429727,

2448242; 429983, 2448223; 430125, 2448308; 430134, 2448147; 429859, 2448138; 429765, 2447986; 430030, 2447910; 429594, 2447854; 429547, 2447759; 429272, 2447797; 429224, 2447749; 429243, 2447664; 429338, 2447711; 429471, 2447598; 429565, 2447598; 429622, 2447560; 429565, 2447503; 429565, 2447427; 429651, 2447380; 429537, 2447323; 429480, 2447323; 429347, 2447446; 429347, 2447304; 427881, 2447774; 427879, 2447772; 427930, 2447722; 427914, 2447661; 427814, 2447666; 427598, 2447732; 427553, 2447727; 427523, 2447732; 427458, 2447772; 427387, 2447757; 427282, 2447842; 427247, 2447872; 427111, 2447887; 427056, 2447862; 427016, 2447912; 426931, 2447952; 426835, 2448008; 426750, 2448043; 426599, 2448113; 426589, 2448188; 426127, 2448336; 426097, 2448378; 426063, 2448412; 426051, 2448421; 426007, 2448440; 425989, 2448455; 425969, 2448492; 425954, 2448543; 425949, 2448584; 425923, 2448613; 425884, 2448631; 425855, 2448652; 425837, 2448658; 425792, 2448676; 425765, 2448685; 425735, 2448700; 425708, 2448709; 425675, 2448727; 425654, 2448744; 425621, 2448768; 425591, 2448786; 425552, 2448813; 425528, 2448834; 425487, 2448867; 425460, 2448891; 425421, 2448924; 425388, 2448948; 425334, 2448975; 425329, 2448978; 425337, 2449010; 425479, 2449057; 425479, 2449181; 425602, 2449067; 425764, 2448953; 425830, 2448991; 425934, 2449001; 426001, 2448953; 426399, 2449038; return to starting point.

(B) NOTE: Map 173 follows:

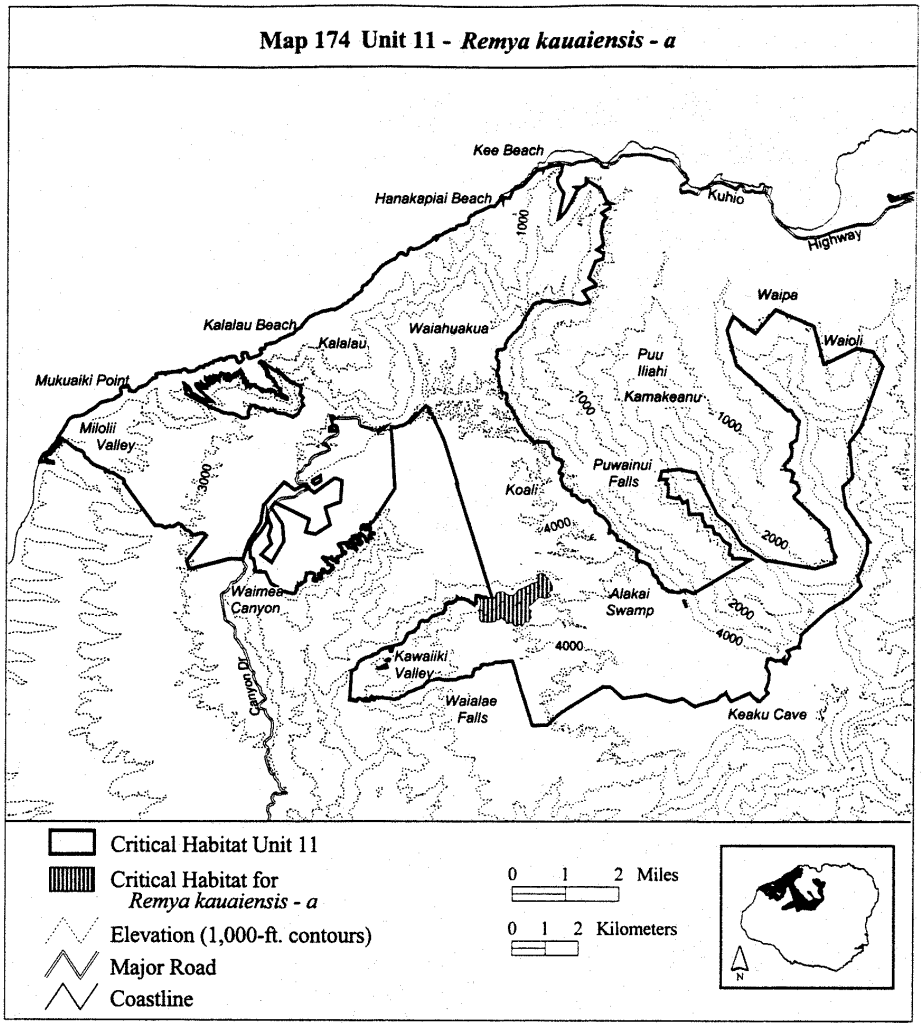


(clxxiv) Kauai 11—*Remya kauaiensis*—a (172 ha; 426 ac)

(A) Unit consists of the following 107 boundary points: Start at 437937, 2443749; 437924, 2443901; 437955, 2444013; 437973, 2444102; 437928, 2444227; 437902, 2444298; 437907, 2444314; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 438310, 2444290; 438384, 2444240; 438455, 2444396; 438625, 2444450; 438696, 2444419; 438799, 2444334; 438946, 2444334; 439013, 2444356; 439080, 2444450; 439129, 2444494; 439250, 2444539; 439326, 2444579; 439402, 2444619; 439540, 2444686; 439678, 2444726; 439710, 2444829; 439705, 2444936; 439759, 2444985; 439857, 2445003; 439897, 2444931; 439919, 2444896; 440004, 2444860; 440058, 2444753; 440107, 2444668; 440138, 2444623; 440143, 2444574; 440143, 2444539; 440143, 2444476; 440071, 2444445; 440018, 2444405; 440018, 2444374; 440067, 2444351; 440080, 2444302; 440058, 2444275; 439928,

2444231; 439830, 2444271; 439750, 2444267; 439678, 2444222; 439607, 2444137; 439495, 2444057; 439428, 2444008; 439415, 2443959; 439464, 2443887; 439500, 2443878; 439518, 2443861; 439486, 2443843; 439486, 2443812; 439477, 2443771; 439464, 2443770; 439500, 2443655; 439473, 2443620; 439446, 2443588; 439446, 2443539; 439428, 2443513; 439312, 2443513; 439294, 2443508; 439268, 2443450; 439241, 2443401; 439210, 2443392; 439187, 2443441; 439125, 2443441; 439067, 2443397; 439035, 2443392; 438955, 2443455; 438946, 2443486; 438919, 2443508; 438852, 2443499; 438803, 2443468; 438754, 2443481; 438750, 2443504; 438745, 2443544; 438719, 2443575; 438669, 2443575; 438669, 2443624; 438620, 2443647; 438585, 2443638; 438544, 2443602; 438473, 2443598; 438442, 2443593; 438415, 2443535; 438308, 2443513; 438085, 2443522; 438009, 2443526; 437955, 2443571; 437933, 2443665; 437940, 2443749; return to starting point.

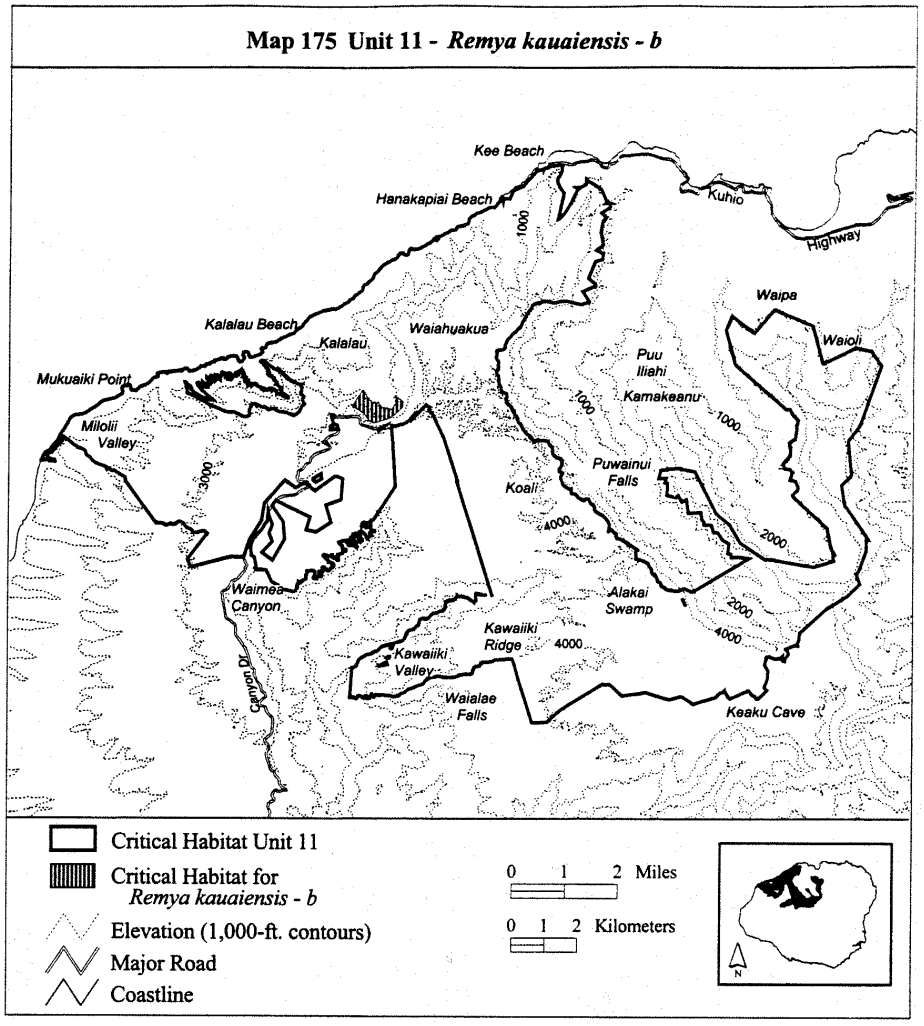
(B) NOTE: Map 174 follows:



(clxxv) Kauai 11—*Remya kauaiensis*—b (66 ha; 163 ac)

(A) Unit consists of the following 19 boundary points: Start at 434356, 2450470; 434503, 2450255; 434622, 2450093; 434841, 2450072; 434941, 2449932; 435078, 2449914; 435232, 2449871; 435368, 2450079; 435350, 2450294; 435580, 2450125; 435569, 2449953; 435472, 2449863; 435368, 2449752; 435167, 2449623; 434776, 2449484; 434694, 2449462; 434539, 2449541; 434381, 2449771; 434044, 2449989; return to starting point.

(B) NOTE: Map 175 follows:

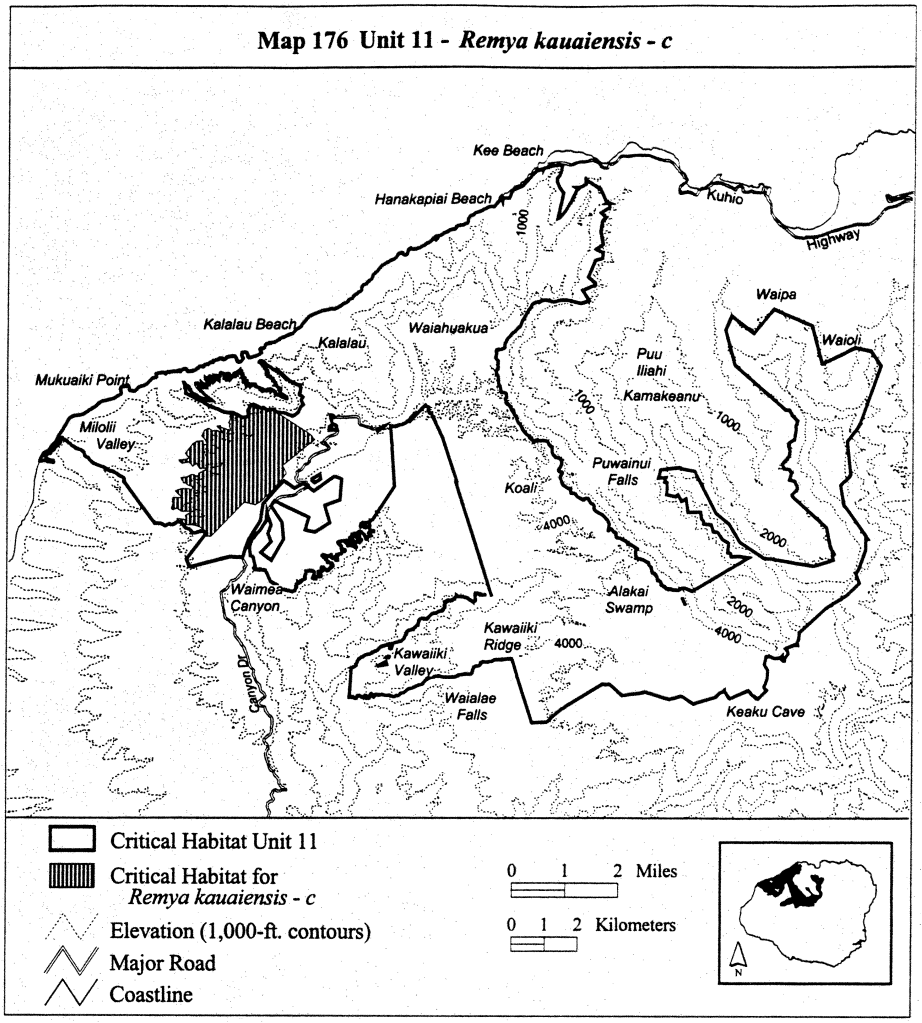


(clxxvi) Kauai 11—*Remya kauaiensis*—c (886 ha; 2,190 ac)

(A) Unit consists of the following 119 boundary points: Start at 431977, 2448160; 432081, 2447933; 431820, 2447620; 431629, 2447412; 431298, 2447081; 431124, 2446995; 430828, 2447064; 430817, 2447078; 429798, 2446041; 429595, 2446048; 429654,

2446125; 429591, 2446167; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428774, 2446550; 428762, 2446580; 428765, 2446584; 429064, 2446531; 429021, 2446658; 429244, 2446797; 428914, 2446797; 428765, 2446882; 428648, 2446839; 428595, 2446892; 428659, 2447052; 428627, 2447073; 428648, 2447201; 428936, 2447211; 428808, 2447318; 428723, 2447414; 428904, 2447477; 429117, 2447477; 429202, 2447435; 429244, 2447541; 429085, 2447595; 429021, 2447658; 428968, 2447658; 428883, 2447797; 429085, 2447829; 429191, 2447914; 429266, 2447914; 429393, 2447839; 429425, 2447946; 429649, 2448063; 429628, 2448105; 429457, 2448095; 429340, 2448244; 429234, 2448158; 429138, 2448286; 428915, 2448244; 428829, 2448339; 429064, 2448361; 429149, 2448424; 429074, 2448478; 429032, 2448552; 429244, 2448829; 429362, 2448914; 429543, 2448924; 429564, 2448807; 429681, 2448818; 429649, 2448882; 429617, 2448967; 429511, 2449084; 429596, 2449254; 429734, 2449318; 429819, 2449233; 429958, 2449244; 430160, 2449169; 429968, 2449371; 430064, 2449382; 430075, 2449339; 430181, 2449307; 430362, 2449254; 430330, 2449414; 430330, 2449415; 430366, 2449436; 430355, 2449451; 430349, 2449466; 430335, 2449474; 430320, 2449476; 430320, 2449477; 430394, 2449658; 430350, 2449658; 430348, 2449666; 430376, 2449750; 430384, 2449766; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431632, 2449893; 432647, 2449237; 432672, 2449222; 432832, 2449094; 432927, 2448966; 432512, 2448626; 431953, 2448167; return to starting point.

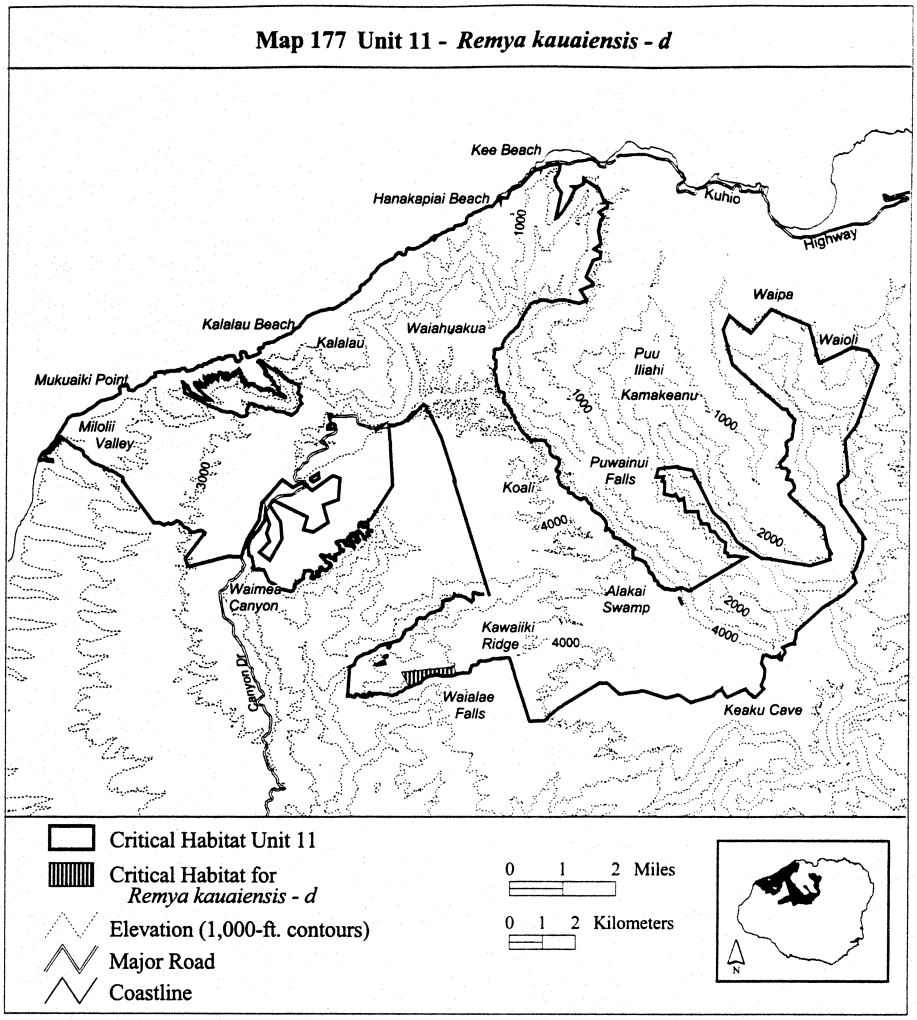
(B) NOTE: Map 176 follows:



(clxxvii) Kauai 11—*Remya kauaiensis*—d (47 ha; 115 ac)

(A) Unit consists of the following 51 boundary points: Start at 435663, 2441899; 437117, 2442058; 437240, 2442106; 437316, 2441834; 437287, 2441816; 437274, 2441809; 437240, 2441796; 437224, 2441791; 437181, 2441781; 437150, 2441777; 437111, 2441777; 437096, 2441779; 437062, 2441776; 437008, 2441775; 436960, 2441776; 436912, 2441780; 436895, 2441784; 436825, 2441795; 436799, 2441801; 436777, 2441809; 436730, 2441820; 436695, 2441811; 436666, 2441808; 436638, 2441803; 436618, 2441796; 436593, 2441792; 436583, 2441789; 436541, 2441785; 436492, 2441773; 436453, 2441759; 436419, 2441739; 436408, 2441737; 436374, 2441718; 436357, 2441708; 436342, 2441700; 436319, 2441681; 436285, 2441639; 436272, 2441618; 436247, 2441590; 436228, 2441575; 436203, 2441564; 436181, 2441558; 436167, 2441552; 436155, 2441546; 436121, 2441536; 436070, 2441515; 436039, 2441504; 436027, 2441501; 435983, 2441481; 435950, 2441467; 435894, 2441450; return to starting point.

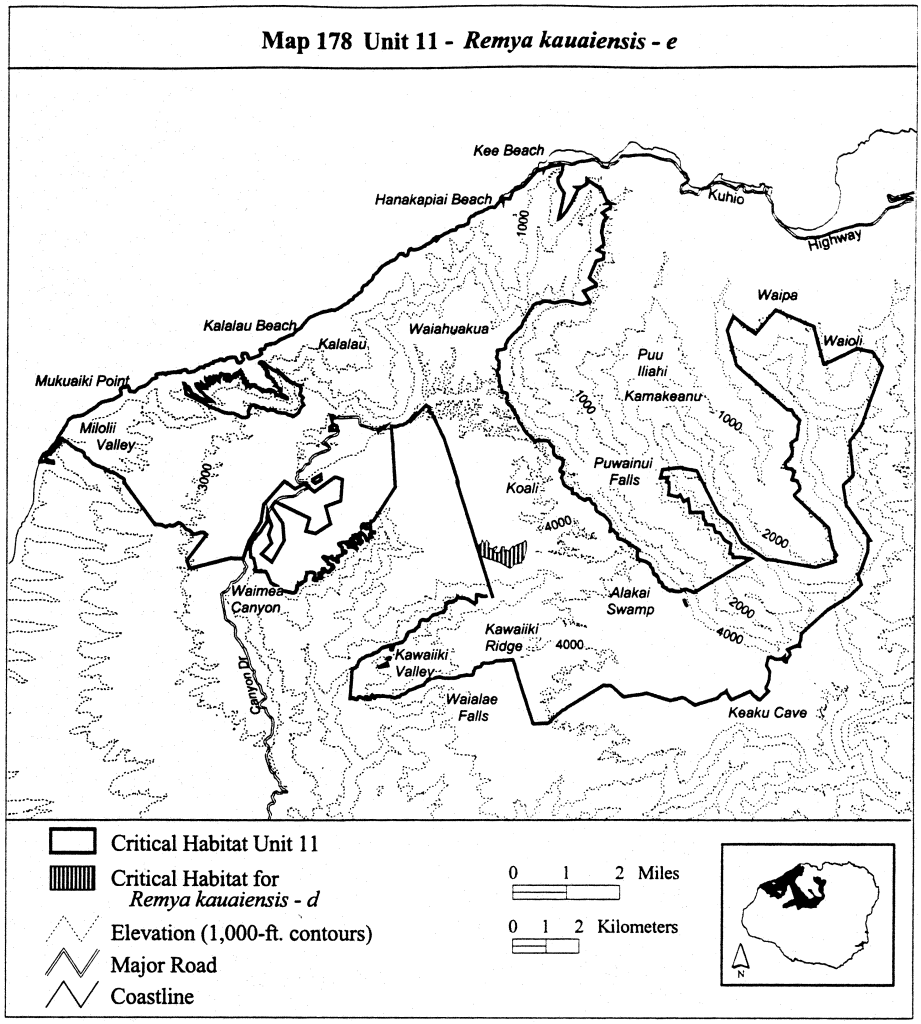
(B) NOTE: Map 177 follows:



(clxxviii) Kauai 11—*Remya kauaiensis*—e (66 ha, 163 ac)

(A) Unit consists of the following 48 boundary points: Start at 437855, 2445706; 437877, 2445731; 437906, 2445821; 437983, 2445872; 437996, 2445968; 438025, 2445891; 438060, 2445843; 438124, 2445965; 438197, 2445865; 438213, 2445843; 438178, 2445750; 438293, 2445689; 438341, 2445734; 438438, 2445779; 438450, 2445747; 438393, 2445660; 438341, 2445593; 438505, 2445580; 438572, 2445708; 438575, 2445763; 438658, 2445766; 438646, 2445664; 438646, 2445616; 438713, 2445667; 438777, 2445628; 438918, 2445792; 438953, 2445744; 439030, 2445811; 439251, 2445897; 439289, 2445958; 439318, 2445919; 439328, 2445836; 439318, 2445679; 439286, 2445555; 439257, 2445401; 439187, 2445295; 439136, 2445260; 438969, 2445228; 438905, 2445151; 438851, 2445110; 438831, 2445107; 438700, 2445203; 438559, 2445267; 438470, 2445308; 438361, 2445331; 438303, 2445382; 438236, 2445382; 437929, 2445478; return to starting point.

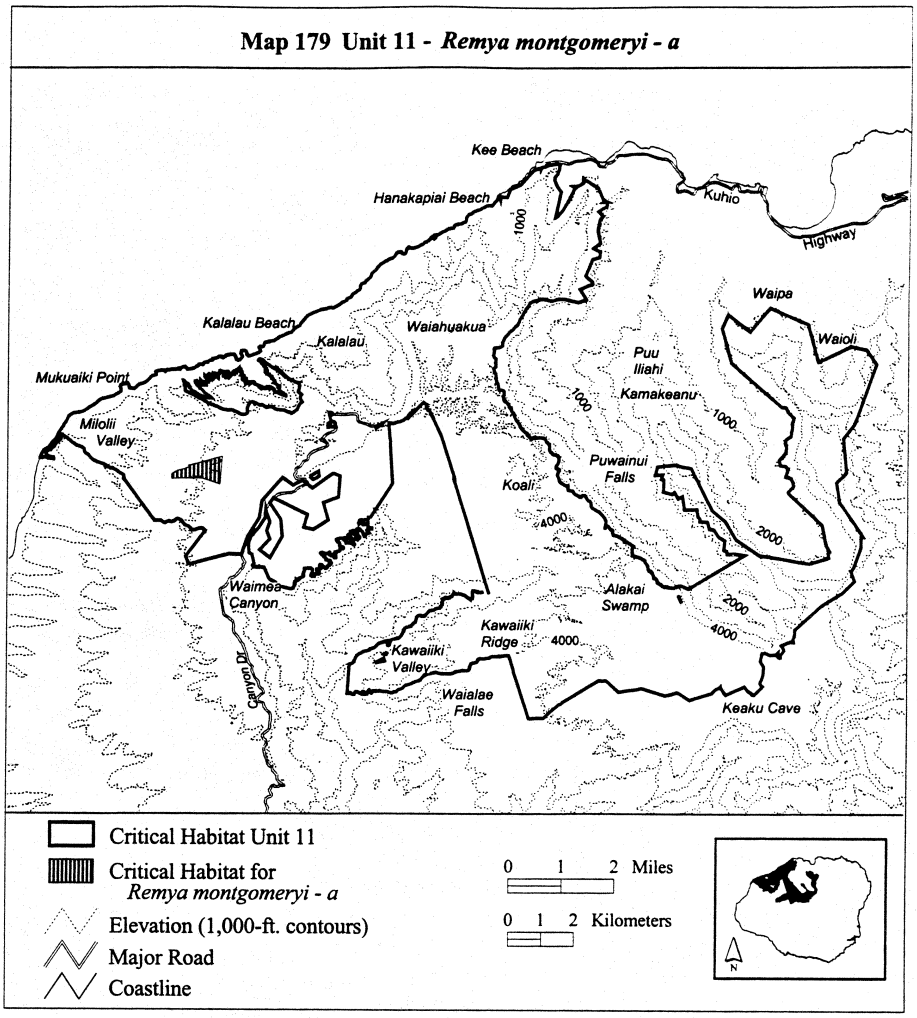
(B) NOTE: Map 178 follows:



(clxxix) Kauai 11—*Remya montgomeryi*—a (69 ha; 171 ac)

(A) Unit consists of the following 12 boundary points: Start at 428611, 2447702; 428616, 2447840; 428804, 2447934; 428942, 2447978; 429058, 2448006; 429174, 2448056; 429113, 2448100; 429373, 2448149; 430157, 2448370; 430091, 2447531; 429544, 2447708; 428821, 2447708; return to starting point.

(B) NOTE: Map 179 follows:

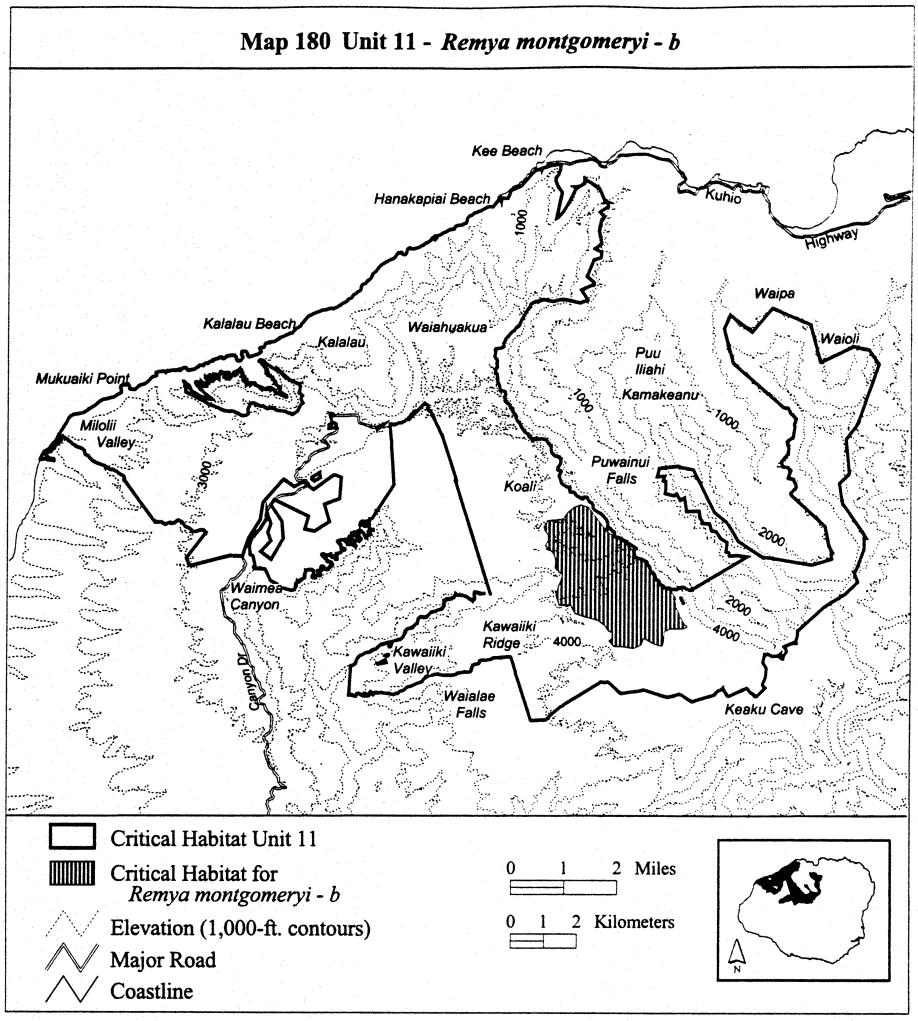


(clxxx) Kauai 11—*Remya montgomeryi*—b (1,010 ha; 2,496 ac)

(A) Unit consists of the following 245 boundary points: Start at 442448, 2445805; 442665, 2445511; 442672, 2445510; 442668, 2445494; 442667, 2445490; 442671, 2445471; 442675, 2445453; 442682, 2445433; 442689, 2445419; 442694, 2445414; 442709, 2445399; 442727, 2445386; 442743, 2445378; 442747, 2445377; 442765, 2445370; 442785, 2445364; 442798, 2445359; 442804, 2445357; 442821, 2445353; 442842, 2445347; 442858, 2445342; 442862, 2445341; 442877, 2445336; 442898, 2445330; 442915, 2445323; 442934, 2445314; 442952, 2445303; 442956, 2445301; 442972, 2445292; 442981, 2445284; 442990, 2445276; 443009, 2445266; 443029, 2445263; 443047, 2445260; 443065, 2445247; 443068, 2445227; 443066, 2445209; 443066, 2445190; 443083, 2445171; 443103, 2445152; 443122, 2445132; 443135, 2445115; 443140, 2445105; 443144, 2445096; 443150, 2445078; 443152, 2445059; 443153, 2445040; 443153, 2445020; 443156, 2445003; 443158, 2444995; 443163, 2444984; 443175, 2444965; 443177, 2444962; 443193, 2444946; 443196, 2444944; 443215, 2444938; 443234, 2444932; 443240, 2444927; 443252, 2444914; 443260, 2444907; 443271,

2444898; 443281, 2444890; 443290, 2444876; 443294, 2444870; 443301, 2444851; 443307, 2444833; 443309, 2444829; 443313, 2444815; 443320, 2444796; 443327, 2444778; 443333, 2444758; 443341, 2444740; 443346, 2444728; 443352, 2444721; 443366, 2444706; 443373, 2444702; 443385, 2444699; 443403, 2444695; 443423, 2444686; 443435, 2444664; 443440, 2444655; 443443, 2444647; 443444, 2444627; 443447, 2444608; 443452, 2444591; 443459, 2444579; 443464, 2444570; 443478, 2444555; 443483, 2444551; 443497, 2444548; 443516, 2444546; 443534, 2444543; 443553, 2444537; 443557, 2444532; 443571, 2444521; 443579, 2444514; 443598, 2444493; 443610, 2444483; 443617, 2444477; 443628, 2444469; 443647, 2444460; 443666, 2444456; 443677, 2444459; 443685, 2444463; 443703, 2444469; 443722, 2444464; 443732, 2444458; 443740, 2444454; 443760, 2444446; 443769, 2444440; 443778, 2444434; 443793, 2444421; 443804, 2444409; 443811, 2444401; 443815, 2444392; 443818, 2444383; 443824, 2444364; 443829, 2444347; 443835, 2444332; 443836, 2444327; 443846, 2444307; 443853, 2444296; 443857, 2444289; 443865, 2444271; 443871, 2444260; 443875, 2444247; 443889, 2444232; 443902, 2444214; 443910, 2444204; 443915, 2444196; 443929, 2444175; 443934, 2444158; 443936, 2444133; 443931, 2444120; 443927, 2444113; 443925, 2444103; 443924, 2444082; 443925, 2444064; 443926, 2444045; 443928, 2444028; 443931, 2444009; 443935, 2443990; 443936, 2443970; 443934, 2443951; 443934, 2443934; 443935, 2443915; 443939, 2443896; 443945, 2443877; 443955, 2443857; 443963, 2443839; 443965, 2443836; 443972, 2443821; 443984, 2443805; 443987, 2443801; 444000, 2443783; 444003, 2443777; 444005, 2443764; 444012, 2443746; 444022, 2443733; 444025, 2443727; 444035, 2443709; 444041, 2443694; 444041, 2443690; 444048, 2443672; 444055, 2443652; 444056, 2443633; 444051, 2443614; 444051, 2443596; 444058, 2443577; 444080, 2443566; 444096, 2443558; 444114, 2443539; 444125, 2443521; 444133, 2443503; 444134, 2443498; 444139, 2443484; 444146, 2443464; 444153, 2443447; 444164, 2443427; 444171, 2443417; 444180, 2443407; 444191, 2443390; 444202, 2443371; 444210, 2443360; 444215, 2443352; 444228, 2443337; 444232, 2443334; 444246, 2443322; 444259, 2443315; 444267, 2443312; 444285, 2443303; 444288, 2443300; 444287, 2443267; 444175, 2443218; 443802, 2443211; 443603, 2443118; 443591, 2442857; 443541, 2442683; 443305, 2442739; 442975, 2442920; 442895, 2442714; 442665, 2442609; 442310, 2442665; 442080, 2442671; 441918, 2442827; 441999, 2442901; 442024, 2443094; 441887, 2443131; 441788, 2443305; 441583, 2443454; 441135, 2443585; 440886, 2443666; 440799, 2443803; 440762, 2443921; 440538, 2443927; 440402, 2443914; 440314, 2444219; 440370, 2444480; 440445, 2444666; 440501, 2444859; 440420, 2444909; 440259, 2445052; 440296, 2445238; 440265, 2445387; 440190, 2445530; 440035, 2445648; 439973, 2445735; 440047, 2445872; 440047, 2446052; 439948, 2446195; 440022, 2446469; 440513, 2446543; 440625, 2446717; 440843, 2446885; 441042, 2446972; 441274, 2446893; 441832, 2446159; 442113, 2445986; 442326, 2445854; 442415, 2445847; 442422, 2445840; 442430, 2445830; 442430, 2445827; 442435, 2445813; 442444, 2445807; return to starting point.

(B) NOTE: Map 180 follows:

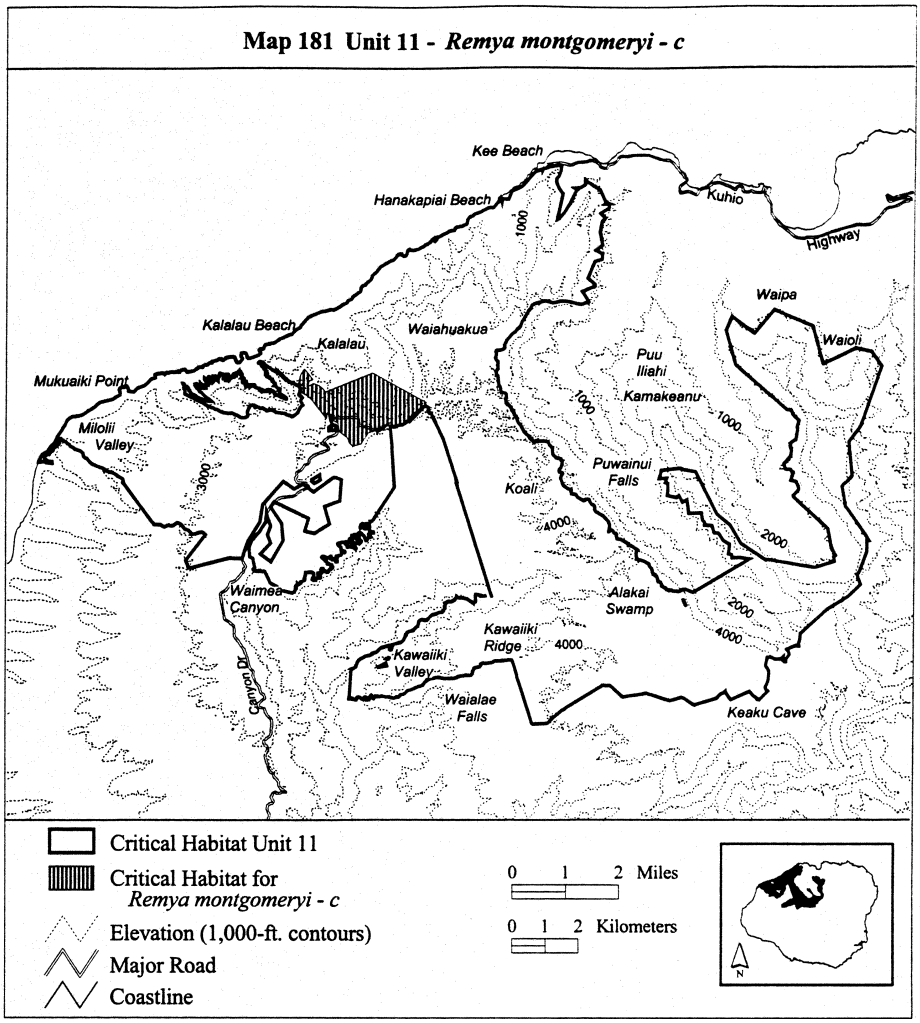


(clxxxi) Kauai 11—*Remya montgomeryi*—c (435 ha; 1,076 ac)

(A) Unit consists of the following 73 boundary points: Start at 434088, 2448772; 434057, 2448814; 433978, 2448898; 433944, 2448994; 433902, 2449074; 433692, 2449220; 433659, 2449275; 433659, 2449342; 433625, 2449489; 433500, 2449564; 433462, 2449619; 433461, 2449623; 433480, 2449629; 433484, 2449703; 433460, 2449707; 433444, 2449707; 433441, 2449723; 433318, 2449783; 433292, 2449640; 432855, 2450187; 432823, 2450206; 432826, 2450224; 432797, 2450260; 432768, 2450266; 432752, 2450270; 432745, 2450272; 432733, 2450275; 432709, 2450317; 432692, 2450330; 432650, 2450343; 432591, 2450373; 432573, 2450385; 432550, 2450412; 432528, 2450468; 432515, 2450503; 432494, 2450543; 432477, 2450580; 432468, 2450593; 432464, 2450611; 432465, 2450623; 432450, 2450624; 432445, 2450625; 432435, 2450666; 432502, 2450935; 432628, 2451128; 432889, 2450808; 432771, 2450766; 432737, 2450598; 432897, 2450691; 433099, 2450615; 433217, 2450489; 433248, 2450427; 434703, 2451005; 436330, 2450099; 436237, 2450032; 436212, 2450009; 436203, 2450009; 436111, 2449924; 436109, 2449918; 435562, 2449429; 435168,

2449400; 435010, 2449343; 435011, 2449352; 434884, 2449298; 434872, 2449294; 434833, 2449281; 434833, 2449280; 434814, 2449273; 434573, 2449187; 434342, 2448860; 434340, 2448859; 434109, 2448774; 434091, 2448768; return to starting point.

(B) NOTE: Map 181 follows:

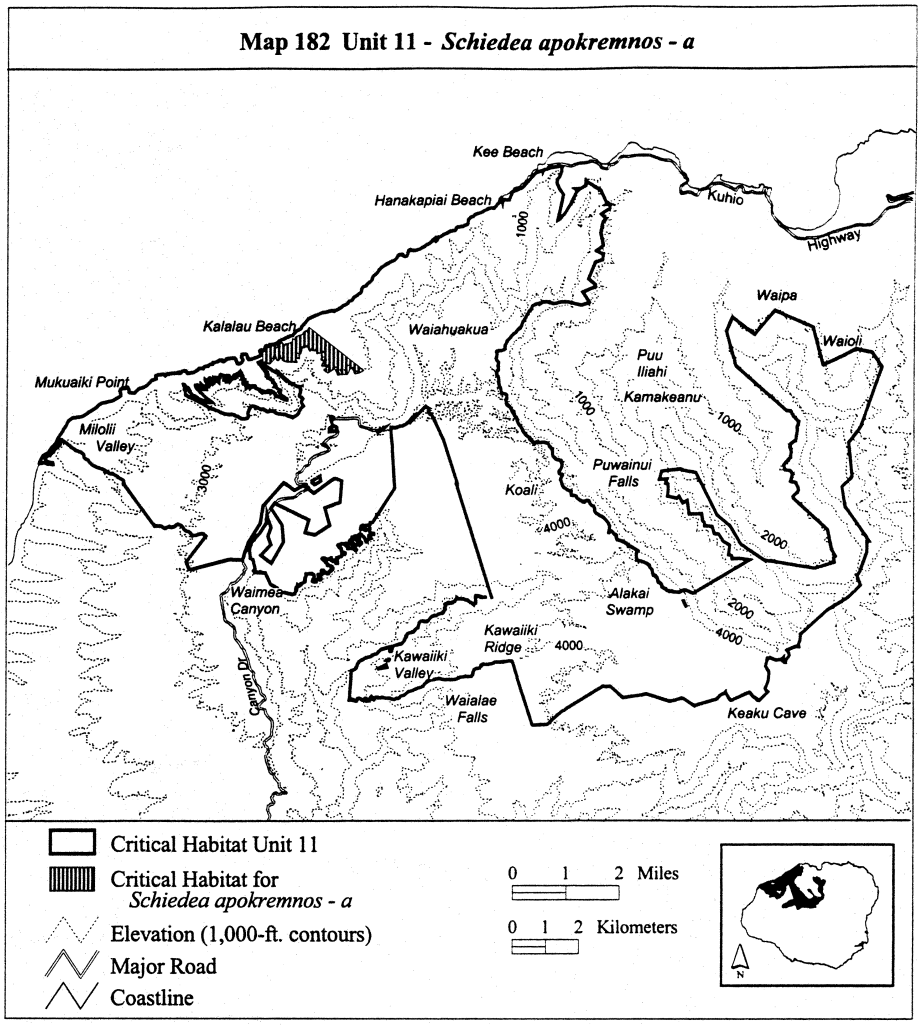


(clxxxii) Kauai 11—*Schiedea apokremnos*—a (170 ha; 420 ac)

(A) Unit consists of the following 121 boundary points: Start at 432745, 2452425; 434404, 2451114; 434287, 2451030; 434135, 2451007; 434062, 2451170; 433978, 2451164; 433917, 2450991; 433698, 2450985; 433608, 2450963; 433524, 2451170; 433328, 2451041; 433188, 2451120; 433322, 2451237; 433132, 2451249; 433143, 2451316; 433210, 2451411; 433126, 2451411; 433098, 2451450; 433132, 2451512; 433109, 2451568; 433126, 2451663; 432980, 2451618; 432969, 2451714; 432919, 2451708; 432812, 2451742; 432773, 2451669; 432689, 2451842; 432621, 2451820; 432571, 2451803; 432537, 2451730; 432504,

2451635; 432453, 2451590; 432453, 2451467; 432347, 2451490; 432347, 2451450; 432392, 2451355; 432319, 2451350; 432201, 2451372; 432139, 2451366; 432016, 2451383; 431932, 2451439; 431893, 2451507; 431831, 2451411; 431775, 2451411; 431736, 2451507; 431657, 2451423; 431618, 2451367; 431579, 2451299; 431511, 2451311; 431416, 2451367; 431378, 2451323; 431373, 2451329; 431370, 2451323; 431360, 2451314; 431351, 2451321; 431337, 2451323; 431318, 2451324; 431304, 2451317; 431293, 2451316; 431287, 2451322; 431281, 2451336; 431277, 2451355; 431264, 2451350; 431245, 2451336; 431233, 2451323; 431242, 2451310; 431267, 2451297; 431294, 2451278; 431312, 2451246; 431348, 2451203; 431384, 2451176; 431402, 2451170; 431407, 2451149; 431415, 2451137; 431428, 2451129; 431432, 2451109; 431442, 2451094; 431457, 2451086; 431456, 2451081; 431450, 2451067; 431455, 2451053; 431467, 2451047; 431486, 2451047; 431488, 2451038; 431482, 2451029; 431481, 2451010; 431487, 2450998; 431504, 2450987; 431499, 2450978; 431486, 2450974; 431476, 2450971; 431456, 2450971; 431455, 2450971; 431158, 2451367; 431349, 2451456; 431321, 2451557; 431287, 2451714; 431371, 2451669; 431438, 2451820; 431461, 2451787; 431567, 2451848; 431685, 2451893; 431769, 2451798; 431808, 2451826; 431775, 2451882; 431853, 2451910; 431937, 2451966; 432016, 2451865; 432027, 2451915; 432083, 2451927; 432150, 2451938; 432223, 2451988; 432251, 2452067; 432319, 2452039; 432319, 2452111; 432448, 2452184; 432532, 2452201; 432593, 2452291; 432672, 2452313; 432706, 2452246; 432700, 2452369; return to starting point.

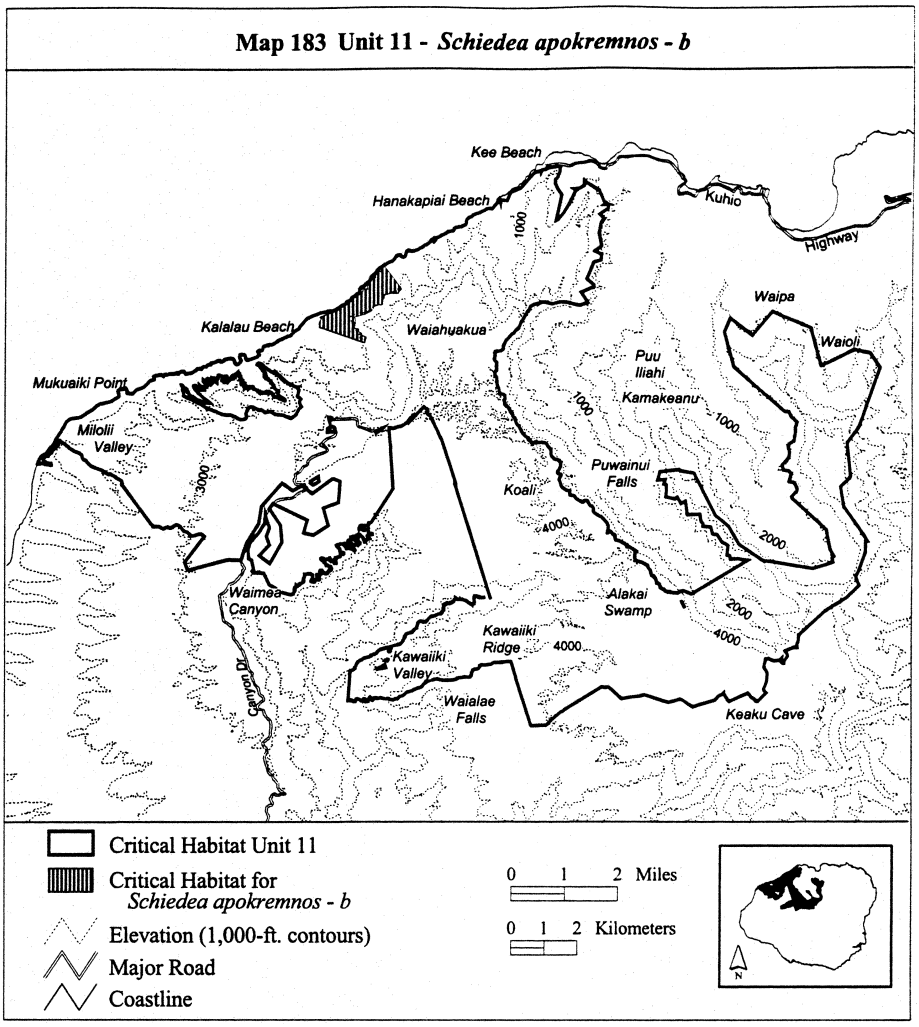
(B) NOTE: Map 182 follows:



(clxxxiii) Kauai 11—*Schiedea apokremnos*—b (187 ha; 463 ac)

(A) Unit consists of the following 49 boundary points: Start at 435094, 2454278; 435593, 2453600; 435509, 2453505; 435509, 2453460; 435374, 2453455; 435279, 2453455; 435184, 2453449; 435077, 2453393; 435083, 2453309; 435038, 2453287; 435015, 2453130; 434982, 2453113; 434892, 2453113; 434774, 2453068; 434713, 2452945; 434601, 2452884; 434483, 2452816; 434180, 2452744; 434203, 2452592; 434169, 2452385; 434309, 2452374; 434309, 2452307; 434388, 2452245; 434371, 2452195; 434533, 2452116; 434488, 2451948; 433115, 2452430; 433092, 2452565; 433171, 2452677; 433132, 2452722; 433311, 2452806; 433704, 2452951; 433743, 2452957; 433788, 2453029; 433995, 2453164; 434085, 2453242; 434186, 2453332; 434354, 2453438; 434421, 2453516; 434427, 2453617; 434561, 2453584; 434567, 2453712; 434657, 2453819; 434780, 2453964; 434802, 2453948; 434802, 2454032; 434903, 2454149; 434971, 2454132; 434993, 2454233; return to starting point.

(B) NOTE: Map 183 follows:

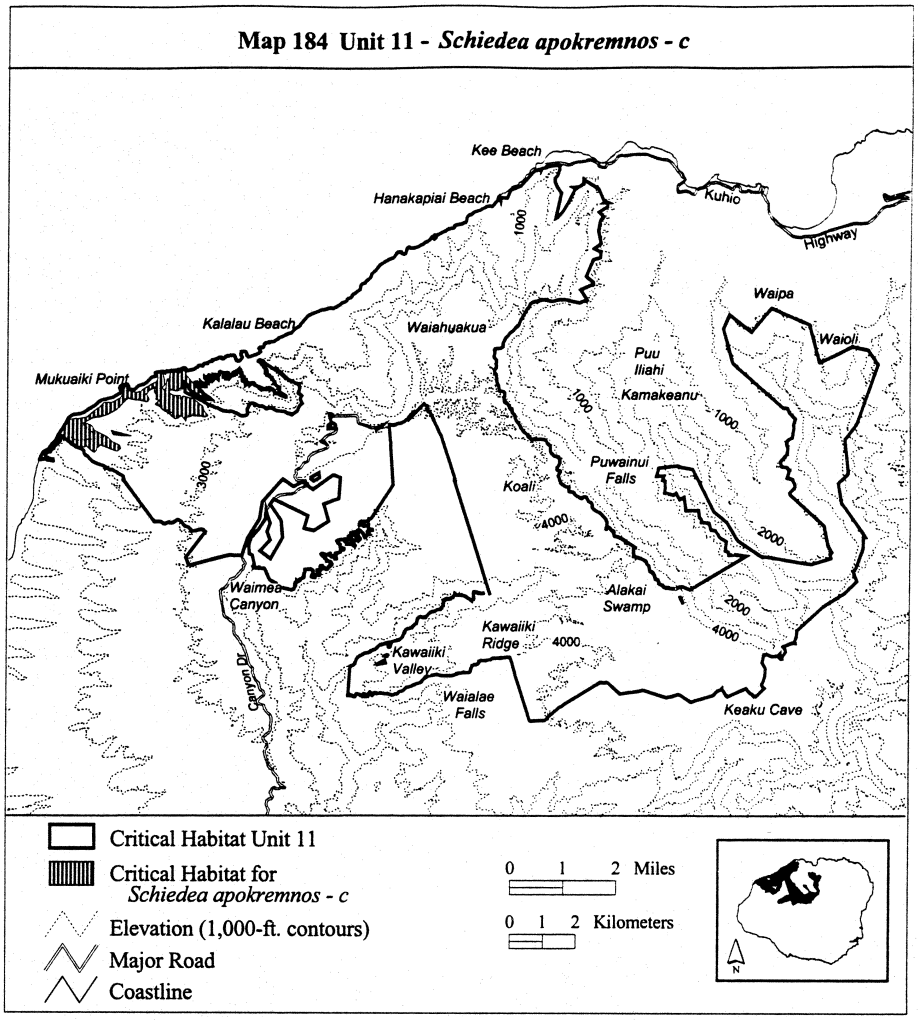


(clxxxiv) Kauai 11—*Schiedea apokremnos*—c (295 ha; 730 ac)

(A) Unit consists of the following 184 boundary points: coastline; 425961, 2449457; 425945, 2449431; 426025, 2449417; 426119, 2449388; 426206, 2449330; 426264, 2449199; 426496, 2449105; 426662, 2449004; 426800, 2448866; 427032, 2448743; 427068, 2448642; 426966, 2448569; 426829, 2448606; 426503, 2448743; 426445, 2448765; 426401, 2448707; 426336, 2448693; 426336, 2448642; 426322, 2448577; 426264, 2448540; 426170, 2448591; 426025, 2448729; 425974, 2448707; 425858, 2448700; 425786, 2448707; 425692, 2448779; 425525, 2448852; 425484, 2448870; 425466, 2448885; 425424, 2448946; 425344, 2449011; 425235, 2449076; 425217, 2449149; 425395, 2449439; 425453, 2449540; 425525, 2449547; 425721, 2449569; 425736, 2449562; 425833, 2449576; 426041, 2449624; 426274, 2449816; 426427, 2449928; 426555, 2450065; 426804, 2450065; 427045, 2450185; 427133, 2450313; 427085, 2450490; 427141, 2450530; 427165, 2450466; 427197, 2450546; 427245, 2450554; 427302, 2450425; 427534, 2450353; 427639, 2450393; 427671, 2450369; 427711, 2450441; 428008, 2450618; 428136, 2450682; 428184, 2450794; 428152, 2450947; 428257,

2450955; 428329, 2450987; 428353, 2450850; 428385, 2450730; 428385, 2450586; 428329, 2450514; 428377, 2450433; 428425, 2450506; 428425, 2450618; 428481, 2450770; 428538, 2450778; 428538, 2450858; 428570, 2450979; 428650, 2451011; 428714, 2450987; 428794, 2450987; 428834, 2450923; 428899, 2451059; 428955, 2451067; 429035, 2450987; 429051, 2450882; 429099, 2450834; 429139, 2450810; 429629, 2450177; 429625, 2450178; 429610, 2450183; 429571, 2450198; 429538, 2450212; 429503, 2450229; 429460, 2450248; 429433, 2450259; 429404, 2450268; 429391, 2450277; 429371, 2450289; 429356, 2450303; 429342, 2450315; 429321, 2450332; 429294, 2450343; 429269, 2450357; 429244, 2450363; 429232, 2450370; 429208, 2450389; 429205, 2450394; 429200, 2450405; 429193, 2450416; 429174, 2450426; 429162, 2450435; 429162, 2450436; 429161, 2450444; 429158, 2450455; 429152, 2450468; 429143, 2450481; 429132, 2450492; 429114, 2450527; 429113, 2450540; 429110, 2450557; 429103, 2450577; 429091, 2450594; 429077, 2450605; 429069, 2450606; 429067, 2450610; 429011, 2450630; 429009, 2450638; 429000, 2450655; 428990, 2450676; 428979, 2450690; 428972, 2450701; 428962, 2450707; 428952, 2450706; 428952, 2450704; 428964, 2450654; 428975, 2450624; 428947, 2450498; 428899, 2450449; 428770, 2450409; 428554, 2450449; 428546, 2450353; 428698, 2450273; 428875, 2450273; 428867, 2450169; 428955, 2450265; 429083, 2450233; 429268, 2450161; 429436, 2450048; 429541, 2449952; 429589, 2449800; 429717, 2449663; 429637, 2449615; 429461, 2449647; 429292, 2449648; 429260, 2449680; 429196, 2449631; 429075, 2449607; 429035, 2449487; 428907, 2449664; 428810, 2449583; 428714, 2449559; 428626, 2449632; 428546, 2449728; 428473, 2449760; 428289, 2449872; 428249, 2449944; 428104, 2449992; 428233, 2450113; 428120, 2450145; 428136, 2450265; 428104, 2450329; 428088, 2450361; 428088, 2450498; 427936, 2450425; 427855, 2450305; 427936, 2450145; 427879, 2450081; 427639, 2450113; 427462, 2450137; 427285, 2450177; 427165, 2450057; 427053, 2449952; 426940, 2449832; 426643, 2449672; 426435, 2449624; 426242, 2449584; 426170, 2449559; 425969, 2449455; coastline.

(B) NOTE: Map 184 follows:

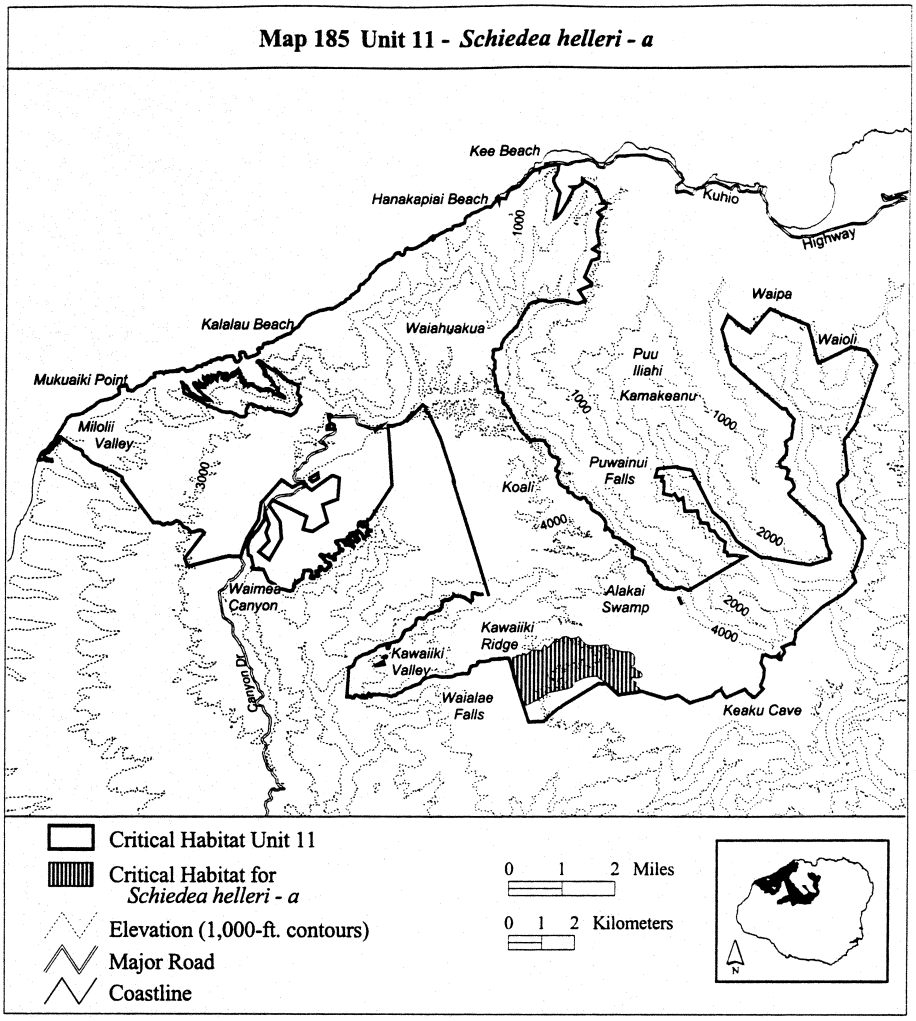


(clxxxv) Kauai 11—*Schiedea helleri*—a (485 ha; 1,198 ac)

(A) Unit consists of the following 100 boundary points: Start at 439125, 2441965; 439082, 2442134; 439060, 2442238; 439038, 2442310; 439065, 2442364; 439202, 2442397; 439262, 2442430; 439514, 2442474; 439586, 2442550; 439651, 2442589; 439788, 2442589; 439876, 2442567; 439925, 2442561; 439969, 2442649; 440018, 2442737; 440035, 2442747; 440073, 2442698; 440073, 2442665; 440150, 2442682; 440248, 2442791; 440363, 2442906; 440407, 2442917; 440468, 2442895; 440577, 2442983; 440654, 2443005; 440774, 2442966; 440769, 2442939; 440862, 2442939; 440988, 2442955; 441059, 2442994; 441141, 2442906; 441207, 2442829; 441306, 2442758; 441415, 2442720; 441651, 2442720; 441810, 2442742; 441908, 2442758; 441968, 2442736; 441996, 2442659; 442111, 2442621; 442341, 2442555; 442434, 2442539; 442598, 2442544; 442659, 2442522; 442659, 2442513; 442735, 2442462; 442779, 2442358; 442757, 2442249; 442757, 2442216; 442763, 2442183; 442752, 2442134; 442697, 2442117; 442675, 2442073; 442708, 2442051; 442768, 2442068; 442796, 2442040; 442850, 2441964; 442933, 2441947; 442987, 2441865; 442987, 2441794; 442954,

2441761; 442883, 2441745; 442779, 2441750; 442719, 2441772; 442681, 2441756; 442681, 2441717; 442730, 2441663; 442812, 2441624; 442823, 2441586; 442812, 2441526; 442856, 2441482; 442916, 2441455; 442954, 2441378; 442982, 2441350; 442631, 2441285; 442287, 2441225; 441900, 2441576; 441842, 2441576; 441832, 2441635; 441804, 2441674; 441733, 2441718; 441667, 2441761; 441651, 2441800; 441519, 2441794; 441251, 2441745; 440977, 2441625; 440917, 2441537; 440884, 2441477; 440725, 2441411; 440511, 2441367; 440265, 2441329; 440194, 2441307; 440018, 2441214; 439892, 2441132; 439761, 2441044; 439553, 2440946; 439492, 2440924; 439405, 2440902; 439076, 2441910; 439120, 2441932; return to starting point.

(B) NOTE: Map 185 follows:

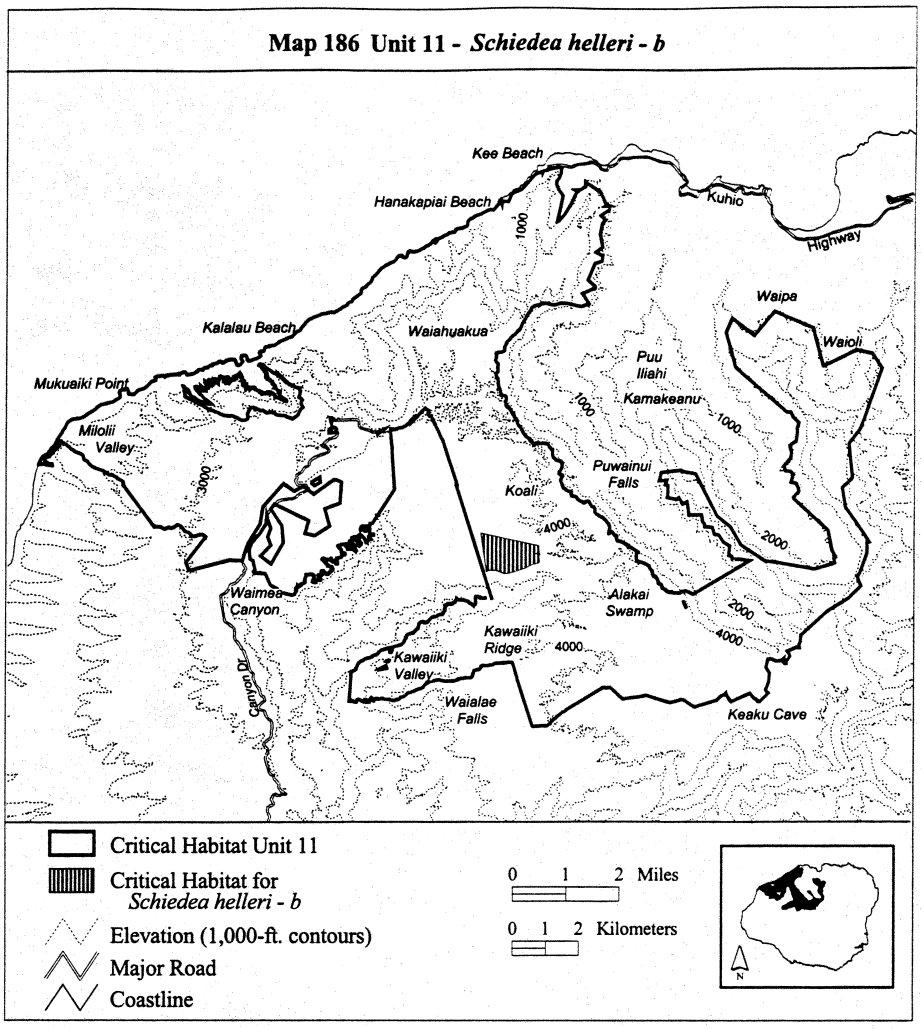


(clxxxvi) Kauai 11—*Schiedea helleri*—b (154 ha; 381 ac)

(A) Unit consists of the following 13 boundary points: Start at 437970, 2446232; 439724, 2445859; 439747, 2445326;

439471, 2445259; 439401, 2445208; 439351, 2445174; 438983, 2445051; 438803, 2445014; 438673, 2445016; 438448, 2445099; 438225, 2445106; 438147, 2445051; 438140, 2445049; return to starting point.

(B) NOTE: Map 186 follows:

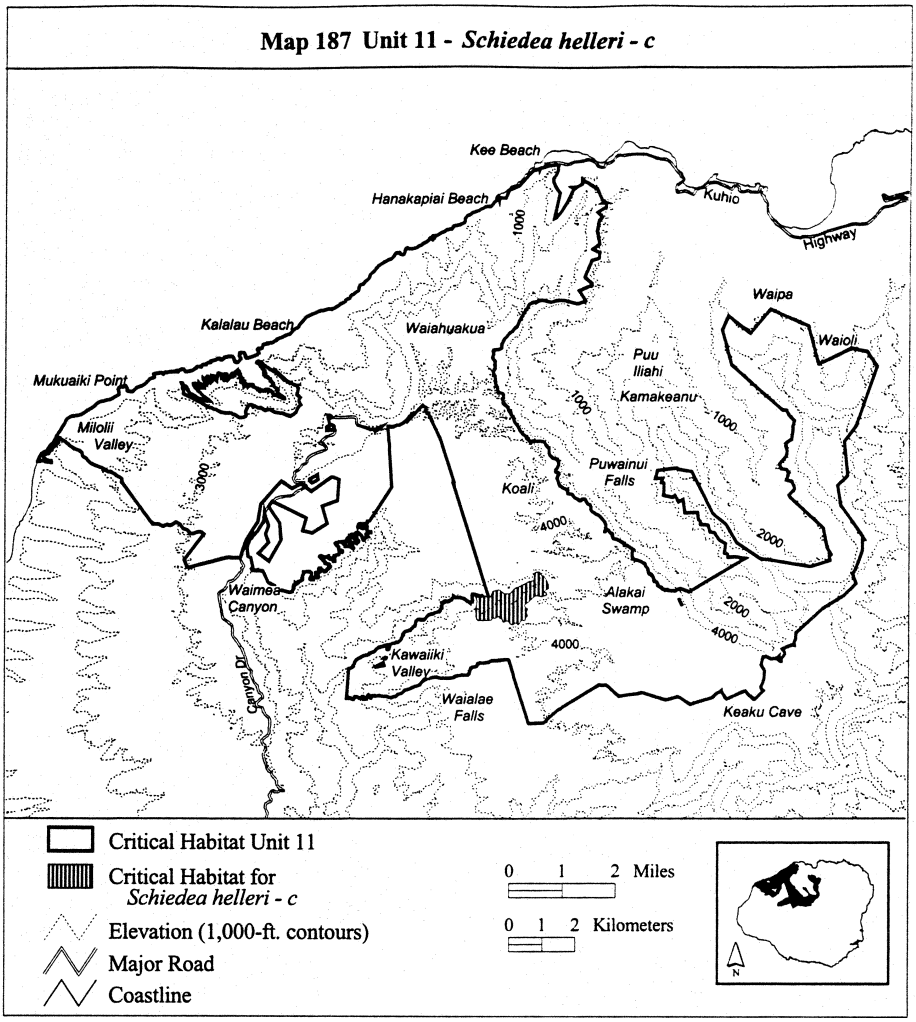


(clxxxvii) Kauai 11—*Schiedea helleri*—c (172 ha; 426 ac)

(A) Unit consists of the following 97 boundary points: Start at 437937, 2443749; 437924, 2443901; 437955, 2444013; 437973, 2444102; 437928, 2444227; 437902, 2444298; 437911, 2444303; 438000, 2444267; 438085, 2444267; 438156, 2444280; 438326, 2444213; 438348, 2444222; 438384, 2444240; 438455, 2444396; 438625, 2444450; 438696, 2444419; 438799, 2444334; 438946, 2444334; 439013, 2444356; 439080, 2444450; 439129, 2444494; 439250, 2444539; 439326, 2444579; 439402, 2444619; 439540, 2444686; 439678, 2444726; 439710, 2444829; 439705, 2444936; 439759, 2444985; 439857, 2445003; 439897,

2444931; 439919, 2444896; 440004, 2444860; 440058, 2444753; 440107, 2444668; 440138, 2444623; 440143, 2444574; 440143, 2444539; 440143, 2444476; 440071, 2444445; 440018, 2444405; 440018, 2444374; 440067, 2444351; 440080, 2444302; 440058, 2444275; 439928, 2444231; 439830, 2444271; 439750, 2444267; 439678, 2444222; 439607, 2444137; 439495, 2444057; 439428, 2444008; 439415, 2443959; 439464, 2443887; 439500, 2443878; 439518, 2443861; 439486, 2443843; 439486, 2443812; 439477, 2443771; 439464, 2443770; 439500, 2443655; 439473, 2443620; 439446, 2443588; 439446, 2443539; 439428, 2443513; 439312, 2443513; 439294, 2443508; 439268, 2443450; 439241, 2443401; 439210, 2443392; 439187, 2443441; 439125, 2443441; 439067, 2443397; 439035, 2443392; 438955, 2443455; 438946, 2443486; 438919, 2443508; 438852, 2443499; 438803, 2443468; 438754, 2443481; 438750, 2443504; 438745, 2443544; 438719, 2443575; 438669, 2443575; 438669, 2443624; 438620, 2443647; 438585, 2443638; 438544, 2443602; 438473, 2443598; 438442, 2443593; 438415, 2443535; 438308, 2443513; 438085, 2443522; 438009, 2443526; 437955, 2443571; 437933, 2443665; 437940, 2443749; return to starting point.

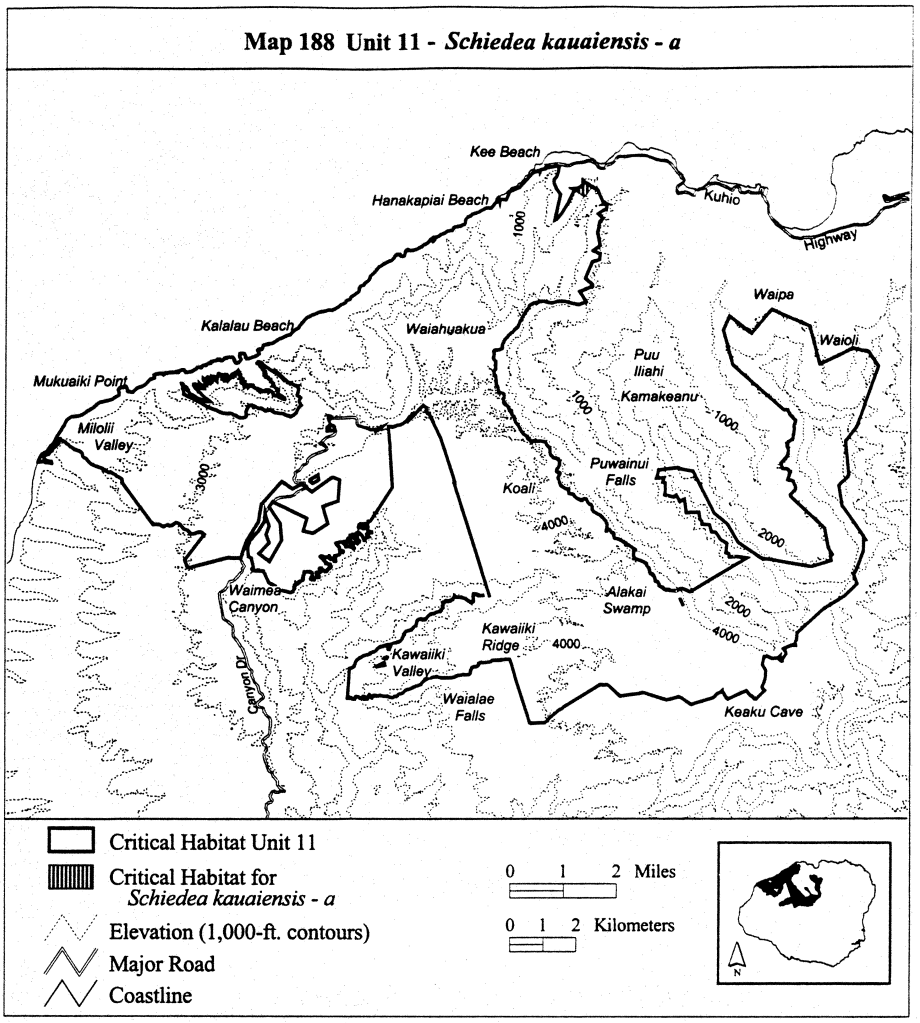
(B) NOTE: Map 187 follows:



(clxxxviii) Kauai 11—*Schiedea kauaiensis*—a (12 ha; 29 ac)

(A) Unit consists of the following 7 boundary points: Start at 441158, 2456345; 440802, 2456603; 441024, 2456625; 441109, 2456674; 441096, 2456831; 441096, 2456842; 441384, 2456663; return to starting point.

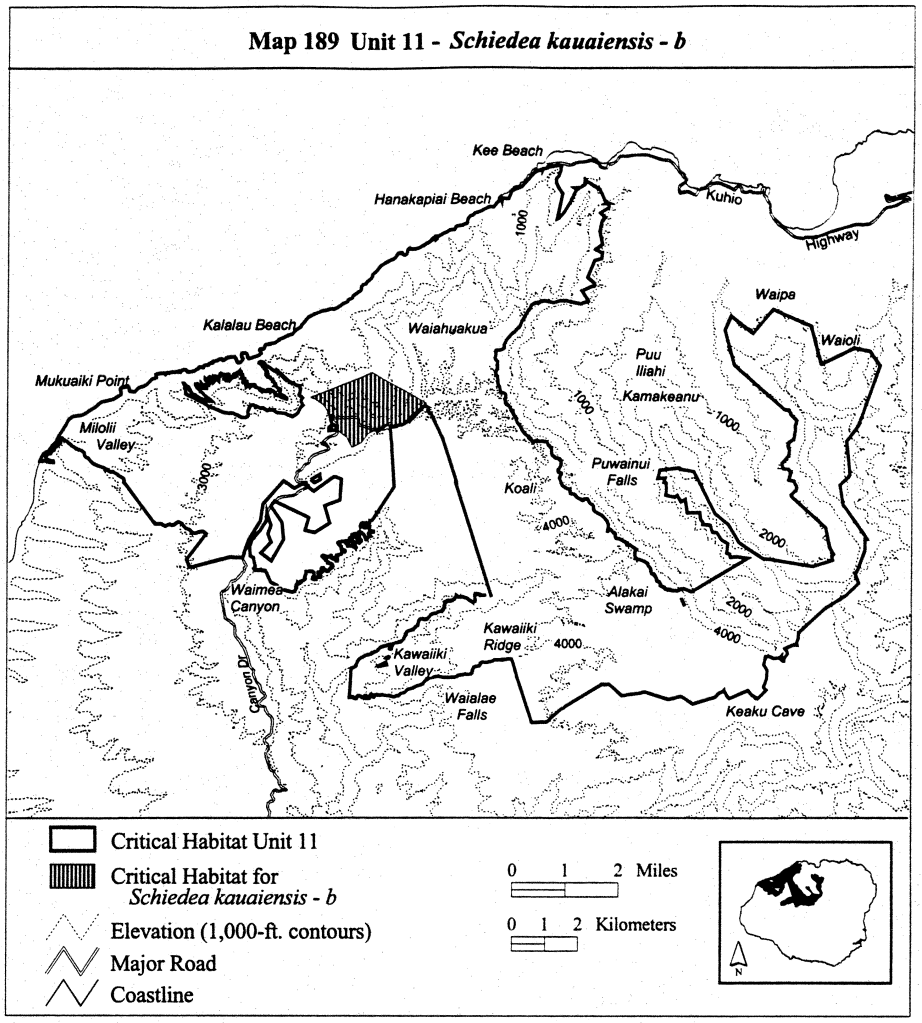
(B) NOTE: Map 188 follows:



(clxxxix) Kauai 11—*Schiedea kauaiensis*—b (394 ha; 974 ac)

(A) Unit consists of the following 47 boundary points: Start at 434833, 2449278; 434824, 2449275; 434569, 2449182; 434357, 2448899; 434343, 2448881; 434145, 2448778; 434076, 2448743; 434061, 2448769; 433970, 2448925; 433903, 2449067; 433746, 2449177; 433650, 2449258; 433659, 2449418; 433575, 2449511; 433473, 2449595; 433461, 2449623; 433480, 2449629; 433484, 2449703; 433460, 2449707; 433443, 2449707; 433442, 2449724; 433348, 2449773; 433304, 2449883; 433184, 2450065; 433006, 2450176; 432940, 2450230; 432816, 2450278; 433712, 2450629; 434347, 2450868; 434676, 2451014; 434924, 2450872; 435714, 2450443; 436323, 2450091; 436203, 2450009; 436203, 2450009; 436201, 2450007; 436194, 2450002; 435573, 2449422; 435549, 2449426; 435517, 2449423; 435501, 2449420; 435498, 2449418; 435177, 2449404; 435010, 2449343; 435011, 2449352; 434881, 2449297; 434833, 2449281; return to starting point.

(B) NOTE: Map 189 follows:

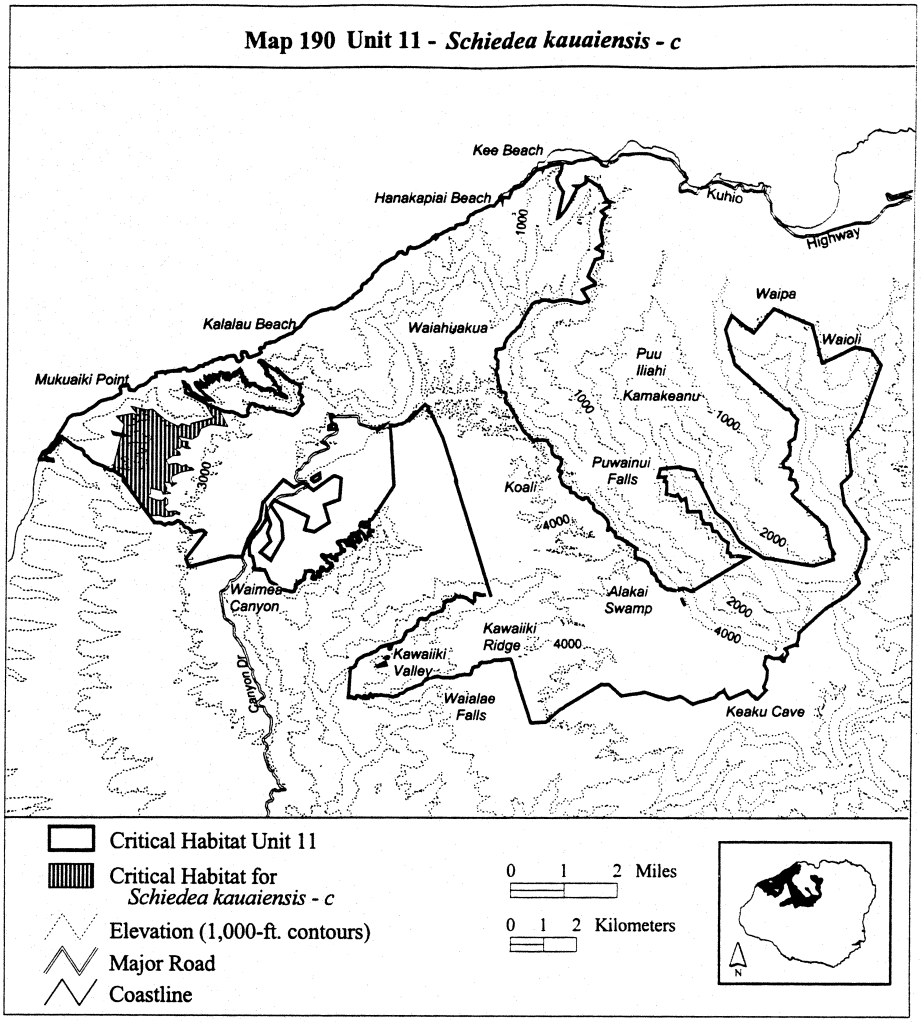


(cxc) Kauai 11—*Schiedea kauaiensis*—c (510 ha; 1,260 ac)

(A) Unit consists of the following 110 boundary points: Start at 426811, 2448002; 427169, 2449411; 426941, 2449644; 427428, 2449744; 427602, 2449670; 427375, 2449950; 427862, 2449850; 428025, 2449872; 428417, 2449538; 428792, 2449348; 428919, 2449417; 429157, 2449343; 429189, 2449432; 429866, 2449617; 429586, 2450082; 429598, 2450077; 429717, 2449996; 429751, 2449978; 429791, 2449963; 429830, 2449956; 429860, 2449947; 429944, 2449910; 429968, 2449904; 430016, 2449884; 430027, 2449878; 430300, 2449348; 429803, 2449411; 429501, 2449279; 429411, 2449047; 429231, 2448941; 428781, 2449052; 428877, 2448948; 428940, 2448908; 429100, 2448884; 429100, 2448820; 429084, 2448749; 429180, 2448669; 429044, 2448677; 428925, 2448749; 428861, 2448677; 428805, 2448685; 428717, 2448637; 428837, 2448565; 428877, 2448470; 428725, 2448462; 428653, 2448462; 428454, 2448318; 428502, 2448174; 428597, 2448198; 428789, 2448214; 428932, 2448119; 429060, 2448182; 429124, 2448087; 429204, 2448095; 429292, 2448023; 429156,

2448007; 428901, 2447951; 428725, 2447863; 428613, 2447816; 428597, 2447736; 428661, 2447616; 428773, 2447616; 428621, 2447520; 428581, 2447624; 428374, 2447648; 428478, 2447465; 428446, 2447369; 428589, 2447313; 428350, 2447281; 428310, 2447393; 427967, 2447465; 427975, 2447369; 427967, 2447289; 427895, 2447289; 427951, 2447186; 428198, 2447098; 428358, 2447098; 428438, 2447193; 428510, 2447122; 428494, 2447098; 428510, 2446994; 428398, 2446906; 428502, 2446755; 428733, 2446787; 428877, 2446723; 428861, 2446667; 428741, 2446707; 428653, 2446635; 428382, 2446595; 428246, 2446651; 427959, 2446635; 427952, 2446615; 427185, 2447661; 427161, 2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 426997, 2447892; 426981, 2447902; 426958, 2447923; 426944, 2447941; 426907, 2447965; 426847, 2447992; 426819, 2447998; return to starting point.

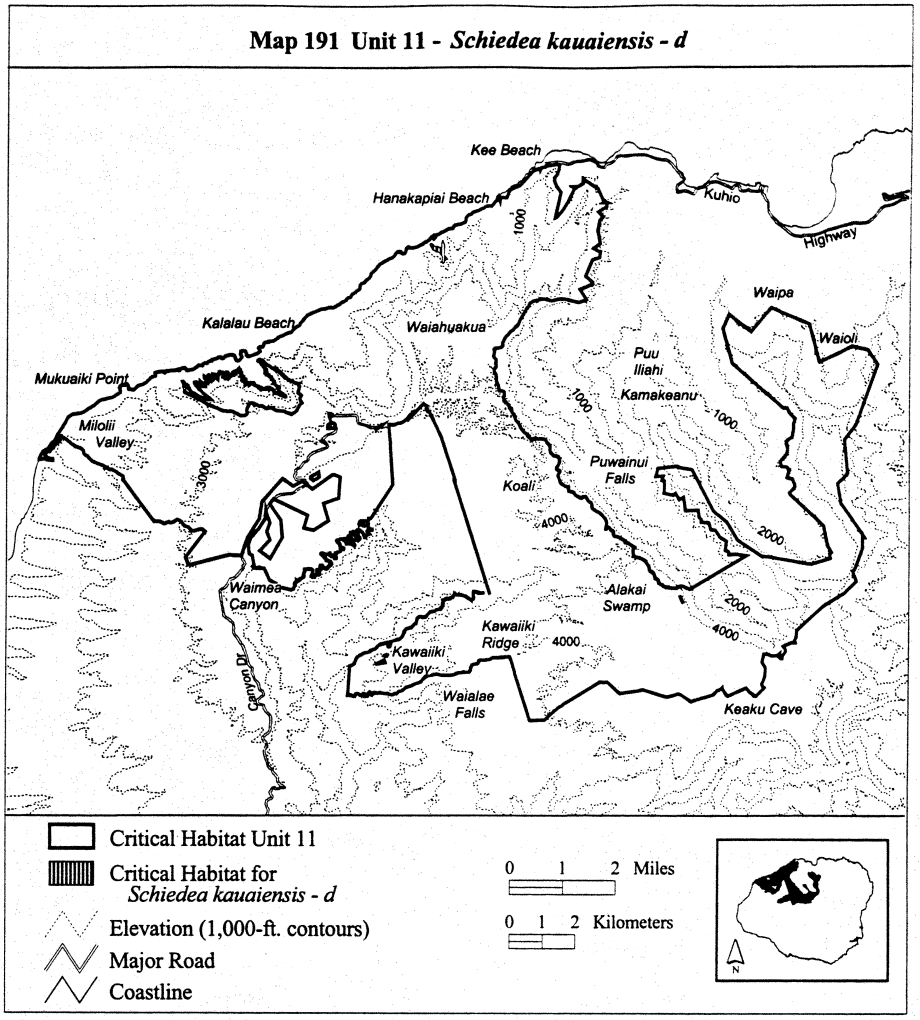
(B) NOTE: Map 190 follows:



(cxci) Kauai 11—*Schiedea kauaiensis*—d (11 ha; 28 ac)

(A) Unit consists of the following 39 boundary points: Start at 436481, 2454892; 436554, 2454840; 436578, 2454805; 436650, 2454788; 436692, 2454795; 436761, 2454736; 436782, 2454761; 436806, 2454757; 436823, 2454836; 436816, 2454895; 436834, 2454968; 436858, 2454971; 436858, 2454912; 436906, 2454847; 436899, 2454633; 436896, 2454554; 436889, 2454509; 436927, 2454474; 437006, 2454412; 437006, 2454395; 436920, 2454384; 436896, 2454298; 436875, 2454271; 436854, 2454271; 436840, 2454322; 436834, 2454426; 436834, 2454485; 436809, 2454523; 436764, 2454567; 436733, 2454616; 436685, 2454619; 436654, 2454619; 436619, 2454650; 436581, 2454681; 436530, 2454688; 436505, 2454737; 436485, 2454781; 436457, 2454833; 436457, 2454861; return to starting point.

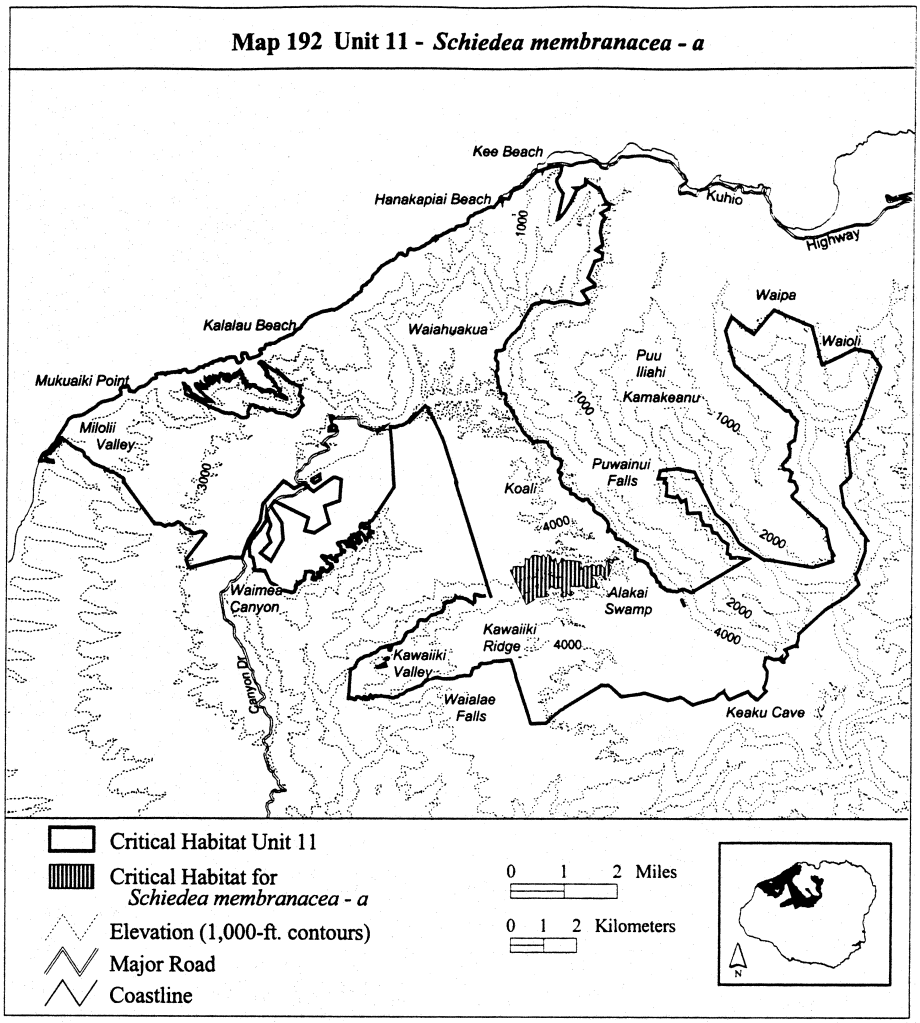
(B) NOTE: Map 191 follows:



(cxcii) Kauai 11—*Schiedea membranacea*—a (251 ha; 620 ac)

(A) Unit consists of the following 85 boundary points: Start at 439181, 2445148; 439301, 2445148; 439351, 2445232; 439351, 2445395; 439471, 2445366; 439563, 2445479; 439711, 2445479; 439817, 2445437; 439895, 2445501; 439951, 2445409; 440008, 2445430; 440022, 2445515; 440128, 2445458; 440149, 2445310; 440269, 2445402; 440312, 2445218; 440404, 2445267; 440439, 2445409; 440517, 2445373; 440545, 2445317; 440623, 2445352; 441025, 2445302; 441054, 2445211; 441018, 2445055; 441145, 2445161; 441216, 2445175; 441280, 2445140; 441372, 2445225; 441527, 2445133; 441527, 2445196; 441647, 2445210; 441746, 2445083; 441796, 2445203; 441788, 2445309; 441894, 2445387; 441979, 2445345; 442057, 2445465; 442198, 2445373; 442057, 2445359; 441993, 2445246; 441894, 2445295; 441866, 2445253; 441951, 2445182; 441951, 2445104; 441880, 2444878; 441803, 2444780; 441739, 2444787; 441640, 2444914; 441548, 2444857; 441400, 2444893; 441357, 2444857; 441485, 2444751; 441612, 2444547; 441591, 2444490; 441442, 2444554; 441343, 2444504; 441188, 2444490; 441117, 2444582; 440969, 2444533; 440714, 2444554; 440714, 2444434; 440835, 2444363; 440736, 2444264; 440594, 2444377; 440594, 2444250; 440432, 2444243; 440432, 2444321; 440531, 2444392; 440446, 2444406; 440446, 2444519; 440283, 2444483; 440142, 2444554; 440057, 2444420; 439980, 2444378; 440078, 2444300; 440022, 2444243; 439874, 2444229; 439704, 2444236; 439640, 2444145; 439492, 2444074; 439400, 2444003; 438884, 2445049; 438983, 2445042; 438983, 2445141; 439139, 2445169; return to starting point.

(B) NOTE: Map 192 follows:

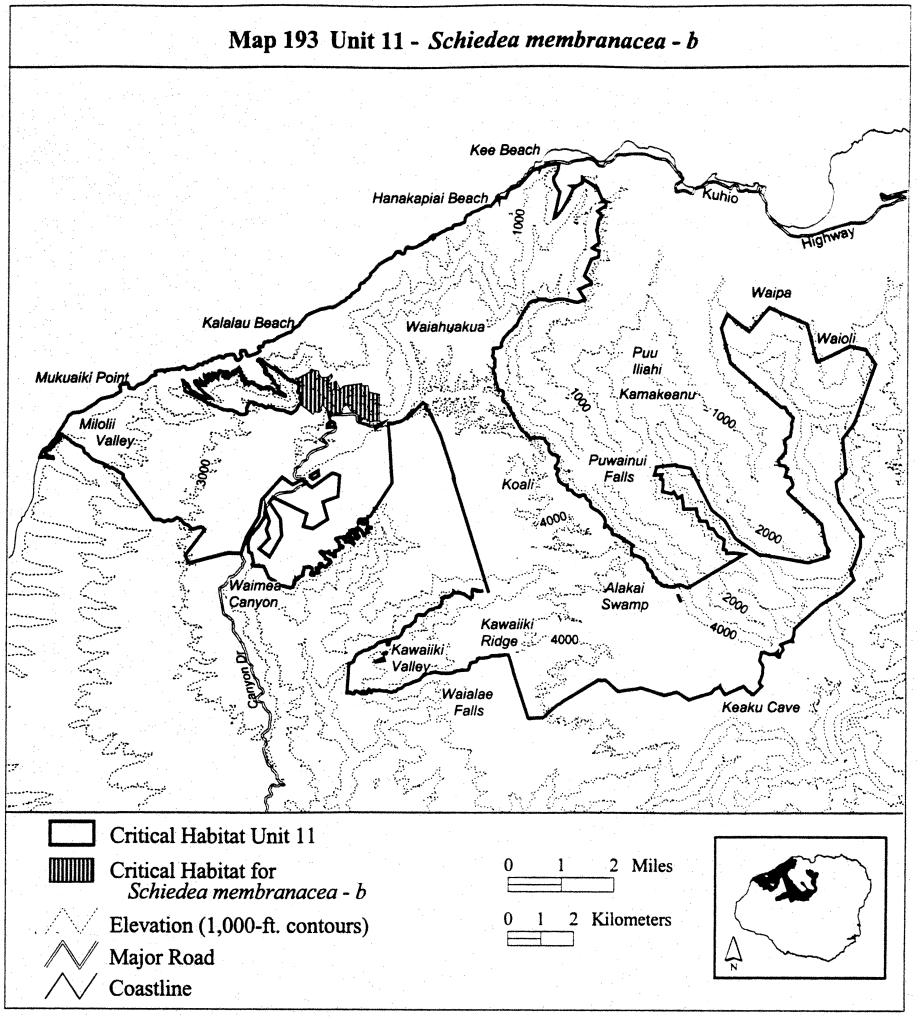


(cxciii) Kauai 11—*Schiedea membranacea*—b (234 ha; 579 ac)

(A) Unit consists of the following 73 boundary points: Start at 432751, 2449809; 432525, 2449982; 432579, 2450036; 432551, 2450083; 432523, 2450130; 432523, 2450182; 432565, 2450262; 432523, 2450304; 432475, 2450313; 432452, 2450337; 432461, 2450375; 432480, 2450426; 432490, 2450478; 432501, 2450529; 432494, 2450543; 432477, 2450580; 432468, 2450593; 432464, 2450611; 432465, 2450623; 432450, 2450624; 432408, 2450635; 432380, 2450644; 432335, 2450666; 432306, 2450682; 432952, 2451018; 433092, 2450986; 433100, 2450920; 433191, 2450796; 433323, 2450788; 433380, 2450813; 433471, 2450895; 433528, 2450805; 433397, 2450640; 433372, 2450550; 433495, 2450640; 433479, 2450443; 433495, 2450369; 433569, 2450435; 433561, 2450632; 433635, 2450681; 433685, 2450566; 433750, 2450410; 433849, 2450517; 434162, 2450566; 434401, 2450615; 434425, 2450525; 434606, 2450525; 434639, 2450327; 434952, 2450270; 434952, 2449497; 434968, 2449447; 434812, 2449447; 434688, 2449421; 434573, 2449489; 434461, 2449513; 434354,

2449390; 434322, 2449449; 434310, 2449628; 434251, 2449664; 434076, 2449767; 433964, 2449950; 433873, 2449910; 433808, 2449826; 433817, 2449668; 433535, 2449656; 433372, 2449777; 433285, 2449871; 433199, 2449958; 433166, 2449867; 433183, 2449769; 433094, 2449708; 432985, 2449744; 432952, 2449654; return to starting point.

(B) NOTE: Map 193 follows:

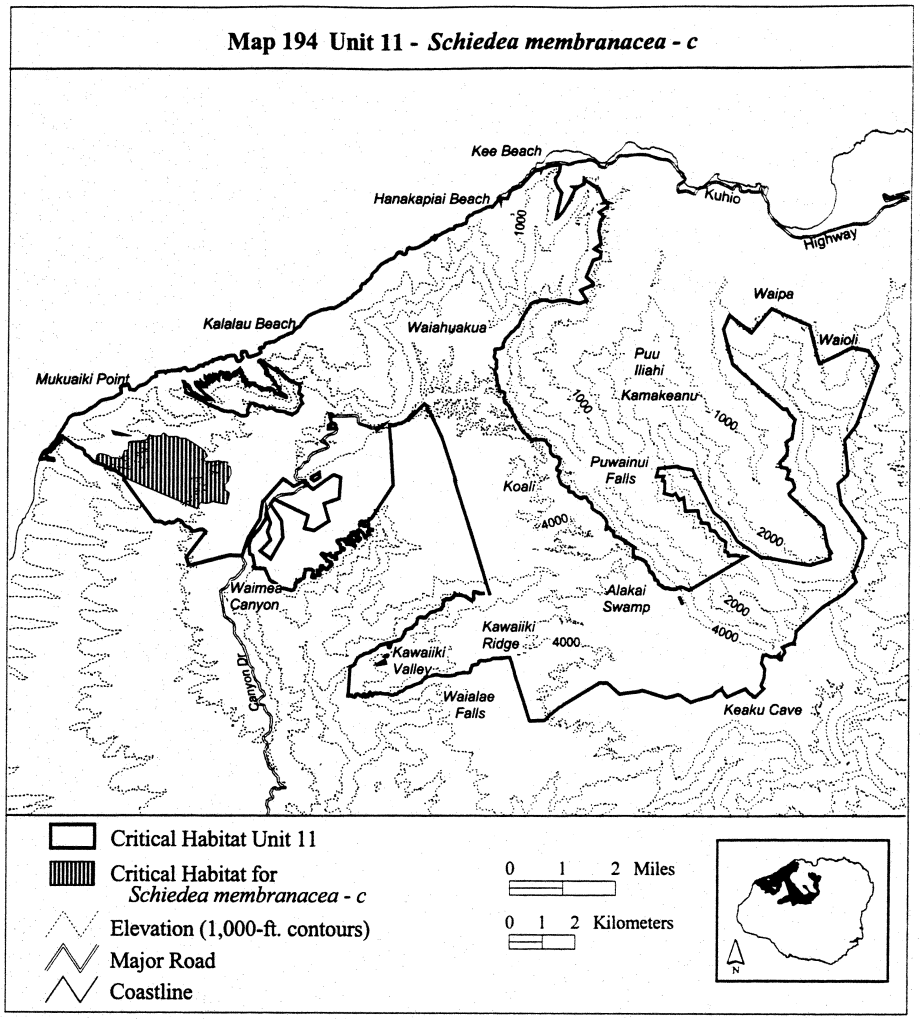


(cxciv) Kauai 11—*Schiedea membranacea*—c (527 ha; 1,303 ac)

(A) Unit consists of the following 95 boundary points: Start at 429500, 2447004; 429408, 2446809; 427175, 2447761; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 427014, 2447882; 427019, 2447905; 426996, 2447928; 426906, 2448039; 426874, 2448050; 426752, 2448039; 426667, 2448060; 426648, 2448068; 426613, 2448093; 426561, 2448116; 426560, 2448116; 426491, 2448177; 426375, 2448225; 426316, 2448252; 426316, 2448342; 426321, 2448427; 426380,

2448475; 426438, 2448496; 426550, 2448475; 426699, 2448421; 426784, 2448374; 427049, 2448347; 427102, 2448379; 427166, 2448575; 427170, 2448577; 427171, 2448582; 427181, 2448581; 427241, 2448602; 427288, 2448618; 427294, 2448767; 427288, 2448830; 427368, 2448873; 427655, 2448889; 427830, 2448915; 427873, 2448968; 427899, 2449027; 427979, 2449048; 428059, 2449037; 428106, 2449027; 428282, 2449032; 428335, 2449117; 428377, 2449133; 428415, 2449101; 428478, 2449037; 428537, 2449006; 428670, 2449006; 428755, 2449021; 428824, 2448995; 428845, 2448968; 428999, 2448968; 429063, 2448942; 429350, 2448766; 429514, 2448660; 429642, 2448549; 429690, 2448432; 429658, 2448384; 429589, 2448336; 429605, 2448283; 429769, 2448246; 429844, 2448257; 430024, 2448283; 430088, 2448283; 430120, 2448235; 430152, 2448235; 430184, 2448257; 430322, 2448225; 430295, 2448166; 430290, 2448140; 430391, 2448092; 430412, 2447906; 430412, 2447848; 430348, 2447747; 430322, 2447657; 430258, 2447588; 430232, 2447529; 430237, 2447396; 430354, 2447317; 430348, 2447221; 430295, 2446966; 430242, 2446961; 430093, 2446998; 429977, 2447014; 429881, 2447041; 429764, 2446993; 429647, 2446982; 429514, 2447003; return to starting point.

(B) NOTE: Map 194 follows:

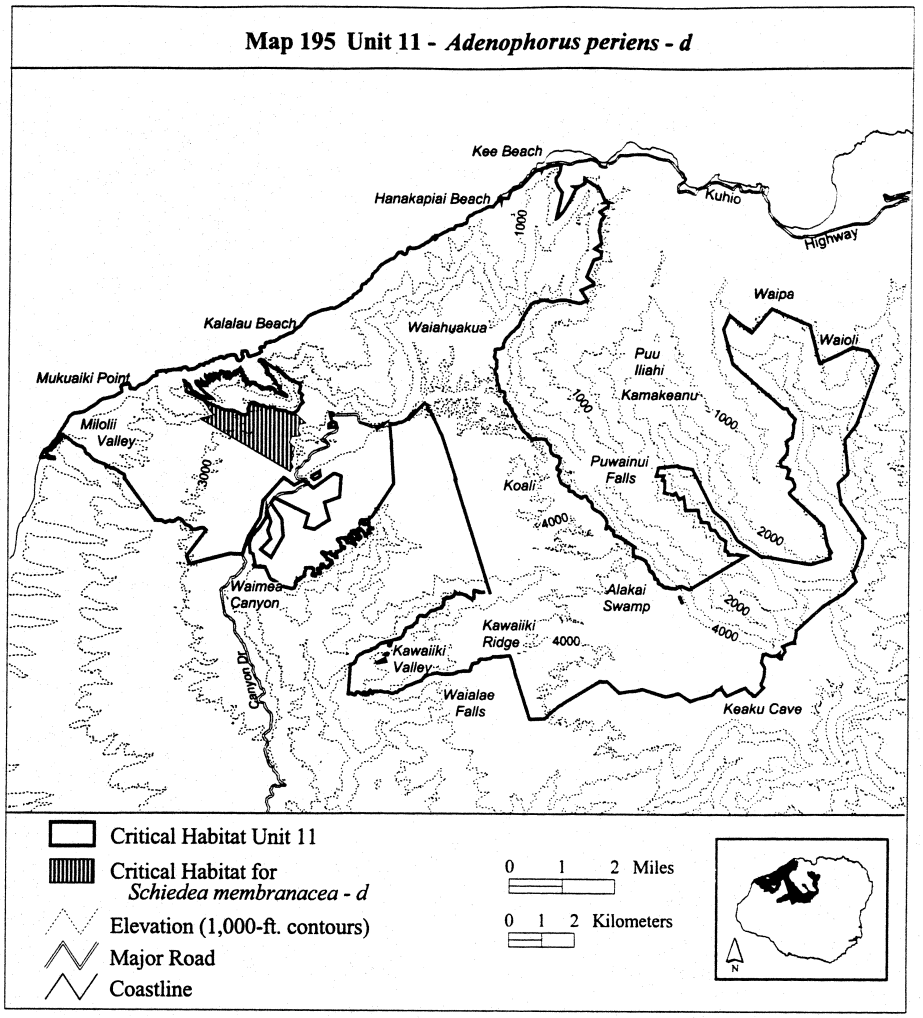


(cxcv) Kauai 11—*Schiedea membranacea*—d (327 ha; 809 ac)

(A) Unit consists of the following 78 boundary points: Start at 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432217, 2449712; 432259, 2449679; 432313, 2449721; 432664, 2449391; 432475, 2449358; 432426, 2449177; 432475, 2449062; 432514, 2449029; 432472, 2448986; 432450, 2448988; 432236, 2448980; 432162, 2448799; 432230, 2448747; 432226, 2448740; 432334, 2448663; 432269, 2448470; 432310, 2448387; 432261, 2448338; 432261, 2448264; 432220, 2448239; 432228, 2448165; 432286, 2448050; 432228, 2447976; 432212, 2447910; 429447, 2449531; 429866, 2449654; 429710,

2449811; 429644, 2449942; 429480, 2450139; 429489, 2450138; 429576, 2450092; 429717, 2449996; 429751, 2449978; 429791, 2449963; 429830, 2449956; 429860, 2449947; 429944, 2449910; 429968, 2449904; 430016, 2449884; 430068, 2449856; 430172, 2449815; 430207, 2449804; 430261, 2449795; 430317, 2449781; 430340, 2449778; 430365, 2449787; 430392, 2449798; 430408, 2449802; 430410, 2449802; return to starting point.

(B) NOTE: Map 195 follows:

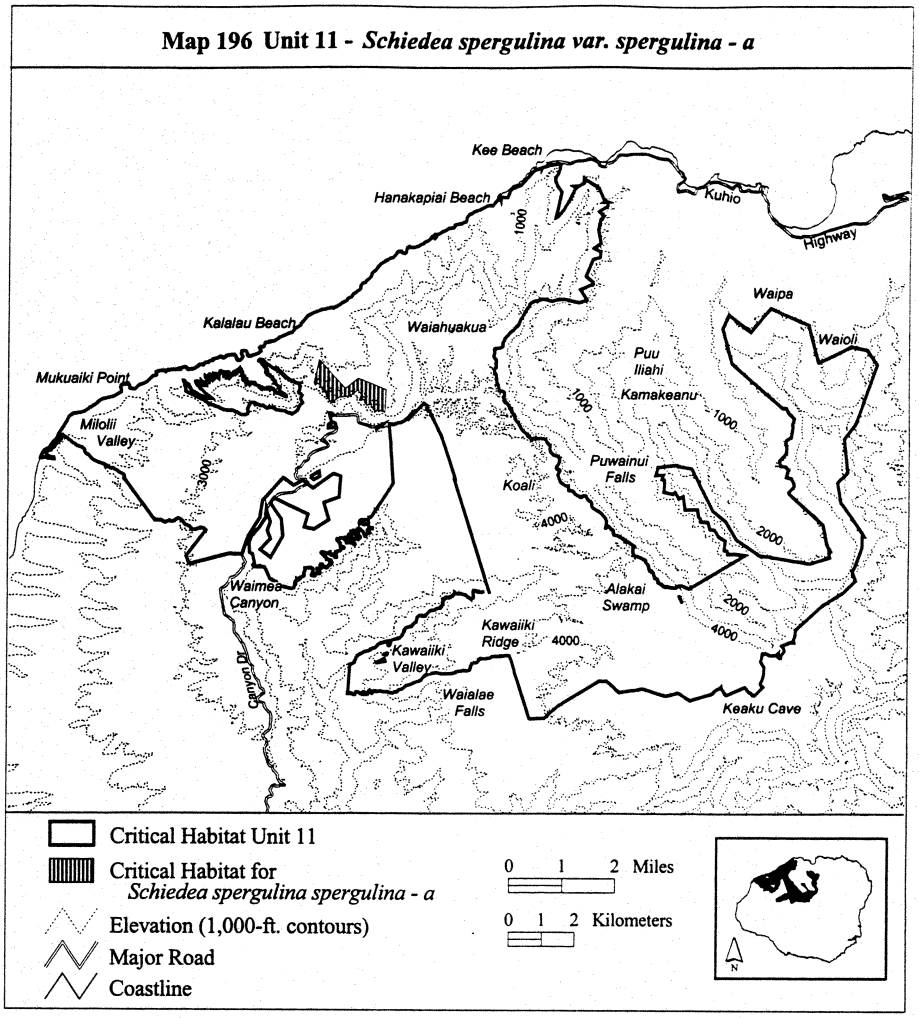


(cxcvi) Kauai 11—*Schiedea spergulina* var. *spergulina*—a (131 ha; 323 ac)

(A) Unit consists of the following 48 boundary points: Start at 432924, 2450644; 433080, 2451343; 433887, 2450474; 434285, 2450789; 435124, 2450447; 435088, 2449734; 434974, 2449796; 434896, 2449749; 434891, 2449796; 434850, 2449796; 434777, 2449718; 434777, 2449827; 434731, 2449827; 434725, 2449889; 434663, 2449889; 434684, 2449998; 434534, 2449951; 434534, 2450013; 434524, 2450039; 434482, 2450018; 434472,

2450096; 434441, 2450132; 434368, 2450101; 434317, 2450106; 434379, 2450323; 434291, 2450354; 434296, 2450396; 434260, 2450432; 434027, 2450241; 433706, 2450194; 433556, 2450112; 433571, 2450029; 433494, 2450050; 433411, 2450070; 433302, 2450251; 433338, 2450303; 433276, 2450298; 433266, 2450344; 433312, 2450365; 433307, 2450391; 433178, 2450355; 433240, 2450463; 433162, 2450448; 433183, 2450500; 433080, 2450489; 433111, 2450593; 433028, 2450629; 432955, 2450557; return to starting point.

(B) NOTE: Map 196 follows:



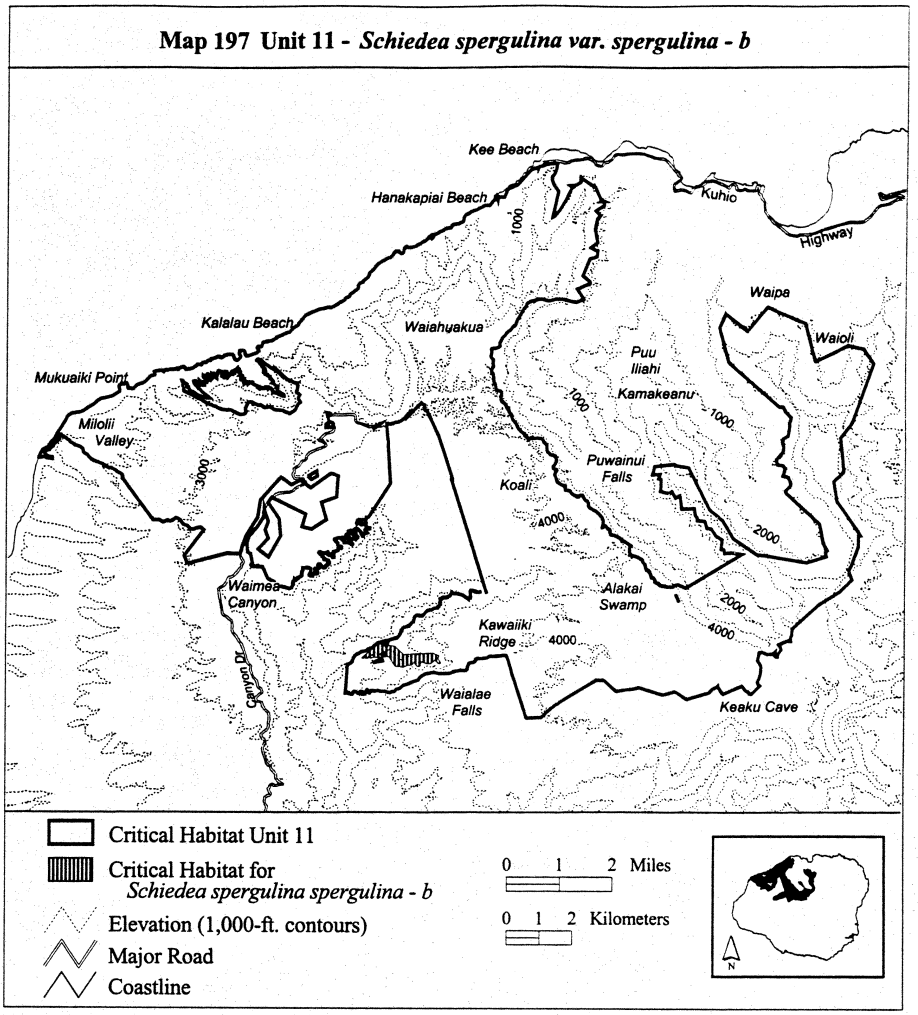
(cxcvii) Kauai 11—*Schiedea spergulina* var. *spergulina*—b (78 ha; 191 ac)

(A) Unit consists of the following 27 boundary points: Start at 435290, 2442650; 435520, 2442618; 435796, 2442364; 436701, 2442400; 436882, 2442335; 436853, 2442241; 436940, 2442103; 436868, 2442082; 436752, 2442198; 436636, 2442089; 436506,

2442082; 436332, 2442154; 436303, 2441988; 436223, 2441988; 436179, 2442031; 436122, 2442125; 436064, 2442053; 435911, 2442024; 435781, 2441966; 435658, 2441995; 435542, 2441995; 435346, 2442306; 434520, 2442249; 435006, 2442690; 435235, 2442658; 435237, 2442643; 435284, 2442631; return to starting point.

(B) Excluding 1 area bounded by the following 4 points (0 ha, 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

(C) NOTE: Map 197 follows:



(cxcviii) Kauai 11—*Schiedea stellarioides*—a (1,260 ha; 3,112 ac)

(A) Unit consists of the following 568 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530,

2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 438315, 2444274; 438323, 2444270; 438355, 2444421; 438442, 2444561; 438420, 2444670; 438420, 2444745; 438528, 2444864; 438680, 2444972; 438907, 2445004; 438907, 2445080; 438993, 2445145; 439156, 2445145; 439296, 2445177; 439339, 2445253; 439545, 2445491; 439783, 2445458; 440107, 2445318; 440150, 2445285; 440334, 2445307; 440410, 2445263; 440431, 2445231; 440594, 2445253; 440691, 2445339; 440756, 2445371; 440907, 2445317; 441048, 2445252; 441113, 2445242; 441221, 2445274; 441361, 2445306; 441513, 2445339; 441707, 2445328; 441848, 2445198; 442075, 2445112; 442053, 2445025; 441988, 2444906; 441891, 2444852; 441740, 2444744; 441664, 2444701; 441697, 2444582; 441740, 2444463; 441675, 2444420; 441513, 2444420; 441069, 2444453; 440626, 2444442; 440626, 2444356; 440723, 2444291; 440896, 2444193; 440886, 2444183; 440723, 2444204; 440410, 2444280; 440237, 2444258; 440161, 2444248; 440075, 2444183; 440075, 2444064; 440183, 2443988; 440280, 2443988; 440323, 2443902; 440356, 2443826; 440453, 2443772; 440486, 2443696; 440464, 2443653; 440291, 2443567; 440096, 2443577; 439934, 2443459; 439718, 2443415; 439523, 2443340; 439274, 2443340; 438961, 2443405; 438745, 2443480; 438582, 2443524; 438377, 2443491; 438269, 2443372; 438334, 2443189; 438485, 2443070; 438615, 2443081; 438669, 2443048; 438669,

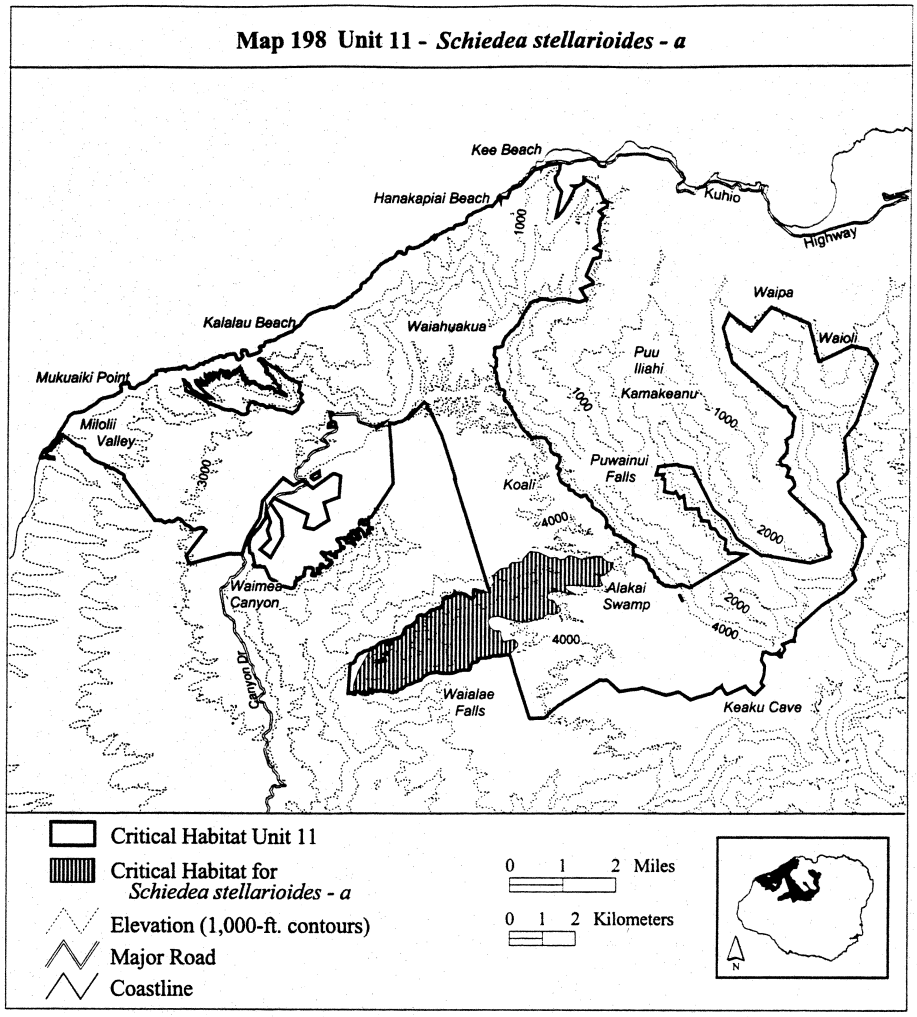
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(B) Excluding 2 areas:

(*1*) Bounded by the following 3 points (1 ha; 3 ac): Start at 435132, 2442248; 435160, 2442164; 434848, 2442098; return to starting point; and

(*2*) Bounded by the following 4 points (0 ha; 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

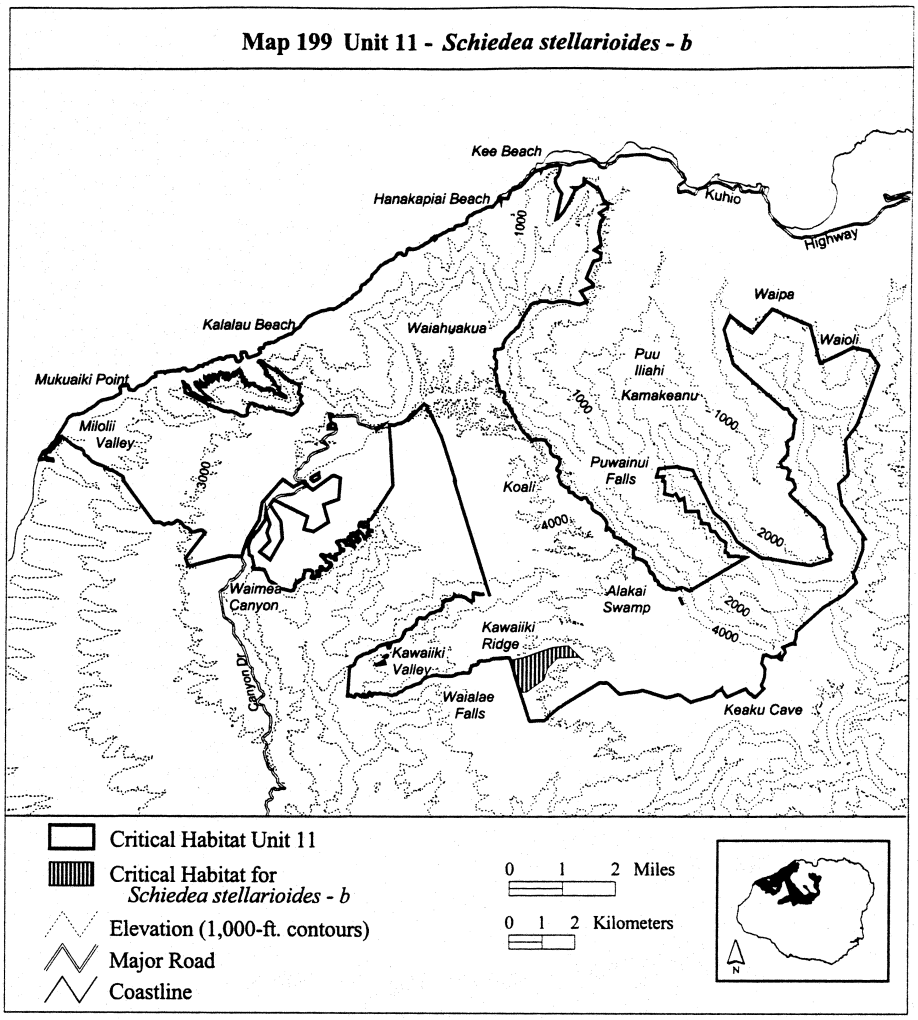
(C) NOTE: Map 198 follows:



(cxcix) Kauai 11—*Schiedea stellarioides*—b (129 ha; 320 ac)

(A) Unit consists of the following 10 boundary points: Start at 438960, 2442270; 439367, 2442351; 440212, 2442656; 440725, 2442711; 441086, 2442365; 440393, 2442323; 440088, 2442032; 439991, 2441672; 439455, 2441287; 439273, 2441296; return to starting point.

(B) NOTE: Map 199 follows:



(cc) Kauai 11—*Solanum sandwicense*—a (2,398 ha; 5,924 ac)

(A) Unit consists of the following 544 boundary points: Start at 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432217, 2449712; 432259, 2449679; 432344, 2449744; 432419, 2449806; 432471, 2449904; 432504, 2449961; 432579, 2450036; 432551, 2450083; 432523, 2450130; 432523, 2450182; 432565, 2450262; 432523, 2450304; 432475, 2450313; 432452, 2450337; 432461, 2450375; 432480, 2450426; 432490, 2450478; 432501, 2450529; 432504, 2450523; 432515, 2450503; 432524, 2450478; 433149, 2450124; 433338, 2449790; 434410, 2449639; 434833, 2449278; 434834, 2449277; 434839, 2449258; 434848, 2449239; 434872, 2449246; 435266, 2448909; 435282, 2448685; 435360,

2447538; 434700, 2446542; 434681, 2446520; 434675, 2446517; 434664, 2446523; 434636, 2446529; 434623, 2446526; 434620, 2446512; 434628, 2446479; 434625, 2446467; 434618, 2446459; 434582, 2446443; 434558, 2446439; 434533, 2446441; 434514, 2446449; 434500, 2446448; 434471, 2446422; 434457, 2446416; 434447, 2446420; 434434, 2446428; 434423, 2446441; 434416, 2446441; 434403, 2446435; 434400, 2446429; 434386, 2446417; 434371, 2446414; 434363, 2446417; 434355, 2446417; 434351, 2446414; 434333, 2446375; 434335, 2446361; 434340, 2446352; 434353, 2446346; 434368, 2446352; 434403, 2446359; 434411, 2446354; 434417, 2446344; 434421, 2446327; 434434, 2446306; 434469, 2446291; 434479, 2446288; 434499, 2446297; 434514, 2446317; 434528, 2446325; 434559, 2446322; 434568, 2446320; 434585, 2446324; 434595, 2446329; 434614, 2446349; 434620, 2446349; 434621, 2446342; 434611, 2446321; 434609, 2446262; 434614, 2446240; 434625, 2446221; 434647, 2446210; 434667, 2446205; 434694, 2446206; 434724, 2446208; 434733, 2446205; 434736, 2446194; 434735, 2446180; 434730, 2446170; 434717, 2446164; 434599, 2446152; 434582, 2446145; 434576, 2446128; 434582, 2446114; 434603, 2446087; 434642, 2446062; 434647, 2446055; 434645, 2446046; 434604, 2446029; 434573, 2446022; 434556, 2446012; 434535, 2445977; 434525, 2445949; 434504, 2445939; 434494, 2445951; 434477, 2446004; 434469, 2446036; 434437, 2446093; 434413, 2446116; 434381, 2446163; 434367, 2446175; 434336, 2446186; 434315, 2446192; 434302, 2446189; 434283, 2446179; 434270, 2446164; 434263, 2446144; 434271, 2446125; 434305, 2446079; 434308, 2446060; 434307, 2446049; 434301, 2446035; 434289, 2446026; 434273, 2446018; 434244, 2446023; 434235, 2446033; 434230, 2446049; 434232, 2446066; 434225, 2446086; 434215, 2446102; 434204, 2446112; 434185, 2446122; 434162, 2446123; 434150, 2446121; 434115, 2446106; 434097, 2446102; 434080, 2446091; 434072, 2446078; 434077, 2446064; 434091, 2446053; 434110, 2446044; 434160, 2446032; 434179, 2446026; 434195, 2446010; 434209, 2445991; 434227, 2445977; 434247, 2445969; 434271, 2445965; 434324, 2445970; 434336, 2445961; 434340, 2445952; 434341, 2445940; 434355, 2445930; 434361, 2445922; 434358, 2445902; 434337, 2445880; 434326, 2445859; 434311, 2445845; 434298, 2445842; 434283, 2445847; 434262, 2445859; 434230, 2445868; 434184, 2445859; 434167, 2445860; 434147, 2445871; 434110, 2445908; 434089, 2445947; 434074, 2445985; 434062, 2445995; 434039, 2446003; 434031, 2446004; 434014, 2445998; 434001, 2445989; 433994, 2445980; 434002, 2445963; 434016, 2445942; 434022, 2445924; 434035, 2445898; 434077, 2445846; 434186, 2445754; 434202, 2445733; 434205, 2445721; 434204, 2445697; 434190, 2445688; 434158, 2445694; 434142, 2445707; 434130, 2445726; 434108, 2445744; 434086, 2445750; 434053, 2445750; 434008, 2445764; 433990, 2445763; 433971, 2445751; 433955, 2445752; 433944, 2445759; 433946, 2445837; 433944, 2445864; 433927, 2445891; 433905, 2445911; 433891, 2445905; 433882, 2445891; 433875, 2445862; 433870, 2445857; 433859, 2445859; 433850, 2445878; 433837, 2445891; 433826, 2445896; 433791, 2445897; 433775, 2445901; 433758, 2445896; 433730, 2445871; 433708, 2445866; 433689, 2445873; 433675, 2445873; 433653, 2445857; 433650, 2445838; 433656, 2445820; 433690, 2445778; 433718, 2445762; 433735, 2445756; 433750, 2445748; 433756, 2445723; 433755, 2445706; 433759, 2445665; 433764, 2445656; 433781, 2445647; 433824, 2445642; 433851, 2445636; 433868, 2445628; 433879, 2445615; 433881, 2445595; 433867, 2445582; 433854, 2445582; 433827, 2445587; 433805, 2445594; 433787, 2445596; 433772, 2445590; 433763, 2445575; 433770, 2445538; 433773, 2445524; 433772, 2445519; 433762, 2445509; 433749, 2445500; 433732, 2445496; 433717, 2445497; 433708, 2445498; 433696, 2445499; 433686, 2445494; 433668, 2445480; 433655, 2445475; 433647, 2445474; 433635, 2445470; 433628, 2445467; 433621, 2445463; 433616, 2445456; 433609, 2445448; 433604, 2445445; 433598, 2445437; 433595, 2445433; 433595, 2445428; 433599, 2445420; 433611, 2445391; 433614, 2445376; 433620, 2445365; 433629, 2445356; 433637, 2445346; 433639, 2445336; 433641, 2445327; 433641, 2445319; 433637, 2445311; 433625, 2445307; 433619, 2445305; 433611, 2445307; 433604, 2445309; 433600, 2445313; 433591, 2445329; 433586, 2445341; 433582, 2445346; 433577, 2445353; 433573, 2445358; 433568, 2445366; 433567, 2445374; 433565, 2445381; 433564, 2445388; 433563, 2445395; 433562, 2445398; 433561, 2445399; 433556, 2445403; 433548, 2445403; 433527, 2445398; 433494, 2445388; 433477, 2445386; 433469, 2445388; 433463, 2445394; 433459, 2445402; 433456, 2445410; 433455, 2445416; 433452, 2445424; 433452, 2445436; 433451, 2445445; 433450, 2445450; 433449, 2445457; 433448, 2445461; 433446, 2445465; 433442, 2445467; 433438, 2445470; 433431, 2445468; 433426, 2445464; 433420, 2445459; 433413, 2445452; 433405, 2445444; 433396, 2445440; 433373, 2445432; 433344, 2445421; 433332, 2445422; 433317, 2445424; 433307, 2445428; 433288, 2445435; 433272, 2445440; 433260, 2445444; 433247, 2445450; 433242,

2445455; 433237, 2445459; 433233, 2445462; 433226, 2445466; 433221, 2445464; 433201, 2445464; 433193, 2445466; 433187, 2445464; 433181, 2445460; 433179, 2445455; 433179, 2445445; 433180, 2445437; 433192, 2445424; 433199, 2445416; 433225, 2445390; 433249, 2445376; 433262, 2445366; 433268, 2445357; 433274, 2445351; 433279, 2445342; 433287, 2445336; 433298, 2445333; 433312, 2445324; 433316, 2445313; 433323, 2445297; 433334, 2445273; 433342, 2445263; 433353, 2445252; 433362, 2445247; 433375, 2445242; 433386, 2445238; 433401, 2445232; 433411, 2445227; 433422, 2445223; 433432, 2445221; 433450, 2445220; 433460, 2445216; 433471, 2445210; 433482, 2445197; 433506, 2445166; 433514, 2445158; 433515, 2445153; 433512, 2445142; 433510, 2445136; 433508, 2445133; 433505, 2445128; 433500, 2445122; 433495, 2445122; 433487, 2445127; 433480, 2445134; 433474, 2445142; 433469, 2445149; 433467, 2445153; 433464, 2445154; 433457, 2445154; 433455, 2445147; 433452, 2445137; 433446, 2445124; 433444, 2445112; 433441, 2445104; 433438, 2445101; 433432, 2445099; 433423, 2445093; 433413, 2445082; 433395, 2445069; 433387, 2445061; 433382, 2445052; 433380, 2445044; 433380, 2445034; 433381, 2445023; 433380, 2445014; 433379, 2445001; 433251, 2445044; 433236, 2445061; 433216, 2445082; 433207, 2445091; 433201, 2445098; 433195, 2445100; 433189, 2445105; 433182, 2445104; 433177, 2445100; 433173, 2445094; 433172, 2445090; 433168, 2445082; 433164, 2445076; 433162, 2445074; 432855, 2445176; 431152, 2445138; 431083, 2445402; 430991, 2445457; 430977, 2445767; 431060, 2445963; 431278, 2446215; 431483, 2446536; 431491, 2446759; 431622, 2446390; 431522, 2446121; 431622, 2445871; 431312, 2445542; 431632, 2445303; 432001, 2445941; 431961, 2446460; 431624, 2446959; 431732, 2447115; 432759, 2446609; 432659, 2446240; 432948, 2446150; 433397, 2446440; 433257, 2446958; 433706, 2447138; 433746, 2447766; 433527, 2447856; 432918, 2447407; 432609, 2447647; 432320, 2447497; 432136, 2447629; 432001, 2447726; 431369, 2447027; 431298, 2446522; 430955, 2445963; 430827, 2445619; 430759, 2445406; 430512, 2445417; 430457, 2445529; 429615, 2446073; 429654, 2446125; 429591, 2446167; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476, 2446463; 428396, 2446447; 428285, 2446458; 428116, 2446474; 428047, 2446484; 427911, 2446671; 428135, 2446700; 428430, 2446668; 428652, 2446679; 428420, 2446795; 428346, 2446995; 428166, 2447059; 427892, 2447133; 427744, 2447249; 427839, 2447460; 428092, 2447502; 428314, 2447470; 428282, 2447639; 428504, 2447839; 428726, 2447966; 429032, 2448061; 428768, 2448156; 428504, 2448156; 428356, 2448261; 428430, 2448388; 428705, 2448546; 428494, 2448705; 428821, 2448757; 428842, 2448873; 428662, 2448989; 428705, 2449084; 428810, 2449127; 429074, 2449042; 429401, 2449063; 429433, 2449264; 429665, 2449464; 429887, 2449517; 430161, 2449559; 430108, 2449664; 429910, 2449925; 429944, 2449910; 429968, 2449904; 430016, 2449884; 430068, 2449856; 430172, 2449815; 430207, 2449804; 430261, 2449795; 430317, 2449781; 430340, 2449778; 430365, 2449787; 430392, 2449798; 430408, 2449802; 430410, 2449802; return to starting point.

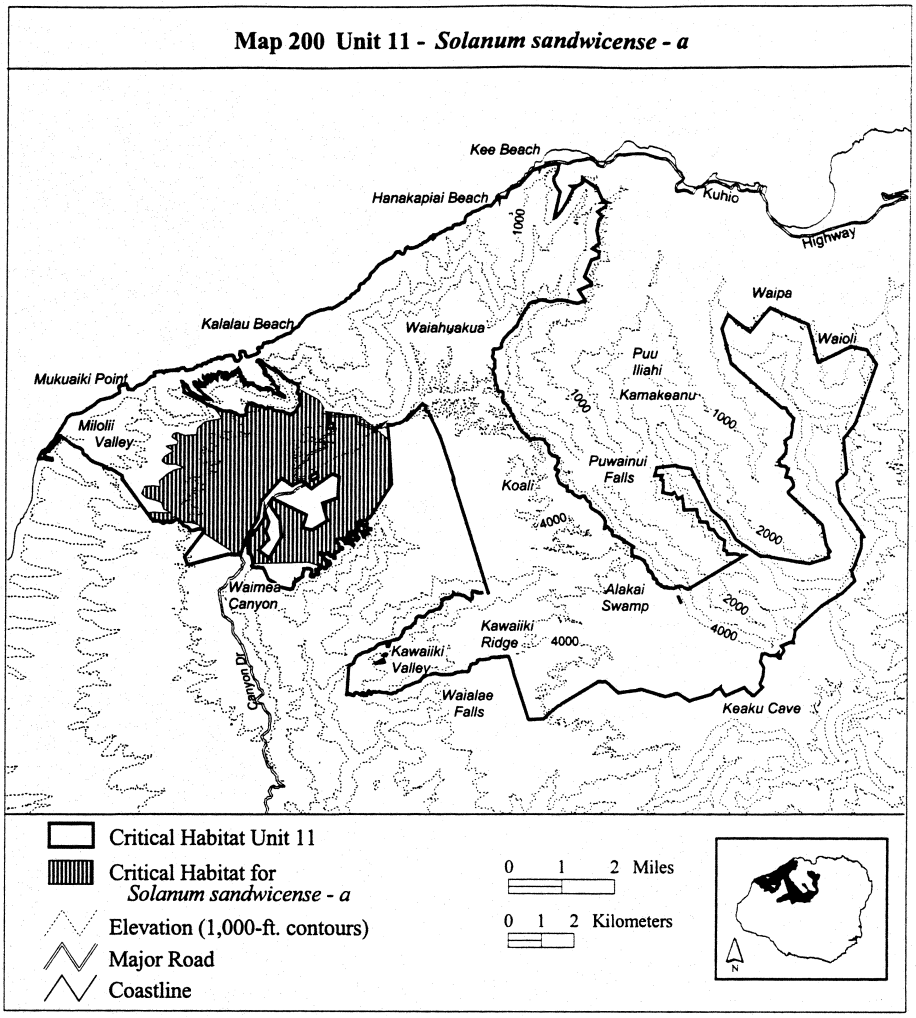
(B) Excluding 3 areas:

(*1*) Bounded by the following 10 points (3 ha; 8 ac): Start at 433368, 2449292; 433367, 2449352; 433448, 2449426; 433546, 2449412; 433567, 2449398; 433589, 2449323; 433612, 2449262; 433588, 2449244; 433567, 2449260; 433369, 2449255; return to starting point;

(*2*) Bounded by the following 4 points (3 ha; 8 ac): Start at 433109, 2447775; 432932, 2447668; 432827, 2447751; 433094, 2447922; return to starting point; and

(*3*) Bounded by the following 9 points (1 ha; 2ac): Start at 433484, 2449703; 433480, 2449629; 433457, 2449622; 433440, 2449604; 433426, 2449556; 433419, 2449599; 433399, 2449709; 433436, 2449707; 433460, 2449707; return to starting point.

(C) NOTE: Map 200 follows:

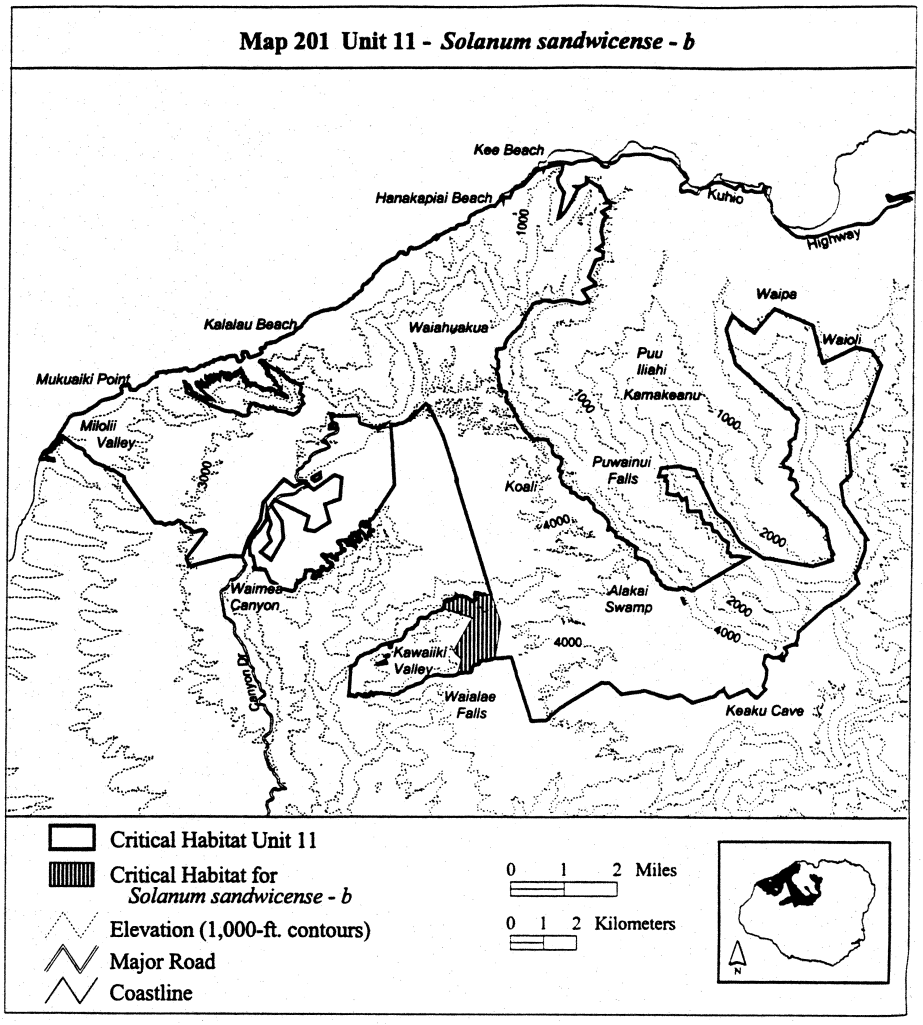


(cci) Kauai 11—*Solanum sandwicense*—b (249 ha; 614 ac)

(A) Unit consists of the following 173 boundary points: Start at 437312, 2441832; 437426, 2442297; 437228, 2442475; 437193, 2442545; 437746, 2443542; 436864, 2443836; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370,

2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 438611, 2443392; 438453, 2442321; 438453, 2442321; 438436, 2442321; 438433, 2442319; 438418, 2442311; 438392, 2442294; 438376, 2442278; 438355, 2442265; 438305, 2442256; 438254, 2442248; 438238, 2442248; 438219, 2442244; 438157, 2442234; 438130, 2442234; 438114, 2442232; 438098, 2442237; 438065, 2442246; 438049, 2442246; 438030, 2442243; 438012, 2442229; 438000, 2442216; 437998, 2442205; 437996, 2442188; 437984, 2442167; 437973, 2442147; 437954, 2442136; 437939, 2442128; 437926, 2442125; 437912, 2442123; 437873, 2442121; 437839, 2442110; 437826, 2442106; 437806, 2442092; 437791, 2442074; 437777, 2442052; 437766, 2442017; 437758, 2441998; 437754, 2441991; 437751, 2441981; 437745, 2441950; 437740, 2441938; 437736, 2441928; 437717, 2441899; 437711, 2441887; 437705, 2441878; 437689, 2441877; 437674, 2441875; 437647, 2441866; 437635, 2441866; 437617, 2441866; 437602, 2441867; 437566, 2441876; 437532, 2441880; 437522, 2441879; 437495, 2441869; 437460, 2441862; 437391, 2441858; 437366, 2441852; 437346, 2441845; 437332, 2441842; 437317, 2441835; return to starting point.

(B) NOTE: Map 201 follows:

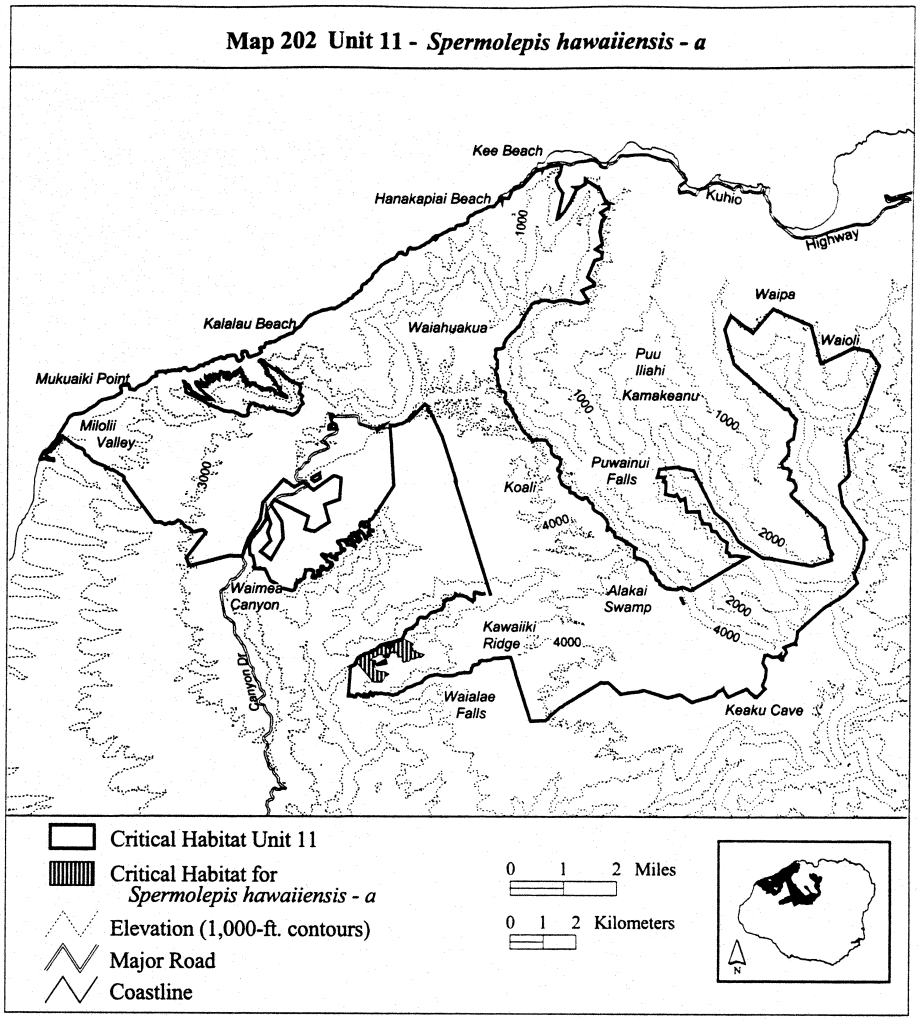


(ccii) Kauai 11—*Spermolepis hawaiiensis*—a (96 ha; 237 ac)

(A) Unit consists of the following 121 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435649, 2442926; 435987, 2442743; 435923, 2442638; 435980, 2442622; 435964, 2442531; 436062, 2442540; 436086, 2442482; 436308, 2442425; 436218, 2442327; 436136, 2442343; 436029, 2442277; 435923, 2442286; 435849, 2442204; 435783, 2442236; 435710, 2442171; 435669, 2442196; 435636, 2442343; 435513, 2442376; 435472, 2442490; 435374, 2442490; 435204, 2442398; 435151, 2442425; 435134, 2442390; 434956, 2442417; 434669, 2442261; 434841, 2442245; 434816, 2442146; 434775, 2442089; 434833, 2442040; 434833, 2441958; 434947, 2441917; 435144, 2441909; 435234, 2441810; 435136, 2441761; 435054,

2441589; 434767, 2441581; 434245, 2442204; 434247, 2442208; 434253, 2442234; 434261, 2442257; 434269, 2442282; 434282, 2442299; 434295, 2442316; 434308, 2442329; 434330, 2442350; 434344, 2442361; 434355, 2442368; 434370, 2442378; 434395, 2442387; 434416, 2442397; 434439, 2442410; 434458, 2442423; 434486, 2442437; 434504, 2442450; 434522, 2442454; 434537, 2442457; 434563, 2442460; 434590, 2442462; 434610, 2442464; 434628, 2442472; 434643, 2442483; 434664, 2442490; 434680, 2442493; 434700, 2442502; 434713, 2442515; 434725, 2442524; 434735, 2442532; 434755, 2442542; 434775, 2442551; 434800, 2442556; 434822, 2442562; 434842, 2442574; 434862, 2442596; 434883, 2442613; 434896, 2442626; 434916, 2442647; 434934, 2442668; 434949, 2442681; 434972, 2442699; 434986, 2442705; 434997, 2442708; 435006, 2442713; 435012, 2442717; 435026, 2442719; 435039, 2442722; 435061, 2442727; 435081, 2442733; 435100, 2442739; 435119, 2442747; 435135, 2442754; 435150, 2442764; 435164, 2442771; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; 435237, 2442643; 435284, 2442631; return to starting point.

(B) NOTE: Map 202 follows:

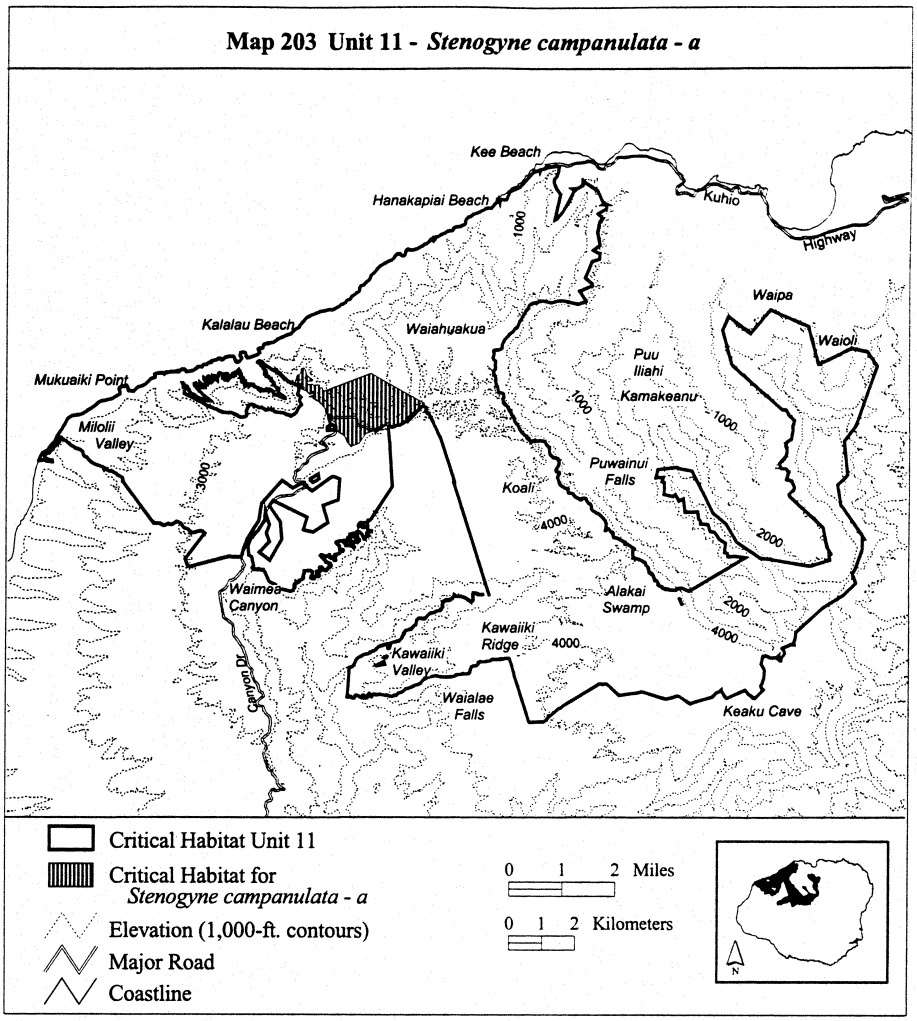


(cciii) Kauai 11—*Stenogyne campanulata*—a (425 ha; 1,050 ac)

(A) Unit consists of the following 144 boundary points: Start at 434899, 2449305; 434804, 2449290; 434736, 2449221; 434553, 2449155; 434346, 2448873; 434346, 2448873; 434133, 2448777; 434083, 2448755; 434075, 2448771; 434056, 2448804; 434012, 2448851; 433982, 2448889; 433967, 2448914; 433940, 2448999; 433923, 2449035; 433901, 2449073; 433878, 2449095; 433816, 2449138; 433722, 2449193; 433702, 2449209; 433670, 2449240; 433661, 2449253; 433655, 2449281; 433657, 2449308; 433655, 2449364; 433644, 2449421; 433637, 2449443; 433599, 2449496; 433583, 2449511; 433542, 2449535; 433502, 2449553; 433474, 2449581; 433459, 2449611; 433455, 2449620; 433457, 2449622; 433480, 2449629; 433484, 2449703; 433460, 2449707; 433445, 2449707; 433447, 2449716; 433452, 2449730; 433426, 2449734; 433382, 2449748; 433360, 2449764; 433333, 2449796; 433315, 2449831; 433305, 2449855; 433306, 2449889; 433274, 2449927; 433264, 2449953; 433222, 2450001; 433205, 2450039; 433187, 2450056; 433159, 2450071; 433150, 2450078; 433137,

2450097; 433123, 2450113; 433092, 2450137; 433056, 2450156; 433000, 2450177; 432990, 2450185; 432989, 2450202; 432984, 2450211; 432948, 2450219; 432933, 2450232; 432915, 2450267; 432908, 2450277; 432893, 2450280; 432816, 2450278; 432928, 2450321; 432968, 2450336; 432937, 2450390; 432818, 2450351; 432724, 2450450; 432672, 2450465; 432566, 2450524; 432499, 2450674; 432388, 2450682; 432448, 2450923; 432499, 2450934; 432562, 2451021; 432566, 2451116; 432649, 2451139; 432688, 2451076; 432704, 2451001; 432732, 2450923; 432850, 2450832; 432925, 2450788; 432893, 2450753; 432811, 2450745; 432740, 2450749; 432767, 2450651; 432822, 2450635; 432909, 2450674; 432953, 2450599; 432980, 2450635; 433130, 2450635; 433130, 2450532; 433201, 2450548; 433225, 2450473; 433286, 2450459; 434695, 2451004; 436326, 2450090; 436322, 2450080; 436296, 2450046; 436244, 2450016; 436213, 2450009; 436203, 2450009; 436111, 2449924; 436104, 2449902; 436086, 2449869; 436075, 2449855; 436058, 2449842; 436017, 2449817; 436001, 2449805; 435988, 2449789; 435981, 2449774; 435967, 2449754; 435899, 2449684; 435876, 2449668; 435842, 2449638; 435825, 2449617; 435797, 2449573; 435765, 2449537; 435716, 2449506; 435664, 2449469; 435598, 2449429; 435576, 2449421; 435549, 2449426; 435517, 2449423; 435501, 2449420; 435469, 2449405; 435418, 2449387; 435390, 2449374; 435368, 2449361; 435334, 2449356; 435319, 2449360; 435292, 2449379; 435269, 2449384; 435247, 2449385; 435234, 2449384; 435201, 2449386; 435171, 2449398; 435011, 2449352; return to starting point.

(B) NOTE: Map 203 follows:



(cciv) Kauai 11—*Wilkesia hobdyi*—a (775 ha; 1,914 ac)

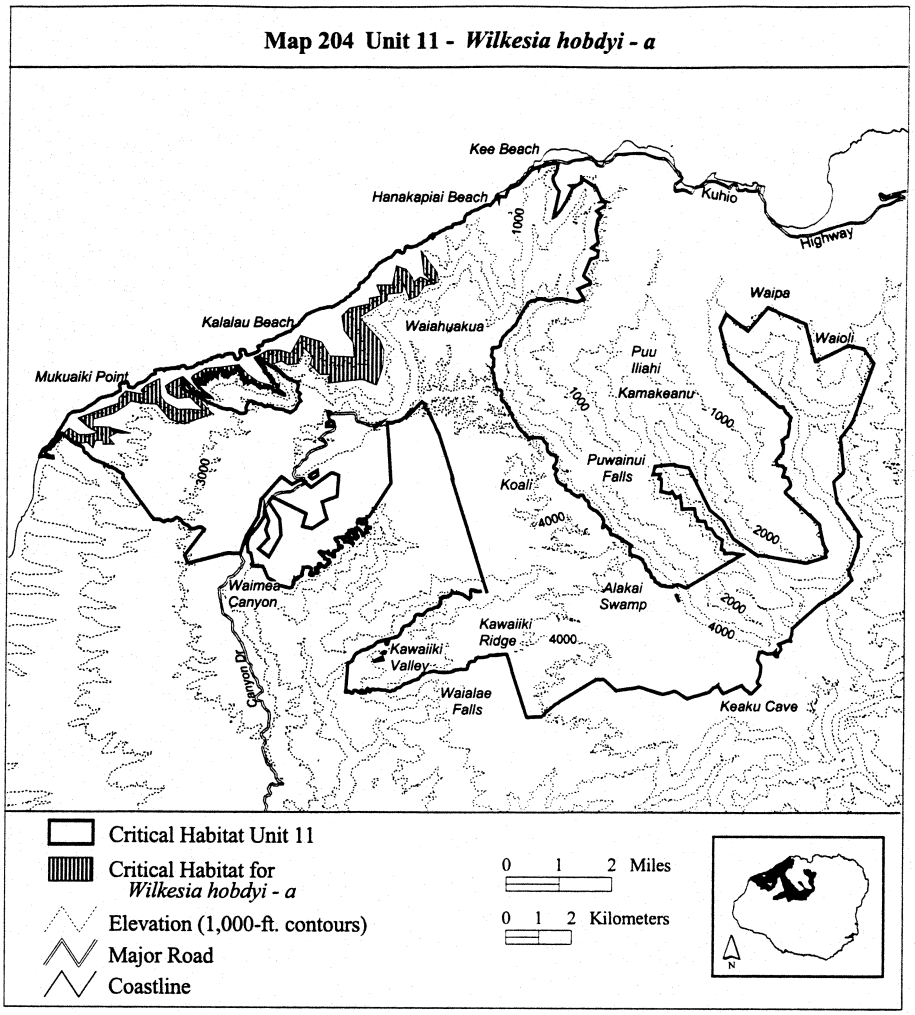
(A) Unit consists of the following 767 boundary points: Start at 429512, 2450126; 429503, 2450126; 429579, 2449948; 429883, 2449645; 429022, 2449316; 428566, 2449468; 428186, 2449923; 427856, 2449949; 427679, 2449974; 427375, 2450025; 427248, 2449898; 426868, 2449645; 426235, 2449468; 426235, 2449240; 426463, 2449240; 426767, 2449215; 426944, 2449037; 426716, 2448911; 426893, 2448708; 426539, 2448708; 426539, 2448809; 426311, 2448809; 426235, 2448581; 426057, 2448759; 425880, 2448733; 425529, 2448833; 425528, 2448834; 425487, 2448867; 425460, 2448891; 425421, 2448924; 425388, 2448948; 425362, 2448961; 425329, 2449019; 425500, 2449189; 425804, 2448987; 426108, 2448987; 426387, 2449063; 426083, 2449215; 425778, 2449493; 426589, 2449797; 427020, 2449949; 427020, 2450126; 427121, 2450227; 427223, 2450328; 427806, 2450227; 427704, 2450354; 427831, 2450506; 428262, 2450708; 428287, 2450176; 428464, 2449974; 428844, 2449771; 429199, 2449771; 429605, 2449746; 429427, 2449923; 429174, 2450151; 428819, 2450100; 428515, 2450278; 428439, 2450480; 428692, 2450657; 428971, 2450784; 429529,

2450252; 429224, 2450733; 429275, 2450809; 429655, 2451037; 430137, 2451088; 430694, 2451163; 430947, 2450860; 431277, 2450632; 431758, 2450480; 431480, 2450885; 431125, 2451366; 431581, 2451594; 431936, 2451594; 432265, 2451492; 432569, 2452049; 433203, 2451846; 433456, 2451416; 434191, 2451390; 434165, 2451821; 433887, 2452200; 433811, 2452631; 434039, 2452884; 434647, 2453010; 434647, 2453187; 435001, 2453263; 434875, 2453592; 435356, 2453592; 435407, 2453845; 435483, 2454174; 435787, 2454073; 435964, 2453820; 435990, 2453668; 436218, 2453845; 436572, 2453668; 436319, 2453946; 436294, 2454098; 436218, 2454629; 436724, 2453971; 436750, 2453667; 436344, 2453566; 436142, 2453263; 435888, 2453162; 435686, 2453643; 435660, 2453364; 435204, 2453314; 435204, 2453136; 434368, 2452605; 434672, 2452251; 434976, 2451922; 435103, 2451593; 435077, 2451061; 434900, 2450529; 434469, 2450707; 434013, 2450656; 433405, 2450580; 433456, 2450859; 433177, 2450859; 432848, 2451163; 432924, 2451416; 432645, 2451669; 432620, 2451492; 432468, 2451188; 432189, 2451138; 431986, 2451264; 431682, 2451163; 431710, 2451085; 431700, 2451088; 431641, 2451117; 431591, 2451154; 431525, 2451187; 431489, 2451219; 431446, 2451247; 431433, 2451261; 431373, 2451329; 431370, 2451323; 431360, 2451314; 431351, 2451321; 431337, 2451323; 431318, 2451324; 431304, 2451317; 431293, 2451316; 431287, 2451322; 431281, 2451336; 431277, 2451355; 431264, 2451350; 431245, 2451336; 431233, 2451323; 431242, 2451310; 431267, 2451297; 431294, 2451278; 431312, 2451246; 431348, 2451203; 431384, 2451176; 431402, 2451170; 431407, 2451149; 431415, 2451137; 431428, 2451129; 431432, 2451109; 431442, 2451094; 431457, 2451086; 431456, 2451081; 431450, 2451067; 431455, 2451053; 431467, 2451047; 431486, 2451047; 431488, 2451038; 431482, 2451029; 431481, 2451010; 431487, 2450998; 431505, 2450987; 431504, 2450980; 431486, 2450974; 431476, 2450971; 431456, 2450971; 431449, 2450963; 431452, 2450955; 431457, 2450948; 431476, 2450934; 431497, 2450922; 431502, 2450903; 431509, 2450895; 431530, 2450888; 431555, 2450880; 431580, 2450878; 431577, 2450867; 431580, 2450848; 431591, 2450839; 431606, 2450830; 431626, 2450824; 431655, 2450815; 431653, 2450800; 431650, 2450792; 431645, 2450777; 431653, 2450764; 431671, 2450767; 431665, 2450749; 431661, 2450738; 431675, 2450731; 431689, 2450726; 431698, 2450722; 431699, 2450717; 431702, 2450701; 431710, 2450693; 431720, 2450686; 431733, 2450677; 431733, 2450656; 431729, 2450645; 431735, 2450642; 431736, 2450636; 431739, 2450626; 431752, 2450619; 431763, 2450615; 431769, 2450597; 431786, 2450573; 431798, 2450561; 431822, 2450550; 431829, 2450545; 431845, 2450528; 431860, 2450521; 431873, 2450519; 431885, 2450510; 431899, 2450498; 431900, 2450492; 431891, 2450486; 431874, 2450483; 431852, 2450481; 431839, 2450475; 431835, 2450472; 431841, 2450451; 431856, 2450433; 431874, 2450409; 431900, 2450378; 431933, 2450350; 431949, 2450336; 431983, 2450316; 432009, 2450298; 432026, 2450277; 432049, 2450261; 432065, 2450255; 432065, 2450248; 432065, 2450233; 432072, 2450223; 432081, 2450211; 432076, 2450207; 432058, 2450218; 432042, 2450225; 432024, 2450234; 432006, 2450246; 431989, 2450255; 431968, 2450265; 431949, 2450270; 431917, 2450271; 431900, 2450287; 431882, 2450301; 431864, 2450315; 431840, 2450325; 431808, 2450327; 431770, 2450328; 431762, 2450341; 431752, 2450353; 431730, 2450369; 431726, 2450392; 431720, 2450403; 431709, 2450416; 431692, 2450418; 431691, 2450429; 431687, 2450439; 431677, 2450453; 431664, 2450465; 431652, 2450468; 431635, 2450468; 431615, 2450468; 431608, 2450462; 431598, 2450460; 431597, 2450472; 431596, 2450476; 431591, 2450488; 431585, 2450499; 431576, 2450494; 431566, 2450502; 431549, 2450505; 431537, 2450505; 431516, 2450496; 431511, 2450486; 431505, 2450470; 431499, 2450454; 431488, 2450449; 431479, 2450454; 431467, 2450462; 431459, 2450467; 431443, 2450470; 431425, 2450469; 431409, 2450466; 431404, 2450459; 431392, 2450462; 431381, 2450464; 431372, 2450459; 431358, 2450458; 431339, 2450460; 431334, 2450462; 431330, 2450466; 431328, 2450478; 431323, 2450490; 431313, 2450497; 431303, 2450494; 431299, 2450488; 431292, 2450476; 431283, 2450480; 431281, 2450486; 431278, 2450497; 431272, 2450502; 431263, 2450505; 431263, 2450516; 431258, 2450530; 431249, 2450545; 431236, 2450549; 431227, 2450551; 431213, 2450554; 431196, 2450558; 431191, 2450563; 431179, 2450576; 431171, 2450582; 431158, 2450585; 431136, 2450584; 431126, 2450573; 431121, 2450586; 431132, 2450596; 431132, 2450623; 431128, 2450641; 431112, 2450648; 431084, 2450652; 431076, 2450639; 431065, 2450624; 431055, 2450628; 431045, 2450645; 431044, 2450656; 431030, 2450661; 431019, 2450646; 431008, 2450631; 430998, 2450615; 430991, 2450601; 430983, 2450597; 430978, 2450604; 430969, 2450622; 430960, 2450622; 430950, 2450609; 430946, 2450604; 430939, 2450609; 430936, 2450617; 430933, 2450631; 430930, 2450644; 430926, 2450657; 430918, 2450664; 430904, 2450664; 430898, 2450659; 430896,

2450648; 430901, 2450638; 430911, 2450630; 430909, 2450620; 430897, 2450617; 430887, 2450619; 430874, 2450620; 430871, 2450614; 430867, 2450602; 430860, 2450586; 430854, 2450591; 430851, 2450600; 430852, 2450614; 430852, 2450631; 430843, 2450645; 430853, 2450656; 430857, 2450667; 430863, 2450680; 430865, 2450697; 430856, 2450711; 430838, 2450715; 430828, 2450715; 430840, 2450723; 430852, 2450728; 430864, 2450742; 430864, 2450756; 430851, 2450759; 430839, 2450752; 430832, 2450747; 430819, 2450748; 430806, 2450738; 430791, 2450737; 430800, 2450754; 430803, 2450759; 430806, 2450776; 430805, 2450791; 430807, 2450800; 430811, 2450812; 430813, 2450819; 430811, 2450834; 430803, 2450837; 430787, 2450832; 430777, 2450824; 430764, 2450815; 430744, 2450805; 430746, 2450813; 430749, 2450824; 430754, 2450841; 430757, 2450850; 430757, 2450862; 430750, 2450872; 430741, 2450873; 430718, 2450870; 430730, 2450885; 430735, 2450896; 430743, 2450916; 430747, 2450940; 430748, 2450959; 430737, 2450969; 430723, 2450972; 430712, 2450965; 430705, 2450955; 430694, 2450953; 430694, 2450967; 430697, 2450980; 430703, 2450995; 430704, 2451010; 430706, 2451037; 430692, 2451040; 430682, 2451033; 430675, 2451043; 430673, 2451050; 430677, 2451062; 430666, 2451065; 430658, 2451067; 430649, 2451073; 430636, 2451076; 430631, 2451072; 430626, 2451059; 430626, 2451041; 430622, 2451022; 430623, 2451005; 430620, 2451000; 430611, 2451001; 430605, 2451008; 430598, 2451020; 430588, 2451025; 430581, 2451020; 430574, 2451012; 430572, 2451002; 430569, 2450983; 430570, 2450961; 430550, 2450974; 430535, 2450983; 430523, 2450988; 430518, 2450991; 430503, 2450993; 430491, 2450990; 430485, 2450984; 430482, 2450977; 430485, 2450962; 430490, 2450949; 430500, 2450934; 430502, 2450920; 430503, 2450902; 430495, 2450892; 430483, 2450890; 430474, 2450882; 430466, 2450887; 430449, 2450901; 430433, 2450901; 430426, 2450896; 430422, 2450890; 430416, 2450880; 430407, 2450876; 430398, 2450872; 430393, 2450868; 430390, 2450853; 430391, 2450836; 430385, 2450826; 430380, 2450816; 430372, 2450803; 430368, 2450818; 430364, 2450833; 430362, 2450842; 430355, 2450855; 430348, 2450863; 430335, 2450873; 430331, 2450883; 430328, 2450897; 430326, 2450922; 430319, 2450953; 430305, 2450972; 430295, 2450980; 430285, 2450982; 430281, 2450979; 430276, 2450975; 430272, 2450958; 430273, 2450938; 430261, 2450933; 430250, 2450924; 430246, 2450905; 430251, 2450875; 430256, 2450842; 430268, 2450786; 430261, 2450779; 430252, 2450779; 430249, 2450795; 430246, 2450807; 430242, 2450821; 430234, 2450838; 430217, 2450857; 430209, 2450860; 430204, 2450855; 430197, 2450844; 430193, 2450832; 430172, 2450844; 430173, 2450865; 430175, 2450880; 430183, 2450896; 430192, 2450910; 430197, 2450925; 430197, 2450937; 430194, 2450949; 430187, 2450962; 430177, 2450971; 430166, 2450974; 430154, 2450976; 430132, 2450976; 430116, 2450985; 430107, 2450980; 430091, 2450975; 430078, 2450990; 430069, 2450993; 430061, 2450978; 430054, 2450938; 430051, 2450920; 430030, 2450915; 430016, 2450914; 430010, 2450909; 430009, 2450885; 430018, 2450854; 430024, 2450828; 430018, 2450825; 430011, 2450820; 430009, 2450808; 430013, 2450787; 430022, 2450756; 430002, 2450778; 429994, 2450795; 429984, 2450820; 429965, 2450849; 429939, 2450888; 429927, 2450906; 429914, 2450914; 429910, 2450911; 429907, 2450899; 429909, 2450889; 429915, 2450875; 429923, 2450865; 429926, 2450848; 429926, 2450827; 429923, 2450820; 429918, 2450819; 429909, 2450824; 429905, 2450835; 429897, 2450849; 429889, 2450860; 429879, 2450871; 429869, 2450875; 429863, 2450868; 429863, 2450852; 429861, 2450836; 429866, 2450814; 429870, 2450799; 429879, 2450785; 429885, 2450774; 429883, 2450763; 429879, 2450756; 429874, 2450750; 429875, 2450744; 429873, 2450736; 429866, 2450746; 429861, 2450753; 429854, 2450754; 429848, 2450756; 429843, 2450769; 429841, 2450785; 429827, 2450802; 429816, 2450819; 429797, 2450845; 429773, 2450868; 429738, 2450896; 429724, 2450899; 429720, 2450887; 429726, 2450875; 429733, 2450856; 429739, 2450832; 429742, 2450813; 429746, 2450791; 429752, 2450769; 429754, 2450756; 429748, 2450755; 429737, 2450753; 429731, 2450750; 429731, 2450739; 429734, 2450732; 429745, 2450721; 429750, 2450701; 429741, 2450701; 429728, 2450698; 429722, 2450692; 429718, 2450681; 429709, 2450676; 429702, 2450682; 429696, 2450693; 429691, 2450714; 429680, 2450743; 429664, 2450781; 429652, 2450802; 429639, 2450818; 429619, 2450828; 429603, 2450830; 429601, 2450825; 429604, 2450812; 429619, 2450793; 429637, 2450771; 429654, 2450750; 429664, 2450735; 429667, 2450717; 429663, 2450706; 429661, 2450673; 429666, 2450641; 429663, 2450621; 429654, 2450603; 429645, 2450601; 429634, 2450610; 429619, 2450622; 429602, 2450633; 429558, 2450656; 429505, 2450692; 429490, 2450702; 429483, 2450698; 429478, 2450692; 429480, 2450680; 429489, 2450657; 429496, 2450634; 429503, 2450613; 429524, 2450599; 429556, 2450569; 429569, 2450555; 429569, 2450546; 429560, 2450541; 429535, 2450540; 429510, 2450541; 429489,

2450546; 429478, 2450553; 429468, 2450566; 429461, 2450574; 429450, 2450580; 429440, 2450580; 429434, 2450588; 429432, 2450595; 429422, 2450604; 429410, 2450609; 429389, 2450622; 429387, 2450629; 429384, 2450638; 429377, 2450656; 429371, 2450661; 429365, 2450670; 429363, 2450681; 429359, 2450689; 429352, 2450687; 429345, 2450685; 429330, 2450677; 429319, 2450668; 429311, 2450657; 429310, 2450642; 429317, 2450633; 429334, 2450615; 429346, 2450600; 429359, 2450581; 429365, 2450564; 429372, 2450543; 429389, 2450532; 429400, 2450531; 429410, 2450517; 429420, 2450504; 429431, 2450485; 429450, 2450463; 429462, 2450449; 429482, 2450434; 429500, 2450421; 429523, 2450406; 429541, 2450384; 429554, 2450363; 429577, 2450344; 429599, 2450324; 429622, 2450305; 429645, 2450292; 429669, 2450271; 429686, 2450258; 429712, 2450243; 429745, 2450217; 429770, 2450202; 429788, 2450184; 429802, 2450172; 429815, 2450154; 429808, 2450151; 429791, 2450150; 429770, 2450151; 429738, 2450152; 429713, 2450155; 429686, 2450161; 429656, 2450168; 429622, 2450179; 429571, 2450198; 429538, 2450212; 429503, 2450229; 429460, 2450248; 429433, 2450259; 429404, 2450268; 429391, 2450277; 429371, 2450289; 429356, 2450303; 429342, 2450315; 429321, 2450332; 429294, 2450343; 429269, 2450357; 429244, 2450363; 429212, 2450380; 429205, 2450394; 429200, 2450405; 429193, 2450416; 429174, 2450426; 429162, 2450435; 429161, 2450444; 429158, 2450455; 429152, 2450468; 429143, 2450481; 429128, 2450496; 429115, 2450512; 429114, 2450524; 429113, 2450540; 429110, 2450557; 429103, 2450577; 429091, 2450594; 429077, 2450605; 429060, 2450608; 429041, 2450610; 429026, 2450609; 429013, 2450623; 429009, 2450638; 429000, 2450655; 428990, 2450676; 428979, 2450690; 428972, 2450701; 428962, 2450707; 428952, 2450706; 428952, 2450704; 428964, 2450654; 428990, 2450584; 429000, 2450551; 429015, 2450477; 429016, 2450451; 429013, 2450421; 429012, 2450380; 429036, 2450360; 429089, 2450331; 429147, 2450304; 429258, 2450260; return to starting point.

(B) NOTE: Map 204 follows:

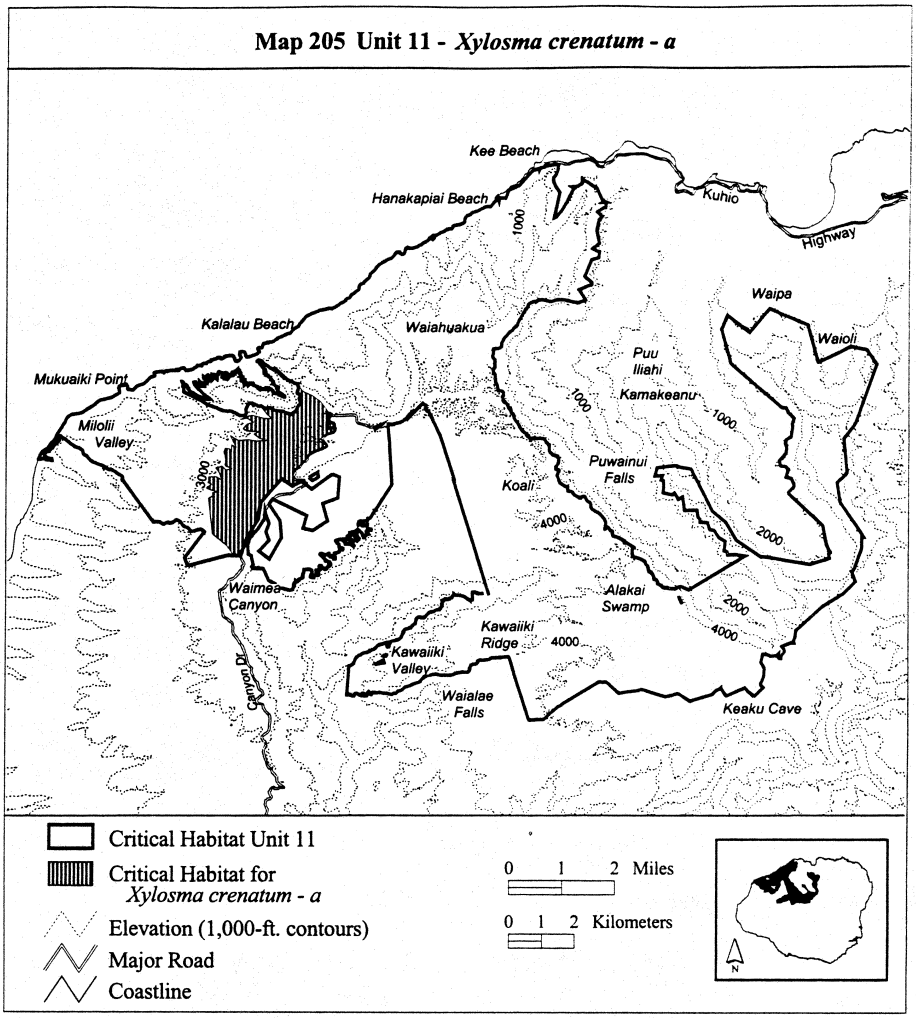


(ccv) Kauai 11—*Xylosma crenatum*—a (840 ha; 2,076 ac)

(A) Unit consists of the following 122 boundary points: Start at 432382, 2447776; 432423, 2447705; 432682, 2447686; 432655, 2447631; 432639, 2447624; 432609, 2447647; 432320, 2447497; 432136, 2447629; 432001, 2447726; 431389, 2447049; 431307, 2447021; 431213, 2446424; 431051, 2446119; 430955, 2445963; 430925, 2445882; 430674, 2445410; 430555, 2445415; 430312, 2445743; 429891, 2446070; 429781, 2447125; 429904, 2447201; 429895, 2447305; 430027, 2447324; 429696, 2447438; 429866, 2447552; 429639, 2447675; 429667, 2447779; 429989, 2447789; 430170, 2447694; 430113, 2447893; 429989, 2448054; 430189, 2448101; 430302, 2447988; 430473, 2448035; 430283, 2448130; 430293, 2448329; 430245, 2448528; 430283, 2448642; 430407, 2448632; 430464, 2448490; 430473, 2448755; 430615, 2448689; 430520, 2448859; 430445, 2449030; 430691, 2448878; 430976, 2448916; 431222, 2448869; 431488, 2448883; 431563, 2448888; 431326, 2448954; 431156, 2449077; 431298, 2449163; 430928, 2449182; 430824, 2449248; 430947, 2449381; 431127, 2449447; 430938, 2449579; 430795, 2449542; 431023, 2449655; 431080, 2449665; 431469,

2449560; 431696, 2449560; 431563, 2449674; 431391, 2449886; 431473, 2449876; 431497, 2449867; 431513, 2449871; 431548, 2449867; 431590, 2449891; 431605, 2449895; 431657, 2449890; 431678, 2449883; 431707, 2449868; 431765, 2449810; 431835, 2449804; 432251, 2449685; 432259, 2449679; 432263, 2449682; 432287, 2449675; 432405, 2449773; 432584, 2450032; 432523, 2450178; 432523, 2450182; 432565, 2450262; 432523, 2450304; 432475, 2450313; 432459, 2450330; 432457, 2450334; 432476, 2450414; 432480, 2450426; 432486, 2450458; 432504, 2450523; 432510, 2450542; 432633, 2450391; 432930, 2450259; 433160, 2450085; 433400, 2449772; 433437, 2449726; 433436, 2449707; 433399, 2449709; 433419, 2449599; 433426, 2449556; 433430, 2449518; 433525, 2449415; 433448, 2449426; 433367, 2449352; 433368, 2449292; 433369, 2449255; 433567, 2449260; 433588, 2449244; 433599, 2449252; 433608, 2449246; 433610, 2449137; 433383, 2449073; 433181, 2448930; 433395, 2448719; 433088, 2448562; 432861, 2448469; 432612, 2448172; 432493, 2448031; 432404, 2447993; 432356, 2447820; return to starting point.

(B) NOTE: Map 205 follows:



(ccvi) Kauai 11—*Zanthoxylum hawaiiense*—a (523 ha; 1,292 ac)

(A) Unit consists of the following 402 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438254, 2444242; 438334, 2444171; 438431, 2444207; 438595, 2444371; 438699, 2444353; 438820, 2444201; 438893, 2444079; 438881, 2443982; 438802, 2443915; 438583, 2443715; 438431, 2443605; 438273, 2443538; 438151, 2443532; 438005, 2443636; 437956, 2443684; 437622, 2443660; 437451, 2443545; 437391, 2443459; 437245, 2443374; 436959, 2443186; 436843, 2443009; 436867, 2442809; 437019, 2442657; 437026, 2442577; 437019, 2442456; 437135, 2442310; 437281, 2442225; 437403, 2442176; 437476, 2442073; 437415, 2441987; 437202, 2441921; 436946, 2441921; 436734, 2441951; 436606, 2441945; 436490, 2441854; 436405, 2441817; 436289, 2441817; 436125, 2441866; 436052, 2441866; 435997, 2441817; 435924, 2441726; 435784, 2441677; 435699, 2441617; 435693, 2441531; 435699, 2441465; 435657, 2441428; 435547, 2441428; 435401, 2441495; 435310, 2441489; 435298, 2441329; 435258, 2441222; 435245, 2441229; 435201, 2441226; 435127, 2441232; 435053, 2441251; 435010, 2441263; 434950, 2441241; 434901,

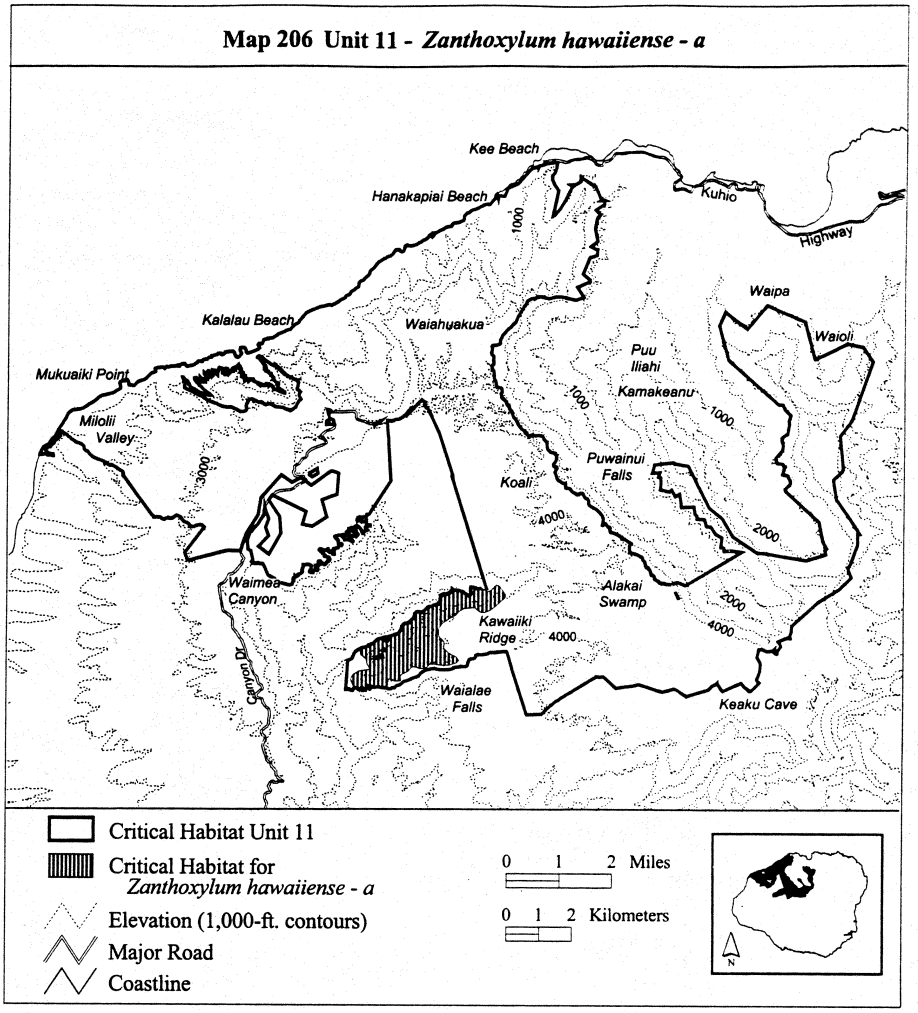
2441226; 434881, 2441230; 434867, 2441252; 434859, 2441262; 434851, 2441266; 434843, 2441266; 434811, 2441263; 434806, 2441260; 434794, 2441245; 434787, 2441223; 434779, 2441196; 434754, 2441166; 434742, 2441170; 434733, 2441191; 434717, 2441232; 434699, 2441277; 434696, 2441283; 434689, 2441286; 434676, 2441286; 434669, 2441281; 434661, 2441273; 434653, 2441254; 434641, 2441213; 434631, 2441186; 434629, 2441175; 434626, 2441167; 434615, 2441161; 434592, 2441168; 434580, 2441170; 434570, 2441168; 434563, 2441163; 434556, 2441145; 434551, 2441140; 434542, 2441137; 434538, 2441144; 434535, 2441154; 434536, 2441173; 434530, 2441201; 434523, 2441222; 434520, 2441227; 434516, 2441230; 434508, 2441229; 434501, 2441223; 434489, 2441216; 434475, 2441203; 434448, 2441190; 434424, 2441176; 434397, 2441178; 434359, 2441197; 434333, 2441217; 434325, 2441222; 434308, 2441229; 434293, 2441229; 434290, 2441228; 434233, 2441313; 434184, 2441410; 434172, 2441489; 434227, 2441617; 434409, 2441732; 434726, 2441787; 434750, 2441817; 434720, 2441872; 434671, 2441933; 434641, 2442103; 434574, 2442152; 434495, 2442219; 434476, 2442219; 434459, 2442342; 434477, 2442433; 434486, 2442437; 434504, 2442450; 434522, 2442454; 434537, 2442457; 434563, 2442460; 434590, 2442462; 434610, 2442464; 434628, 2442472; 434643, 2442483; 434664, 2442490; 434680, 2442493; 434700, 2442502; 434713, 2442515; 434725, 2442524; 434735, 2442532; 434755, 2442542; 434775, 2442551; 434800, 2442556; 434822, 2442562; 434842, 2442574; 434862, 2442596; 434883, 2442613; 434896, 2442626; 434916, 2442647; 434934, 2442668; 434949, 2442681; 434972, 2442699; 434986, 2442705; 434997, 2442708; 435006, 2442713; 435012, 2442717; 435026, 2442719; 435039, 2442722; 435061, 2442727; 435081, 2442733; 435100, 2442739; 435119, 2442747; 435135, 2442754; 435150, 2442764; 435164, 2442771; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; 435237, 2442643; 435284, 2442631; return to starting point.

(B) Excluding 2 areas:

(*1*) Bounded by the following 3 points (1 ha, 3 ac): Start at 435132, 2442248; 435160, 2442164; 434848, 2442098; return to starting point; and

(*2*) Bounded by the following 4 points (0 ha, 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

(C) NOTE: Map 206 follows:

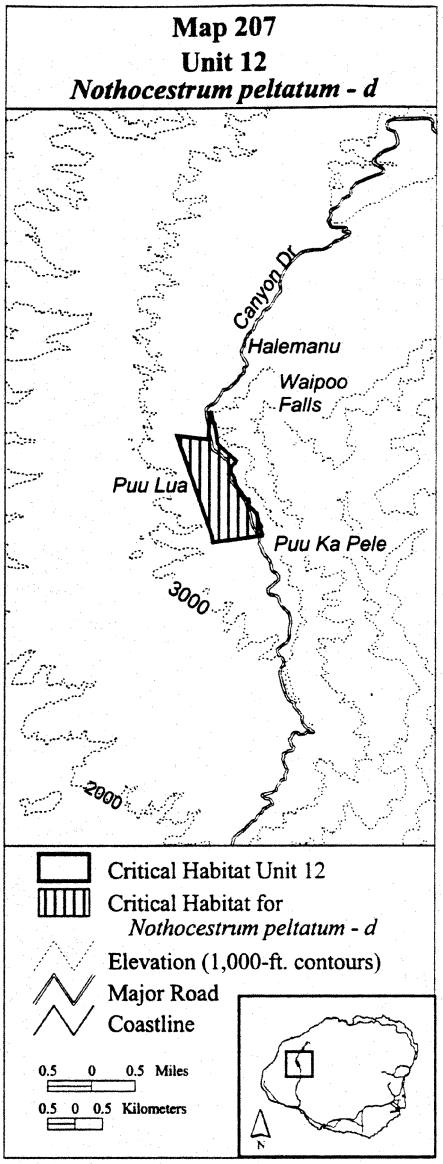


(ccvii) Kauai 12—*Nothocestrum peltatum*—d (162 ha; 400 ac)

(A) Unit consists of the following 65 boundary points: Start at 431190, 2442015; 430254, 2441884; 430238, 2442005; 429593, 2443842; 430155, 2443777; 430205, 2444275; 430214, 2444280; 430308, 2443912; 430339, 2443693; 430676, 2443374; 430654, 2443340; 430640, 2443324; 430608, 2443294; 430597, 2443274; 430587, 2443203; 430586, 2443158; 430592, 2443144; 430612, 2443121; 430634, 2443085; 430661, 2443014; 430671, 2442975; 430675, 2442949; 430682, 2442928; 430690, 2442911; 430702, 2442896; 430742, 2442852; 430777, 2442811; 430786, 2442795; 430789, 2442762; 430795, 2442751; 430844, 2442701; 430857, 2442692; 430896, 2442674; 430907, 2442665; 430914, 2442656; 430921, 2442640; 430921, 2442620; 430918, 2442601; 430912, 2442582; 430914, 2442564; 430919, 2442555; 430931, 2442541; 430947, 2442529; 430975, 2442502; 431001, 2442469; 431018, 2442445; 431030, 2442435; 431051, 2442425; 431058, 2442415; 431061, 2442389; 431068, 2442359; 431085, 2442326; 431091, 2442304; 431090, 2442285; 431094, 2442268; 431108, 2442231; 431119, 2442215; 431132, 2442205; 431142, 2442193; 431142, 2442168; 431126,

2442140; 431123, 2442121; 431130, 2442104; 431167, 2442034; 431188, 2442016; return to starting point.

(B) NOTE: Map 207 follows:

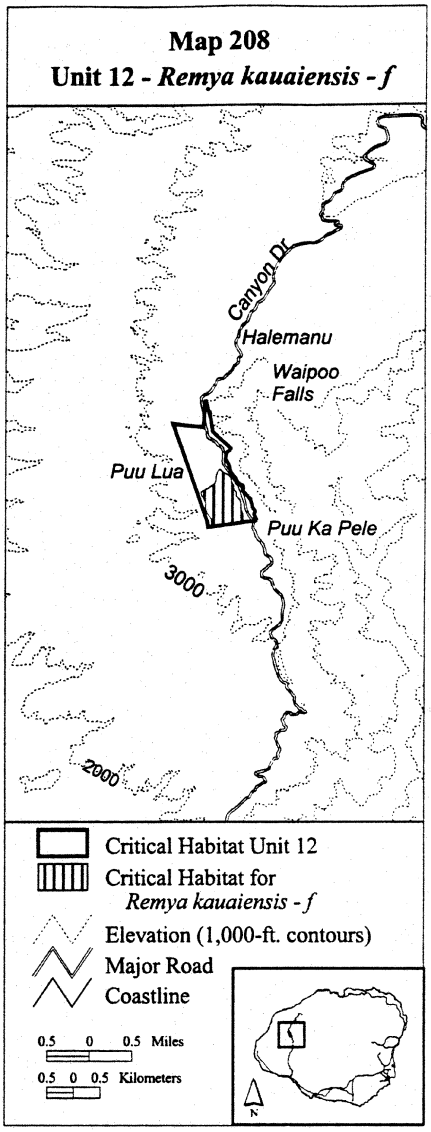


(ccviii) Kauai 12—*Remya kauaiensis*—f (52 ha; 128 ac)

(A) Unit consists of the following 42 boundary points: Start at 430320,

2441937; 430316, 2441992; 430320, 2442046; 430290, 2442087; 430221, 2442167; 430221, 2442192; 430203, 2442243; 430214, 2442345; 430181, 2442389; 430163, 2442448; 430130, 2442480; 430119, 2442542; 430148, 2442568; 430258, 2442619; 430334, 2442666; 430382, 2442714; 430407, 2442779; 430407, 2442841; 430422, 2442911; 430458, 2442951; 430465, 2442976; 430502, 2442954; 430542, 2442911; 430608, 2442896; 430659, 2442845; 430684, 2442801; 430684, 2442754; 430695, 2442721; 430728, 2442684; 430739, 2442593; 430779, 2442550; 430783, 2442477; 430812, 2442440; 430859, 2442400; 430877, 2442313; 430881, 2442218; 430907, 2442138; 430921, 2442006; 430888, 2441992; 430699, 2441963; 430582, 2441941; 430356, 2441922; return to starting point.

(B) NOTE: Map 208 follows:

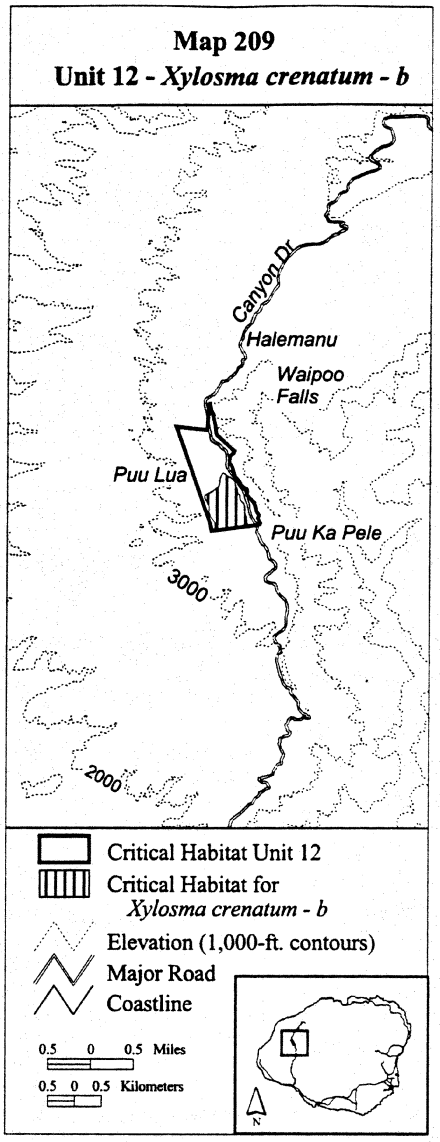


(ccix) Kauai 12—*Xylosma crenatum*—b (52 ha; 128 ac)

(A) Unit consists of the following 42 boundary points: Start at 430320, 2441937; 430316, 2441992; 430320, 2442046; 430290, 2442087; 430221, 2442167; 430221, 2442192; 430203, 2442243; 430214, 2442345; 430181, 2442389; 430163, 2442448; 430130, 2442480; 430119, 2442542; 430148, 2442568; 430258, 2442619; 430334, 2442666; 430382,

2442714; 430407, 2442779; 430407, 2442841; 430422, 2442911; 430458, 2442951; 430465, 2442976; 430502, 2442954; 430542, 2442911; 430608, 2442896; 430659, 2442845; 430684, 2442801; 430684, 2442754; 430695, 2442721; 430728, 2442684; 430739, 2442593; 430779, 2442550; 430783, 2442477; 430812, 2442440; 430859, 2442400; 430877, 2442313; 430881, 2442218; 430907, 2442138; 430921, 2442006; 430888, 2441992; 430699, 2441963; 430582, 2441941; 430356, 2441922; return to starting point.

(B) NOTE: Map 209 follows:

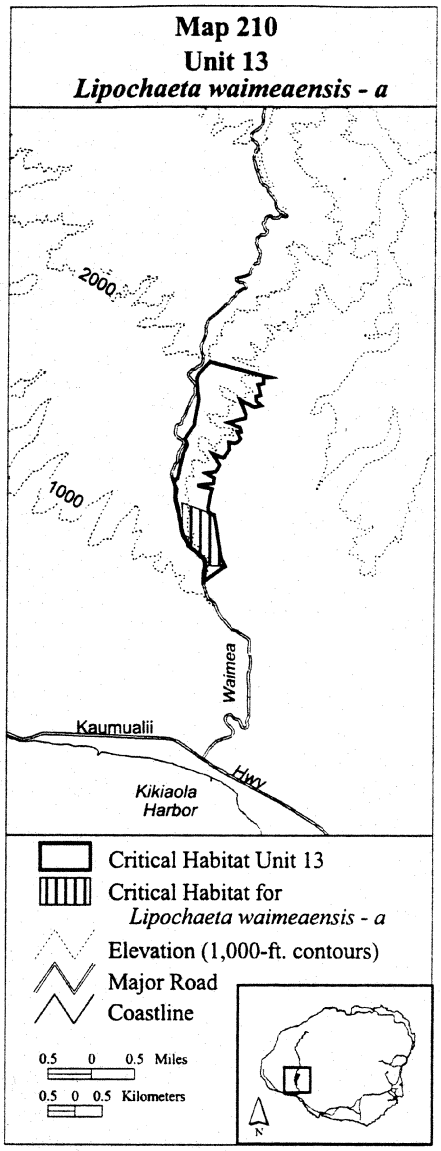


(ccx) Kauai 13—*Lipochaeta waimeaensis*—a (56 ha; 139 ac)

(A) Unit consists of the following 18 boundary points: Start at 430198, 2432906; 430189, 2433035; 430229, 2433022; 430792, 2432814; 430834, 2432547; 430921, 2432026; 430997, 2431853; 430996, 2431853; 430633, 2431864; 430621, 2431947; 430622, 2431957; 430619, 2431960; 430615, 2431990; 430308, 2432247; 430317, 2432397; 430247,

2432440; 430207, 2432544; 430198, 2432716; return to starting point.

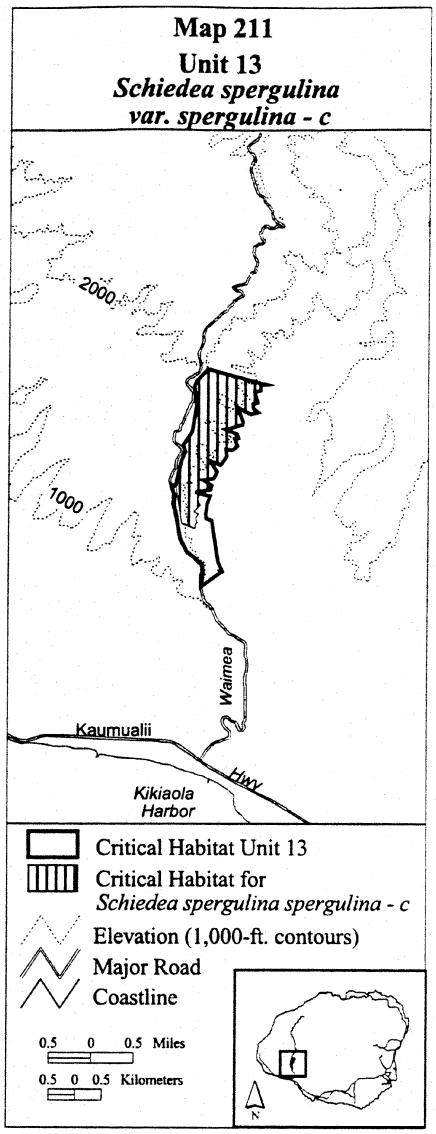
(B) NOTE: Map 210 follows:



(ccxi) Kauai 13—*Schiedea spergulina* var. *spergulina*—c (221 ha; 545 ac)

(A) Unit consists of the following 59 boundary points: Start at 430475, 2432656; 430222, 2432760; 430103, 2433479; 430210, 2433949; 430290, 2434118; 430239, 2434242; 430239, 2434243; 430259, 2434273; 430414, 2434498; 430435, 2434630; 430495, 2434992; 430479, 2435099; 430454, 2435369; 430488, 2435448; 430698, 2435675; 430703, 2435680; 431807, 2435389; 431700, 2435381; 431700, 2435274; 431600, 2435251; 431654, 2435052; 431562, 2435029; 431562, 2434945; 431661, 2434861; 431661, 2434861; 431524, 2434832; 431520, 2434828; 431263, 2434968; 431370, 2434692; 431363, 2434623; 431049, 2434539; 431256, 2434455; 431294, 2434371; 431217, 2434363; 431267, 2434228; 431236, 2434191; 431179, 2434149; 431057, 2434164; 431072, 2434034; 430969, 2433883; 430955, 2433867; 430955, 2433866; 430750, 2433950; 430892, 2433741; 430865, 2433686; 430819, 2433613; 430635, 2433582; 430789, 2433483; 430785, 2433441; 430774, 2433398; 430505, 2433360; 430544, 2433268; 430513, 2433223; 430567, 2433100; 430459, 2432985; 430536, 2432939; 430482, 2432847; 430521, 2432771; 430490, 2432756; return to starting point.

(B) NOTE: Map 211 follows:

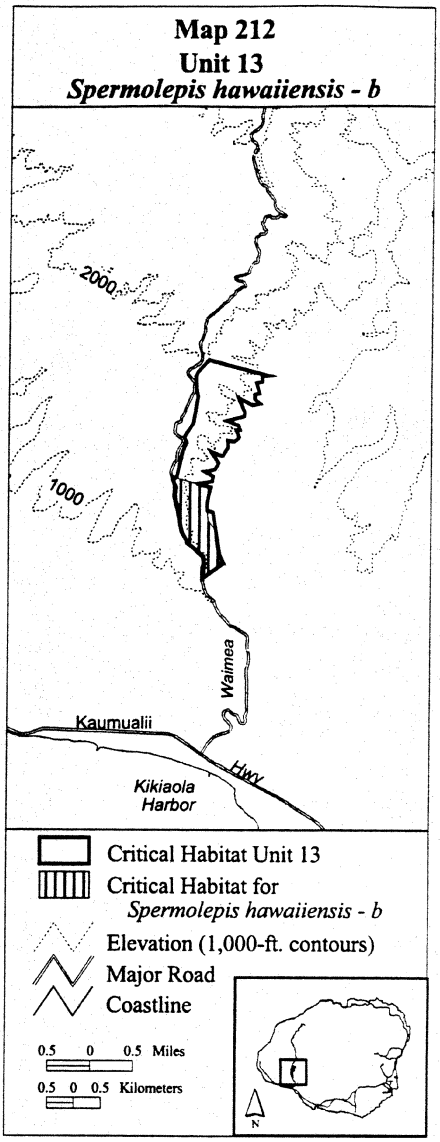


(ccxii) Kauai 13—*Spermolepis hawaiiensis*—b (87 ha; 215 ac)

(A) Unit consists of the following 29 boundary points: Start at 430602, 2431571; 430633, 2431875; 430620, 2431939;

430622, 2431957; 430615, 2431963; 430605, 2432015; 430417, 2432156; 430304, 2432274; 430205, 2432470; 430137, 2432799; 430123, 2432906; 430115, 2432961; 430081, 2433067; 430077, 2433154; 430099, 2433286; 430054, 2433369; 430032, 2433480; 430032, 2433480; 430747, 2433285; 430743, 2433270; 430745, 2433254; 430708, 2433142; 430680, 2432935; 430698, 2432672; 430820, 2432494; 430839, 2432344; 430858, 2432156; 430952, 2431931; 430980, 2431846; return to starting point.

(B) NOTE: Map 212 follows:

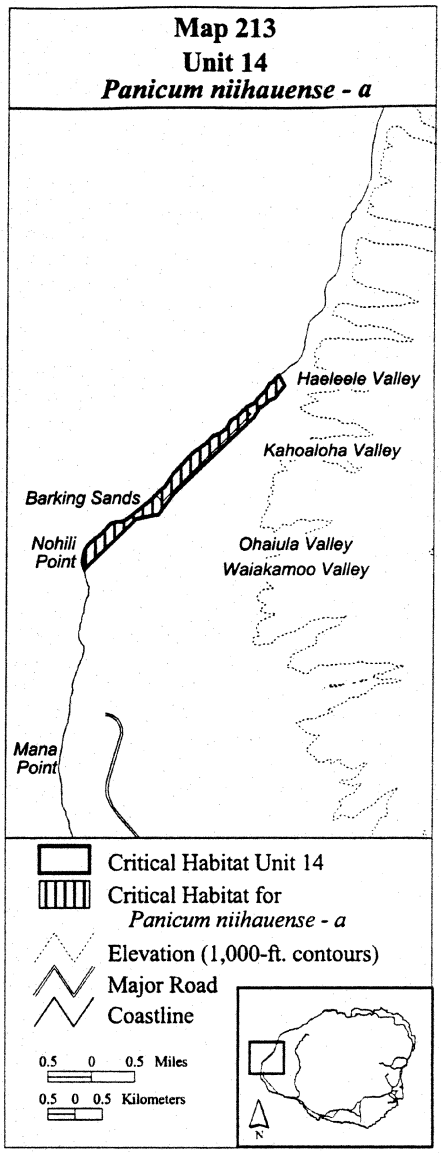


(ccxiii) Kauai 14—*Panicum niihauense*—a (120 ha; 297 ac)

(A) Unit consists of the following 17 boundary points: coastline; 420498, 2440857; 420095, 2440787; 419127, 2439857; 422725, 2443464; 422749, 2443432; 422830, 2443273; 422794, 2443226; 422660, 2443057; 422609, 2443018; 422557, 2443003; 422396, 2442865; 422383, 2442876; 422340, 2442802;

422337, 2442797; 422267, 2442675; 422055, 2442471; 420764, 2441227; coastline.

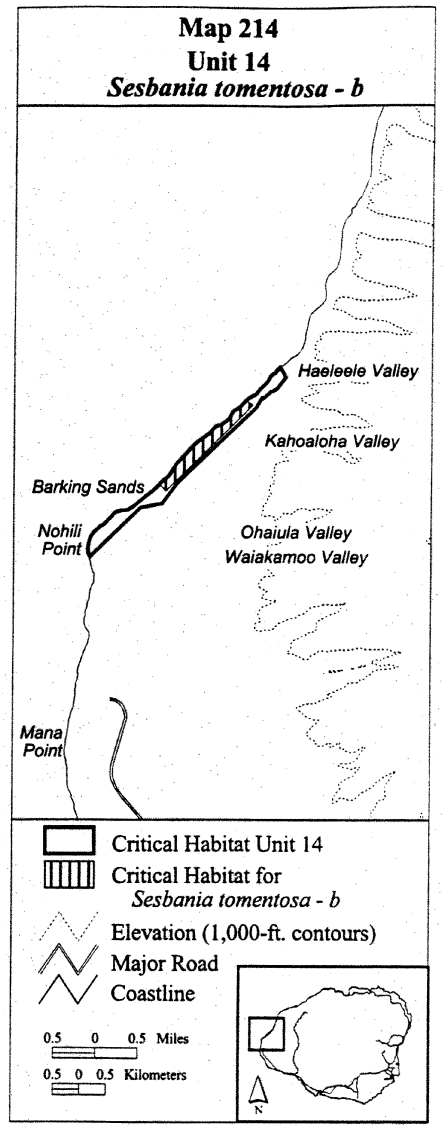
(B) NOTE: Map 213 follows:



(ccxiv) Kauai 14—*Sesbania tomentosa*—b (44 ha; 110 ac)

(A) Unit consists of the following 7 boundary points: coastline; 422206, 2442741; 421987, 2442507; 420735, 2441277; 420643, 2441178; 420572, 2441093; 420438, 2441235; 422071, 2442818; coastline.

(B) NOTE: Map 214 follows:

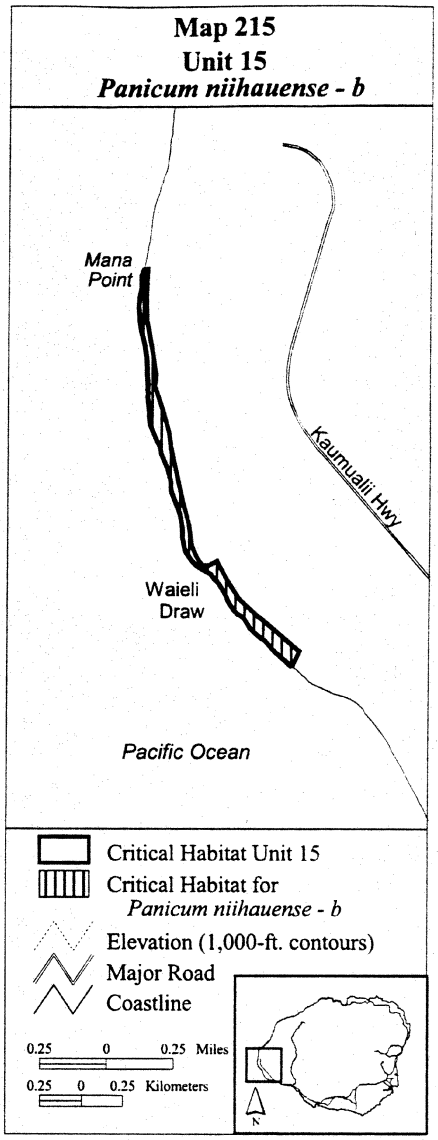


(ccxv) Kauai 15—*Panicum niihauense*—b (16 ha; 39 ac)

(A) Unit consists of the following 24 boundary points: coastline; 418718, 2436405; 418711, 2436261; 418713, 2436100; 418746, 2435916; 418771, 2435768; 418763, 2435699; 418816, 2435550; 418853, 2435417; 418863, 2435329; 418904, 2435147; 418938, 2434999; 418971, 2434874; 418992, 2434737; 419022, 2434668; 419057, 2434621; 419092,

2434621; 419145, 2434647; 419209, 2434531; 419280, 2434420; 419395, 2434316; 419428, 2434292; 419645, 2434109; 419600, 2434015; 418693, 2436403 coastline.

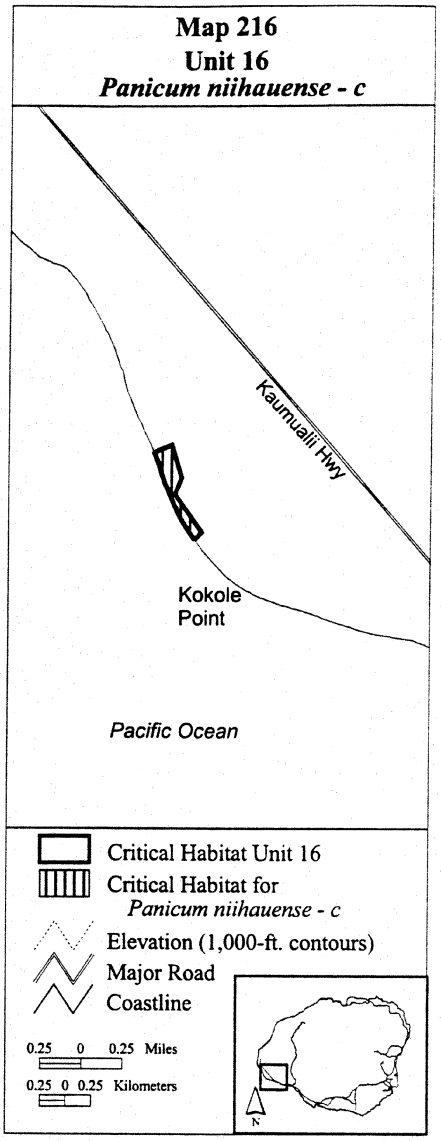
(B) NOTE: Map 215 follows:



(ccxvi) Kauai 16—*Panicum niihauense*—c (11 ha; 28 ac)

(A) Unit consists of the following 8 boundary points: coastline; 421032, 2432070; 421129, 2431750; 421067, 2431592; 421328, 2431221; 421301, 2431191; 421254, 2431147; 420862, 2431988; 420900, 2432013; coastline.

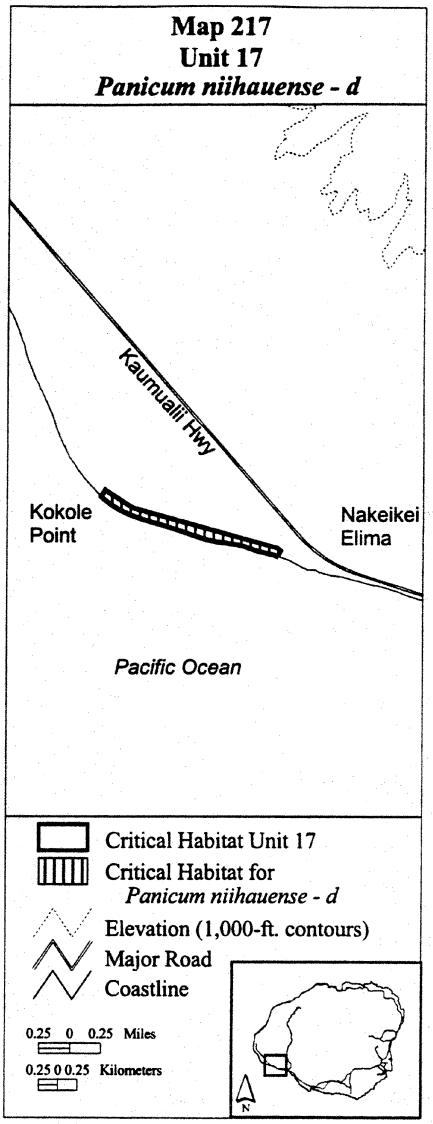
(B) NOTE: Map 216 follows:



(ccxvii) Kauai 17—*Panicum niihauense*—d (28 ha; 68 ac)

(A) Unit consists of the following 5 boundary points: coastline; 423847, 2430037; 423765, 2429965; 422210, 2430021; 421524, 2430758; 421555, 2430809; coastline.

(B) NOTE: Map 217 follows:



(CCXVIII) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI

Unit name	Species occupied	Species unoccupied
Kauai 1—*Ischaemum byrone*—a	*Ischaemum byrone*	
Kauai 2—*Ischaemum byrone*—b	.....	*Ischaemum byrone*
Kauai 3—*Ischaemum byrone*—c	*Ischaemum byrone.*	
Kauai 4—*Adenophorus periens*—a	*Adenophorus periens*	
Kauai 4—*Cyanea asarifolia*—a	*Cyanea asarifolis*	
Kauai 4—*Cyanea recta*—a	*Cyanea recta*	
Kauai 4—*Cyanea recta*—b	*Cyanea recta*	

(CCXVIII) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI—Continued

Unit name	Species occupied	Species unoccupied
Kauai 4—*Cyanea remyi*—a	*Cyanea remyi*	
Kauai 4—*Cyrtandra cyaneoides*—a	*Cyrtandra cyaneoides*	
Kauai 4—*Cyrtandra limahuliensis*—a	*Cyrtandra limahuliensis*	
Kauai 4—*Cyrtandra limahuliensis*—b	*Cyrtandra limahuliensis*	
Kauai 4—*Hibiscus clayi*—a		*Hibiscus clayi*
Kauai 4—*Hibiscus clayi*—b		*Hibiscus clayi*
Kauai 4—*Hibiscus clayi*—c		*Hibiscus clayi*
Kauai 4—*Hibiscus clayi*—d		*Hibiscus clayi*
Kauai 4—*Hibiscus clayi*—e		*Hibiscus clayi*
Kauai 4—*Labordia lydgatei*—a	*Labordia lydgatei*	
Kauai 4—*Phyllostegia wawrana*—a	*Phyllostegia wawrana*	
Kauai 5—*Hibiscus clayi*—f	*Hibiscus clayi*	
Kauai 5—*Munroidendron racemosum*—a	*Munroidendron racemosum*	
Kauai 6—*Brighamia insignis*—a	*Brighamia insignis*	
Kauai 7—*Brighamia insignis*—b	*Brighamia insignis*	
Kauai 7—*Delissea rhytidosperma*—a	*Delissea rhytidosperma*	
Kauai 7—*Isodendrion longifolium*—a	*Isodendrion longifolium*	
Kauai 7—*Lipochaeta micrantha*—a	*Lipochaeta micrantha*	
Kauai 7—*Melicope haupuensis*—a		*Melicope haupuensis*
Kauai 7—*Munroidendron racemosum*—b	*Munroidendron racemosum*	
Kauai 7—*Myrsine linearifolia*—a		*Myrsine linearifolia*
Kauai 7—*Peucedanum sandwicense*—a	*Peucedanum sandwicense*	
Kauai 7—*Pteralyxia kauaiensis*—a	*Pteralyxia kauaiensis*	
Kauai 7—*Schiedea nuttallii*—a	*Schiedea nuttallii*	
Kauai 8—*Sesbania tomentosa*—a		*Sesbania tomentosa*
Kauai 9—*Schiedea spergulina* var. *leiopoda*—a	*Schiedea spergulina* var. *leiopoda*	
Kauai 10—*Adenophorus periens*—b	*Adenophorus periens*	
Kauai 10—*Bonamia menziesii*—a	*Bonamia menziesii*	
Kauai 10—*Cyanea asarifolia*—b	*Cyanea asarifolia*	
Kauai 10—*Cyanea remyi*—b	*Cyanea remyi*	
Kauai 10—*Cyanea undulata*—a	*Cyanea undulata*	
Kauai 10—*Cyrtandra limahuliensis*—c	*Cyrtandra limahuliensis*	
Kauai 10—*Dubautia pauciflorula*—a	*Dubautia pauciflorula*	
Kauai 10—*Exocarpos luteolus*—a	*Exocarpos luteolus*	
Kauai 10—*Hesperomannia lydgatei*—a	*Hesperomannia lydgatei*	
Kauai 10—*Isodendrion longifolium*—b	*Isodendrion longifolium*	
Kauai 10—*Labordia lydgatei*—b	*Labordia lydgatei*	
Kauai 10—*Labordia tinifolia* var. *wahiawaensis*—a	*Labordia tinifolia* var. *wahiawaensis.*	
Kauai 10—*Lysimachia filifolia*—a	*Lysimachia filifolia*	
Kauai 10—*Myrsine linearifolia*—b	*Myrsine linearifolia*	
Kauai 10—*Phlegmariurus nutans*—a		*Phlegmariurus nutans*
Kauai 10—*Plantago princeps*—a	*Plantago princeps*	
Kauai 10—*Pteralyxia kauaiensis*—b	*Pteralyxia kauaiensis*	
Kauai 10—*Viola helenae*—a	*Viola helenae*	
Kauai 10—*Viola kauaiensis* var. *wahiawaensis*—a	*Viola kauaiensis* var. *wahiawaensis.*	
Kauai 11—*Adenophorus periens*—c	*Adenophorus periens*	
Kauai 11—*Adenophorus periens*—d	*Adenophorus periens*	
Kauai 11—*Alectryon macrococcus*—a	*Alectryon macrococcus*	
Kauai 11—*Alectryon macrococcus*—b	*Alectryon macrococcus*	
Kauai 11—*Alsinidendron lychnoides*—a	*Alsinidendron lychnoides*	
Kauai 11—*Alsinidendron lychnoides*—b	11—*Alsinidendron lychnoides*—a	
Kauai 11—*Alsinidendron lychnoides*—c		*Alsinidendron lychnoides*
Kauai 11—*Alsinidendron viscosum*—a	*Alsinidendron viscosum*	
Kauai 11—*Alsinidendron viscosum*—b	*Alsinidendron viscosum*	
Kauai 11—*Alsinidendron viscosum*—c	*Alsinidendron viscosum*	
Kauai 11—*Alsinidendron viscosum*—d	*Alsinidendron viscosum*	
Kauai 11—*Bonamia menziesii*—b	*Bonamia menziesii*	
Kauai 11—*Brighamia insignis*—c	*Brighamia insignis*	
Kauai 11—*Centaurium sebaeoides*—a	*Centaurium sebaeoides*	
Kauai 11—*Chamaesyce halemanui*—a		*Chamaesyce halemanui*
Kauai 11—*Chamaesyce halemanui*—b	*Chamaesyce halemanui*	
Kauai 11—*Chamaesyce halemanui*—c	*Chamaesyce halemanui*	
Kauai 11—*Ctenitis squamigera*—a		*Ctenitis squamigera*
Kauai 11—*Cyanea recta*—c	*Cyanea recta*	
Kauai 11—*Cyanea recta*—d		*Cyanea recta*
Kauai 11—*Cyanea remyi*—c	*Cyanea remyi*	
Kauai 11—*Cyanea remyi*—d	*Cyanea remyi*	

(CCXVIII) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI—Continued

Unit name	Species occupied	Species unoccupied
Kauai 11—*Cyperus trachysanthos*—a	*Cyperus trachysanthos*	
Kauai 11—*Cyrtandra cyaneoides*—b	*Cyrtandra cyaneoides*	
Kauai 11—*Cyrtandra cyaneoides*—c	*Cyrtandra cyaneoides*	
Kauai 11—*Cyrtandra limahuliensis*—d	*Cyrtandra limahuliensis*	
Kauai 11—*Cyrtandra limahuliensis*—e	*Cyrtandra limahuliensis*	
Kauai 11—*Delissea rhytidosperma*—b	*Delissea rhytidosperma*	
Kauai 11—*Delissea rhytidosperma*—c		*Delissea rhytidosperma*
Kauai 11—*Delissea rivularis*—a	*Delissea rivularis*	
Kauai 11—*Delissea undulata*—a		*Delissea undulata*
Kauai 11—*Delissea undulata*—b	*Delissea undulata*	
Kauai 11—*Diellia erecta*—a		*Diellia erecta*
Kauai 11—*Diellia pallida*—a	*Diellia pallida*	
Kauai 11—*Diellia pallida*—b	*Diellia pallida*	
Kauai 11—*Diplazium molokaiense*—a		*Diplazium molokaiense*
Kauai 11—*Dubautia latifolia*—1		*Dubautia latifolia*
Kauai 11—*Dubautia latifolia*—b	*Dubautia latifolia*	
Kauai 11—*Dubautia latifolia*—c	*Dubautia latifolia*	
Kauai 11—*Euphorbia haeleeleana*—a	*Euphorbia haeleeleana*	
Kauai 11—*Euphorbia haeleeleana*—b	*Euphorbia haeleeleana*	
Kauai 11—*Euphorbia haeleeleana*—c	*Euphorbia haeleeleana*	
Kauai 11—*Exocarpos luteolus*—b	*Exocarpos luteolus*	
Kauai 11—*Exocarpos luteolus*—c	*Exocarpos luteolus*	
Kauai 11—*Exocarpos luteolus*—d	*Exocarpos luteolus*	
Kauai 11—*Exocarpos luteolus*—e	*Exocarpos luteolus*	
Kauai 11—*Flueggea neowawraea*—a		*Flueggea neowawraea*
Kauai 11—*Flueggea neowawraea*—b	*Flueggea neowawraea*	
Kauai 11—*Flueggea neowawraea*—c	*Flueggea neowawraea*	
Kauai 11—*Flueggea neowawraea*—d	*Flueggea neowawraea*	
Kauai 11—*Flueggea neowawraea*—e	*Flueggea neowawraea*	
Kauai 11—*Flueggea neowawraea*—f	*Flueggea neowawraea*	
Kauai 11—*Gouania meyenii*—a		*Gouania meyenii*
Kauai 11—*Gouania meyenii*—b	*Gouania meyenii*	
Kauai 11—*Gouania meyenii*—c		*Gouania meyenii*
Kauai 11—*Hedyotis cookiana*—a	*Hedyotis cookiana*	
Kauai 11—*Heduptos st.-johnii*—a	*Heduptos st.-johnii*	
Kauai 11—*Hesperomannia lydgatei*—b	*Hesperomannia lydgatei*	
Kauai 11—*Hesperomannia lydgatei*—e	*Hesperomannia lydgatei*	
Kauai 11—*Hibiscadelphus woodii*—a	*Hibiscadelphus woodii*	
Kauai 11—*Hibiscadelphus woodii*—b	*Hibiscadelphus woodii*	
Kauai 11—*Hibiscus waimeae* ssp. *hannerae*—a	*Hibiscus waimeae* ssp. *hannerae*	
Kauai 11—*Ischaemum byrone*—d		*Ischaemum byrone*
Kauai 11—*Isodendrion laurifolium*—a	*Isodendrion laurifolium*	
Kauai 11—*Isodendrion laurifolium*—b	*Isodendrion laurifolium*	
Kauai 11—*Isodendrion longifolium*—c	*Isodendrion longifolium*	
Kauai 11—*Isodendrion longifolium*—d	*Isodendrion longifolium*	
Kauai 11—*Isodendrion longifolium*—e	*Isodendrion longifolium*	
Kauai 11—*Kokia kauaiensis*—a	*Kokia kauaiensis*	
Kauai 11—*Kokia kauaiensis*—b	*Kokia kauaiensis*	
Kauai 11—*Kokia kauaiensis*—c	*Kokia kauaiensis*	
Kauai 11—*Kokia kauaiensis*—d	*Kokia kauaiensis*	
Kauai 11—*Labordia lydgatei*—c	*Labordia lydgatei*	
Kauai 11—*Labordia lydgatei*—d	*Labordia lydgatei*	
Kauai 11—*Labordia lydgatei*—e	*Labordia lydgatei*	
Kauai 11—*Lipochaeta fauriei*—a		*Lipochaeta fauriei*
Kauai 11—*Lipochaeta fauriei*—b	*Lipochaeta fauriei*	
Kauai 11—*Lipochaeta micrantha*—b	*Lipochaeta micrantha*	
Kauai 11—*Lobelia niihauensis*—a		*Lobelia niihauensis*
Kauai 11—*Lobelia niihauensis*—b	*Lobelia niihauensis*	
Kauai 11—*Mariscus pennatiformis*—a		*Mariscus pennatiformis*
Kauai 11—*Melicope haupuensis*—b	*Melicope haupuensis*	
Kauai 11—*Melicope haupuensis*—c	*Melicope haupuensis*	
Kauai 11—*Melicope knudsenii*—a	*Melicope knudsenii*	
Kauai 11—*Melicope knudsenii*—b	*Melicope knudsenii*	
Kauai 11—*Melicope pallida*—a	*Melicope pallida*	
Kauai 11—*Melicope pallida*—b	*Melicope pallida*	
Kauai 11—*Munroidendron racemosum*—c	*Munroidendron racemosum*	
Kauai 11—*Munroidendron racemosum*—d	*Munroidendron racemosum*	
Kauai 11—*Myrsine linearifolia*—c	*Myrsine linearifolia*	
Kauai 11—*Myrsine linearifolia*—d	*Myrsine linearifolia*	
Kauai 11—*Myrsine linearifolia*—e	*Myrsine linearifolia*	

(CCXVIII) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI—Continued

Unit name	Species occupied	Species unoccupied
Kauai 11—*Myrsine linearifolia*—f	*Myrsine linearifolia*	
Kauai 11—*Nothocestrum peltatum*—a		*Nothocestrum peltatum*
Kauai 11—*Nothocestrum peltatum*—b	*Nothocestrum peltatum*	
Kauai 11—*Nothocestrum peltatum*—c	*Nothocestrum peltatum*	
Kauai 11—*Peucedanum sandwicense*—b	*Peucedanum sandwicense*	
Kauai 11—*Peucedanum sandwicense*—c	*Peucedanum sandwicense*	
Kauai 11—*Phyllostegia knudsenii*—a	*Phyllostegia knudsenii*	
Kauai 11—*Phyllostegia waimeae*—a	*Phyllostegia waimeae*	
Kauai 11—*Phyllostegia wawrana*—b	*Phyllostegia wawrana*	
Kauai 11—*Phyllostegia wawrana*—c	*Phyllostegia wawrana*	
Kauai 11—*Phyllostegia wawrana*—d	*Phyllostegia wawrana*	
Kauai 11—*Plantago princeps*—b	*Plantago princeps*	
Kauai 11—*Plantago princeps*—c		*Plantago princeps*
Kauai 11—*Plantago princeps*—d	*Plantago princeps*	
Kauai 11—*Platanthera holochila*—a	*Platanthera holochila*	
Kauai 11—*Poa mannii*—a		*Poa mannii*
Kauai 11—*Poa mannii*—b	*Poa mannii*	
Kauai 11—*Poa mannii*—c		*Poa mannii*
Kauai 11—*Poa mannii*—d	*Poa mannii*	
Kauai 11—*Poa sandvicensis*—a	*Poa sandvicensis*	
Kauai 11—*Poa sandvicensis*—b	*Poa sandvicensis*	
Kauai 11—*Poa siphonoglossa*—a	*Poa siphonoglossa*	
Kauai 11—*Poa siphonoglossa*—b	*Poa siphonoglossa*	
Kauai 11—*Pteralyxia kauaiensis*—c	*Pteralyxia kauaiensis*	
Kauai 11—*Pteralyxia kauaiensis*—d	*Pteralyxia kauaiensis*	
Kauai 11—*Pteralyxia kauaiensis*—e	*Pteralyxia kauaiensis*	
Kauai 11—*Pteralyxia kauaiensis*—f	*Pteralyxia kauaiensis*	
Kauai 11—*Pteralyxia kauaiensis*—g	*Pteralyxia kauaiensis*	
Kauai 11—*Remya kauaiensis*—a	*Remya kauaiensis*	
Kauai 11—*Remya kauaiensis*—b	*Remya kauaiensis*	
Kauai 11—*Remya kauaiensis*—c	*Remya kauaiensis*	
Kauai 11—*Remya kauaiensis*—d	*Remya kauaiensis*	
Kauai 11—*Remya kauaiensis*—e	*Remya kauaiensis*	
Kauai 11—*Remya montgomeryi*—a		*Remya montgomeryi*
Kauai 11—*Remya montgomeryi*—b	*Remya montgomeryi*	
Kauai 11—*Remya montgomeryi*—c	*Remya montgomeryi*	
Kauai 11—*Schiedea apokremnos*—a	*Schiedea apokremnos*	
Kauai 11—*Schiedea apokremnos*—b	*Schiedea apokremnos*	
Kauai 11—*Schiedea apokremnos*—c	*Schiedea apokremnos*	
Kauai 11—*Schiedea helleri*—a		*Schiedea helleri*
Kauai 11—*Schiedea helleri*—b	*Schiedea helleri*	
Kauai 11—*Schiedea helleri*—c	*Schiedea helleri*	
Kauai 11—*Schiedea kauaiensis*—a		*Schiedea kauaiensis*
Kauai 11—*Schiedea kauaiensis*—c	*Schiedea kauaiensis*	
Kauai 11—*Schiedea kauaiensis*—c	*Schiedea kauaiensis*	
Kauai 11—*Schiedea kauaiensis*—d		*Schiedea kauaiensis*
Kauai 11—*Schiedea membranacea*—a	*Schiedea membranacea*	
Kauai 11—*Schiedea membranacea*—b	*Schiedea membranacea*	
Kauai 11—*Schiedea membranacea*—c	*Schiedea membranacea*	
Kauai 11—*Schiedea membranacea*—d	*Schiedea membranacea*	
Kauai 11—*Schiedea spergulina* var. *spergulina*—a	*Schiedea spergulina* var. *spergulina.*	
Kauai 11—*Schiedea spergulina* var. *spergulina*—b	*Schiedea spergulina* var. *spergulina.*	
Kauai 11—*Schiedea stellarioides*—a	*Schiedea stellarioides*	
Kauai 11—*Schiedea stellarioides*—b		*Schiedea stellarioides*
Kauai 11—*Solanum sandwicense*—a	*Solanum sandwicense*	
Kauai 11—*Solanum sandwicense*—b		*Solanum sandwicense*
Kauai 11—*Spermolepis hawaiiensis*—a	*Spermolepis hawaiiensis*	
Kauai 11—*Stenogyne campanulata*—a	*Stenogyne campanulata*	
Kauai 11—*Wilkesia hobdyi*—a	*Wilkesia hobdyi*	
Kauai 11—*Xylosma crenatum*—a	*Xylosma crenatum*	
Kauai 11—*Zanthoxylum hawaiiense*—a	*Zanthoxylum hawaiiense*	
Kauai 12—*Nothocestrum peltatum*—d	*Nothocestrum peltatum*	
Kauai 12—*Remya kauaiensis*—f		*Remya kauaiensis*
Kauai 12—*Xylosma crenatum*—b		*Xylosma crenatum*
Kauai 13—*Lipochaeta waimeaensis*—a	*Lipochaeta waimeaensis*	
Kauai 13—*Schiedea spergulina* var. *spergulina*—c		*Schiedea spergulina* var. *spergulina*
Kauai 13—*Spermolepis hawaiiensis*—b	*Spermolepis hawaiiensis*	
Kauai 14—*Panicum niihauense*—a	*Panicum niihauense*	

(CCXVIII) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI—Continued

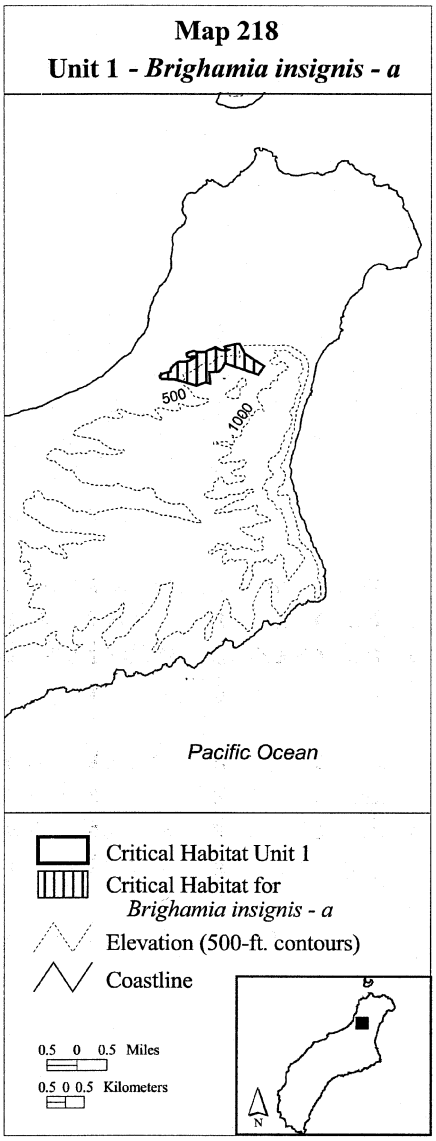
Unit name	Species occupied	Species unoccupied
Kauai 14—*Sesbania tomentosa*—b	*Sesbania tomentosa*	
Kauai 15—*Panicum niihauense*—b		*Panicum niihauense*
Kauai 16—*Panicum niihauense*—c		*Panicum niihauense*
Kauai 17—*Panicum niihauense*—d		*Panicum niihauense*

(2) *Niihau.* Critical habitat units are described below. Coordinates in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following map shows the general location of the one critical habitat unit designated on the island of Niihau.

(i) Niihau 1—*Brighamia insignis*—a (144 ha; 357 ac)

(A) Unit consists of the following 52 boundary points: Start at 384729, 2427553; 384706, 2427627; 384746, 2427670; 384750, 2427684; 384766, 2427695; 384924, 2427730; 384995, 2427744; 384993, 2427821; 385066, 2427920; 385143, 2427974; 385186, 2428008; 385291, 2428014; 385421, 2428023; 385500, 2428057; 385605, 2428131; 385614, 2428162; 385546, 2428162; 385509, 2428133; 385435, 2428142; 385410, 2428184; 385415, 2428238; 385478, 2428278; 385597, 2428312; 385679, 2428287; 385801, 2428267; 385903, 2428282; 385977, 2428333; 386111, 2428376; 386173, 2428412; 386264, 2428364; 386326, 2428328; 386482, 2428317; 386530, 2428342; 386440, 2428385; 386428, 2428419; 386471, 2428436; 386539, 2428453; 386582, 2428467; 386732, 2428498; 386811, 2428496; 386814, 2428500; 386959, 2428247; 387475, 2427909; 387322, 2427686; 386416, 2427981; 386362, 2427840; 386256, 2427750; 386010, 2427731; 386042, 2427438; 385897, 2427457; 385678, 2427367; 385116, 2427542. return to starting point.

(B) NOTE: Map 218 follows:



(II) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR NIIHAU

Unit name	Species occupied	Species unoccupied
Niihau 1—*Brighamia insignis*—a	*Brighamia insignis*	

(b) *Plants on Kauai and Niihau; Constituent elements.*

(1) *Flowering Plants.*

FAMILY APIACEAE: ***Peucedanum sandwicense*** (MAKOU)

Kauai 7—*Peucedanum sandwicense*—a, Kauai 11—*Peucedanum sandwicense*—b, and Kauai 11—*Peucedanum sandwicense*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Peucedanum sandwicense* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliff habitats in mixed shrub coastal dry cliff communities or diverse mesic forest and containing one or more of the following associated native plant species: *Acacia koa, Artemisia australis, Bidens* spp., *Brighamia insignis, Carex meyenii, Chamaesyce celastroides, Diospyros* spp., *Dodonaea viscosa, Eragrostis variabilis, Hibiscus kokio, Lobelia niihauensis, Metrosideros polymorpha, Panicum lineale, Psydrax odorata, Psychotria* spp., or *Wilkesia* spp.; and

(ii) Elevations between 119 and 1,232 m (391 and 4,041 ft).

FAMILY APIACEAE: ***Spermolepis hawaiiensis*** (NCN)

Kauai 11—*Spermolepis hawaiiensis*—a, Kauai 13—*Spermolepis hawaiiensis*—b, and Kauai 13—*Spermolepis hawaiiensis*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Spermolepis hawaiiensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha* forests or *Dodonaea viscosa* lowland dry shrubland and containing one or more of the following associated plant species: *Bidens sandvicensis, Doryopteris* spp., *Eragrostis variabilis, Erythrina sandwicensis, Lipochaeta* spp., *Schiedea spergulina,* or *Sida fallax;* and

(ii) Elevations between 56 and 662 m (184 and 2,172 ft).

FAMILY APOCYNACEAE: ***Pteralyxia kauaiensis*** (KAULU)

Kauai 7—*Pteralyxia kauaiensis*—a, Kauai 10—*Pteralyxia kauaiensis*—b, Kauai 11—*Pteralyxia kauaiensis*—c, Kauai 11—*Pteralyxia kauaiensis*—d, Kauai 11—*Pteralyxia kauaiensis*—e, Kauai 11—*Pteralyxia kauaiensis*—f, and Kauai 11—*Pteralyxia kauaiensis*—g, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Pteralyxia kauaiensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Diverse mesic or *Diospyros sandwicensis* mixed mesic forests with *Pisonia* spp. and containing one or more of the following associated plant species: *Acacia koa, Alectryon macrococcus, Alphitonia ponderosa, Antidesma platyphyllum* var. *hillebrandii, Bobea brevipes, Carex* spp., *Charpentiera elliptica, Claoxylon sandwicense, Cyanea* spp., *Dianella sandwicensis, Diospyros* spp., *Dodonaea viscosa, Diplazium sandwichianum, Euphorbia haeleeleana, Freycinetia arborea, Gahnia* spp., *Gardenia remyi, Hedyotis terminalis, Hibiscus kokio, Kokia kauaiensis, Leptecophylla tameiameiae, Metrosideros polymorpha, Myrsine lanaiensis, Neraudia* spp., *Nesoluma polynesicum, Nestegis sandwicensis, Peperomia* spp., *Pisonia sandwicensis, Pipturus* spp., *Pleomele aurea, Poa sandvicensis, Pouteria sandwicensis, Pritchardia* spp., *Psydrax odorata, Psychotria* spp., *Rauvolfia sandwicensis, Santalum freycinetianum* var. *pyrularium, Schiedea* spp., *Syzygium sandwicensis, Tetraplasandra* spp., *Xylosma hawaiiense,* or *Zanthoxylum dipetalum;* and

(ii) Elevations between 127 and 1,563 m (418 and 5,128 ft).

FAMILY ARALIACEAE: ***Munroidendron racemosum*** (NCN)

Kauai 5—*Munroidendron racemosum*—a, Kauai 7—*Munroidendron racemosum*—b, Kauai 11—*Munroidendron racemosum*—c, and Kauai 11—*Munroidendron racemosum*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Munroidendron racemosum*

on Kauai. Within these units the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep exposed cliffs or ridge slopes in coastal or lowland mesic forest and containing one or more of the following associated plant species: *Bobea brevipes, Brighamia insignis, Canavalia napaliensis, Diospyros sandwicensis, Diospyros hillebrandii, Nestegis sandwicensis, Pisonia sandwicensis, Pisonia umbellifera, Pleomele aurea, Pouteria sandwicensis, Psychotria* spp., *Psydrax odorata, Rauvolfia sandwicensis, Schiedea* spp., *Sida fallax,* or *Tetraplasandra* spp.; and

(ii) Elevations between 11 and 938 m (37 and 3,077 ft).

FAMILY ASTERACEAE: ***Dubautia latifolia*** (NAENAE)

Kauai 11—*Dubautia latifolia—a, Kauai 11— Dubautia latifolia*—b, and Kauai 11—*Dubautia latifolia*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Dubautia latifolia* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gentle or steep slopes on well drained soil in semi-open or closed, diverse montane mesic forest dominated by *Acacia koa* and/or *Metrosideros polymorpha* and containing one or more of the following native plant species: *Alphitonia ponderosa, Antidesma platyphyllum, Bobea* spp., *Claoxylon sandwicense, Coprosma waimeae, Cyrtandra* spp., *Dicranopteris linearis, Diplazium sandwichianum, Dodonaea viscosa, Elaeocarpus bifidus, Hedyotis terminalis, Ilex anomala, Melicope anisata, Nestegis sandwicensis, Pleomele aurea, Pouteria sandwicensis, Psychotria mariniana, Scaevola* spp., or *Xylosma* spp.; and

(ii) Elevations between 545 and 1,277 m (1,786 and 4,189 ft).

FAMILY ASTERACEAE: ***Dubautia pauciflorula*** (NAENAE)

Kauai 10—*Dubautia pauciflorul*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Dubautia pauciflorula* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest within stream drainages containing one or more of the following associated native plant species: *Antidesma platyphyllum, Broussaisia arguta, Cheirodendron* spp., *Dubautia laxa, Embelia pacifica, Hesperomannia lydgatei, Labordia waialealae, Melicope* spp., *Nothoperanema rubiginosa, Pritchardia* spp., *Psychotria* spp., *Sadleria* spp., *Scaevola mollis, Syzygium sandwicensis,* or *Tetraplasandra* spp.; and

(ii) Elevations between 564 and 1,094 m (1,849 and 3,587 ft).

FAMILY ASTERACEAE: ***Hesperomannia lydgatei*** (NCN)

Kauai 10—*Hesperomannia lydgatei*—a, Kauai 11—*Hesperomannia lydgatei*—b, and Kauai 11—*Hesperomannia lydgatei*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Hesperomannia lydgatei* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Stream banks and forested slopes in rich brown soil and silty clay in *Metrosideros polymorpha* or *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest and containing one or more of the following associated native plant species: *Adenophorus periens, Antidesma platyphyllum, Broussaisia arguta, Cheirodendron* spp., *Cyanea* spp., *Dubautia knudsenii, Dubautia laxa, Dubautia pauciflorula, Dubautia raillardioides, Elaphoglossum* spp., *Freycinetia arborea, Hedyotis terminalis, Labordia lydgatei, Machaerina angustifolia, Peperomia* spp., *Pritchardia* spp., *Psychotria hexandra,* or *Syzygium sandwicensis;* and

(ii) Elevations between 207 and 1,344 m (680 and 4,409 ft).

FAMILY ASTERACEAE: ***Lipochaeta fauriei*** (NEHE)

Kauai 11—*Lipochaeta fauriei*—a, and Kauai 11—*Lipochaeta fauriei*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Lipochaeta fauriei* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Moderate shade to full sun on the sides of steep gulches in diverse lowland mesic forests and containing one or more of the following native species: *Acacia koa, Carex meyenii, Carex wahuensis, Dicranopteris linearis, Diospyros* spp., *Dodonaea viscosa, Euphorbia haeleeleana, Hibiscus waimeae, Kokia kauaiensis, Myrsine lanaiensis, Nestegis sandwicensis, Pleomele aurea, Psychotria greenwelliae, Psychotria mariniana, or Sapindus oahuensis;* and

(ii) Elevations between 438 and 948 m (1,438 and 3,108 ft).

FAMILY ASTERACEAE: ***Lipochaeta micrantha*** (NEHE)

Kauai 7—*Lipochaeta micrantha*—a, and Kauai 11—*Lipochaeta micrantha*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Lipochaeta micrantha* on Kauai. Within these units the currently known primary constituent elements of critical habitat for *Lipochaeta micrantha* are the habitat components provided by:

(i) Cliffs, ridges, stream banks, or slopes in mesic to wet mixed communities and containing one or more of the following associated native plant species: *Acacia koa, Antidesma* spp., *Artemisia australis, Bidens sandvicensis, Bobea* spp., *Chamaesyce celastroides* var. *hanapepensis, Diospyros* spp., *Dodonaea viscosa, Eragrostis grandis, Eragrostis variabilis, Hibiscus kokio, Lepidium bidentatum, Lobelia niihauensis, Melicope* spp., *Metrosideros polymorpha, Neraudia kauaiensis, Nototrichium* spp., *Pipturus* spp., *Plectranthus parviflorus, Pleomele aurea, Psydrax odorata, Rumex albescens, Sida fallax,* or *Xylosma hawaiiense;* and

(ii) Elevations between 127 and 1,090 m (418 and 3,574 ft).

FAMILY ASTERACEAE: ***Lipochaeta waimeaensis*** (NEHE)

Kauai 13—*Lipochaeta waimeaensis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Lipochaeta waimeaensis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Precipitous, shrub-covered gulches in diverse lowland forest and containing one or more of the following associated native plant species: *Artemisia australis, Chamaesyce celastroides, Dodonaea viscosa, Lipochaeta connata, Santalum freycinetianum, Schiedea spergulina,* or *Panicum* spp.; and

(ii) Elevations between 44 and 409 m (145 and 1,340 ft).

FAMILY ASTERACEAE: ***Remya kauaiensis*** (NCN)

Kauai 11—*Remya kauaiensis*—a, Kauai 11—*Remya kauaiensis*—b, Kauai 11—*Remya kauaiensis*—c, Kauai 11—*Remya kauaiensis*—d, Kauai 11—*Remya kauaiensis*—e, and Kauai 12—*Remya kauaiensis*—f, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Remya kauaiensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, north or northeast-facing slopes in *Acacia koa-Metrosideros* polymorpha lowland mesic forest and containing one or more of the following associated native plant species: *Chamaesyce* spp., *Claoxylon sandwicense, Dianella sandwicensis, Diospyros* spp., *Dodonaea viscosa, Hedyotis terminalis, Melicope* spp., *Nestegis sandwicensis, Pouteria sandwicensis, Psychotria* spp., *Schiedea* spp., or *Tetraplasandra* spp.; and

(ii) Elevations between 560 and 1,249 m (1,836 and 4,097 ft).

FAMILY ASTERACEAE: ***Remya montgomeryi*** (NCN)

Kauai 11—*Remya montgomeryi*—a, Kauai 11—*Remya montgomeryi*—b, and

Kauai 11—*Remya montgomeryi*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Remya montgomeryi* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, north or northeast-facing slopes or cliffs in transitional wet or *Metrosideros polymorpha*-dominated mixed mesic forest and containing one or more of the following associated native plant species: *Artemisia australis, Bobea* spp., *Boehmeria grandis, Cheirodendron* spp., *Claoxylon sandwicense, Cyrtandra* spp., *Dubautia* spp., *Ilex anomala, Lepidium serra, Lysimachia* spp., *Myrsine linearifolia, Nototrichium* spp., *Pleomele aurea, Poa mannii, Sadleria* spp., *Scaevola* spp., *Stenogyne campanulata, Tetraplasandra* spp., or *Zanthoxylum dipetalum;* and

(ii) Elevations between 336 and 1,345 m (1,102 and 4,411 ft).

FAMILY ASTERACEAE: ***Wilkesia hobdyi*** (DWARF ILIAU)

Kauai 11—*Wilkesia hobdyi*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Wilkesia hobdyi* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Coastal dry cliffs or very dry ridges containing one or more of the following associated native plant species: *Artemisia australis, Dodonaea viscosa, Eragrostis variabilis, Hibiscus kokio* ssp. *saint johnianus, Lipochaeta connata, Lobelia niihauensis, Myoporum sandwicense, Peperomia blanda, Peperomia* spp., *Peperomia tetraphylla, Peucedanum sandwicense, Psydrax odorata, Sida fallax, Waltheria indica,* or *Wilkesia gymnoxiphium;* and

(ii) Elevations between 12 and 685 m (40 and 2,246 ft).

FAMILY CAMPANULACEAE: ***Brighamia insignis*** (OLULU)

Kauai 6—*Brighamia insignis*—a, Kauai 7—*Brighamia insignis*—b, and Kauai 11—*Brighamia insignis*—c identified in the legal descriptions in paragraph (a)(1) of this section, and Niihau 1—*Brighamia insignis*—a, identified in the legal description in paragraph (a)(2) of this section, constitute critical habitat for *Brighamia insignis* on Kauai and Niihau. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rocky ledges with little soil or steep sea cliffs in lowland dry grasslands or shrublands with annual rainfall that is usually less than 170 cm (65 in) and containing one or more of the following native plant species: *Artemisia australis, Chamaesyce celastroides, Eragrostis variabilis, Heteropogon contortus, Hibiscus kokio, Hibiscus kokio* ssp. *saintjohnianus, Lepidium serra, Lipochaeta succulenta, Munroidendron racemosum,* or *Sida fallax;* and

(ii) Elevations between 0 and 748 m (0 and 2,453 ft).

FAMILY CAMPANULACEAE: ***Cyanea asarifolia*** (HAHA)

Kauai 4—*Cyanea asarifolia*—a, and Kauai 10—*Cyanea asarifolia*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea asarifolia* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Pockets of soil on sheer wet rock cliffs and waterfalls in lowland wet forests and containing one or more of the following native plant species: *Bidens* spp., *Dubautia plantaginea, Hedyotis centranthoides, Hedyotis elatior, Lysimachia filifolia, Machaerina angustifolia, Metrosideros polymorpha,* or *Panicum lineale;* and

(ii) Elevations between 182 and 1,212 m (597 and 3,976 ft).

FAMILY CAMPANULACEAE: ***Cyanea recta*** (HAHA)

Kauai 4—*Cyanea recta*—a, Kauai 4—*Cyanea recta*—b, Kauai 11—*Cyanea recta*—c, and Kauai 11—*Cyanea recta*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea recta*

on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulches or slopes in lowland wet or mesic *Metrosideros polymorpha* forest or shrubland and containing one or more of the following native plant species: *Antidesma platyphyllum, Cheirodendron platyphyllum, Cibotium* spp., *Dicranopteris linearis, Diplazium* spp., or *Psychotria* spp.; and

(ii) Elevations between 297 and 1,345 m (975 and 4,411 ft).

FAMILY CAMPANULACEAE: ***Cyanea remyi*** (HAHA)

Kauai 4—*Cyanea remyi*—a, Kauai 10—*Cyanea remyi*—b, Kauai 11—*Cyanea remyi*—c, and Kauai 11—*Cyanea remyi*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea remyi* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Narrow drainages and wet stream banks in lowland wet forest or shrubland and containing one or more of the following native plant species: various grammitid and filmy ferns (Grammitidaceae and Hymenophyllaceae), *Adenophorus* spp., *Antidesma platyphyllum, Bidens* spp., *Broussaisia arguta, Cheirodendron* spp., *Cyrtandra* spp., *Diplazium sandwichianum, Eragrostis grandis, Freycinetia arborea, Hedyotis terminalis, Machaerina angustifolia, Metrosideros polymorpha, Perrottetia sandwicensis, Pipturus* spp., *Psychotria hexandra, Syzygium sandwicensis, Thelypteris* spp., *Touchardia latifolia*, or *Urera glabra;* and

(ii) Elevations between 219 and 1,089 m (719 and 3,571 ft).

FAMILY CAMPANULACEAE: ***Cyanea undulata*** (HAHA)

Kauai 10—*Cyanea undulata*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Cyanea undulata* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Narrow drainages and wet stream banks in *Metrosideros polymorpha* dry to montane wet forest or shrubland and containing one or more of the following associated native species: various grammitid and filmy ferns (Grammitidaceae and Hymenophyllaceae), *Adenophorus* spp., *Antidesma platyphyllum, Bidens* spp., *Broussaisia arguta, Cheirodendron* spp., *Diplazium sandwichianum, Dryopteris glabra, Eragrostis grandis, Freycinetia arborea, Machaerina angustifolia, Mariscus* spp., *Melicope feddei, Perrottetia sandwicensis, Pipturus* spp., *Psychotria hexandra, Psychotria mariniana, Sadleria pallida, Sadleria squarrosa, Smilax melastomifolia, Sphenomeris chinensis, Syzygium sandwicensis*, or *Thelypteris* spp.; and

(ii) Elevations between 375 and 1,046 m (1,231 and 3,430 ft).

FAMILY CAMPANULACEAE: ***Delissea rhytidosperma*** (NO COMMON NAME)

Kauai 7—*Delissea rhytidosperma*—a, Kauai 11—*Delissea rhytidosperma*—b, and Kauai 11—*Delissea rhytidosperma*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Delissea rhytidosperma* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Well-drained soils with medium or fine-textured subsoil in Diospyros diverse lowland mesic forests or diverse *Metrosideros polymorpha-Acacia koa* forests and containing one or more of the following native species: *Adenophorus* spp., *Cyanea* spp., *Dianella sandwicensis, Diospyros sandwicensis, Dodonaea viscosa, Doodia kunthiana, Euphorbia haeleeleana,* grammitid ferns (Grammitidaceae), *Hedyotis* spp., *Leptecophylla tameiameiae, Microlepia strigosa, Nestegis sandwicensis, Pisonia* spp., *Psychotria hobdyi,* or *Pteralyxia kauaiensis;* and

(ii) Elevations between 167 and 895 m (547 and 2,935 ft).

FAMILY CAMPANULACEAE: ***Delissea rivularis*** (OHA)

Kauai 11—*Delissea rivularis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Delissea rivularis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes near streams in *Metrosideros polymorpha-Cheirodendron trigynum* montane wet or mesic forest and containing one or more of the following native plant species: *Boehmeria grandis, Broussaisia arguta, Carex* spp., *Coprosma* spp., *Diplazium sandwichianum, Dubautia knudsenii, Hedyotis foggiana, Ilex anomala, Machaerina angustifolia, Melicope anisata, Melicope clusiifolia, Pipturus* spp., *Psychotria hexandra,* or *Sadleria* spp.; and

(ii) Elevations between 823 and 1,307 m (2,701 and 4,286 ft).

FAMILY CAMPANULACEAE: ***Delissea undulata*** (NCN)

Kauai 11—*Delissea undulata*—a, and Kauai 11—*Delissea undulata*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Delissea undulata* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry or open *Acacia koa-Metrosideros polymorpha* mesic forests or *Alphitonia ponderosa* montane forest and containing one or more of the following native plant species: *Diospyros sandwicensis, Dodonaea viscosa, Doodia kunthiana, Eragrostis variabilis, Euphorbia haeleeleana, Kokia kauaiensis, Microlepia strigosa, Panicum* spp., *Pleomele aurea, Psychotria mariniana, Psychotria greenwelliae,* or *Santalum freycinetianum*; and

(ii) Elevations between 139 and 1,006 m (456 and 3,299 ft).

FAMILY CAMPANULACEAE: ***Lobelia niihauensis*** (NCN)

Kauai 11—*Lobelia niihauensis*—a, and Kauai 11—*Lobelia niihauensis*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Lobelia niihauensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Exposed mesic mixed shrubland or coastal dry cliffs and containing one or more of the following associated native plant species: *Artemisia australis, Bidens sandvicensis, Chamaesyce celastroides, Charpentiera* spp., *Eragrostis variabilis, Hibiscus kokio* ssp. *saint-johnianus, Lipochaeta connata* var. *acris, Lythrum* spp., *Nototrichium* spp., *Plectranthus parviflorus, Schiedea apokremnos,* or *Wilkesia hobdyi*; and

(ii) Elevations between 36 and 888 m (117 and 2,911 ft).

FAMILY CARYOPHYLLACEAE: ***Alsinidendron lychnoides*** (KUAWAWAENOHU)

Kauai 11—*Alsinidendron lychnoides*—a, Kauai 11—*Alsinidendron lychnoides*—b, and Kauai 11—*Alsinidendron lychnoides*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Alsinidendron lychnoides* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep riparian clay or silty soil banks in montane wet forests dominated by *Metrosideros polymorpha* and *Cheirodendron* spp., or by *Metrosideros polymorpha* and *Dicranopteris linearis* and containing one or more of the following native plant species: *Asplenium* spp., *Astelia* spp., *Broussaisia arguta, Carex* spp., *Cyrtandra* spp., *Diplazium sandwichianum, Elaphoglossum* spp., *Hedyotis terminalis, Machaerina* spp., *Peperomia* spp., or *Vaccinium* spp.; and

(ii) Elevations between 828 and 1,344 m (2,715 and 4,408 ft).

FAMILY CARYOPHYLLACEAE: ***Alsinidendron viscosum*** (NCN)

Kauai 11—*Alsinidendron viscosum*—a, Kauai 11—*Alsinidendron viscosum*—b, Kauai 11—*Alsinidendron viscosum*—c, and Kauai 11—*Alsinidendron viscosum*—d, identified in the legal descriptions in

paragraph (a)(1) of this section, constitute critical habitat for *Alsinidendron viscosum* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes in *Acacia koa-Metrosideros polymorpha* lowland and montane mesic forest and containing one or more of the following native plant species: *Alyxia oliviformis, Asplenium polyodon, Bidens cosmoides, Bobea* spp., *Carex meyenii, Carex wahuensis, Coprosma* spp., *Dianella sandwicensis, Dodonaea viscosa, Doodia kunthiana, Dryopteris glabra, Dryopteris unidentata, Dryopteris wallichiana, Dubautia laevigata, Gahnia* spp., *Ilex anomala, Melicope* spp., *Panicum nephelophilum, Pleomele aurea, Psychotria* spp., *Pteridium aquilinum* var. *decompositum, Schiedea stellarioides,* or *Vaccinium dentatum*; and

(ii) Elevations between 754 and 1,224 m (2,474 and 4,016 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea apokremnos*** (MAOLIOLI)

Kauai 11—*Schiedea apokremnos*—a, Kauai 11—*Schiedea apokremnos*—b, and Kauai 11—*Schiedea apokremnos*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea apokremnos* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Crevices of near-vertical basalt coastal cliff faces in sparse dry coastal cliff shrub vegetation and containing one or more of the following associated native plant species: *Artemisia australis, Bidens* spp., *Carex meyenii, Chamaesyce celastroides, Eragrostis variabilis, Lepidium serra, Lipochaeta connata, Lobelia niihauensis, Myoporum sandwicense, Peperomia* spp., *Pleomele aurea, Psydrax odorata,* or *Wilkesia* spp.; and

(ii) Elevations between 11 and 538 m (35 and 1,765 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea helleri*** (NCN)

Kauai 11—*Schiedea helleri*—a, Kauai 11—S*chiedea helleri*—b, and Kauai 11—*Schiedea helleri*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea helleri* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridges and steep cliffs in closed *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest, *M. polymorpha-Cheirodendron* spp. montane wet forest, or *Acacia koa-M. polymorpha* montane mesic forest and containing one or more of the following associated native plant species: *Broussaisia arguta, Cheirodendron* spp., *Cibotium* spp., *Cyanea* spp., *Dianella sandwicensis, Dubautia* spp., *Elaeocarpus bifidus, Hedyotis terminalis, Melicope* spp., *Myrsine* spp., *Poa sandvicensis, Scaevola procera, Syzygium sandwicensis,* or *Viola wailenalenae*; and

(ii) Elevations between 664 and 1,361 m (2,178 and 4,464 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea kauaiensis*** (NCN)

Kauai 11—*Schiedea kauaiensis*—a, Kauai 11—*Schiedea kauaiensis*—b, Kauai 11—*Schiedea kauaiensis*—c, and Kauai 11—*Schiedea kauaiensis—d*, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea kauaiensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes in diverse mesic to wet *Acacia koa-Metrosideros polymorpha* forest and containing one or more of the following associated plant species: *Alphitonia ponderosa, Cryptocarya mannii, Diospyros* spp., *Dodonaea viscosa, Euphorbia haeleeleana, Exocarpos luteolus, Leptocophylla tameiameiae, Microlepia strigosa, Nestegis sandwicensis, Peucedanum sandwicense, Pisonia* spp., *Psychotria* spp., or *Psydrax odorata*; and

(ii) Elevations between 117 and 1,290 m (385 and 4,232 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea membranacea*** (NCN)

Kauai 11—*Schiedea membranacea*—a, Kauai 11—*Schiedea membranacea*—b, Kauai 11—*Schiedea membranacea*—c, and Kauai 11—*Schiedea membranacea*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea membranacea* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliffs or cliff bases in mesic or wet habitats in lowland or montane shrubland or forest communities dominated by *Acacia koa, Pipturus* spp. and *Metrosideros polymorpha* or Urticaceae shrubland on talus slopes and containing one or more of the following associated native plant species: *Alphitonia ponderosa, Alyxia oliviformis, Asplenium* spp., *Athyrium sandwicensis, Bobea brevipes, Boehmeria grandis, Cyrtandra* spp., *Diplazium sandwichianum, Dodonaea viscosa, Eragrostis variabilis, Hedyotis terminalis, Hibiscus waimeae, Joinvillea ascendens* ssp. *ascendens, Labordia helleri, Lepidium serra, Lysimachia kalalauensis, Machaerina angustifolia, Mariscus pennatiformis, Melicope* spp., *Myrsine* spp., *Perrottetia sandwicensis, Pisonia* spp., *Pleomele aurea, Poa mannii, Poa sandvicensis, Pouteria sandwicensis, Psychotria* spp., *Psydrax odorata, Remya kauaiensis, Sadleria cyatheoides, Scaevola procera, Thelypteris cyatheoides, Thelypteris sandwicensis*, or *Touchardia latifolia*; and

(ii) Elevations between 423 and 1,259 m (1,386 and 4,131 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea nuttallii*** (NCN)

Kauai 7—*Schiedea nuttallii*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Schiedea nuttallii* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliffs in lowland diverse mesic forest dominated by *Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii, Bidens valida, Chamaesyce celastroides, Eragrostis variabilis, Hedyotis acuminata, Hedyotis fluviatilis, Heteropogon contortus, Lepidium* spp., *Lobelia niihauensis, Psychotria* spp., *Perrottetia sandwicensis*, or *Pisonia* spp.; and

(ii) Elevations between 127 and 702 m (418 and 2,303 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea spergulina*** VAR. ***leiopoda*** (NCN)

Kauai 9—*Schiedea spergulina* var. *leiopoda*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Schiedea spergulina* var. *leiopoda* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic forests and containing one or more of the following native plant species: *Acacia koa, Artemisia australis, Bidens sandvicensis, Carex meyenii, Chamaesyce celastroides, Dianella sandwicensis, Doryopteris* spp., *Eragrostis variabilis, Erythrina sandwicensis, Gahnia* spp., *Heliotropium* spp., *Lepidium serra, Lipochaeta connata, Microlepia strigosa, Nestegis sandwicensis, Nototrichium sandwicense, Panicum lineale, Peucedanum sandwicense*, or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 21 and 90 m (69 and 294 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea spergulina*** VAR. ***spergulina*** (NCN)

Kauai 11—*Schiedea spergulina* var. *spergulina*—a, Kauai 11—*Schiedea spergulina* var. *spergulina*—b, and Kauai 13—*Schiedea spergulina* var. *spergulina*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea spergulina* var. *spergulina* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic forests and containing one or more of the following associated plant species: *Acacia koa, Artemisia australis, Bidens sandvicensis, Carex meyenii, Chamaesyce celastroides, Dianella sandwicensis, Doryopteris* spp., *Eragrostis variabilis, Erythrina sandwicensis, Gahnia* spp., *Heliotropium* spp., *Lepidium serra, Lipochaeta connata, Microlepia strigosa, Nestegis sandwicensis, Nototrichium sandwicense, Panicum lineale, Peucedanum sandwicense,* or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 145 and 829 m (474 and 2,718 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea stellarioides*** (LAULIHILIHI (=MAOLIOLI))

Kauai 11—*Schiedea stellarioides*—a, and Kauai 11—*Schiedea stellarioides*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea stellarioides* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes in closed *Acacia koa-Metrosideros polymorpha* lowland or montane mesic forest or shrubland and containing one or more of the following native plant species: *Alsinidendron viscosum, Artemisia australis, Bidens cosmoides, Chenopodium* spp., *Dianella sandwicensis, Dodonaea viscosa, Mariscus* spp., *Melicope* spp., *Nototrichium sandwicense, Pipturus* spp., *Leptecophylla tameiameiae, Syzygium sandwicensis,* or *Zanthoxylum dipetalum*; and

(ii) Elevations between 376 and 1,251 m (1,135 and 4,102 ft).

FAMILY CONVOLVULACEAE: ***Bonamia menziesii*** (NCN)

Kauai 10—*Bonamia menziesii*—a, and Kauai 11—*Bonamia menziesii*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Bonamia menziesii* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry, mesic, or wet *Metrosideros polymorpha-Cheirodendron-Dicranopteris* forest and containing one or more of the following native plant species: *Antidesma platyphyllum, Alphitonia ponderosa, Acacia koa, Cyanea* spp., *Cyrtandra pickeringii, Cyrtandra limahuliensis, Dianella sandwicensis, Diospyros sandwicensis, Dodonaea viscosa, Dubautia knudsenii, Hedyotis terminalis, Isodendrion longifolium, Labordia hirtella, Melicope anisata, Melicope barbigera, Myoporum sandwicense, Nestegis sandwicensis, Pisonia* spp., *Pittosporum* spp., *Pouteria sandwicensis, Psychotria mariniana, Psychotria hexandra, Psydrax odorata, Sapindus oahuensis, Scaevola procera,* or *Syzygium sandwicensis*; and

(ii) Elevations between 566 and 1,127 m (1,858 and 3,695 ft).

FAMILY CYPERACEAE: ***Cyperus trachysanthos*** (PUUKAA)

Kauai 11—*Cyperus trachysanthos*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Cyperus trachysanthos* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Wet sites (mud flats, wet clay soil, or wet cliff seeps) on seepy flats or talus slopes and containing the native plant species *Taliparitilia ceum;* and

(ii) Elevations between 0 and 235 m (0 and 771 ft).

FAMILY CYPERACEAE: ***Mariscus pennatiformis*** (NCN)

Kauai 11—*Mariscus pennatiformis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Mariscus pennatiformis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Open sites in *Metrosideros polymorpha-Acacia koa* mixed mesic forest and containing one or more of the following associated native plant species: *Alsinidendron viscosum, Antidesma platyphyllum* var. *hillebrandii, Carex alligata, Cyperus laevigatus, Dianella sandwicensis, Diospyros hillebrandii,*

Diospyros sandwicensis, Dodonaea viscosa, Leptecophylla tameiameiae, Myrsine linearifolia, Nestegis sandwicensis, Panicum nephelophilum, Poa sandvicensis, Psydrax odorata, Schiedea stellarioides, or endemic ferns; and

(ii) Elevations between 605 and 1,065 m (1,983 and 3,493 ft).

FAMILY EUPHORBIACEAE: ***Chamaesyce halemanui*** (NCN)

Kauai 11—*Chamaesyce halemanui*—a, Kauai 11—*Chamaesyce halemanui*—b, and Kauai 11—*Chamaesyce halemanui*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Chamaesyce halemanui* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes of gulches in mesic *Acacia koa* forests and containing one or more of the following native plant species: *Asplenium* spp., *Alphitonia ponderosa, Antidesma platyphyllum, Bobea brevipes, Carex meyenii, Carex wahuensis, Cheirodendron trigynum, Coprosma* spp., *Diospyros sandwicensis, Dodonaea viscosa, Elaeocarpus bifidus, Hedyotis terminalis, Kokia kauaiensis, Leptecophylla tameiameiae, Microlepia strigosa, Melicope haupuensis, Metrosideros polymorpha, Panicum nephelophilum, Pisonia* spp., *Pittosporum spp., Pleomele aurea, Psychotria greenwelliae, Psychotria mariniana, Pouteria sandwicensis,* or *Santalum freycinetianum;* and

(ii) Elevations between 556 and 1,249 m (1,825 and 4,097 ft).

FAMILY EUPHORBIACEAE: ***Euphorbia haeleeleana*** (AKOKO)

Kauai 11—*Euphorbia haeleeleana*—a, Kauai 11—*Euphorbia haeleeleana*—b, and Kauai 11—*Euphorbia haeleeleana*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Euphorbia haeleeleana* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Lowland mixed mesic or dry *Diospyros* forest that is often codominated by *Metrosideros polymorpha* and *Alphitonia ponderosa* and containing one or more of the following native plant species: *Acacia koaia, Antidesma platyphyllum, Carex meyenii, Carex wahuensis, Claoxylon sandwicense, Diplazium sandwichianum, Dodonaea viscosa, Erythrina sandwicensis, Kokia kauaiensis, Pisonia sandwicensis, Pleomele aurea, Pouteria sandwicensis, Psychotria greenwelliae, Psychotria mariniana, Pteralyxia kauaiensis, Rauvolfia sandwicensis, Sapindus oahuensis, Tetraplasandra kavaiensis,* or *Xylosma* spp.; and

(ii) Elevations between 284 and 1,179 m (931 and 3,866 ft).

FAMILY EUPHORBIACEAE: ***Flueggea neowawraea*** (MEHAMEHAME)

Kauai 11—*Flueggea neowawraea*—a, Kauai 11—*Flueggea neowawraea*—b, Kauai 11—*Flueggea neowawraea*—c, Kauai 11—*Flueggea neowawraea*—d, Kauai 11—*Flueggea neowawraea*—e, and Kauai 11—*Flueggea neowawraea*—f, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Flueggea neowawraea* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry or mesic forests containing one or more of the following native plant species: *Alectryon macrococcus, Antidesma platyphyllum, Bidens sandvicensis, Bobea timonioides, Caesalpinia kavaiensis, Charpentiera* spp., *Diospyros* spp., *Diplazium sandwichianum, Freycinetia arborea, Hibiscus* spp., *Isodendrion laurifolium, Kokia kauaiensis, Melicope* spp., *Metrosideros polymorpha, Munroidendron racemosum, Myrsine lanaiensis, Nesoluma polynesicum, Nestegis sandwicensis, Pittosporum* spp., *Pouteria sandwicensis, Pritchardia minor, Psychotria* spp., *Psydrax odorata, Pteralyxia kauaiensis, Rauvolfia sandwicensis, Streblus pendulinus, Tetraplasandra* spp., *Xylosma crenatum,* or *Xylosma hawaiiense;* and

(ii) Elevations between 210 and 1,178 m (689 and 3,865 ft).

FAMILY FABACEAE: ***Sesbania tomentosa*** (OHAI)

Kauai 8—*Sesbania tomentosa*—a, and Kauai 14—*Sesbania tomentosa*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Sesbania tomentosa* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Sandy beaches, dunes, or pond margins in coastal dry shrublands or mixed coastal dry cliffs, and containing one or more of the following associated native plant species: *Chamaesyce celastroides, Cuscuta sandwichiana, Dodonaea viscosa, Heteropogon contortus, Myoporum sandwicense, Nama sandwicensis, Scaevola sericea, Sida fallax, Sporobolus virginicus, Vitex rotundifolia,* or *Waltheria indica;* and

(ii) Elevations between 0 and 130 m (0 and 427 ft).

FAMILY FLACOURTIACEAE: ***Xylosma crenatum*** (NCN)

Kauai 11—*Xylosma crenatum*—a, and Kauai 12—*Xylosma crenatum*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Xylosma crenatum* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Diverse *Acacia koa-Metrosideros polymorpha* montane mesic or wet forest, or *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest, and containing one or more of the following associated native plant species: *Athyrium sandwicensis, Cheirodendron* spp., *Claoxylon sandwicense, Coprosma* spp., *Cyanea* spp., *Diplazium sandwichianum, Dubautia knudsenii, Hedyotis* spp., *Ilex anomala, Lobelia yuccoides, Myrsine* spp., *Nestegis sandwicensis, Perrottetia sandwicensis, Pleomele aurea, Poa sandvicensis, Pouteria sandwicensis, Psychotria* spp., *Scaevola procera, Streblus pendulinus, Tetraplasandra* spp., *Touchardia latifolia,* or *Zanthoxylum dipetalum;* and

(ii) Elevations between 941 and 1,284 m (3,086 and 4,212 ft).

FAMILY GENTIANACEAE: ***Centaurium sebaeoides*** (AWIWI)

Kauai 11—*Centaurium sebaeoides*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Centaurium sebaeoides* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Volcanic or clay soils or on cliffs in arid coastal areas and containing one or more of the following native plant species: *Artemisia* spp., *Bidens* spp., *Chamaesyce celastroides, Cyperus phleoides, Dodonaea viscosa, Fimbristylis cymosa, Heteropogon contortus, Jacquemontia ovalifolia, Lipochaeta* spp., *Lycium sandwicense, Lysimachia mauritiana, Melanthera integrifolia, Panicum fauriei, Panicum torridum, Scaevola sericea, Sida fallax,* or *Wikstroemia uva-ursi;* and

(ii) Elevations between 0 and 147 m (0 and 483 ft).

FAMILY GESNERIACEAE: ***Cyrtandra cyaneoides*** (MAPELE)

Kauai 4—*Cyrtandra cyaneoides*—a, Kauai 11—*Cyrtandra cyaneoides*—b, and Kauai 11—*Cyrtandra cyaneoides*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyrtandra cyaneoides* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Talus rubble on steep slopes or cliffs with water seeps running below, near streams or waterfalls in lowland or montane wet forest or shrubland dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha, Cheirodendron* spp., and *Dicranopteris linearis* and containing one or more of the following native species: *Bidens* spp., *Boehmeria grandis, Coprosma* spp., *Cyanea* spp., *Cyrtandra kauaiensis, Cyrtandra limahuliensis, Cyrtandra longifolia, Diplazium sandwichianum, Freycinetia arborea, Gunnera kauaiensis, Hedyotis terminalis, Hedyotis tryblium, Machaerina* spp.,

Melicope clusiifolia, Melicope puberula, Perrottetia sandwicensis, Pipturus spp., *Psychotria* spp., *Pritchardia* spp., or *Stenogyne purpurea;* and

(ii) Elevations between 157 and 1,407 m (514 and 4,614 ft).

FAMILY GESNERIACEAE: ***Cyrtandra limahuliensis*** (HAIWALE)

Kauai 4—*Cyrtandra limahuliensis*—a, Kauai 4—*Cyrtandra limahuliensis*—b, Kauai 10—*Cyrtandra limahuliensis*—c, Kauai 11—*Cyrtandra limahuliensis*—d, and Kauai 11—*Cyrtandra limahuliensis*—e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyrtandra limahuliensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Stream banks in lowland wet forests containing one or more of the following native plant species: *Antidesma platyphyllum, Bidens* spp., *Boehmeria grandis, Charpentiera* spp., *Cibotium glaucum, Cyanea* spp., *Cyrtandra kealiae, Dicranopteris linearis, Diplazium sandwichianum, Dubautia* spp., *Eugenia reinwardtiana, Gunnera kauaiensis, Hedyotis terminalis, Hibiscus waimeae, Metrosideros polymorpha, Perrottetia sandwicensis, Pisonia* spp., *Pipturus* spp., *Pritchardia* spp., *Psychotria* spp., or *Touchardia latifolia;* and

(ii) Elevations between 208 and 1,591 m (681 and 5,217 ft).

FAMILY LAMIACEAE: ***Phyllostegia knudsenii*** (NCN)

Kauai 11—*Phyllostegia knudsenii*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Phyllostegia knudsenii* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha* lowland mesic or wet forest containing one or more of the following associated native plant species: *Bobea timonioides, Claoxylon sandwicense, Cryptocarya mannii, Cyrtandra kauaiensis, Cyrtandra paludosa, Diospyros sandwicensis, Elaeocarpus bifidus, Ilex anomala, Myrsine linearifolia, Perrottetia sandwicensis, Pittosporum kauaiense, Pouteria sandwicensis, Pritchardia minor, Selaginella arbuscula, Tetraplasandra oahuensis,* or *Zanthoxylum dipetalum;* and

(ii) Elevations between 401 and 1,059 m (1,315 and 3,475 ft).

FAMILY LAMIACEAE: ***Phyllostegia waimeae*** (NO COMMON NAME)

Kauai 11—*Phyllostegia waimeae*—a, and Kauai 11—*Phyllostegia waimeae*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Phyllostegia waimeae* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Acacia koa-Metrosideros polymorpha* dominated wet or mixed mesic forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominants and containing one or more of the following associated native plant species: *Broussaisia arguta, Claoxylon sandwicense, Diplazium sandwichianum, Dubautia knudsenii, Elaphoglossum* spp., *Gunnera kauaiensis, Hedyotis* spp., *Myrsine lanaiensis, Pleomele aurea, Psychotria* spp., *Sadleria* spp., *Scaevola procera, Syzygium sandwicensis,* or *Vaccinium* spp.; and

(ii) Elevations between 655 and 1,224 m (2,149 and 4,016 ft).

FAMILY LAMIACEAE: ***Phyllostegia wawrana*** (NO COMMON NAME)

Kauai 4—*Phyllostegia wawrana*—a, Kauai 11—*Phyllostegia wawrana*—b, Kauai 11—*Phyllostegia wawrana*—c, and Kauai 11—*Phyllostegia wawrana*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Phyllostegia wawrana* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Acacia koa-Metrosideros polymorpha-Cheirodendron* mixed mesic forest containing one or more of the following associated native plant species: *Alectryon macrococcus, Asplenium polyodon, Athyrium microphyllum, Carex* spp., *Claoxylon sandwicense, Cyanea fissa, Delissea rivularis, Dianella sandwicensis, Diplazium sandwichianum,*

Dodonaea viscosa, Doodia kunthiana, Dryopteris wallichiana, Dubautia knudsenii, Dubautia laevigata, Hedyotis tryblium, Machaerina angustifolia, Panicum nephelophilum, Peperomia spp., *Perrottetia sandwicensis, Poa sandvicensis, Pleomele aurea, Pteridium aquilinum* var. *decompositum, Sadleria pallida, Scaevola procera, Schiedea stellarioides, Syzygium sandwicensis, Touchardia latifolia,* or *Vaccinium dentatum;* and

(ii) Elevations between 400 and 1,284 m (1,311 and 4,212 ft).

FAMILY LAMIACEAE: ***Stenogyne campanulata*** (NCN)

Kauai 11—*Stenogyne campanulata*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Stenogyne campanulata* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rock faces of nearly vertical, north-facing cliffs in diverse lowland or montane mesic forest and containing one or more of the following associated native plant species: *Lepidium serra, Lobelia niihauensis, Lysimachia* spp., *Melicope pallida, Metrosideros polymorpha, Neraudia kauaiensis, Nototrichium divaricatum, Poa mannii, Remya montgomeryi,* or *Wilkesia gymnoxiphium;* and

(ii) Elevations between 335 and 1,290 (1,100 and 4,232 ft).

FAMILY LOGANIACEAE: ***Labordia lydgatei*** (KAMAKAHALA)

Kauai 4—*Labordia lydgatei*—a, Kauai 10—*Labordia lydgatei*—b, Kauai 11—*Labordia lydgatei*—c, Kauai 11—*Labordia lydgatei*—d, and Kauai 11—*Labordia lydgatei*—e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Labordia lydgatei* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streambanks in *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii, Cyanea* spp., *Cyrtandra* spp., *Dubautia knudsenii, Hedyotis terminalis, Ilex anomala, Labordia hirtella, Psychotria* spp., or *Syzygium sandwicensis;* and

(ii) Elevations between 182 and 1,148 m (597 and 3,737 ft).

FAMILY LOGANIACEAE: ***Labordia tinifolia*** VAR. ***wahiawaensis*** (KAMAKAHALA)

Kauai 10—*Labordia tinifolia* var. *wahiawaensis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Labordia tinifolia* var. *wahiawaensis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streambanks in lowland wet forests dominated by *Metrosideros polymorpha* and containing one or more of the following associated species: *Antidesma platyphyllum, Athyrium microphyllum, Cheirodendron* spp., *Cyrtandra* spp., *Dicranopteris linearis, Hedyotis terminalis,* or *Psychotria* spp.; and

(ii) Elevations between 458 and 1,006 m (1,502 and 3,301 ft).

FAMILY MALVACEAE: ***Hibiscadelphus woodii*** (HAU KUAHIWI)

Kauai 11—*Hibiscadelphus woodii*—a, and Kauai 11—*Hibiscadelphus woodii*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Hibiscadelphus woodii* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Basalt talus or cliff walls in *Metrosideros polymorpha* montane mesic forest and containing one or more of the following associated native plant species: *Artemisia australis, Bidens sandvicensis, Carex meyenii, Chamaesyce celastroides* var. *hanapepensis, Dubautia* spp., *Hedyotis* spp., *Lepidium serra, Lipochaeta* spp., *Lobelia niihauensis, Lysimachia glutinosa, Melicope pallida, Myrsine* spp., *Nototrichium* spp., *Panicum lineale, Poa mannii,* or *Stenogyne campanulata;* and

(ii) Elevations between 219 and 1,197 m (717 and 3,926 ft).

FAMILY MALVACEAE: ***Hibiscus clayi*** (CLAY'S HIBISCUS)

Kauai 4—*Hibiscus clayi*—a, Kauai 4—*Hibiscus clayi*—b, Kauai 4—*Hibiscus clayi*—c, Kauai 4—*Hibiscus clayi*—d, Kauai 4—*Hibiscus clayi*—e, and Kauai 5—*Hibiscus clayi*—f, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Hibiscus clayi* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes in *Acacia koa* or *Diospyros* spp.-*Pisonia* spp.-*Metrosideros polymorpha* lowland dry or mesic forest and containing one or more of the following associated native plant species: *Artemisia australis, Bidens* spp., *Cyanea hardyi, Gahnia* spp., *Hedyotis acuminata, Munroidendron racemosum, Pandanus tectorius, Panicum tenuifolium, Pleomele aurea, Pipturus* spp., *Psychotria* spp., or *Psydrax odorata;* and

(ii) Elevations between 121 and 765 m (396 and 2,509 ft).

FAMILY MALVACEAE: ***Hibiscus waimeae*** SSP. ***hannerae*** (KOKIO KEOKEO)

Kauai 11—*Hibiscus waimeae* ssp. *hannerae*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Hibiscus waimeae* ssp. *hannerae* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha-Dicranopteris linearis* or *Pisonia* spp.-*Charpentiera elliptica* lowland wet or mesic forest and containing one or more of the following associated native plant species: *Antidesma* spp., *Bidens* spp., *Bobea* spp., *Cibotium* spp., *Cyanea* spp., *Cyrtandra* spp., *Perrottetia sandwicensis, Pipturus* spp., *Psychotria* spp., *Sadleria* spp., or *Syzygium sandwicensis;* and

(ii) Elevations between 174 and 1,155 m (570 and 3,787 ft).

FAMILY MALVACEAE: ***Kokia kauaiensis*** (KOKIO)

Kauai 11—*Kokia kauaiensis*—a, Kauai 11—*Kokia kauaiensis*—b, Kauai 11—*Kokia kauaiensis*—c, and Kauai 11—*Kokia kauaiensis*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Kokia kauaiensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Diverse mesic forest containing one or more of the following associated native plant species: *Acacia koa, Alyxia oliviformis, Antidesma* spp., *Bobea* spp., *Chamaesyce celastroides, Claoxylon sandwicense, Dicranopteris linearis, Diellia pallida, Diospyros hillebrandii, Diospyros sandwicensis, Dodonaea viscosa, Flueggea neowawraea, Hedyotis* spp., *Hibiscus* spp., *Isodendrion laurifolium, Lipochaeta fauriei, Melicope* spp., *Metrosideros polymorpha, Nestegis sandwicensis, Nototrichium* spp., *Pisonia* spp., *Pleomele aurea, Pouteria sandwicensis, Psydrax odorata, Pteralyxia kauaiensis, Rauvolfia sandwicensis, Santalum freycinetianum* var. *pyrularium, Streblus pendulinus, Syzygium sandwicensis, Tetraplasandra* spp., or *Xylosma* spp.; and

(ii) Elevations between 300 and 1,049 m (984 and 3,441 ft).

FAMILY MYRSINACEAE: ***Myrsine linearifolia*** (KOLEA)

Kauai 7—*Myrsine linearifolia*—a, Kauai 10—*Myrsine linearifolia*—b, Kauai 11—*Myrsine linearifolia*—c, Kauai 11—*Myrsine linearifolia*—d, Kauai 11—*Myrsine linearifolia*—e, and Kauai 11—*Myrsine linearifolia*—f, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Myrsine linearifolia* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Diverse mesic or wet lowland or montane *Metrosideros polymorpha* forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominant species, and containing one or more of the following associated native plant species: *Bobea*

brevipes, Cryptocarya mannii, Dubautia spp., *Eurya sandwicensis, Freycinetia arborea, Hedyotis terminalis,* Lysimachia glutinosa, *Machaerina angustifolia, Melicope* spp., *Myrsine* spp., *Nothocestrum* spp., *Psychotria* spp., *Sadleria pallida,* or *Syzygium sandwicensis*; and

(ii) Elevations between 129 and 1,345 m (424 and 4,411 ft).

FAMILY ORCHIDACEAE: ***Platanthera holochila*** (NCN)

Kauai 11—*Platanthera holochila*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Platanthera holochila* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Montane *Metrosideros polymorpha—Dicranopteris linearis* wet forest or *M. polymorpha* mixed bog and containing one or more of the following associated native plant species: *Carex montis-eeka, Cibotium* spp., *Clermontia fauriei, Coprosma elliptica, Dichanthelium* spp., grammitid ferns (Grammitidaceae), *Leptecophylla tameiameiae, Lobelia kauaensis, Machaerina angustifolia, Myrsine denticulata, Oreobolus furcatus, Rhynchospora* spp., *Vaccinium* spp., or *Viola kauaensis*; and

(ii) Elevations between 861 and 1,453 m (2,825 and 4,766 ft).

FAMILY PLANTAGINACEAE: ***Plantago princeps*** (LAUKAHI KUAHIWI)

Kauai 10—*Plantago princeps*—a, Kauai 11—*Plantago princeps*—b, Kauai 11—*Plantago princeps*—c, and Kauai 11—*Plantago princeps*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Plantago princeps* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Windswept areas near waterfalls in *Metrosideros polymorpha-Cheirodendron* montane wet forest with riparian vegetation or *Metrosideros polymorpha* lowland to montane transitional wet forest on cliffs and ridges, growing on basalt rocky outcrops, and containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii, Bidens forbesii, Bidens sandvicensis, Bobea elatior, Boehmeria grandis, Carex meyenii, Carex wahuensis, Charpentiera elliptica, Cyrtandra* spp., *Diplazium sandwichianum, Freycinetia arborea, Gunnera kauaiensis, Hedyotis* spp., *Huperzia* spp. *Isachne pallens, Lipochaeta connata, Lysimachia glutinosa, Lysimachia kalalauensis, Machaerina angustifolia, Melicope* spp., *Myrsine linearifolia, Perrottetia sandwicensis, Pilea peploides, Pipturus* spp., *Poa mannii, Sadleria cyatheoides, Tetraplasandra* spp., or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 434 and 1,563 m (1,424 and 5,128 ft).

FAMILY POACEAE: ***Ischaemum byrone*** (HILO ISCHAEMUM)

Kauai 1—*Ischaemum byrone*—a, Kauai 2—*Ischaemum byrone*—b, Kauai 3—*Ischaemum byrone*—c, and Kauai 11—*Ischaemum byrone*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Ischaemum byrone* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Coastal shrubland near the ocean among rocks and seepy cliffs and containing one or more of the following associated native plant species: *Bidens* spp., *Chamaesyce celastroides, Fimbristylis cymosa, Lipochaeta succulenta, Lysimachia mauritiana,* or *Scaevola sericea*; and

(ii) Elevations between 0 and 159 m (0 and 523 ft).

FAMILY POACEAE: ***Panicum niihauense*** (LAU EHU)

Kauai 14—*Panicum niihauense*—a, Kauai 15—*Panicum niihauense*—b, Kauai 16—*Panicum niihauense*—c, and Kauai 17—*Panicum niihauense*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Panicum niihauense* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Sand dunes in coastal shrubland and containing one or more of the following associated native plant species: *Cassytha filiformis*, *Chamaesyce celastroides*, *Dodonaea viscosa*, *Nama sandwicensis*, *Ophioglossum pendulum* ssp. *falcatum*, *Scaevola sericea*, *Sida fallax*, *Sporobolus virginicus*, or *Vitex rotundifolia*; and

(ii) Elevations between 0 and 29 m (0 and 95 ft).

FAMILY POACEAE: ***Poa mannii*** (MANN'S BLUEGRASS)

Kauai 11—*Poa mannii*—a, Kauai 11—*Poa mannii*—b, Kauai 11—*Poa mannii*—c, and Kauai 11—*Poa mannii*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Poa mannii* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliffs or rock faces in lowland or montane mesic *Metrosideros polymorpha* or *Acacia koa-Metrosideros polymorpha* forest and containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Artemisia australis*, *Bidens cosmoides*, *Bidens sandvicensis*, *Carex meyenii*, *Carex wahuensis*, *Chamaesyce celastroides* var. *hanapepensis*, *Cyperus phleoides*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Eragrostis variabilis*, *Hedyotis terminalis*, *Lobelia niihauensis*, *Lobelia yuccoides*, *Luzula hawaiiensis*, *Melicope anisata*, *Melicope barbigera*, *Melicope pallida*, *Nototrichium* spp., *Panicum lineale*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Schiedea* spp., or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 327 and 1,222 m (1,072 and 4,009 ft).

FAMILY POACEAE: ***Poa sandvicensis*** (HAWAIIAN BLUEGRASS)

Kauai 11—*Poa sandvicensis*—a, and Kauai 11—*Poa sandvicensis*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Poa sandvicensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Wet, shaded, gentle to steep slopes, ridges, and rock ledges of stream banks in semi-open to closed, wet, diverse *Acacia koa-Metrosideros polymorpha* montane forest and containing one or more of the following associated native species: *Alyxia oliviformis*, *Bidens sandvicensis*, *Cheirodendron* spp., *Claoxylon sandwicense*, *Coprosma* spp., *Dianella sandwicensis*, *Dicranopteris linearis*, *Dodonaea viscosa*, *Dubautia* spp., *Hedyotis* spp., *Melicope* spp., *Peperomia* spp., *Psychotria* spp., *Scaevola procera*, *Schiedea stellarioides*, or *Syzygium sandwicensis*; and

(ii) Elevations between 473 and 1,270 m (1,553 and 4,165 ft).

FAMILY POACEAE: ***Poa siphonoglossa*** (NCN)

Kauai 11—*Poa siphonoglossa*—a, and Kauai 11—*Poa siphonoglossa*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Poa siphonoglossa* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Shady banks on steep slopes in mesic *Metrosideros polymorpha-Acacia koa* forests and containing one or more of the following associated native plant species: *Alphitonia ponderosa*, *Alyxia oliviformis*, *Bobea brevipes*, *Carex meyenii*, *Carex wahuensis*, *Coprosma waimeae*, *Dianella sandwicensis*, *Dodonaea viscosa*, *Dubautia* spp., *Hedyotis* spp., *Leptecophylla tameiameiae*, *Lobelia yuccoides*, *Melicope* spp., *Microlepia strigosa*, *Myrsine* spp., *Panicum nephelophilum*, *Poa sandvicensis*, *Psychotria* spp., *Scaevola procera*, *Tetraplasandra kavaiensis*, *Vaccinium* spp., *Wilkesia gymnoxiphium*, *Xylosma* spp., or *Zanthoxylum dipetalum*; and

(ii) Elevations between 480 and 1,296 m (1,573 and 4,251 ft).

FAMILY PRIMULACEAE: ***Lysimachia filifolia*** (NO COMMON NAME)

Kauai 10—*Lysimachia filifolia*—a, identified in the legal description in

paragraph (a)(1) of this section, constitutes critical habitat for *Lysimachia filifolia* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mossy banks at the base of cliff faces within the spray zone of waterfalls or along streams in lowland wet forests and containing one or more of the following associated native plant species: *Antidesma platyphyllum, Bidens valida, Bobea elatior, Chamaesyce remyi* var *kauaiensis, Cyanea asarifolia, Dubautia plantaginea* ssp. *magnifolia, Eragrostis variabilis, Machaerina angustifolia, Melicope* spp., *Metrosideros polymorpha*, or *Panicum lineale*; and

(ii) Elevations between 454 and 1,308 m (1,490 and 4,290 ft).

FAMILY RHAMNACEAE: ***Gouania meyenii*** (NCN)

Kauai 11—*Gouania meyenii*—a, Kauai 11—*Gouania meyenii*—b, and Kauai 11—*Gouania meyenii*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Gouania meyenii* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rocky ledges, cliff faces, and ridge tops in dry shrubland or *Metrosideros polymorpha* lowland diverse mesic forest and containing one or more of the following native plant species: *Bidens* spp., *Carex meyenii, Chamaesyce* spp., *Dodonaea viscosa, Diospyros* spp., *Eragrostis variabilis, Euphorbia haeleeleana, Hedyotis* spp., *Hibiscadelphus* spp., *Lysimachia* spp., *Melicope pallida, Neraudia kauaiensis, Nestegis sandwicensis, Nototrichium divaricatum, Panicum lineale, Poa mannii, Psychotria* spp., *Senna gaudichaudii*, or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 375 and 1,179 m (1,231 and 3,867 ft).

FAMILY RUBIACEAE: ***Hedyotis cookiana*** (AWIWI)

Kauai 11—*Hedyotis cookiana*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Hedyotis cookiana* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streambeds or steep cliffs close to water sources in relict *Metrosideros polymorpha* lowland mesic and lowland wet forest communities containing one or more of the following associated native plant species: *Boehmeria grandis, Chamaesyce celastroides* var. *hanapepensis, Hibiscus kokio* ssp. *saintjohnianus, Machaerina angustifolia, Nototrichium sandwicense, Pipturus kauaiensis, Pleomele aurea, Pouteria sandwicensis, Psydrax odorata*, or *Rauvolfia sandwicensis;* and

(ii) Elevations between 120 and 553 m (392 and 1,814 ft).

FAMILY RUBIACEAE: ***Hedyotis st.-johnii*** (NA PALI BEACH HEDYOTIS)

Kauai 11—*Hedyotis st.-johnii*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Hedyotis st.-johnii* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Crevices of north-facing, near-vertical coastal cliff faces within the spray zone in sparse dry coastal shrubland and containing one or more of the following native plant species: *Artemisia australis, Bidens* spp., *Capparis sandwichiana, Chamaesyce celastroides, Eragrostis variabilis, Heteropogon contortus, Lipochaeta connata, Lycium sandwicense, Myoporum sandwicense, Nototrichium sandwicense*, or *Schiedea apokremnos;* and

(ii) Elevations between 0 and 187 m (0 and 613 ft).

FAMILY RUTACEAE: ***Melicope haupuensis*** (ALANI)

Kauai 7—*Melicope haupuensis*—a, Kauai 11—*Melicope haupuensis*—b, and Kauai 11—*Melicope haupuensis*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Melicope haupuensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but

are not limited to, the habitat components provided by:

(i) Moist talus slopes in *Metrosideros polymorpha*-dominated lowland mesic forests or *Metrosideros polymorpha-Acacia koa* montane mesic forest and containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii, Bobea brevipes, Cheirodendron trigynum, Claoxylon sandwicense, Cryptocarya mannii, Dianella sandwicensis, Diospyros hillebrandii, Diospyros sandwicensis, Dodonaea viscosa, Elaeocarpus bifidus, Hedyotis terminalis, Melicope anisata, Melicope barbigera, Melicope ovata, Pleomele aurea, Pouteria sandwicensis, Pritchardia minor, Psychotria greenwelliae, Psychotria mariniana, Tetraplasandra waimeae,* or *Zanthoxylum dipetalum;* and

(ii) Elevations between 125 and 1,249 m (410 and 4,097 ft).

FAMILY RUTACEAE: ***Melicope knudsenii*** (ALANI)

Kauai 11—*Melicope knudsenii*—a, and Kauai 11—*Melicope knudsenii*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Melicope knudsenii* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Forested flats with brown granular soil in lowland dry to montane mesic forests and containing one or more of the following associated native plant species: *Alectryon macrococcus, Antidesma platyphylla, Bobea brevipes, Carex meyenii, Cryptocarya mannii, Diospyros sandwicensis, Diplazium sandwichianum, Dodonaea viscosa, Euphorbia haeleeleana, Gahnia beecheyi, Hedyotis spp., Hibiscus waimeae, Isodendrion laurifolium, Leptecophylla tameiameiae, Melicope spp., Metrosideros polymorpha, Myrsine lanaiensis, Nestegis sandwicensis, Panicum nephelophilum, Peucedanum sandwicense, Pisonia sandwicensis, Pittosporum kauaiensis, Pleomele aurea, Pouteria sandwicensis, Pritchardia minor, Psychotria hobdyi, Psydrax odorata, Rauvolfia sandwicensis, Remya kauaiensis, Scaevola procera,* or *Xylosma hawaiiense;* and

(ii) Elevations between 346 and 1,065 m (1,135 and 3,492 ft).

FAMILY RUTACEAE: ***Melicope pallida*** (ALANI)

Kauai 11—*Melicope pallida*—a, and Kauai 11—*Melicope pallida*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Melicope pallida* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep rock faces in lowland to montane mesic to wet forests or shrubland and containing one or more of the following associated native plant species: *Alyxia oliviformis, Artemisia australis, Boehmeria grandis, Carex meyenii, Chamaesyce celastroides* var. *hanapepensis, Coprosma kauensis, Coprosma waimeae, Dodonaea viscosa, Dryopteris* spp., *Hedyotis terminalis, Lepidium serra, Melicope* spp., *Metrosideros polymorpha, Nototrichium* spp., *Pipturus albidus, Pleomele aurea, Poa mannii, Psychotria mariniana, Pritchardia minor, Sapindus oahuensis, Schiedea membranacea, Tetraplasandra waialealae,* or *Xylosma hawaiiense;* and

(ii) Elevations between 418 and 1,081 m (1,371 and 3,546 ft).

FAMILY RUTACEAE: ***Zanthoxylum hawaiiense*** (AE)

Kauai 11—*Zanthoxylum hawaiiense*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Zanthoxylum hawaiiense* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Lowland dry or mesic forests dominated by *Metrosideros polymorpha* or *Diospyros sandwicensis,* and containing one or more of the following associated plant species: *Alectryon macrococcus, Antidesma platyphyllum, Charpentiera elliptica, Dodonaea viscosa, Melicope* spp., *Myrsine lanaiensis, Pisonia* spp., *Pleomele aurea, Streblus pendulinus,* or *Zanthoxylum dipetalum;* and

(ii) Elevations between 332 and 1,151 m (1,089 and 3,774 ft).

FAMILY SANTALACEAE: ***Exocarpos luteolus*** (HEAU)

Kauai 10—*Exocarpos luteolus*—a, Kauai 11—*Exocarpos luteolus*—b, Kauai 11—*Exocarpos luteolus*—c, Kauai 11—*Exocarpos luteolus*—d, and Kauai 11—*Exocarpos luteolus*—e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Exocarpos luteolus* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Wet places bordering swamps or open bogs or on open or dry ridges in lowland or montane mesic *Acacia koa-Metrosideros polymorpha*-dominated forest communities with *Dicranopteris linearis* and containing one or more of the following native plant species: *Bobea brevipes, Cheirodendron trigynum, Claoxylon sandwicense, Dianella sandwicensis, Dodonaea viscosa, Dubautia laevigata, Elaeocarpus bifidus, Hedyotis terminalis, Leptecophylla tameiameiae, Melicope haupuensis, Peperomia* spp., *Pleomele aurea, Poa sandvicensis, Pouteria sandwicensis, Psychotria greenwelliae, Psychotria mariniana, Santalum freycinetianum,* or *Schiedea stellarioides;* and

(ii) Elevations between 416 and 1,453 m (1,364 and 4,766 ft).

FAMILY SAPINDACEAE: ***Alectryon macrococcus*** (MAHOE)

Kauai 11—*Alectryon macrococcus*—a, and Kauai 11—*Alectryon macrococcus*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Alectryon macrococcus* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry slopes or gulches in *Diospyros* spp.-*Metrosideros polymorpha* lowland mesic forest, *Metrosideros polymorpha* mixed mesic forest, or *Diospyros* spp. mixed mesic forest, and containing one or more of the following native plant species: *Acacia koa, Alyxia oliviformis, Antidesma* spp., *Bobea timonioides, Caesalpinia kavaiense, Canavalia* spp., *Carex meyenii, Carex wahuensis, Doodia kunthiana, Hibiscus waimeae, Kokia kauaiensis, Melicope knudsenii, Microlepia strigosa, Munroidendron racemosum, Myrsine lanaiensis, Nesoluma polynesicum, Nestegis sandwicensis, Pisonia* spp., *Pleomele aurea, Pouteria sandwicensis, Psychotria* spp., *Psydrax odorata, Pteralyxia kauaiensis, Rauvolfia sandwicensis, Streblus pendulinus, Tetraplasandra* spp., *Xylosma* spp., or *Zanthoxylum spp.;* and

(ii) Elevations between 343 and 954 m (1,126 and 3,129 ft).

FAMILY SOLANACEAE: ***Nothocestrum peltatum*** (AIEA)

Kauai 11—*Nothocestrum peltatum*—a, Kauai 11—*Nothocestrum peltatum*—b, Kauai 11—*Nothocestrum peltatum*—c, and *Kauai 12—Nothocestrum peltatum*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Nothocestrum peltatum* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rich soil on steep slopes in mesic or wet forest dominated by *Acacia koa* or a mixture of *Acacia koa* and *Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Alphitonia ponderosa, Antidesma* spp., *Bobea brevipes, Broussaisia arguta, Cheirodendron trigynum, Claoxylon sandwicense, Coprosma* spp., *Cryptocarya mannii, Dianella sandwicensis, Dicranopteris linearis, Diplazium sandwichianum, Dodonaea viscosa, Elaeocarpus bifidus, Hedyotis terminalis, Ilex anomala, Melicope anisata, Melicope barbigera, Melicope haupuensis, Perrottetia sandwicensis, Pleomele aurea, Pouteria sandwicensis, Psychotria mariniana, Psychotria greenwelliae, Tetraplasandra kavaiensis,* or *Xylosma* spp.; and

(ii) Elevations between 581 and 1,290 m (1,906 and 4,232 ft).

FAMILY SOLANACEAE: ***Solanum sandwicense*** (AIAKEAKUA, POPOLO)

Kauai 11—*Solanum sandwicense*—a, and Kauai 11—*Solanum sandwicense*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Solanum*

sandwicense on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Under forest canopies in diverse lowland or montane *Acacia koa* or *Acacia koa-Metrosideros polymorpha* mesic or wet forests and containing one or more of the following associated plant species: *Alphitonia ponderosa, Athyrium sandwicensis, Bidens* spp., *Carex meyenii, Coprosma* spp., *Cryptocarya mannii, Dianella sandwicensis, Dicranopteris linearis, Dubautia* spp., *Hedyotis* spp., *Ilex anomala, Melicope* spp., *Poa* spp., *Pouteria sandwicensis, Psychotria* spp., *Syzygium sandwicensis,* or *Xylosma hawaiiense;* and

(ii) Elevations between 540 and 1,290 m (1,770 and 4,232 ft).

FAMILY VIOLACEAE: ***Isodendrion laurifolium*** (AUPAKA)

Kauai 11—*Isodendrion laurifolium*—a, and Kauai 11—*Isodendrion laurifolium*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Isodendrion laurifolium* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Diverse mesic forest dominated by *Metrosideros polymorpha, Acacia koa* or *Diospyros* spp. and containing one or more of the following associated native plant species: *Alphitonia ponderosa, Antidesma* spp., *Claoxylon sandwicense, Dodonaea viscosa, Dubautia* spp., *Elaeocarpus bifidus, Euphorbia haeleeleana, Hedyotis terminalis, Kokia kauaiensis, Melicope anisata, Melicope barbigera, Melicope ovata, Melicope peduncularis, Myrsine lanaiensis, Nestegis sandwicensis, Pisonia* spp., *Pittosporum glabrum, Pleomele aurea, Pouteria sandwicensis, Psydrax odorata, Streblus pendulinus,* or *Xylosma hawaiiense;* and

(ii) Elevations between 397 and 1,164 m (1,303 and 3,817 ft).

FAMILY VIOLACEAE: ***Isodendrion longifolium*** (AUPAKA)

Kauai 7—*Isodendrion longifolium*—a, Kauai 10—*Isodendrion longifolium*—b, Kauai 11—*Isodendrion longifolium*—c, Kauai 11—*Isodendrion longifolium*—d, and Kauai 11—*Isodendrion longifolium*—e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Isodendrion longifolium* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes, gulches, or streambanks and flats in undisturbed areas, in mesic or wet *Metrosideros polymorpha-Acacia koa* forests and containing one or more of the following native species: *Antidesma* spp., *Bidens* spp., *Bobea brevipes, Cheirodendron* spp., *Cibotium* spp., *Cyanea hardyi, Cyrtandra* spp., *Dicranopteris linearis, Diospyros* spp., *Eugenia reinwardtiana, Hedyotis* spp., *Ilex anomala, Melicope* spp., *Nestegis sandwicensis, Peperomia* spp., *Perrottetia sandwicensis, Pipturus* spp., *Pittosporum* spp., *Pritchardia* spp., *Psychotria* spp., *Psydrax odorata,* or *Syzygium sandwicensis;* and

(ii) Elevations between 127 and 1,295 m (418 and 4,246 ft).

FAMILY VIOLACEAE: ***Viola helenae*** (NCN)

Kauai 10—*Viola helenae*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Viola helenae* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Stream drainage banks or adjacent valley bottoms in light to moderate shade in *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest or *Metrosideros polymorpha-Cheirodendron* wet forest and containing one or more of the following native plant species: *Antidesma platyphyllum* var. *hillebrandii, Broussaisia arguta, Dicranopteris linearis, Diplazium sandwichianum, Dubautia* spp., *Freycinetia arborea, Hesperomannia lydgatei, Melicope* spp., or *Pritchardia* spp.; and

(ii) Elevations between 522 and 1,006 m (1,712 and 3,301 ft).

FAMILY VIOLACEAE: ***Viola kauaiensis*** VAR. ***wahiawaensis*** (NANI WAIALEALE)

Kauai 10—*Viola kauaiensis* var. *wahiawaensis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Viola kauaiensis* var. *wahiawaensis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Machaerina angustifolia-Rhynchospora rugosa* lowland bog or mixed wet shrubland and adjacent *Metrosideros polymorpha* wet forest and containing one or more of the following native plant species: *Antidesma platyphyllum* var. *hillebrandii, Bidens forbesii, Chamaesyce remyi, Chamaesyce sparsiflora, Coprosma* spp., *Cyanea fissa, Dicranopteris linearis, Diplopterygium pinnatum, Dubautia imbricata, Dubautia raillardioides, Gahnia vitiensis, Leptechophylla tameiameiae, Lobelia kauaensis, Machaerina angustifolia, Machaerina mariscoides, Melicope* spp., *Psychotria wawrae, Sadleria pallida, Scaevola gaudichaudii, Sphenomeris chinensis, Syzygium sandwicensis, Tetraplasandra oahuensis,* or *Vaccinium dentatum;* and

(ii) Elevations between 394 and 1,006 (1,291 and 3,301 ft).

(2) *Ferns and allies.*

FAMILY ASPLENIACEAE: ***Diellia erecta*** (NO COMMON NAME)

Kauai 11—*Diellia erecta*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Diellia erecta* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Brown granular soil with leaf litter and occasional terrestrial moss on north-facing slopes in deep shade on steep slopes or gulch bottoms in *Metrosideros polymorpha-Dicranopteris linearis* wet forest or *Metrosideros polymorpha* mixed mesic forest with *Acacia koa* and *Acacia koaia* as co-dominants and containing one or more of the following native plant species: *Asplenium aethiopicum, Asplenium contiguum, Asplenium macraei, Coprosma* spp., *Dodonaea viscosa, Dryopteris fuscoatra, Dryopteris unidentata, Hedyotis terminalis, Leptecophylla tameiameiae, Melicope* spp., *Microlepia strigosa, Myrsine* spp., *Nestegis sandwicensis, Psychotria* spp., *Syzygium sandwicensis,* or *Wikstroemia* spp.; and

(ii) Elevations between 655 and 1,224 m (2,149 and 4,016 ft).

FAMILY ASPLENIACEAE: ***Diellia pallida*** (NO COMMON NAME)

Kauai 11—*Diellia pallida*—a, and Kauai 11—*Diellia pallida*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Diellia pallida* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Bare granular soil with dry to mesophytic leaf litter with a pH of 6.9 to 7.9 on steep talus slopes in lowland mesic forests and containing one or more of the following native plant species: *Acacia koa, Alectryon macrococcus, Alphitonia ponderosa, Alyxia oliviformis, Antidesma platyphyllum, Asplenium* spp., *Carex meyenii, Diospyros hillebrandii, Diospyros sandwicensis, Doodia kunthiana, Hedyotis knudsenii, Leptecophylla tameiameiae, Metrosideros polymorpha, Microlepia strigosa, Myrsine lanaiensis, Nestegis sandwicensis, Psychotria mariniana, Psydrax odorata, Pteralyxia kauaiensis, Rauvolfia sandwicensis, Tetraplasandra kavaiensis, Wilkesia gymnoxiphium,* or *Zanthoxylum dipetalum;* and

(ii) Elevations between 445 and 1,028 m (1,461 and 3,371 ft).

FAMILY ASPLENIACEAE: ***Diplazium molokaiense*** (NCN)

Kauai 11—*Diplazium molokaiense*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Diplazium molokaiense* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Brown soil with basalt outcrops near waterfalls in lowland or montane

mesic *Metrosideros polymorpha-Acacia koa* forest; and

(ii) Elevations between 624 and 1,234 m (2,048 and 4,048 ft).

FAMILY ASPLENIACEAE: ***Ctenitis squamigera*** (PAUOA)

Kauai 11—*Ctenitis squamigera*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Ctenitis squamigera* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rock faces in gulches in the understory of *Metrosideros polymorpha-Diospyros* spp. mesic forest and diverse mesic forest and containing one or more of the following native plant species: *Myrsine* spp., *Psychotria* spp., or *Xylosma* spp.; and

(ii) Elevations between 538 and 1,069 m (1,765 and 3,507 ft).

FAMILY GRAMMITIDACEAE: ***Adenophorus periens*** (PENDENT KIHI FERN)

Kauai 4—*Adenophorus periens*—a, Kauai 10—*Adenophorus periens*—b, Kauai 11—*Adenophorus periens*—c, and Kauai 11—*Adenophorus periens*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Adenophorus periens* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) On *Metrosideros polymorpha* trunks, in riparian banks of stream systems in well-developed, closed canopy that provides deep shade or high humidity in *Metrosideros polymorpha-Cibotium glaucum* lowland wet forests, open *Metrosideros polymorpha* montane wet forest, or *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest and containing one or more of the following native plant species: *Antidesma platyphyllum, Athyrium sandwichianum, Broussaisia arguta, Cheirodendron trigynum, Cyanea* spp., *Cyrtandra* spp., *Dicranopteris linearis, Freycinetia arborea, Hedyotis terminalis, Labordia hirtella, Machaerina angustifolia, Psychotria* spp., *Syzygium sandwicensis,* or *Tetraplasandra oahuensis;* and

(ii) Elevations between 169 and 1,345 m (553 and 4,411 ft).

FAMILY LYCOPODIACEAE: ***Phlegmariurus nutans*** (WAWAEIOLE)

Kauai 10—*Phlegmariurus nutans*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Phlegmariurus nutans* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

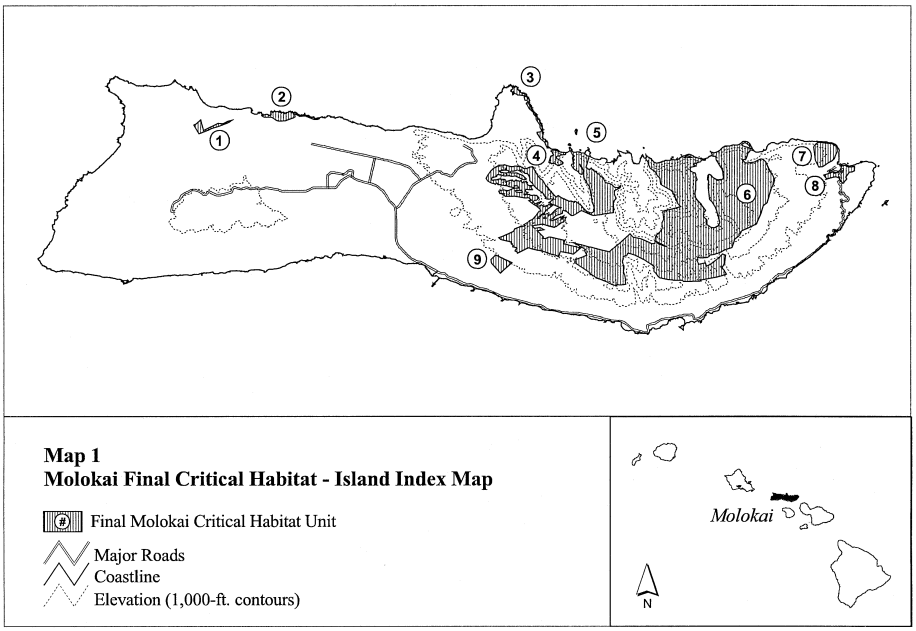
(i) Tree trunks, usually on open ridges and slopes in *Metrosideros polymorpha-Dicranopteris linearis* wet or mesic forests and containing one or more of the following associated native plant species: *Antidesma platyphyllum, Broussaisia arguta, Cheirodendron fauriei, Cibotium* spp., *Diplopterygium pinnatum, Hedyotis terminalis, Hibiscus kokio ssp. kokio, Melicope waialealae, Perrottetia sandwicensis, Psychotria hexandra, Psychotria mariniana, Psychotria wawrae, Scaevola gaudichaudii,* or *Syzygium sandwicensis;* and

(ii) Elevations between 615 and 1,591 m (2,016 and 5,217 ft).

(c) *Maps and critical habitat unit descriptions for the island of Molokai, HI.* The following paragraphs contain the legal descriptions of the critical habitat units designated for the island of Molokai, HI. Existing manmade features and structures within the critical habitat units, such as buildings; roads; aqueducts and other watersystem features, including but not limited to reservoirs, diversions, flumes, pumping stations, irrigation ditches, pipelines, siphons, tunnels, water tanks, gaging stations, intakes, and wells; telecommunications equipment towers and associated structures, electrical power transmission lines and distribution and regularly maintained associated rights-of-way and access ways; radars and telemetry antennas; missile launch sites; campgrounds; existing trails; arboreta and gardens, heiau (indigenous places of worship or shrines) and other archaeological sites; airports; other paved areas; lawns and other rural residential landscaped areas do not contain the primary constituent elements described for each species in paragraph

(d) of this section and therefore are not included in the critical habitat designations. Coordinates are in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following map shows the general locations of the 88 critical habitat units designated on the island of Molokai.

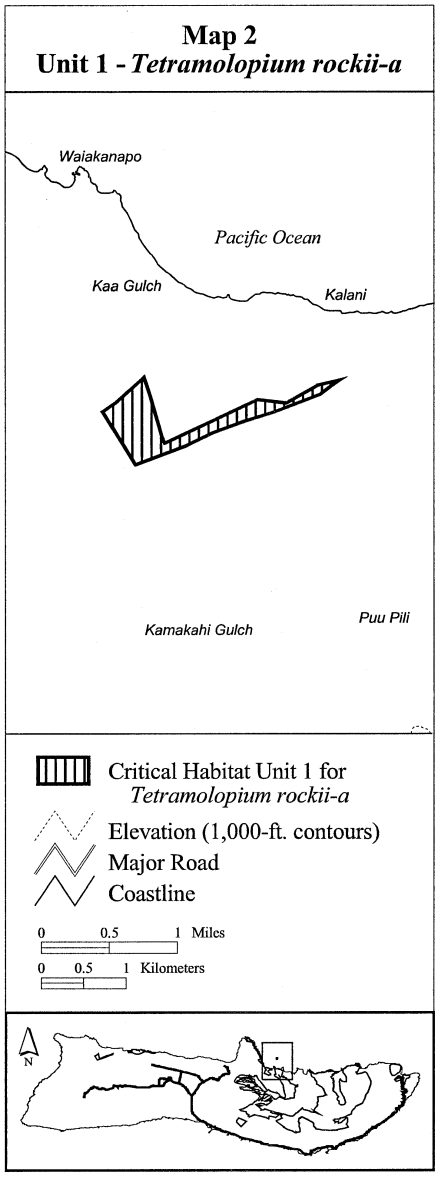
(1) NOTE: Map 1–Index map follows:



(2) Molokai 1—*Tetramolopium rockii*—a (68 ha; 167 ac)

(i) Unit consists of the following 18 boundary points: Start at 689772, 2344661; 689621, 2344539; 689052, 2344319; 688718, 2344221; 688327, 2344075; 688023, 2343926; 687408, 2343701; 687025, 2344327; 687025, 2344327; 687188, 2344441; 687513, 2344733; 687571, 2344549; 687727, 2344013; 687757, 2343953; 688857, 2344469; 689205, 2344430; 689575, 2344638; 689833, 2344699; return to starting point.

(ii) NOTE: Map 2 follows:

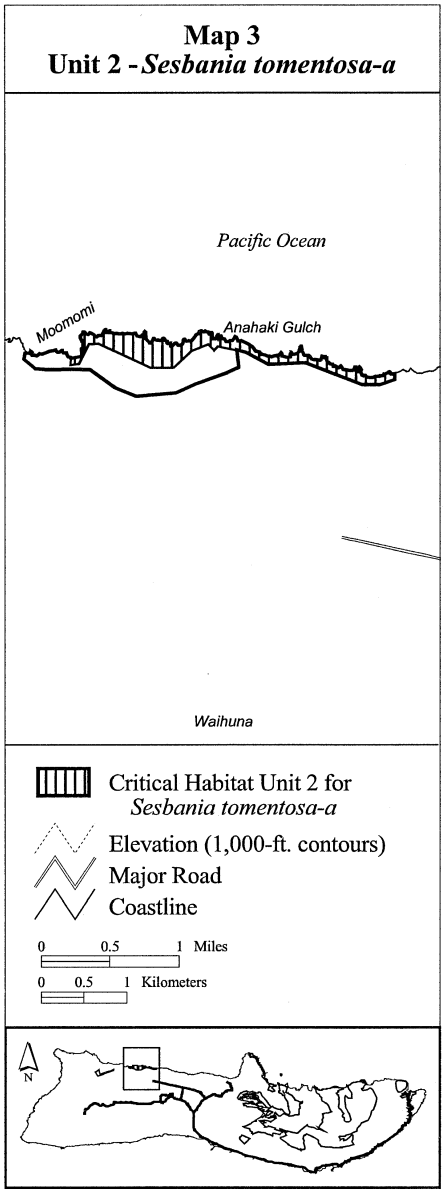


(3) Molokai 2—*Sesbania tomentosa*—a (58 ha; 143 ac)

(i) Unit consists of the following 16 boundary points and the intermediate coastline: Start at 696391, 2344805; 696219, 2344744; 696015, 2344744; 6953, 2345000; 694917, 2344983; 694654, 2345127;

694330, 2345195; 694288, 2345144; 694220, 2345221; 694024, 2345136; 693811, 2344940; 693548, 2344940; 692944, 2345229; 692833, 2345221; 692714, 2344991; 692614, 2344974; follow coastline and return to starting point.

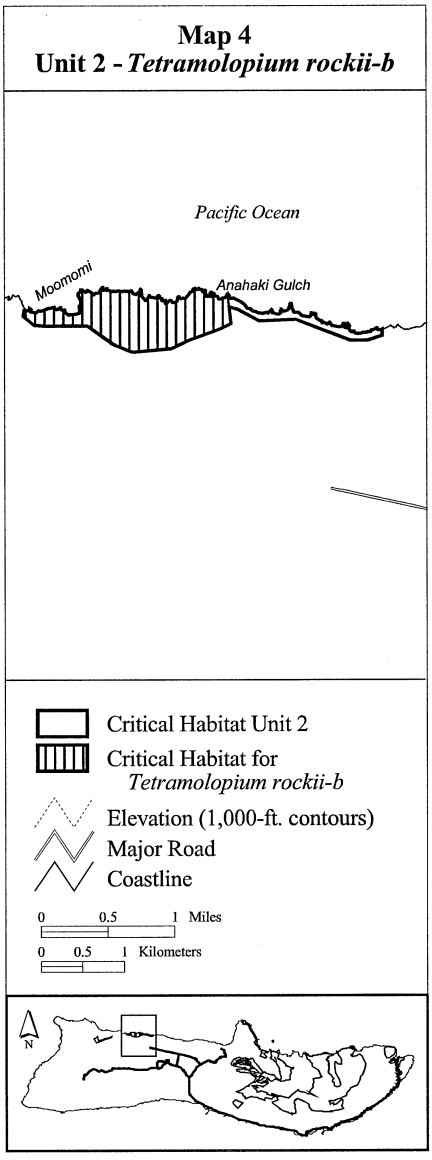
(ii) NOTE: Map 3 follows:



(4) Molokai 2—*Tetramolopium rockii*—b (112 ha; 278 ac)

(i) Unit consists of the following 13 boundary points and the intermediate coastline: Start at 694570, 2344946; 694440, 2344889; 694073, 2344750; 693846, 2344653; 693382, 2344612; 693146, 2344702; 692844, 2344921; 692641, 2344929; 692389, 2344922; 692389, 2344921; 692356, 2344921; 692201, 2344938; 692071, 2345043; follow coastline and return to starting point.

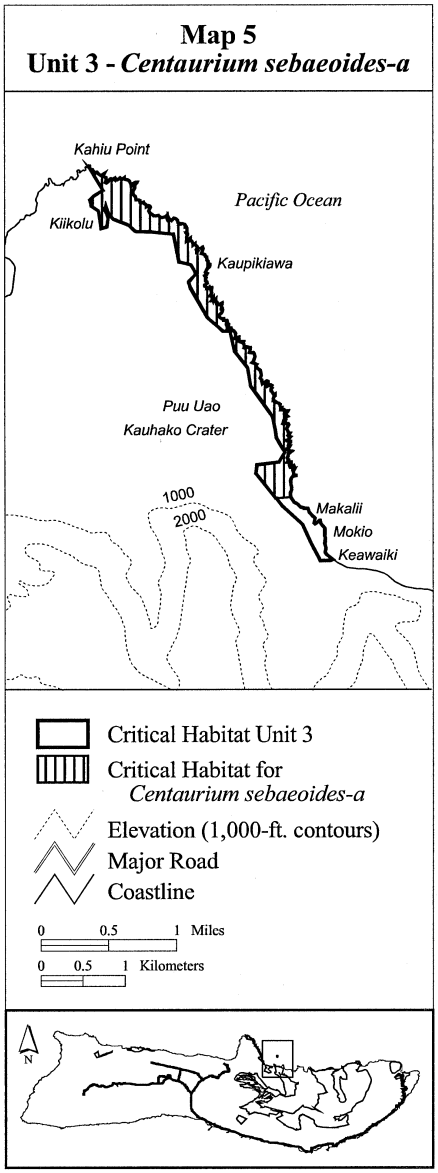
(ii) NOTE: Map 4 follows:



(5) Molokai 3—*Centaurium sebaeoides*—a (96 ha; 238 ac)

(i) Unit consists of the following 38 boundary points and the intermediate coastline: Start at 710676, 2347273; 712999, 2343399; 712824, 2343386; 712590, 2343678; 712603, 2343781; 712863, 2343820; 712941, 2343944; 712837, 2344106; 712792, 2344340; 712668, 2344541; 712526, 2344729; 712493, 2344936; 712337, 2345131; 712279, 2345365; 712214, 2345371; 712035, 2345519; 711799, 2345942; 711883, 2346053; 711827, 2346164; 711683, 2346195; 711618, 2346528; 711159, 2346569; 711092, 2346637; 710917, 2346701; 710858, 2346756; 710816, 2346864; 710811, 2346802; 710845, 2346718; 710832, 2346611; 710768, 2346591; 710734, 2346806; 710652, 2346855; 710629, 2346935; 710676, 2346982; 710788, 2347050; 710636, 2347297; 710642, 2347291; 710661, 2347288; follow coastline and return to starting point.

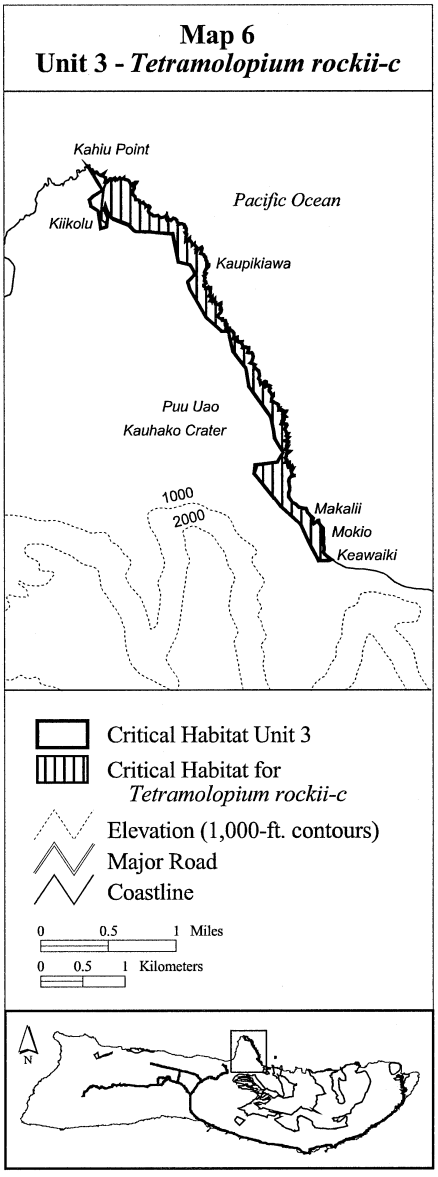
(ii) NOTE: Map 5 follows:



(6) Molokai 3—*Tetramolopium rockii*—c (106 ha; 260 ac)

(i) Unit consists of the following 34 boundary points and the intermediate coastline: Start at 713501, 2342654; 713473, 2342635; 713351, 2342635; 713245, 2342841; 713138, 2343077; 712902, 2343290; 712773, 2343465; 712591, 2343679; 712625, 2343781; 712863, 2343814; 712934, 2343924; 712831, 2344099; 712805, 2344327; 712526, 2344716; 712500, 2344936; 712337, 2345131; 712279, 2345365; 712208, 2345371; 712019, 2345540; 711819, 2345873; 711799, 2345962; 711883, 2346040; 711838, 2346156; 711689, 2346202; 711624, 2346539; 711169, 2346559; 711098, 2346649; 710890, 2346727; 710817, 2346864; 710810, 2346810; 710849, 2346706; 710832, 2346656; 710759, 2346712; 710802, 2347065; follow coastline and return to starting point.

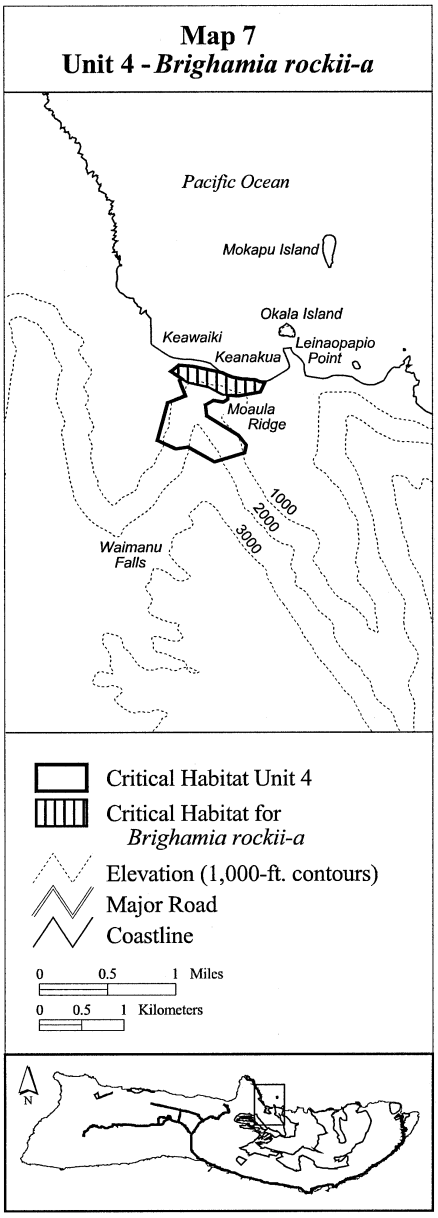
(ii) NOTE: Map 6 follows:



(7) Molokai 4—*Brighamia rockii*—a (20 ha; 51 ac)

(i) Unit consists of the following 9 boundary points and the intermediate coastline: Start at 714246, 2342381; 714703, 2342153; 714446, 2342101; 714255, 2342116; 714094, 2342204; 713837, 2342263; 713646, 2342395; 713740, 2342469; 713902, 2342456; follow coastline and return to starting point.

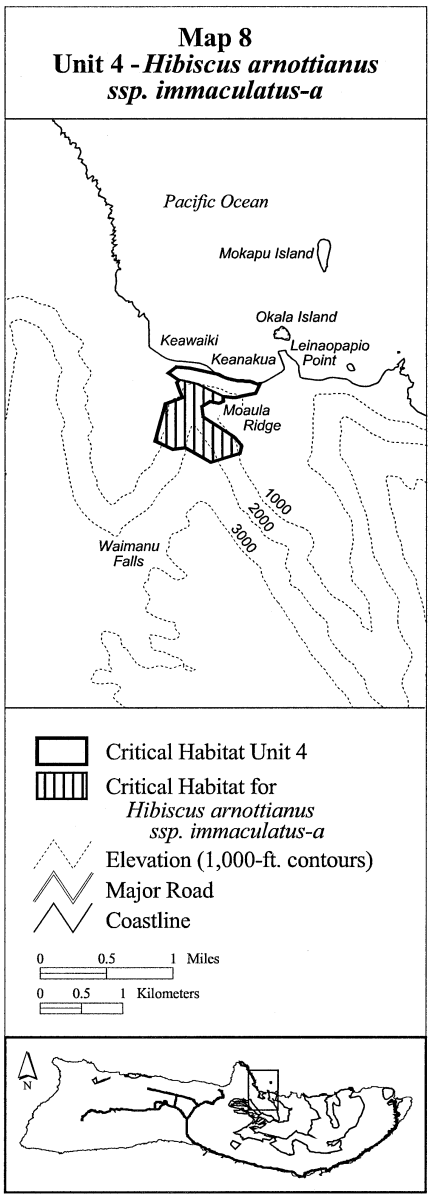
(ii) NOTE: Map 7 follows:



(8) Molokai 4—*Hibiscus arnottianus* ssp. *immaculatus*—a (56 ha; 139 ac)

(i) Unit consists of the following 20 boundary points: Start at 714313, 2342111; 714313, 2342061; 714263, 2342030; 714146, 2342049; 714053, 2341993; 714065, 2341869; 714443, 2341627; 714530, 2341522; 714511, 2341429; 714158, 2341318; 713848, 2341497; 713697, 2341473; 713483, 2341578; 713601, 2342024; 713813, 2342101; 713769, 2342222; 713769, 2342222; 713743, 2342284; 713786, 2342315; 713991, 2342266; return to starting point.

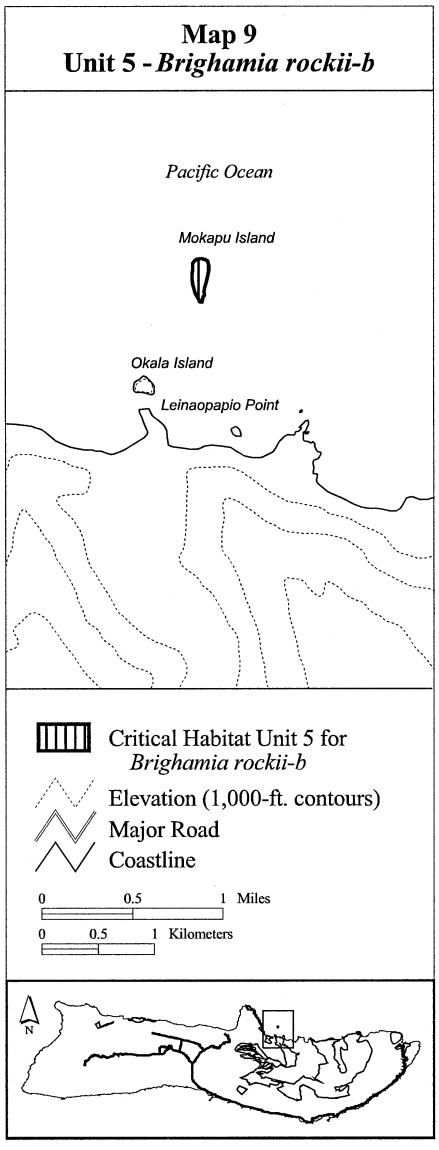
(ii) NOTE: Map 8 follows:



(9) Molokai 5—*Brighamia rockii*—b (4 ha; 10 ac)

(i) Area consists of the entire offshore island located at approximately: 715517, 2343847.

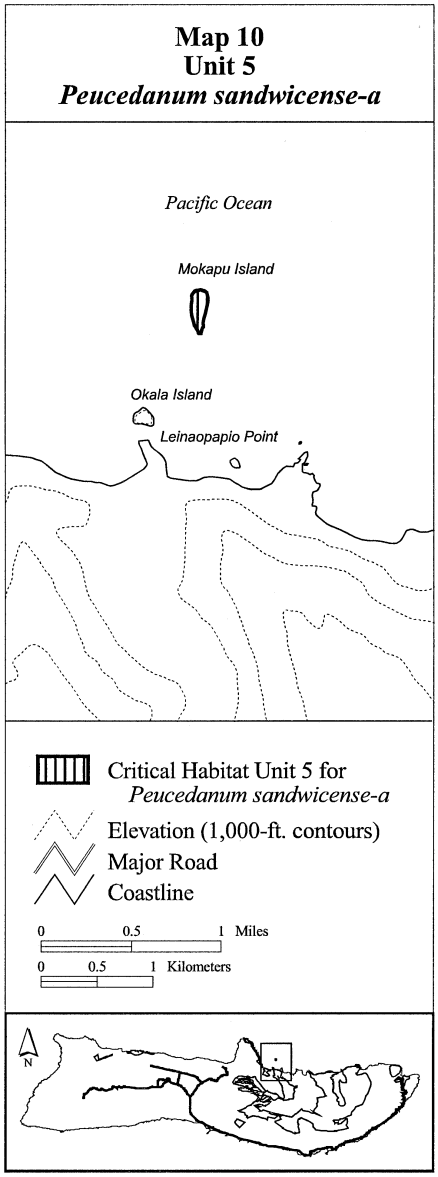
(ii) NOTE: Map 9 follows:



(10) Molokai 5—*Peucedanum sandwicense*—a (4 ha; 10 ac)

(i) Area consists of the entire offshore island located at approximately: 715517, 2343847.

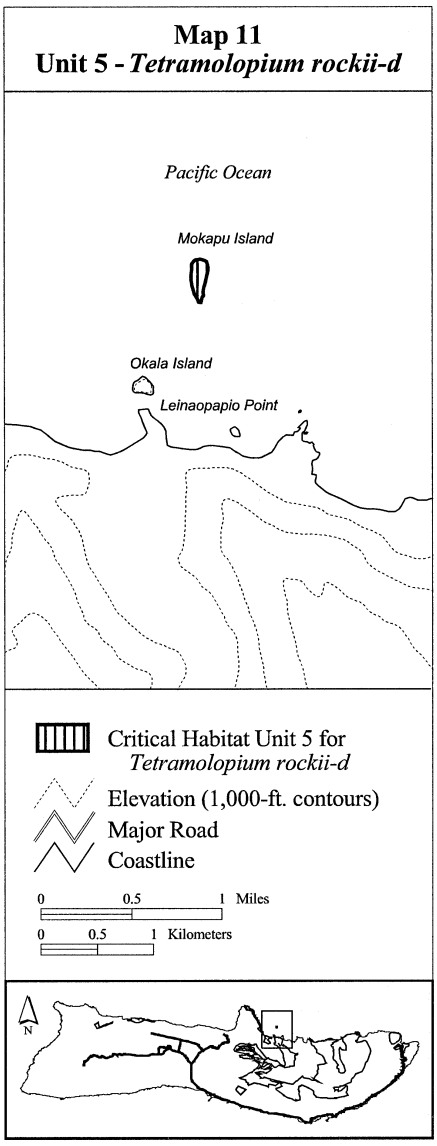
(ii) NOTE: Map 10 follows:



(11) Molokai 5—*Tetramolopium rockii*—d (4 ha; 10 ac)

(i) Area consists of the entire offshore island located at approximately: 715517, 2343847.

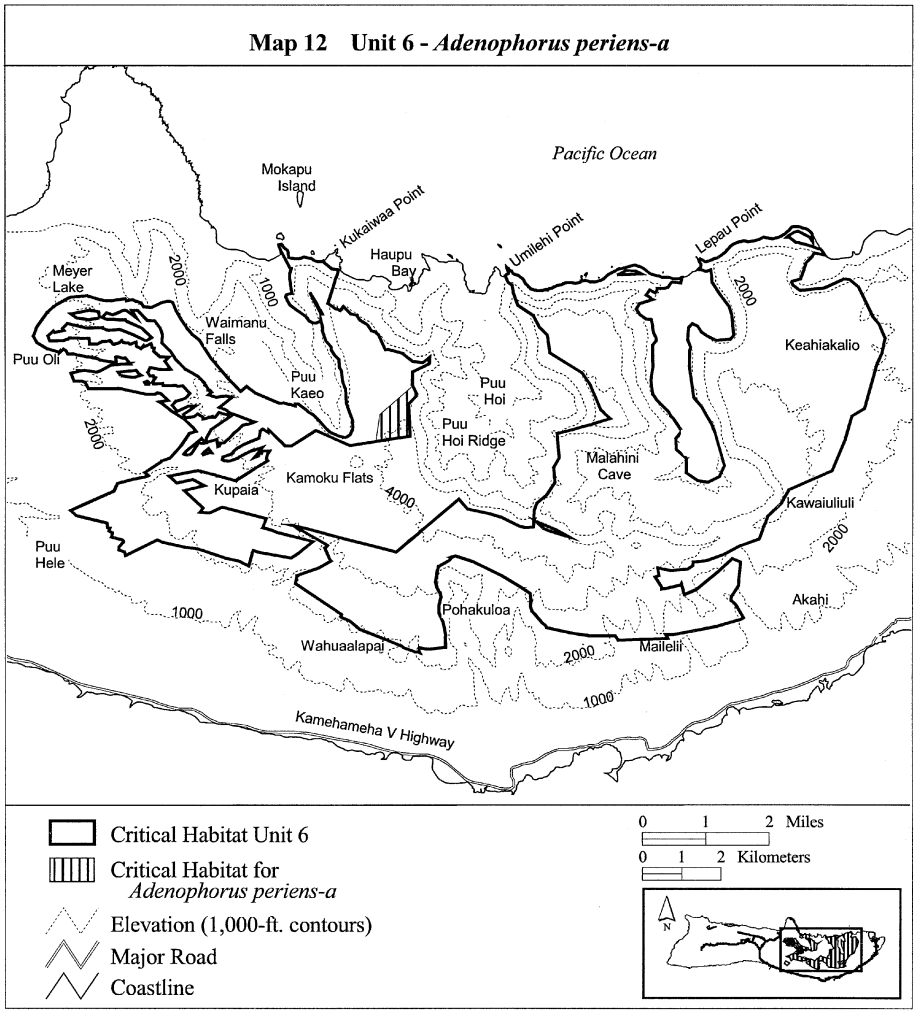
(ii) NOTE: Map 11 follows:



(12) Molokai 6—*Adenophorus periens*—a (79 ha; 194 ac)

(i) Unit consists of the following 6 boundary points: Start at 718366, 2339098; 718483, 2338864; 718272, 2338643; 718311, 2337817; 717446, 2337682; 717549, 2338376; return to starting point.

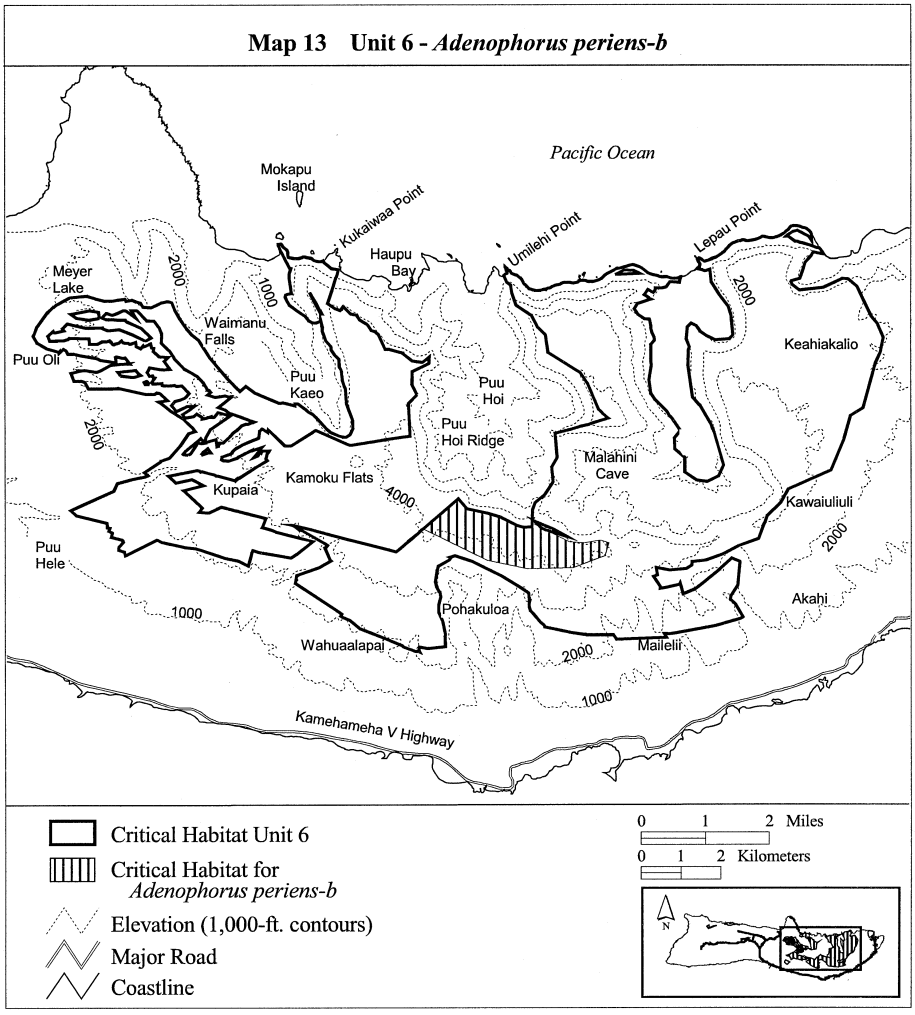
(ii) NOTE: Map 12 follows:



(13) Molokai 6—*Adenophorus periens*—b (396 ha; 980 ac)

(i) Unit consists of the following 19 boundary points: Start at 721394, 2335607; 722329, 2335129; 722733, 2335104; 723117, 2335165; 723342, 2335105; 723236, 2334774; 723034, 2334703; 722442, 2334466; 721281, 2334442; 720262, 2334655; 718639, 2335464; 719529, 2336227; 719749, 2335976; 720611, 2335749; 721062, 2335514; 721066, 2335513; 721206, 2335488; 721387, 2335499; 721388, 2335510; return to starting point.

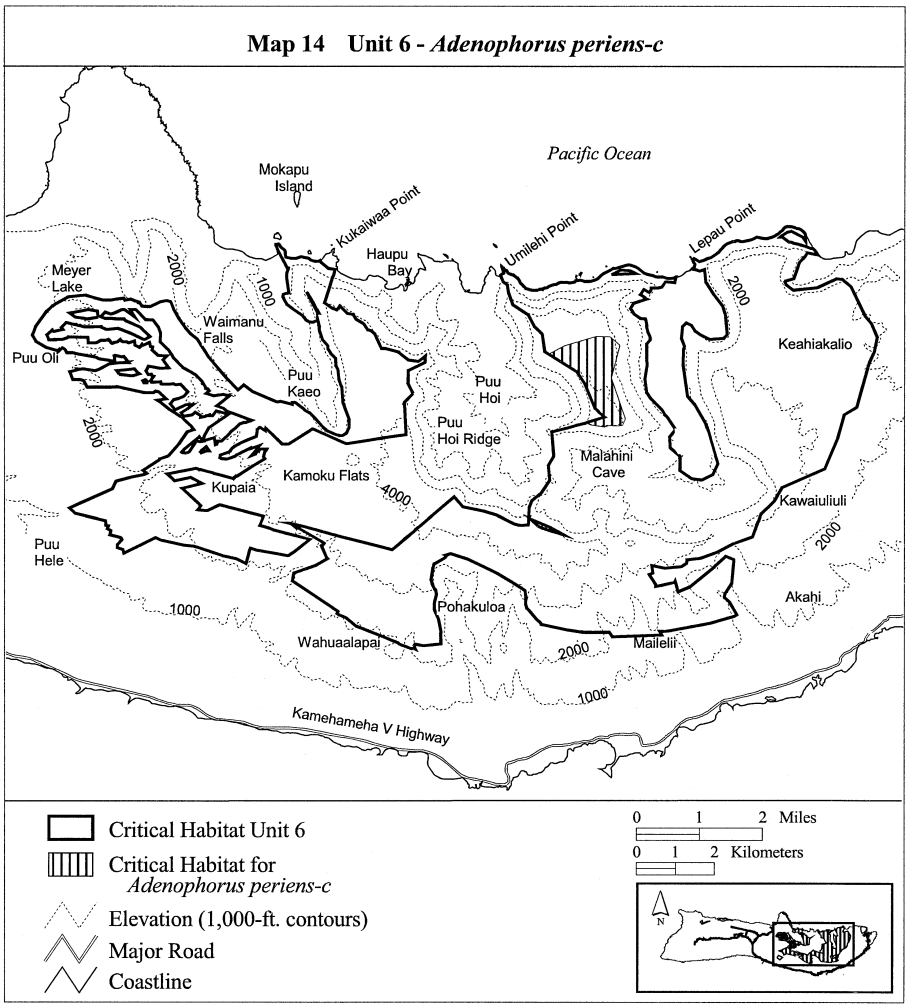
(ii) NOTE: Map 13 follows:



(14) Molokai 6—*Adenophorus periens*—c (214 ha; 530 ac)

(i) Unit consists of the following 20 boundary points: Start at 723720, 2340102; 723501, 2339267; 723764, 2338476; 723865, 2338213; 723777, 2338050; 723639, 2338043; 723426, 2338056; 723331, 2338018; 722967, 2338062; 722873, 2338122; 723352, 2338246; 723352, 2338246; 723351, 2338247; 723088, 2338481; 722803, 2339144; 722612, 2339432; 721900, 2339870; 722315, 2340090; 723124, 2340328; 723469, 2340315; return to starting point.

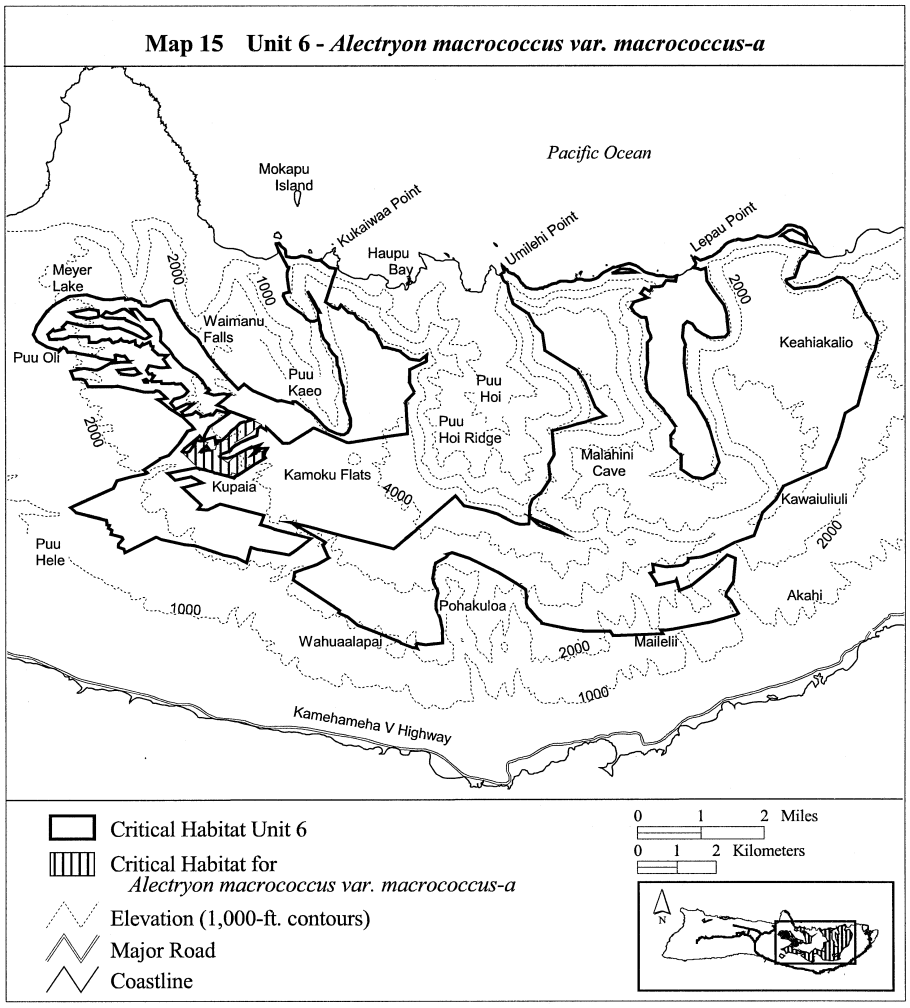
(ii) NOTE: Map 14 follows:



(15) Molokai 6—*Alectryon macrococcus*—a (125 ha; 309 ac)

(i) Unit consists of the following 38 boundary points: Start at 712844, 2337089; 712698, 2337229; 712592, 2337339; 712695, 2337321; 712881, 2337456; 712940, 2337659; 713244, 2337600; 712999, 2337330; 713210, 2337389; 713430, 2337414; 713497, 2337642; 713742, 2337668; 713818, 2337870; 714080, 2338090; 714258, 2338132; 714331, 2338177; 714454, 2338134; 714593, 2338051; 714604, 2338018; 714460, 2337955; 714325, 2337836; 713954, 2337608; 713818, 2337397; 713489, 2337254; 713742, 2337076; 713970, 2337296; 714283, 2337448; 714553, 2337532; 714359, 2337279; 714722, 2337423; 714604, 2337228; 714660, 2337178; 714025, 2336784; 713852, 2336821; 713844, 2336766; 713421, 2336814; 713160, 2336950; 713033, 2336916; return to starting point.

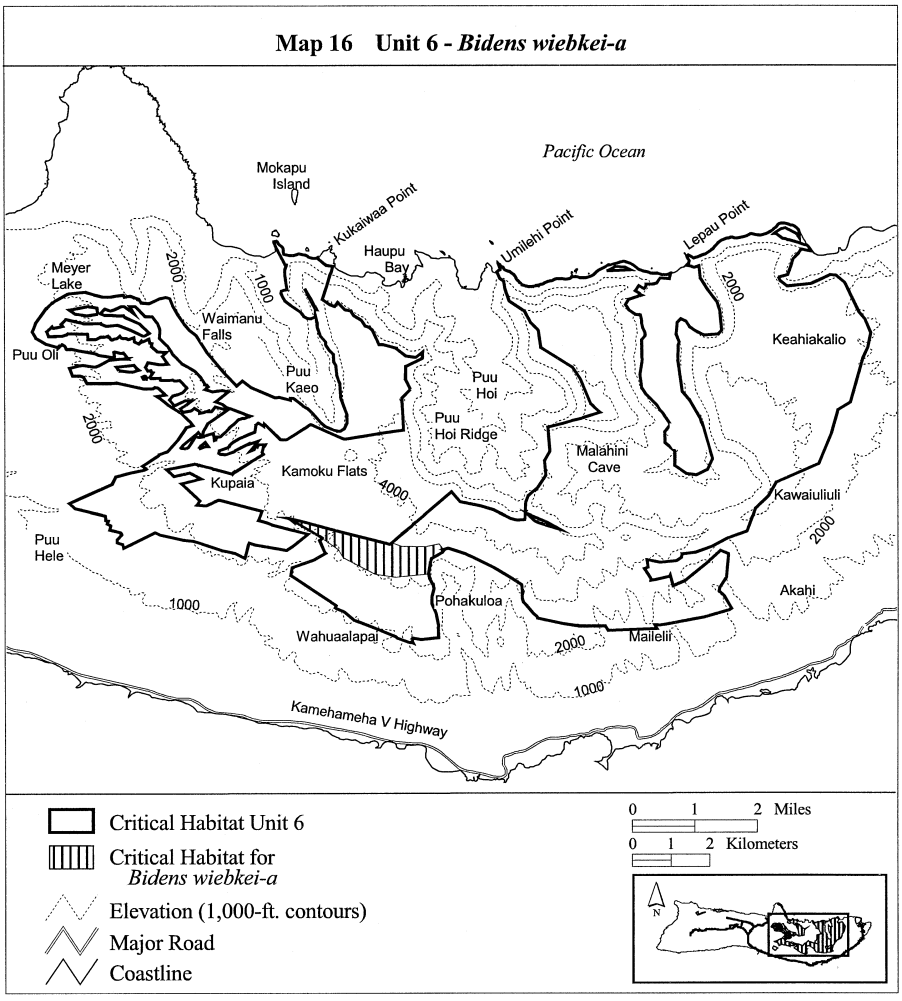
(ii) NOTE: Map 15 follows:



(16) Molokai 6—*Bidens wiebkei*—a (219 ha; 542 ac)

(i) Unit consists of the following 20 boundary points: Start at 718006, 2334920; 718258, 2334825; 718858, 2334816; 719204, 2334884; 719331, 2334723; 719289, 2334656; 719289, 2334656; 719020, 2334504; 719018, 2334503; 719018, 2334503; 719018, 2334503; 718994, 2334425; 718934, 2334106; 718097, 2334022; 717573, 2334098; 716744, 2334529; 716634, 2334732; 716135, 2335095; 715347, 2335551; 717956, 2334877; return to starting point.

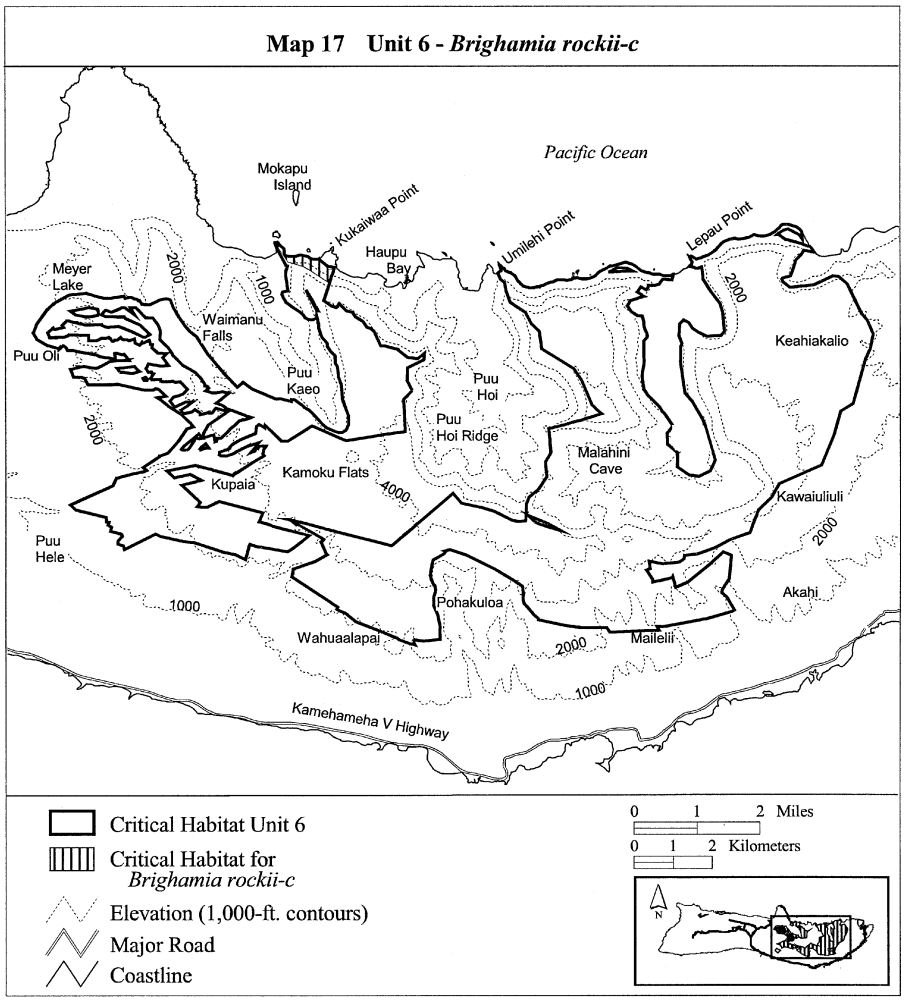
(ii) NOTE: Map 16 follows:



(17) Molokai 6—*Brighamia rockii*—c (38 ha; 95 ac)

(i) Unit consists of the following 9 boundary points and the intermediate coastline: Start at 716089, 2342247; 716263, 2342102; 716347, 2341969; 716482, 2341996; 716375, 2341657; 716328, 2341655; 715888, 2341942; 715686, 2342053; 715313, 2342170; follow coastline and return to starting point.

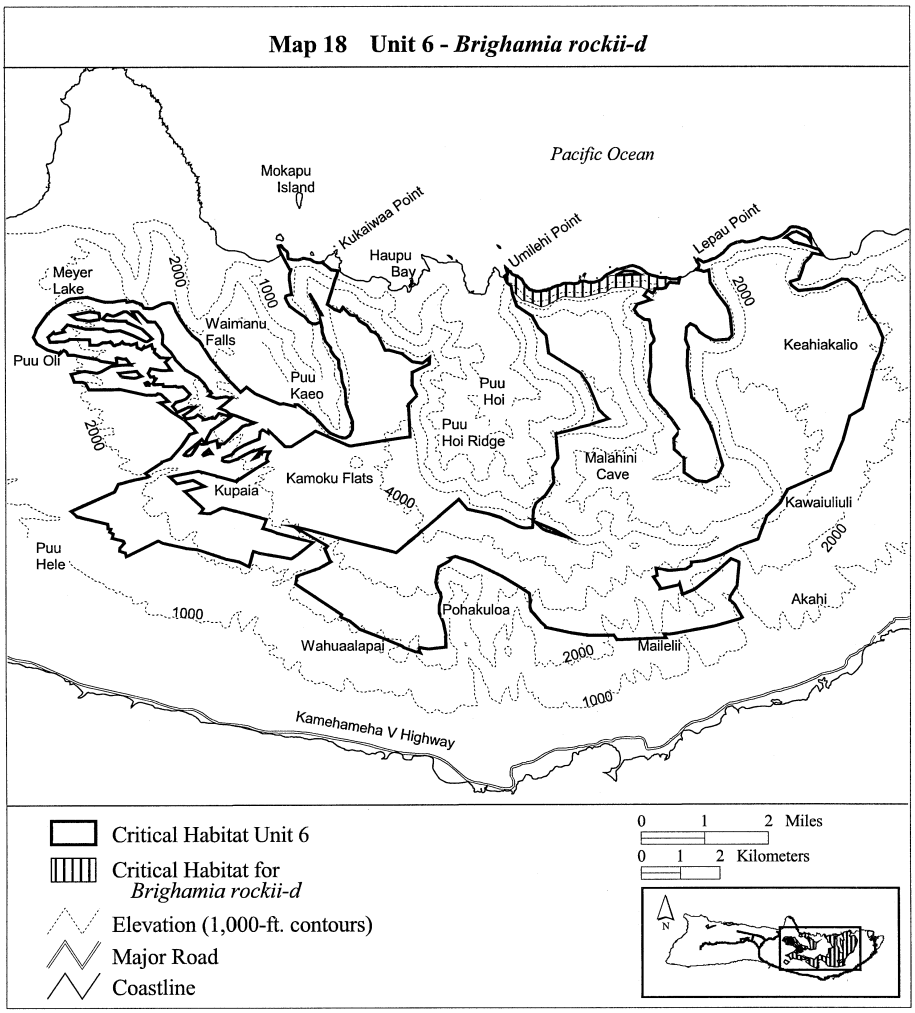
(ii) NOTE: Map 17 follows:



(18) Molokai 6—*Brighamia rockii*—d (145 ha; 358 ac)

(i) Unit consists of the following 35 boundary points and the intermediate coastline: Start at 720770, 2341981; 723204, 2341840; 723220, 2341842; 723377, 2341891; 724326, 2341946; 724920, 2341803; 724885, 2341725; 724781, 2341588; 724671, 2341562; 724262, 2341549; 724190, 2341601; 723996, 2341614; 723405, 2341582; 723256, 2341465; 723139, 2341465; 722691, 2341348; 722509, 2341348; 722158, 2341374; 721756, 2341147; 721620, 2341102; 721256, 2341251; 721139, 2341270; 720872, 2341522; 720861, 2341600; 720856, 2341640; 720767, 2341699; 720682, 2341883; 720682, 2341883; 720682, 2341883; 720690, 2341897; 720716, 2341917; 720755, 2341929; 720769, 2341936; 720777, 2341952; 720777, 2341970; follow coastline and return to starting point.

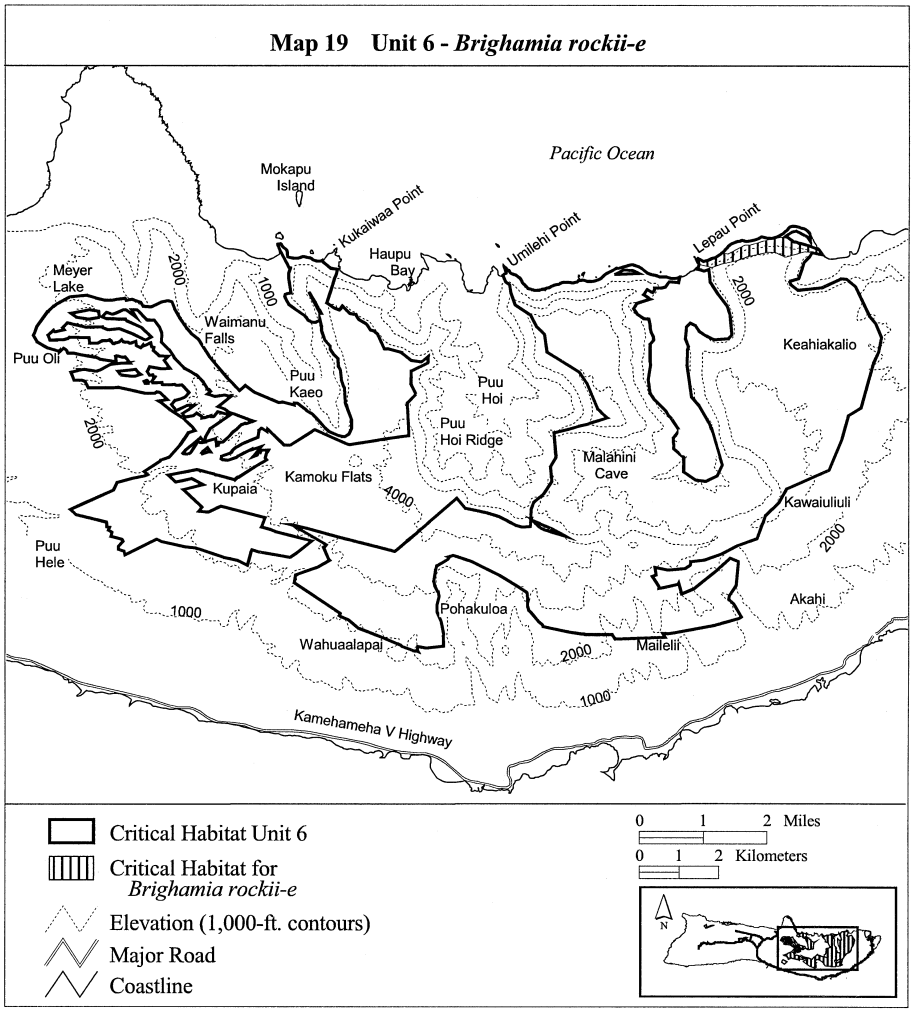
(ii) NOTE: Map 18 follows:



(19) Molokai 6—*Brighamia rockii*—e (83 ha; 206 ac)

(i) Unit consists of the following 24 boundary points and the intermediate coastline: Start at 726360, 2342420; 726777, 2342655; 726909, 2342655; 727223, 2342748; 727399, 2342787; 727757, 2342861; 727860, 2342856; 728070, 2342704; 728207, 2342694; 728394, 2342640; 728580, 2342567; 728635, 2342558; 728678, 2342429; 728305, 2342483; 727815, 2342351; 727571, 2342464; 727394, 2342478; 726860, 2342366; 726591, 2342258; 726194, 2342170; 725949, 2342077; 725660, 2342155; 725633, 2342168; 725632, 2342174; follow coastline and return to starting point.

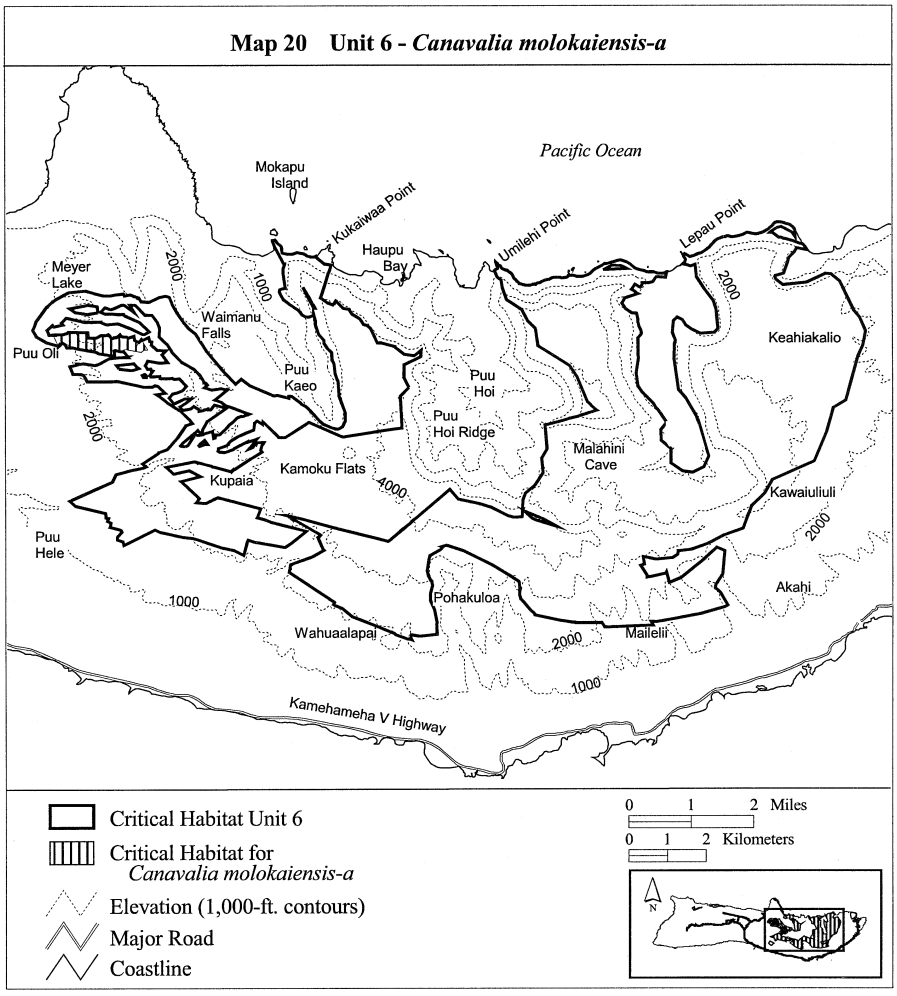
(ii) NOTE: Map 19 follows:



(20) Molokai 6—*Canavalia molokaiensis*—a (80 ha; 197 ac)

(i) Unit consists of the following 28 boundary points: Start at 711585, 2340110; 711750, 2339841; 711652, 2339833; 711589, 2339786; 711148, 2339857; 711062, 2339810; 710951, 2339857; 710881, 2339810; 710881, 2339715; 710487, 2339755; 710251, 2339841; 709913, 2339873; 709574, 2340038; 709469, 2339940; 709322, 2340226; 709637, 2340243; 709724, 2340298; 710220, 2340290; 710227, 2340156; 710338, 2340109; 710542, 2340211; 710778, 2340219; 710818, 2340125; 710936, 2340125; 711077, 2340188; 711376, 2340133; 711463, 2340038; 711455, 2339952; return to starting point.

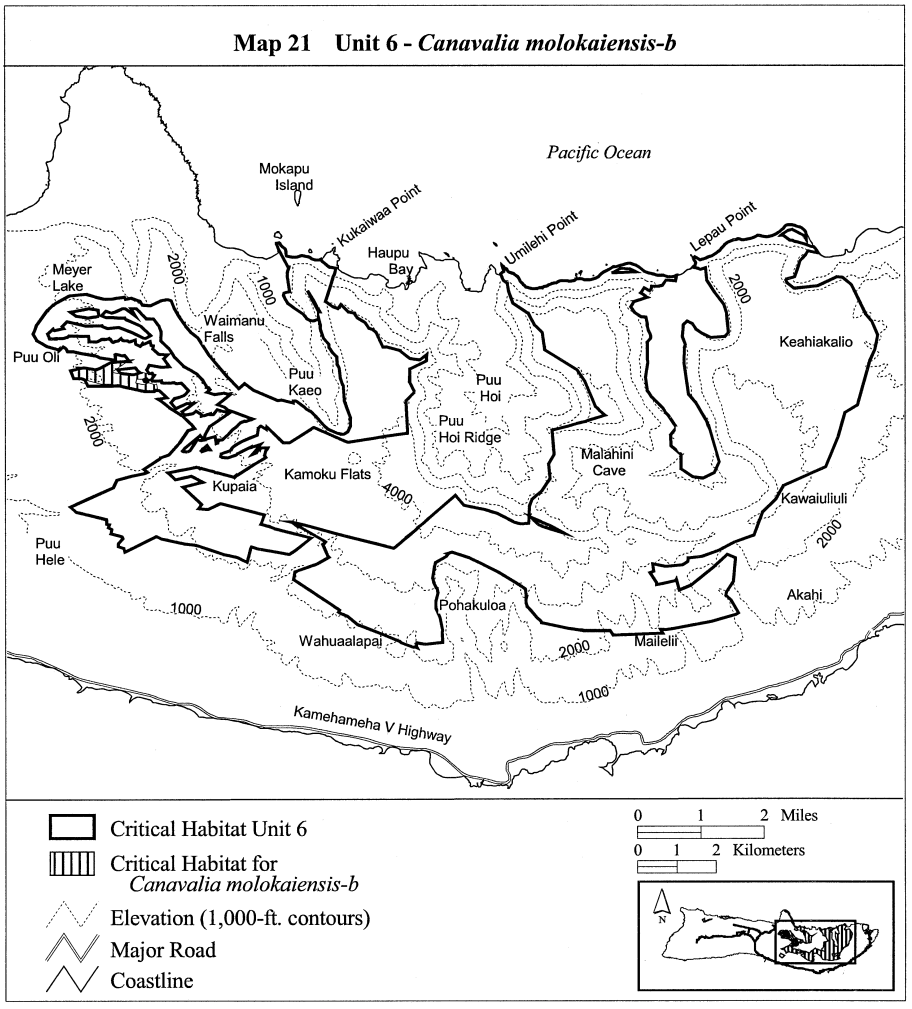
(ii) NOTE: Map 20 follows:



(21) Molokai 6—*Canavalia molokaiensis*—b (76 ha; 187 ac)

(i) Unit consists of the following 27 boundary points: Start at 711826, 2339337; 711860, 2339273; 711809, 2339212; 711431, 2339196; 711408, 2339109; 711589, 2339062; 711746, 2339109; 711880, 2339062; 711947, 2339066; 711971, 2338928; 711873, 2338886; 711654, 2338886; 710802, 2339069; 710534, 2339069; 710041, 2339210; 709997, 2339210; 709997, 2339210; 709837, 2339210; 709751, 2339417; 710102, 2339495; 710424, 2339432; 710763, 2339613; 711203, 2339660; 710794, 2339377; 711258, 2339283; 711573, 2339377; 711778, 2339330; return to starting point.

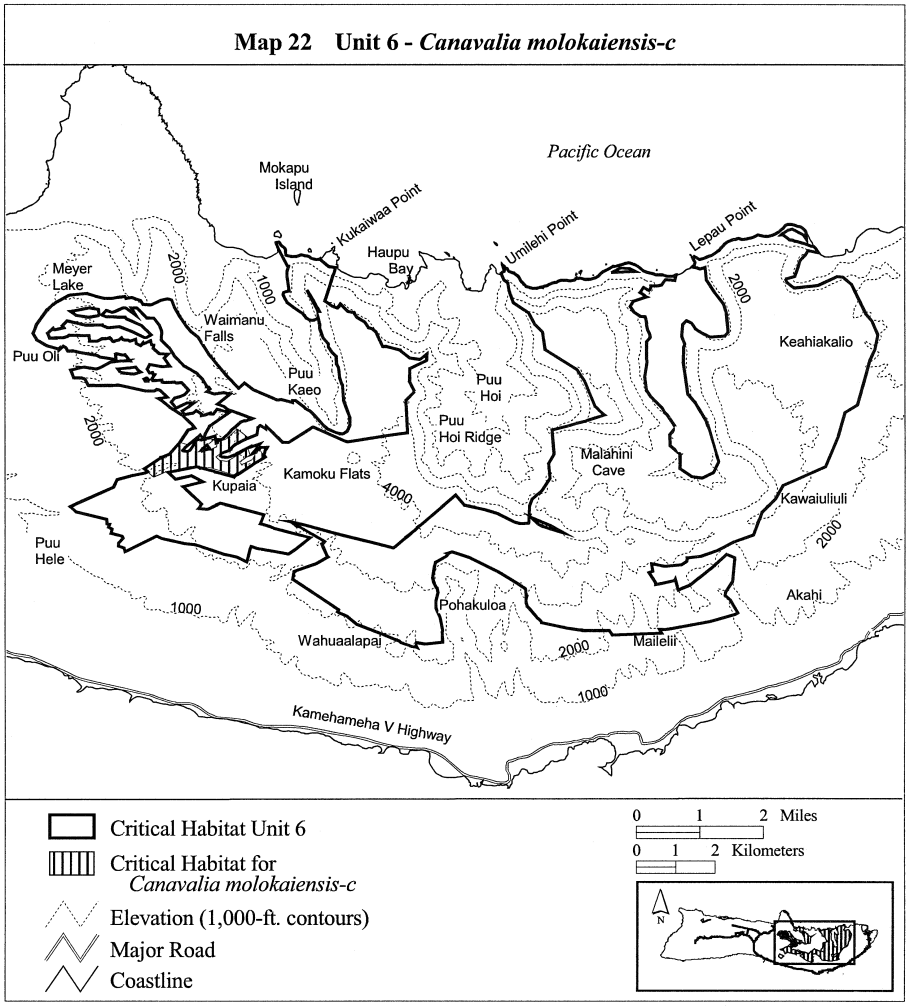
(ii) NOTE: Map 21 follows:



(22) Molokai 6—*Canavalia molokaiensis*—c (150 ha; 371 ac)

(i) Unit consists of the following 36 boundary points: Start at 711848, 2336679; 711615, 2336901; 712021, 2337169; 712152, 2337176; 712518, 2337570; 712704, 2337521; 712587, 2337356; 712746, 2337335; 712939, 2337632; 713415, 2337666; 712987, 2337335; 713236, 2337363; 713457, 2337452; 713477, 2337590; 713678, 2337653; 713919, 2337860; 713966, 2337927; 714259, 2337694; 713940, 2337542; 713781, 2337363; 713512, 2337266; 713443, 2337197; 713533, 2337114; 713719, 2337087; 713995, 2337252; 714250, 2337404; 714299, 2337252; 714043, 2337073; 714085, 2336997; 714354, 2337121; 714517, 2337419; 714705, 2337206; 713938, 2336730; 713284, 2336921; 712794, 2336955; 712139, 2336804; return to starting point.

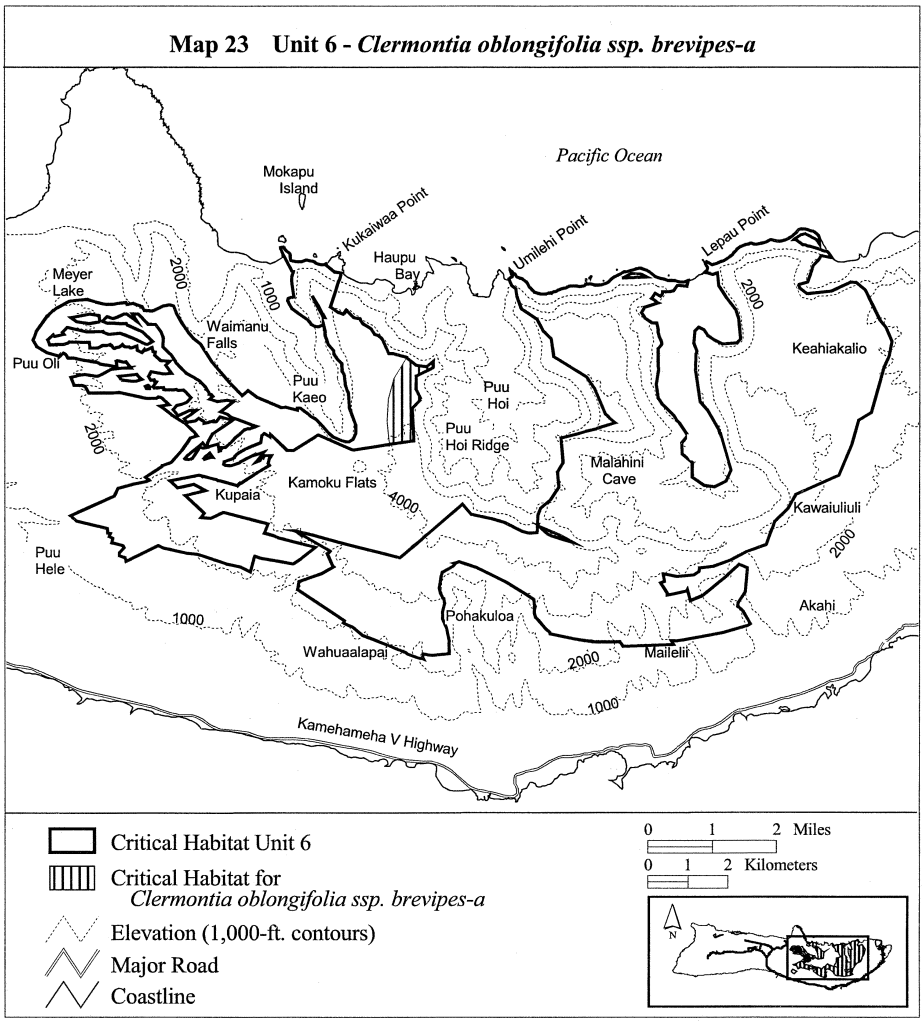
(ii) NOTE: Map 22 follows:



(23) Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—a (131 ha; 325 ac)

(i) Unit consists of the following 14 boundary points: Start at 717701, 2337728; 717628, 2338298; 717674, 2338869; 717807, 2339393; 718126, 2339914; 718369, 2339712; 718630, 2339684; 718798, 2339820; 718794, 2339660; 718369, 2339448; 718361, 2339127; 718483, 2338864; 718272, 2338643; 718311, 2337817; return to starting point.

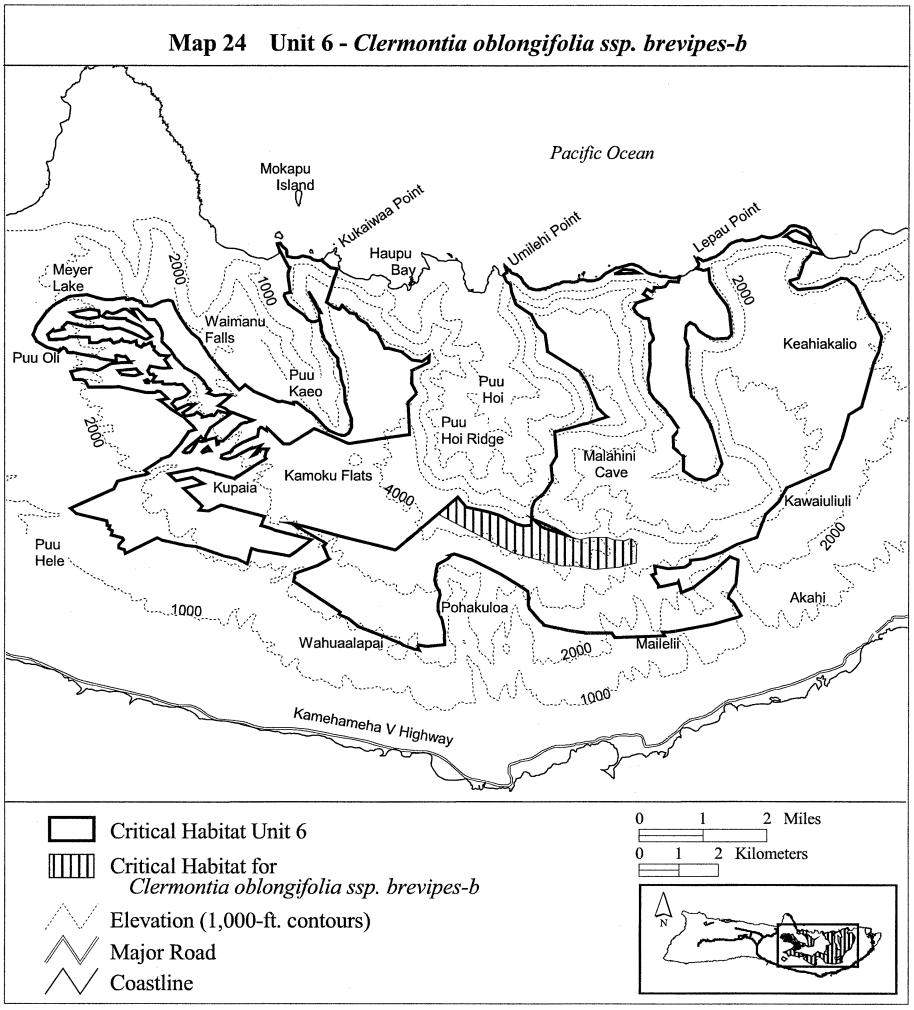
(ii) NOTE: Map 23 follows:



(24) Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—b (358 ha; 884 ac)

(i) Unit consists of the following 27 boundary points: Start at 721397, 2335692; 721668, 2335452; 721947, 2335359; 722644, 2335147; 722856, 2335193; 723314, 2335207; 723493, 2335140; 723765, 2335120; 723904, 2335173; 723977, 2335160; 724070, 2335007; 724063, 2334550; 723652, 2334443; 723002, 2334377; 722511, 2334470; 722166, 2334470; 720938, 2334795; 719017, 2335788; 719529, 2336227; 719749, 2335976; 720611, 2335749; 720920, 2335559; 721062, 2335514; 721066, 2335513; 721206, 2335488; 721388, 2335510; 721396, 2335678; return to starting point.

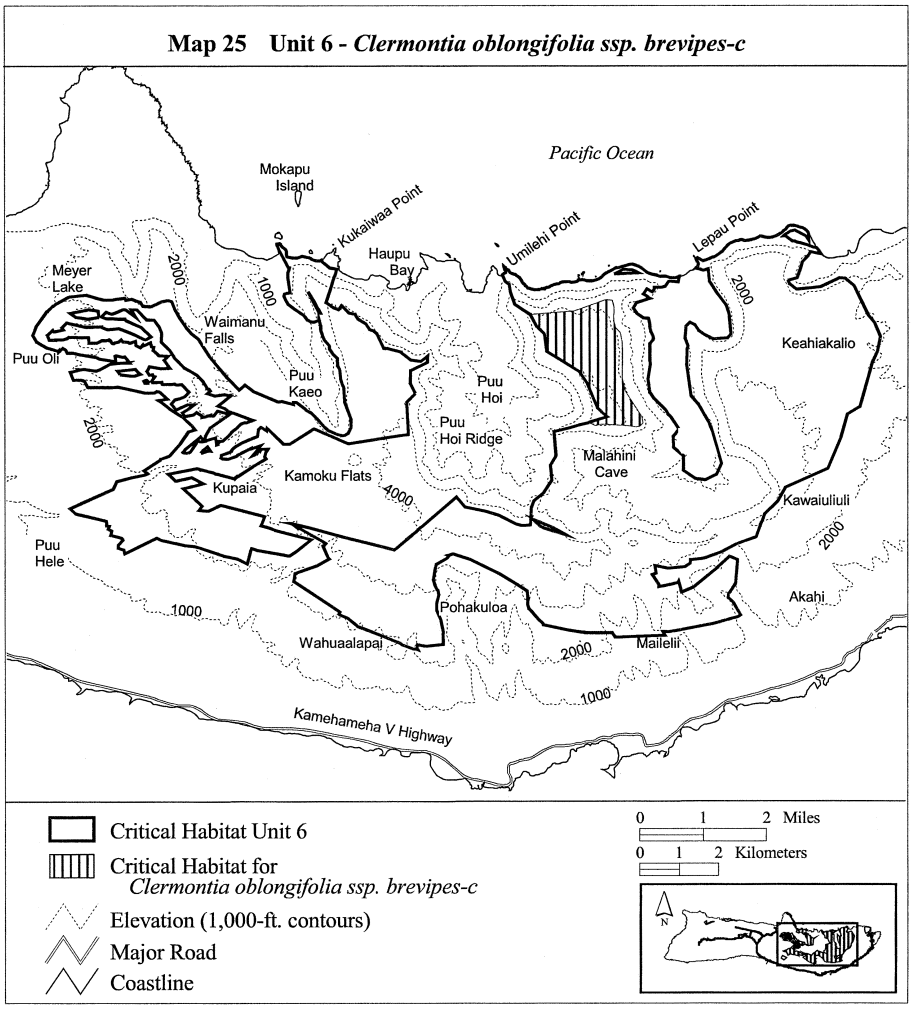
(ii) NOTE: Map 24 follows:



(25) Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—c (427 ha; 1,054 ac)

(i) Unit consists of the following 28 boundary points: Start at 722484, 2340959; 723300, 2341251; 723453, 2341231; 723499, 2341052; 723492, 2340727; 723539, 2340534; 723652, 2340415; 723711, 2340170; 723718, 2339871; 723711, 2339267; 723778, 2338922; 724196, 2338272; 724229, 2338099; 724149, 2338033; 724063, 2338006; 723844, 2338046; 723174, 2338080; 723028, 2338046; 722869, 2338119; 722868, 2338120; 723331, 2338266; 723088, 2338481; 722803, 2339144; 722612, 2339432; 721796, 2339934; 721731, 2340378; 721548, 2340570; 721380, 2340876; return to starting point.

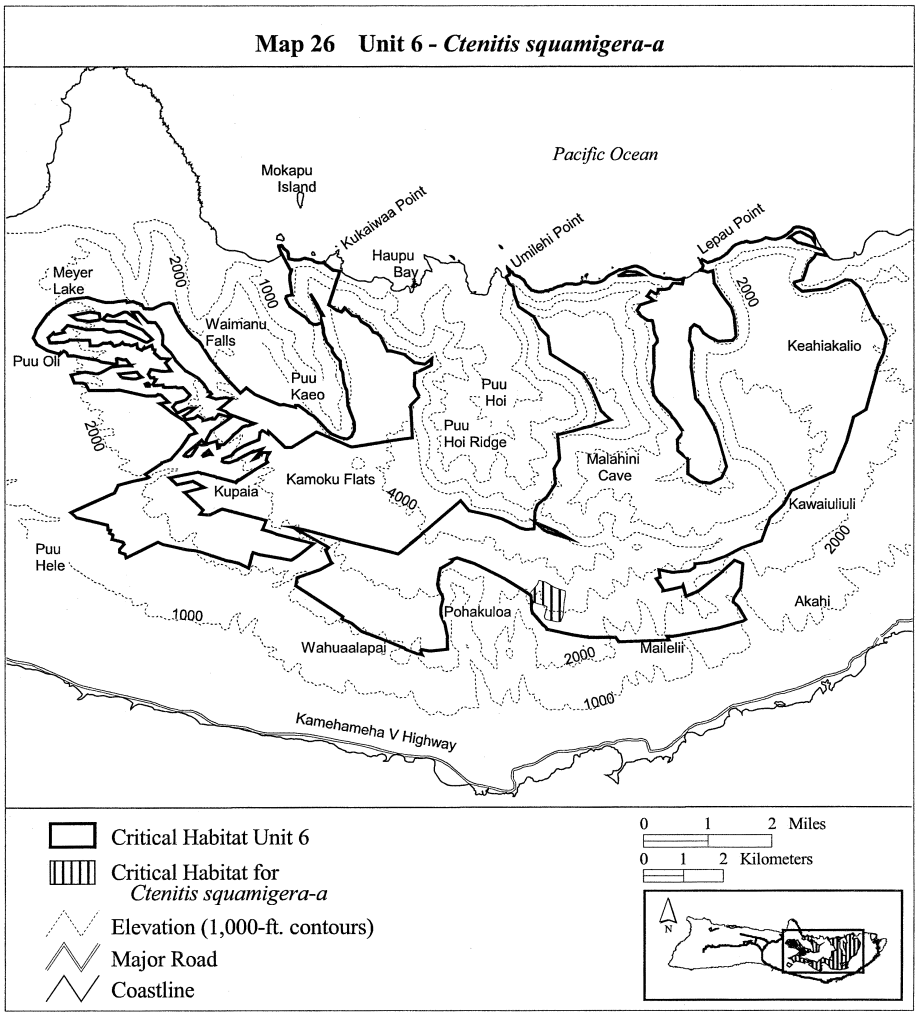
(ii) NOTE: Map 25 follows:



(26) Molokai 6—*Ctenitis squamigera*—a (58 ha; 144 ac)

(i) Unit consists of the following 21 boundary points: Start at 721326, 2333655; 721317, 2333769; 721287, 2333895; 721466, 2334108; 721505, 2334200; 721670, 2334169; 721897, 2334030; 722041, 2333969; 722176, 2333943; 722167, 2333799; 722145, 2333638; 722128, 2333429; 722119, 2333298; 722054, 2333159; 721988, 2333146; 721692, 2333207; 721666, 2333237; 721644, 2333298; 721697, 2333464; 721714, 2333525; 721679, 2333560; return to starting point.

(ii) NOTE: Map 26 follows:

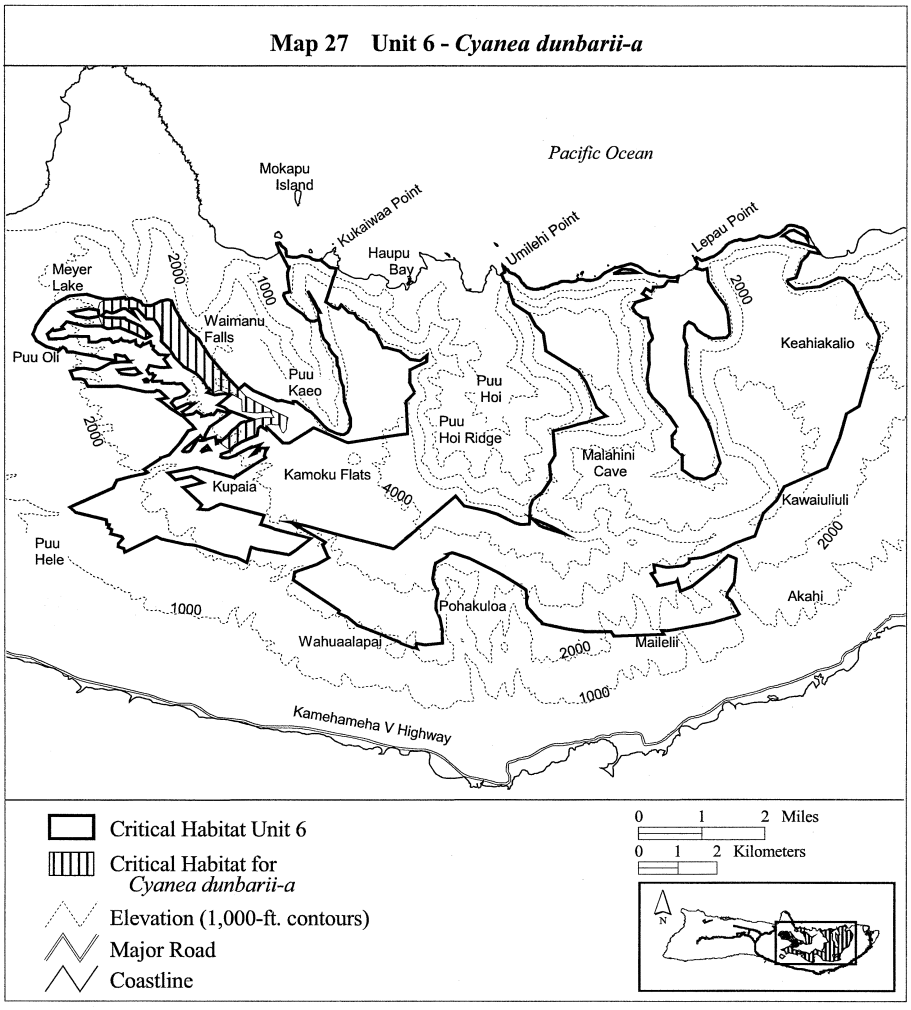


(27) Molokai 6—*Cyanea dunbarii*—a (328 ha; 810 ac)

(i) Unit consists of the following 90 boundary points: Start at 712383, 2341010; 712509, 2340781; 712677, 2340542; 712803, 2340388; 712971, 2340262; 713243, 2339841; 713266, 2339806; 713715, 2339259; 714220, 2338754; 714297, 2338733; 714374, 2338677; 714760, 2338473; 715273, 2338222; 715234, 2338101; 715225, 2337922; 715157, 2337836; 715115, 2337848; 715023, 2338037; 714756, 2338059; 714707, 2337911; 714567, 2338002; 714503, 2337946; 714489, 2337777; 714272, 2337679; 713969, 2337560; 713829, 2337426; 713749, 2337418; 713485, 2337618; 713716, 2337686; 713906, 2337932; 714103, 2338087; 714609, 2338220; 714918, 2338213; 714813, 2338368; 714419, 2338347; 714103, 2338389; 714089, 2338684; 713829, 2338832; 713499, 2338930; 713358, 2338860; 713246, 2338979; 713158, 2339000; 713210, 2339000; 713105, 2339162; 712936, 2339352; 712620, 2339534; 712395, 2339759; 712248, 2339991; 712044, 2340188; 712051, 2340406; 711988, 2340567; 711861, 2340729; 711679, 2340743; 711433, 2341003; 711081, 2340996; 710800, 2340884; 710660, 2340940; 710547, 2340827;

710653, 2340778; 710856, 2340778; 711123, 2340743; 711531, 2340560; 711791, 2340321; 711666, 2340244; 711599, 2340252; 711348, 2340378; 711130, 2340462; 710976, 2340525; 710695, 2340497; 710564, 2340545; 710482, 2340767; 710454, 2340998; 710489, 2341159; 710587, 2341201; 711050, 2341229; 711309, 2341265; 711407, 2341229; 711520, 2341187; 711520, 2341187; 711590, 2341089; 711621, 2341088; 711621, 2341088; 711786, 2341082; 712007, 2341178; 712060, 2341201; 712183, 2341226; 712235, 2341236; 712236, 2341236; 712305, 2341201; 712382, 2341012; return to starting point.

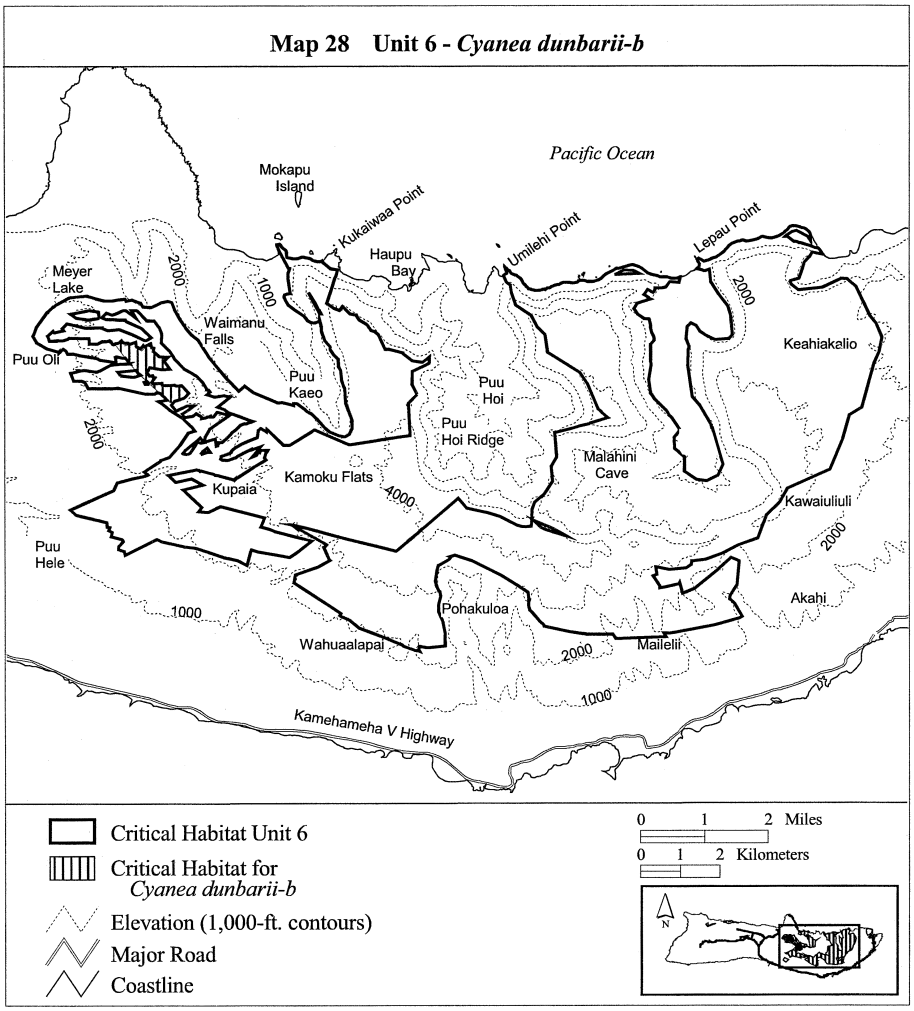
(ii) NOTE: Map 27 follows:



(28) Molokai 6—*Cyanea dunbarii*—b (88 ha; 218 ac)

(i) Unit consists of the following 38 boundary points: Start at 712268, 2338661; 711464, 2339411; 711167, 2339755; 710877, 2340154; 710985, 2340181; 711039, 2340242; 711079, 2340187; 711133, 2340181; 711133, 2340113; 711295, 2340160; 711397, 2340201; 711410, 2340052; 711545, 2339985; 711687, 2340106; 711849, 2340046; 711836, 2339971; 711991, 2339830; 712227, 2339823; 712119, 2339721; 712261, 2339519; 712059, 2339505; 711755, 2339553; 711687, 2339445; 711748, 2339343; 711829, 2339350; 711843, 2339309; 711883, 2339303; 711802, 2339181; 711843, 2339120; 712011, 2339134; 712140, 2339087; 712194, 2339080; 712383, 2339114; 712423, 2339087; 712565, 2339093; 712741, 2338904; 712639, 2338796; 712525, 2338742; return to starting point.

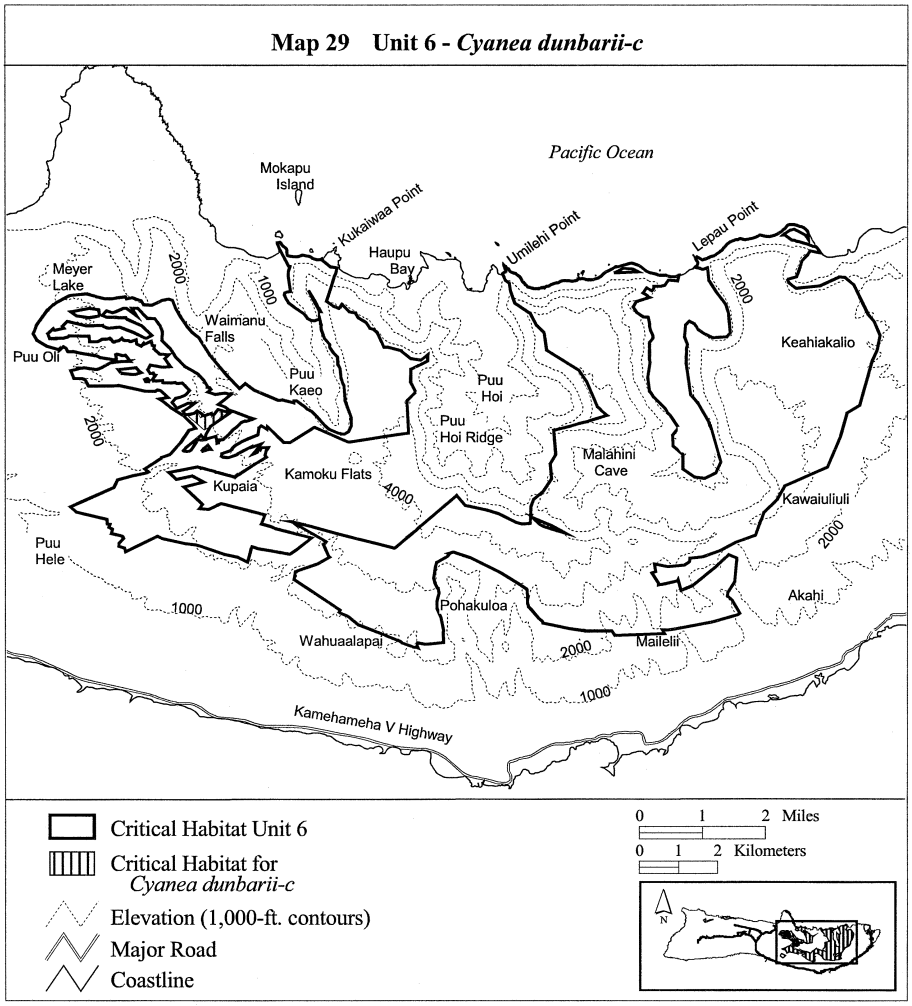
(ii) NOTE: Map 28 follows:



(29) Molokai 6—*Cyanea dunbarii*—c (23 ha; 56 ac)

(i) Unit consists of the following 8 boundary points: Start at 713119, 2337891; 712721, 2338242; 712943, 2338337; 713018, 2338202; 713295, 2338323; 713301, 2338229; 713470, 2338418; 713767, 2338337; return to starting point.

(ii) NOTE: Map 29 follows:

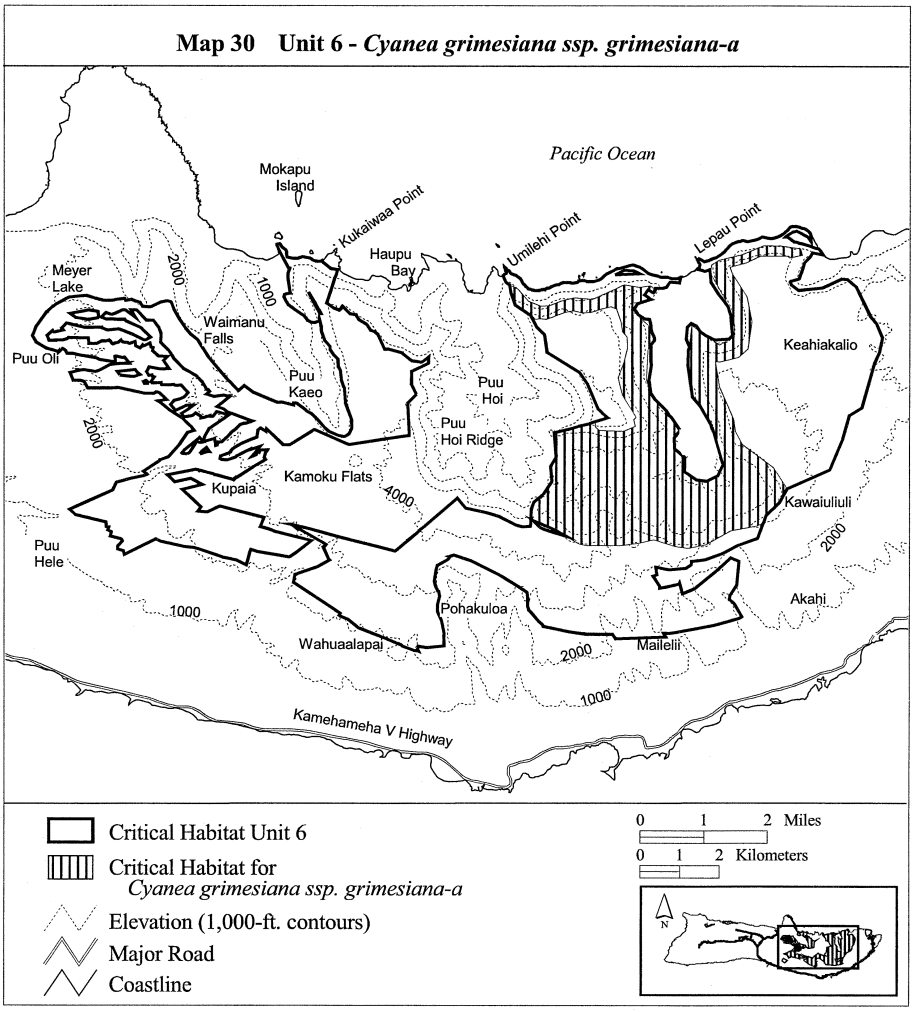


(30) Molokai 6—*Cyanea grimesiana* ssp. *grimesiana*—a (2,133 ha; 5,272 ac)

(i) Unit consists of the following 147 boundary points: Start at 724402, 2341280; 724061, 2341168; 723989, 2341034; 724140, 2340797; 724323, 2340631; 724436, 2340432; 724436, 2340432; 724485, 2340334; 724485, 2340334; 724485, 2340334; 724496, 2340239; 724495, 2340236; 724406, 2340142; 724406, 2340141; 724328, 2339992; 724289, 2339246; 724392, 2338911; 724498, 2338755; 724498, 2338755; 724580, 2338634; 724934, 2338251; 725144, 2337958; 724994, 2337760;

725003, 2337485; 725003, 2337479; 725003, 2337479; 725257, 2337263; 725252, 2336892; 725552, 2336696; 725813, 2336660; 726097, 2336793; 726225, 2337071; 726132, 2337378; 725950, 2337999; 725950, 2337999; 725948, 2337998; 725947, 2337998; 725906, 2338120; 725645, 2338566; 725448, 2338803; 725338, 2339603; 725350, 2340002; 725368, 2340078; 725368, 2340079; 725431, 2340616; 726134, 2340129; 726517, 2340344; 726517, 2340585; 726288, 2341264; 725894, 2341967; 725924, 2342152; 726122, 2342269; 726708, 2342417; 727260, 2342635; 727711, 2342629; 728174, 2342570; 728226, 2342394; 727905, 2342331; 727855, 2342374; 727164, 2342368; 726825, 2342214; 726406, 2342096; 726455, 2341942; 726831, 2341350; 726961, 2340727; 726862, 2340024; 726619, 2339809; 726149, 2339695; 726027, 2339695; 726106, 2339243; 726139, 2339057; 726506, 2338221; 726534, 2337929; 726712, 2337601; 727511, 2336999; 727854, 2336466; 727650, 2336110; 727313, 2335793; 727248, 2335596; 727088, 2335525; 726421, 2335393; 725792, 2335036; 725341, 2334952; 725013, 2334999; 724477, 2335168; 724109, 2335080; 723632, 2335018; 722824, 2335018; 722627, 2335055; 721913, 2335459; 721396, 2335678; 721470, 2336127; 721713, 2336326; 721929, 2336656; 721893, 2337028; 722037, 2337255; 721980, 2337890; 722331, 2337981; 723022, 2338160; 723014, 2338043; 723114, 2337949; 723297, 2337942; 723717, 2337932; 724017, 2338052; 723979, 2338221; 724036, 2338277; 723697, 2338841; 723585, 2339283; 723733, 2339688; 723818, 2340054; 723803, 2340329; 723696, 2340449; 723662, 2340693; 723538, 2341038; 723396, 2341086; 723176, 2341034; 722908, 2340945; 722675, 2340943; 722677, 2340938; 722661, 2340941; 722639, 2340938; 722637, 2340946; 722457, 2340989; 722243, 2340955; 721785, 2340772; 721651, 2340790; 721486, 2340778; 721475, 2340813; 720997, 2341127; 720995, 2341131; 720861, 2341600; 720942, 2341609; 721062, 2341540; 721334, 2341227; 721651, 2341103; 721861, 2341113; 722188, 2341248; 722488, 2341323; 722939, 2341279; 723503, 2341530; 723727, 2341654; 724109, 2341592; 724378, 2341623; 724450, 2341588; 724473, 2341445; 724325, 2341519; 724244, 2341392; return to starting point.

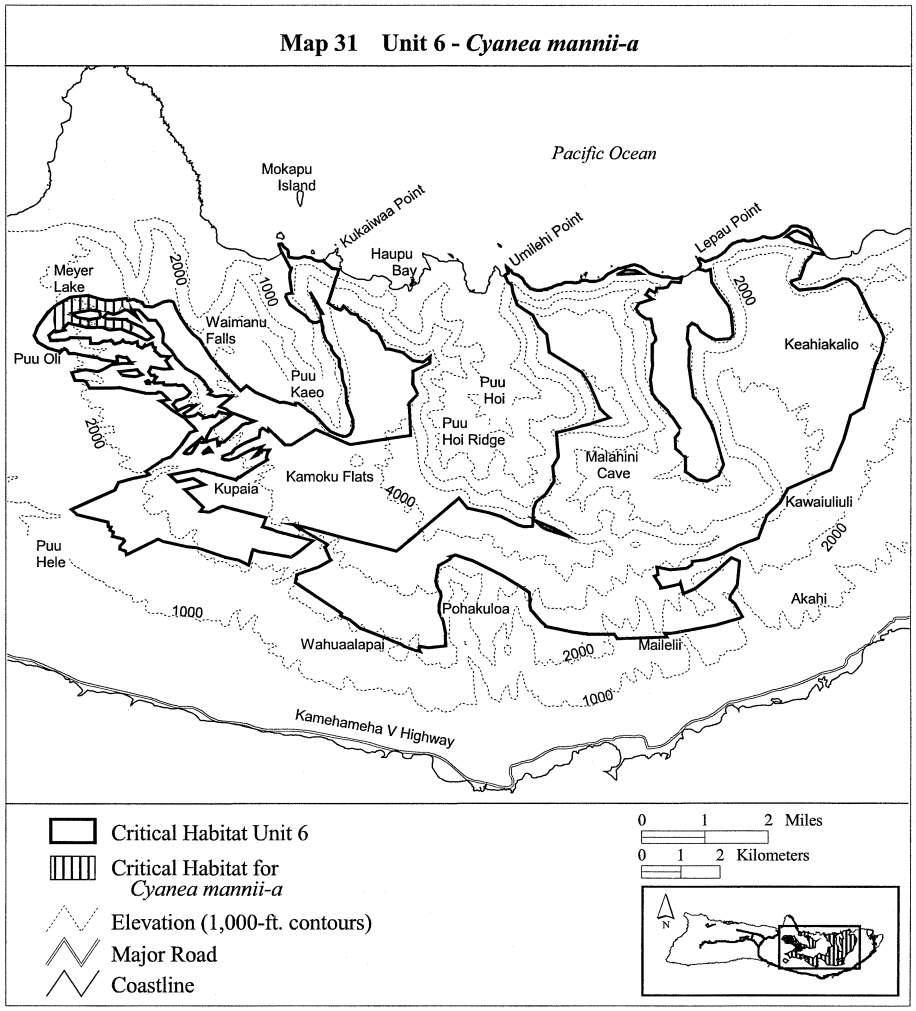
(ii) NOTE: Map 30 follows:



(31) Molokai 6—*Cyanea mannii*—a (110 ha; 272 ac)

(i) Unit consists of the following 31 boundary points: Start at 709340, 2340505; 709294, 2340681; 709294, 2340850; 709317, 2341088; 709693, 2341288; 710007, 2341357; 710238, 2341334; 710614, 2341241; 710790, 2341242; 710928, 2341272; 711128, 2341288; 711412, 2340812; 711005, 2341103; 710913, 2340927; 710215, 2341004; 709647, 2340888; 709977, 2340773; 710084, 2340781; 710199, 2340766; 710491, 2340812; 710783, 2340750; 710867, 2340758; 711136, 2340758; 711297, 2340581; 711235, 2340428; 711005, 2340520; 710783, 2340543; 710575, 2340566; 710146, 2340551; 709670, 2340666; 709462, 2340482; return to starting point.

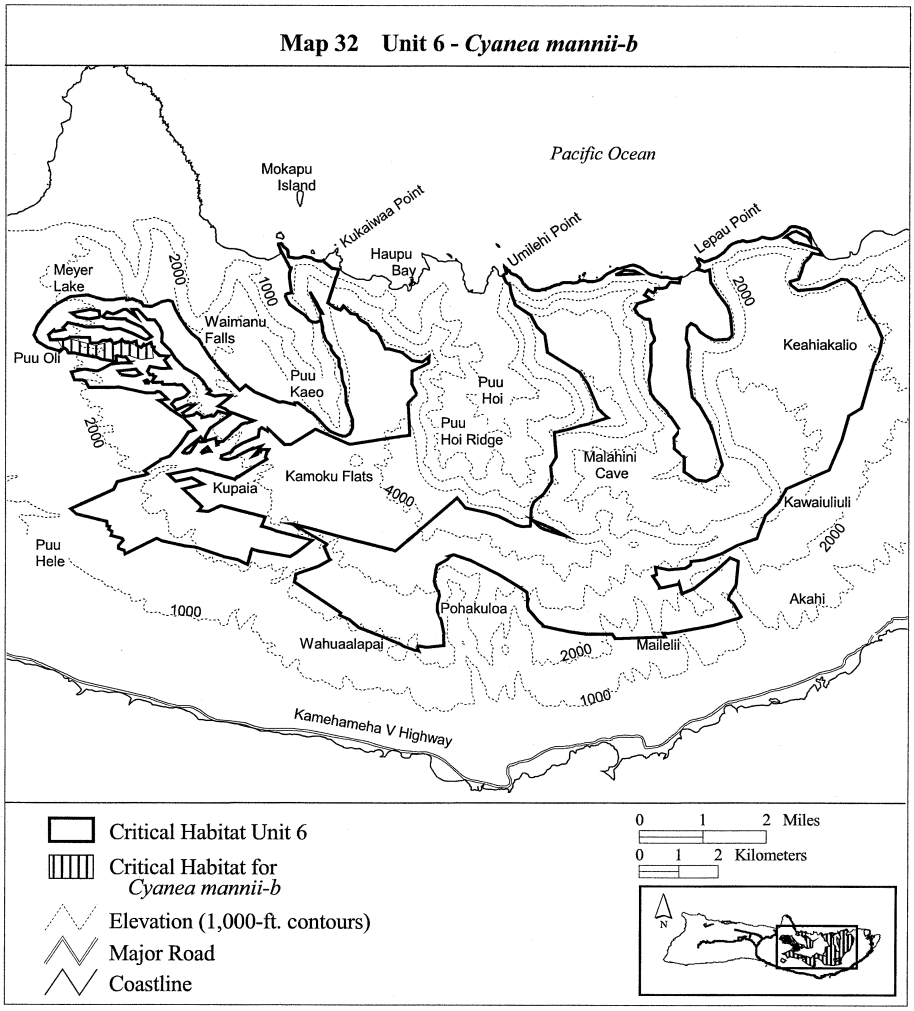
(ii) NOTE: Map 31 follows:



(32) Molokai 6—*Cyanea mannii*—b (81 ha; 199 ac)

(i) Unit consists of the following 25 boundary points: Start at 709386, 2340236; 709700, 2340251; 709777, 2340244; 710360, 2340090; 710721, 2340190; 710890, 2340113; 711036, 2340244; 711105, 2340121; 711312, 2340129; 711527, 2340036; 711780, 2340167; 711842, 2339768; 711527, 2339729; 711205, 2339837; 711082, 2339791; 710890, 2339837; 710905, 2339683; 710583, 2339737; 710499, 2339745; 710391, 2339791; 709992, 2339860; 709839, 2339891; 709685, 2339898; 709624, 2339983; 709501, 2340067; return to starting point.

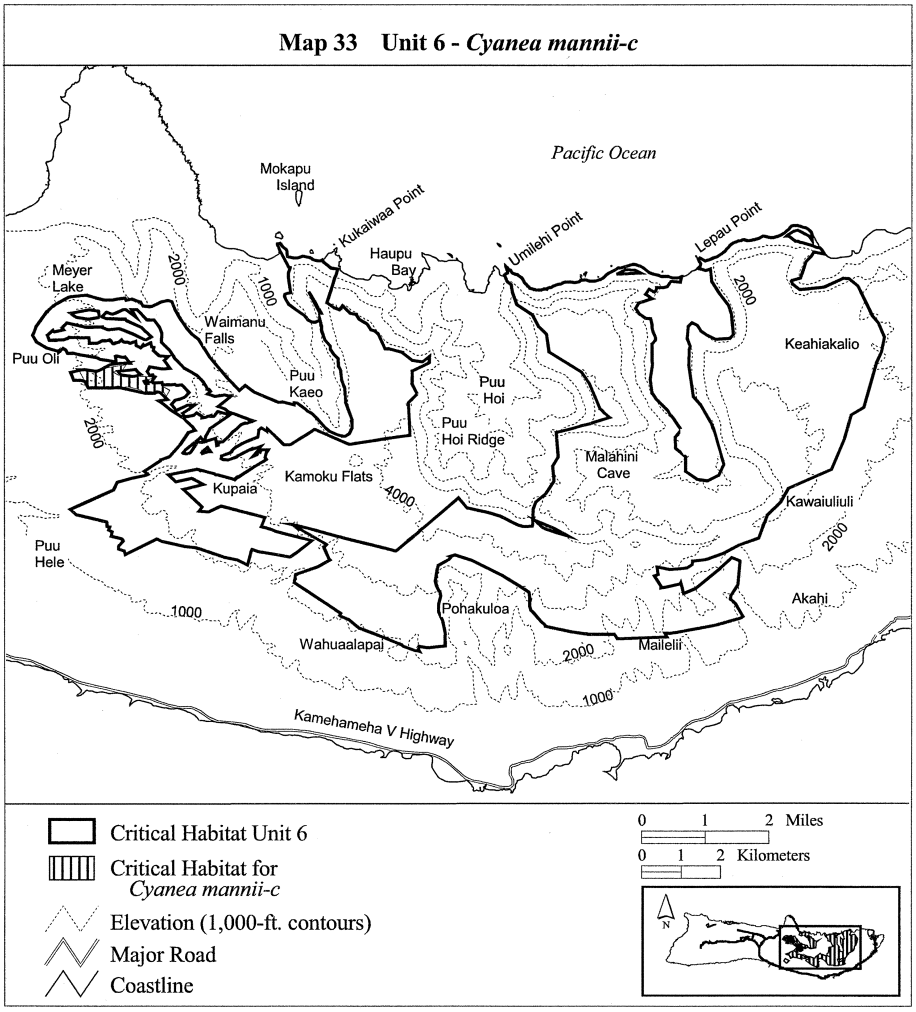
(ii) NOTE: Map 32 follows:



(33) Molokai 6—*Cyanea mannii*—c (78 ha; 192 ac)

(i) Unit consists of the following 25 boundary points: Start at 709961, 2339476; 710399, 2339438; 710644, 2339522; 710867, 2339568; 711159, 2339607; 711059, 2339476; 710821, 2339422; 710951, 2339353; 711320, 2339315; 711673, 2339307; 711865, 2339284; 711612, 2339184; 711642, 2339131; 712057, 2339154; 712087, 2339062; 712256, 2338962; 712172, 2338816; 712103, 2338900; 711888, 2338916; 711719, 2338931; 711581, 2338908; 711542, 2338954; 711220, 2339039; 710836, 2339023; 710207, 2339023; return to starting point.

(ii) NOTE: Map 33 follows:

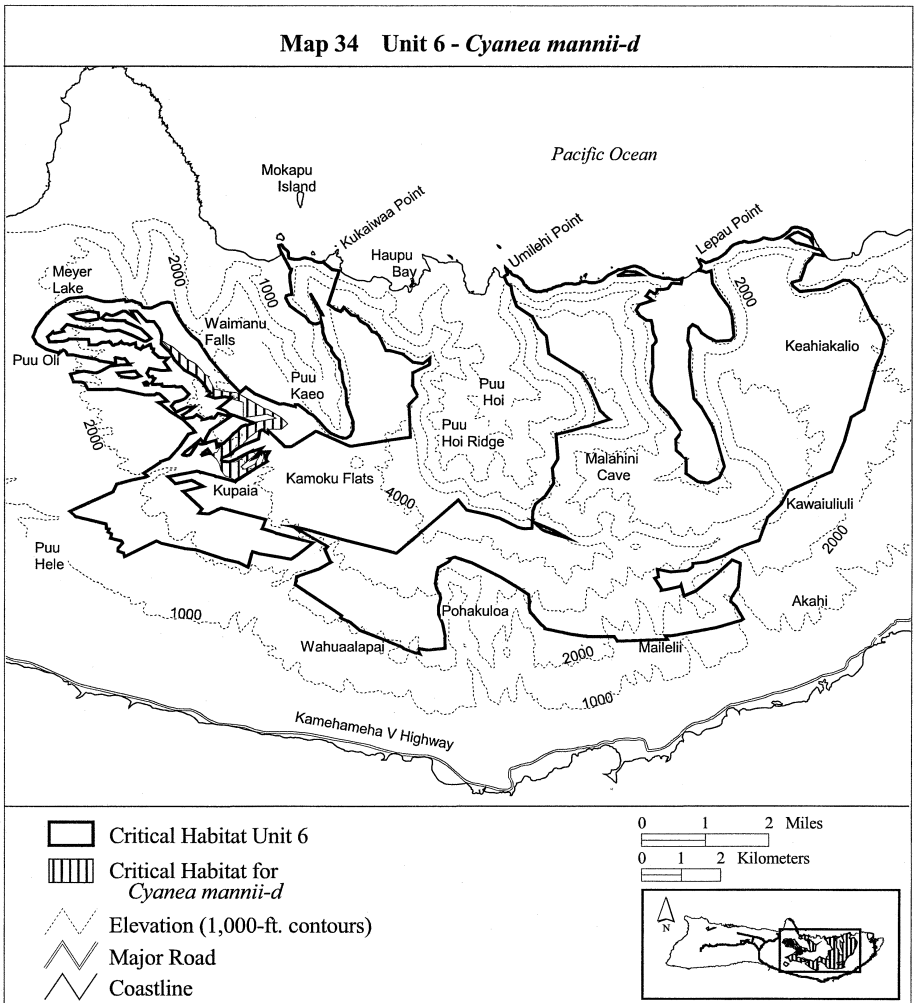


(34) Molokai 6—*Cyanea mannii*—d (160 ha; 396 ac)

(i) Unit consists of the following 73 boundary points: Start at 712661, 2339820; 712658, 2339819; 712672, 2339802; 712901, 2339679; 713065, 2339521; 713151, 2339406; 713247, 2339345; 713227, 2339338; 713378, 2339028; 713664, 2338964; 713937, 2338939; 713943, 2338936; 714265, 2338754; 714620, 2338553; 714721, 2338508; 715049, 2338303; 715206, 2338154; 715047, 2338011; 714522, 2338019; 714260, 2337828; 714038, 2337597; 713569, 2337288; 713537, 2337168; 713934, 2337192; 714324, 2337470; 714403, 2337375; 714038, 2337065; 714141, 2337001; 714379, 2337129; 714570, 2337438; 714753, 2337438; 714586, 2337240; 714581, 2337183; 714556, 2337183; 714560, 2337116; 713942, 2336733; 713867, 2336746; 713697, 2336822; 713650, 2336839; 713539, 2336980; 713504, 2337120; 713445, 2337255; 713334, 2337337; 713308, 2337344; 713372, 2337417; 713426, 2337415; 713553, 2337613; 713775, 2337812; 714022, 2338058; 714459, 2338209; 714912, 2338297; 714697, 2338392; 714101, 2338305; 714101, 2338519; 714101, 2338702; 713903, 2338766; 713648, 2338845; 713402, 2338805;

713210, 2338869; 713291, 2338925; 713171, 2339131; 712925, 2339354; 712655, 2339521; 712369, 2339783; 712266, 2340021; 712094, 2340230; 712094, 2340233; 712204, 2340159; 712321, 2340118; 712461, 2339995; 712575, 2339895; 712590, 2339902; 712650, 2339829; return to starting point.

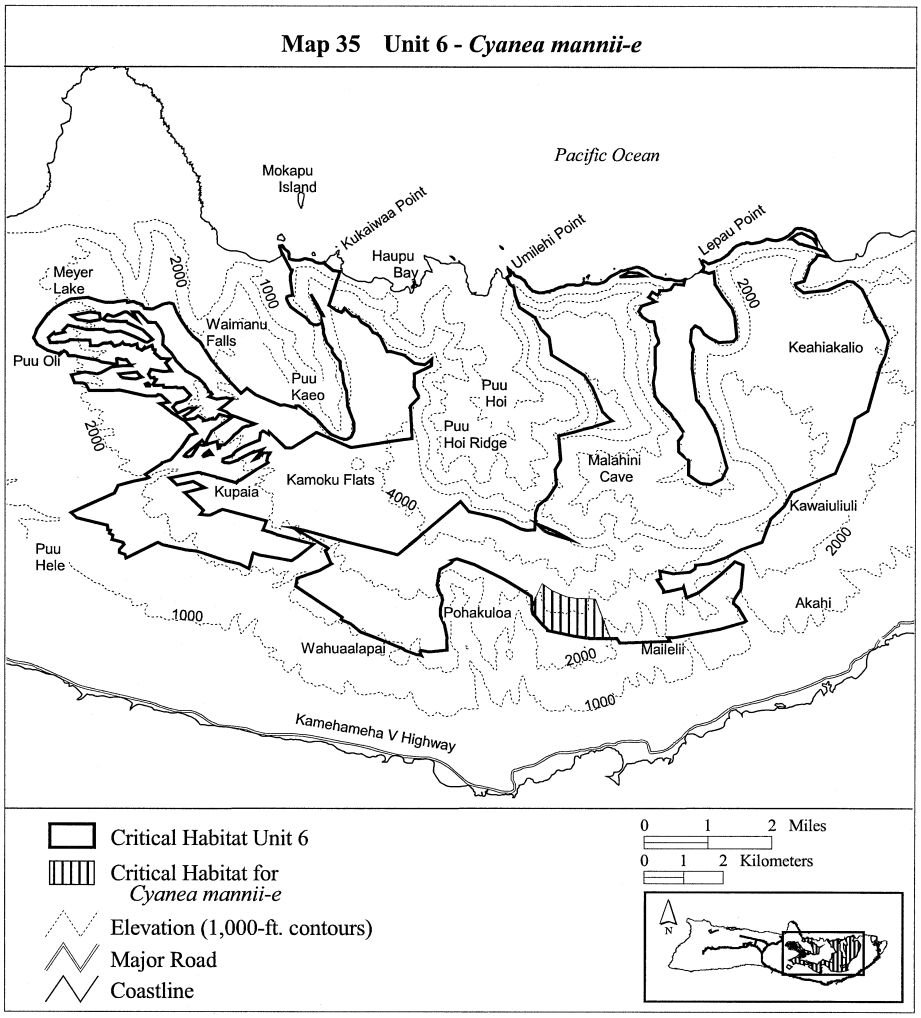
(ii) NOTE: Map 34 follows:



(35) Molokai 6—*Cyanea mannii*—e (168 ha; 416 ac)

(i) Unit consists of the following 18 boundary points: Start at 721578, 2334150; 721818, 2333970; 722169, 2333818; 722450, 2333777; 722673, 2333777; 722910, 2333761; 723049, 2333401; 723285, 2332769; 722714, 2332764; 722368, 2332823; 721718, 2332957; 721694, 2332993; 721595, 2333086; 721408, 2333315; 721338, 2333379; 721314, 2333467; 721314, 2333577; 721414, 2333839; return to starting point.

(ii) NOTE: Map 35 follows:

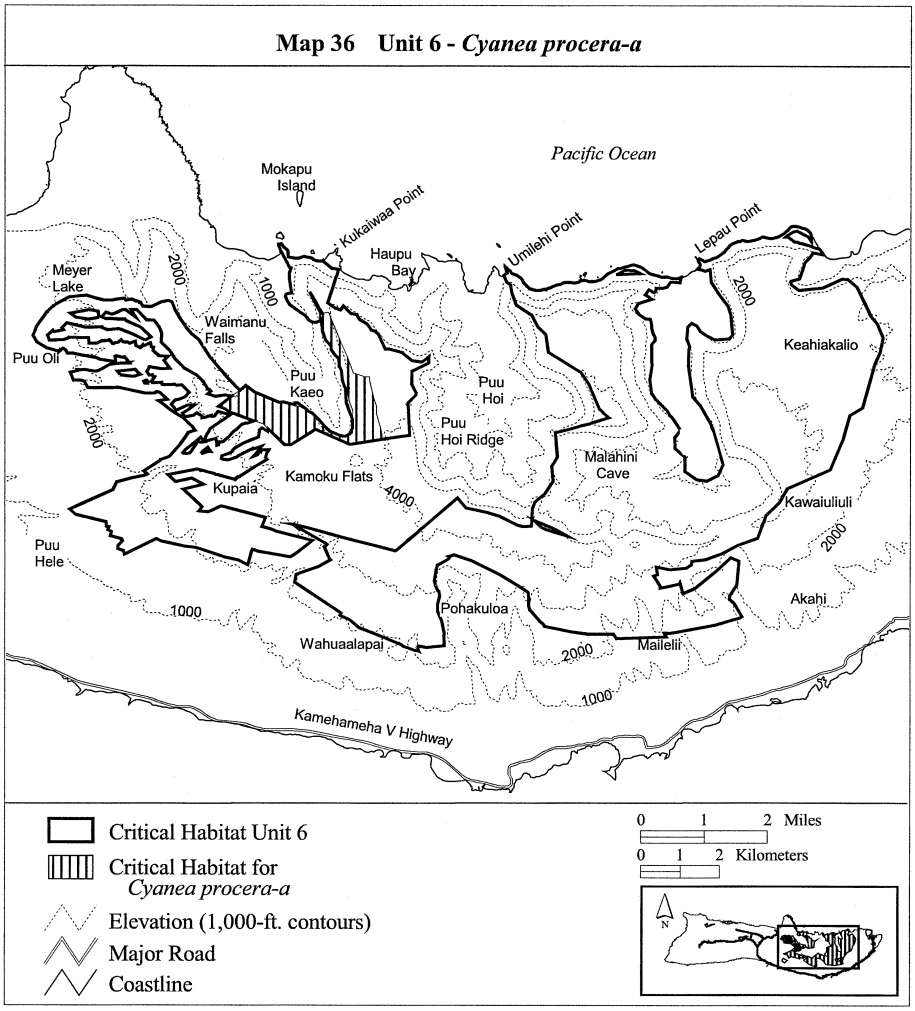


(36) Molokai 6—*Cyanea procera*—a (348 ha; 860 ac)

(i) Unit consists of the following 64 boundary points: Start at 717603, 2337808; 717607, 2337707; 717538, 2337697; 717493, 2337690; 716789, 2337580; 715922, 2337961; 715922, 2337961; 715899, 2337947; 715302, 2337577; 715148, 2337577; 714597, 2338100; 714254, 2338220; 713860, 2338374; 713740, 2338408; 713648, 2338488; 713476, 2338552; 714171, 2339082; 714385, 2338922; 715008, 2338648; 715099, 2338665; 715512, 2338547; 715842, 2338374; 716007, 2338202; 716190, 2338008; 716282, 2337911; 716533, 2337808; 716653, 2337785; 716801, 2337820; 716864, 2337877; 716864, 2338048; 716859, 2338282; 716854, 2338447; 716801, 2338608; 716716, 2338911; 716636, 2339105; 716596, 2339225; 716567, 2339476; 716516, 2339568; 716499, 2339773; 716390, 2339888; 716316, 2340002; 716310, 2340070; 716167, 2340242; 716093, 2340453; 716087, 2340602; 716047, 2340762; 716005, 2340909; 716252, 2340933; 716289, 2340900; 716266, 2340906; 716562, 2340165; 716724, 2339814; 716872, 2339396; 717182, 2339302; 717290, 2339294; 717293, 2339185; 717390, 2338768; 717464, 2338534;

717470, 2338534; 717470, 2338517; 717470, 2338385; 717470, 2338340; 717577, 2337948; 717601, 2337860; return to starting point.

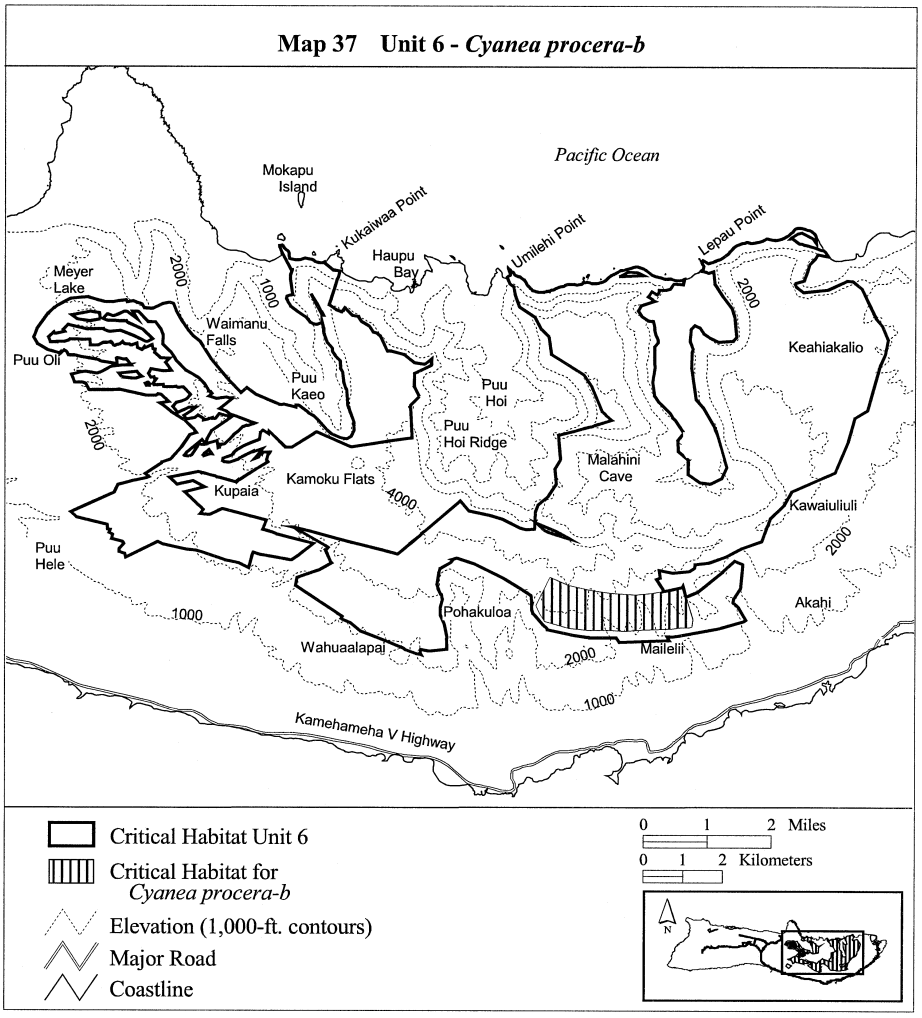
(ii) NOTE: Map 36 follows:



(37) Molokai 6—*Cyanea procera*—b (373 ha; 921 ac)

(i) Unit consists of the following 24 boundary points: Start at 721773, 2334290; 722229, 2334092; 722786, 2333963; 723322, 2333892; 723936, 2333849; 724350, 2333885; 724757, 2333956; 725114, 2334042; 725130, 2334067; 725385, 2333227; 725353, 2333037; 725264, 2333013; 725228, 2333013; 725035, 2333013; 724850, 2332985; 724514, 2332971; 724100, 2332956; 723650, 2332921; 723357, 2332942; 722765, 2332949; 722244, 2332999; 721637, 2333171; 721522, 2333349; 721417, 2333581; return to starting point.

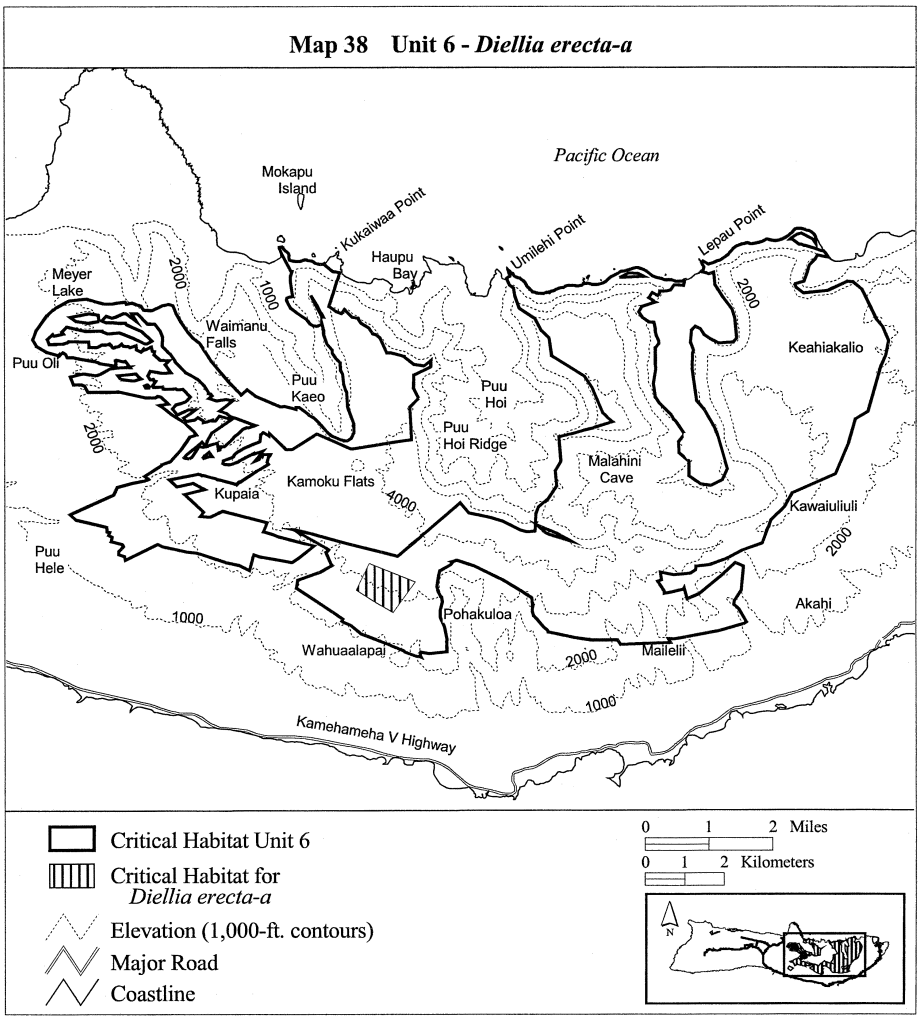
(ii) NOTE: Map 37 follows:



(38) Molokai 6—*Diellia erecta*—a (99 ha; 244 ac)

(i) Unit consists of the following 5 boundary points: Start at 717246, 2334694; 718399, 2334223; 717831, 2333459; 717408, 2333703; 716905, 2334028; return to starting point.

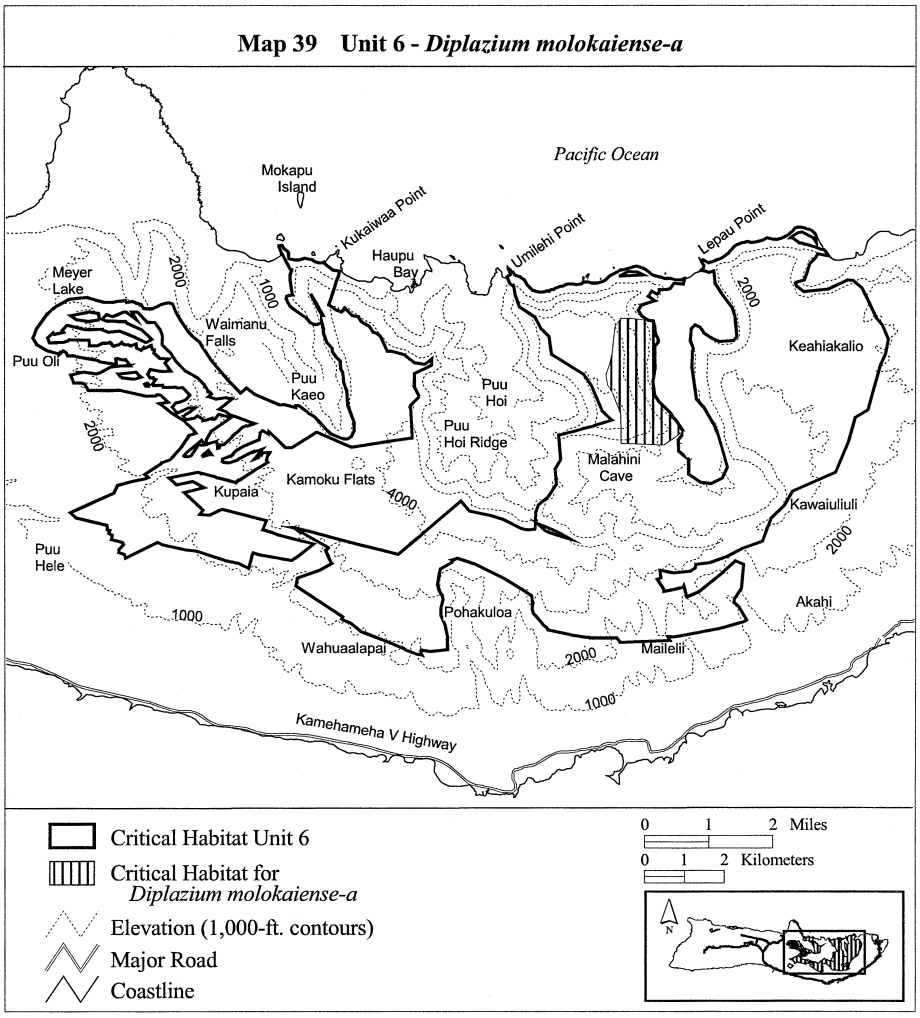
(ii) NOTE: Map 38 follows:



(39) Molokai 6—*Diplazium molokaiense*—a (368 ha; 909 ac)

(i) Unit consists of the following 31 boundary points: Start at 724370, 2340778; 724382, 2340717; 724401, 2340620; 724402, 2340548; 724402, 2340548; 724406, 2340143; 724406, 2340142; 724406, 2340141; 724411, 2339687; 724412, 2339620; 724349, 2339241; 724412, 2338841; 724498, 2338755; 724498, 2338755; 724498, 2338755; 724612, 2338641; 724801, 2338452; 724881, 2338317; 725086, 2337967; 724633, 2337631; 723549, 2337673; 723549, 2337936; 723538, 2338420; 723338, 2338957; 723212, 2339157; 723170, 2339420; 723265, 2339662; 723328, 2339957; 723402, 2340631; 723538, 2340830; 723812, 2340830; return to starting point.

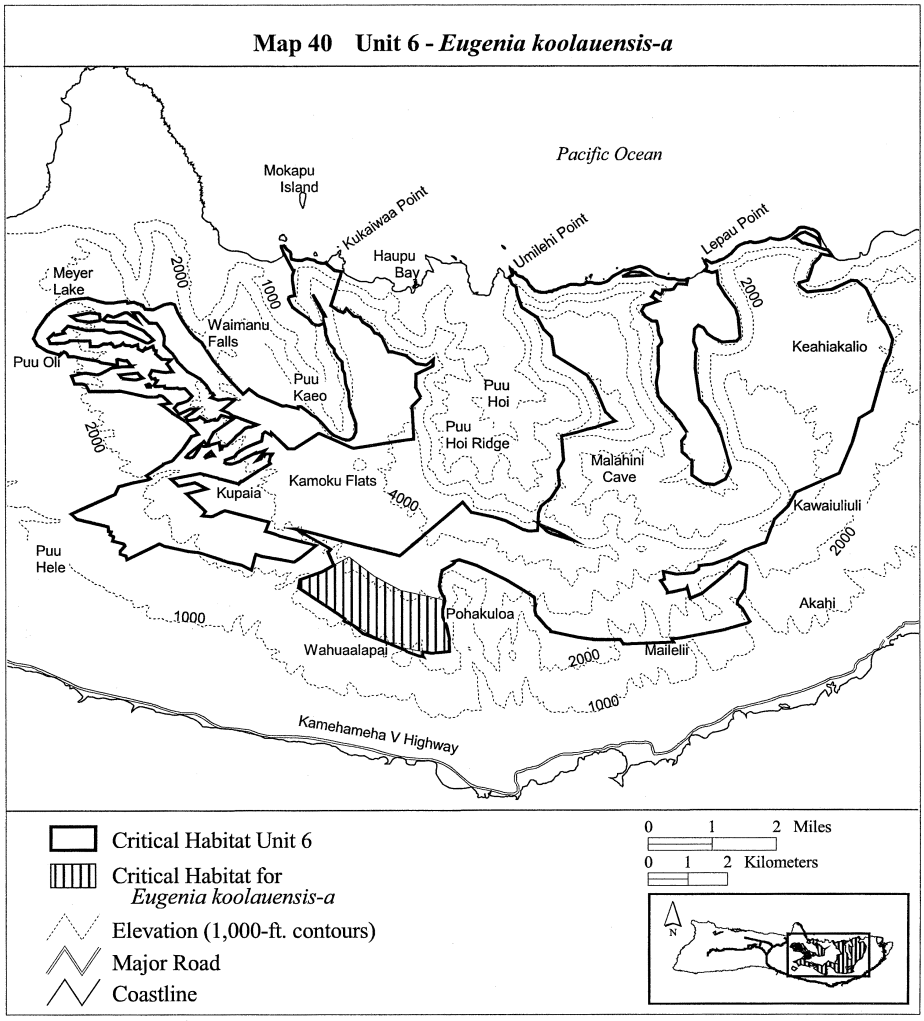
(ii) NOTE: Map 39 follows:



(40) Molokai 6—*Eugenia koolauensis*—a (471 ha; 1,164 ac)

(i) Unit consists of the following 14 boundary points: Start at 716675, 2334851; 717303, 2334375; 717982, 2334001; 719022, 2333773; 719028, 2333297; 719168, 2332885; 719193, 2332460; 718755, 2332409; 717855, 2332593; 717138, 2332929; 716434, 2333380; 715394, 2334071; 715432, 2334280; 715978, 2334477; return to starting point.

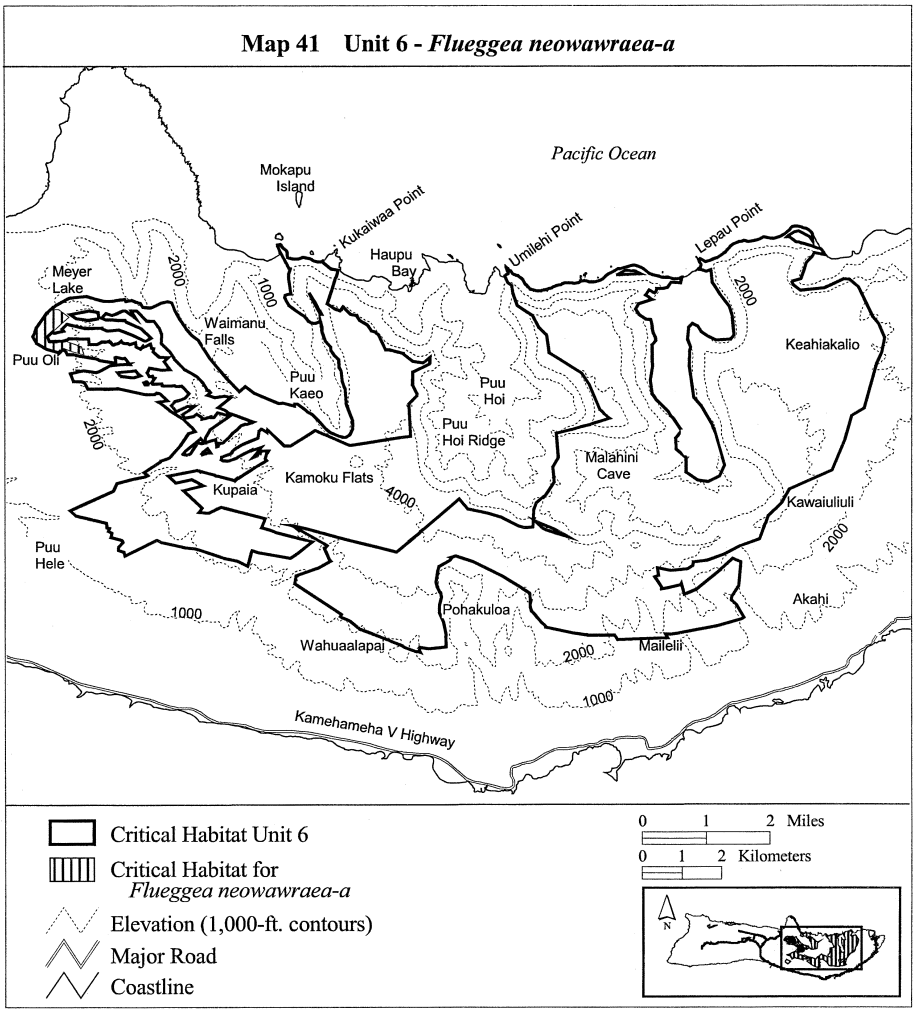
(ii) NOTE: Map 40 follows:



(41) Molokai 6—*Flueggea neowawraea*—a (61 ha; 151 ac)

(i) Unit consists of the following 19 boundary points: Start at 709451, 2339945; 709152, 2340035; 708894, 2340184; 708809, 2340348; 708808, 2340350; 708842, 2340439; 708897, 2340586; 709165, 2340951; 709293, 2341039; 709468, 2341039; 709723, 2340851; 709481, 2340637; 709173, 2340349; 709227, 2340228; 709676, 2340228; 710031, 2340101; 710105, 2339900; 709756, 2339987; 709595, 2340060; return to starting point.

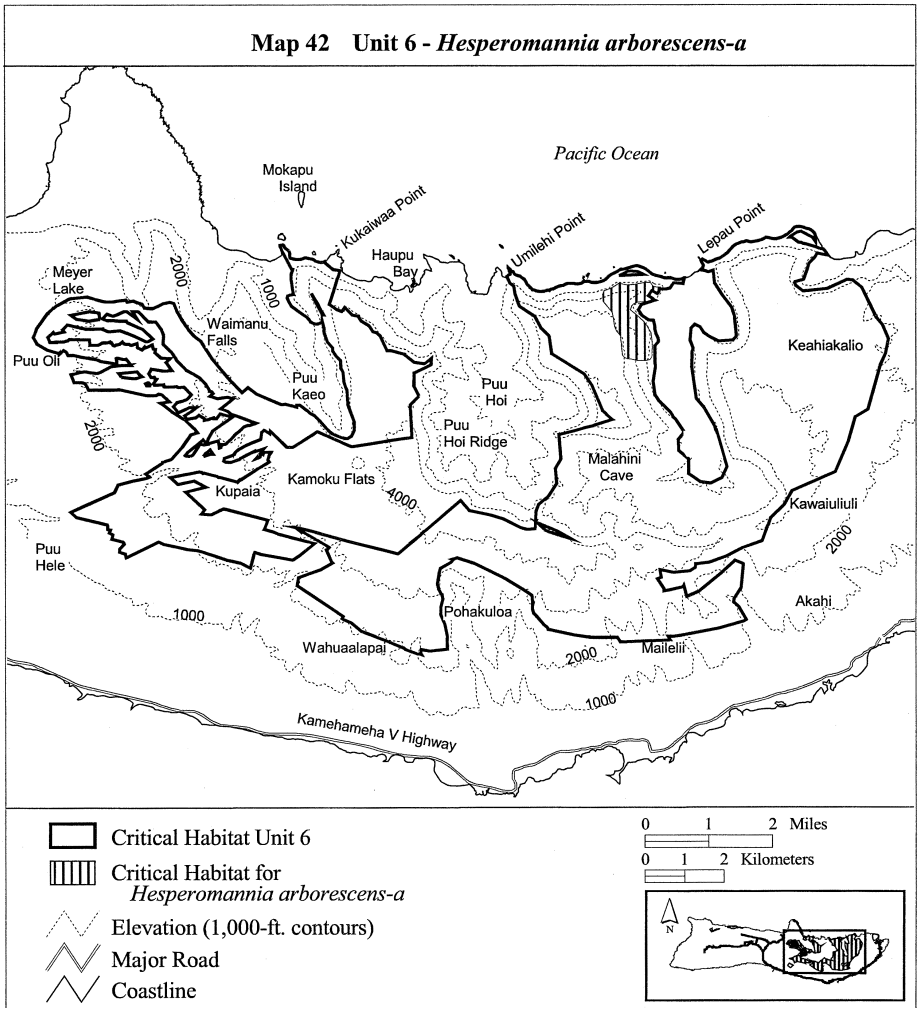
(ii) NOTE: Map 41 follows:



(42) Molokai 6—*Hesperomannia arborescens*—a (160 ha; 397 ac)

(i) Unit consists of the following 49 boundary points: Start at 723690, 2341666; 723886, 2341679; 724133, 2341723; 724285, 2341723; 724349, 2341641; 724450, 2341609; 724545, 2341609; 724517, 2341540; 724481, 2341462; 724473, 2341445; 724325, 2341519; 724244, 2341392; 724356, 2341313; 724355, 2341311; 724222, 2341248; 723968, 2341229; 723867, 2341197; 723816, 2341140; 723785, 2341045; 723981, 2340880; 724152, 2340722; 724304, 2340468; 724330, 2340234; 724336, 2340038; 724330, 2340038; 724330, 2339987; 724323, 2339866; 724273, 2339778; 724152, 2339752; 723975, 2339752; 723804, 2339797; 723683, 2339803; 723633, 2339847; 723582, 2339898; 723556, 2340145; 723562, 2340145; 723537, 2340266; 723537, 2340373; 723442, 2340494; 723385, 2340621; 723354, 2340849; 723322, 2340982; 723189, 2341153; 723094, 2341261; 723088, 2341425; 723126, 2341520; 723271, 2341577; 723392, 2341641; 723506, 2341710; return to starting point.

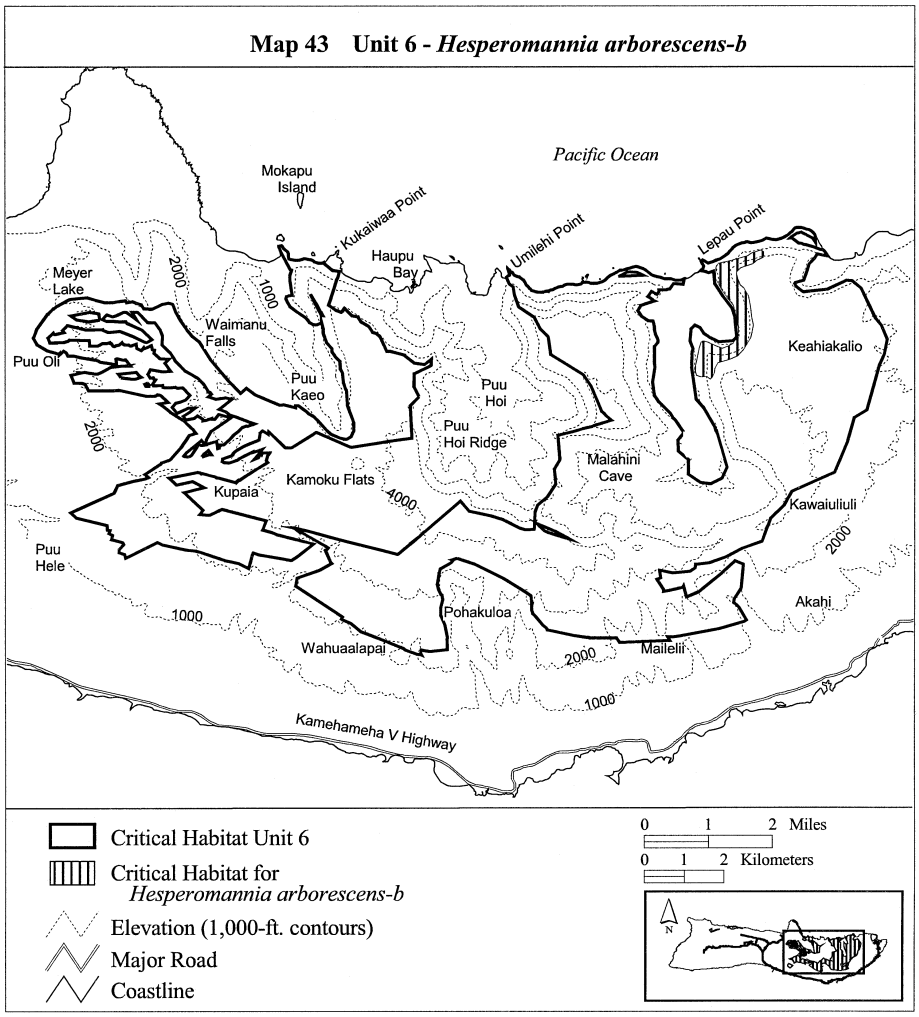
(ii) NOTE: Map 42 follows:



(43) Molokai 6—*Hesperomannia arborescens*—b (175 ha; 432 ac)

(i) Unit consists of the following 58 boundary points: Start at 726819, 2340382; 726807, 2340335; 726636, 2340063; 726484, 2339892; 726300, 2339809; 725990, 2339714; 725920, 2339581; 725901, 2339467; 725850, 2339353; 725806, 2339315; 725724, 2339359; 725572, 2339359; 725464, 2339397; 725407, 2339562; 725470, 2339816; 725527, 2340095; 725578, 2340240; 725629, 2340272; 725755, 2340234; 725933, 2340145; 726110, 2340082; 726275, 2340152; 726370, 2340209; 726503, 2340411; 726510, 2340431; 726497, 2340437; 726516, 2340532; 726516, 2340614; 726427, 2340791; 726433, 2340937; 726370, 2341184; 726224, 2341374; 726066, 2341603; 725933, 2341850; 725945, 2342128; 726002, 2342230; 726275, 2342287; 726541, 2342357; 726725, 2342414; 726839, 2342483; 727073, 2342566; 727149, 2342509; 727149, 2342458; 727118, 2342369; 726984, 2342306; 726870, 2342223; 726566, 2342116; 726459, 2342014; 726459, 2341945; 726484, 2341843; 726547, 2341691; 726642, 2341609; 726750, 2341425; 726782, 2341298; 726807, 2341127; 726839, 2340848; 726889, 2340671; 726851, 2340462; return to starting point.

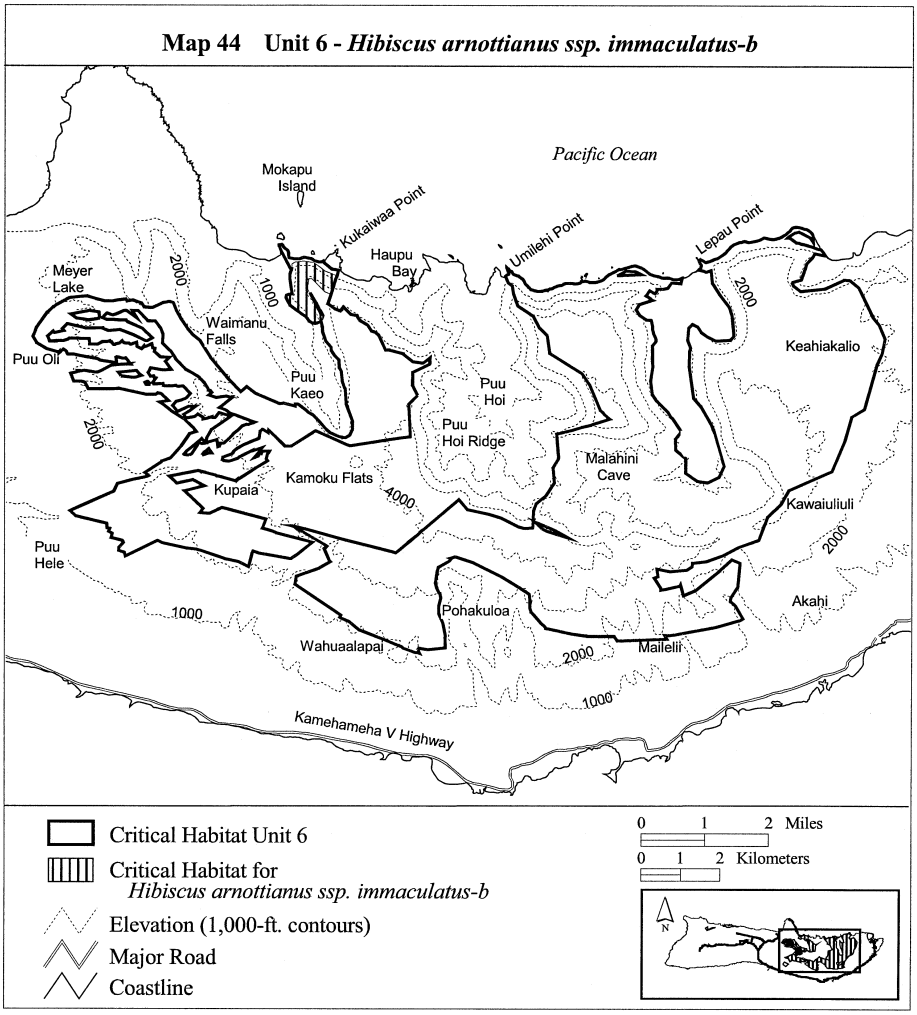
(ii) NOTE: Map 43 follows:



(44) Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—b (108 ha; 268 ac)

(i) Unit consists of the following 37 boundary points: Start at 715304, 2341435; 715298, 2341516; 715255, 2341795; 715255, 2341937; 715304, 2342104; 715304, 2342179; 715385, 2342234; 715614, 2342265; 715862, 2342216; 716066, 2342067; 716157, 2342009; 716159, 2342011; 716327, 2341937; 716447, 2341883; 716302, 2341425; 716141, 2341479; 715905, 2341726; 715910, 2341731; 715812, 2341813; 715738, 2341813; 715719, 2341677; 715720, 2341541; 715887, 2341206; 716048, 2340921; 716116, 2340859; 716097, 2340791; 716042, 2340741; 715912, 2340679; 715825, 2340698; 715738, 2340747; 715658, 2340847; 715404, 2341026; 715261, 2341144; 715193, 2341262; 715150, 2341342; 715174, 2341398; 715230, 2341417; return to starting point.

(ii) NOTE: Map 44 follows:

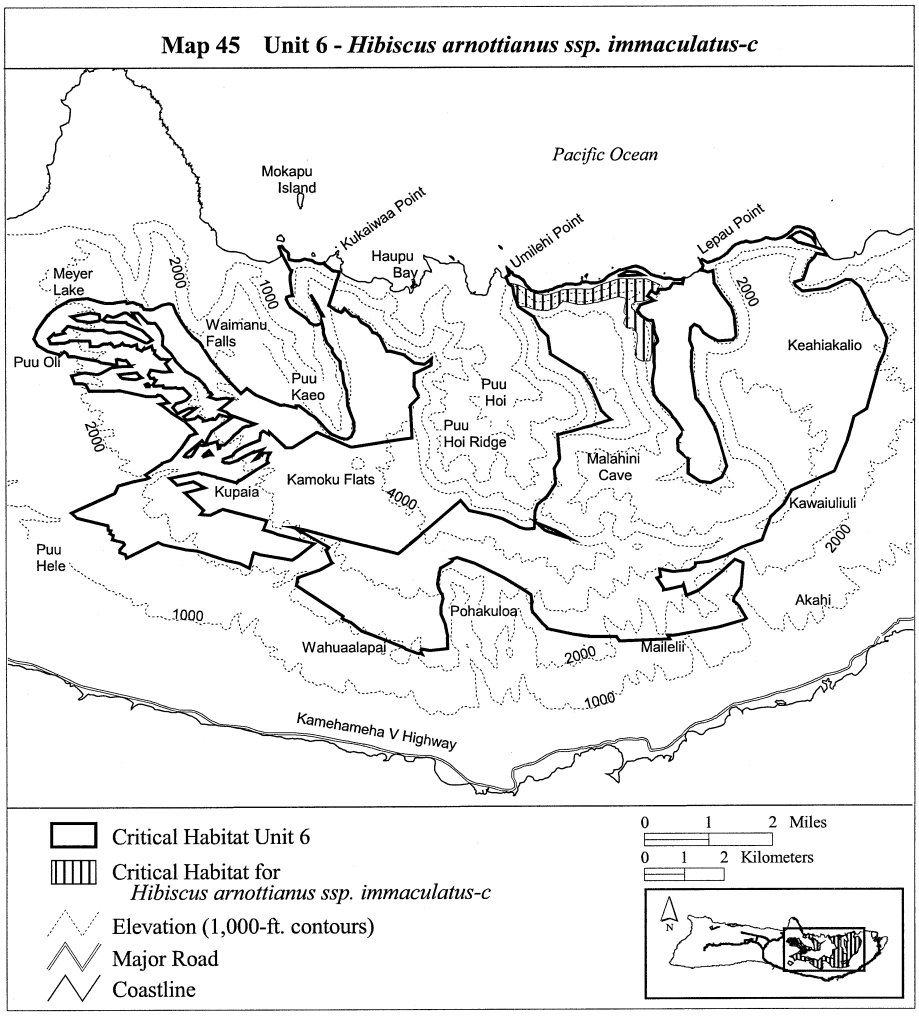


(45) Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—c (218 ha; 538 ac)

(i) Unit consists of the following 77 boundary points: Start at 723666, 2341344; 723521, 2341378; 723025, 2341248; 722721, 2341195; 722521, 2341178; 722223, 2341256; 722138, 2341256; 722107, 2341251; 721964, 2341109; 721712, 2341030; 721443, 2341048; 721225, 2341117; 721025, 2341152; 720987, 2341152; 720883, 2341439; 720861, 2341600; 720856, 2341640; 720767, 2341699; 720752, 2341731; 720765, 2341735; 721008, 2341674; 721417, 2341474; 721686, 2341422; 721947, 2341500; 722070, 2341534; 722069, 2341552; 722399, 2341587; 722816, 2341578; 723077, 2341691; 723538, 2341839; 723903, 2341830; 724233, 2341830; 724564, 2341674; 724453, 2341513; 724453, 2341513; 724423, 2341470; 724325, 2341519; 724244, 2341392; 724326, 2341334; 724270, 2341301; 724155, 2341272; 723949, 2341249; 723851, 2341180; 723845, 2341094; 723989, 2340961; 723989, 2340961; 723991, 2340959; 724000, 2340951; 724230, 2340796; 724390, 2340583; 724402, 2340549; 724402, 2340548; 724436, 2340446; 724436, 2340432; 724436, 2340432; 724436, 2340431; 724436, 2340314; 724390, 2340193;

724350, 2339964; 724310, 2339803; 724299, 2339751; 724115, 2339746; 724000, 2339792; 723920, 2339906; 723943, 2340027; 723989, 2340262; 723983, 2340440; 723874, 2340578; 723725, 2340583; 723644, 2340710; 723679, 2340842; 723725, 2340882; 723662, 2340974; 723650, 2341048; 723667, 2341152; 723702, 2341255; 723702, 2341289; return to starting point.

(ii) NOTE: Map 45 follows:

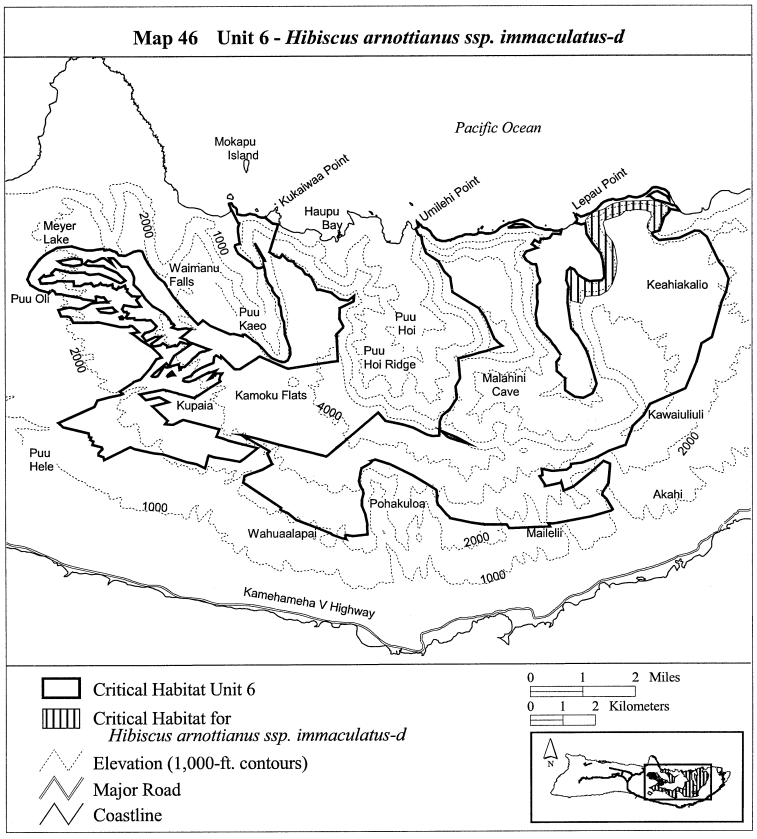


(46) Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—d (276 ha; 681 ac)

(i) Unit consists of the following 52 boundary points: Start at 728137, 2341804; 727911, 2341743; 727815, 2341830; 727763, 2341908; 727798, 2342065; 727902, 2342247; 727868, 2342360; 727737, 2342430; 727450, 2342456; 727111, 2342412; 726963, 2342273; 726685, 2342178; 726468, 2342108; 726424, 2342021; 726468, 2341900; 726520, 2341717; 726720, 2341456; 726790, 2341239; 726859, 2340848; 726824, 2340517; 726711,

2340152; 726564, 2339952; 726311, 2339813; 725877, 2339778; 725772, 2339561; 725425, 2339657; 725399, 2339996; 725368, 2340078; 725368, 2340079; 725294, 2340274; 725320, 2340569; 725422, 2340671; 725546, 2340613; 725674, 2340421; 726007, 2340256; 726381, 2340282; 726458, 2340381; 726442, 2340648; 726402, 2341022; 726123, 2341391; 725911, 2341717; 725877, 2342108; 726071, 2342357; 726416, 2342456; 726720, 2342630; 727033, 2342699; 728085, 2342734; 728494, 2342482; 728433, 2342369; 728276, 2342204; 728234, 2342042; 728234, 2342042; return to starting point.

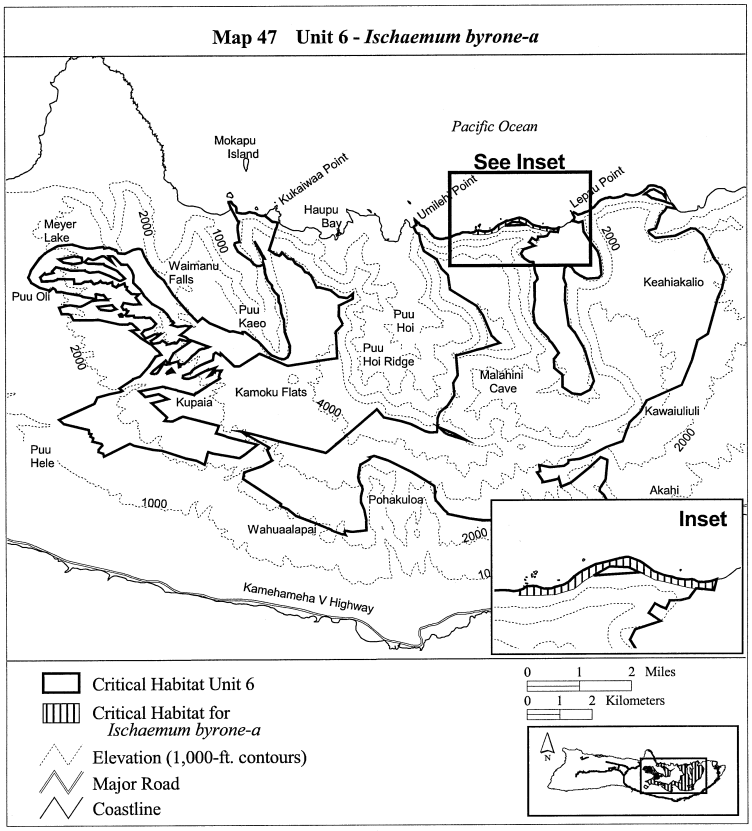
(ii) NOTE: Map 46 follows:



(47) Molokai 6—*Ischaemum byrone*—a (30 ha; 75 ac)

(i) Unit consists of the following 18 boundary points and the intermediate coastline: Start at 722523, 2341702; 725160, 2341840; 725118, 2341694; 724963, 2341709; 724963, 2341709; 724909, 2341714; 724840, 2341714; 724719, 2341743; 724418, 2341814; 724326, 2341831; 724245, 2341874; 723971, 2342008; 723722, 2342018; 723395, 2341836; 723249, 2341714; 722994, 2341641; 722702, 2341629; 722508, 2341629; follow coastline and return to starting point.

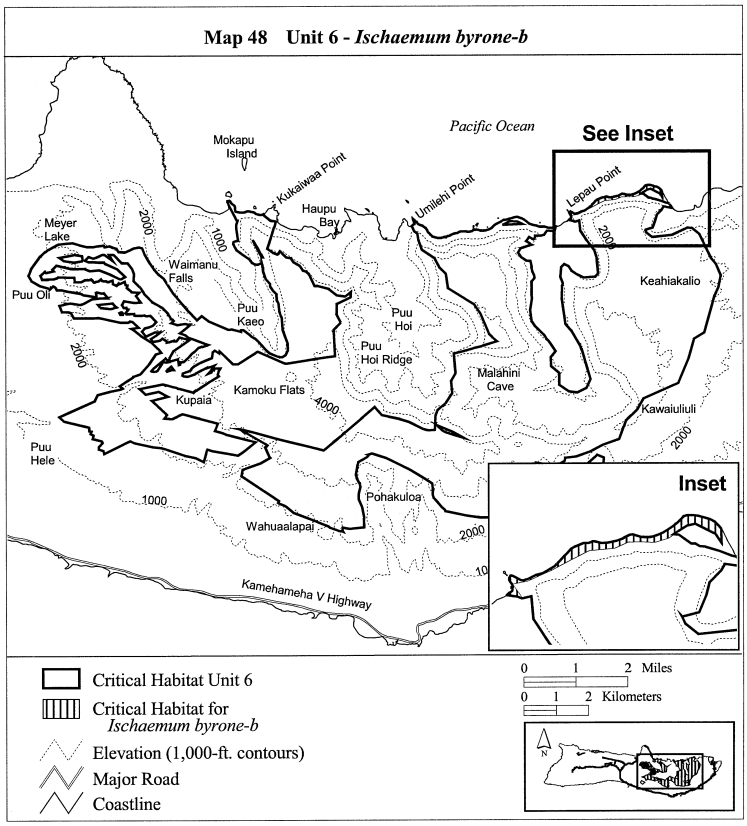
(ii) NOTE: Map 47 follows:



(48) Molokai 6—*Ischaemum byrone*—b (29 ha; 72 ac)

(i) Unit consists of the following 26 boundary points and the intermediate coastline: Start at 728440, 2342742; 728356, 2342866; 728088, 2343003; 727978, 2342980; 727842, 2342898; 727728, 2342811; 727541, 2342752; 727327, 2342761; 727195, 2342757; 727194, 2342760; 727001, 2342673; 726661, 2342637; 726418, 2342516; 726151, 2342370; 725981, 2342297; 725835, 2342224; 725629, 2342188; 725763, 2342006; 725562, 2342041; 725558, 2342045; 725582, 2342067; 725624, 2342097; 725631, 2342109; 725630, 2342134; 725635, 2342160; 725632, 2342174; follow coastline and return to starting point.

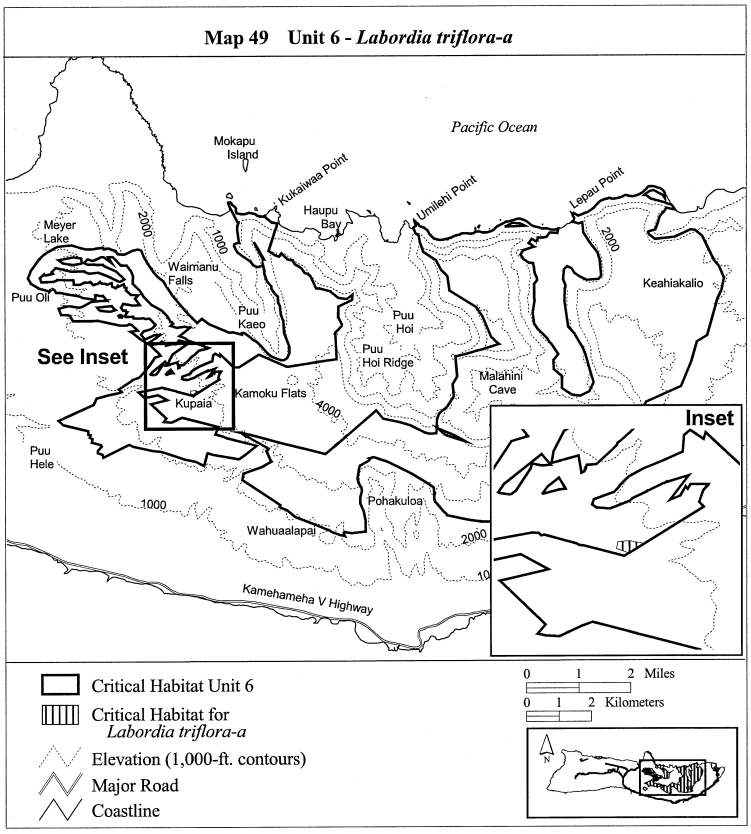
(ii) NOTE: Map 48 follows:



(49) Molokai 6—*Labordia triflora*—a (2 ha; 5 ac)

(i) Unit consists of the following 5 boundary points: Start at 714077, 2336828; 713934, 2336726; 713805, 2336774; 713819, 2336848; 713941, 2336855; return to starting point.

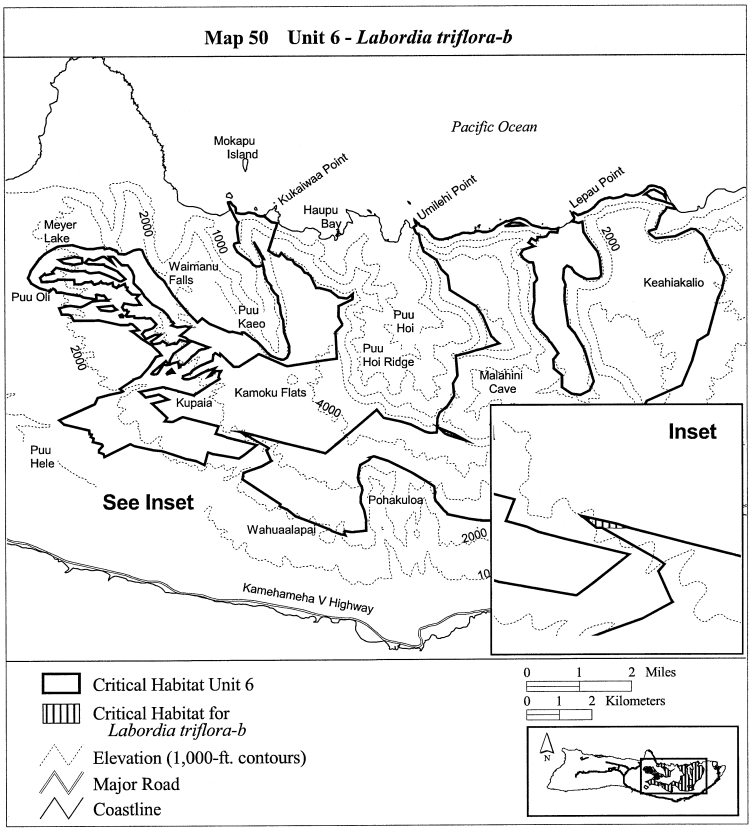
(ii) NOTE: Map 49 follows:



(50) Molokai 6—*Labordia triflora*—b (2 ha; 6 ac)

(i) Unit consists of the following 4 boundary points: Start at 715351, 2335553; 715717, 2335465; 715866, 2335418; 715507, 2335425; return to starting point.

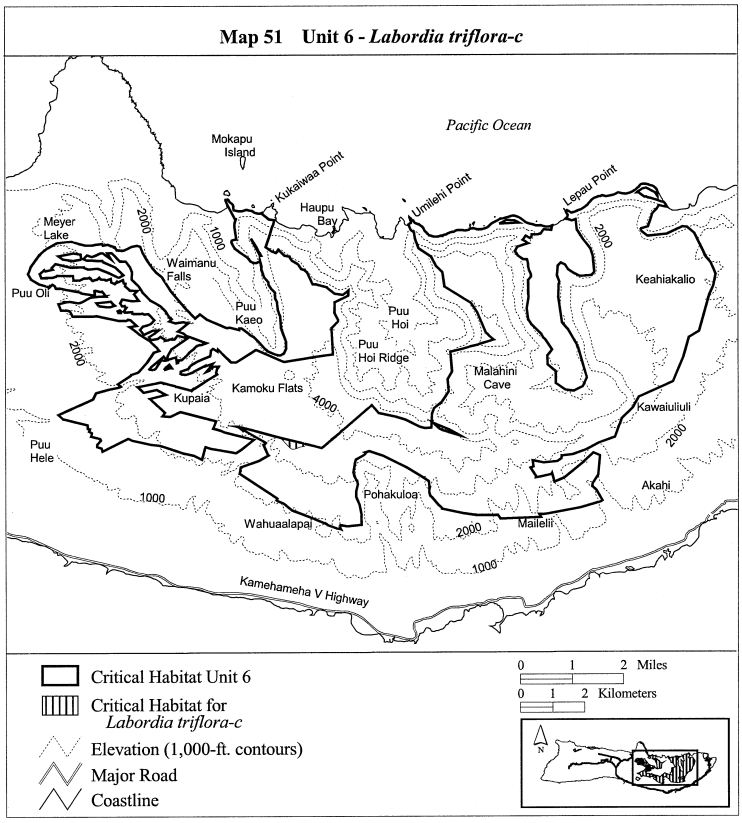
(ii) NOTE: Map 50 follows:



(51) Molokai 6—*Labordia triflora*—c (13 ha; 32 ac)

(i) Unit consists of the following 10 boundary points: Start at 717469, 2335003; 717464, 2334998; 717421, 2334927; 717290, 2334910; 717137, 2334850; 717038, 2334834; 716956, 2334889; 716743, 2335118; 716660, 2335211; 716661, 2335212; return to starting point.

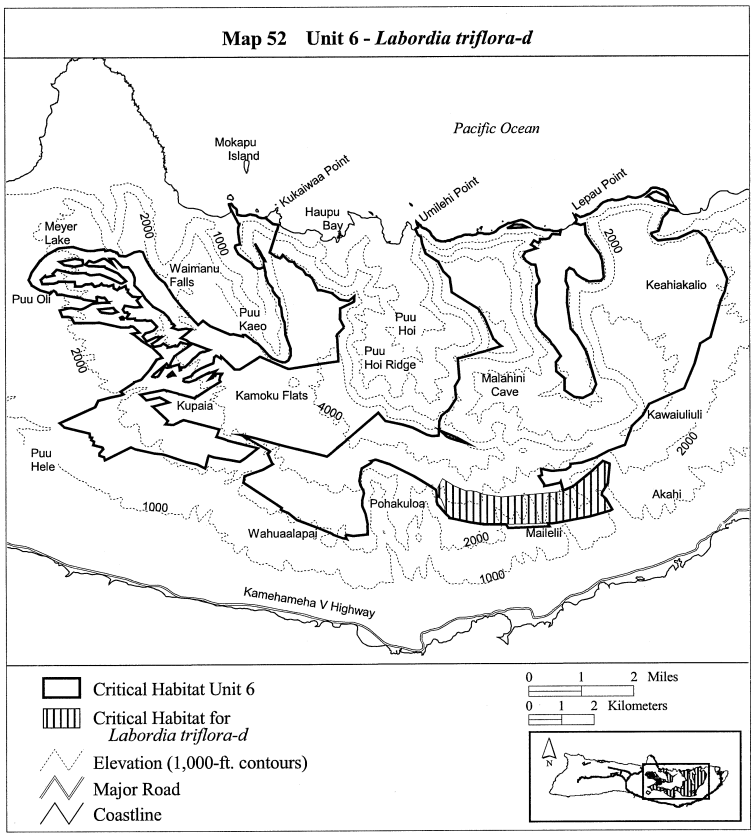
(ii) NOTE: Map 51 follows:



(52) Molokai 6—*Labordia triflora*—d (523 ha; 1,292 ac)

(i) Unit consists of the following 34 boundary points: Start at 725106, 2333758; 725517, 2333924; 726111, 2334421; 726421, 2334714; 726628, 2334621; 726580, 2334022; 726403, 2333749; 726403, 2333749; 726386, 2333663; 726517, 2333545; 726703, 2333212; 726702, 2333211; 726649, 2333179; 726032, 2332999; 725026, 2332806; 725026, 2332805; 724835, 2332780; 723332, 2332760; 722771, 2332760; 721750, 2332951; 721570, 2333120; 721570, 2333277; 721452, 2333546; 721323, 2333635; 721309, 2333822; 721490, 2334177; 721866, 2333950; 722233, 2333793; 722416, 2333793; 722547, 2333767; 722765, 2333679; 723324, 2333609; 724137, 2333670; 724687, 2333723; return to starting point.

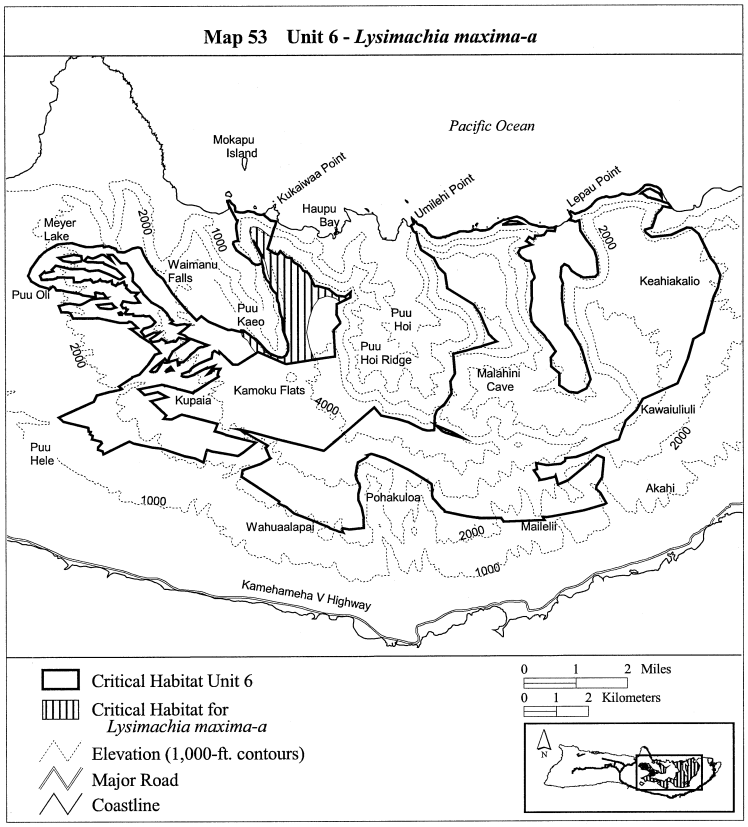
(ii) NOTE: Map 52 follows:



(53) Molokai 6—*Lysimachia maxima*—a (408 ha; 1,009 ac)

(i) Unit consists of the following 72 boundary points: Start at 715599, 2338316; 715589, 2338334; 715539, 2338372; 715436, 2338451; 715426, 2338481; 715392, 2338575; 715392, 2338634; 715480, 2338634; 715670, 2338502; 715860, 2338283; 715998, 2338166; 716086, 2338042; 716166, 2337947; 716400, 2337830; 716641, 2337772; 716787, 2337845; 716853, 2338020; 716845, 2338232; 716751, 2338473; 716692, 2338641; 716663, 2339028; 716597, 2339466; 716509, 2339773; 716378, 2339948; 716217, 2340408; 716166, 2340744; 716045, 2340987; 716035, 2340985; 715903, 2341234; 715713, 2341533; 715670, 2341730; 715691, 2341847; 715845, 2341869; 715918, 2341847; 716027, 2341789; 716247, 2341606; 716337, 2341533; 716226, 2341182; 716397, 2341056; 716537, 2341006; 716619, 2341102; 716803, 2340912; 716949, 2340883; 717034, 2340760; 717233, 2340650; 717327, 2340487; 717417, 2340471; 717512, 2340386; 717678, 2340008; 717794, 2340014; 718125, 2339916; 718212, 2339767; 718369, 2339712; 718630, 2339684; 718798, 2339820; 718794, 2339660; 718638, 2339632; 718464, 2339513; 718342, 2339634; 718072, 2339707; 717817, 2339620; 717634, 2339379; 717503, 2338992; 717430, 2338575; 717517, 2338123; 717671, 2337717; 716789, 2337580; 715922, 2337961; 715922, 2337961; 715899, 2337947; 715859, 2337922; 715692, 2338137; return to starting point.

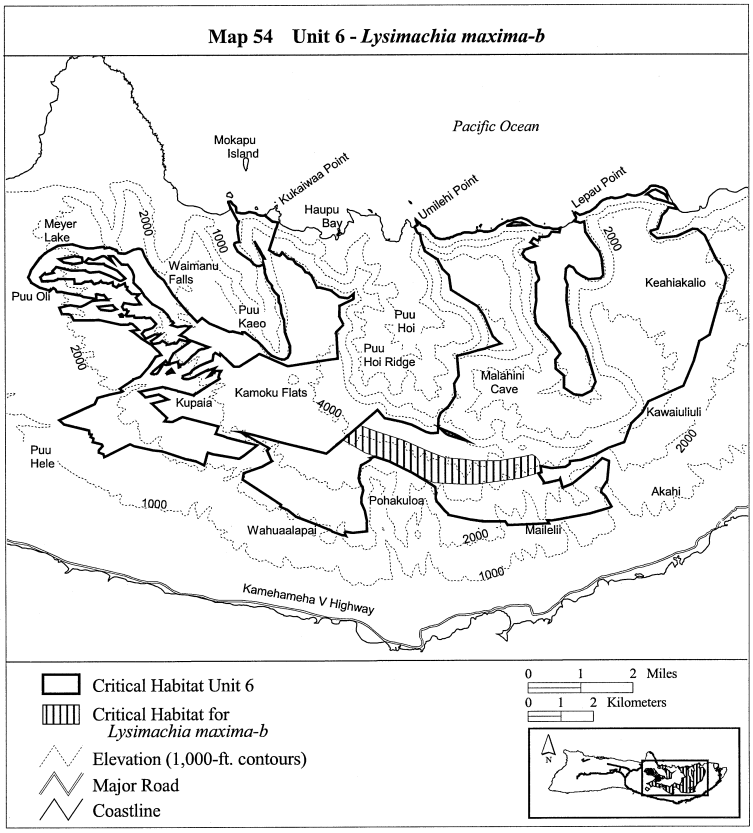
(ii) NOTE: Map 53 follows:



(54) Molokai 6—*Lysimachia maxima*—b (441 ha; 1,090 ac)

(i) Unit consists of the following 21 boundary points: Start at 718975, 2335752; 719482, 2335559; 720322, 2335289; 721118, 2334924; 721592, 2334734; 722228, 2334683; 722563, 2334639; 723243, 2334639; 724024, 2334778; 724280, 2334822; 724374, 2334778; 724499, 2334624; 724564, 2334274; 723885, 2334084; 722542, 2333909; 722191, 2333916; 721256, 2333960; 720782, 2334179; 719825, 2334654; 719139, 2334902; 718454, 2335304; return to starting point.

(ii) NOTE: Map 54 follows:

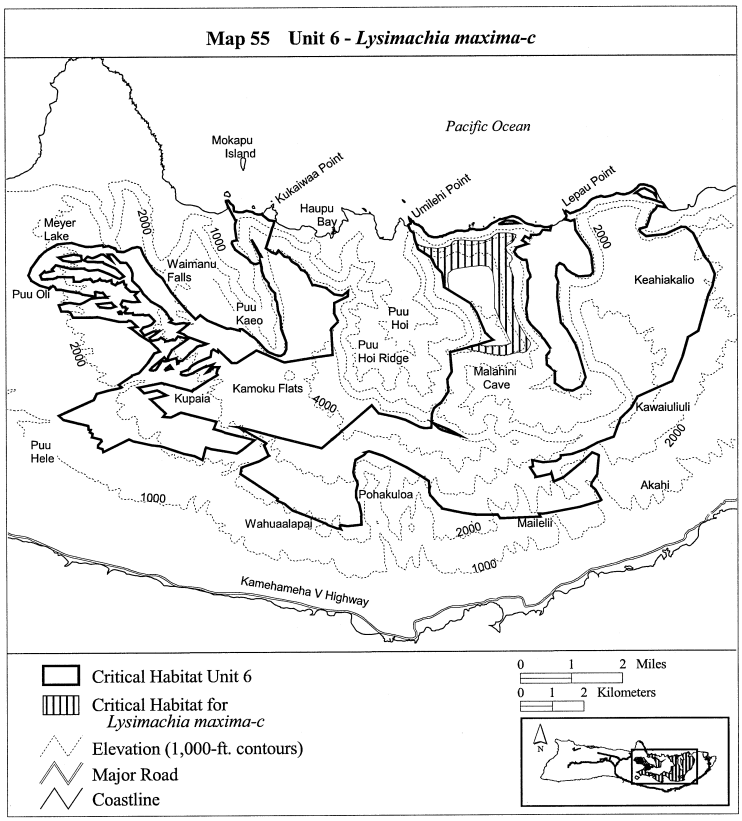


(55) Molokai 6—*Lysimachia maxima*—c (414 ha; 1,023 ac)

(i) Unit consists of the following 99 boundary points: Start at 723398, 2339253; 723381, 2339249; 723379, 2339344; 723376, 2339354; 723378, 2339355; 723371, 2339592; 723381, 2339985; 723316, 2340399; 723195, 2340566; 722958, 2340611; 722589, 2340566; 722226, 2340525; 722075, 2340480; 721933, 2340369; 721913, 2340111; 721962, 2339832; 721796, 2339934; 721815, 2340038; 721731, 2340378; 721548, 2340570; 721486, 2340778; 721475, 2340813; 720997, 2341127; 720995, 2341131; 720932, 2341305; 720944, 2341307; 721070, 2341237; 721237, 2341186; 721590, 2341156; 721802, 2341181; 721989, 2341242; 722059, 2341343; 722140, 2341398; 722256, 2341403; 722453, 2341403; 722695, 2341378; 722882, 2341378; 723043, 2341388; 723225, 2341449; 723341, 2341534; 723462, 2341625; 723659, 2341630; 723820, 2341620; 723951, 2341605; 724047, 2341565; 724017, 2341474; 723977, 2341378; 723931, 2341327; 723780, 2341242; 723735, 2341181; 723770, 2341025; 723916, 2340899; 723931, 2340793; 723871, 2340707; 723830, 2340687; 723851, 2340621; 723836, 2340621; 723911, 2340404; 723977, 2340232; 723957, 2339844; 723945, 2339508; 723957, 2339309; 724047, 2338941; 724123, 2338779; 724184, 2338658; 724295, 2338487; 724375, 2338345; 724374, 2338322; 724461, 2338239; 724492, 2338174; 724476, 2338083; 724426, 2337992; 724370, 2337896; 724234, 2337856; 724128, 2337881; 723825, 2337805; 723593, 2337775; 723381, 2337800; 723281, 2337831; 723104, 2337856; 722927, 2337891; 722776, 2337926; 722584, 2337952; 722549, 2337972; 722498, 2337972; 722463, 2338015; 722941, 2338139; 722953, 2338093; 723134, 2338068; 723281, 2338073; 723533, 2338078; 723780, 2338113; 723881, 2338169; 723836, 2338265; 723735, 2338497; 723598,

2338744; 723497, 2338966; 723437, 2339127; 723402, 2339238; return to starting point.

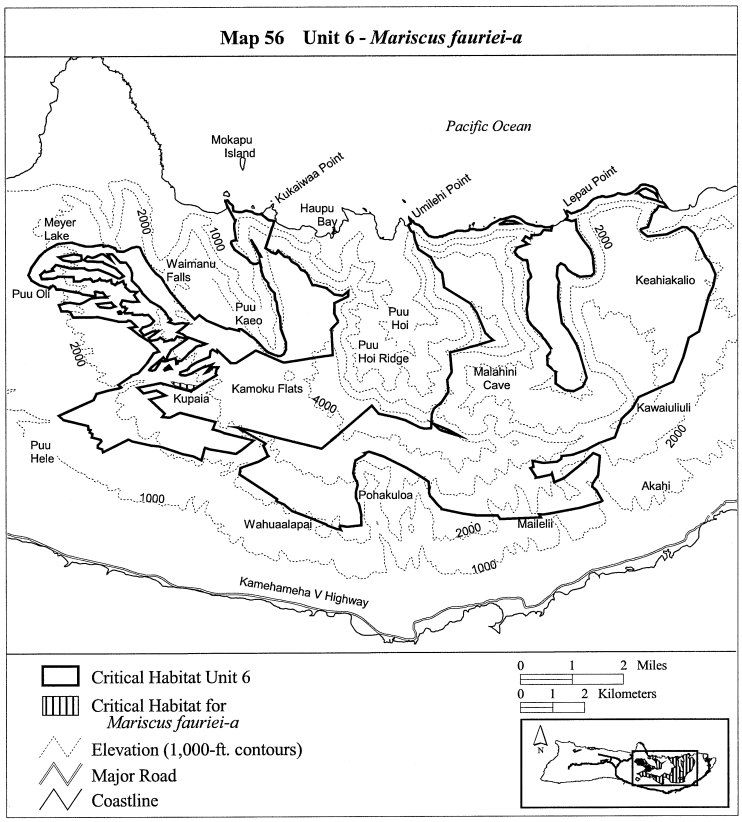
(ii) NOTE: Map 55 follows:



(56) Molokai 6—*Mariscus fauriei*—a (9 ha; 22 ac)

(i) Unit consists of the following 13 boundary points: Start at 713863, 2336745; 713857, 2336753; 713410, 2336878; 713325, 2336923; 713279, 2336986; 713376, 2336985; 713511, 2336946; 713642, 2336946; 713732, 2336895; 713879, 2336895; 714141, 2336856; 713932, 2336726; 713866, 2336753; return to starting point.

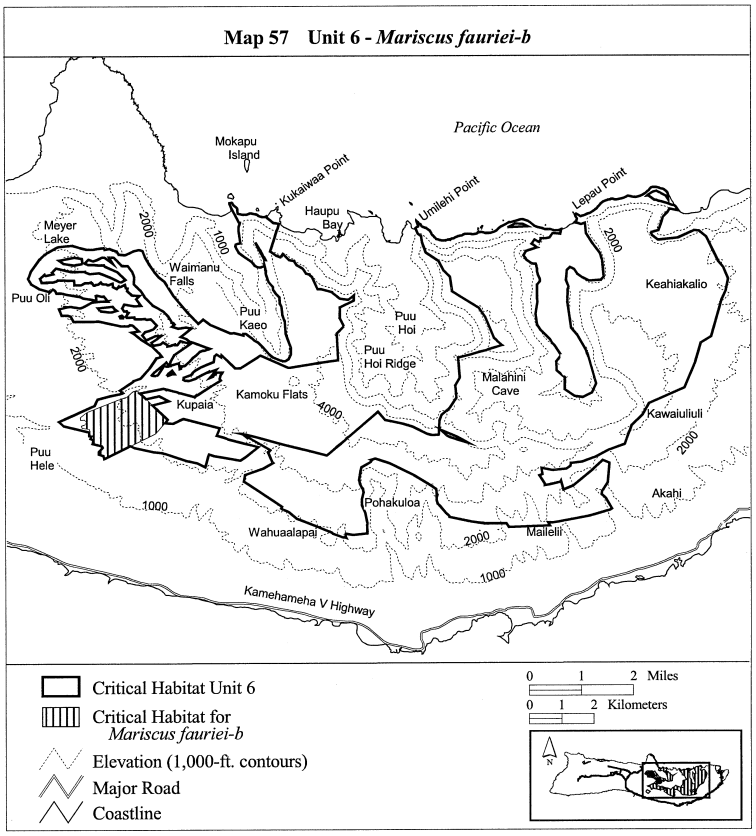
(ii) NOTE: Map 56 follows:



(57) Molokai 6—*Mariscus fauriei*—b (307 ha; 758 ac)

(i) Unit consists of the following 29 boundary points: Start at 711134, 2334784; 711103, 2334882; 710967, 2334926; 710964, 2335005; 711076, 2335127; 711056, 2335185; 710777, 2335257; 710794, 2335355; 710715, 2335416; 710729, 2335488; 710676, 2335499; 710663, 2335614; 710663, 2335614; 710691, 2335624; 710671, 2335709; 710460, 2335743; 710429, 2335804; 710542, 2335849; 710583, 2335930; 710515, 2335992; 710409, 2335978; 710392, 2336053; 710593, 2336220; 711546, 2336604; 711828, 2336689; 712019, 2336866; 712138, 2336893; 713077, 2335992; 712699, 2335566; return to starting point.

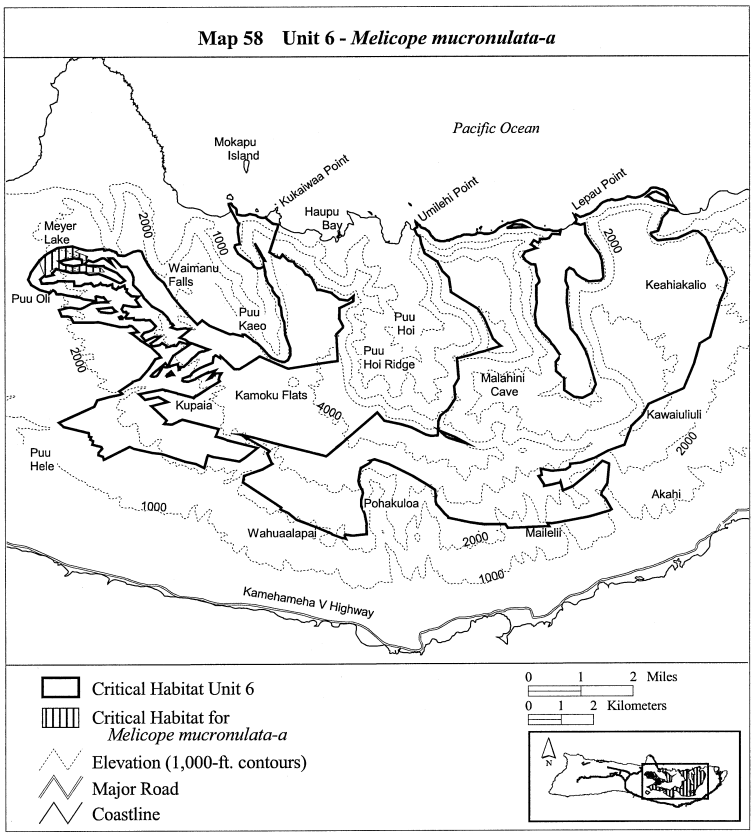
(ii) NOTE: Map 57 follows:



(58) Molokai 6—*Melicope mucronulata*—a (84 ha; 206 ac)

(i) Unit consists of the following 31 boundary points: Start at 709335, 2340440; 709281, 2340521; 709168, 2340808; 709174, 2340968; 709174, 2340969; 709403, 2341155; 709702, 2341325; 709740, 2341335; 710171, 2341369; 710202, 2341362; 710386, 2341296; 710256, 2341200; 710646, 2341064; 710595, 2340934; 710143, 2341019; 709911, 2340985; 709730, 2340923; 709899, 2340810; 710284, 2340748; 710527, 2340788; 710730, 2340737; 711052, 2340691; 711154, 2340578; 710838, 2340573; 710555, 2340573; 710278, 2340573; 709933, 2340607; 709673, 2340720; 709476, 2340618; 709582, 2340499; 709578, 2340495; return to starting point.

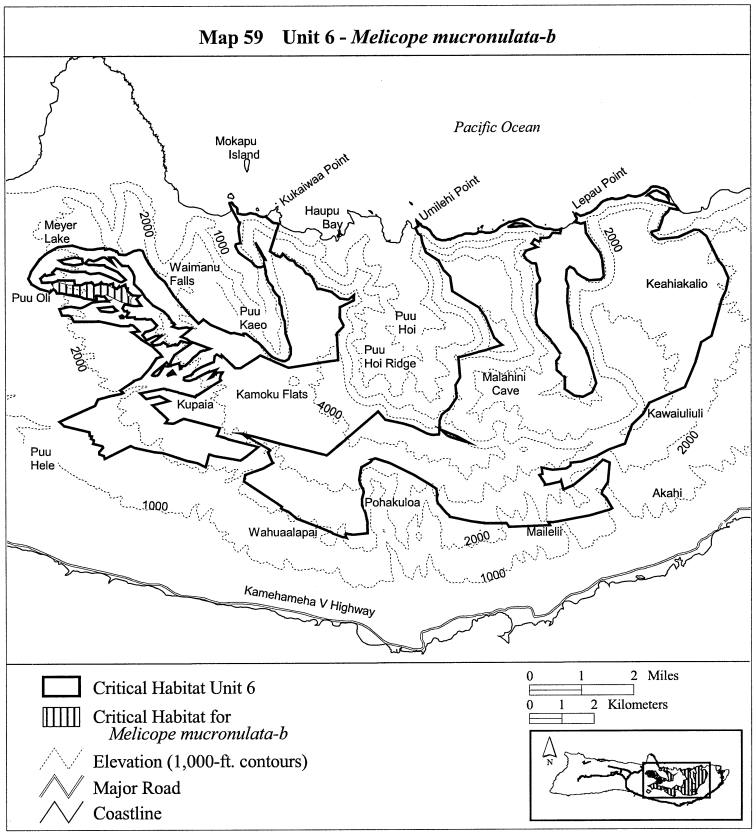
(ii) NOTE: Map 58 follows:



(59) Molokai 6—*Melicope mucronulata*—b (84 ha; 208 ac)

(i) Unit consists of the following 25 boundary points: Start at 709700, 2339897; 709487, 2340217; 709638, 2340270; 710047, 2340146; 710491, 2340155; 710740, 2340244; 710794, 2340128; 710998, 2340190; 711221, 2340173; 711496, 2340004; 711594, 2340093; 711781, 2340101; 711852, 2339799; 711914, 2339826; 712021, 2339817; 711941, 2339692; 711959, 2339568; 711665, 2339621; 711194, 2339861; 711069, 2339799; 710865, 2339861; 710847, 2339790; 710856, 2339719; 710456, 2339763; 710171, 2339879; return to starting point.

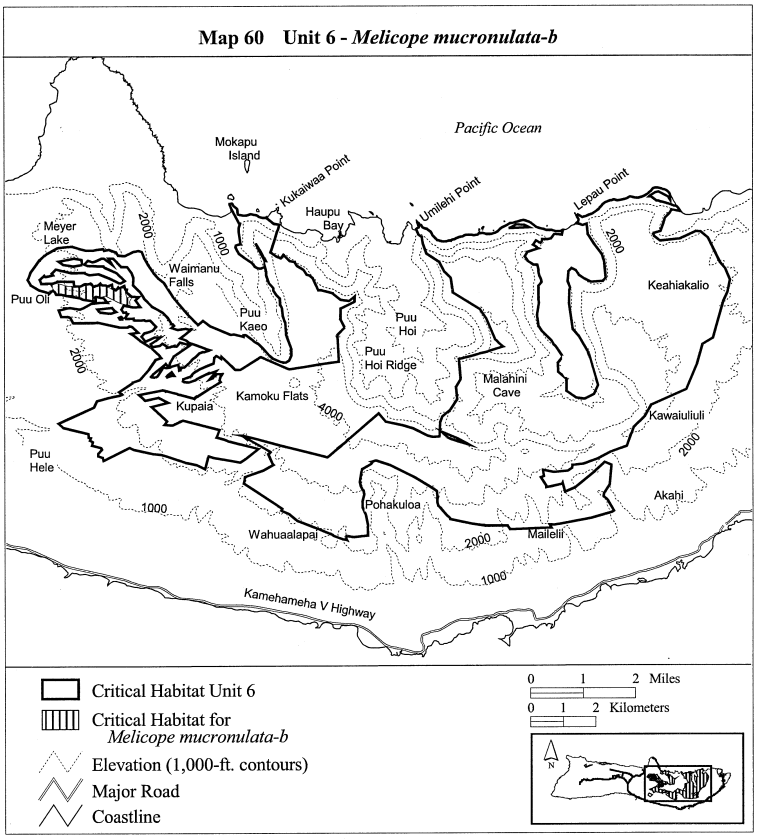
(ii) NOTE: Map 59 follows:



(60) Molokai 6—*Melicope mucronulata*—c (72 ha; 177 ac)

(i) Unit consists of the following 23 boundary points: Start at 711686, 2338887; 711563, 2338926; 711395, 2338998; 711198, 2339010; 710768, 2339040; 710356, 2339058; 710070, 2339422; 710055, 2339441; 710131, 2339465; 710391, 2339414; 710640, 2339527; 711007, 2339640; 711375, 2339651; 711539, 2339504; 710945, 2339442; 711030, 2339324; 711471, 2339278; 711346, 2339160; 711573, 2339069; 711940, 2339103; 712268, 2339092; 712279, 2338951; 711866, 2338911; return to starting point.

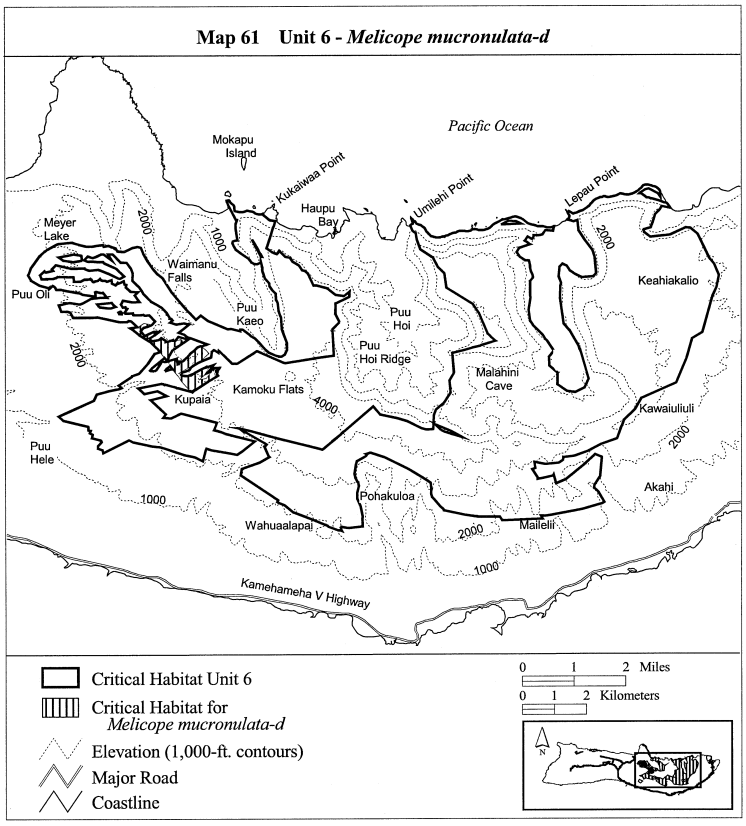
(ii) NOTE: Map 60 follows:



(61) Molokai 6—*Melicope mucronulata*—d (127 ha; 314 ac)

(i) Unit consists of the following 54 boundary points: Start at 713151, 2337624; 713032, 2337762; 712811, 2338054; 712578, 2338275; 712261, 2338472; 712052, 2338634; 711975, 2338689; 712251, 2338741; 712403, 2338838; 712635, 2338804; 712403, 2338713; 712296, 2338594; 712426, 2338453; 712686, 2338572; 712872, 2338572; 712714, 2338464; 712573, 2338368; 712646, 2338278; 712861, 2338318; 712929, 2338380; 713073, 2338297; 713070, 2338261; 713573, 2338329; 713602, 2338227; 713325, 2338097; 713161, 2337786; 713138, 2337662; 713415, 2337741; 713443, 2337560; 713669, 2337656; 713828, 2337877; 714065, 2338091; 714159, 2338128; 714322, 2338006; 714422, 2337906; 714116, 2337622; 713720, 2337413; 713483, 2337277; 713596, 2337204; 713856, 2337176; 714127, 2337374; 714421, 2337458; 714263, 2337210; 714110, 2337074; 714336, 2337119; 714517, 2337362; 714738, 2337419; 714585, 2337260; 714634, 2337162; 713969, 2336749; 713796, 2336764; 713546, 2337045; 713480, 2337164; 713315, 2337345; return to starting point.

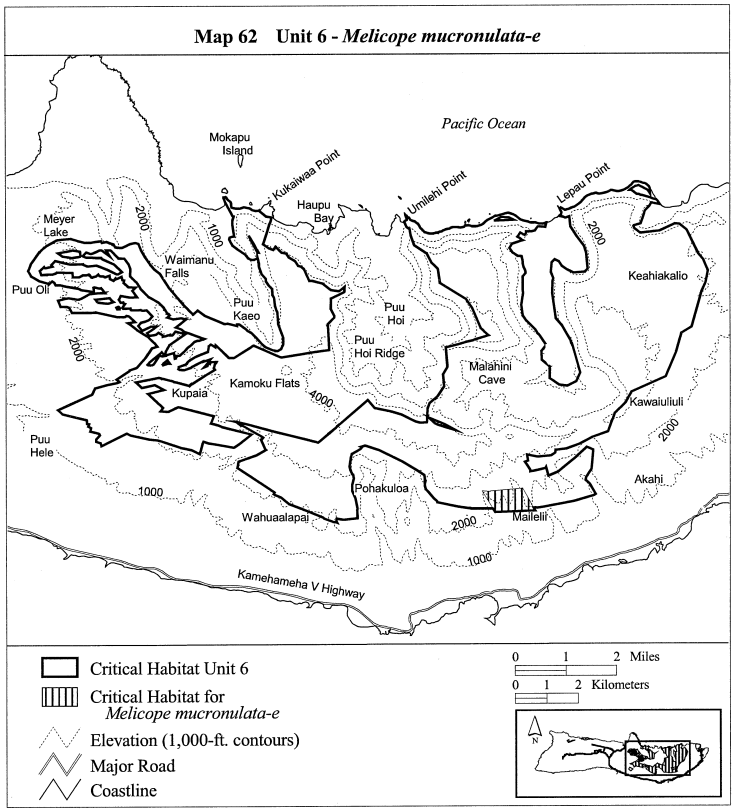
(ii) NOTE: Map 61 follows:



(62) Molokai 6—*Melicope mucronulata*—e (89 ha; 221 ac)

(i) Unit consists of the following 8 boundary points: Start at 723107, 2333319; 723177, 2333312; 723171, 2333312; 723379, 2333304; 723379, 2333312; 724393, 2333404; 724790, 2332688; 723525, 2332647; return to starting point.

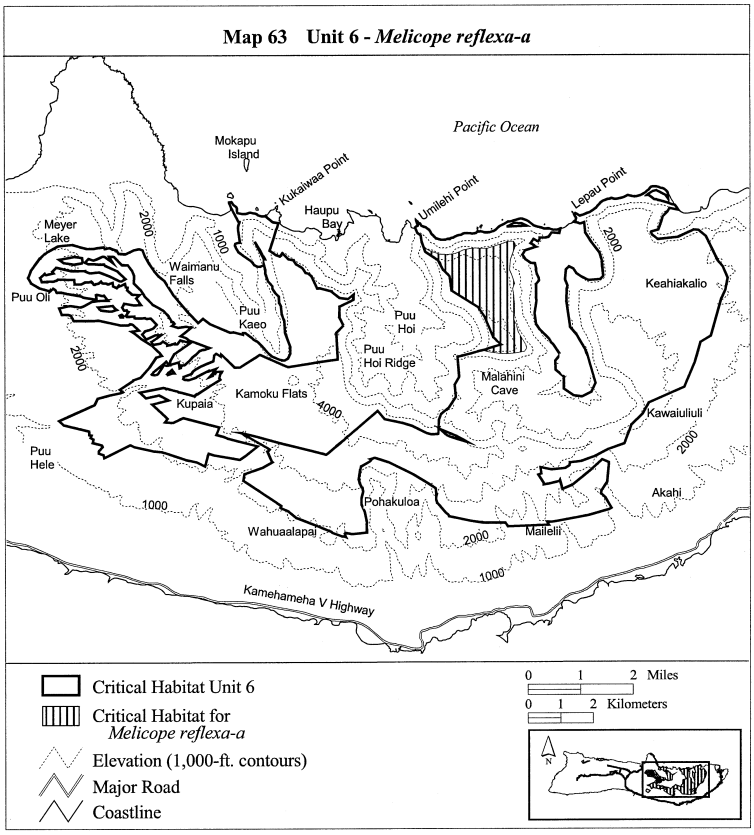
(ii) NOTE: Map 62 follows:



(63) Molokai 6—*Melicope reflexa*—a (484 ha; 1,195 ac)

(i) Unit consists of the following 58 boundary points: Start at 721122, 2341169; 721462, 2341052; 721683, 2341052; 721919, 2341079; 722176, 2341197; 722460, 2341246; 722744, 2341232; 722897, 2341232; 723209, 2341336; 723396, 2341398; 723534, 2341440; 723715, 2341447; 723770, 2341370; 723756, 2341273; 723701, 2341135; 723618, 2340892; 723611, 2340733; 723590, 2340573; 723652, 2340414; 723742, 2340150; 723687, 2339998; 723722, 2339797; 723742, 2339471; 723742, 2339193; 723715, 2339048; 723798, 2338881; 723840, 2338729; 723860, 2338639; 724082, 2338251; 724117, 2338153; 724048, 2338056; 723777, 2338008; 723465, 2337973; 723264, 2337987; 722945, 2338043; 722814, 2338070; 722795, 2338101; 723022, 2338160; 723352, 2338246; 723352, 2338246; 723352, 2338246; 723351, 2338247; 723331, 2338266; 723146, 2338429; 723088, 2338481; 722865, 2339034; 722803, 2339144; 722612, 2339432; 721796, 2339934; 721815, 2340038; 721731, 2340378; 721548, 2340570; 721486, 2340778; 721475, 2340813; 720997, 2341127; 720995, 2341131; 720966, 2341212; 721011, 2341232; return to starting point.

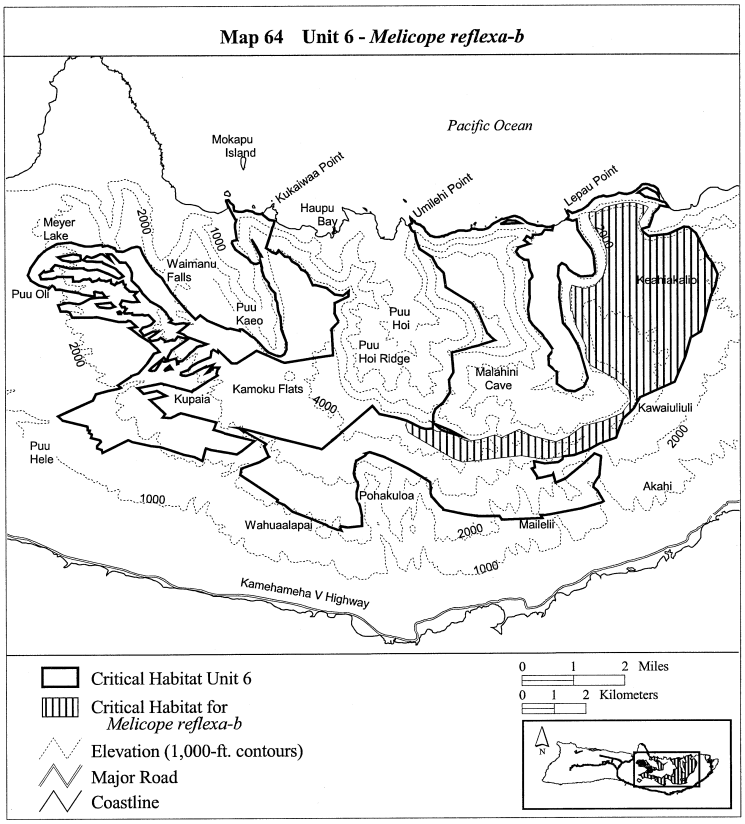
(ii) NOTE: Map 63 follows:



(64) Molokai 6—*Melicope reflexa*—b (2,226 ha; 5,500 ac)

(i) Unit consists of the following 83 boundary points: Start at 721387, 2335501; 721509, 2335424; 721760, 2335424; 722136, 2335290; 722228, 2335203; 722488, 2335115; 722822, 2335156; 723316, 2335315; 723516, 2335215; 724077, 2335474; 724470, 2335273; 725231, 2335081; 725608, 2335240; 726076, 2335574; 726712, 2335733; 727272, 2335967; 727540, 2336327; 727498, 2336679; 727088, 2337047; 726319, 2337457; 726168, 2337699; 726168, 2338051; 725875, 2338678; 725792, 2338979; 725743, 2339143; 725691, 2339180; 725658, 2339740; 725733, 2339983; 726118, 2339866; 726444, 2339958; 726695, 2340242; 726837, 2340661; 726820, 2341037; 726695, 2341430; 726519, 2341664; 726398, 2341832; 726285, 2342032; 726260, 2342150; 726293, 2342258; 726511, 2342267; 726804, 2342426; 727322, 2342543; 727581, 2342559; 727724, 2342551; 728050, 2342451; 728134, 2342400; 727832, 2341957; 727849, 2341865; 727907, 2341740; 727950, 2341648; 728125, 2341505; 728744, 2341572; 729221, 2341806; 729369, 2341792; 729593, 2341616; 729957, 2340844; 730108, 2340669; 730258, 2340309; 730192, 2339932; 730058, 2339648; 729740, 2338526; 729427, 2338327; 729264, 2337734; 728927, 2336948; 727849, 2336461; 727650, 2336110; 727313, 2335793; 727105, 2335206; 726607, 2335031; 726193, 2334817; 726193, 2334817; 725775, 2334663; 724830, 2334537; 724144, 2334654; 722304, 2334454; 722003, 2334571; 720806, 2335290; 720631, 2335399; 720539, 2335625; 720606, 2335742; 720920, 2335559; 721173, 2335498; 721387, 2335499; return to starting point.

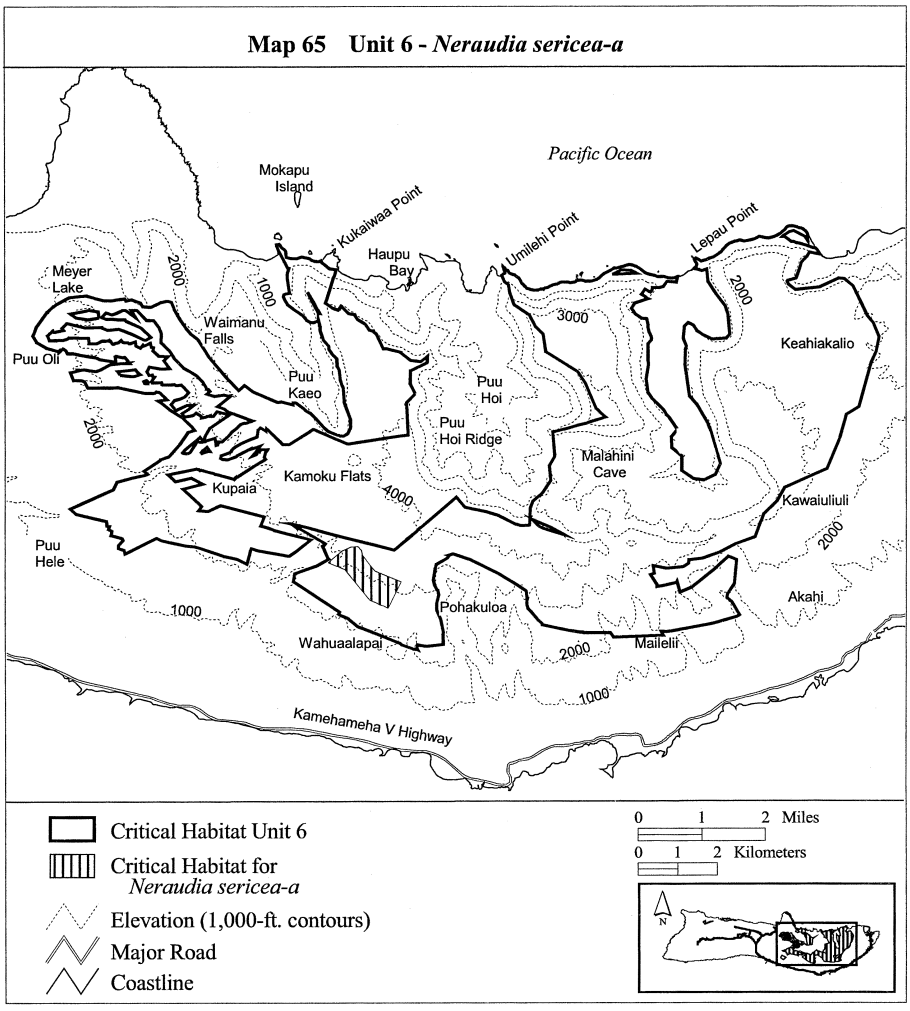
(ii) NOTE: Map 64 follows:



(65) Molokai 6—*Neraudia sericea*—a (116 ha; 286 ac)

(i) Unit consists of the following 19 boundary points: Start at 717801, 2333397; 717692, 2333442; 717579, 2333480; 717491, 2333530; 717347, 2333600; 716701, 2334383; 716295, 2334550; 716286, 2334559; 716380, 2334641; 716631, 2334855; 716863, 2334955; 717039, 2334968; 717121, 2334880; 717146, 2334754; 717341, 2334497; 717466, 2334340; 718000, 2334120; 718125, 2334064; 718129, 2334063; return to starting point.

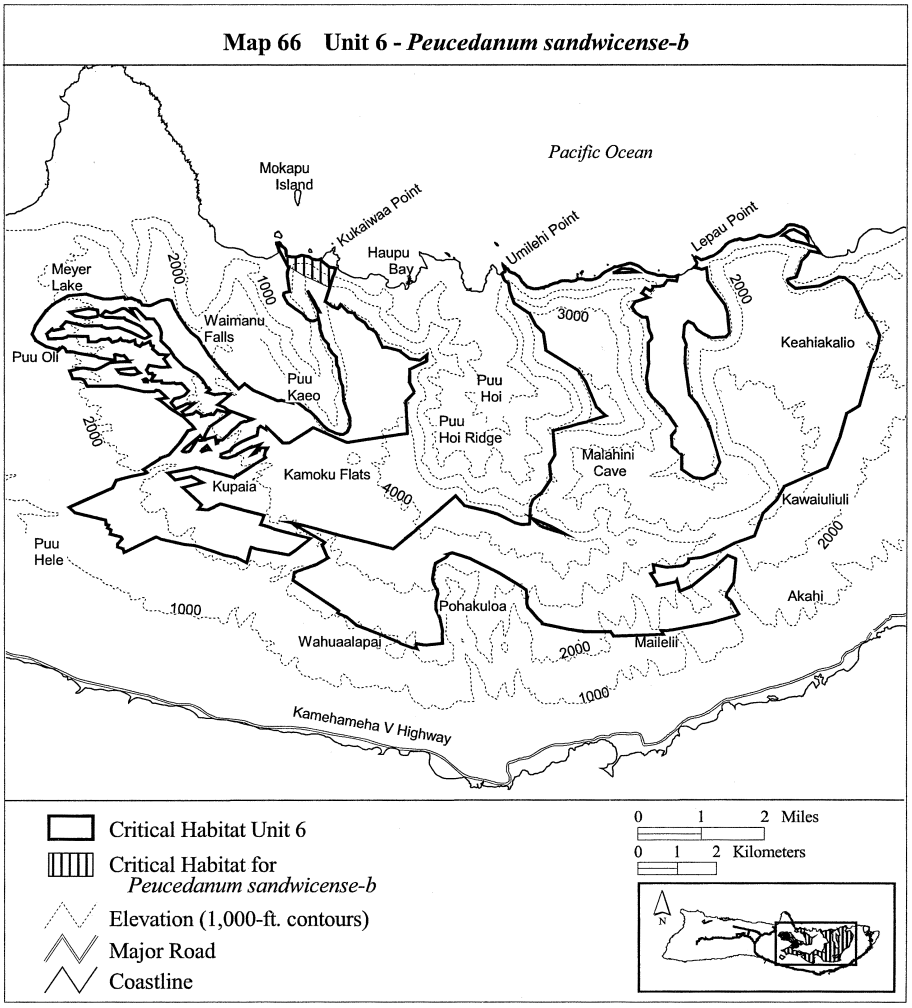
(ii) NOTE: Map 65 follows:



(66) Molokai 6—*Peucedanum sandwicense*—b (61 ha; 151 ac)

(i) Unit consists of the following 10 boundary points and the intermediate coastline: Start at 716106, 2342255; 716166, 2342156; 716323, 2342056; 716493, 2342030; 716336, 2341530; 716324, 2341534; 715896, 2341742; 715687, 2341830; 715259, 2342083; 715057, 2342471; follow coastline and return to starting point.

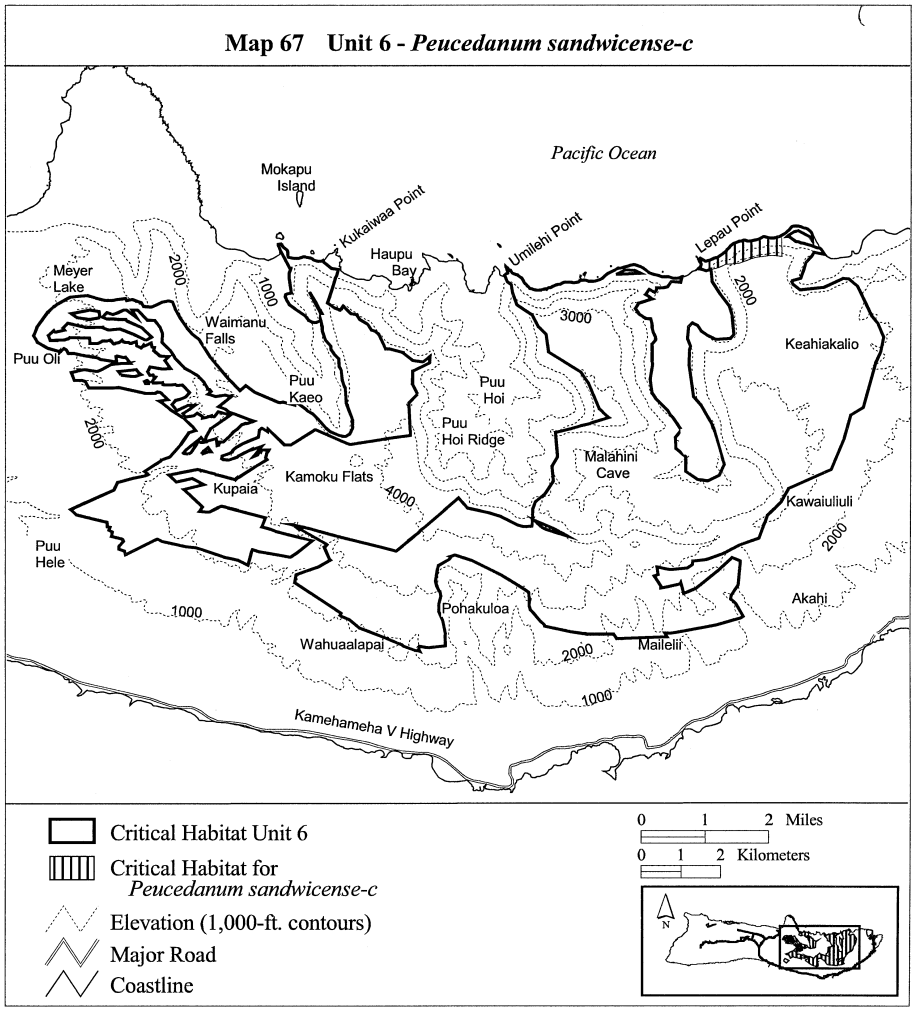
(ii) NOTE: Map 66 follows:



(67) Molokai 6—*Peucedanum sandwicense*—c (84 ha; 208 ac)

(i) Unit consists of the following 17 boundary points and the intermediate coastline: Start at 727593, 2342860; 727604, 2342849; 727663, 2342832; 727670, 2342363; 727415, 2342390; 726998, 2342335; 726592, 2342181; 726251, 2342159; 726075, 2342071; 725757, 2341995; 725581, 2342066; 725582, 2342067; 725624, 2342097; 725631, 2342109; 725630, 2342134; 725635, 2342160; 725632, 2342174; follow coastline and return to starting point.

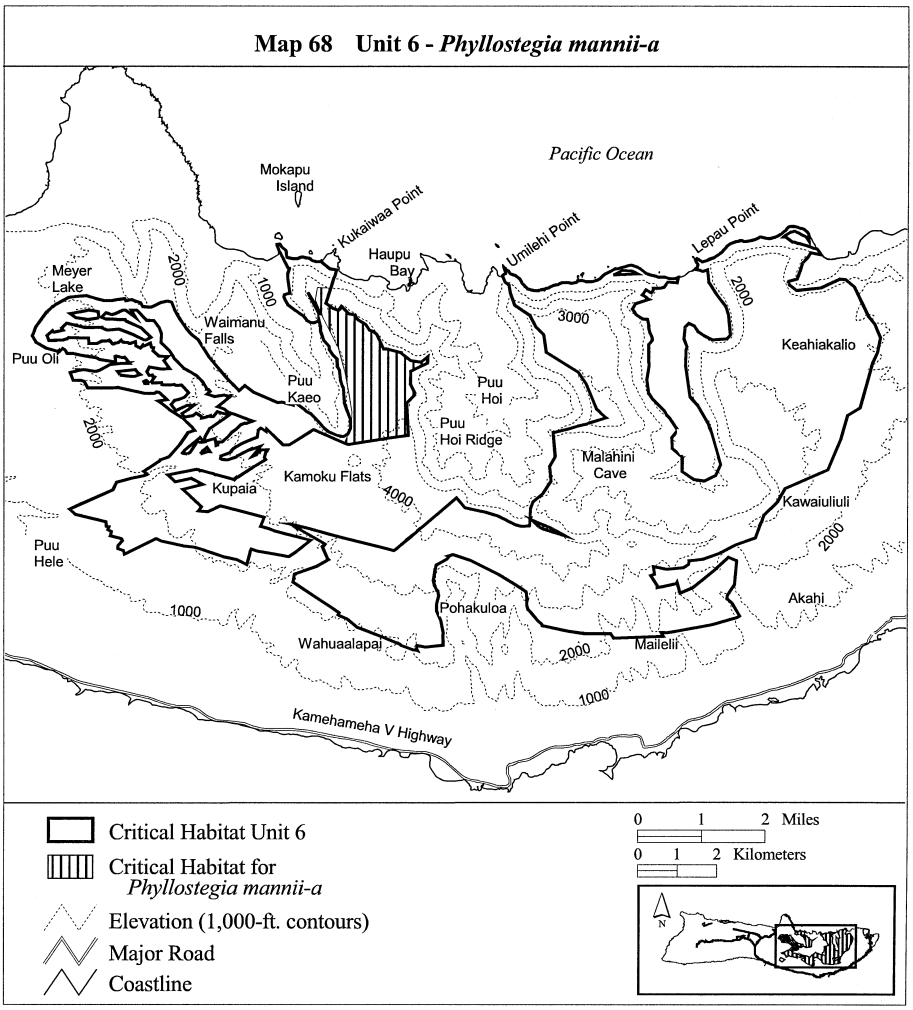
(ii) NOTE: Map 67 follows:



(68) Molokai 6—*Phyllostegia mannii*—a (480 ha; 1,185 ac)

(i) Unit consists of the following 37 boundary points: Start at 716869, 2338015; 716890, 2338405; 716806, 2338901; 716711, 2339439; 716542, 2340030; 716162, 2340801; 715962, 2341265; 716004, 2341581; 716344, 2341557; 716226, 2341182; 716397, 2341056; 716537, 2341006; 716619, 2341102; 716803, 2340912; 716949, 2340883; 717034, 2340760; 717233, 2340650; 717327, 2340487; 717417, 2340471; 717512, 2340386; 717678, 2340008; 717794, 2340014; 718125, 2339916; 718212, 2339767; 718369, 2339712; 718630, 2339684; 718798, 2339820; 718794, 2339660; 718638, 2339632; 718369, 2339448; 718361, 2339127; 718483, 2338864; 718272, 2338643; 718273, 2338203; 718311, 2337817; 716789, 2337580; 716695, 2337621; return to starting point.

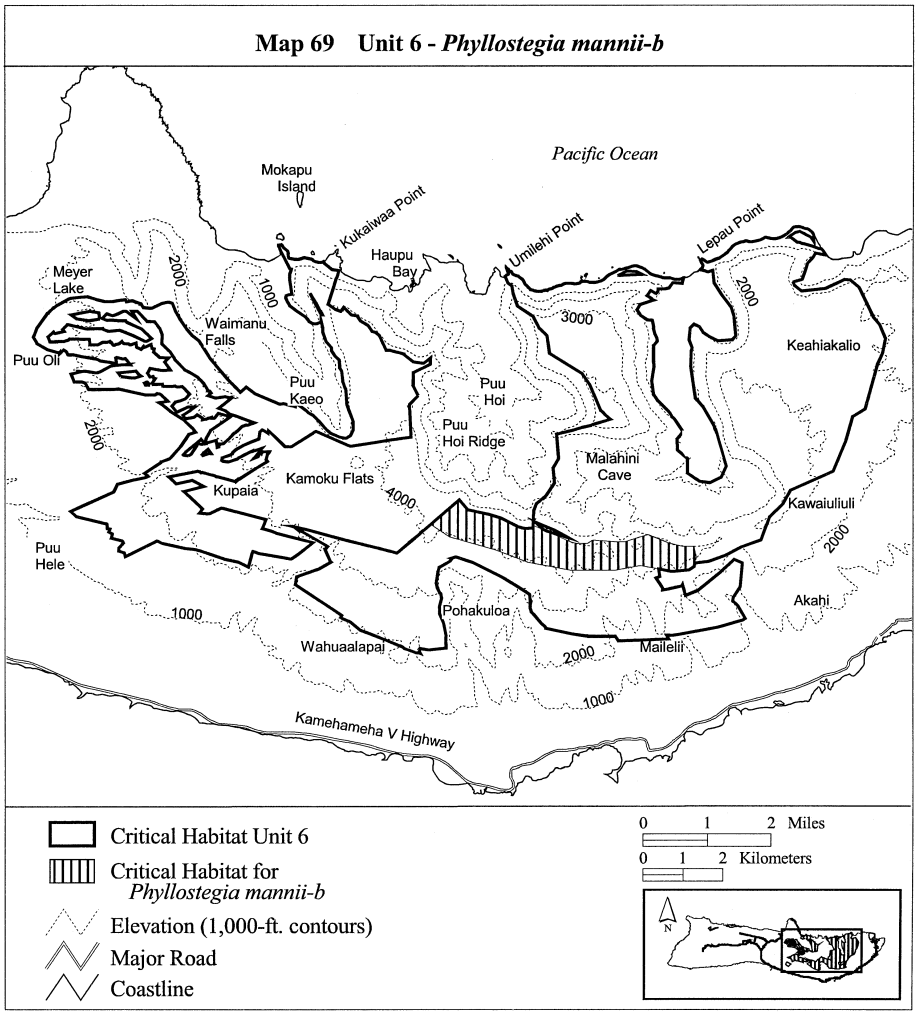
(ii) NOTE: Map 68 follows:



(69) Molokai 6—*Phyllostegia mannii*—b (496 ha; 1,226 ac)

(i) Unit consists of the following 32 boundary points: Start at 721391, 2335576; 721786, 2335398; 722335, 2335155; 722504, 2335113; 722757, 2335124; 722884, 2335208; 723517, 2335155; 723664, 2335155; 724266, 2335345; 724783, 2335134; 725131, 2335039; 725416, 2335039; 725479, 2334765; 725416, 2334532; 725289, 2334448; 724857, 2334406; 724076, 2334554; 723422, 2334427; 722314, 2334448; 721269, 2334638; 720436, 2334955; 719286, 2335282; 718807, 2335607; 719529, 2336227; 719749, 2335976; 720278, 2335860; 720611, 2335749; 720920, 2335559; 721062, 2335514; 721066, 2335513; 721173, 2335498; 721388, 2335510; return to starting point.

(ii) NOTE: Map 69 follows:

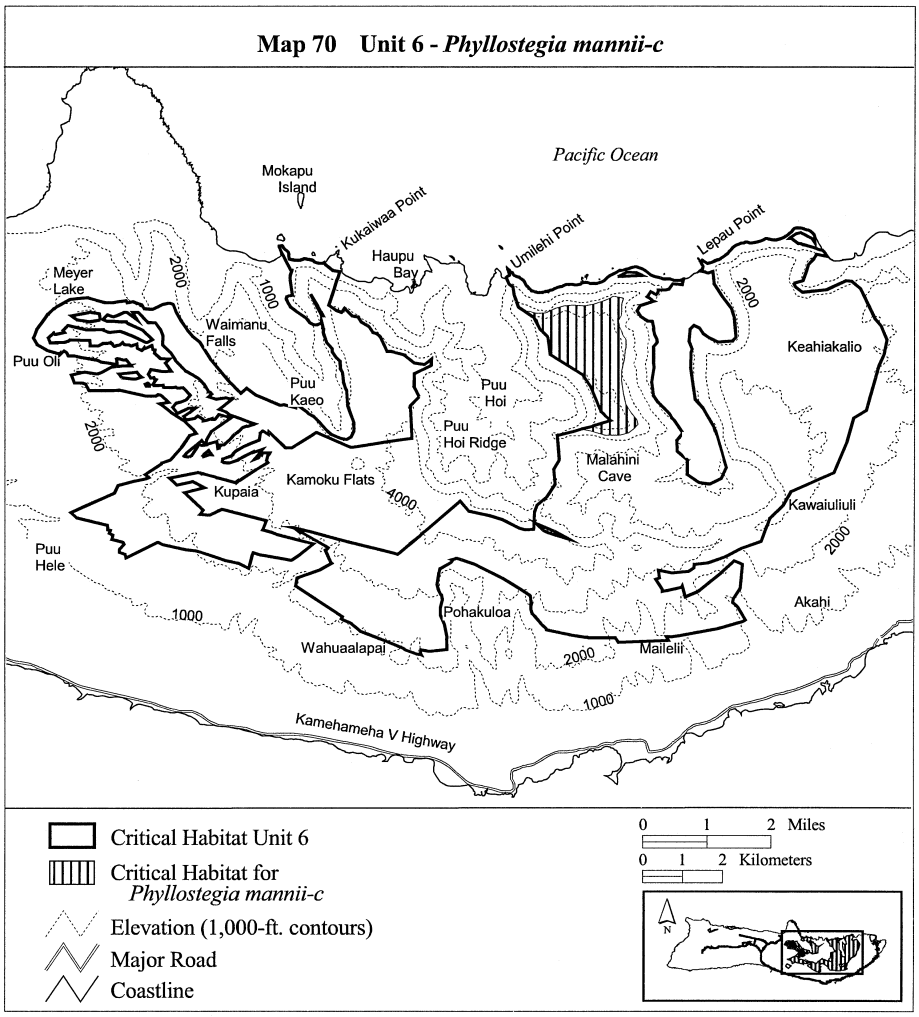


(70) Molokai 6—*Phyllostegia mannii*—c (452 ha; 1,117 ac)

(i) Unit consists of the following 61 boundary points: Start at 723531, 2340665; 723531, 2340665; 723599, 2340516; 723630, 2340429; 723723, 2340305; 723717, 2340125; 723698, 2340045; 723673, 2339815; 723605, 2339530; 723605, 2339263; 723649, 2338953; 723705, 2338693; 723835, 2338476; 723990, 2338277; 724008, 2338172; 723922, 2338066; 723773, 2337955; 723562, 2337905; 723351, 2337887; 723196, 2337887; 722805, 2337998; 722619, 2338035; 722603, 2338052; 723022, 2338160; 723352, 2338246; 723352, 2338246; 723352, 2338246; 723351, 2338247; 723331, 2338266; 723146, 2338429; 723088, 2338481; 722865, 2339034; 722803, 2339144; 722612, 2339432; 721796, 2339934; 721815, 2340038; 721731, 2340378; 721548, 2340570; 721486, 2340778; 721475, 2340813; 721196, 2340996; 721237, 2341043; 721361, 2340999; 721454, 2340975; 721689, 2340987; 721931, 2341099; 722148, 2341161; 722303, 2341185; 722464, 2341179; 722669, 2341167; 722886, 2341204; 723115, 2341278; 723289, 2341347; 723388, 2341409; 723611, 2341371; 723642, 2341353; 723605, 2341223; 723599, 2341068;

723587, 2340925; 723518, 2340782; 723543, 2340665; return to starting point.

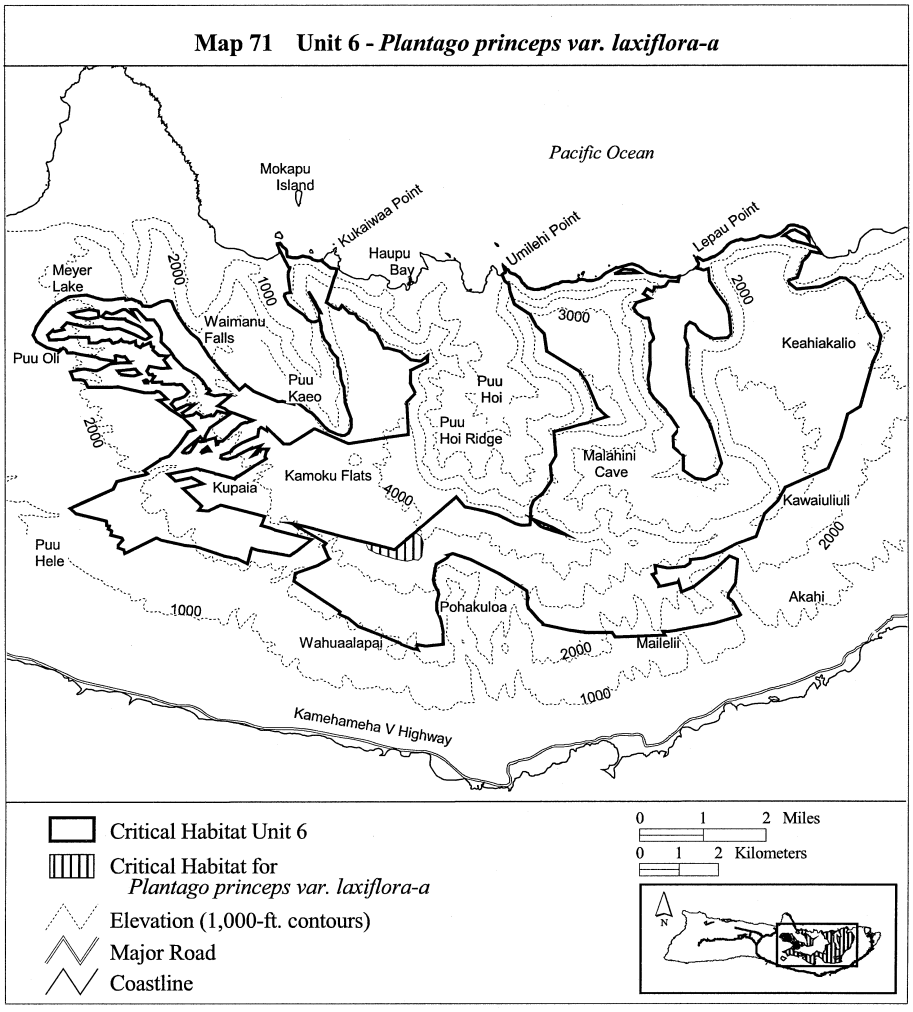
(ii) NOTE: Map 70 follows:



(71) Molokai 6—*Plantago princeps*—a (52 ha; 129 ac)

(i) Unit consists of the following 18 boundary points: Start at 717295, 2334884; 717244, 2334999; 717248, 2335060; 717948, 2334879; 717956, 2334877; 718173, 2335063; 718196, 2335083; 718480, 2335327; 718487, 2335324; 718623, 2335225; 718692, 2335058; 718669, 2334831; 718654, 2334694; 718555, 2334611; 718441, 2334618; 718274, 2334580; 717971, 2334633; 717492, 2334793; return to starting point.

(ii) NOTE: Map 71 follows:

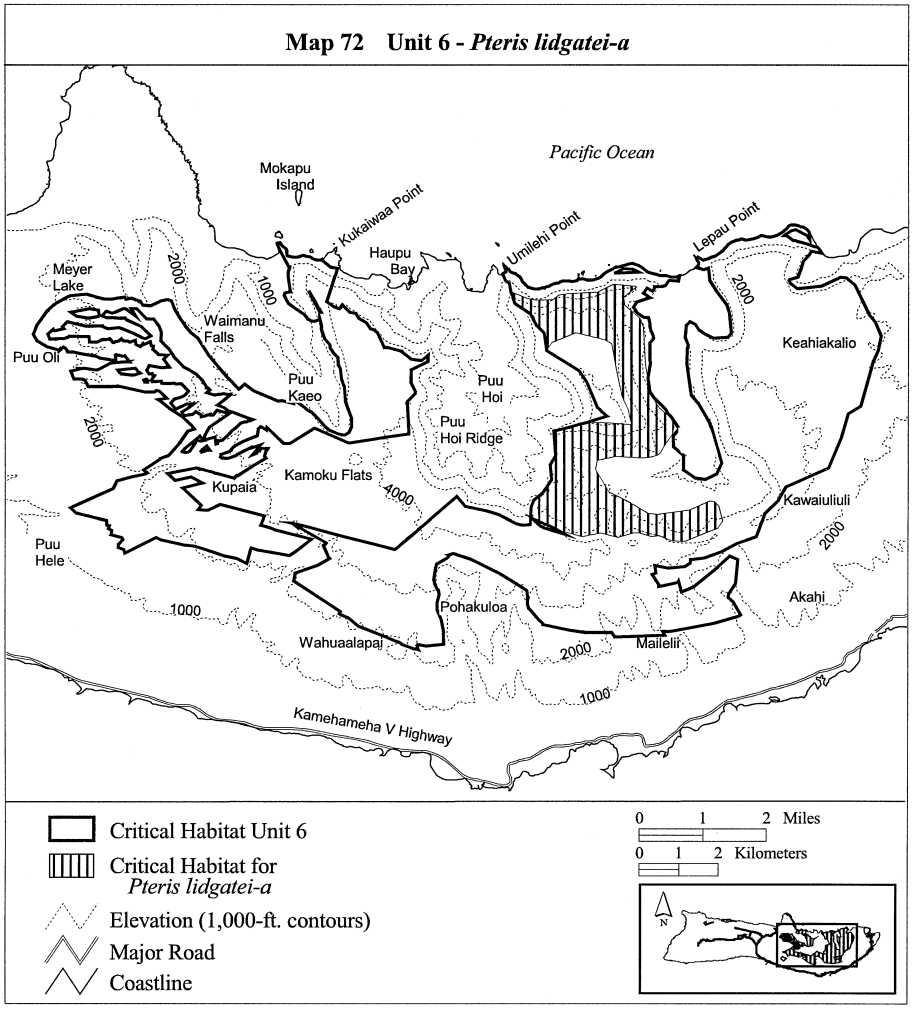


(72) Molokai 6—*Pteris lidgatei*—a (1,227 ha; 3,031 ac)

(i) Unit consists of the following 80 boundary points: Start at 723445, 2340106; 723260, 2340220; 722544, 2340390; 721922, 2340143; 721803, 2339930; 721731, 2340378; 721548, 2340570; 721486, 2340778; 721475, 2340813; 720997, 2341127; 720995, 2341131; 720883, 2341439; 721294, 2341263; 721528, 2341222; 721947, 2341235; 722100, 2341344; 722233, 2341375; 722232, 2341368; 722323, 2341386; 723080, 2341420; 723496, 2341619; 724036, 2341574; 724064, 2341546; 723750, 2341295; 723771, 2341089; 724145, 2340764; 724235, 2340541; 724295, 2339594; 724406, 2338835; 724644, 2338479; 724933, 2338228; 725017, 2338008; 724961, 2337795; 724790, 2337537; 724672, 2337327; 724612, 2337279; 724393, 2337216; 724159, 2337205; 723555, 2337244; 723081, 2337145; 723038, 2336915; 723379, 2336344; 723830, 2336114; 724367, 2335790; 724657, 2335771; 724657, 2335773; 725406, 2335875; 725917, 2336114; 726037, 2336097; 726147, 2335977; 726250, 2335603; 726122, 2335424; 725892, 2335339; 725287, 2335083; 724946, 2335109; 724631, 2335236; 724452, 2335211; 724146, 2335296;

723984, 2335296; 723600, 2335177; 723175, 2335296; 722689, 2335211; 722152, 2335364; 721398, 2335722; 721410, 2335958; 721470, 2336127; 721713, 2336326; 721929, 2336656; 721893, 2337028; 722035, 2337272; 721980, 2337890; 722904, 2338129; 722913, 2338109; 722924, 2338113; 723426, 2338095; 723943, 2338048; 723898, 2338235; 723856, 2338440; 723711, 2338763; 723549, 2339479; return to starting point.

(ii) NOTE: Map 72 follows:

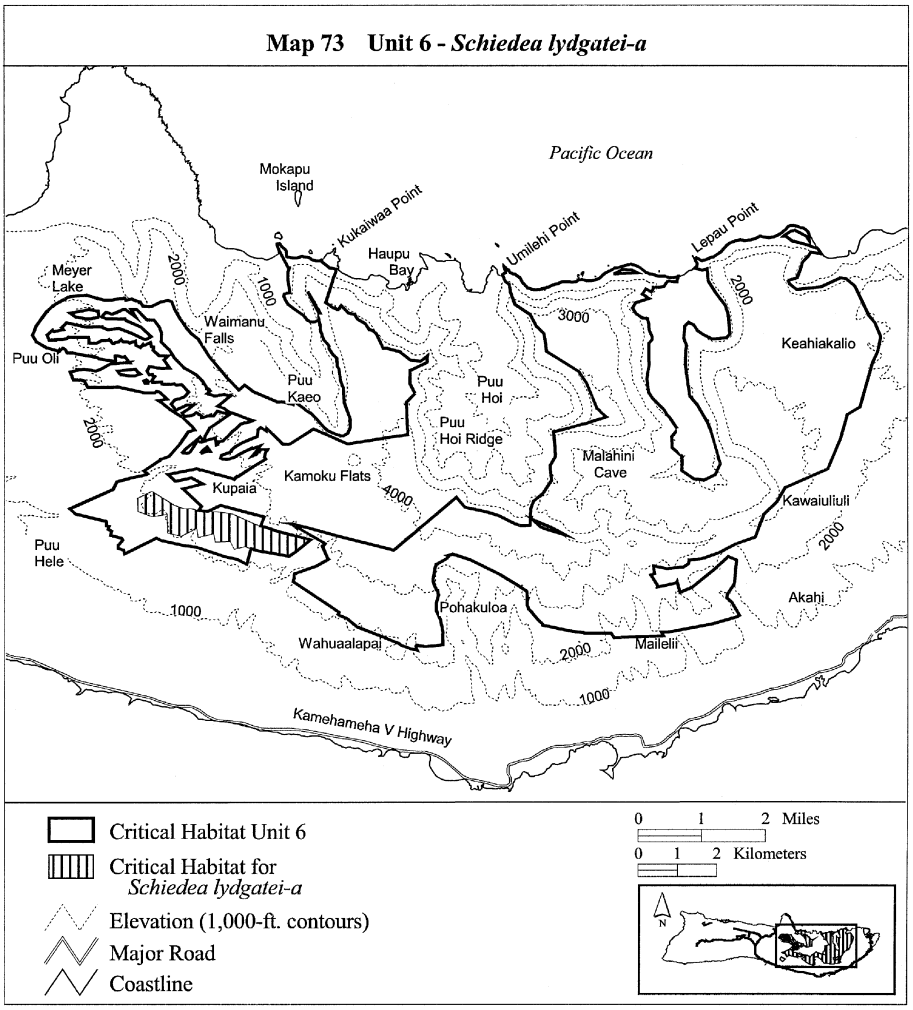


(73) Molokai 6—*Schiedea lydgatei*—a (261 ha; 645 ac)

(i) Unit consists of the following 30 boundary points: Start at 714170, 2334964; 713902, 2334907; 713797, 2335102; 713416, 2335086; 713375, 2335296; 712986, 2335199; 712946, 2335434; 712548, 2335232; 712208, 2335321; 712191, 2335791; 711827, 2335726; 711462, 2335864; 711444, 2336201; 711819, 2336380; 712392, 2336016; 712634, 2335930; 712816, 2335930; 713078, 2335882;

713513, 2335857; 713845, 2335807; 714450, 2335533; 714788, 2335442; 714911, 2335383; 715195, 2335308; 715838, 2335147; 715840, 2335147; 715467, 2334842; 715299, 2334721; 715010, 2334771; 714498, 2334867; return to starting point.

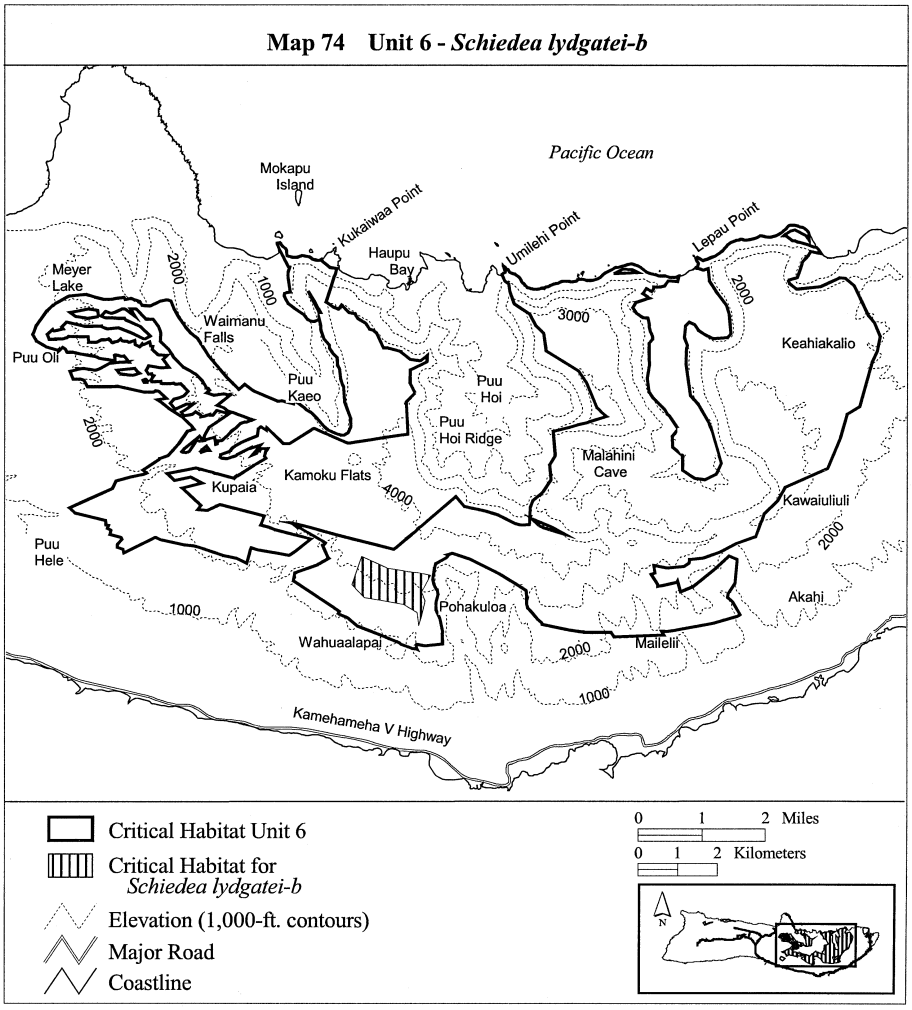
(ii) NOTE: Map 73 follows:



(74) Molokai 6—*Schiedea lydgatei*—b (163 ha; 403 ac)

(i) Unit consists of the following 16 boundary points: Start at 717142, 2334694; 717649, 2334467; 717799, 2334397; 718083, 2334354; 718335, 2334311; 718582, 2334274; 718897, 2334216; 718662, 2333788; 718751, 2333561; 718662, 2333172; 718585, 2332948; 718548, 2333269; 718208, 2333472; 717608, 2333577; 717202, 2333650; 716886, 2333975; return to starting point.

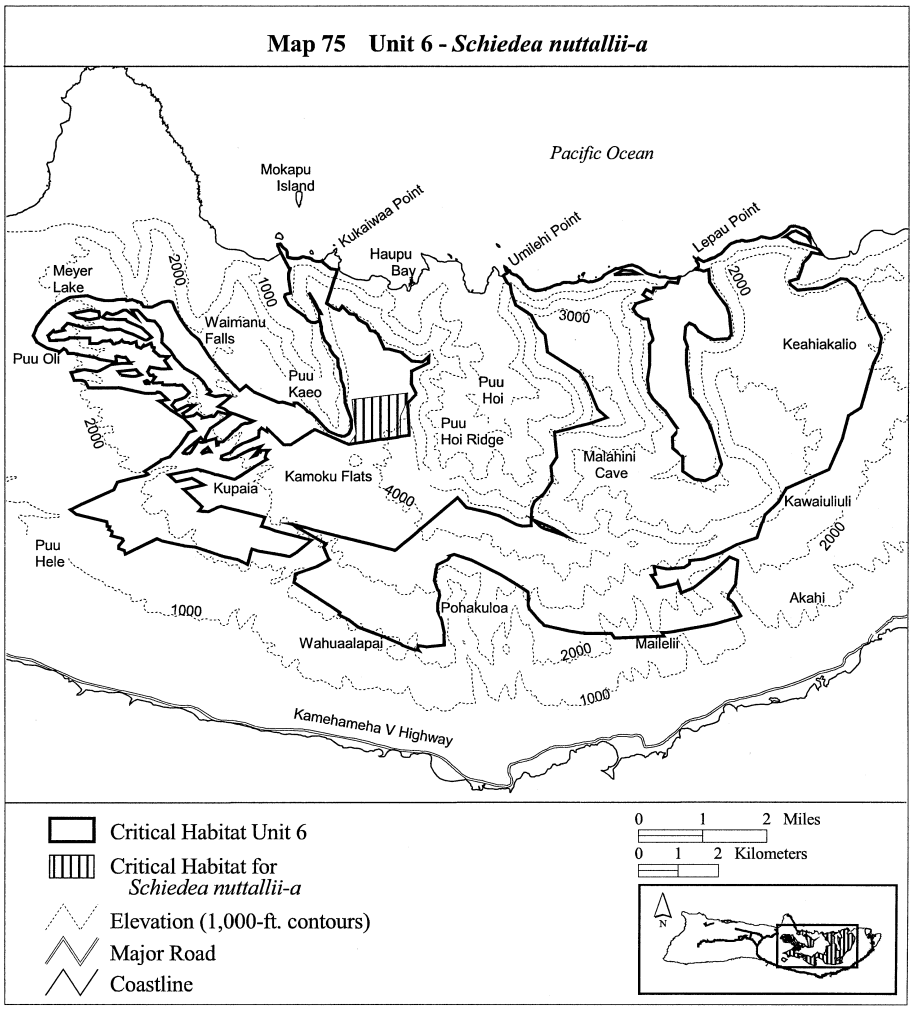
(ii) NOTE: Map 74 follows:



(75) Molokai 6—*Schiedea nuttallii*—a (138 ha; 341 ac)

(i) Unit consists of the following 11 boundary points: Start at 716789, 2337580; 716978, 2337857; 716937, 2338109; 716872, 2338694; 716865, 2338724; 718265, 2338899; 718271, 2338719; 718092, 2338312; 718084, 2337808; 718087, 2337782; 716789, 2337580; return to starting point.

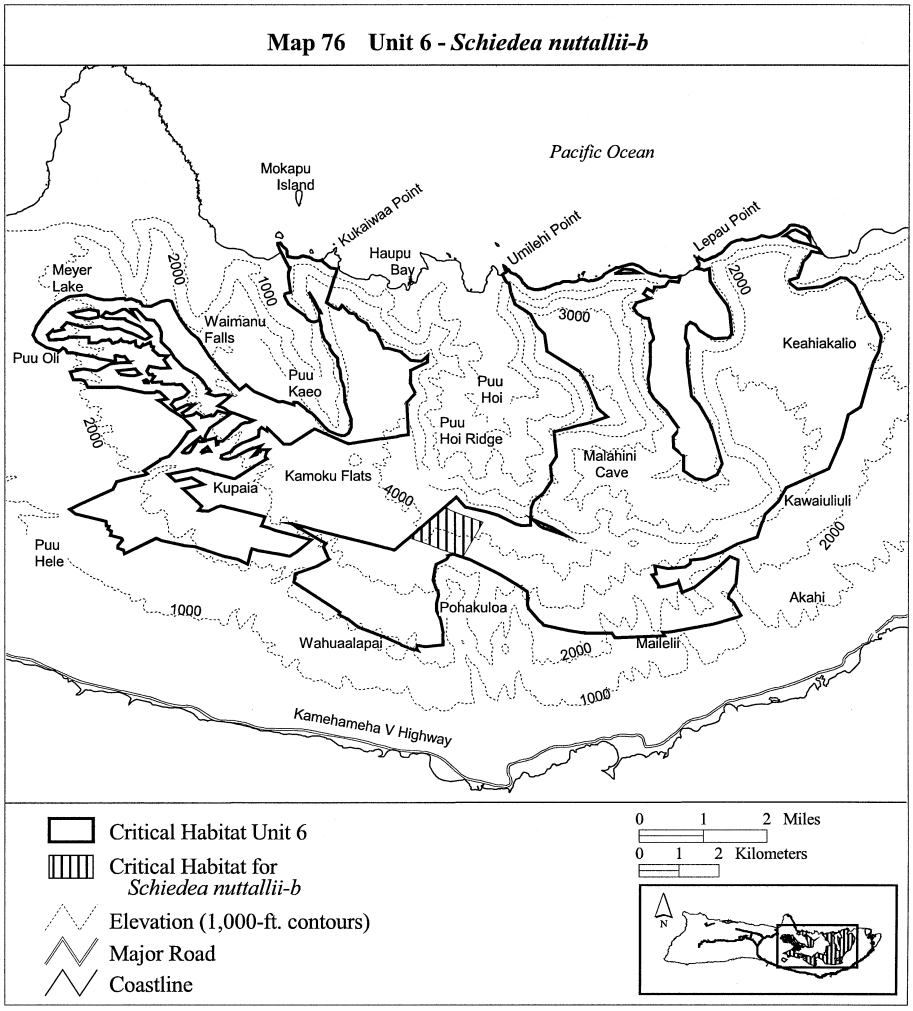
(ii) NOTE: Map 75 follows:



(76) Molokai 6—*Schiedea nuttallii*—b (127 ha; 313 ac)

(i) Unit consists of the following 9 boundary points: Start at 719243, 2335981; 719377, 2335889; 719629, 2335799; 720198, 2335594; 719706, 2334719; 719336, 2334824; 719149, 2334897; 718824, 2335019; 718326, 2335195; return to starting point.

(ii) NOTE: Map 76 follows:

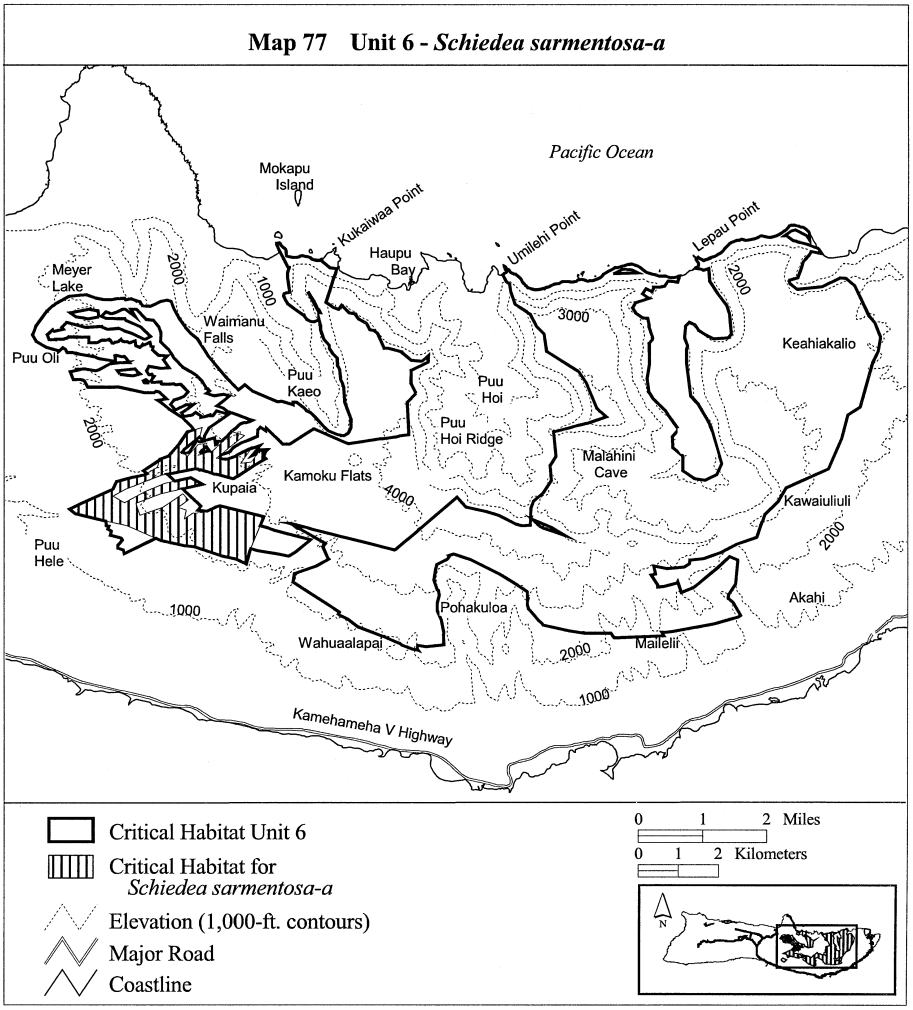


(77) Molokai 6—*Schiedea sarmentosa*—a (608 ha; 1,502 ac)

(i) Unit consists of the following 69 boundary points: Start at 713966, 2334650; 713788, 2334691; 713615, 2334727; 713388, 2334805; 712981, 2334936; 712897, 2334972; 712639, 2334989; 712070, 2335120; 711195, 2335499; 710655, 2335616; 709885, 2335800; 709748, 2335926; 710043, 2336068; 710830, 2336433; 710920, 2336613; 711297, 2336725; 711647, 2336798; 711968, 2336987; 712027, 2337192; 712260, 2337279; 712508, 2337556; 712727, 2337892; 713103, 2338002; 713052, 2337770; 712568, 2337381; 712726, 2337266; 713010, 2337570; 713220, 2337591; 713010, 2337297; 713378, 2337402; 713872, 2337886; 714166, 2337802; 713462, 2337213; 713693, 2337171; 714302, 2337413; 714071, 2337087; 714344, 2337118; 714523, 2337371; 714712, 2337413; 714649, 2337223; 714705, 2337206; 713885, 2336698; 713409, 2336824; 713242, 2336872; 712968, 2336950; 712064, 2336782; 711160, 2336425; 710834, 2336246; 711129, 2336088; 711654, 2336362; 712169, 2336582; 712821, 2336719; 713104, 2336561; 712053, 2336309; 711423, 2336067; 711517, 2335773; 712106, 2335973; 712610, 2336309;

712758, 2336162; 712505, 2335973; 712705, 2335889; 712652, 2335679; 712863, 2335815; 713115, 2335826; 713441, 2335973; 713554, 2336015; 714666, 2335727; 714306, 2334848; 714212, 2334524; return to starting point.

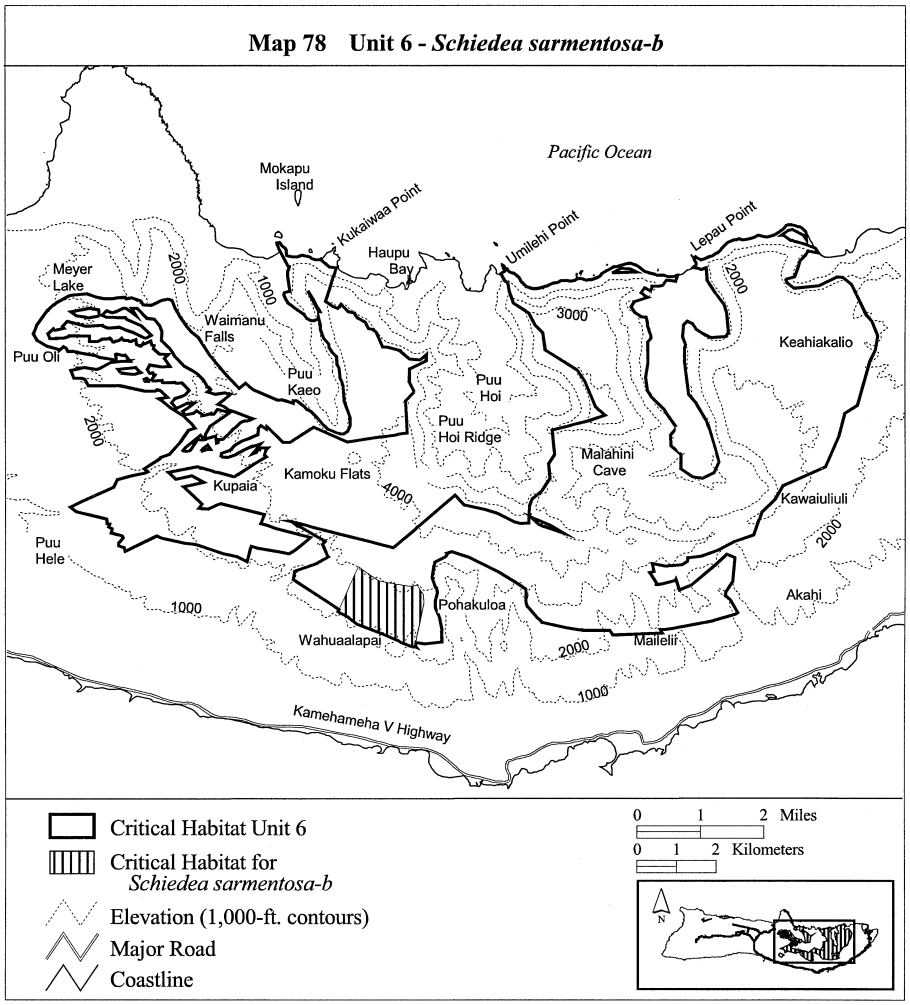
(ii) NOTE: Map 77 follows:



(78) Molokai 6—*Schiedea sarmentosa*—b (266 ha; 657 ac)

(i) Unit consists of the following 28 boundary points: Start at 717066, 2334401; 717233, 2334267; 717586, 2334045; 717849, 2333974; 718082, 2333944; 718381, 2333890; 718442, 2333895; 718444, 2333903; 718564, 2333925; 718720, 2333686; 718734, 2333470; 718650, 2333017; 718566, 2332647; 718524, 2332368; 718544, 2332329; 718510, 2332337; 718423, 2332353; 718140, 2332456; 718106, 2332490; 717980, 2332538; 717741, 2332640; 717257, 2332837; 717029, 2332921; 716778, 2333118; 716581, 2333214; 716538, 2333243; 716559, 2333270; 716896, 2334032; return to starting point.

(ii) NOTE: Map 78 follows:

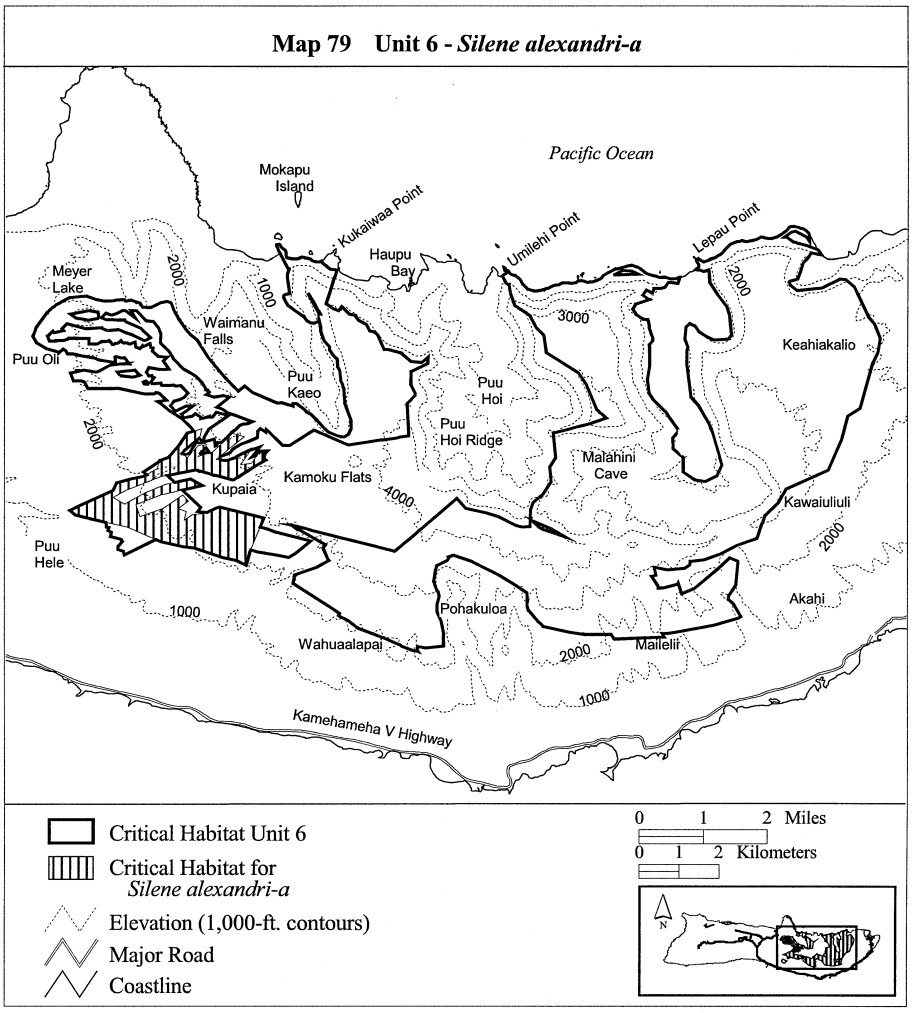


(79) Molokai 6—*Silene alexandri*—a (608 ha; 1,502 ac)

(i) Unit consists of the following 69 boundary points: Start at 713966, 2334650; 713788, 2334691; 713615, 2334727; 713388, 2334805; 712981, 2334936; 712897, 2334972; 712639, 2334989; 712070, 2335120; 711195, 2335499; 710655, 2335616; 709885, 2335800; 709748, 2335926; 710043, 2336068; 710830, 2336433; 710920, 2336613; 711297, 2336725; 711647, 2336798; 711968, 2336987; 712027, 2337192; 712260, 2337279; 712508, 2337556; 712727, 2337892; 713103, 2338002; 713052, 2337770; 712568, 2337381; 712726, 2337266; 713010, 2337570; 713220, 2337591; 713010, 2337297; 713378, 2337402; 713872, 2337886; 714166, 2337802; 713462, 2337213; 713693, 2337171; 714302, 2337413; 714071, 2337087; 714344, 2337118; 714523, 2337371; 714712, 2337413; 714649, 2337223; 714705, 2337206; 713885, 2336698; 713409, 2336824; 713242, 2336872; 712968, 2336950; 712064,

2336782; 711160, 2336425; 710834, 2336246; 711129, 2336088; 711654, 2336362; 712169, 2336582; 712821, 2336719; 713104, 2336561; 712053, 2336309; 711423, 2336067; 711517, 2335773; 712106, 2335973; 712610, 2336309; 712758, 2336162; 712505, 2335973; 712705, 2335889; 712652, 2335679; 712863, 2335815; 713115, 2335826; 713441, 2335973; 713554, 2336015; 714666, 2335727; 714306, 2334848; 714212, 2334524; return to starting point.

(ii) NOTE: Map 79 follows:

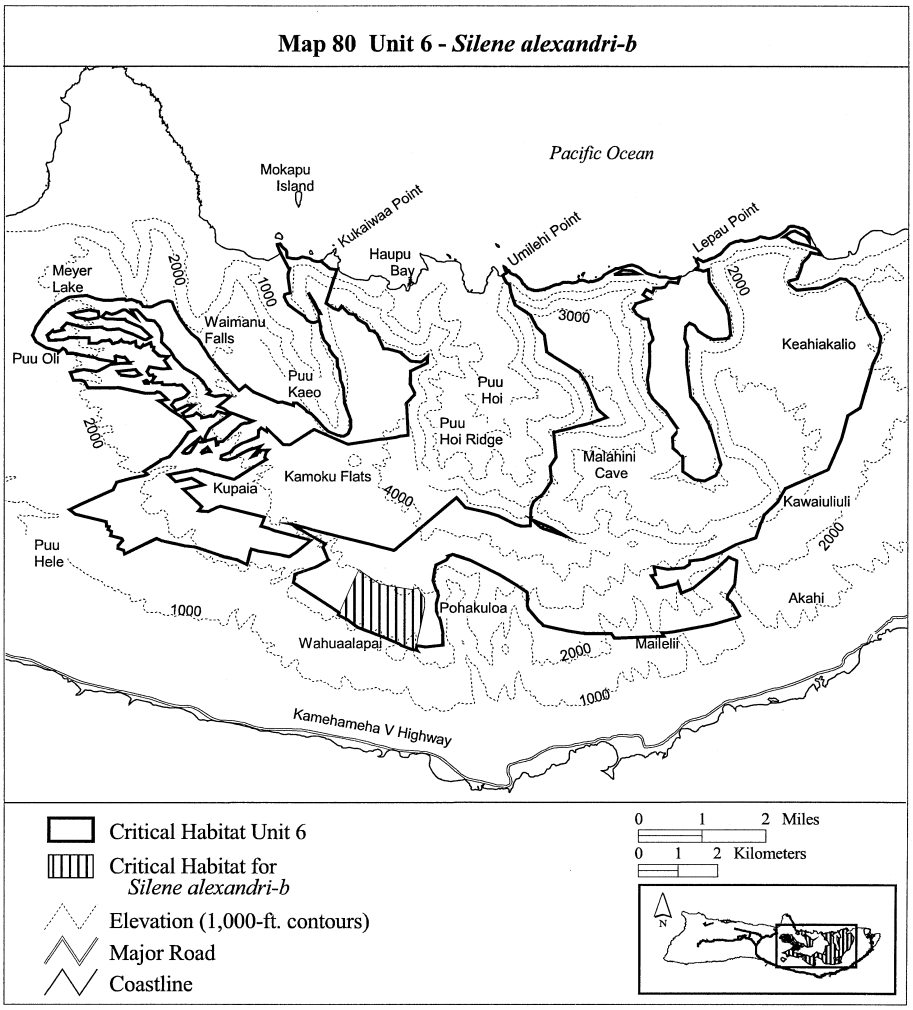


(80) Molokai 6—*Silene alexandri*—b (266 ha; 657 ac)

(i) Unit consists of the following 28 boundary points: Start at 717066, 2334401; 717233, 2334267; 717586, 2334045; 717849, 2333974; 718082, 2333944; 718381, 2333890; 718442, 2333895; 718444, 2333903; 718564, 2333925; 718720, 2333686; 718734, 2333470; 718650, 2333017; 718566, 2332647; 718524, 2332368; 718544, 2332329; 718510, 2332337; 718423, 2332353; 718140, 2332456;

718106, 2332490; 717980, 2332538; 717741, 2332640; 717257, 2332837; 717029, 2332921; 716778, 2333118; 716581, 2333214; 716538, 2333243; 716559, 2333270; 716896, 2334032; return to starting point.

(ii) NOTE: Map 80 follows:

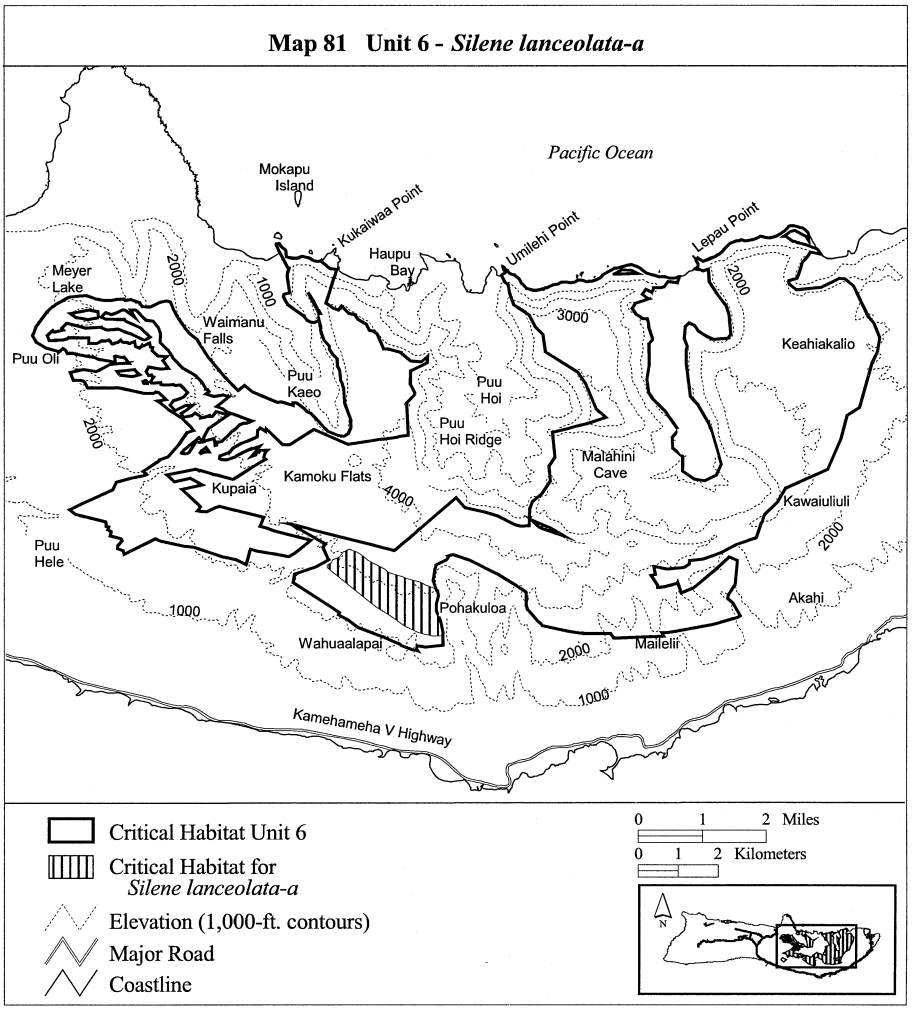


(81) Molokai 6—*Silene lanceolata*—a (289 ha; 714 ac)

(i) Unit consists of the following 33 boundary points: Start at 716266, 2334444; 716261, 2334516; 716359, 2334579; 716396, 2334646; 716504, 2334687; 716572, 2334713; 716655, 2334838; 716826, 2334915; 717038, 2334833; 717215, 2334703; 717292, 2334620; 717712, 2334413; 717800, 2334325; 718184, 2334200; 718262, 2334164; 718645, 2334060; 718728, 2334014; 718951, 2333920; 719060, 2333843; 719075, 2333754; 719029, 2333532; 719034, 2333329; 719138, 2333091; 719195, 2332759; 719174, 2332707; 719127, 2332687; 718946, 2332692; 718728, 2332749; 718578, 2332780; 718225, 2332946; 717852,

2333210; 717505, 2333428; 717256, 2333630; return to starting point.

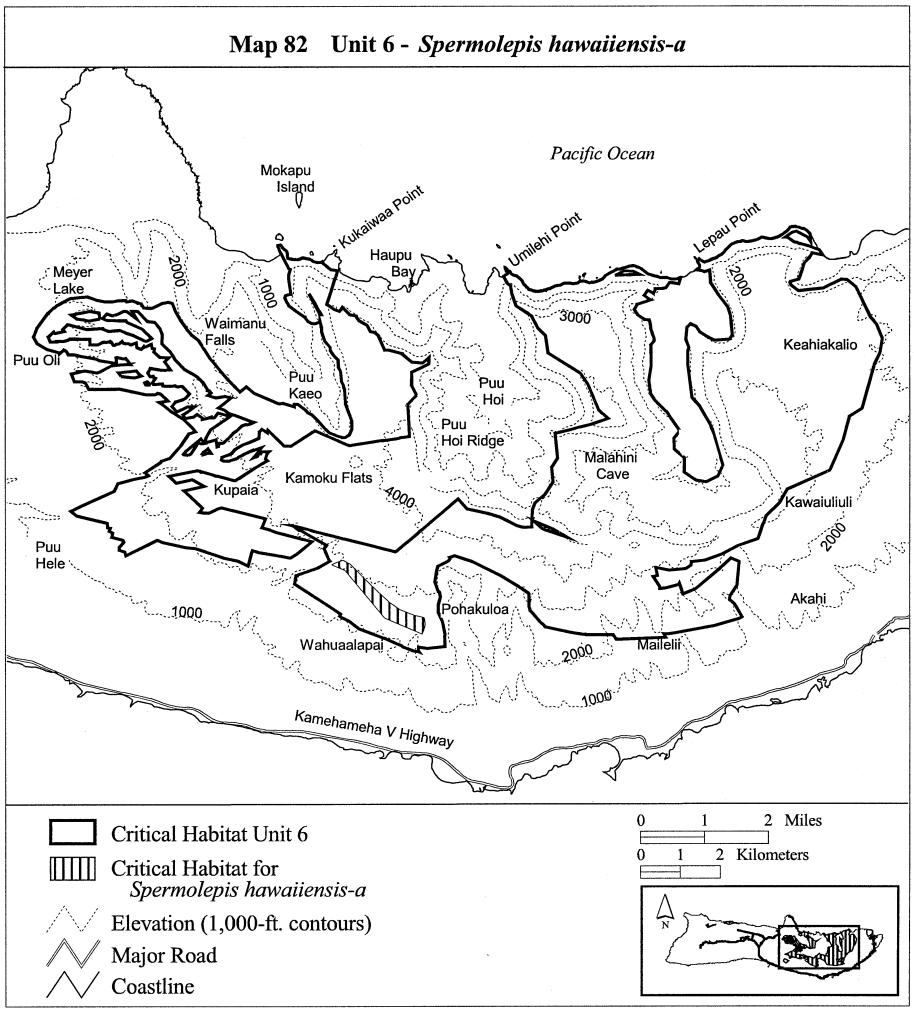
(ii) NOTE: Map 81 follows:



(82) Molokai 6—*Spermolepis hawaiiensis*—a (85 ha; 211 ac)

(i) Unit consists of the following 15 boundary points: Start at 716625, 2334674; 716813, 2334572; 717300, 2334062; 717795, 2333591; 718070, 2333402; 718415, 2333269; 718674, 2333206; 718698, 2333025; 718659, 2332868; 718629, 2332777; 717686, 2333184; 716684, 2334404; 716364, 2334553; 716353, 2334564; 716460, 2334611; return to starting point.

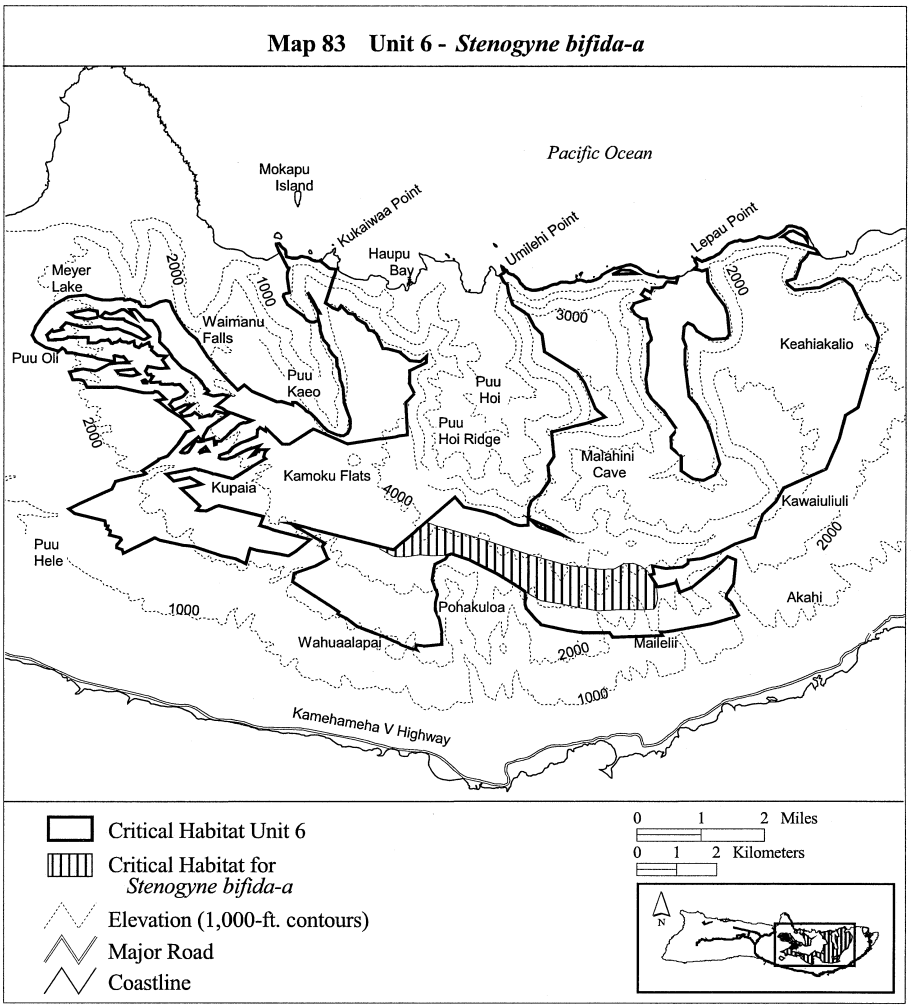
(ii) NOTE: Map 82 follows:



(83) Molokai 6—*Stenogyne bifida*—a (585 ha; 1,445 ac)

(i) Unit consists of the following 40 boundary points: Start at 718790, 2335593; 719006, 2335519; 719486, 2335379; 720326, 2335124; 721475, 2334733; 722382, 2334483; 723214, 2334383; 723564, 2334400; 723789, 2334525; 724030, 2334533; 724230, 2334467; 724405, 2334350; 724629, 2333975; 724663, 2333617; 724604, 2333418; 724563, 2333368; 724330, 2333360; 724155, 2333343; 723597, 2333343; 723140, 2333310; 723015, 2333335; 722732, 2333393; 722241, 2333493; 721708, 2333584; 721417, 2333743; 721075, 2333976; 720376, 2334408; 719918, 2334617; 719436, 2334775; 719286, 2334733; 718936, 2334720; 718641, 2334751; 718269, 2334697; 718006, 2334697; 717897, 2334736; 717605, 2334906; 717621, 2334964; 717948, 2334879; 717956, 2334877; 718196, 2335083; return to starting point.

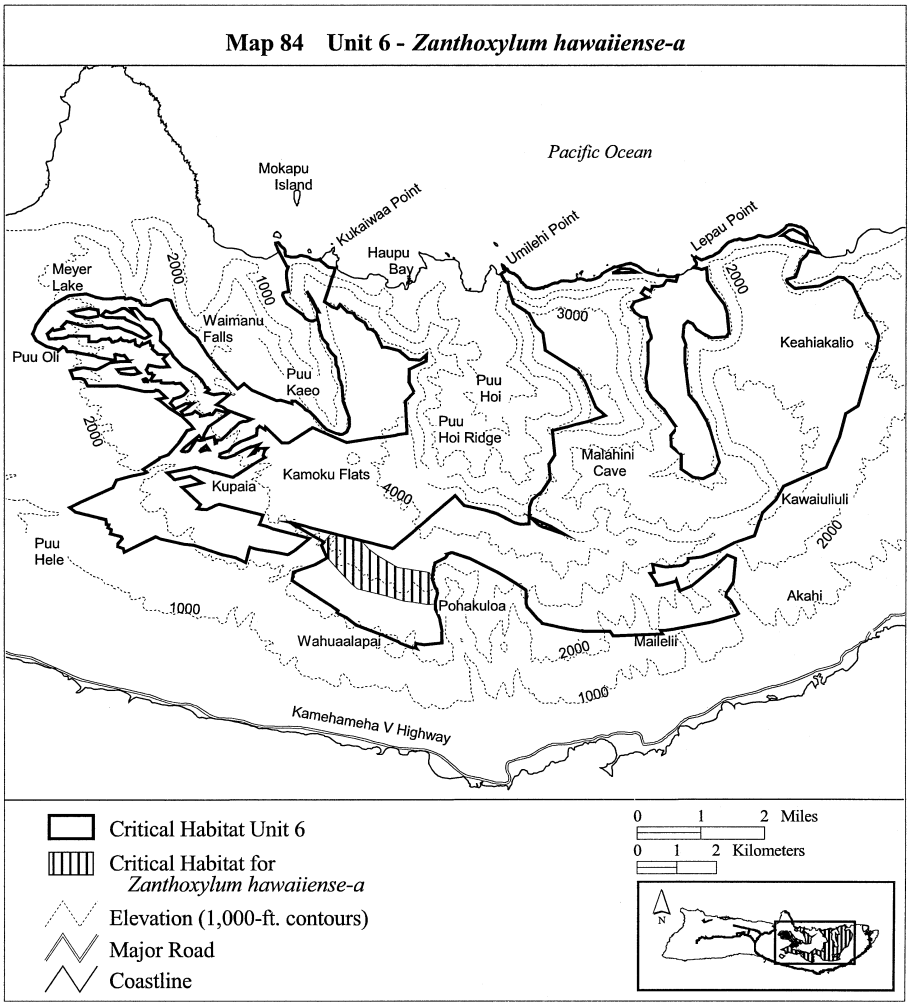
(ii) NOTE: Map 83 follows:



(84) Molokai 6—*Zanthoxylum hawaiiense*—a (259 ha; 640 ac)

(i) Unit consists of the following 23 boundary points: Start at 719023, 2333460; 718836, 2333440; 718456, 2333509; 718235, 2333529; 717759, 2333668; 717061, 2333854; 716909, 2333978; 716661, 2334227; 716274, 2334669; 716143, 2334966; 716364, 2335228; 716429, 2335272; 717190, 2335075; 717206, 2335035; 717344, 2334876; 717572, 2334703; 718083, 2334400; 718256, 2334365; 718877, 2334268; 718926, 2334151; 718974, 2333999; 719085, 2333743; 719036, 2333536; return to starting point.

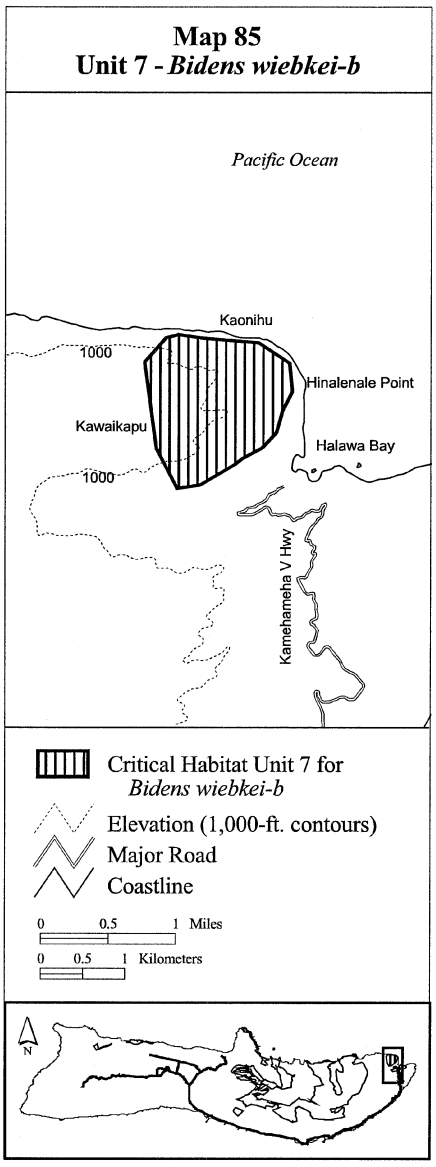
(ii) NOTE: Map 84 follows:



(85) Molokai 7—*Bidens wiebkei*—b (240 ha; 593 ac)

(i) Unit consists of the following 21 boundary points: Start at 733159, 2342717; 733159, 2342717; 733163, 2342721; 733418, 2343010; 733569, 2343051; 733836, 2343010; 734539, 2342951; 734906, 2342708; 734940, 2342357; 734814, 2342115; 734747, 2341873; 734741, 2341866; 734741, 2341866; 734576, 2341687; 734338, 2341564; 734246, 2341490; 733836, 2341246; 733552, 2341204; 733301, 2341680; 733301, 2341681; 733301, 2341684; return to starting point.

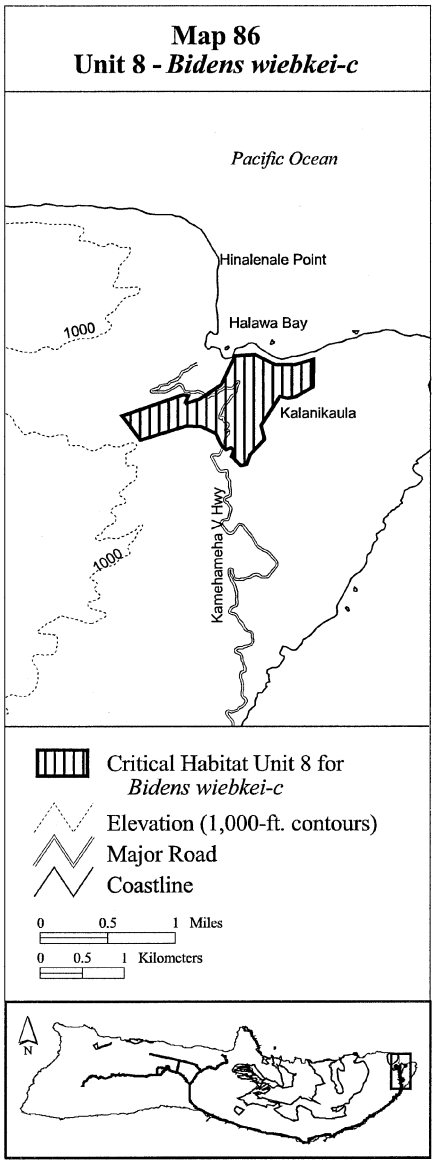
(ii) NOTE: Map 85 follows:



(86) Molokai 8—*Bidens wiebkei*—c (124 ha; 305 ac)

(i) Unit consists of the following 42 boundary points: Start at 734689, 2340744; 734863, 2340794; 734864, 2340794; 735124, 2340970; 735291, 2341321; 735533, 2341329; 735776, 2341212; 735776, 2341212; 735776, 2341212; 735985, 2341212; 736223, 2341276; 736217, 2340947; 736005, 2340825; 735918, 2340811; 735826, 2340828; 735600, 2340485; 735600, 2340485; 735600, 2340485; 735600, 2340485; 735642, 2340318; 735606, 2340279; 735606, 2340279; 735466, 2340126; 735433, 2340017; 735366, 2340000; 735249, 2340109; 735273, 2340184; 735238, 2340212; 735183, 2340197; 735126, 2340248; 735057, 2340393; 735057, 2340393; 735057, 2340393; 734881, 2340469; 734706, 2340477; 734706, 2340477; 734706, 2340477; 734706, 2340477; 734162, 2340310; 733947, 2340597; 734672, 2340853; 734731, 2340835; return to starting point.

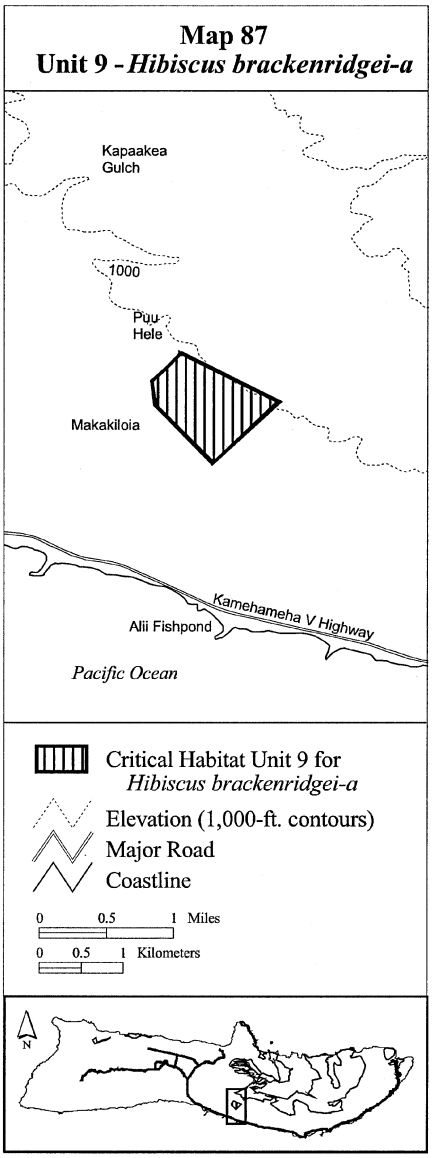
(ii) NOTE: Map 86 follows:



(87) Molokai 9—*Hibiscus brackenridgei*—a (101 ha; 249 ac)

(i) Unit consists of the following 11 boundary points: Start at 709892, 2333333; 709202, 2334013; 709147, 2334290; 709480, 2334623; 709485, 2334639; 709485, 2334639; 709485, 2334641; 709486, 2334643; 709599, 2334575; 709599, 2334575; 710655, 2334053; return to starting point.

(ii) NOTE: Map 87 follows:

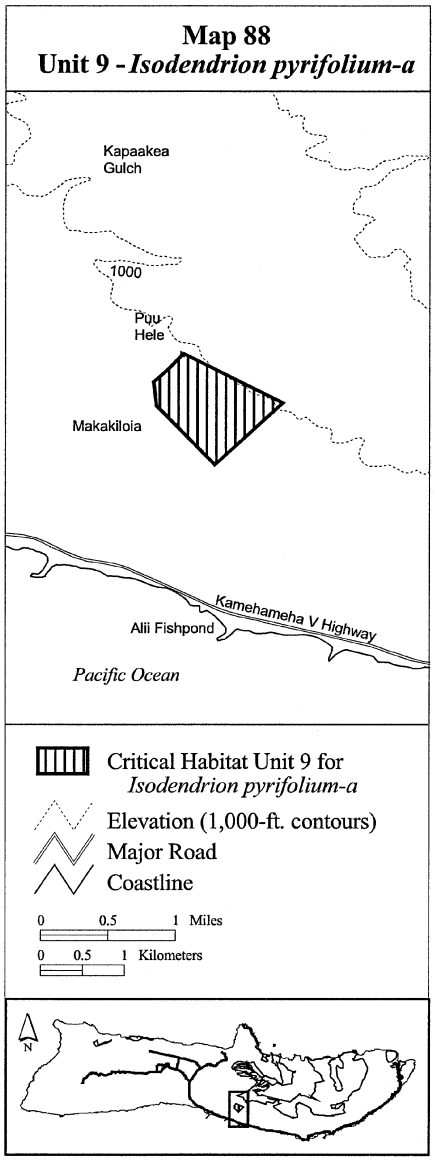


(88) Molokai 9—*Isodendrion pyrifolium*—a (107 ha; 264 ac)

(i) Unit consists of the following 5 boundary points: Start at 709515,

2334641; 710692, 2334052; 709880, 2333311; 709180, 2334022; 709149, 2334306; return to starting point.

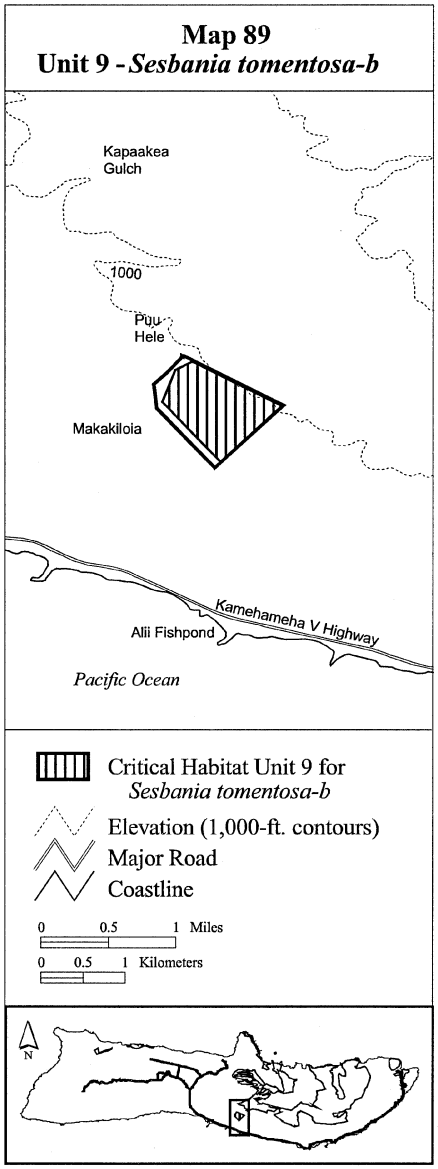
(ii) NOTE: Map 88 follows:



(89) Molokai 9—*Sesbania tomentosa*—b (88 ha; 217 ac)

(i) Unit consists of the following 5 boundary points: Start at 709608, 2334578; 710672, 2334051; 709945, 2333376; 709250, 2334093; 709408, 2334472; return to starting point.

(ii) NOTE: Map 89 follows:



(90) Table of Protected Species Within Each Critical Habitat Unit for Molokai

Unit name	Species occupied	Species unoccupied
Molokai 1—T*etramolopium rockii*—a		*Tetramolopium rockii.*
Molokai 2—*Sesbania tomentosa*—a	*Sesbania tomentosa.*	
Molokai 2—*Tetramolopium rockii*—b	*Tetramolopium rockii.*	
Molokai 3—*Centaurium sebaeoides*—a	*Centaurium sebaeoides.*	
Molokai 3—*Tetramolopium rockii*—c	*Tetramolopium rockii.*	
Molokai 4—*Brighamia rockii*—a		*Brighamia rockii.*
Molokai 4—*Hibiscus arnottianus* ssp. *immaculatus*		*Hibiscus arnottianus* ssp. *immaculatus.*—a.
Molokai 5—*Brighamia rockii*—b		*Brighamia rockii.*
Molokai 5—*Peucedanum sandwicense*—a	*Peucedanum sandwicense.*	
Molokai 5—*Tetramolopium rockii*—d		*Tetramolopium rockii.*
Molokai 6—*Adenophorus periens*—a		*Adenophorus periens.*
Molokai 6—*Adenophorus periens*—b		*Adenophorus periens.*
Molokai 6—*Adenophorus periens*—c		*Adenophorus periens.*
Molokai 6—*Alectryon macrococcus*—a	*Alectryon macrococcus.*	
Molokai 6—*Bidens wiebkei*—a	*Bidens wiebkei.*	
Molokai 6—*Brighamia rockii*—c		*Brighamia rockii.*
Molokai 6—*Brighamia rockii*—d	*Brighamia rockii.*	
Molokai 6—*Brighamia rockii*—e	*Brighamia rockii.*	
Molokai 6—*Canavalia molokaiensis*—a		*Canavalia molokaiensis.*
Molokai 6—*Canavalia molokaiensis*—b		*Canavalia molokaiensis.*
Molokai 6—*Canavalia molokaiensis*—c	*Canavalia molokaiensis.*	
Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—a		*Clermontia oblongifolia* ssp. *brevipes.*
Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—b		*Clermontia oblongifolia* ssp. *brevipes.*
Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—c		*Clermontia oblongifolia* ssp. *brevipes.*
Molokai 6—*Ctenitis squamigera*—a	*Ctenitis squamigera.*	
Molokai 6—*Cyanea dunbarii*—a		*Cyanea dunbarii.*
Molokai 6—*Cyanea dunbarii*—b	*Cyanea dunbarii.*	
Molokai 6—*Cyanea dunbarii*—c		*Cyanea dunbarii.*
Molokai 6—*Cyanea grimesiana* ssp. *grimesiana*—a	*Cyanea grimesiana* ssp. *grimesiana.*	
Molokai 6—*Cyanea mannii*—a	*Cyanea mannii.*	
Molokai 6—*Cyanea mannii*—b	*Cyanea mannii.*	
Molokai 6—*Cyanea mannii*—c	*Cyanea mannii.*	
Molokai 6—*Cyanea mannii*—d	*Cyanea mannii.*	
Molokai 6—*Cyanea mannii*—e	*Cyanea mannii.*	
Molokai 6—*Cyanea procera*—a	*Cyanea procera.*	
Molokai 6—*Cyanea procera*—b		*Cyanea procera.*
Molokai 6—*Diellia erecta*—a	*Diellia erecta.*	
Molokai 6—*Diplazium molokaiense*—a		*Diplazium molokaiense.*
Molokai 6—*Eugenia koolauensis*—a		*Eugenia koolauensis.*
Molokai 6—*Flueggea neowawraea*—a		*Flueggea neowawraea.*
Molokai 6—*Hesperomannia arborescens*—a	*Hesperomannia arborescens.*	
Molokai 6—*Hesperomannia arborescens*—b		*Hesperomannia arborescens.*
Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—b.		*Hibiscus arnottianus* ssp. *immaculatus.*
Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—c	*Hibiscus arnottianus* ssp. *immaculatus.*	
Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—d.	*Hibiscus arnottianus* ssp. *immaculatus.*	
Molokai 6—*Ischaemum byrone*—a	*Ischaemum byrone.*	
Molokai 6—*Ischaemum byrone*—b	*Ischaemum byrone.*	
Molokai 6—*Labordia triflora*—a		*Labordia triflora.*
Molokai 6—*Labordia triflora*—b		*Labordia triflora.*
Molokai 6—*Labordia triflora*—c		*Labordia triflora.*
Molokai 6—*Labordia triflora*—d	*Labordia triflora.*	
Molokai 6—*Lysimachia maxima*—a		*Lysimachia maxima.*
Molokai 6—*Lysimachia maxima*—b		*Lysimachia maxima.*
Molokai 6—*Lysimachia maxima*—c		*Lysimachia maxima.*
Molokai 6—*Mariscus fauriei*—a		*Mariscus fauriei.*
Molokai 6—*Mariscus fauriei*—b	*Mariscus fauriei.*	
Molokai 6—*Melicope mucronulata*—a		*Melicope mucronulata.*
Molokai 6—*Melicope mucronulata*—b		*Melicope mucronulata.*
Molokai 6—*Melicope mucronulata*—c		*Melicope mucronulata.*
Molokai 6—*Melicope mucronulata*—d		*Melicope mucronulata.*
Molokai 6—*Melicope mucronulata*—e		*Melicope mucronulata.*
Molokai 6—*Melicope reflexa*—a		*Melicope reflexa.*
Molokai 6—*Melicope reflexa*—b	*Melicope reflexa.*	
Molokai 6—*Neraudia sericea*—a	*Neraudia sericea.*	
Molokai 6—*Peucedanum sandwicense*—b		*Peucedanum sandwicense.*
Molokai 6—*Peucedanum sandwicense*—c	*Peucedanum sandwicense.*	

Unit name	Species occupied	Species unoccupied
Molokai 6—*Phyllostegia mannii*—a		*Phyllostegia mannii.*
Molokai 6—*Phyllostegia mannii*—b		*Phyllostegia mannii.*
Molokai 6—*Phyllostegia mannii*—c		*Phyllostegia mannii.*
Molokai 6—*Plantago princeps*—a		*Plantago princeps.*
Molokai 6—*Pteris lidgatei*—a		*Pteris lidgatei.*
Molokai 6—*Schiedea lydgatei*—a	*Schiedea lydgatei.*	
Molokai 6—*Schiedea lydgatei*—b	*Schiedea lydgatei.*	
Molokai 6—*Schiedea nuttallii*—a		*Schiedea nuttallii.*
Molokai 6—*Schiedea nuttallii*—b		*Schiedea nuttallii.*
Molokai 6—*Schiedea sarmentosa*—a	*Schiedea sarmentosa.*	
Molokai 6—*Schiedea sarmentosa*—b	*Schiedea sarmentosa.*	
Molokai 6—*Silene alexandri*—a		*Silene alexandri.*
Molokai 6—*Silene alexandri*—b		*Silene alexandri.*
Molokai 6—*Silene lanceolata*—a	*Silene lanceolata.*	
Molokai 6—*Spermolepis hawaiiensis*—a	*Spermolepis hawaiiensis.*	
Molokai 6—*Stenogyne bifida*—a	*Stenogyne bifida.*	
Molokai 6—*Zanthoxylum hawaiiense*—a	*Zanthoxylum hawaiiense.*	
Molokai 7—*Bidens wiebkei*—b	*Bidens wiebkei.*	
Molokai 8—*Bidens wiebkei*—c		*Bidens wiebkei.*
Molokai 9—*Isodendrion pyrifolium*—a		*Isodendrion pyrifolium.*
Molokai 9—*Hibiscus brackenridgei*—a		*Hibiscus brackenridgei.*
Molokai 9—*Sesbania tomentosa*—b		*Sesbania tomentosa.*

(d) *Plants on Molokai; Constituent elements.*

(1) *Flowering plants.*

FAMILY APIACEAE: ***Peucedanum sandwicense*** (MAKOU)

Molokai 5—*Peucedanum sandwicense*—a, Molokai 6—*Peucedanum sandwicense*—b, and Molokai 6—*Peucedanum sandwicense*—c, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Peucedanum sandwicense* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliff habitats in brown soil and talus in *Chamaesyce celastroides* var. *amplectans-Chenopodium oahuense* coastal dry shrubland or *Diospyros sandwicensis* forest with one or more of the following associated native species: *Artemisia australis, Dianella sandwicensis, Eragrostis* sp., *Lepidium bidentatum* var. *o-waihiense, Melanthera integrifolia, Metrosideros polymorpha, Osteomeles anthyllidifolia, Peperomia remyi, Pittosporum halophilum, Plectranthus parviflorus, Plumbago zeylanica, Portulaca lutea, Pritchardia hillebrandii, Reynoldsia sandwicensis, Santalum ellipticum, Scaevola sericea, Schiedea globosa, Senna gaudichaudii,* or *Sida fallax*; and

(ii) Elevations between 0 and 724 m (0 and 2,375 ft).

FAMILY APIACEAE: ***Spermolepis hawaiiensis*** (NCN)

Molokai 6—*Spermolepis hawaiiensis*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Spermolepis hawaiiensis* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridge crests and gulch slopes in dry to mesic shrublands with one or more of the following associated native species: *Dodonaea viscosa, Leptecophylla tameiameiae*, or *Metrosideros polymorpha*; and

(ii) Elevations between 589 and 972 m (1,932 and 3,188 ft).

FAMILY ASTERACEAE: ***Bidens wiebkii*** (KOOKOOLAU)

Molokai 6—*Bidens wiebkei*—a, Molokai 7—*Bidens wiebkei*—b, and Molokai 8—*Bidens wiebkei*—c, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Bidens wiebkii* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes in *Metrosideros polymorpha*-dominated mesic shrublands or dry or mesic *Metrosideros polymorpha-Leptechophylla tameiameiae* lowland shrubland with one or more of the following associated native species: *Antidesma platyphyllum, Dodonaea viscosa, Lysimachia* sp., *Nestegis sandwicensis, Phyllanthus distichus, Pisonia* sp., *Psydrax odorata,* or *Scaevola gaudichaudii*; and

(ii) Elevations between 8 and 1,199 m (26 and 3,933 ft).

FAMILY ASTERACEAE: ***Hesperomannia arborescens*** (NCN)

Molokai 6—*Hesperomannia arborescens*—a and Molokai 6—*Hesperomannia arborescens*—b, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Hesperomannia arborescens* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes or ridges in wet *Metrosideros polymorpha-Dicranopteris linearis* lowland forest or mesic *Diospyros sandwicensis-Metrosideros polymorpha* lowland forest transition zones with one or more of the following associated native species: *Antidesma* sp., *Boehmeria grandis, Broussaisia arguta, Cibotium glaucum, Cheirodendron* sp., *Clermontia pallida, Coprosma* sp., *Cyrtandra* sp., *Diplopterygium pinnatum, Elaphoglossum* sp., *Freycinetia arborea, Hedyotis* sp., *Ilex anomala, Myrsine* sp., *Nephrolepis exaltata, Nestegis sandwicensis, Pipturus* sp., *Psychotria mauiensis, Smilax melastomifolia, Thelypteris* sp., *Urera glabra,* or *Wikstroemia* sp.; and

(ii) Elevations between 175 and 959 m (574 and 3,146 ft).

FAMILY ASTERACEAE: ***Tetramolopium rockii*** (NCN)

Molokai 1—*Tetramolopium rockii*—a, Molokai 2—*Tetramolopium rockii*—b, Molokai 3—*Tetramolopium rockii*—c, and Molokai 5—*Tetramolopium rockii*—d, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Tetramolopium rockii* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Hardened calcareous sand dunes or ash-covered basalt in the coastal spray zone or coastal dry shrubland and grassland with one or more of the following associated native species: *Diospyros sandwicensis, Fimbristylis cymosa, Heliotropium anomalum, Melanthera integrifolia, Metrosideros polymorpha, Osteomeles anthyllidifolia, Pouteria sandwicensis, Psydrax odorata, Scaevola* sp., *Sida fallax,* or *Sporobolus virginicus*; and

(ii) Elevations between 0 and 198 m (0 and 649 ft).

FAMILY CAMPANULACEAE: ***Brighamia rockii*** (PUA ALA)

Molokai 4—*Brighamia rockii*—a, Molokai 5—*Brighamia rockii*—b, Molokai 6—*Brighamia rockii*—c, Molokai 6—*Brighamia rockii*—d, and Molokai 6—*Brighamia rockii*—e, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Brighamia rockii* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rock crevices on steep basalt sea cliffs, often within the spray zone, in coastal dry or mesic forest, *Eragrostis variabilis* mixed coastal cliff community, or shrubland, or *Pritchardia* sp. coastal mesic forest with one or more of the following associated native species: *Artemisia* sp., *Bidens* sp., *Carex wahuensis* ssp. *wahuensis, Chamaesyce celastroides* var. *amplectans, Cocculus orbiculatus, Cyrtomium falcatum, Cyperus phleoides* ssp. *phleoides, Dianella sandwicensis, Diospyros sandwicensis, Hedyotis littoralis, Lepidium bidentatum* var. *o-waihiense, Metrosideros polymorpha, Osteomeles anthyllidifolia, Pittosporum halophilum, Pandanus tectorius, Peucedanum sandwicensis, Phymatosorus grossus, Pritchardia hillebrandii, Psydrax odorata, Reynoldsia sandwicensis, Scaevola sericea, Schiedea globosa, Senna gaudichaudii, Tetramolopium* sp., or *Wikstroemia uva-ursi*; and

(ii) Elevations between 0 and 671 m (0 and 2,201 ft).

FAMILY CAMPANULACEAE: ***Clermontia oblongifolia*** SSP. ***brevipes*** (OHA WAI)

Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—a, Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—b, and Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—c, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Clermontia oblongifolia* ssp. *brevipes* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Shallow soil on gulch slopes in wet *Metrosideros polymorpha*-dominated forests with one or more of the following associated plant species: *Broussaisia arguta, Cheirodendron trigynum, Cibotium* spp., *Hedyotis terminalis*, or *Melicope* sp.; and

(ii) Elevations between 770 and 1,508 m (2,526 and 4,946 ft).

FAMILY CAMPANULACEAE: ***Cyanea dunbarii*** (HAHA)

Molokai 6—*Cyanea dunbarii*—a, Molokai 6—*Cyanea dunbarii*—b, and Molokai 6—*Cyanea dunbarii*—c, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyanea dunbarii* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streambanks on moderate to steep slopes in mesic to wet *Dicranopteris linearis-Metrosideros polymorpha* lowland forest with one or more of the following associated native plant species: *Charpentiera obovata, Cheirodendron trigynum, Clermontia kakeana, Diplazium sandwichianum, Freycinetia arborea, Perrottetia sandwicensis*, or *Pipturus albidus*; and

(ii) Elevations between 560 and 1,067 m (1,837 and 3,500 ft).

FAMILY CAMPANULACEAE: ***Cyanea grimesiana*** SSP. ***grimesiana*** (HAHA)

Molokai 6—*Cyanea grimesiana* ssp. *grimesiana*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Cyanea grimesiana* ssp. *grimesiana* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliffs or mesic forest often dominated by *Metrosideros polymorpha* or *Metrosideros polymorpha* and *Acacia koa*, with one or more of the following associated native species: *Antidesma* sp., *Bobea* sp., *Cibotium* sp., *Cyrtandra* sp., *Dicranopteris linearis, Doodia* sp., *Freycinetia arborea, Nephrolepis* sp., *Psychotria* sp., *Syzygium sandwicensis*, or *Xylosma* sp.; and

(ii) Elevations between 94 and 1,324 m (308 and 4,343 ft).

FAMILY CAMPANULACEAE: ***Cyanea mannii*** (HAHA)

Molokai 6—*Cyanea mannii*—a, Molokai 6—*Cyanea mannii*—b, Molokai 6—*Cyanea mannii*—c, Molokai 6—*Cyanea mannii*—d, and Molokai 6—*Cyanea mannii*—e, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyanea mannii* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) The sides of deep gulches in *Metrosideros polymorpha*-dominated montane mesic forests with one or more of the following associated native species: *Dicranopteris linearis, Vaccinium* sp., or *Wikstroemia* sp.; and

(ii) Elevations between 497 and 1,093 m (1,630 and 3,585 ft).

FAMILY CAMPANULACEAE: ***Cyanea procera*** (HAHA)

Molokai 6—*Cyanea procera*—a and Molokai 6—*Cyanea procera*—b, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyanea procera* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Walls of steep gulches in wet *Metrosideros polymorpha*-dominated lowland mixed forest with one or more

of the following associated native species: *Asplenium* spp., *Brousaissia arguta, Coprosma ochracea, Cyanea* sp., *Cyrtandra macrocalyx, Dicranopteris linearis, Pipturus albidus, Pisonia* spp., *Scaevola procera,* or *Touchardia latifolia;* and

(ii) Elevations between 331 and 1,209 m (1,086 and 3,966 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea lydgatei*** (NCN)

Molokai 6—*Schiedea lydgatei*—a and Molokai 6—*Schiedea lydgatei*—b, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Schiedea lydgatei* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridges in dry to mesic grassland, shrubland, and forest with scattered native trees with one or more of the following associated native species: *Dicranopteris linearis, Dodonaea viscosa, Leptecophylla tameiameiae,* or *Metrosideros polymorpha*; and

(ii) Elevations between 545 and 1,047 m (1,788 and 3,434 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea nuttallii*** (NCN)

Molokai 6—*Schiedea nuttallii*—a and Molokai 6—*Schiedea nuttallii*—b, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Schiedea nuttallii* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streamside grottos in wet *Metrosideros polymorpha-Cheirodendron trigynum* forest with one or more of the following associated native species: *Asplenium lobulatum, Asplenium macraei, Asplenium unilaterale, Cyrtandra hawaiiensis, Thelypteris sandwicensis,* or *Vandenboschia davallioides*; and

(ii) Elevations between 988 and 1,341 m (3,241 and 4,398 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea sarmentosa*** (NCN)

Molokai 6—*Schiedea sarmentosa*—a and Molokai 6—*Schiedea sarmentosa*—b, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Schiedea sarmentosa* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep or gentle to moderate slopes in *Metrosideros polymorpha-Dodonaea viscosa* lowland dry or mesic shrubland, or dry to mesic forest dominated by *Metrosideros polymorpha* and/or *Diospyros sandwicensis* with one or more of the following associated native species: *Alyxia oliviformis, Bidens menziesii, Carex meyenii, Chamaesyce* sp., *Chenopodium oahuense, Leptecophylla tameiameiae, Lipochaeta rockii, Nestegis sandwicensis, Nothocestrum latifolium, Pleomele auwahiensis, Sida fallax,* or *Sophora chrysophylla*; and

(ii) Elevations between 316 and 1,020 m (1,036 and 3,346 ft).

FAMILY CARYOPHYLLACEAE: ***Silene alexandri*** (NCN)

Molokai 6—*Silene alexandri*—a and Molokai 6—*Silene alexandri*—b, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Silene alexandri* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Moderate to steep slopes or cliffs in dry forest with one or more of the following associated native species: *Bidens menziesii, Carex wahuensis, Diospyros sandwicensis, Dodonaea viscosa, Leptecophylla tameiameiae,* or *Schiedea* spp.; and

(ii) Elevations between 316 and 1,020 m (1,036 and 3,346 ft).

FAMILY CARYOPHYLLACEAE: ***Silene lanceolata*** (NCN)

Molokai 6—*Silene lanceolata*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes

critical habitat for *Silene lanceolata* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulch slopes, ridge tops, and cliffs in dry to mesic shrubland with one or more of the following associated native species: *Bidens menziesii, Carex wahuensis, Diospyros sandwicensis, Dodonaea viscosa, Dubautia linearis, Leptecophylla tameiameiae, Metrosideros polymorpha,* or *Schiedea* spp.; and

(ii) Elevations between 581 and 1,043 m (1,906 and 3,421 ft).

FAMILY CYPERACEAE: ***Mariscus fauriei*** (NCN)

Molokai 6—*Mariscus fauriei*—a and Molokai 6—*Mariscus fauriei*—b, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Mariscus fauriei* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Lava substrate or *Diospyros sandwicensis*-dominated lowland dry forests with one or more of the following associated native species: *Peperomia* sp., *Psydrax odorata,* or *Rauvolfia sandwicensis;* and

(ii) Elevations between 436 and 887 m (1,430 and 2,909 ft).

FAMILY EUPHORBIACEAE: ***Flueggea neowawraea*** (MEHAMEHAME)

Molokai 6—*Flueggea neowawraea*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Flueggea neowawraea* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulches in mesic forest; and

(ii) Elevations between 450 and 618 m (1,476 and 2,027 ft).

FAMILY FABACEAE: ***Canavalia molokaiensis*** (AWIKIWIKI)

Molokai 6—*Canavalia molokaiensis*—a, Molokai 6—*Canavalia molokaiensis*—b, and Molokai 6—*Canavalia molokaiensis*—c, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Canavalia molokaiensis* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Exposed sites, both dry and mesic, on steep slopes in *Metrosideros polymorpha-Dodonaea viscosa* lowland shrubland and mesic shrublands with one or more of the following associated native species: *Artemisia* sp., *Chamaesyce* sp., *Coprosma* sp., *Leptecophylla tameiameiae,* or *Wikstroemia* sp.; and

(ii) Elevations between 503 and 1,013 m (1,650 and 3,323 ft).

FAMILY FABACEAE: ***Sesbania tomentosa*** (OHAI)

Molokai 2—*Sesbania tomentosa*—a and Molokai 9—*Sesbania tomentosa*—b, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Sesbania tomentosa* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Windswept slopes, sea cliffs and weathered basaltic slopes in *Scaevola sericea* coastal dry shrubland with one or more of the following associated native species: *Dodonaea viscosa, Jacquemontia ovalifolia* ssp. *sandwicensis, Melanthera integrifolia,* or *Sida fallax;* and

(ii) Elevations between 0 and 318 m (0 and 1,043 ft).

FAMILY GENTIANACEAE: ***Centaurium sebaeoides*** (AWIWI)

Molokai 3—*Centaurium sebaeoides*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Centaurium sebaeoides* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Volcanic or clay soils or cliffs in arid coastal areas with one or more of the following associated native species: *Artemisia* sp., *Bidens* sp., *Chamaesyce*

celastroides, Cyperus phleoides, Dodonaea viscosa, Fimbristylis cymosa, Heteropogon contortus, Jacquemontia ovalifolia, Lipochaeta heterophylla, Lipochaeta succulenta, Lycium sandwicense, Lysimachia mauritiana, Melanthera integrifolia, Panicum fauriei, Panicum torridum, Scaevola sericea, Schiedea globosa, Sida fallax, or *Wikstroemia uva-ursi;* and

(ii) Elevations between 0 and 39 m (0 and 128 ft).

FAMILY LAMIACEAE: ***Phyllostegia mannii*** (NCN)

Molokai 6—*Phyllostegia mannii*—a, Molokai 6—*Phyllostegia mannii*—b, and Molokai 6—*Phyllostegia mannii*—c, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Phyllostegia mannii* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Shaded sites in sometimes foggy and windswept, wet, open *Metrosideros polymorpha*-dominated montane forest with a native shrub and *Cibotium* sp. understory with one or more of the following associated native species: *Asplenium* sp., *Broussaisia arguta, Cheirodendron trigynum, Coprosma ochracea, Cyanea* sp., *Dicranopteris linearis, Hedyotis hillebrandii, Pipturus albidus, Pouteria sandwicensis, Psychotria* sp., *Touchardia latifolia, Vaccinium* sp., or *Wikstroemia* sp.; and

(ii) Elevations between 603 and 1,508 m (1,978 and 4,946 ft).

FAMILY LAMIACEAE: ***Stenogyne bifida*** (NCN)

Molokai 6—*Stenogyne bifida*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Stenogyne bifida* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulch slopes in *Metrosideros polymorpha*-dominated montane mesic to wet forest with one or more of the following associated native species: *Broussaisia arguta, Cheirodendron trigynum, Cibotium* sp., *Cyanea* sp., *Dicranopteris linearis, Dodonaea viscosa, Hedyotis hillebrandii, Hedyotis* sp., *Leptecophylla tameiameiae, Pipturus albidus, Pouteria sandwicensis, Psychotria* sp., *Vaccinium* sp., or *Wikstroemia* sp.; and

(ii) Elevations between 467 and 1,300 m (1,532 and 4,264 ft).

FAMILY LOGANIACEAE: ***Labordia triflora*** (KAMAKAHALA)

Molokai 6—*Labordia triflora*—a, Molokai 6—*Labordia triflora*—b, Molokai 6—*Labordia triflora*—c, and Molokai 6—*Labordia triflora*—d, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Labordia triflora* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mixed mesic *Metrosideros polymorpha* forest, with one or more of the following associated native species: *Coprosma* sp., *Myrsine lessertiana, Nephrolepis exaltata, Pouteria sandwicensis, Sadleria cyatheoides,* or *Tetraplasandra hawaiensis;* and

(ii) Elevations between 207 and 1,097 m (679 and 3,598 ft).

FAMILY MALVACEAE: ***Hibiscus arnottianus*** SSP. ***immaculatus*** (KOKIO KEOKEO)

Molokai 4—*Hibiscus arnottianus* ssp. *immaculatus*—a, Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—b, Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—c, and Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—d, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Hibiscus arnottianus* ssp. *immaculatus* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep sea cliffs in mesic forests with one or more of the following associated native species: *Antidesma platyphyllum, Athyrium* spp., *Boehmeria grandis, Cyanea grimesiana, Diospyros sandwicensis, Metrosideros polymorpha, Pipturus* spp., *Psydrax odorata,* or *Urera glabra;* and

(ii) Elevations between 8 and 813 m (26 and 2,667 ft).

FAMILY MALVACEAE: ***Hibiscus brackenridgei*** (MAU HAO HELE)

Molokai 9—*Hibiscus brackenridgei*—a, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Hibiscus brackenridgei* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes in lowland dry forest and shrubland; and

(ii) Elevations between 174 to 317 m (571 to 1,040 ft).

FAMILY MYRTACEAE: ***Eugenia koolauensis*** (NIOI)

Molokai 6—*Eugenia koolauensis*—a, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Eugenia koolauensis* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rocky gulches or gentle slopes with deep soil with one or more of the following associated native species: *Diospyros sandwicensis, Erythrina sandwicensis, Nesoluma polynesicum, Nestegis sandwicensis, Nototrichium sandwicensis, Reynoldsia sandwicensis,* or *Xylosma hawaiiense;* and

(ii) Elevations between 475 and 992 m (1,558 and 3,254 ft).

FAMILY PLANTAGINACEAE: ***Plantago princeps*** (LAUKAHI KUAHIWI)

Molokai 6—*Plantago princeps*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Plantago princeps* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streambanks in *Metrosideros polymorpha* lowland mesic forest with one or more of the following associated native species: *Coprosma* sp., *Cyanea* sp., *Dodonaea viscosa, Dryopteris unidentata, Pipturus albidus,* or *Wikstroemia oahuensis;* and

(ii) Elevations between 1,008 and 1,213 m (3,306 and 3,979 ft).

FAMILY POACEAE: ***Ischaemum byrone*** (HILO ISCHAEMUM)

Molokai 6—*Ischaemum byrone*—a and Molokai 6—*Ischaemum byrone*—b, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Ischaemum byrone* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Coastal dry shrubland or *Artemisia* sp. cliff communities, near the ocean, among rocks or basalt cliffs or talus slopes with one or more of the following associated native species: *Bidens molokaiensis, Fimbristylis cymosa, Hedyotis littoralis, Lysimachia mauritiana,* or *Pandanus tectorius;* and

(ii) Elevations between sea level and 235 m (0 and 771 ft).

FAMILY PRIMULACEAE: ***Lysimachia maxima*** (NCN)

Molokai 6—*Lysimachia maxima*—a, Molokai 6—*Lysimachia maxima*—b, and Molokai 6—*Lysimachia maxima*—c, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Lysimachia maxima* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest with one or more of the following associated native species: *Dubautia* sp., *Hedyotis* sp., *Ilex anomala, Psychotria* sp., or *Vaccinium* sp.; and

(ii) Elevations between 446 and 1,329 m (1,463 and 4,359 ft).

FAMILY RUTACEAE: ***Melicope mucronulata*** (ALANI)

Molokai 6—*Melicope mucronulata*—a, Molokai 6—*Melicope mucronulata*—b, Molokai 6—*Melicope mucronulata*—c, Molokai 6—*Melicope mucronulata*—d, and Molokai 6—*Melicope mucronulata*—e, identified in the legal description in

paragraph (c) of this section, constitute critical habitat for *Melicope mucronulata* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, west- or north-facing slopes in mesic *Diospyros sandwicensis-Metrosideros polymorpha* forest, *Metrosideros polymorpha-Dodonaea viscosa* shrubland, or *Metrosideros polymorpha-Leptechophylla tameiameiae* shrubland with one or more of the following associated native species: *Alyxia oliviformis, Alphitonia ponderosa, Coprosma foliosa, Hedyotis terminalis, Melicope hawaiensis, Myrsine lanaiensis, Nestegis sandwicensis, Ochrosia compta, Osteomeles anthyllidifolia, Phyllanthus* sp., *Pittosporum* sp., *Pleomele auwahiensis,* or *Psychotria mariniana;* and

(ii) Elevations between 354 and 1,015 m (1,161 and 3,329 ft).

FAMILY RUTACEAE: ***Melicope reflexa*** (ALANI)

Molokai 6—*Melicope reflexa*—a Molokai 6—*Melicope reflexa*—b, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Melicope reflexa* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Wet *Metrosideros polymorpha*-dominated forest with native trees such as *Cheirodendron* sp., with one or more of the following associated native species: *Alyxia oliviformis, Antidesma platyphyllum, Cheirodendron trigynum, Cibotium* spp., *Dicranopteris linearis, Freycinetia arborea,* or *Syzygium sandwicensis;* and

(ii) Elevations between 319 and 1,508 m (1,046 and 4,946 ft).

FAMILY RUTACEAE: ***Zanthoxylum hawaiiense*** (AE)

Molokai 6—*Zanthoxylum hawaiiense*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Zanthoxylum hawaiiense* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulch slopes in mesic *Metrosideros polymorpha* or *Diospyros sandwicensis* forest with one or more of the following associated native species: *Alyxia oliviformis, Dodonaea viscosa, Leptecophylla tameiameiae, Myrsine lanaiensis, Nestegis sandwicensis, Osteomeles anthyllidifolia, Pleomele auwahiensis,* or *Psychotria* sp.; and

(ii) Elevations between 754 and 1,084 m (2,473 and 3,555 ft).

FAMILY SAPINDACEAE: ***Alectryon macrococcus*** VAR. ***macrococcus*** (MAHOE)

Molokai 6—*Alectryon macrococcus*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Alectryon macrococcus* var. *macrococcus* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Talus slopes or gulches within dry or mesic lowland forest with one or more of the following associated native species: *Dodonaea viscosa, Lipochaeta* sp., *Myrsine* sp., *Nestegis sandwicensis, Nothocestrum* sp., *Pleomele* sp., *Psychotria* sp., or *Streblus pendulina;* and

(ii) Elevations between 616 and 1,026 m (2,020 and 3,365 ft).

FAMILY URTICACEAE: ***Neraudia sericea*** (NCN)

Molokai 6—*Neraudia sericea*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Neraudia sericea* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulch slopes and gulch bottoms in lowland dry to mesic *Metrosideros polymorpha-Dodonaea viscosa-Leptechophylla tameiameiae* shrubland or forest with one or more of the following associated native species: *Alyxia oliviformis, Coprosma* sp., *Hedyotis* sp., or *Pleomele auwahiensis;* and

(ii) Elevations between 701 and 1,043 m (2,299 and 3,421 ft).

FAMILY VIOLACEAE: ***Isodendrion pyrifolium*** (WAHINE NOHO KULA)

Molokai 9—*Isodendrion pyrifolium*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Isodendrion pyrifolium* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry shrublands with one or more of the following associated native species: *Bidens menziesii, Dodonaea viscosa, Heteropogon contortus,* or *Leptecophylla tameiameiae;* and

(ii) Elevations between 173 and 322 m (567 and 1,056 ft).

(2) *Ferns and fern allies.*

FAMILY ADIANTACEAE: ***Pteris lidgatei*** (NCN)

Molokai 6—*Pteris lidgatei*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Pteris lidgatei* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep streambanks in wet forest, and

(ii) Elevations between 160 and 1,251 m (525 and 4,103 ft).

FAMILY ASPLENIACEAE: ***Ctenitis squamigera*** (PAUOA)

Molokai 6—*Ctenitis squamigera*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Ctenitis squamigera* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mesic forest and gulch slopes with one or more of the following associated native species: *Carex meyenii, Diospyros sandwicensis, Dryopteris unidentata, Metrosideros polymorpha, Nephrolepis exaltata, Nestegis sandwicensis, Pleomele auwahiensis, Pouteria sandwicensis,* or *Xylosma hawaiiense;* and

(ii) Elevations between 757 and 1,133 m (2,483 and 3,716 ft).

FAMILY ASPLENIACEAE: ***Diellia erecta*** (ASPLENIUM-LEAVED DIELLIA)

Molokai 6—*Diellia erecta*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Diellia erecta* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mixed mesic forest and mesic *Diospyros sandwicensis* forest with one or more of the following associated native species: *Alyxia oliviformis, Bobea* sp., *Coprosma foliosa, Dodonaea viscosa, Dryopteris unidentata, Dubautia linearis* ssp. *opposita, Leptecophylla tameiameiae, Metrosideros polymorpha, Myrsine* sp., *Ochrosia compta, Pleomele auwahiensis, Psychotria* sp., *Sophora chrysophylla, Syzygium sandwicensis,* or *Wikstroemia* sp.; and

(ii) Elevations between 716 and 1,046 m (2,348 and 3,431 ft).

FAMILY ASPLENIACEAE: ***Diplazium molokaiense*** (NCN)

Molokai 6—*Diplazium molokaiense*—a, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Diplazium molokaiense* on Molokai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, rocky, wooded gulch walls in wet forests; and

(ii) Elevations between 97 and 1,349 m (318 and 4,425 ft).

FAMILY GRAMMITIDACEAE: ***Adenophorous periens*** (PENDANT KIHI FERN)

Molokai 6—*Adenophorus periens*—a, Molokai 6—*Adenophorus periens*—b, and Molokai 6—*Adenophorus periens*—c, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Adenophorous periens* on Molokai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

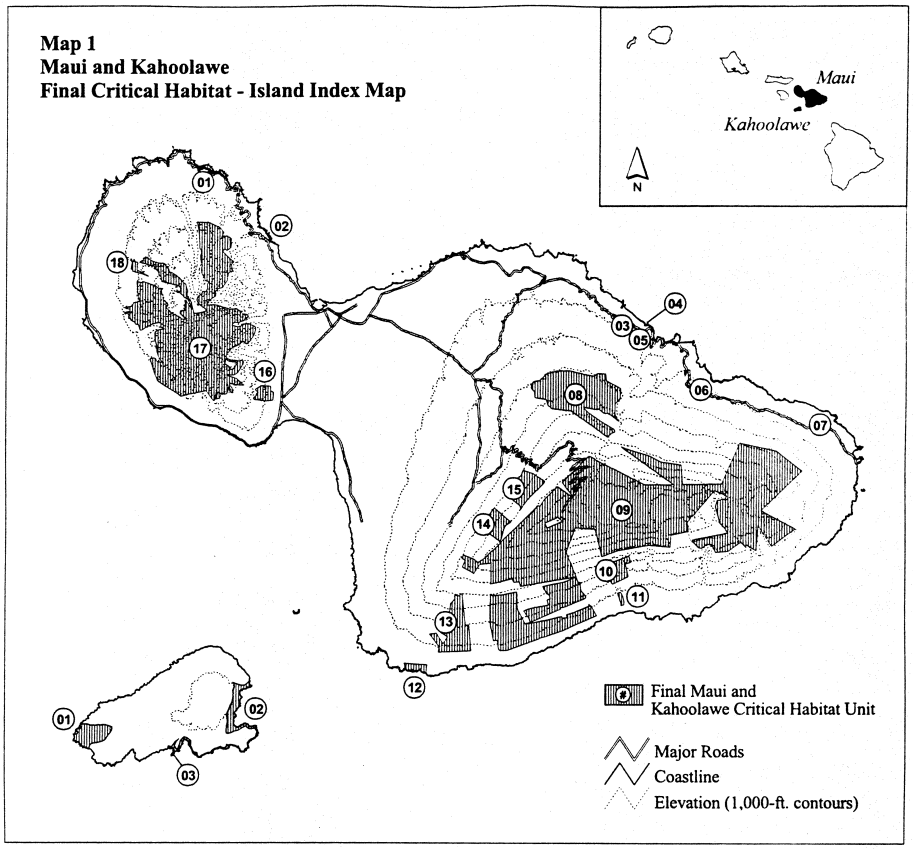
(i) Well-developed, closed canopy providing deep shade and high humidity on *Metrosideros polymorpha* trunks, in *Metrosideros polymorpha-Myrsine lessertiana* forest with one or more of the following associated native species: *Anoectochilus sandvicensis, Broussasia arguta, Cheirodendron trigynum, Cibotium glaucum, Coprosma ochracea, Cyanea* sp., *Cyrtandra* sp., *Dicranopteris linearis, Freycinetia arborea, Hedyotis terminalis, Ilex anomala, Labordia hirtella, Leptecophylla tameiameiae, Machaerina angustifolia, Melicope* sp., *Psychotria* spp., *Stenogyne kamehamehae, Syzygium sandwicensis, Vaccinium calycinum,* or *Viola chamissoniana* ssp. *robusta;* and

(ii) Elevations between 816 and 1,508 m (2,676 and 4,946 ft).

(e) *Maps and critical habitat unit descriptions for the islands of Maui and Kahoolawe, HI.* The following sections contain the legal descriptions of the critical habitat units designated for the islands of Maui and Kahoolawe, HI. Existing manmade features and structures within the boundaries of the mapped areas, such as buildings; roads; aqueducts and other water system features—including but not limited to pumping stations, irrigation ditches, pipelines, siphons, tunnels, water tanks, gaging stations, intakes, reservoirs, diversions, flumes, and wells; existing trails; campgrounds and their immediate surrounding landscaped area; scenic lookouts; remote helicopter landing sites; existing fences; telecommunications towers and associated structures and equipment; electrical transmission lines and distribution, and communication facilities and regularly maintained associated rights-of-way and access ways; radars and telemetry antennas; missile launch sites; arboreta and gardens; heiau (indigenous places of worship or shrines) and other archaeological sites; airports; other paved areas; and lawns and other rural residential landscaped areas do not contain the primary constituent elements described for each species in paragraph (f) of this section, except for the elevation primary constituent element, and therefore are not included in the critical habitat designations.

(1) *Maui.* Critical habitat units are described below. Coordinates in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following map shows the general locations of the 136 critical habitat units designated on the island of Maui.

(i) NOTE: Map 1—Index map—follows:

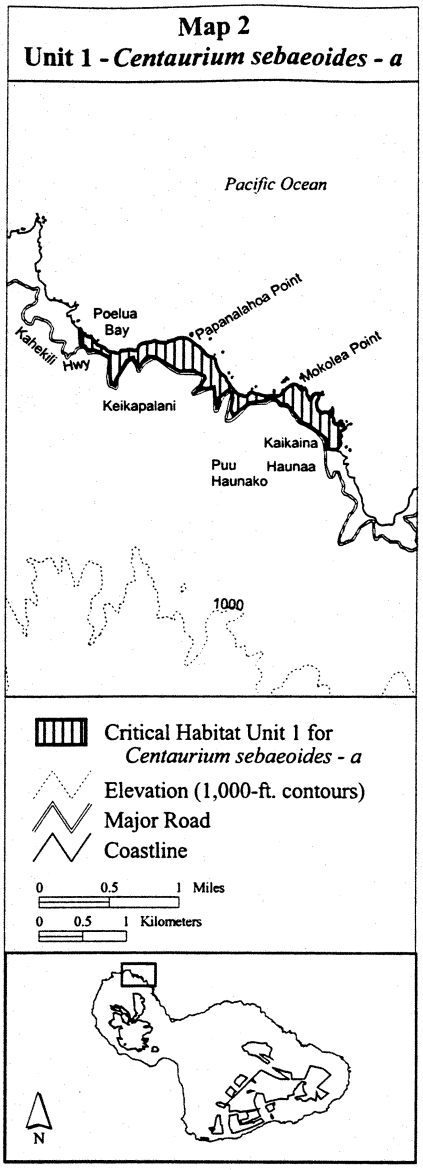


(ii) Maui 1—*Centaurium sebaeoides*—a (71 ha; 174 ac).

(A) Unit consists of the following 93 boundary points and the intermediate coastline: Start at 751112, 2326166; 754099, 2324756; 754053, 2324754; 754053, 2324754; 753973, 2324765; 753966, 2324891; 753771, 2325042; 753692, 2325076; 753669, 2325092; 753524, 2325277; 753446, 2325286; 753446, 2325286; 753388, 2325342; 753388, 2325342; 753381, 2325348; 753372, 2325347; 753367, 2325346; 753332, 2325352; 753325, 2325353; 753299, 2325342; 753270, 2325329; 753238, 2325323; 753221, 2325320; 753189, 2325314; 753085, 2325303; 753085, 2325303; 753085, 2325303; 753077, 2325294; 753069, 2325293; 752894, 2325153; 752865, 2325227; 752886, 2325361; 752884, 2325378; 752893, 2325419; 752878, 2325426; 752833, 2325446; 752831, 2325447; 752829, 2325444; 752827, 2325442; 752732, 2325363; 752732, 2325363; 752732, 2325363; 752725, 2325288; 752717, 2325268; 752711, 2325276; 752692, 2325301; 752671, 2325491; 752670, 2325500; 752591, 2325471; 752535, 2325474; 752535, 2325474; 752535, 2325474; 752475, 2325438; 752566, 2325581; 752580, 2325602; 752559, 2325613; 752455, 2325669; 752444, 2325674; 752441, 2325676; 752268, 2325670; 751992, 2325839; 751990, 2325840; 751898, 2325842; 751835, 2325769; 751804, 2325709; 751734, 2325826; 751730, 2325834; 751715, 2325826; 751714, 2325826; 751713, 2325825; 751653, 2325794; 751526, 2325562; 751530, 2325511; 751525, 2325510; 751492, 2325530; 751475, 2325549; 751475, 2325549; 751461, 2325680; 751461, 2325835; 751461, 2325837; 751461, 2325837; 751461, 2325837; 751273, 2325927; 751251, 2325921; 751218, 2325911; 751187, 2325954; 751173, 2325973; 751154, 2325968; 751123,

2325981; 751122, 2325980; 751117, 2326075; 751115, 2326111; 751112, 2326166; return to starting point.

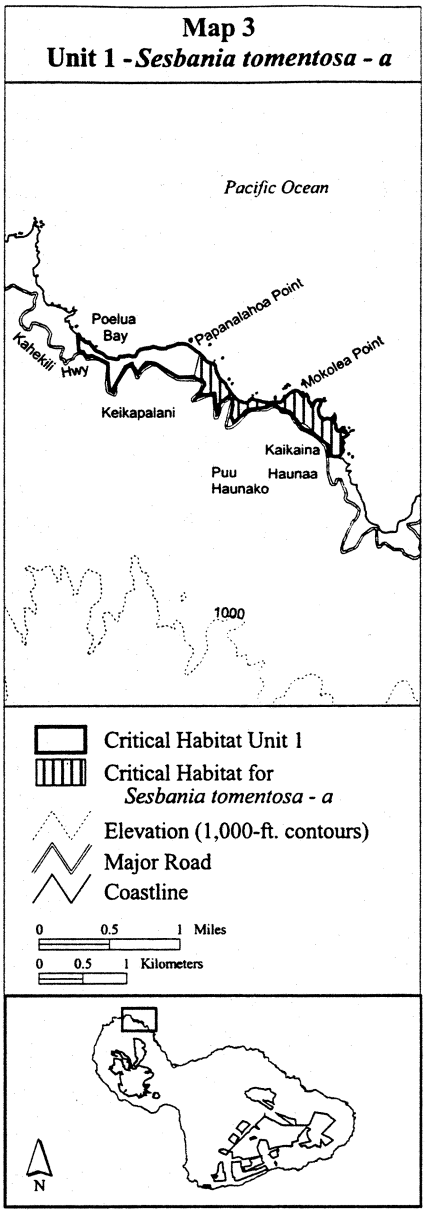
(B) NOTE: Map 2 follows:



(iii) Maui 1—*Sesbania tomentosa*—a (38 ha; 94 ac).

(A) Unit consists of the following 54 boundary points and the intermediate coastline: Start at 752505, 2325951; 754099, 2324756; 754053, 2324754; 754053, 2324754; 753994, 2324762; 753966, 2324896; 753718, 2325117; 753656, 2325144; 753550, 2325285; 753389, 2325341; 753388, 2325342; 753384, 2325343; 753372, 2325347; 753346, 2325356; 753332, 2325352; 753332, 2325352; 753325, 2325353; 753300, 2325342; 753299, 2325342; 753238, 2325323; 753231, 2325321; 753221, 2325320; 753036, 2325303; 752894, 2325153; 752865, 2325227; 752886, 2325361; 752882, 2325396; 752886, 2325418; 752878, 2325426; 752850, 2325454; 752833, 2325446; 752829, 2325444; 752753, 2325409; 752739, 2325369; 752739, 2325369; 752732, 2325363; 752730, 2325339; 752708, 2325279; 752708, 2325280; 752700, 2325498; 752671, 2325491; 752593, 2325471; 752535, 2325474; 752535, 2325474; 752487, 2325446; 752567, 2325578; 752566, 2325581; 752559, 2325613; 752549, 2325657; 752455, 2325669; 752443, 2325670; 752444, 2325674; 752504, 2325951; 752505, 2325951; return to starting point.

(B) NOTE: Map 3 follows:

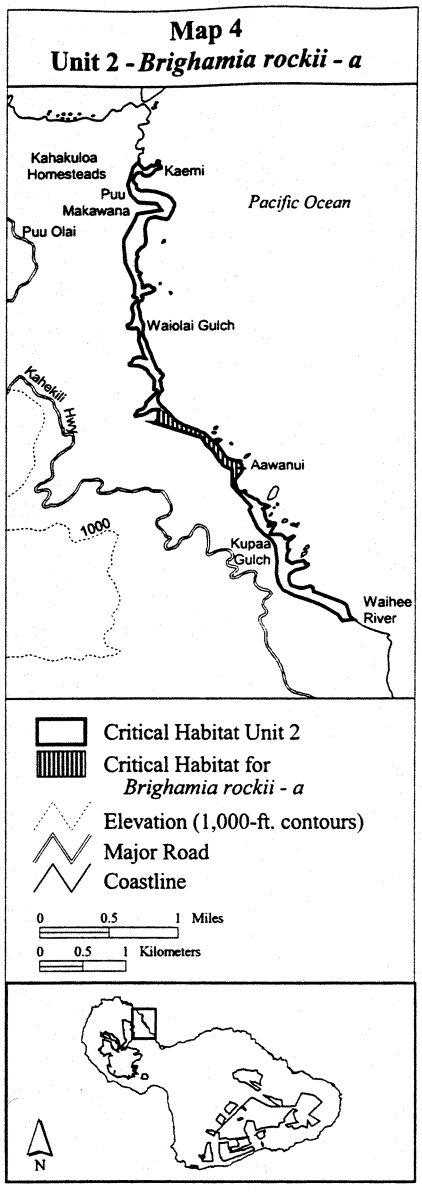


(iv) Maui 2—*Brighamia rockii*—a (6 ha; 14 ac).

(A) Unit consists of the following 29 boundary points and the intermediate coastline: Start at 757892, 2319612; 757868, 2319613; 757861, 2319624; 757862,

2319690; 757862, 2319690; 757794, 2319720; 757771, 2319757; 757765, 2319756; 757726, 2319818; 757700, 2319852; 757688, 2319868; 757645, 2319908; 757645, 2319908; 757626, 2319942; 757626, 2319942; 757371, 2320024; 757371, 2320024; 757333, 2320052; 757268, 2320058; 757266, 2320058; 757272, 2320064; 757278, 2320070; 757288, 2320086; 757296, 2320107; 757292, 2320137; 757312, 2320161; 757387, 2320119; 757388, 2320120; 757892, 2319612; return to starting point.

(B) NOTE: Map 4 follows:

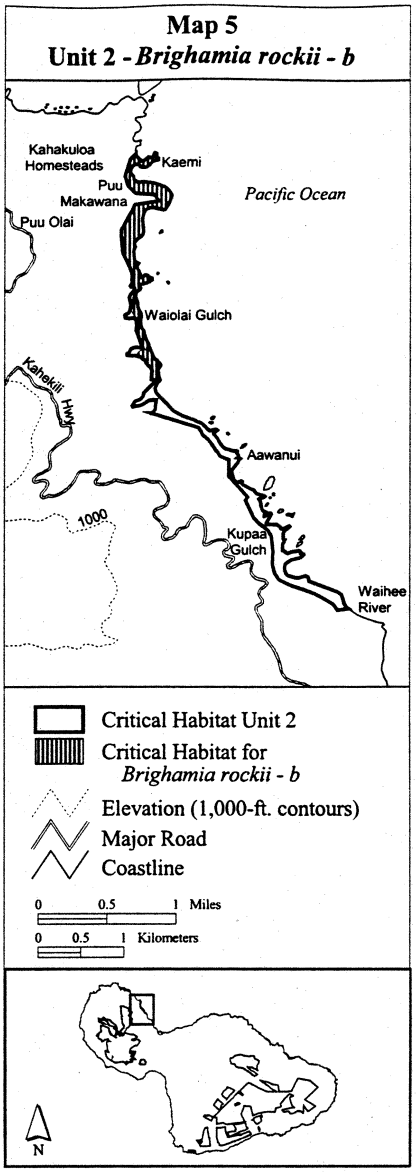


(v) Maui 2—*Brighamia rockii*—b (17 ha; 42 ac).

(A) Unit consists of the following 47 boundary points and the intermediate coastline: Start at 757133, 2322103; 757301, 2320290; 757290, 2320310; 757286, 2320313; 757279, 2320318; 757264, 2320330; 757264, 2320389; 757248, 2320415; 757247,

2320416; 757241, 2320425; 757211, 2320467; 757209, 2320469; 757193, 2320485; 757174, 2320504; 757148, 2320525; 757157, 2320542; 757190, 2320563; 757188, 2320568; 757183, 2320582; 757167, 2320630; 757140, 2320705; 757145, 2320746; 757139, 2320784; 757137, 2320794; 757102, 2320856; 757102, 2320918; 757125, 2321030; 757126, 2321037; 757127, 2321042; 757107, 2321136; 757104, 2321149; 757082, 2321207; 757031, 2321316; 757019, 2321449; 757019, 2321491; 757069, 2321583; 757108, 2321658; 757109, 2321661; 757127, 2321696; 757312, 2321727; 757278, 2321778; 757132, 2321784; 757073, 2321843; 757052, 2321922; 757086, 2322052; 757133, 2322103; 757133, 2322103; return to starting point.

(B) NOTE: Map 5 follows:

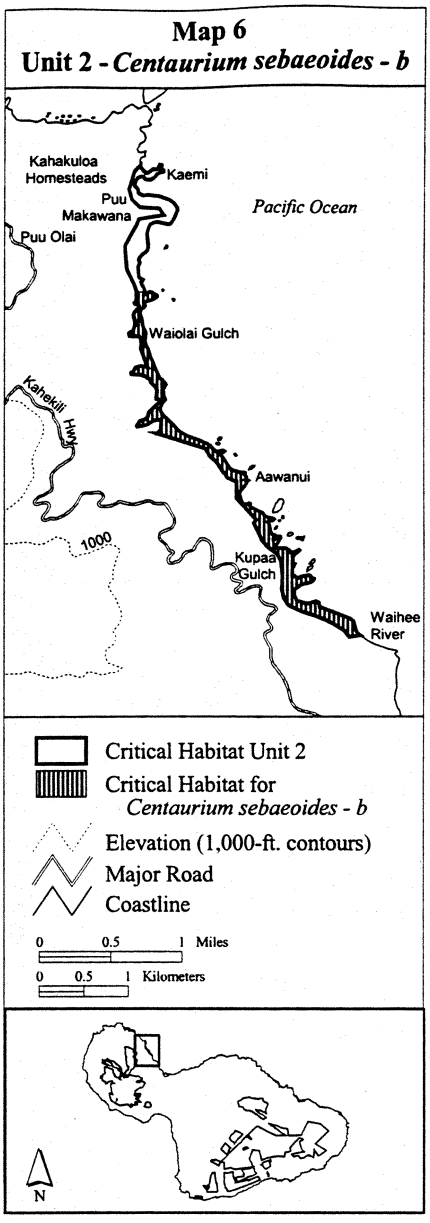


(vi) Maui 2—*Centaurium sebaeoides*—b (27 ha; 66 ac).

(A) Unit consists of the following 106 boundary points and the intermediate coastline: Start at 757167, 2321145; 758803, 2318519; 758719, 2318510; 758683, 2318554; 758580, 2318620; 758534, 2318638; 758445, 2318673; 758344, 2318706; 758258,

2318748; 758224, 2318802; 758205, 2318870; 758210, 2318971; 758198, 2319087; 758172, 2319133; 758100, 2319189; 758059, 2319236; 757995, 2319372; 758013, 2319396; 758013, 2319396; 758013, 2319396; 757861, 2319563; 757861, 2319624; 757862, 2319690; 757794, 2319720; 757771, 2319757; 757727, 2319831; 757700, 2319852; 757658, 2319885; 757645, 2319908; 757626, 2319942; 757371, 2320024; 757267, 2320057; 757268, 2320058; 757272, 2320064; 757287, 2320085; 757291, 2320139; 757294, 2320164; 757273, 2320164; 757242, 2320158; 757201, 2320133; 757176, 2320121; 757115, 2320110; 757111, 2320116; 757132, 2320151; 757173, 2320169; 757193, 2320192; 757198, 2320217; 757211, 2320231; 757274, 2320293; 757290, 2320303; 757286, 2320313; 757285, 2320316; 757279, 2320318; 757259, 2320326; 757259, 2320339; 757260, 2320395; 757247, 2320416; 757243, 2320423; 757241, 2320425; 757213, 2320452; 757209, 2320469; 757205, 2320484; 757193, 2320485; 757184, 2320485; 757169, 2320504; 757152, 2320502; 757143, 2320509; 757089, 2320510; 757068, 2320516; 757067, 2320526; 757083, 2320535; 757093, 2320554; 757100, 2320567; 757138, 2320580; 757188, 2320568; 757191, 2320567; 757183, 2320582; 757171, 2320606; 757168, 2320622; 757167, 2320630; 757156, 2320685; 757142, 2320706; 757148, 2320745; 757139, 2320784; 757136, 2320795; 757126, 2320807; 757087, 2320802; 757054, 2320808; 757050, 2320822; 757051, 2320829; 757079, 2320846; 757094, 2320878; 757098, 2320909; 757087, 2320942; 757083, 2320967; 757092, 2320990; 757125, 2321030; 757127, 2321033; 757126, 2321037; 757124, 2321043; 757096, 2321047; 757094, 2321055; 757103, 2321074; 757107, 2321136; 757107, 2321139; 757167, 2321145; return to starting point.

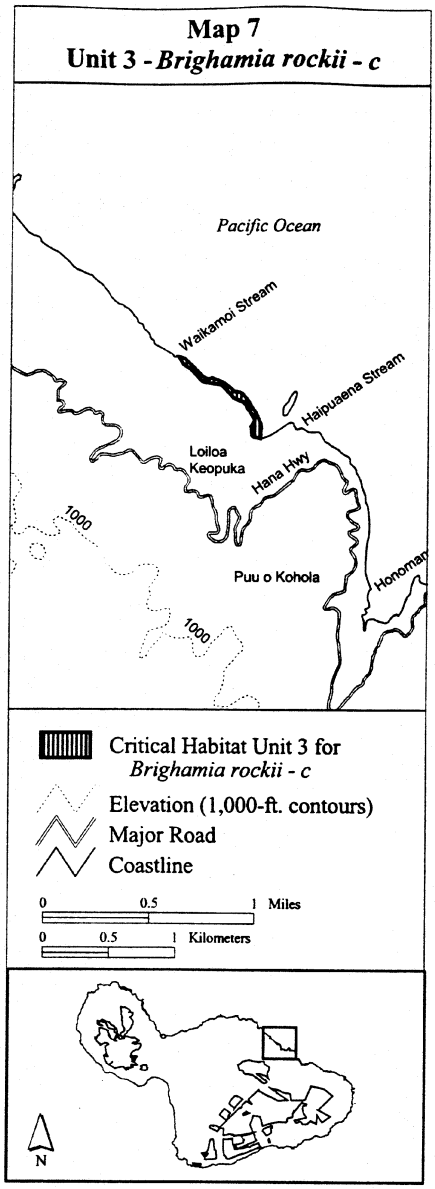
(B) NOTE: Map 6 follows:



(vii) Maui 3—*Brighamia rockii*—c (4 ha; 9 ac).

(A) Unit consists of the following 31 boundary points and the intermediate coastline: Start at 793379, 2311347; 793988, 2310722; 793937, 2310735; 793921, 2310750; 793918, 2310815; 793926, 2310829; 793943, 2310864; 793938, 2310875; 793940, 2310881; 793940, 2310881; 793940, 2310881; 793940, 2310881; 793940, 2310881; 793931, 2310894; 793906, 2310935; 793885, 2310962; 793883, 2310973; 793856, 2311001; 793796, 2311026; 793781, 2311037; 793781, 2311037; 793768, 2311053; 793690, 2311134; 793635, 2311144; 793569, 2311152; 793544, 2311158; 793534, 2311167; 793459, 2311247; 793399, 2311287; 793362, 2311345; 793379, 2311347; return to starting point.

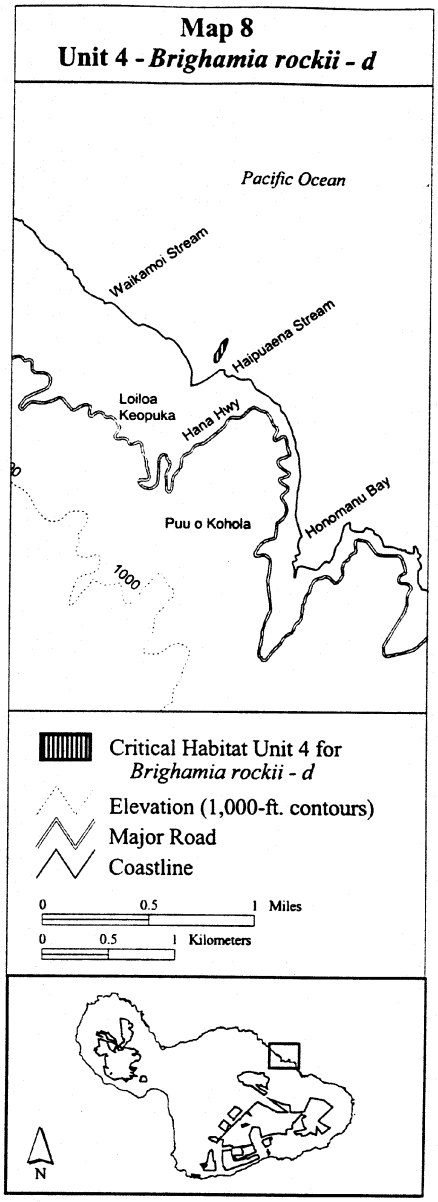
(B) NOTE: Map 7 follows:



(viii) Maui 4—*Brighamia rockii*—d (1 ha; 2 ac).

(A) Unit consists of the entire offshore island located at approximately: 794212, 2310986.

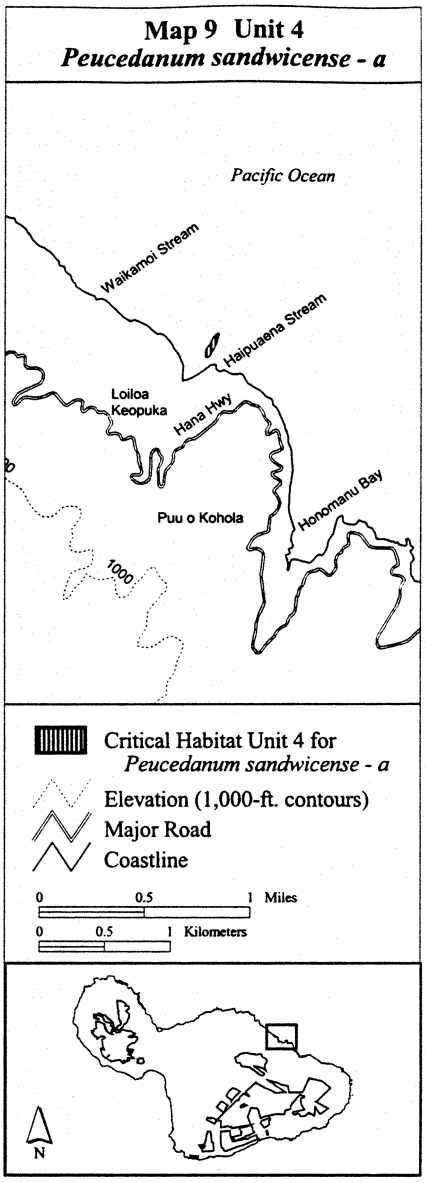
(B) NOTE: Map 8 follows:



(ix) Maui 4—*Peucedanum sandwicense*—a (1 ha; 2 ac).

(A) Unit consists of the entire offshore island located at approximately: 794212, 2310986.

(B) NOTE: Map 9 follows:

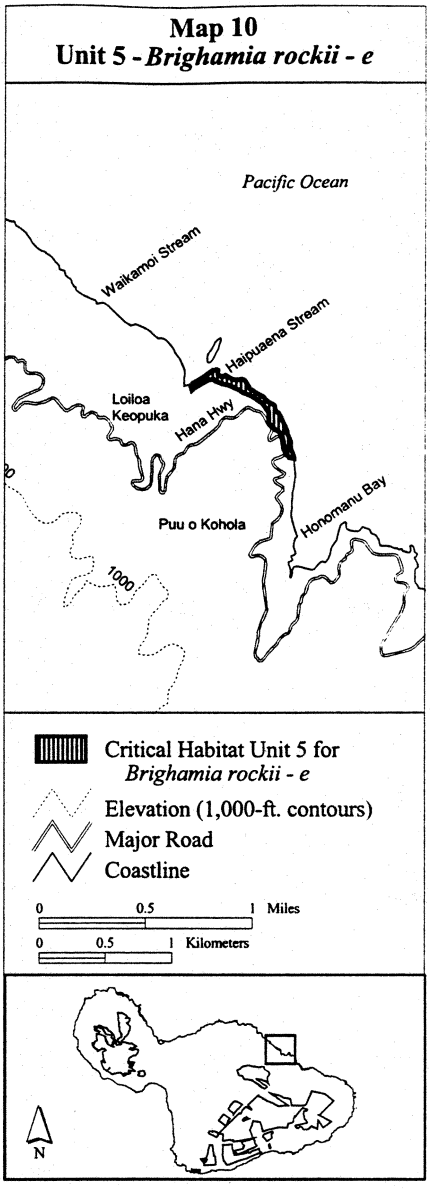


(x) Maui 5—*Brighamia rockii*—e (6 ha; 15 ac).

(A) Unit consists of the following 46 boundary points and the intermediate coastline: Start at 794814, 2310166; 794778, 2310176; 794770, 2310182; 794756, 2310193; 794756, 2310217; 794742, 2310240; 794739, 2310261; 794733, 2310282; 794733,

2310282; 794733, 2310282; 794732, 2310303; 794731, 2310313; 794728, 2310324; 794728, 2310324; 794728, 2310324; 794721, 2310337; 794712, 2310344; 794707, 2310362; 794706, 2310368; 794706, 2310368; 794706, 2310368; 794665, 2310393; 794660, 2310404; 794652, 2310413; 794642, 2310419; 794632, 2310428; 794632, 2310428; 794629, 2310436; 794625, 2310446; 794622, 2310523; 794573, 2310595; 794492, 2310647; 794439, 2310671; 794411, 2310685; 794335, 2310724; 794326, 2310728; 794266, 2310740; 794242, 2310754; 794222, 2310764; 794210, 2310773; 794177, 2310772; 794066, 2310705; 794050, 2310688; 794040, 2310715; 794043, 2310738; 794043, 2310738; return to starting point.

(B) NOTE: Map 10 follows:

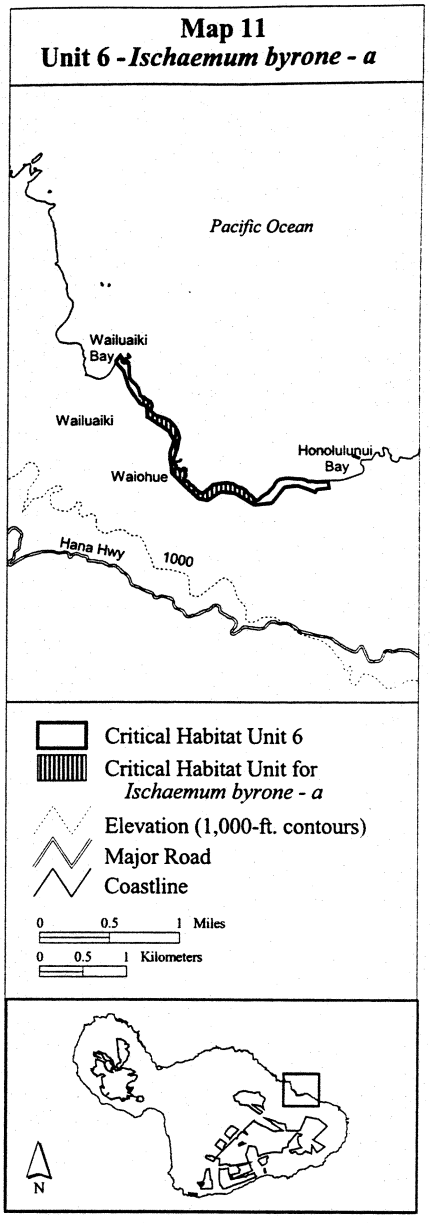


(xi) Maui 6—*Ischaemum byrone*—a (17 ha; 43 ac).

(A) Unit consists of the following 34 boundary points and the intermediate coastline: Start at 799822, 2306499; 801132, 2305284; 801131, 2305234; 801117, 2305232; 801048, 2305275; 800891, 2305373; 800731, 2305387; 800581, 2305284; 800517,

2305297; 800481, 2305305; 800472, 2305307; 800472, 2305307; 800265, 2305505; 800166, 2305599; 800166, 2305599; 800166, 2305599; 800159, 2305694; 800147, 2305843; 800147, 2305849; 800147, 2305849; 800190, 2305990; 800138, 2306094; 800138, 2306094; 800060, 2306148; 800001, 2306188; 800001, 2306188; 799917, 2306240; 799879, 2306263; 799874, 2306386; 799796, 2306425; 799795, 2306425; 799795, 2306425; 799795, 2306425; 799822, 2306499; return to starting point.

(B) NOTE: Map 11 follows:

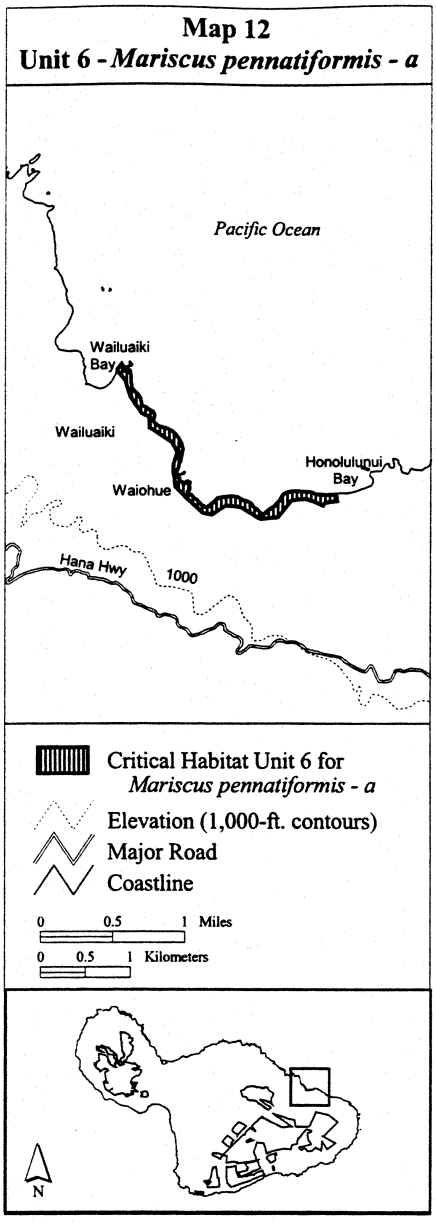


(xii) Maui 6—*Mariscus pennatiformis*—a (30 ha; 75 ac).

(A) Unit consists of the following 47 boundary points and the intermediate coastline: Start at 799656, 2306630; 799606, 2306800; 799516, 2306902; 799516,

2306902; 801972, 2305512; 801972, 2305512; 801981, 2305435; 801840, 2305416; 801825, 2305385; 801734, 2305421; 801628, 2305464; 801558, 2305455; 801466, 2305444; 801320, 2305260; 801117, 2305232; 801067, 2305263; 801048, 2305275; 800896, 2305373; 800734, 2305390; 800586, 2305288; 800517, 2305297; 800517, 2305297; 800481, 2305305; 800481, 2305305; 800289, 2305482; 800265, 2305505; 800171, 2305595; 800159, 2305694; 800150, 2305769; 800147, 2305842; 800147, 2305843; 800171, 2305927; 800190, 2305990; 800156, 2306059; 800136, 2306101; 800060, 2306148; 800060, 2306148; 800001, 2306188; 799917, 2306240; 799917, 2306240; 799886, 2306262; 799874, 2306391; 799795, 2306425; 799789, 2306428; 799723, 2306527; 799721, 2306530; 799656, 2306630; return to starting point.

(B) NOTE: Map 12 follows:

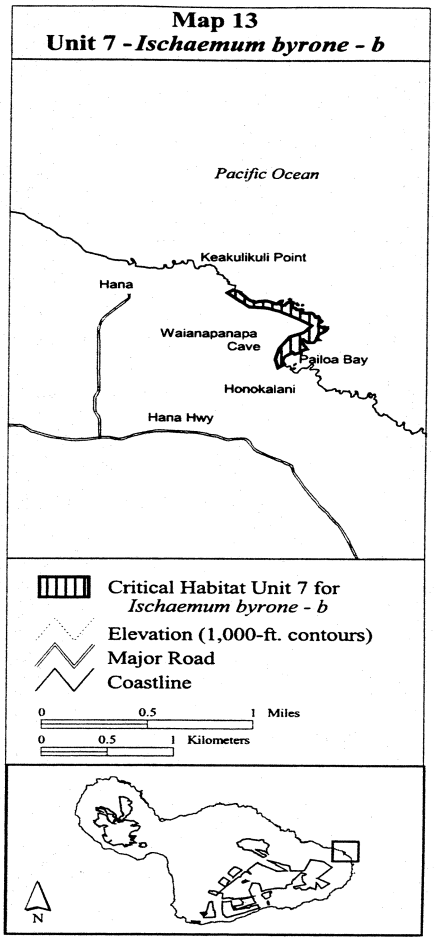


(xiii) Maui 7—*Ischaemum byrone*—b (11 ha; 27 ac).

(A) Unit consists of the following 15 boundary points and the intermediate coastline: Start at 811597, 2302341; 811983, 2301617; 811982, 2301617; 811936,

2301585; 811916, 2301671; 811945, 2301774; 812026, 2301885; 812133, 2301927; 812193, 2301995; 812092, 2302061; 811938, 2302135; 811849, 2302164; 811717, 2302172; 811546, 2302307; 811597, 2302341; return to starting point.; return to starting point.

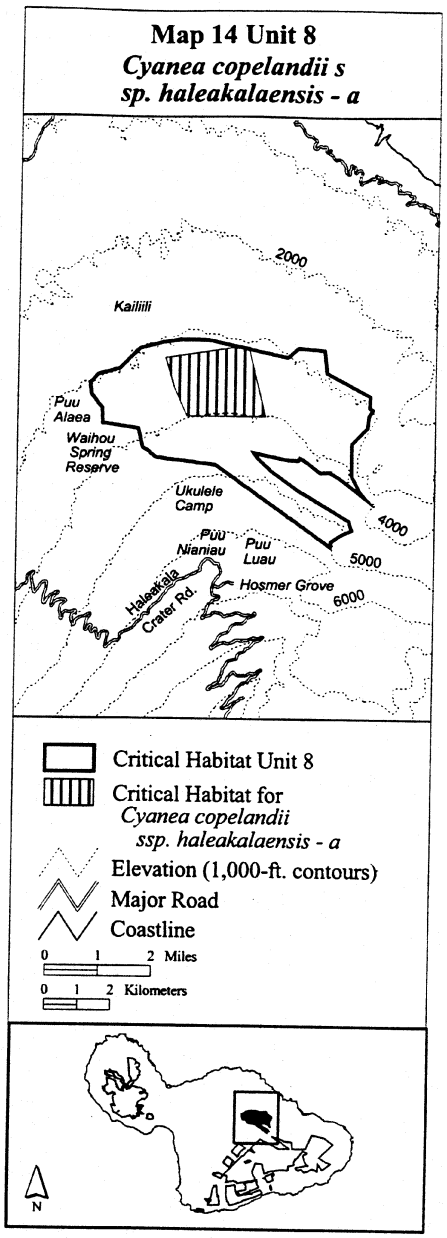
(B) NOTE: Map 13 follows:



(xiv) Maui 8—*Cyanea copelandii* ssp. *haleakalaensis*—a (501 ha; 1,238 ac).

(A) Unit consists of the following 10 boundary points: Start at 787682, 2306203; 787708, 2306208; 787902, 2306166; 787967, 2306151; 788003, 2306143; 788005, 2306134; 788521, 2304072; 786138, 2304072; 785730, 2304957; 785457, 2305842; return to starting point.

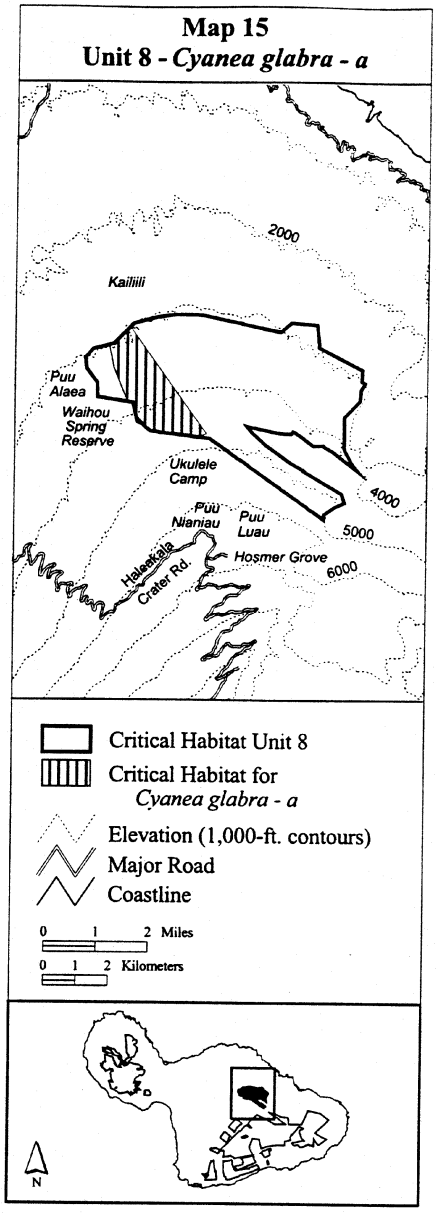
(B) NOTE: Map 14 follows:



(xv) Maui 8—*Cyanea glabra*—a (450 ha; 1,112 ac).

(A) Unit consists of the following 29 boundary points: Start at 783933, 2305472; 783933, 2305473; 783961, 2305480; 784075, 2305511; 784100, 2305536; 784575, 2306024; 784578, 2306020; 786938, 2302713; 786676, 2302611; 786661, 2302613; 786491, 2302633; 786339, 2302653; 786280, 2302660; 786106, 2302680; 786032, 2302690; 785884, 2302707; 785796, 2302718; 785680, 2302732; 785510, 2302753; 785357, 2302772; 785246, 2302785; 785242, 2302786; 785188, 2302835; 784760, 2303276; 784660, 2303678; 784487, 2303704; 784079, 2304760; 784008, 2305132; 783955, 2305292; return to starting point.

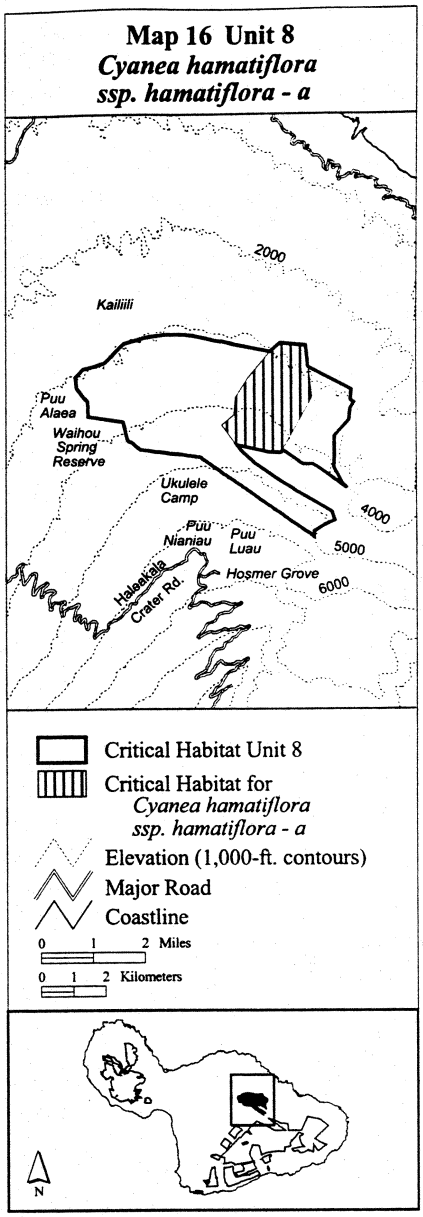
(B) NOTE: Map 15 follows:



(xvi) Maui 8—*Cyanea hamatiflora* ssp. *hamatiflora*—a (611 ha; 1,509 ac).

(A) Unit consists of the following 17 boundary points: Start at 789198, 2305890; 789215, 2305911; 789515, 2306162; 790281, 2306097; 790352, 2305511; 790360, 2305448; 790364, 2305412; 790482, 2304451; 789577, 2302791; 789530, 2302705; 789179, 2302726; 788179, 2302942; 788149, 2302948; 787716, 2303565; 788077, 2303893; 788127, 2304437; 788521, 2305059; return to starting point.

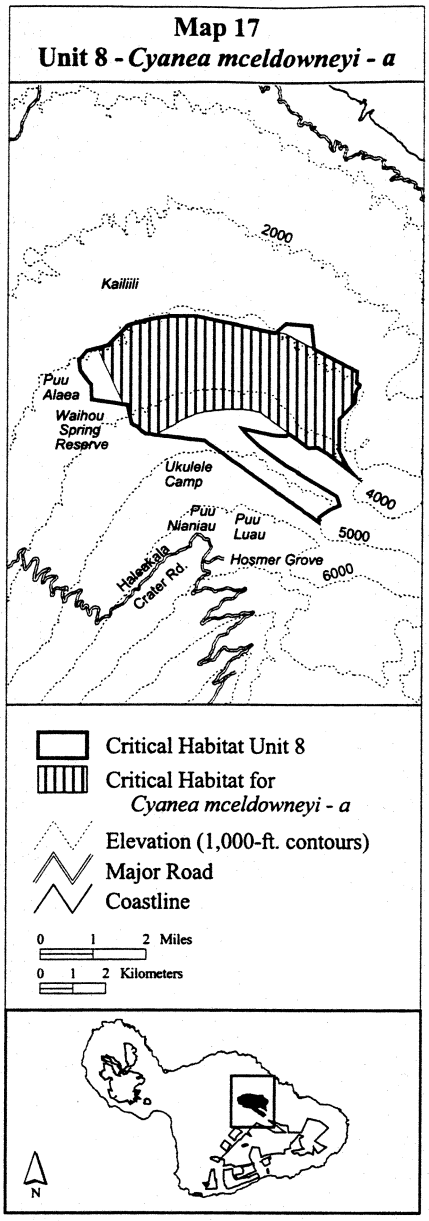
(B) NOTE: Map 16 follows:



(xvii) Maui 8—*Cyanea mceldowneyi*—a (2,127 ha; 5,256 ac).

(A) Unit consists of the following 56 boundary points: Start at 784578, 2306020; 784691, 2306136; 785400, 2306325; 785976, 2306411; 786598, 2306408; 786651, 2306403; 786837, 2306385; 787682, 2306203; 788005, 2306134; 789162, 2305885; 789198, 2305890; 789297, 2305904; 789492, 2305870; 790364, 2305412; 791696, 2304712; 791696, 2304710; 791671, 2304359; 791781, 2304297; 791780, 2304294; 791653, 2304101; 791627, 2303742; 791158, 2303230; 791158, 2302616; 791149, 2302250; 791407, 2301760; 791550, 2301582; 790766, 2302188; 790511, 2302348; 790503, 2302354; 790502, 2302354; 790198, 2302345; 790198, 2302344; 789827, 2302625; 788750, 2303441; 788540, 2303493; 788181, 2303547; 787765, 2303538; 787076, 2303479; 786758, 2303386; 786339, 2303226; 786095, 2303051; 785740, 2302863; 785554, 2302748; 785510, 2302753; 785357, 2302772; 785246, 2302785; 785206, 2302791; 785067, 2302898; 784947, 2303017; 784875, 2303047; 784803, 2303101; 784660, 2303678; 784551, 2303694; 783794, 2305326; 784087, 2305516; 784183, 2305615; return to starting point.

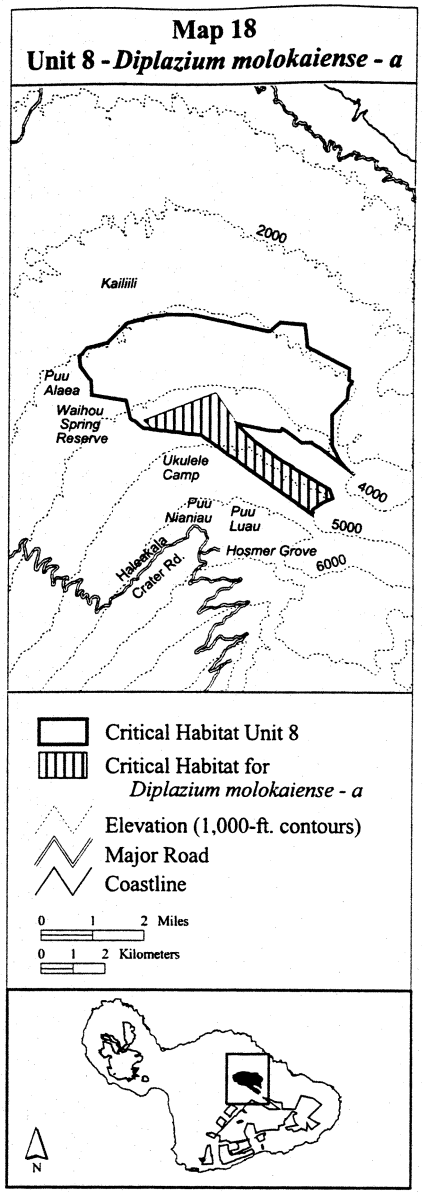
(B) NOTE: Map 17 follows:



(xviii) Maui 8—*Diplazium molokaiense*—a (574 ha; 1,419 ac).

(A) Unit consists of the following 91 boundary points: Start at 788179, 2302942; 788284, 2302790; 788714, 2302383; 789527, 2301802; 789911, 2301569; 789906, 2301556; 791083, 2300859; 791083, 2300858; 791164, 2300577; 790858, 2300440; 790545, 2300227; 790534, 2300210; 790469, 2300111; 790425, 2300143; 790396, 2300164; 790270, 2300253; 790224, 2300285; 790198, 2300304; 790089, 2300382; 790055, 2300406; 790028, 2300425; 789912, 2300508; 789880, 2300531; 789749, 2300625; 789706, 2300655; 789647, 2300697; 789572, 2300752; 789531, 2300780; 789502, 2300802; 789471, 2300823; 789458, 2300832; 789393, 2300880; 789355, 2300906; 789339, 2300917; 789210, 2301009; 789182, 2301030; 789152, 2301051; 789038, 2301132; 789009, 2301153; 788981, 2301173; 788864, 2301257; 788834, 2301279; 788804, 2301301; 788692, 2301381; 788635, 2301422; 788527, 2301498; 788489, 2301526; 788434, 2301565; 788343, 2301629; 788313, 2301650; 788288, 2301668; 788190, 2301738; 788141, 2301774; 788117, 2301792; 787998, 2301875; 787965, 2301899; 787938, 2301919; 787838, 2301989; 787796, 2302020; 787771, 2302038; 787661, 2302116; 787622, 2302144; 787597, 2302162; 787492, 2302236; 787423, 2302286; 787307, 2302369; 787253, 2302408; 787141, 2302489; 787105, 2302512; 787079, 2302531; 787026, 2302568; 787026, 2302569; 786951, 2302579; 786738, 2302604; 786661, 2302613; 786491, 2302633; 786339, 2302653; 786280, 2302660; 786106, 2302680; 786032, 2302690; 785884, 2302707; 785796, 2302718; 785680, 2302732; 785510, 2302753; 785504, 2302754; 785239, 2303033; 785221, 2303039; 785230, 2303043; 785221, 2303052; 785248, 2303050; 787496, 2303927; return to starting point.

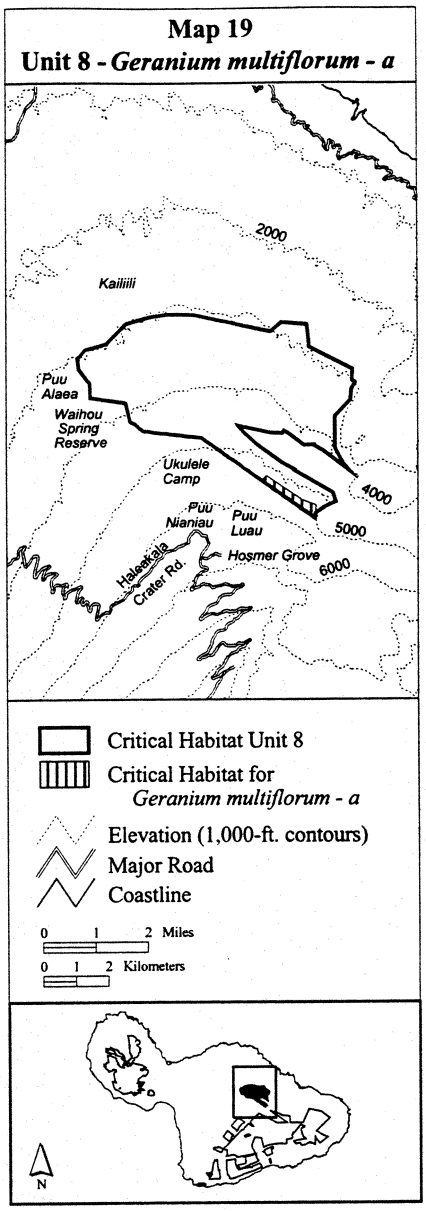
(B) NOTE: Map 18 follows:



(xix) Maui 8—*Geranium multiflorum*—a (46 ha; 113 ac).

(A) Unit consists of the following 32 boundary points: Start at 790534, 2300210; 790525, 2300071; 790425, 2300143; 790396, 2300164; 790270, 2300253; 790224, 2300285; 790198, 2300304; 790089, 2300382; 790055, 2300406; 790028, 2300425; 789912, 2300508; 789880, 2300531; 789749, 2300625; 789706, 2300655; 789647, 2300697; 789572, 2300752; 789531, 2300780; 789502, 2300802; 789466, 2300826; 789393, 2300880; 789355, 2300906; 789339, 2300917; 789210, 2301009; 789182, 2301030; 789152, 2301051; 789038, 2301132; 789009, 2301153; 788981, 2301173; 788881, 2301245; 789034, 2301393; 790128, 2300638; 790551, 2300470; return to starting point.

(B) NOTE: Map 19 follows:

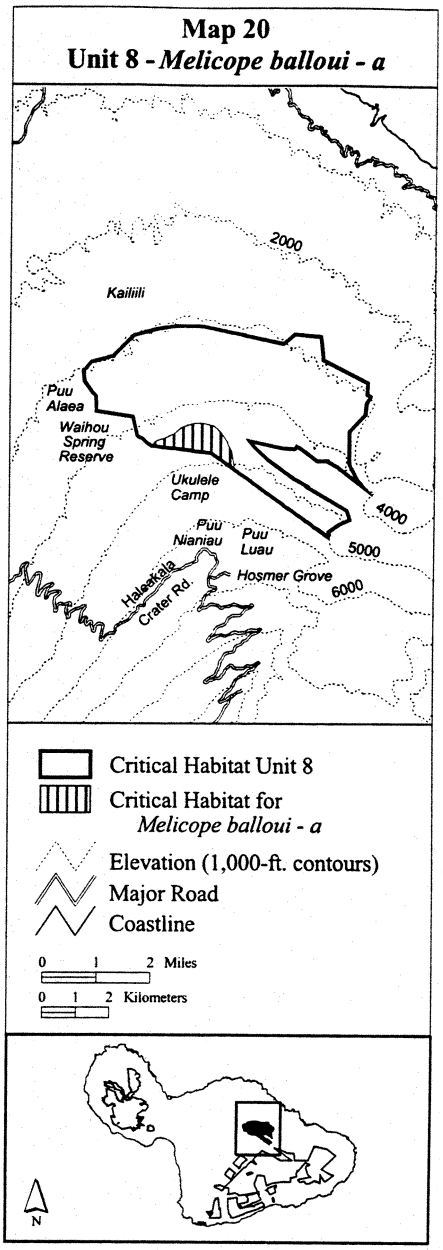


(xx) Maui 8—*Melicope balloui*—a (151 ha; 374 ac).

(A) Unit consists of the following 42 boundary points: Start at 787661, 2302116; 787622, 2302144; 787597, 2302162; 787492, 2302236; 787423, 2302286; 787307,

2302369; 787253, 2302408; 787141, 2302489; 787105, 2302512; 787079, 2302531; 787026, 2302568; 787026, 2302569; 786951, 2302579; 786738, 2302604; 786661, 2302613; 786491, 2302633; 786339, 2302653; 786280, 2302660; 786106, 2302680; 786032, 2302690; 785884, 2302707; 785796, 2302718; 785680, 2302732; 785510, 2302753; 785357, 2302772; 785248, 2302785; 785306, 2302888; 785406, 2302943; 785630, 2303011; 785923, 2303157; 786143, 2303330; 786357, 2303424; 786541, 2303481; 786781, 2303481; 787100, 2303408; 787288, 2303230; 787513, 2302911; 787513, 2302859; 787634, 2302639; 787702, 2302252; 787717, 2302148; 787677, 2302105; return to starting point.

(B) NOTE: Map 20 follows:

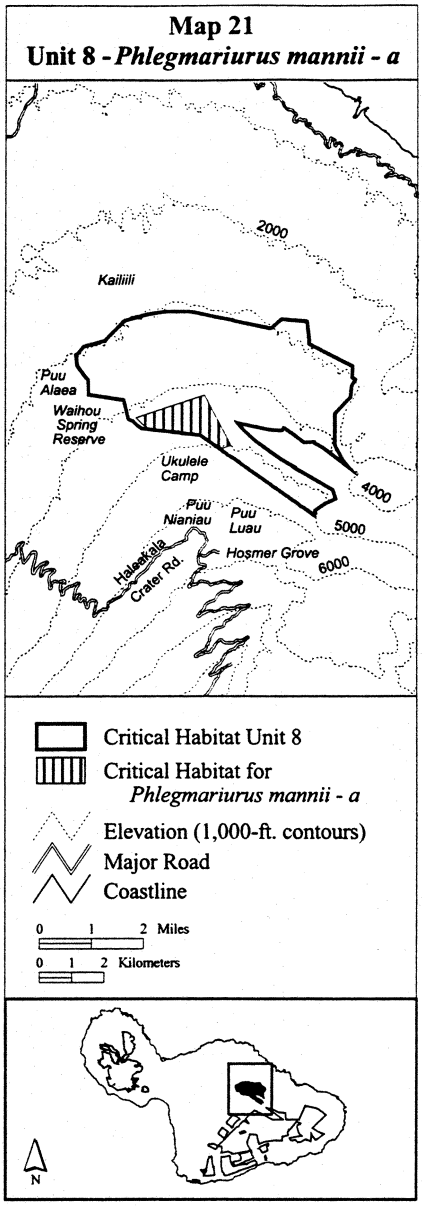


(xxi) Maui 8—*Phlegmariurus mannii*—a (221 ha; 547 ac).

(A) Unit consists of the following 28 boundary points: Start at 787622, 2302144; 787597, 2302162; 787492, 2302236;

787423, 2302286; 787307, 2302369; 787253, 2302408; 787141, 2302489; 787105, 2302512; 787079, 2302531; 787026, 2302568; 787026, 2302569; 786951, 2302579; 786738, 2302604; 786661, 2302613; 786491, 2302633; 786339, 2302653; 786280, 2302660; 786106, 2302680; 786032, 2302690; 785884, 2302707; 785796, 2302718; 785680, 2302732; 785510, 2302753; 785414, 2302765; 785047, 2303112; 787157, 2303805; 787966, 2302253; 787643, 2302129; return to starting point.

(B) NOTE: Map 21 follows:

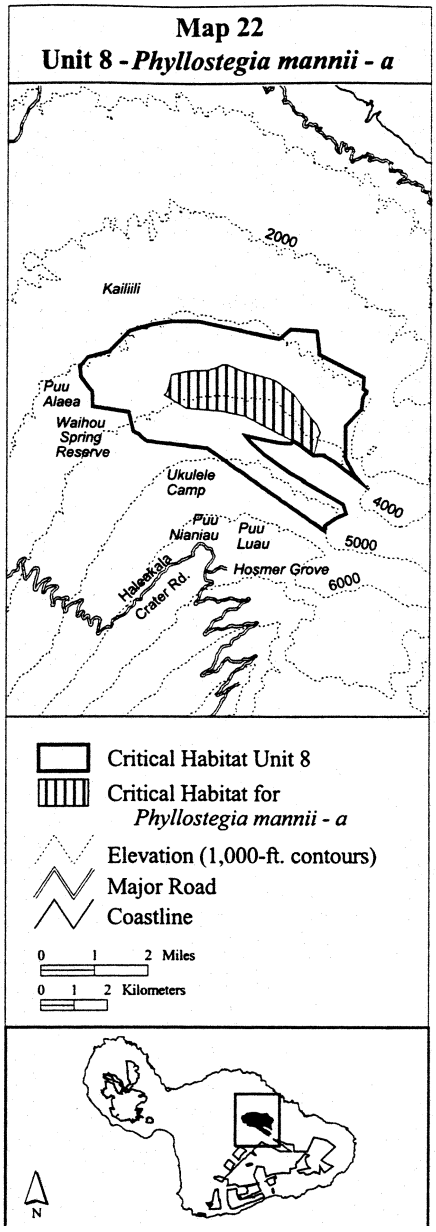


(xxii) Maui 8—*Phyllostegia mannii*—a (570 ha; 1,407 ac).

(A) Unit consists of the following 26 boundary points: Start at 789827, 2302625; 789610, 2302774; 789577, 2302791; 788148, 2303539; 787484, 2303692; 786396, 2303777; 785739, 2304188; 785794, 2304239;

785860, 2304480; 785944, 2304792; 786485, 2304912; 787026, 2304936; 787302, 2305014; 787488, 2305093; 787615, 2305093; 788065, 2304906; 788906, 2304672; 789100, 2304588; 789615, 2304203; 789825, 2303873; 790084, 2303525; 790288, 2303290; 790396, 2303032; 790324, 2302870; 790294, 2302671; 790206, 2302365; return to starting point.

(B) NOTE: Map 22 follows:

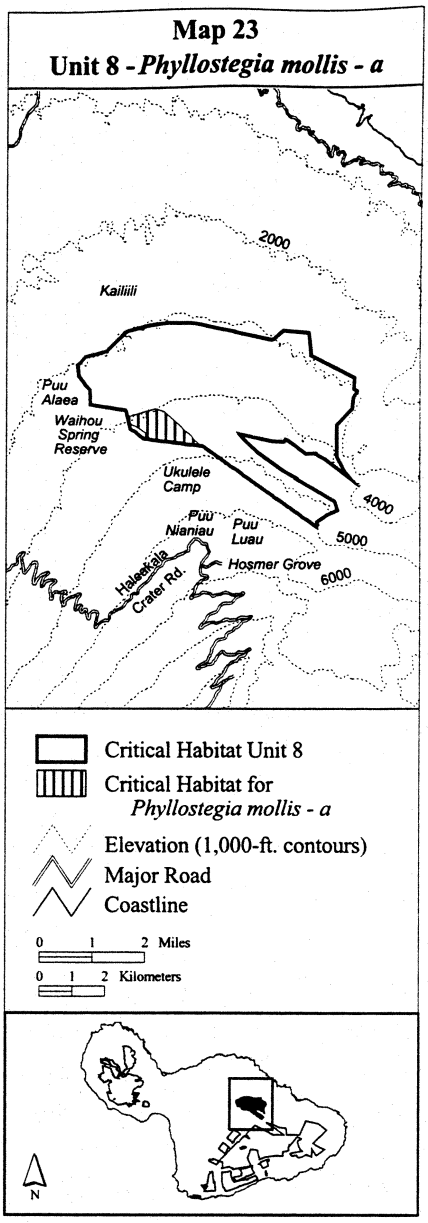


(xxiii) Maui 8—*Phyllostegia mollis*—a (128 ha; 316 ac).

(A) Unit consists of the following 20 boundary points: Start at 785938, 2302701; 785884, 2302707; 785796, 2302718; 785680, 2302732; 785510, 2302753; 785357,

2302772; 785247, 2302785; 785274, 2302870; 785281, 2302986; 784974, 2303191; 784840, 2303242; 784725, 2303477; 785401, 2303682; 785589, 2303726; 785845, 2303639; 786322, 2303224; 786467, 2303065; 786660, 2302911; 786775, 2302757; 786962, 2302596; return to starting point.

(B) NOTE: Map 23 follows:

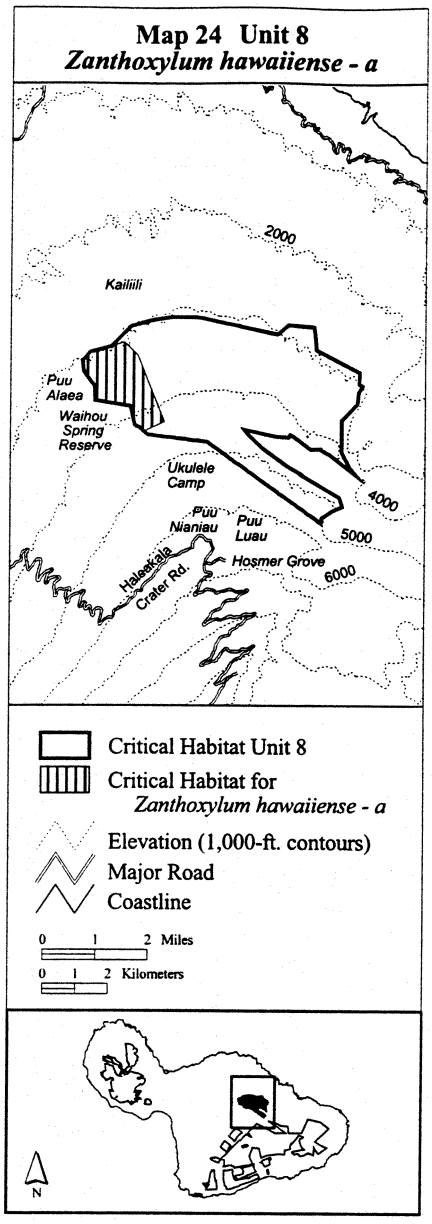


(xxiv) Maui 8—*Zanthoxylum hawaiiense*—a (362 ha; 895 ac)

(A) Unit consists of the following 24 boundary points: Start at 783221, 2305104; 783425, 2305329; 783765, 2305418; 783933, 2305472; 783961, 2305480; 783967,

2305482; 784075, 2305511; 784083, 2305519; 784480, 2305646; 784882, 2305244; 785713, 2303193; 785079, 2302889; 785056, 2302911; 784947, 2303017; 784803, 2303101; 784660, 2303678; 783584, 2303838; 783583, 2303838; 783559, 2304310; 783487, 2304405; 783488, 2304406; 783486, 2304406; 783228, 2304747; 783196, 2305076; return to starting point.

(B) NOTE: Map 24 follows:

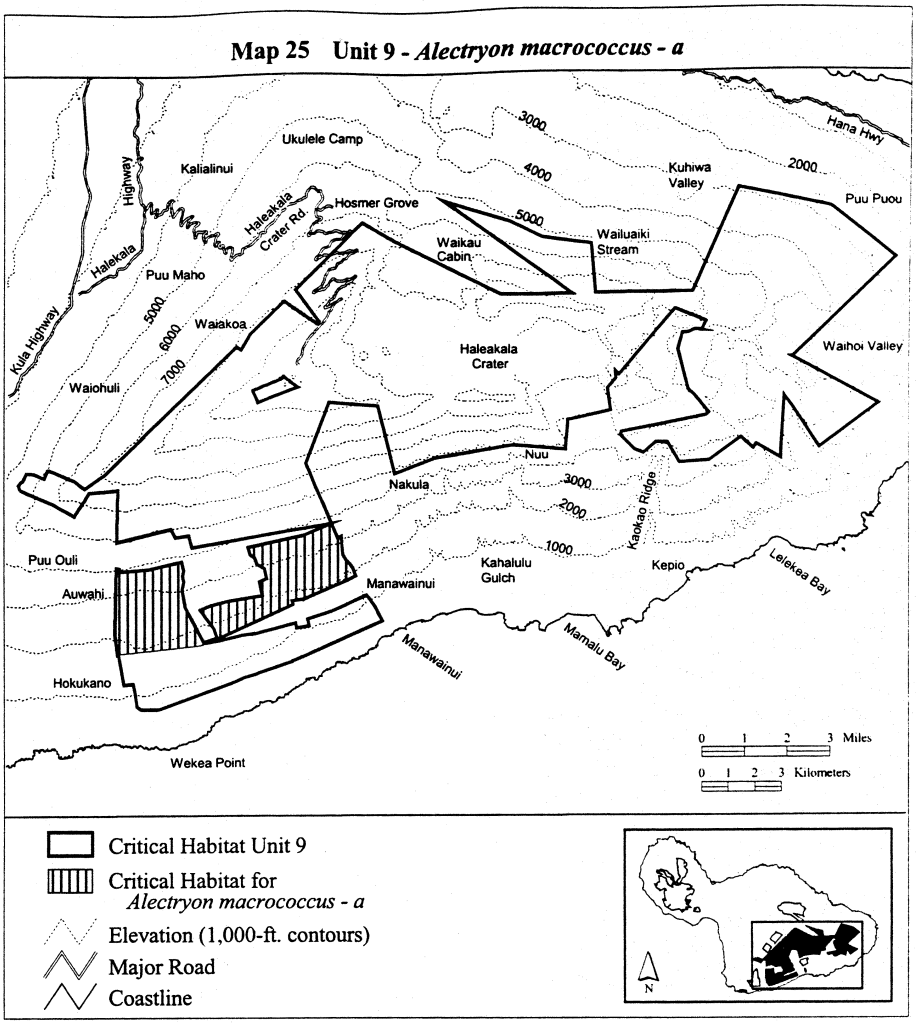


(xxv) Maui 9—*Alectryon macrococcus*—a (1,893 ha; 4,678 ac).

(A) Unit consists of the following 87 boundary points: Start at 787503, 2286804; 787552, 2286825; 787793, 2286254; 787882, 2286300; 787924, 2286322; 787969,

2285836; 787982, 2285645; 788112, 2285409; 788112, 2285408; 788269, 2285261; 788387, 2285086; 788485, 2284821; 788486, 2284815; 788116, 2284626; 788115, 2284625; 786708, 2284032; 786514, 2283946; 786511, 2283963; 786509, 2283964; 786072, 2283891; 786071, 2283889; 786091, 2283757; 785721, 2283591; 782955, 2282353; 782675, 2282228; 779507, 2281898; 779470, 2281894; 779468, 2281911; 779453, 2282018; 779433, 2282157; 779422, 2282233; 779414, 2282298; 779404, 2282370; 779384, 2282500; 779372, 2282586; 779369, 2282603; 779370, 2282710; 779372, 2282813; 779377, 2282926; 779379, 2283091; 779379, 2283156; 779384, 2283260; 779385, 2283362; 779386, 2283461; 779389, 2283570; 779391, 2283672; 779394, 2283769; 779397, 2283875; 779398, 2283992; 779401, 2284094; 779401, 2284203; 779403, 2284241; 779406, 2284322; 779413, 2284560; 779419, 2284768; 779424, 2284997; 779552, 2285008; 780605, 2285094; 781897, 2285373; 781955, 2285060; 781922, 2284849; 781966, 2284605; 781901, 2284319; 782031, 2283673; 782383, 2282985; 782730, 2282341; 782731, 2282340; 783230, 2282513; 783231, 2282514; 783231, 2282515; 783112, 2282851; 782588, 2283565; 782997, 2283742; 783717, 2283910; 784941, 2284105; 784942, 2284105; 784943, 2284107; 784824, 2284610; 785088, 2284723; 785089, 2284725; 785013, 2285109; 785013, 2285110; 784720, 2285273; 784639, 2285527; 784482, 2285614; 784385, 2285911; 786496, 2286367; return to starting point.

(B) NOTE: Map 25 follows:



(xxvi) Maui 9—*Argyroxiphium sandwicense* ssp. *macrocephalum*—a (9,041 ha; 22,340 ac).

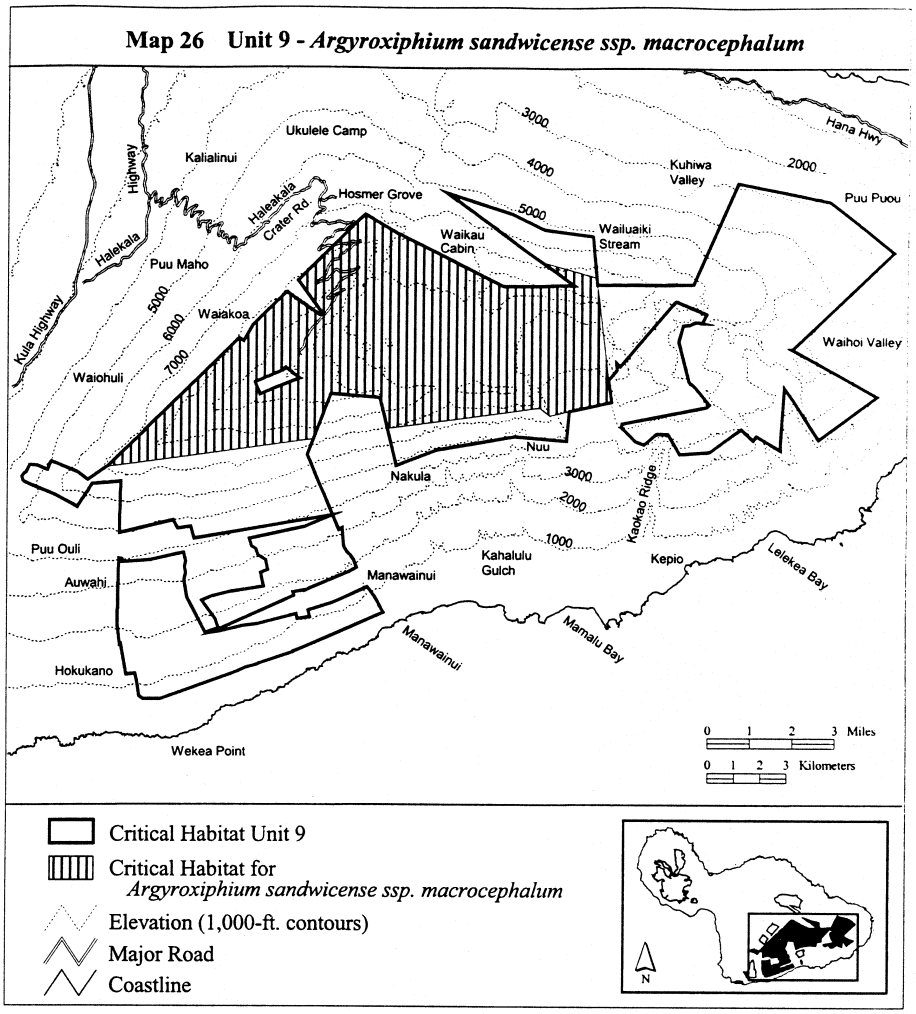
(A) Unit consists of the following 159 boundary points: Start at 778986, 2288684; 778989, 2288687; 779048, 2288746; 779070, 2288768; 780400, 2290082; 780392, 2290088; 780380, 2290097; 781358, 2291060; 781772, 2291467; 783957, 2293620; 784132, 2293514; 784471, 2294125; 785753, 2295387; 785766, 2295377; 785773, 2295373; 785784, 2295366; 785798, 2295356; 785812, 2295346; 785831, 2295333; 785843, 2295325; 785871, 2295305; 785887, 2295294; 785904, 2295283; 785906, 2295281; 785922, 2295270; 785931, 2295264; 785949, 2295252; 785962, 2295242; 785975, 2295233; 785995, 2295220; 786007, 2295211; 786012, 2295208; 786032, 2295194; 786034, 2295193; 786047, 2295183; 786054, 2295179; 786071, 2295167; 786099, 2295147; 786102, 2295145; 786104, 2295144; 786108, 2295141; 786113, 2295137; 786127, 2295127; 786136, 2295121; 786146, 2295115; 786153, 2295110; 786155, 2295108; 786173, 2295096; 786193, 2295082; 786225, 2295060; 786238, 2295051; 786290, 2295015; 786293, 2295013;

786317, 2294997; 786332, 2294986; 786344, 2294978; 786351, 2294973; 786354, 2294971; 786363, 2294965; 786368, 2294961; 786378, 2294954; 786390, 2294945; 786395, 2294943; 786413, 2294930; 786415, 2294929; 786420, 2294926; 786424, 2294923; 786464, 2294895; 786474, 2294887; 786483, 2294882; 786493, 2294875; 786507, 2294865; 786518, 2294857; 786525, 2294853; 786537, 2294844; 786558, 2294830; 786582, 2294813; 786597, 2294803; 786600, 2294801; 786616, 2294789; 786634, 2294777; 786668, 2294753; 786701, 2294730; 786716, 2294721; 786759, 2294691; 786775, 2294680; 786777, 2294679; 786791, 2294668; 786810, 2294655; 786824, 2294646; 786843, 2294633; 786895, 2294597; 786905, 2294591; 786915, 2294583; 786917, 2294582; 786938, 2294566; 786957, 2294554; 786990, 2294532; 787001, 2294523; 787015, 2294513; 787022, 2294508; 787024, 2294508; 787025, 2294508; 787038, 2294530; 787082, 2294593; 786188, 2295812; 788190, 2297786; 788404, 2297994; 788742, 2298301; 788752, 2298310; 788754, 2298309; 788785, 2298291; 788906, 2298219; 788934, 2298204; 788940, 2298201; 788942, 2298200; 788965, 2298185; 789012, 2298158; 789034, 2298146; 789372, 2297947; 789683, 2297771; 789712, 2297753; 789756, 2297728; 789999, 2297585; 790577, 2297304; 790826, 2297180; 791591, 2296795; 794000, 2295593; 795810, 2295621; 795945, 2295623; 796322, 2295627; 796366, 2295628; 796367, 2295628; 796710, 2295632; 796712, 2295633; 796712, 2295635; 796322, 2295917; 796064, 2296102; 795805, 2296286; 795433, 2296550; 797565, 2295906; 797569, 2295864; 797581, 2295638; 797634, 2295413; 798056, 2292032; 798056, 2292031; 798107, 2291624; 798165, 2291162; 796929, 2290891; 796545, 2290807; 795794, 2290643; 795424, 2290939; 795382, 2290933; 789630, 2290134; 789516, 2290615; 789343, 2291348; 787469, 2291492; 786812, 2289742; 778932, 2288646; return to starting point.

(B) Excluding the area bounded by the following 42 boundary points (76ha; 189ac):

Start at 784680, 2291987; 784747, 2292015; 784786, 2292031; 784910, 2292083; 784946, 2292099; 784984, 2292116; 785051, 2292143; 785110, 2292167; 785146, 2292182; 785204, 2292207; 785308, 2292250; 785341, 2292265; 785383, 2292282; 785501, 2292330; 785537, 2292346; 785576, 2292362; 785614, 2292410; 785643, 2292390; 785674, 2292428; 785689, 2292448; 785732, 2292503; 785780, 2292466; 785847, 2292414; 785871, 2292394; 785930, 2292350; 785942, 2292341; 785983, 2292310; 785993, 2292302; 786016, 2292284; 786041, 2292263; 786107, 2292213; 786138, 2292189; 786181, 2292155; 786209, 2292133; 786238, 2292111; 786263, 2292091; 785264, 2291677; 784769, 2291468; 784742, 2291524; 784703, 2291618; 784568, 2291939; 784568, 2291941; return to starting point.

(C) NOTE: Map 26 follows:

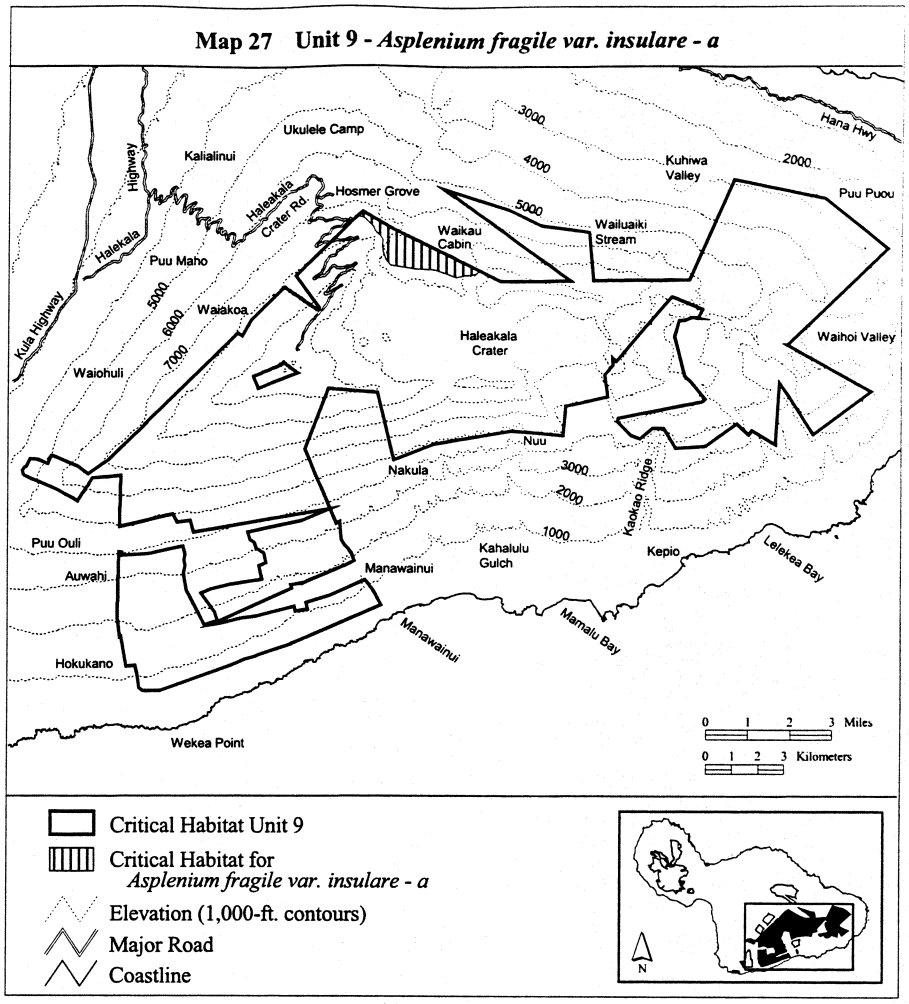


(xxvii) Maui 9—*Asplenium fragile* var. *insulare*—a (362 ha; 894 ac).

(A) Unit consists of the following 74 boundary points: Start at 788543, 2298123; 788563, 2298140; 788600, 2298173; 788754, 2298309; 788785, 2298291; 788906, 2298219; 788934, 2298204; 788942, 2298200; 788965, 2298185; 789012, 2298158; 789097, 2298111; 789125, 2298094; 789154, 2298077; 789279, 2298004; 789310, 2297986; 789342, 2297969; 789450, 2297905; 789495, 2297879; 789521, 2297863; 789656, 2297787; 789683, 2297771; 789712, 2297753; 789841, 2297681; 789867, 2297664; 789901, 2297645; 789955, 2297614; 790033, 2297574; 790061, 2297560; 790093, 2297545; 790216, 2297485; 790249, 2297467; 790279, 2297452; 790304, 2297441; 790412, 2297387; 790443, 2297372; 790472, 2297357; 790581, 2297304; 790638, 2297276; 790666, 2297261; 790719, 2297235; 790800, 2297196; 790831, 2297181; 790865, 2297163; 790992, 2297102; 791409, 2296895; 791824, 2296689; 792240, 2296482; 792444, 2296380; 792449, 2296378; 792655, 2296275; 793070, 2296068; 793155, 2296026; 793157, 2295951; 793118, 2295890; 792901, 2295834; 792611,

2295823; 792304, 2295750; 791909, 2295901; 791480, 2296046; 791067, 2296068; 790755, 2296079; 790543, 2296118; 789819, 2296246; 789629, 2296452; 789535, 2296731; 789485, 2296976; 789512, 2297221; 789514, 2297223; 789451, 2297316; 789306, 2297478; 789212, 2297600; 789145, 2297717; 788799, 2298069; 788554, 2298124; return to starting point.

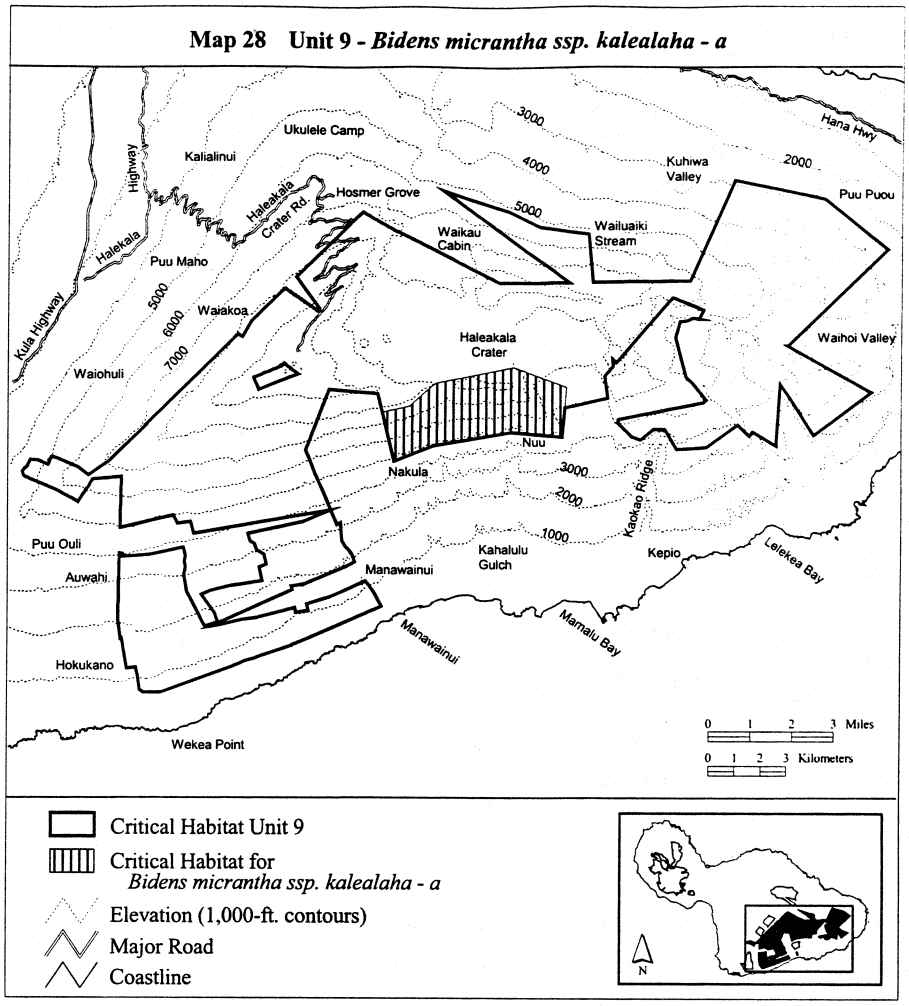
(B) NOTE: Map 27 follows:



(xxviii) Maui 9—*Bidens micrantha* ssp. *kalealaha*—a (1,563 ha; 3,861 ac).

(A) Unit consists of the following 16 boundary points: Start at 796545, 2290807; 796545, 2290801; 796458, 2289725; 796454, 2289679; 796453, 2289665; 794502, 2289839; 794488, 2289840; 794474, 2289837; 791519, 2289316; 789966, 2288718; 789516, 2290615; 790559, 2290844; 791422, 2291618; 791566, 2291747; 794576, 2292372; 796609, 2291606; return to starting point.

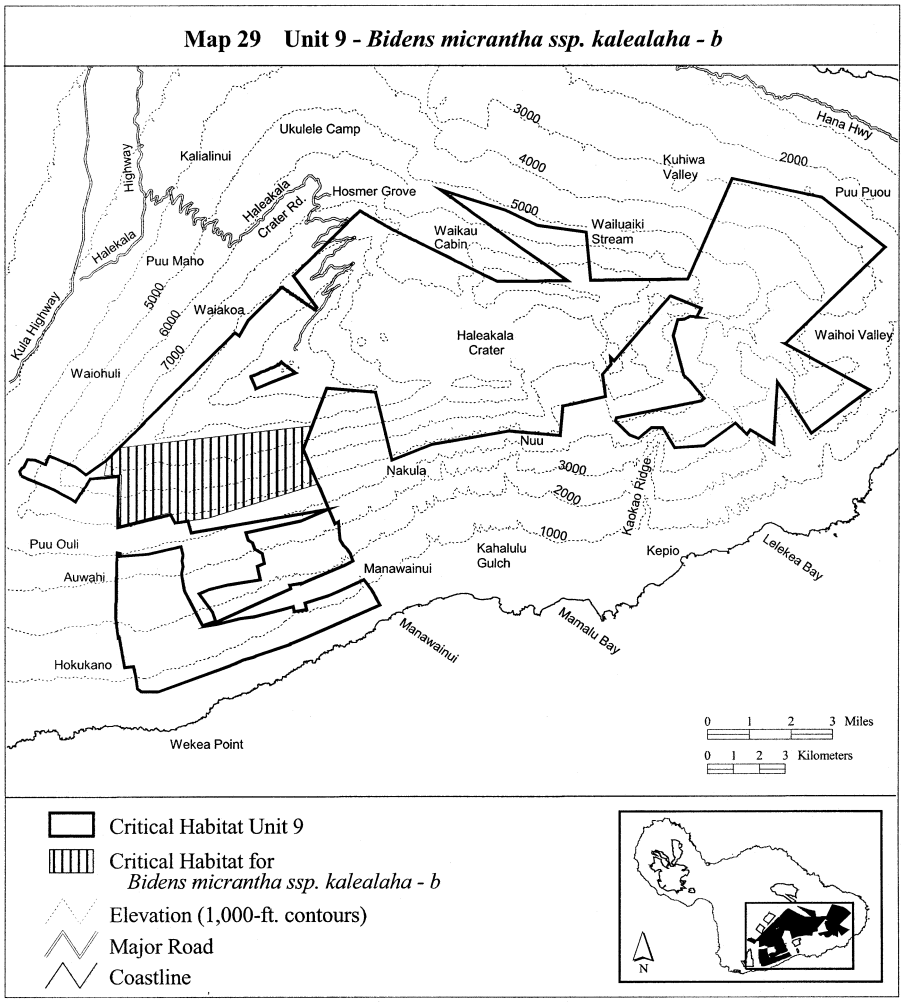
(B) NOTE: Map 28 follows:



(xxix) Maui 9—*Bidens micrantha* ssp. *kalealaha*—b (2,116 ha; 5,229 ac).

(A) Unit consists of the following 18 boundary points: Start at 779048, 2288746; 779070, 2288768; 779512, 2289205; 780627, 2289332; 782572, 2289555; 786928, 2290052; 786812, 2289742; 786580, 2289125; 786747, 2288730; 787145, 2287787; 782967, 2286486; 782162, 2286366; 781652, 2286290; 781485, 2286623; 781454, 2286686; 779524, 2286194; 779600, 2288162; 778935, 2288132; return to starting point.

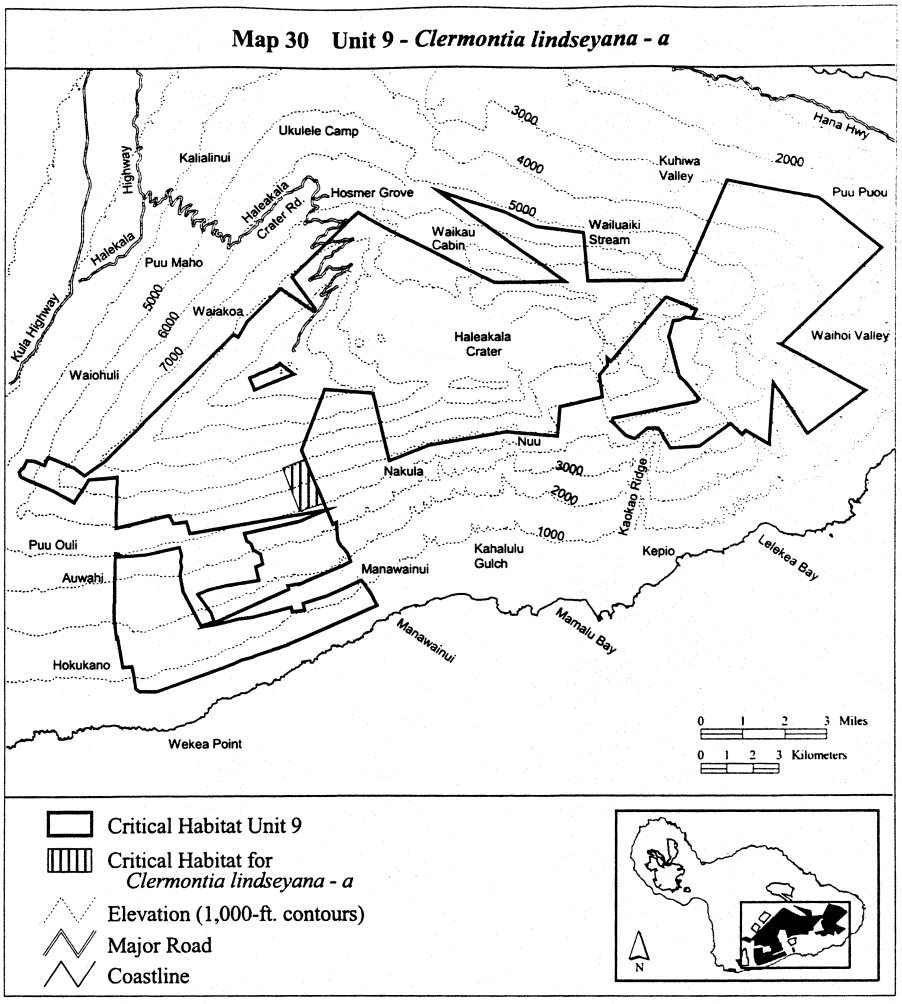
(B) NOTE: Map 29 follows:



(xxx) Maui 9—*Clermontia lindseyana*—a (177 ha; 438 ac).

(A) Unit consists of the following 5 boundary points: Start at 787444, 2287080; 787071, 2286938; 786501, 2286762; 785851, 2288424; 786721, 2288791; return to starting point.

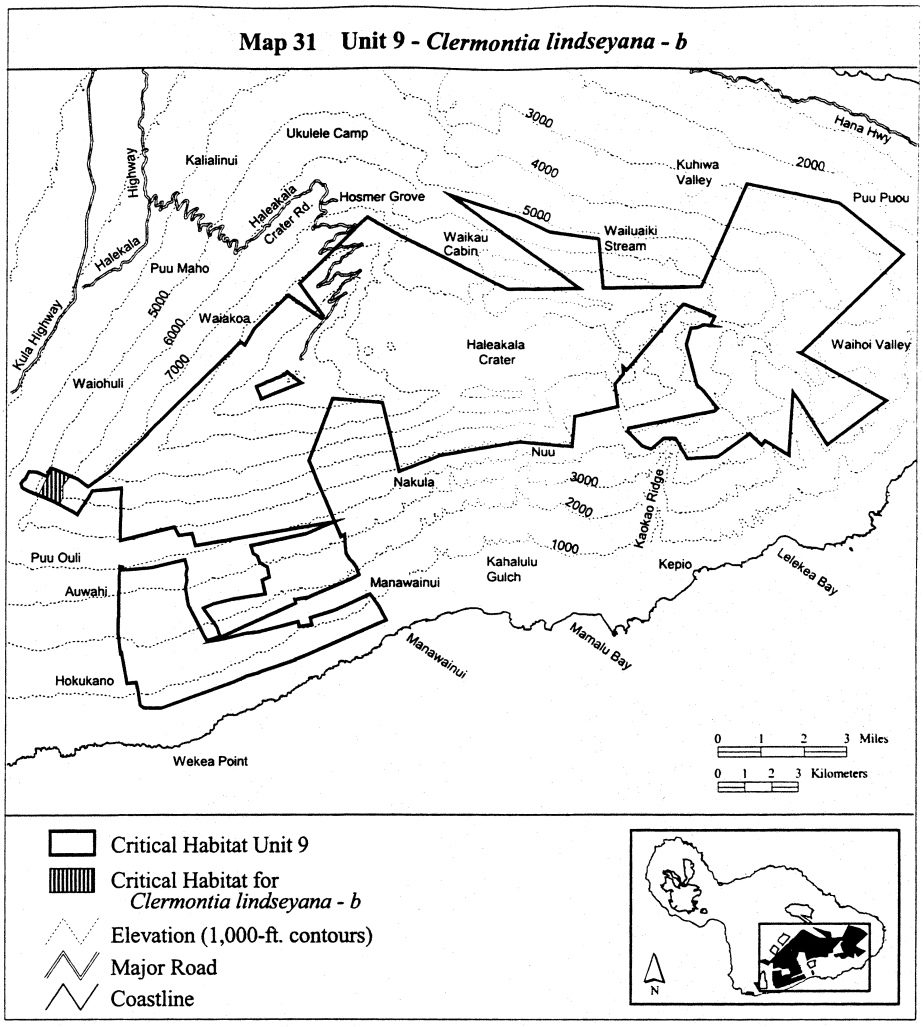
(B) NOTE: Map 30 follows:



(xxxi) Maui 9—*Clermontia lindseyana*—b (60 ha; 148 ac).

(A) Unit consists of the following 25 boundary points: Start at 776854, 2288875; 776854, 2288876; 776882, 2288864; 776920, 2288848; 776994, 2288817; 777561, 2288580; 777275, 2288186; 777275, 2287757; 777159, 2287487; 776983, 2287585; 776726, 2287694; 776756, 2287770; 776817, 2287928; 776860, 2288037; 776871, 2288068; 776895, 2288122; 776938, 2288237; 776979, 2288341; 777002, 2288401; 777006, 2288411; 777006, 2288412; 777006, 2288413; 777005, 2288413; 777005, 2288414; 776698, 2288553; return to starting point.

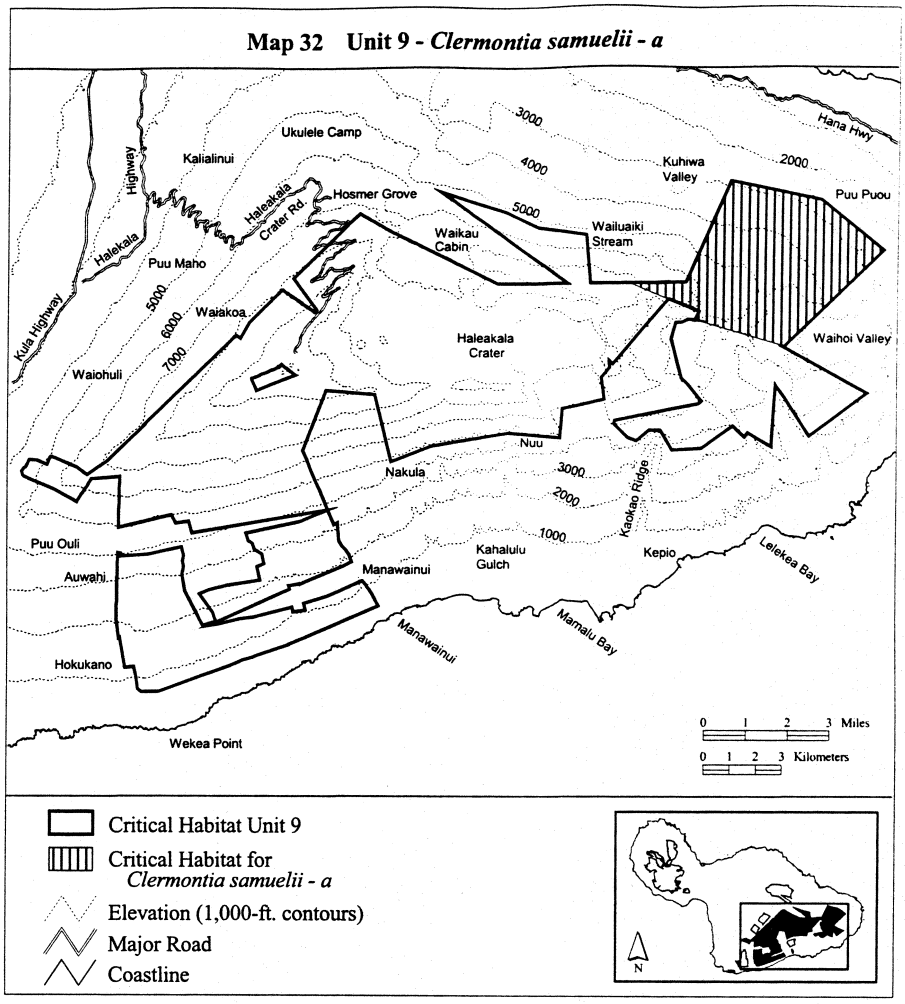
(B) NOTE: Map 31 follows:



(xxxii) Maui 9—*Clermontia samuelii*—a (3,130 ha; 7,734 ac).

(A) Unit consists of the following 27 boundary points: Start at 799099, 2295658; 799092, 2295661; 799244, 2295662; 799663, 2295668; 800082, 2295673; 800414, 2295677; 800379, 2295672; 800982, 2295684; 801296, 2295688; 801297, 2295688; 801369, 2295851; 802993, 2299556; 806459, 2298838; 807604, 2297939; 808913, 2296912; 805091, 2293218; 805090, 2293218; 801679, 2294214; 801640, 2294225; 801796, 2294569; 801346, 2294743; 801340, 2294745; 800636, 2295040; 800633, 2295036; 800632, 2295034; 800624, 2295037; 800620, 2295038; return to starting point.

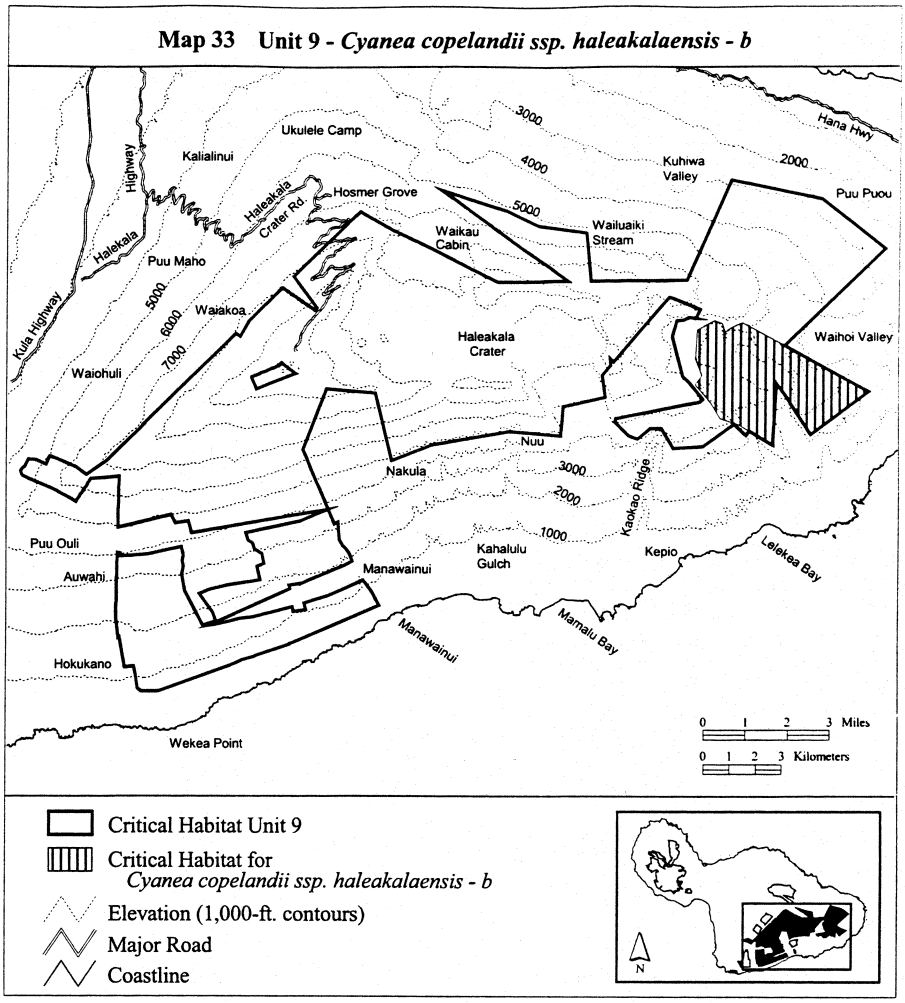
(B) NOTE: Map 32 follows:



(xiii) Maui 9—*Cyanea copelandii* ssp. *haleakalaensis*—b (1,709 ha; 4,224 ac).

(A) Unit consists of the following 21 boundary points: Start at 805053, 2293180; 806644, 2292314; 808301, 2291412; 806062, 2289747; 805115, 2291183; 804741, 2291728; 804610, 2289526; 804598, 2289317; 803684, 2289877; 803296, 2290115; 802589, 2290350; 802215, 2290953; 801641, 2291671; 801871, 2292015; 801641, 2292647; 801699, 2293766; 802359, 2294139; 802646, 2294024; 802761, 2293680; 802962, 2293852; 803432, 2294063; return to starting point.

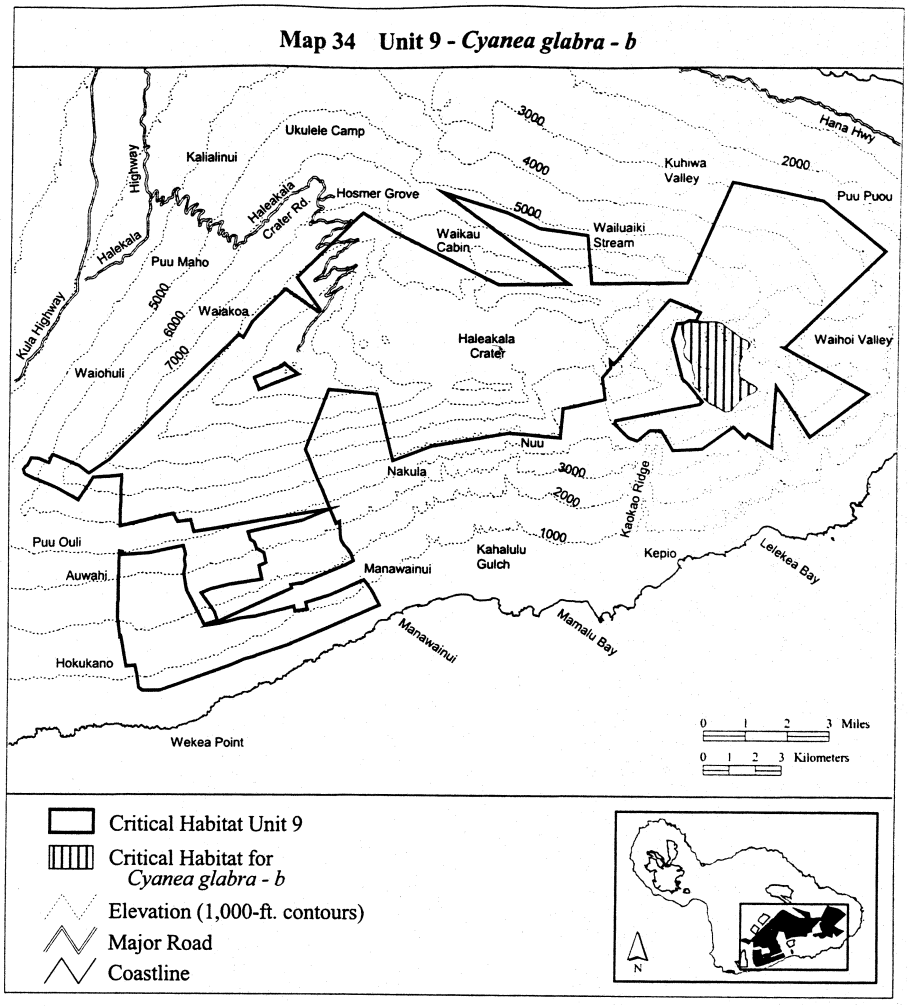
(B) NOTE: Map 33 follows:



(xxxiv) Maui 9—*Cyanea glabra*—b (650 ha; 1,605 ac).

(A) Unit consists of the following 50 boundary points: Start at 801146, 2294134; 801147, 2294134; 801185, 2294156; 801306, 2294225; 801376, 2294265; 801594, 2294228; 801679, 2294214; 801771, 2294198; 802073, 2294198; 802434, 2294198; 802655, 2294131; 802883, 2293924; 803365, 2293596; 803600, 2293468; 803707, 2293361; 803713, 2293247; 803425, 2292852; 803318, 2292564; 803312, 2292196; 803372, 2292055; 803713, 2291855; 803988, 2291687; 804008, 2291560; 803894, 2291480; 803680, 2291366; 803486, 2291265; 803305, 2291078; 803044, 2290763; 802850, 2290709; 802722, 2290743; 802542, 2290884; 802227, 2291017; 801979, 2291212; 801832, 2291439; 801745, 2291560; 801637, 2291660; 801550, 2291788; 801544, 2291848; 801604, 2291955; 801611, 2292069; 801517, 2292370; 801497, 2292538; 801443, 2292638; 801330, 2292757; 801229, 2292846; 801175, 2293006; 801182, 2293134; 801242, 2293401; 801142, 2293689; 801062, 2294018; return to starting point.

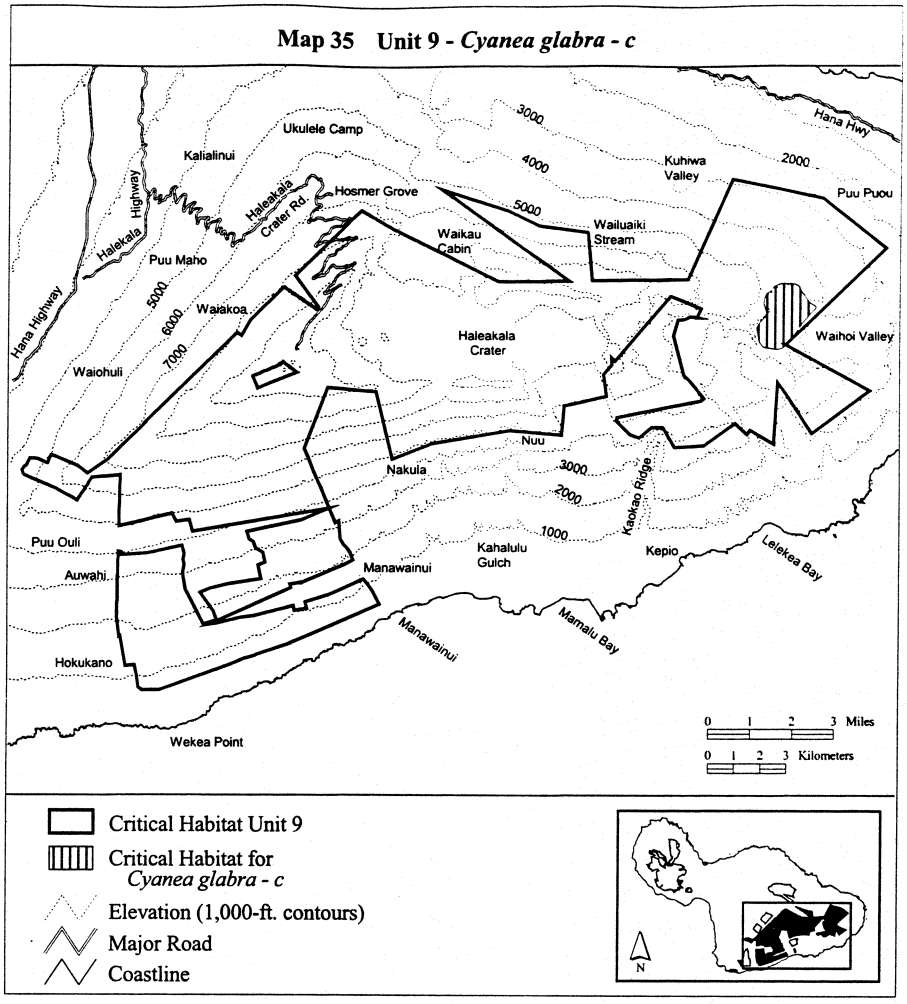
(B) NOTE: Map 34 follows:



(xxxv) Maui 9—*Cyanea glabra*—c (363 ha; 898 ac).

(A) Unit consists of the following 38 boundary points: Start at 805090, 2293218; 805068, 2293196; 805053, 2293181; 805053, 2293180; 804943, 2293067; 804871, 2293032; 804680, 2293002; 804400, 2293049; 804298, 2293049; 804161, 2293121; 804036, 2293276; 804024, 2293342; 803964, 2293634; 803917, 2293843; 803988, 2293950; 804084, 2294076; 804245, 2294261; 804298, 2294398; 804245, 2294571; 804191, 2294750; 804215, 2295007; 804304, 2295144; 804489, 2295275; 804573, 2295394; 804650, 2295454; 804895, 2295550; 805367, 2295538; 805534, 2295460; 805587, 2295365; 805695, 2295150; 805933, 2294828; 806166, 2294684; 806184, 2294631; 806178, 2294595; 805981, 2294362; 805677, 2294016; 805480, 2293718; 805188, 2293318; return to starting point.

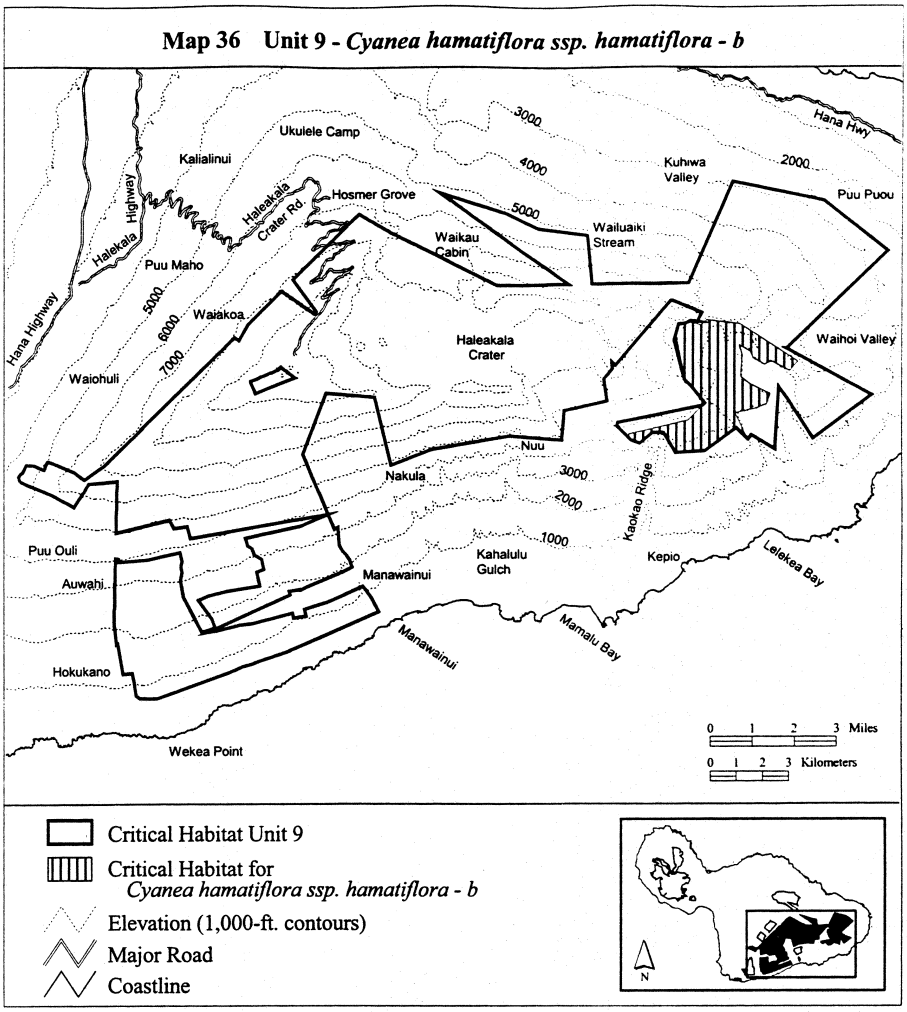
(B) NOTE: Map 35 follows:



(xxxvi) Maui 9—*Cyanea hamatiflora* ssp. *hamatiflora*—b (1,309 ha; 3,235 ac).

(A) Unit consists of the following 34 boundary points: Start at 801996, 2294274; 803261, 2294116; 805475, 2292702; 805159, 2292328; 804474, 2292692; 804184, 2292587; 803762, 2292824; 803635, 2293097; 803235, 2293299; 803340, 2292930; 803288, 2292113; 803657, 2291823; 804421, 2291454; 804289, 2291058; 803920, 2290900; 803077, 2290716; 803548, 2289729; 803114, 2290141; 801935, 2289265; 800788, 2289185; 800516, 2289662; 800342, 2289966; 799912, 2289966; 799418, 2289552; 799034, 2289728; 799006, 2289910; 801285, 2290452; 801917, 2291085; 801678, 2291389; 801153, 2292060; 800860, 2293524; 801185, 2294156; 801306, 2294225; 801759, 2294089; return to starting point.

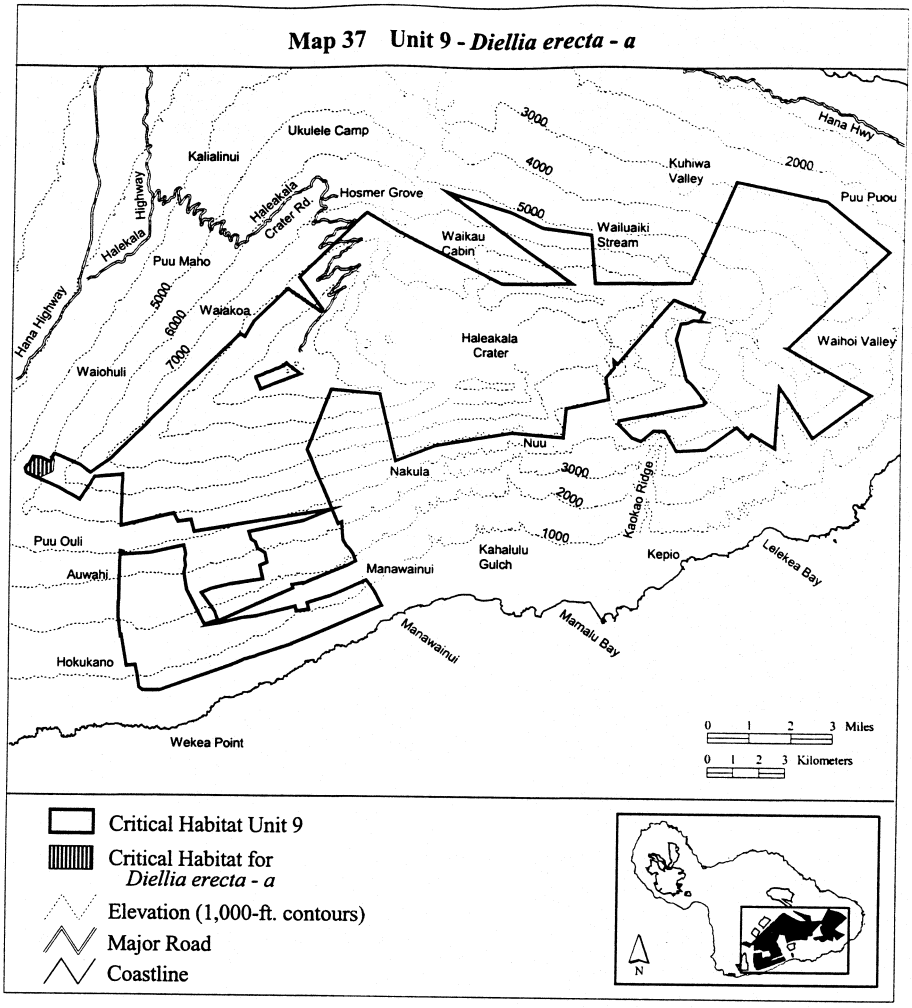
(B) NOTE: Map 36 follows:



(xxxvii) Maui 9—*Diellia erecta*—a (2 ha; 5 ac).

(A) Unit consists of the following 9 boundary points: Start at 776678, 2288562; 776714, 2288648; 776729, 2288680; 776747, 2288719; 776756, 2288719; 776808, 2288717; 776832, 2288598; 776823, 2288519; 776820, 2288498; return to starting point.

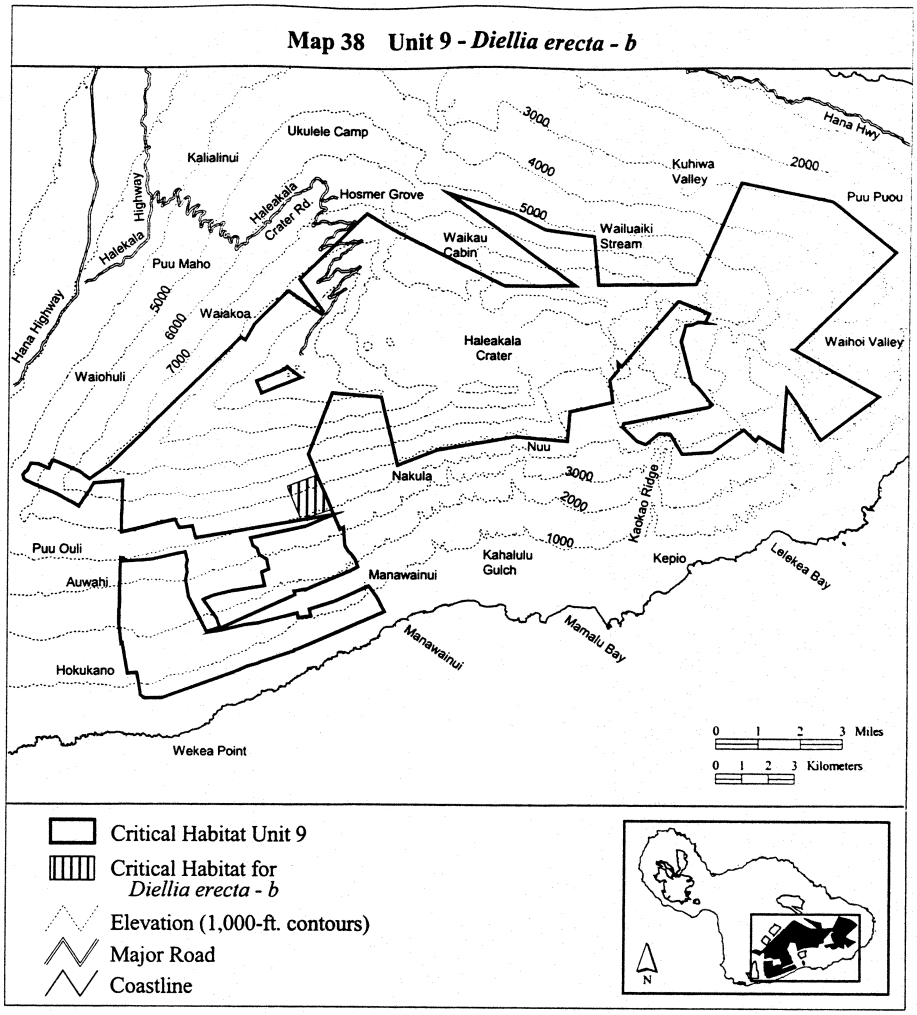
(B) NOTE: Map 37 follows:



(xxxviii) Maui 9—*Diellia erecta*—b (175 ha; 431 ac).

(A) Unit consists of the following 9 boundary points: Start at 787240, 2287564; 787475, 2287007; 786302, 2286613; 785862, 2287663; 785861, 2287662; 785789, 2287851; 785769, 2287902; 785806, 2287916; 786914, 2288334; return to starting point.

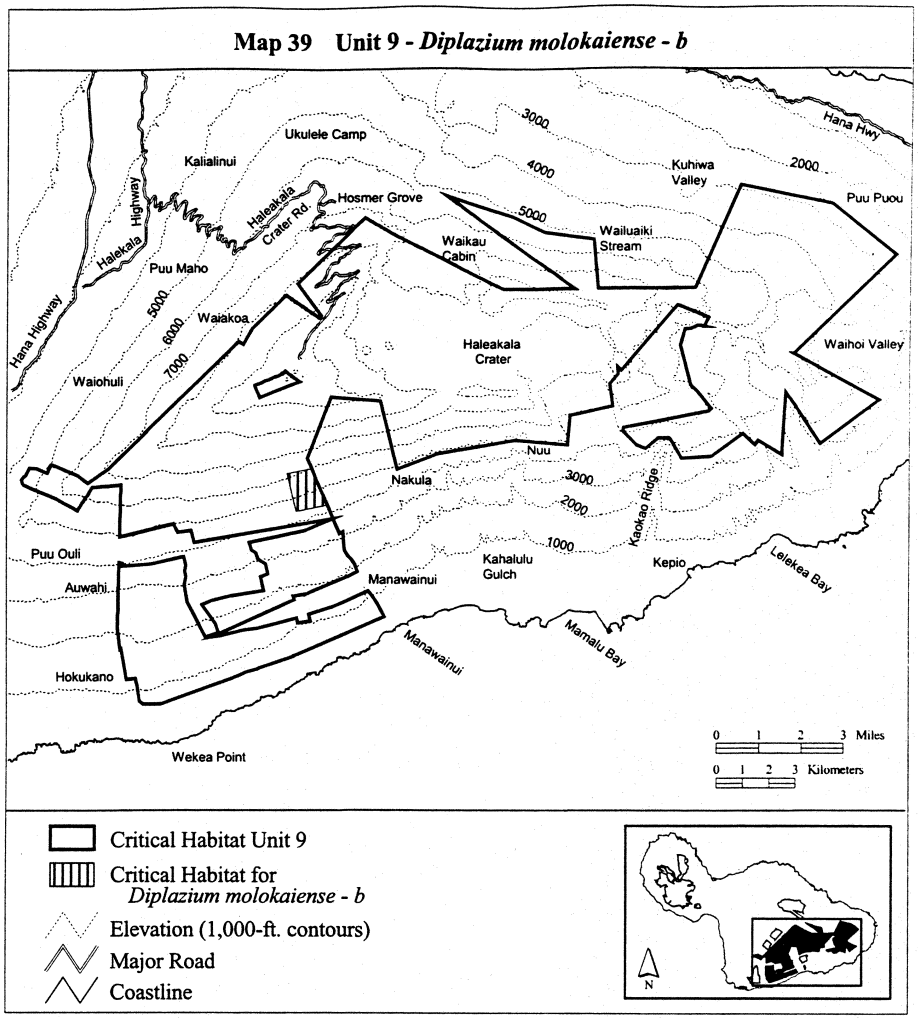
(B) NOTE: Map 38 follows:



(xxxix) Maui 9—*Diplazium molokaiense*—b (162 ha; 401 ac).

(A) Unit consists of the following 4 boundary points: Start at 786149, 2287088; 785806, 2288547; 786747, 2288730; 787339, 2287329; return to starting point.

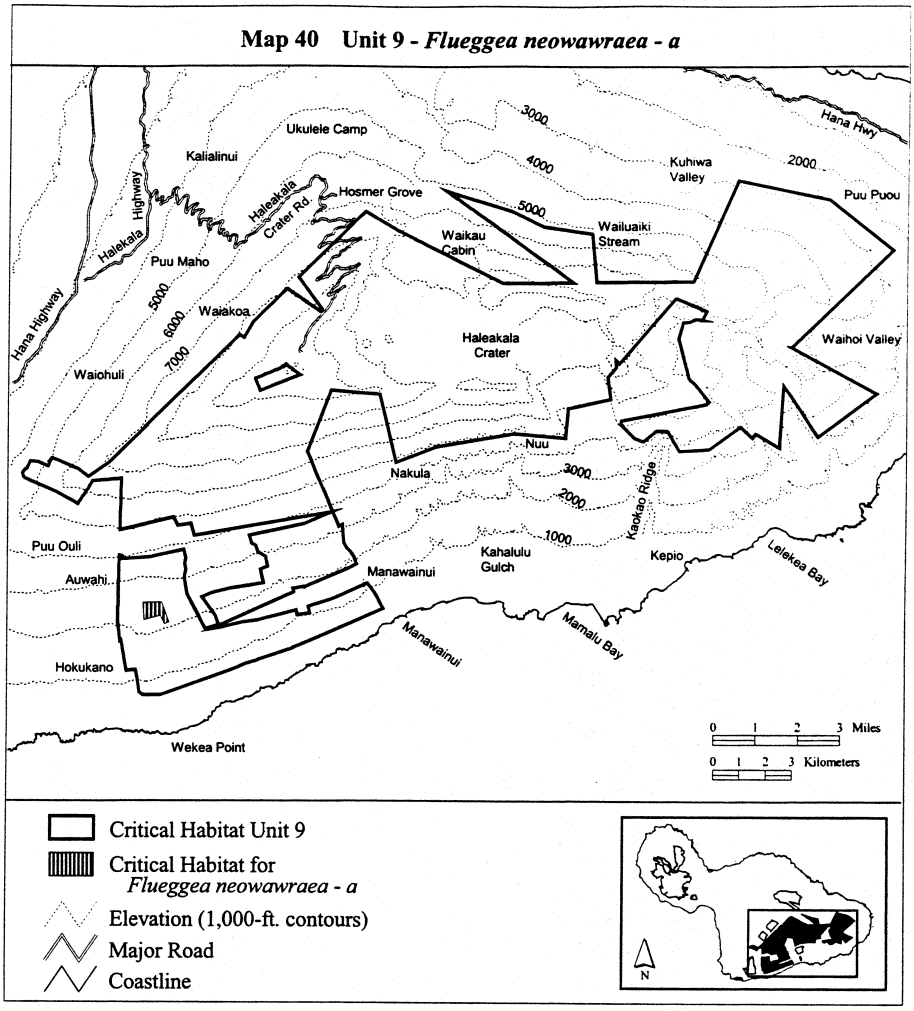
(B) NOTE: Map 39 follows:



(xl) Maui 9—*Flueggea neowawraea*—a (52 ha; 128 ac).

(A) Unit consists of the following 6 boundary points: Start at 780345, 2283357; 781056, 2283374; 781342, 2282594; 781160, 2282542; 781012, 2282863; 780388, 2282689; return to starting point.

(B) NOTE: Map 40 follows:

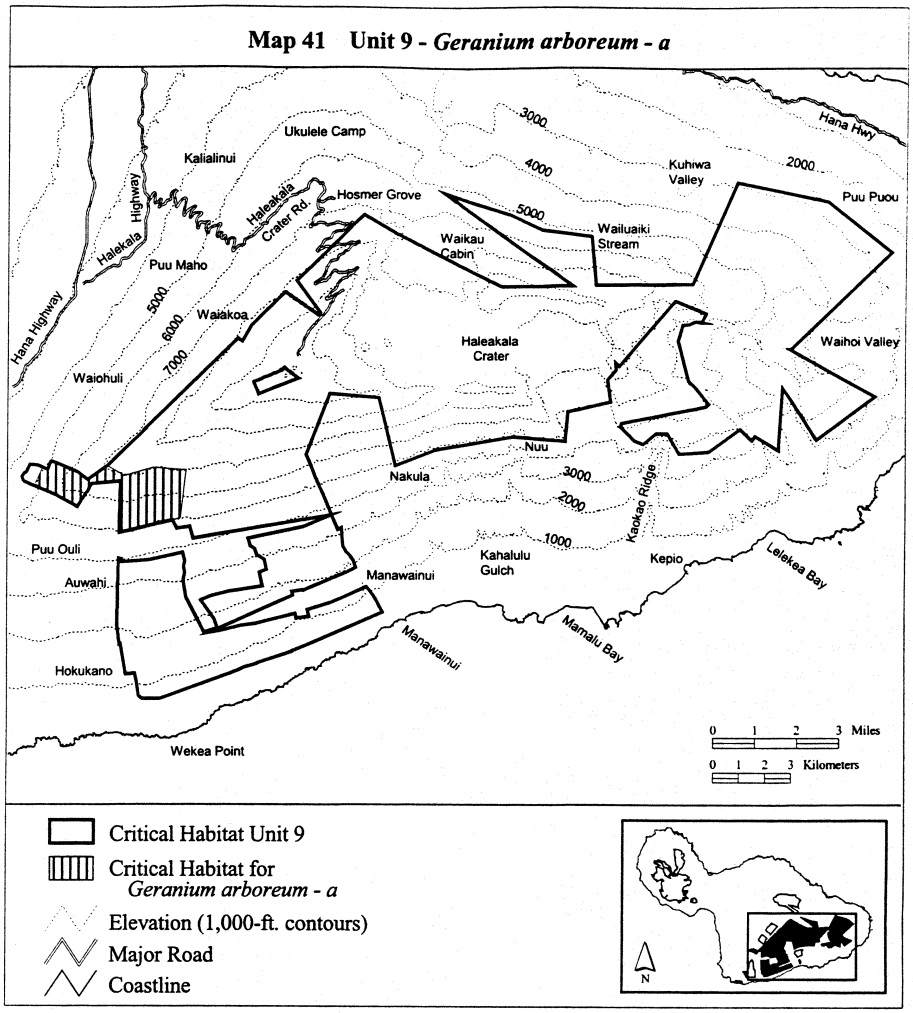


(xli) Maui 9—*Geranium arboreum*—a (731 ha; 1,805 ac).

(A) Unit consists of the following 78 boundary points: Start at 776678, 2288562; 776714, 2288648; 776729, 2288680; 776769, 2288768; 776801, 2288841; 776816, 2288873; 776823, 2288888; 776854, 2288875; 776994, 2288817; 777437, 2288634; 777736, 2288504; 777822, 2288467; 778221, 2288151; 778821, 2288569; 778986, 2288684; 779630, 2288318; 780757, 2288633; 782012, 2288542; 781788, 2286699; 781485, 2286623; 779450, 2286115; 779447, 2286116; 779447, 2286118; 779447, 2286148; 779449, 2286273; 779451, 2286428; 779453, 2286528; 779457, 2286767; 779463, 2287069; 779466, 2287187; 779469, 2287405; 779474, 2287664; 779478, 2287896; 779480, 2288005; 779481, 2288094; 779481, 2288097; 779480, 2288099; 779379, 2288090; 779098, 2288064; 778964, 2288051; 778864, 2288041; 778675, 2288023; 778485, 2288006; 778407, 2287998; 778397, 2287997; 778396, 2287997; 778295, 2287839; 778290, 2287830; 778201, 2287689; 778141, 2287597; 778127, 2287576; 778122, 2287567; 778097, 2287528; 778072, 2287490; 778051, 2287458; 778008,

2287395; 777941, 2287295; 777929, 2287273; 777926, 2287268; 777872, 2287190; 777820, 2287111; 777670, 2287202; 777221, 2287452; 776983, 2287585; 776726, 2287694; 776756, 2287770; 776817, 2287928; 776860, 2288037; 776871, 2288068; 776895, 2288122; 776938, 2288237; 776979, 2288341; 777002, 2288401; 777006, 2288411; 777006, 2288412; 777006, 2288413; 777005, 2288413; 777005, 2288414; return to starting point.

(B) NOTE: Map 41 follows:

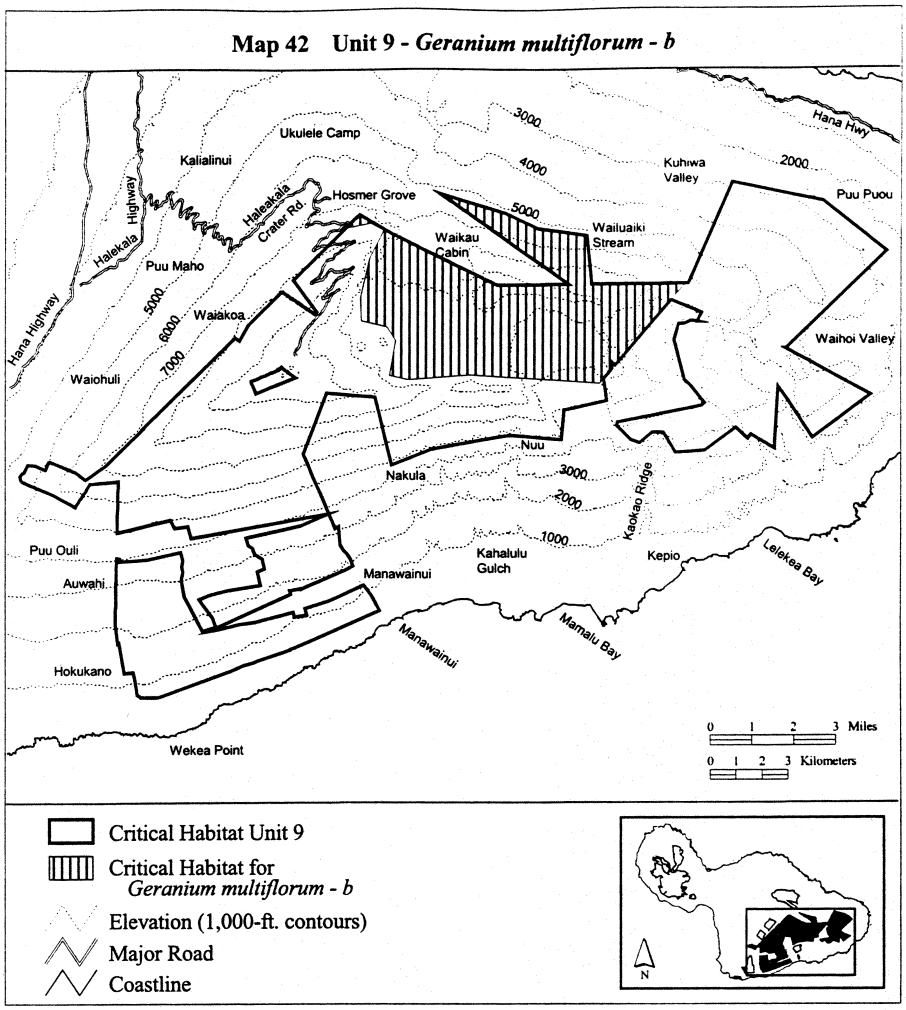


(xlii) Maui 9—*Geranium multiflorum*—b (4,817 ha; 11,903 ac).

(A) Unit consists of the following 155 boundary points: Start at 788163, 2297782; 788209, 2297823; 788474, 2298061; 788549, 2298128; 788563, 2298140; 788752, 2298310; 788754, 2298309; 788785, 2298291; 788906, 2298219; 788934, 2298204; 788940, 2298201; 788945, 2298198; 788965, 2298185; 789012, 2298158; 789097, 2298111; 789125,

2298094; 789154, 2298077; 789279, 2298004; 789310, 2297986; 789342, 2297969; 789450, 2297905; 789495, 2297879; 789521, 2297863; 789656, 2297787; 789683, 2297771; 789712, 2297753; 789841, 2297681; 789867, 2297664; 789901, 2297645; 789955, 2297614; 790033, 2297574; 790061, 2297560; 790093, 2297545; 790216, 2297485; 790249, 2297467; 790279, 2297452; 790304, 2297441; 790412, 2297387; 790443, 2297372; 790472, 2297357; 790581, 2297304; 790633, 2297278; 790637, 2297277; 790638, 2297276; 790666, 2297261; 790712, 2297238; 790778, 2297205; 790851, 2297171; 790865, 2297163; 790992, 2297102; 791049, 2297073; 791253, 2296971; 791748, 2296726; 792093, 2296555; 792239, 2296482; 792302, 2296451; 792444, 2296380; 792449, 2296378; 792490, 2296357; 792655, 2296275; 793070, 2296068; 793303, 2295953; 793307, 2295951; 793422, 2295894; 793425, 2295892; 793482, 2295864; 793485, 2295863; 793542, 2295834; 793701, 2295755; 794013, 2295601; 794376, 2295605; 794739, 2295608; 795102, 2295612; 795523, 2295618; 795945, 2295623; 796322, 2295627; 796366, 2295628; 796367, 2295628; 796710, 2295632; 796712, 2295633; 796712, 2295635; 796322, 2295917; 796064, 2296102; 795805, 2296286; 795412, 2296565; 794929, 2296911; 794586, 2297162; 794089, 2297517; 793843, 2297693; 793840, 2297695; 793717, 2297782; 793715, 2297784; 793592, 2297871; 793096, 2298227; 792850, 2298402; 792846, 2298405; 792724, 2298492; 792721, 2298494; 792661, 2298537; 792659, 2298539; 792630, 2298559; 792627, 2298561; 792614, 2298570; 792612, 2298572; 792606, 2298576; 792604, 2298578; 792602, 2298579; 792600, 2298581; 792599, 2298581; 792395, 2298727; 792392, 2298730; 792290, 2298802; 792288, 2298804; 792238, 2298839; 792236, 2298841; 792212, 2298858; 792210, 2298860; 792199, 2298867; 792197, 2298869; 792193, 2298872; 792190, 2298874; 792187, 2298876; 791820, 2299139; 792911, 2298800; 794323, 2298361; 795561, 2297771; 797414, 2297495; 797590, 2295645; 797591, 2295643; 797602, 2295643; 797615, 2295643; 797793, 2295645; 798243, 2295649; 800429, 2295671; 801112, 2295683; 801148, 2295656; 800620, 2295038; 800619, 2295037; 799580, 2293819; 798494, 2292544; 798490, 2292539; 798357, 2292680; 798374, 2292403; 798056, 2292031; 797894, 2291841; 792958, 2292187; 790618, 2291998; 789902, 2292186; 790128, 2293507; 789788, 2294035; 788807, 2294262; 788770, 2295129; 789109, 2296601; 789675, 2297733; 789185, 2297997; return to starting point.

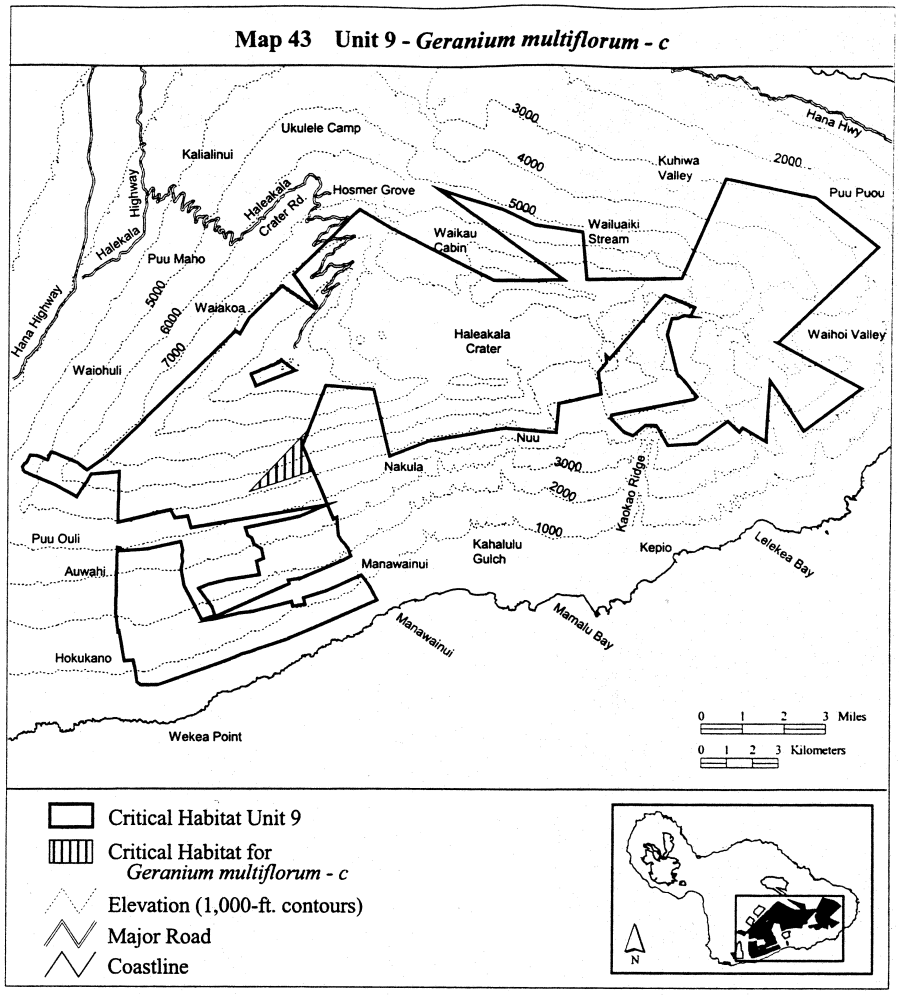
(B) NOTE: Map 42 follows:



(xliii) Maui 9—*Geranium multiflorum*—c (182 ha; 451 ac).

(A) Unit consists of the following 4 boundary points: Start at 786997, 2288137; 784544, 2287319; 786824, 2289775; 786580, 2289125; return to starting point.

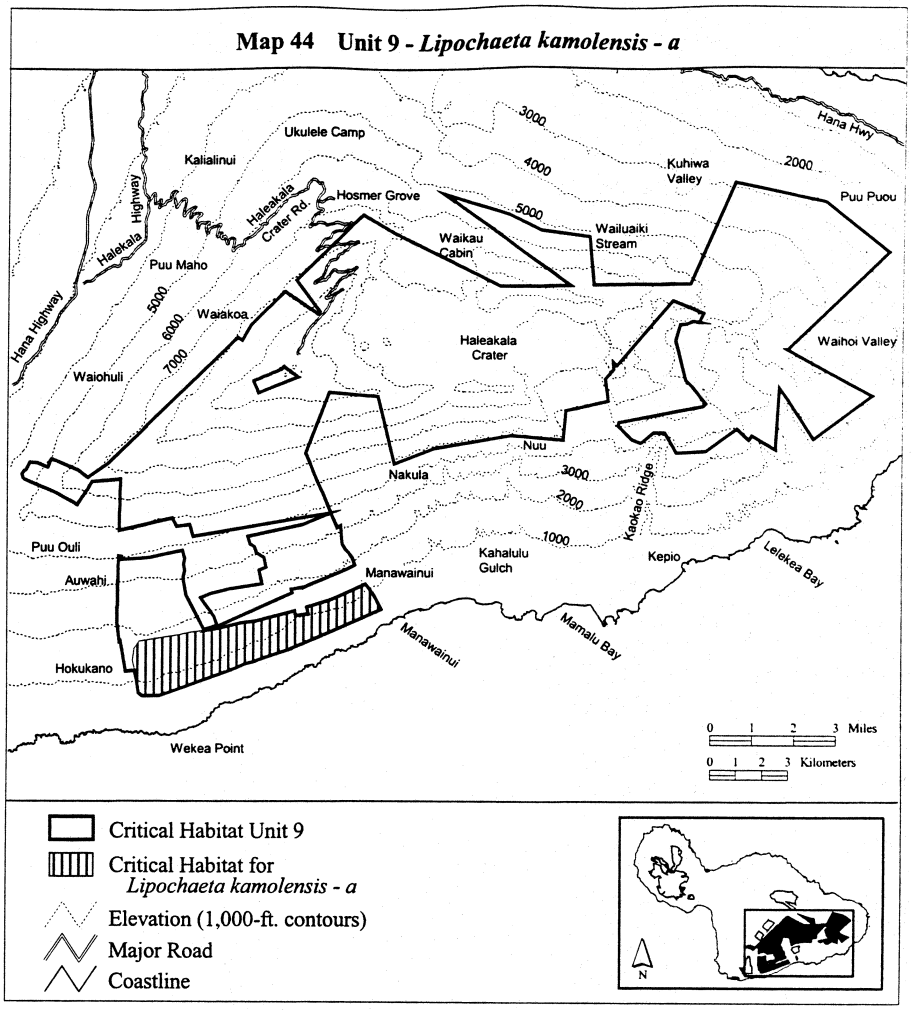
(B) NOTE: Map 43 follows:



(xliv) Maui 9—*Lipochaeta kamolensis*—a (1,475 ha; 3,644 ac).

(A) Unit consists of the following 42 boundary points: Start at 782955, 2282353; 783327, 2282400; 784164, 2282607; 784741, 2282683; 785726, 2282934; 786198, 2283073; 786228, 2282888; 786228, 2282887; 786230, 2282886; 786701, 2282954; 786702, 2282955; 786702, 2282956; 786655, 2283208; 787384, 2283423; 787548, 2283495; 787945, 2283669; 788905, 2284089; 788984, 2283995; 789152, 2283770; 789288, 2283565; 789391, 2283327; 789514, 2283129; 787773, 2282368; 786596, 2281853; 786087, 2281631; 786085, 2281630; 784789, 2281189; 784708, 2281139; 784251, 2281019; 784001, 2280899; 783805, 2280811; 781021, 2279811; 780368, 2279811; 780216, 2279920; 780139, 2280453; 780063, 2280787; 780052, 2280834; 779976, 2281160; 780031, 2281595; 780248, 2281900; 781662, 2282128; 782206, 2282259; return to starting point.

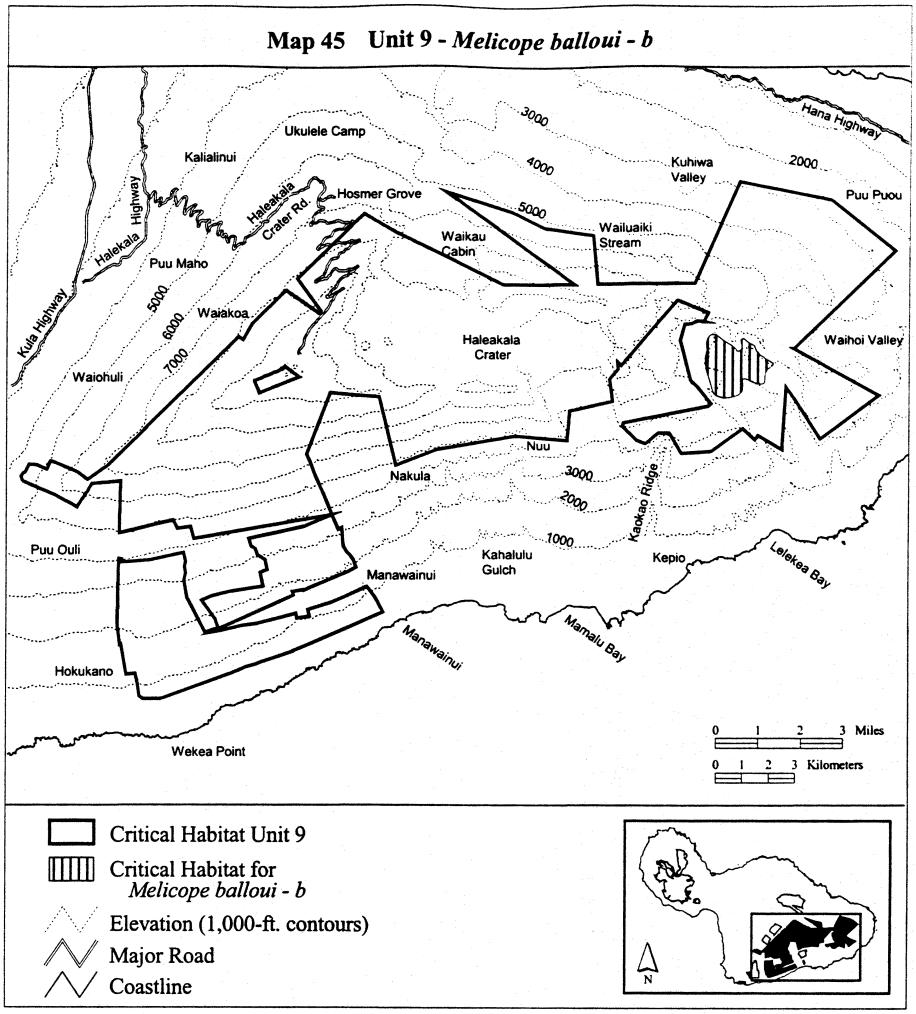
(B) NOTE: Map 44 follows:



(xlv) Maui 9—*Melicope balloui*—b (394 ha; 973 ac).

(A) Unit consists of the following 45 boundary points: Start at 801687, 2292860; 801740, 2293120; 801749, 2293217; 801736, 2293388; 801740, 2293476; 801793, 2293617; 801894, 2293723; 802092, 2293736; 802374, 2293512; 802708, 2293331; 802840, 2293212; 802889, 2293116; 802955, 2293094; 803069, 2293173; 803087, 2293287; 803047, 2293446; 803047, 2293538; 803140, 2293582; 803316, 2293437; 803545, 2293314; 803619, 2293116; 803769, 2292957; 804016, 2292781; 804266, 2292645; 804249, 2292561; 804051, 2292403; 803963, 2292244; 803945, 2292099; 803945, 2291945; 803928, 2291870; 803804, 2291844; 803681, 2291848; 803413, 2291949; 803272, 2292020; 803153, 2292051; 803109, 2292020; 803118, 2291804; 803091, 2291562; 802964, 2291430; 802770, 2291368; 802422, 2291298; 802088, 2291417; 802000, 2291518; 801758, 2292262; 801714, 2292447; return to starting point.

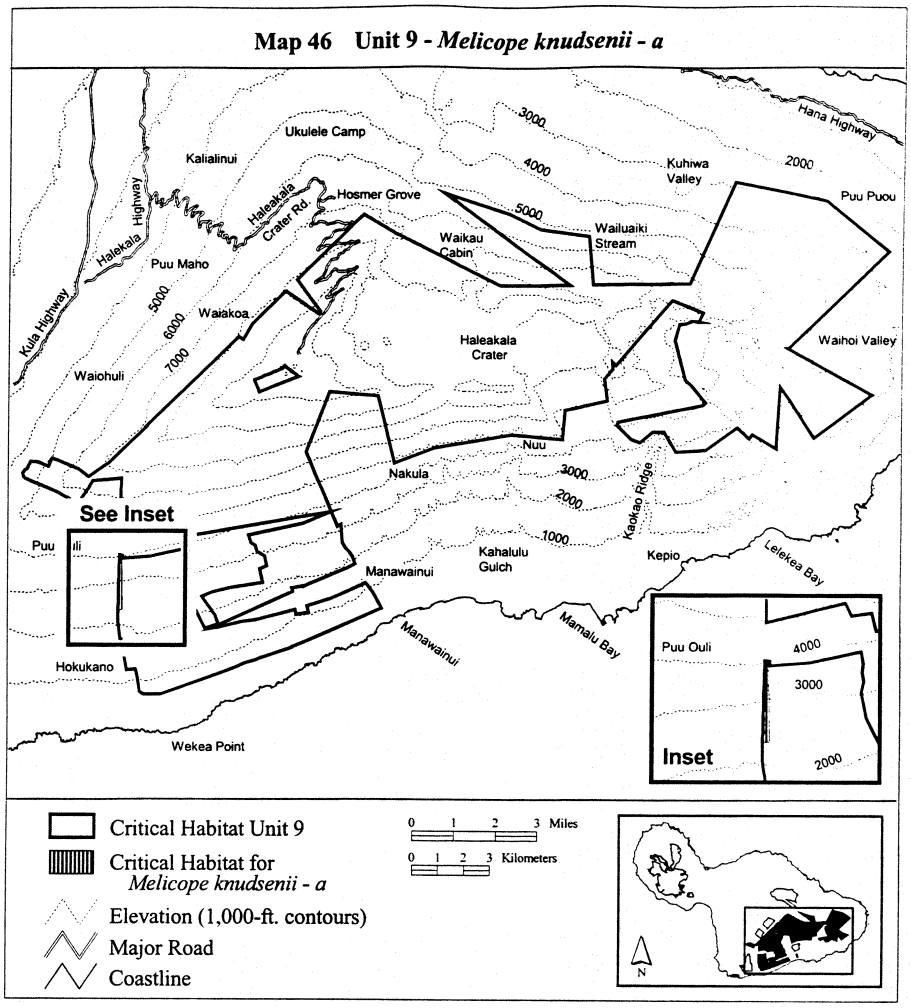
(B) NOTE: Map 45 follows:



(xlvi) Maui 9—Melicope knudsenii—a (28 ha; 69 ac).

(A) Unit consists of the following 26 boundary points: Start at 779378, 2283038; 779379, 2283091; 779379, 2283156; 779384, 2283260; 779385, 2283362; 779386, 2283461; 779389, 2283570; 779391, 2283672; 779394, 2283769; 779397, 2283858; 779397, 2283869; 779397, 2283875; 779398, 2283992; 779401, 2284094; 779401, 2284203; 779403, 2284241; 779406, 2284322; 779408, 2284377; 779408, 2284385; 779408, 2284390; 779413, 2284560; 779419, 2284768; 779424, 2285004; 779427, 2285134; 779523, 2285126; 779547, 2283051; return to starting point.

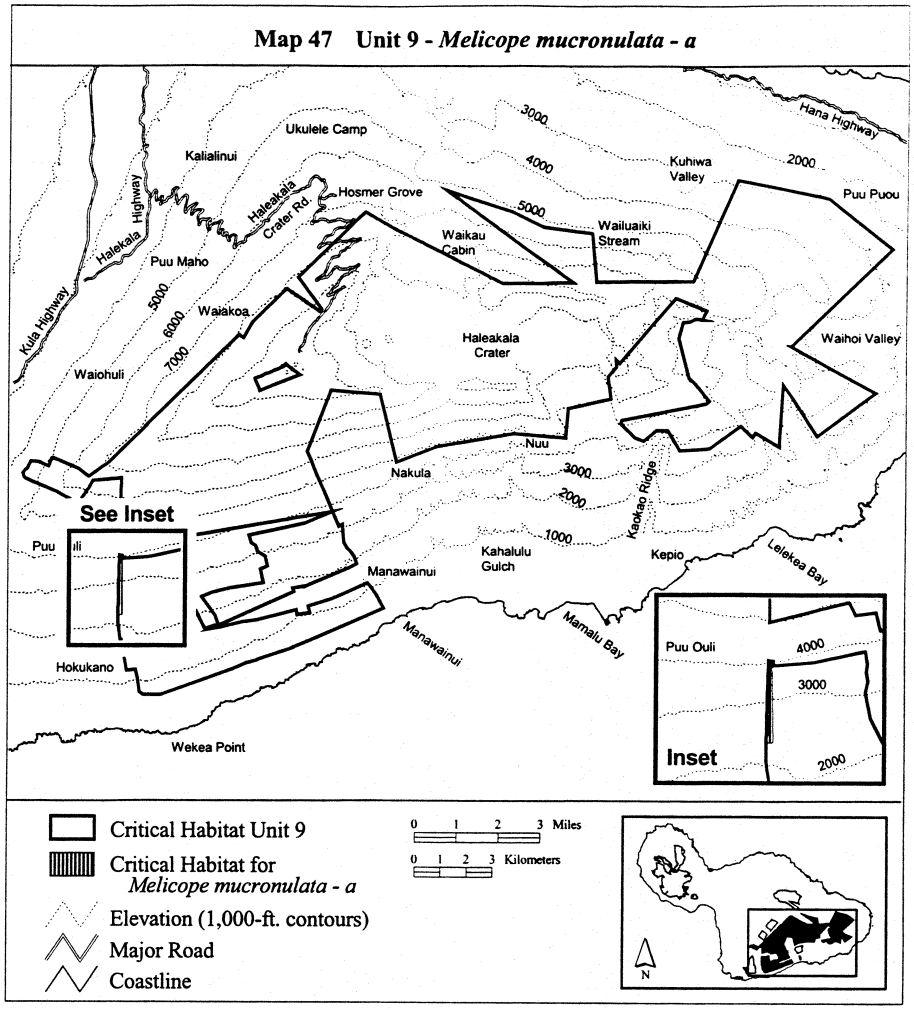
(B) NOTE: Map 46 follows:



(xlvii) Maui 9—*Melicope mucronulata*—a (34 ha; 83 ac).

(A) Unit consists of the following 23 boundary points: Start at 779374, 2282861; 779377, 2282926; 779379, 2283091; 779379, 2283156; 779384, 2283260; 779385, 2283362; 779386, 2283461; 779389, 2283570; 779391, 2283672; 779394, 2283769; 779397, 2283875; 779398, 2283992; 779401, 2284094; 779401, 2284203; 779403, 2284241; 779406, 2284322; 779413, 2284560; 779419, 2284768; 779424, 2285004; 779427, 2285144; 779552, 2285134; 779552, 2285008; 779544, 2282873; return to starting point.

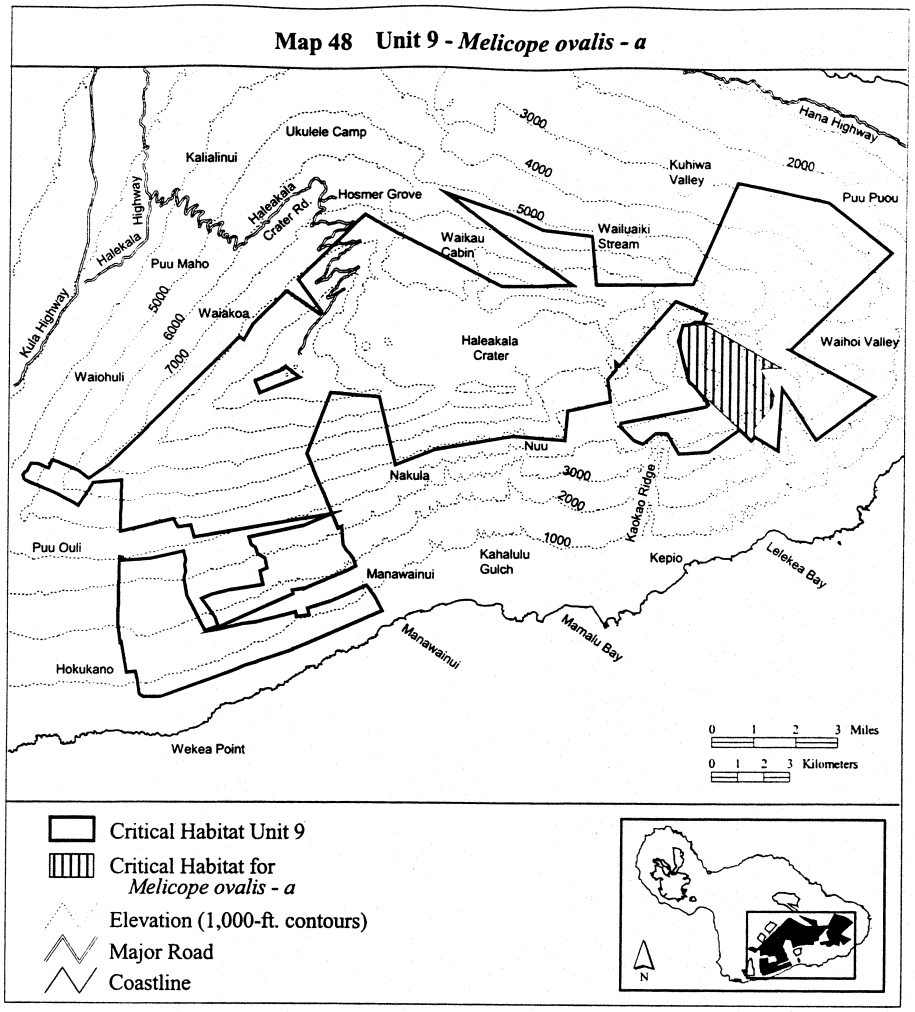
(B) NOTE: Map 47 follows:



(xlviii) Maui 9—*Melicope ovalis*—a (933 ha; 2,306 ac).

(A) Unit consists of the following 18 boundary points: Start at 803684, 2289877; 803574, 2289704; 803114, 2290141; 803112, 2290139; 801383, 2291766; 801145, 2291990; 800743, 2293514; 800900, 2294126; 801146, 2294134; 801147, 2294134; 801148, 2294134; 801758, 2294144; 804700, 2292498; 804245, 2292498; 803895, 2292463; 804438, 2291482; 804352, 2291008; 803667, 2290169; return to starting point.

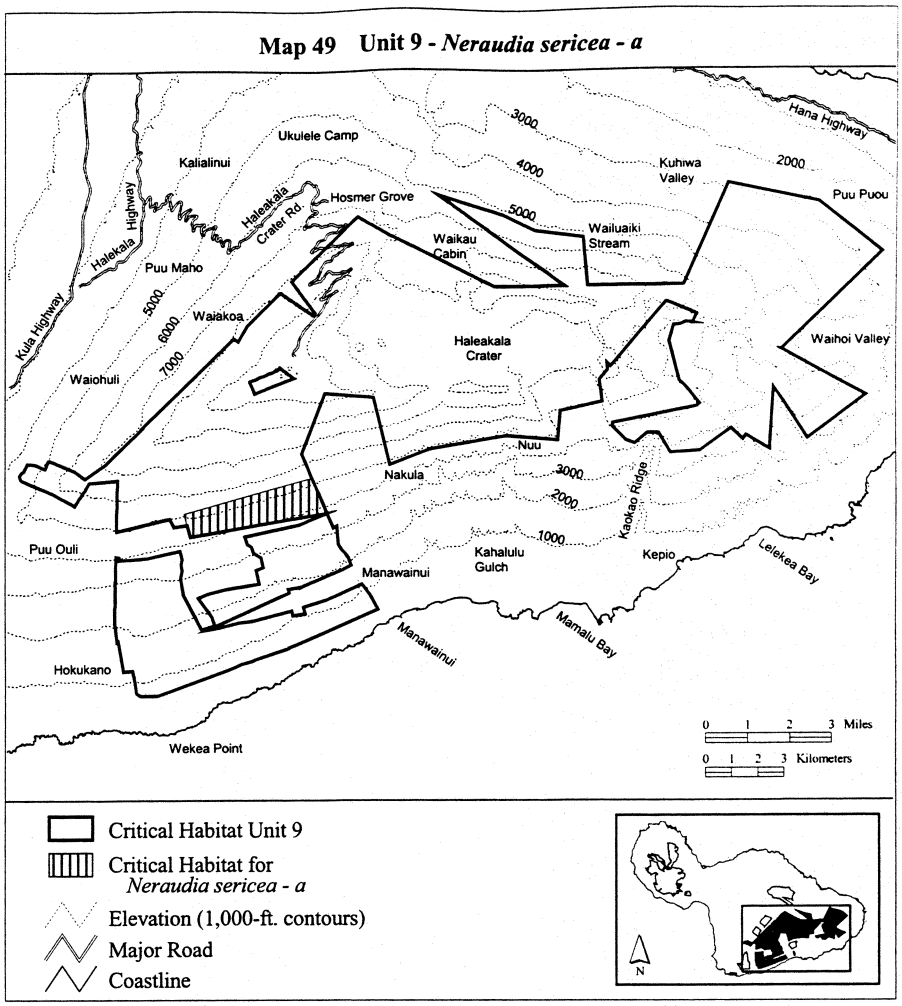
(B) NOTE: Map 48 follows:



(xlix) Maui 9—*Neraudia sericea*—a (623 ha; 1,540 ac).

(A) Unit consists of the following 7 boundary points: Start at 787503, 2286804; 782284, 2285907; 782162, 2286366; 782046, 2286802; 786980, 2288178; 787198, 2287662; 787557, 2286813; return to starting point.

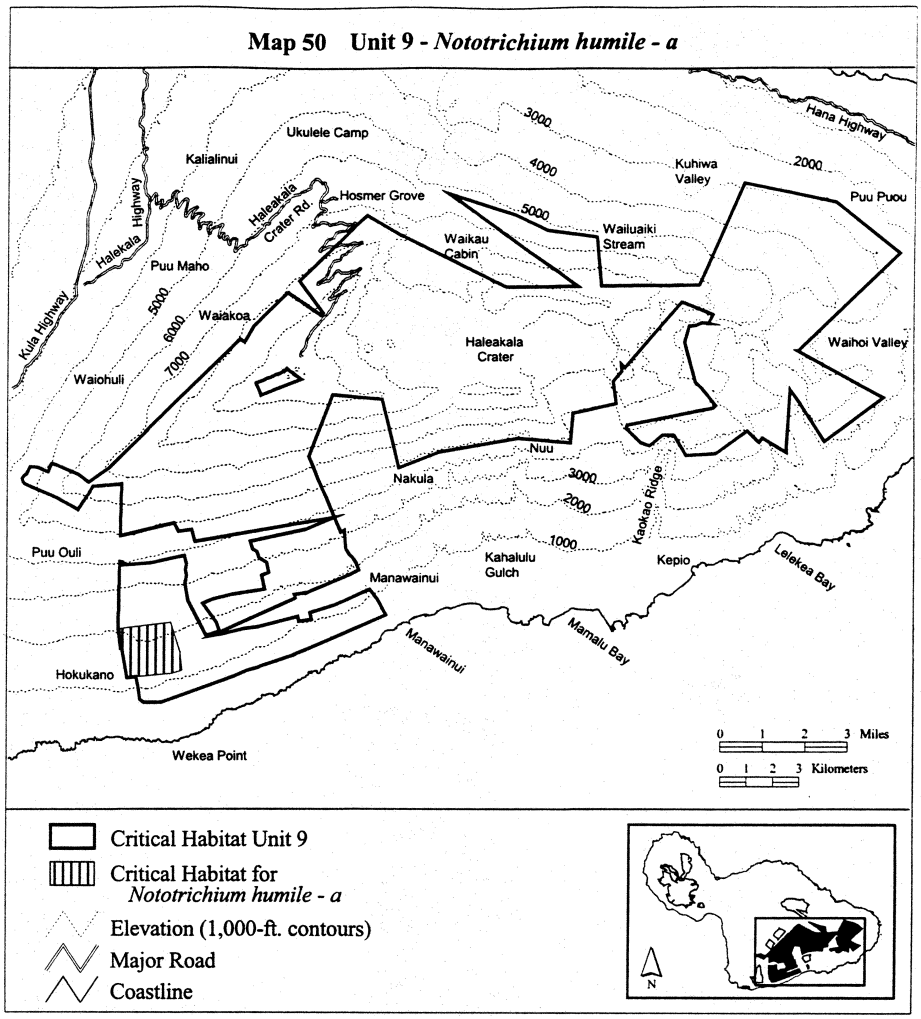
(B) NOTE: Map 49 follows:



(l) Maui 9—*Nototrichium humile*—a (398 ha; 982 ac).

(A) Unit consists of the following 9 boundary points: Start at 780063, 2280787; 779707, 2280753; 779507, 2281898; 779466, 2282131; 779455, 2282613; 781370, 2282843; 781731, 2281716; 781818, 2281027; 781425, 2280917; return to starting point.

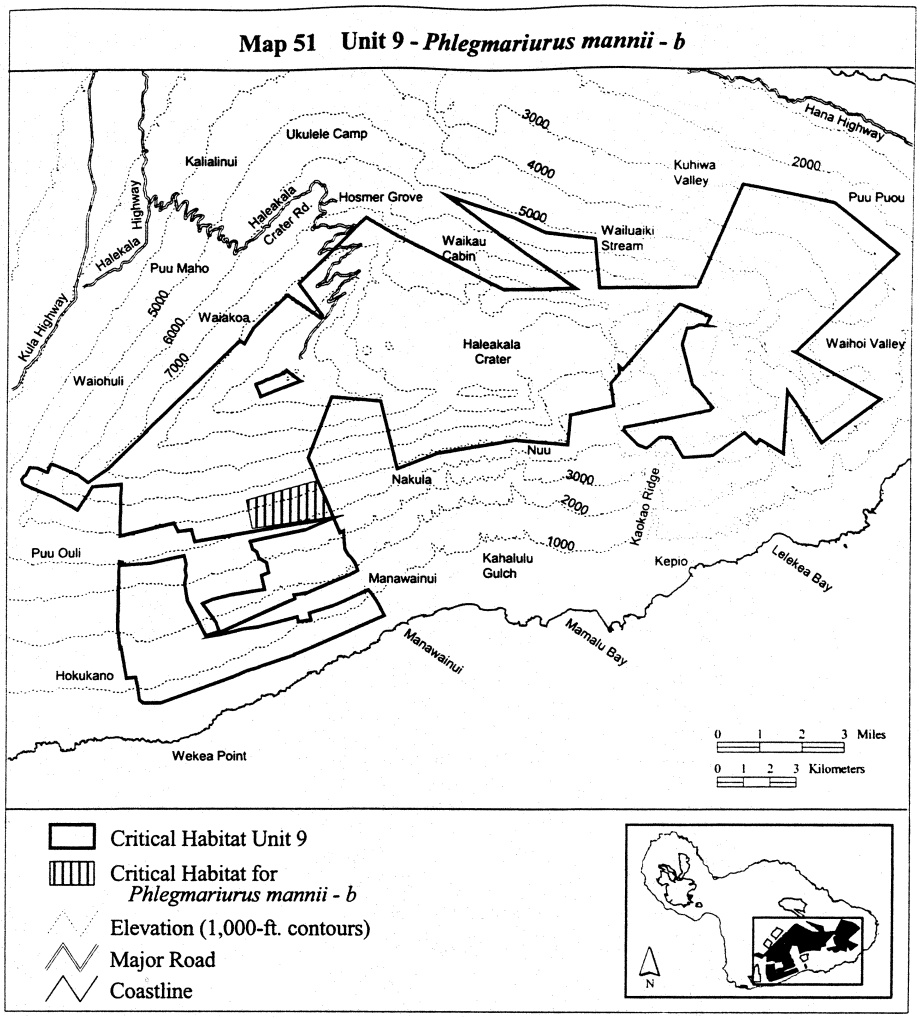
(B)NOTE: Map 50 follows:



(li) Maui 9—*Phlegmariurus mannii*—b (383 ha; 947 ac).

(A) Unit consists of the following 4 boundary points: Start at 787536, 2286861; 784465, 2286413; 784226, 2287486; 786946, 2288260; return to starting point.

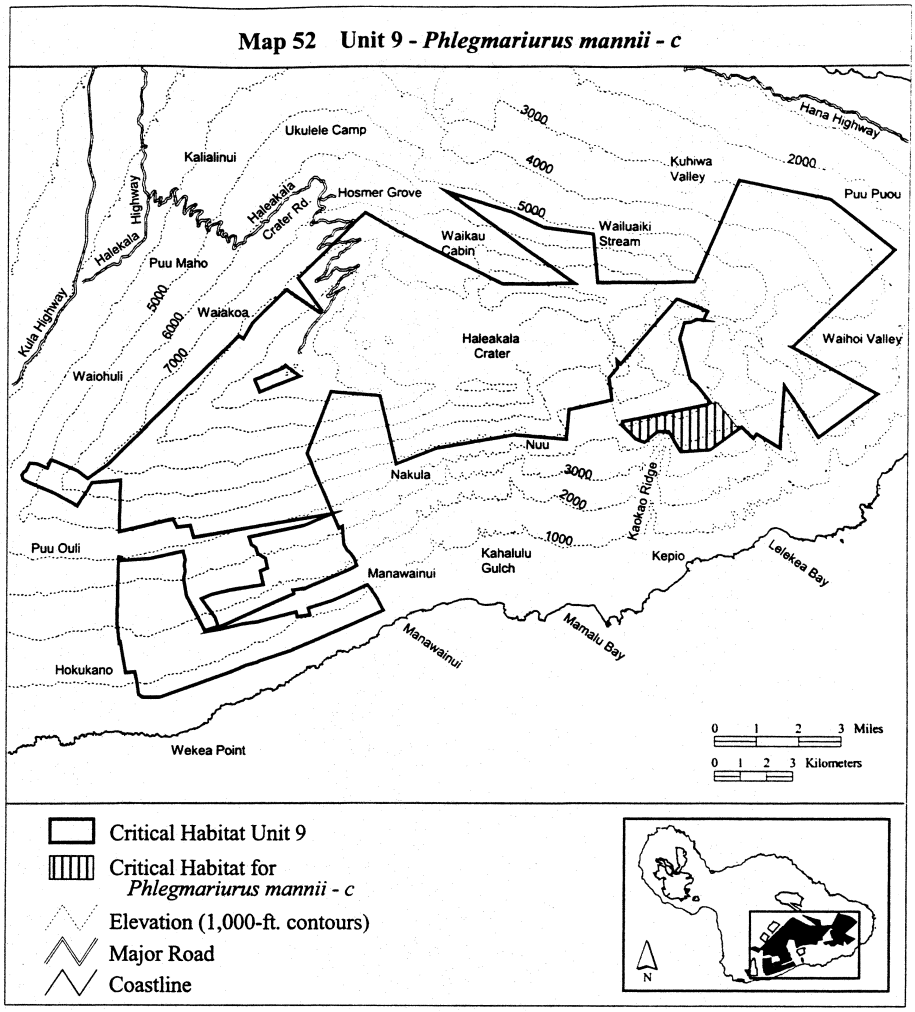
(B) NOTE: Map 51 follows:



(lii) Maui 9—*Phlegmariurus mannii*—c (476 ha; 1,176 ac).

(A) Unit consists of the following 12 boundary points: Start at 801935, 2289265; 800788, 2289185; 800342, 2289966; 799912, 2289966; 799418, 2289552; 799083, 2289679; 799034, 2289728; 798541, 2290221; 798585, 2290346; 801831, 2290999; 802185, 2291070; 803010, 2290064; return to starting point.

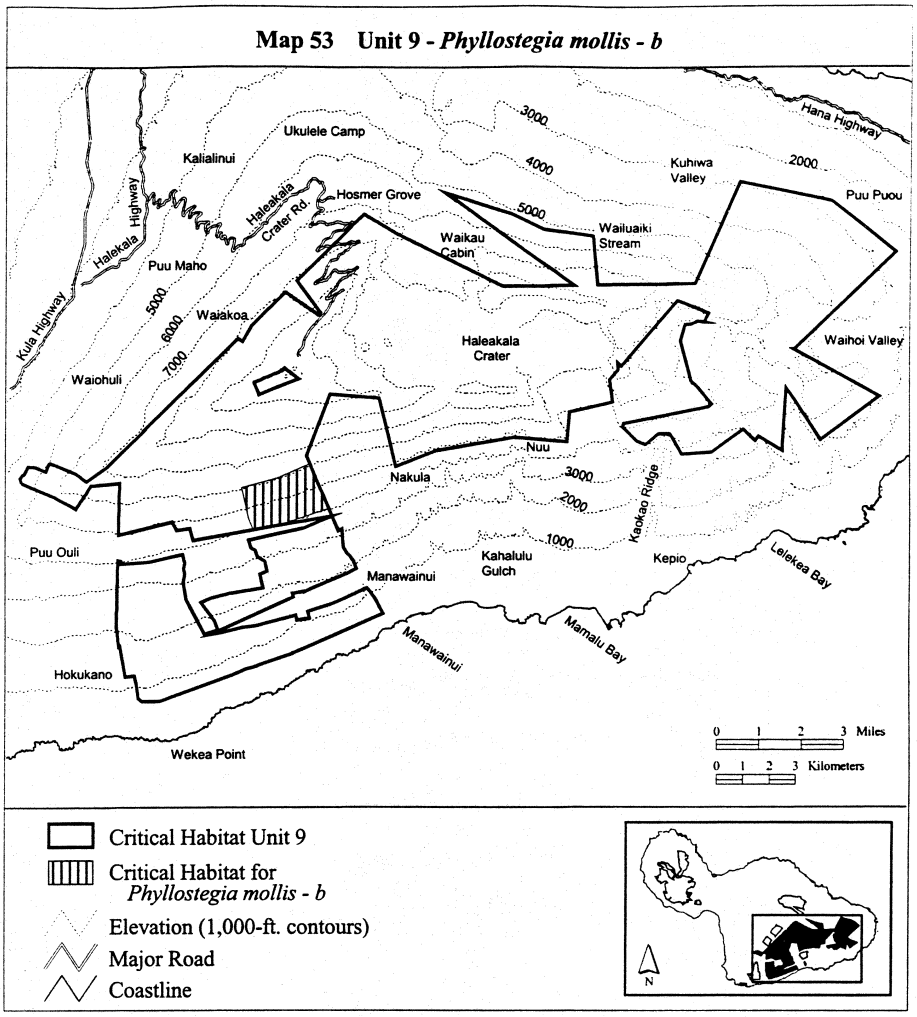
(B) NOTE: Map 52 follows:



(liii) Maui 9—*Phyllostegia mollis*—b (508 ha; 1,256 ac)

(A) Unit consists of the following 9 boundary points: Start at 787430, 2287113; 786267, 2286707; 785468, 2286458; 784537, 2286331; 784388, 2286734; 784109, 2287909; 785061, 2288163; 785507, 2288294; 786709, 2288819; return to starting point.

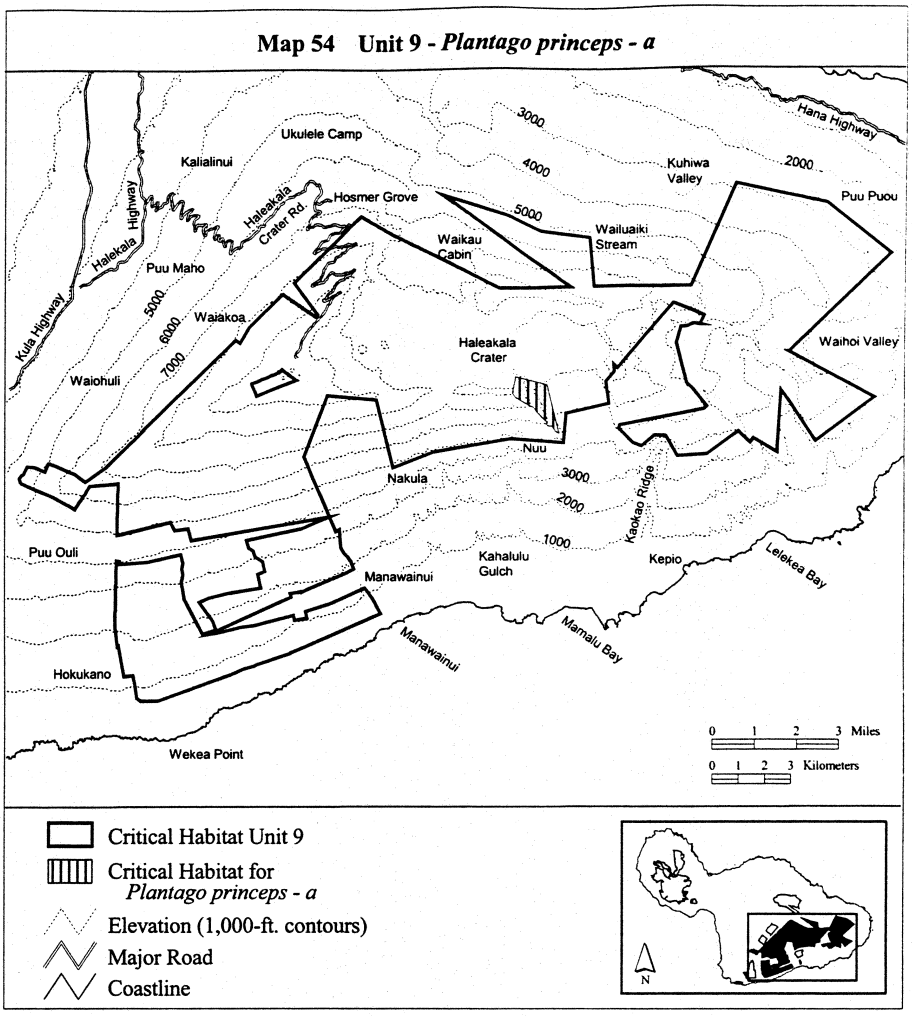
(B) NOTE: Map 53 follows:



(liv) Maui 9—*Plantago princeps*—a (164 ha; 406 ac).

(A) Unit consists of the following 13 boundary points: Start at 794508, 2291589; 794636, 2292209; 795824, 2291911; 796274, 2290033; 796133, 2290112; 796008, 2290304; 795864, 2290318; 795807, 2290385; 795821, 2290462; 795400, 2290907; 795299, 2291051; 795213, 2291075; 794614, 2291434; return to starting point.

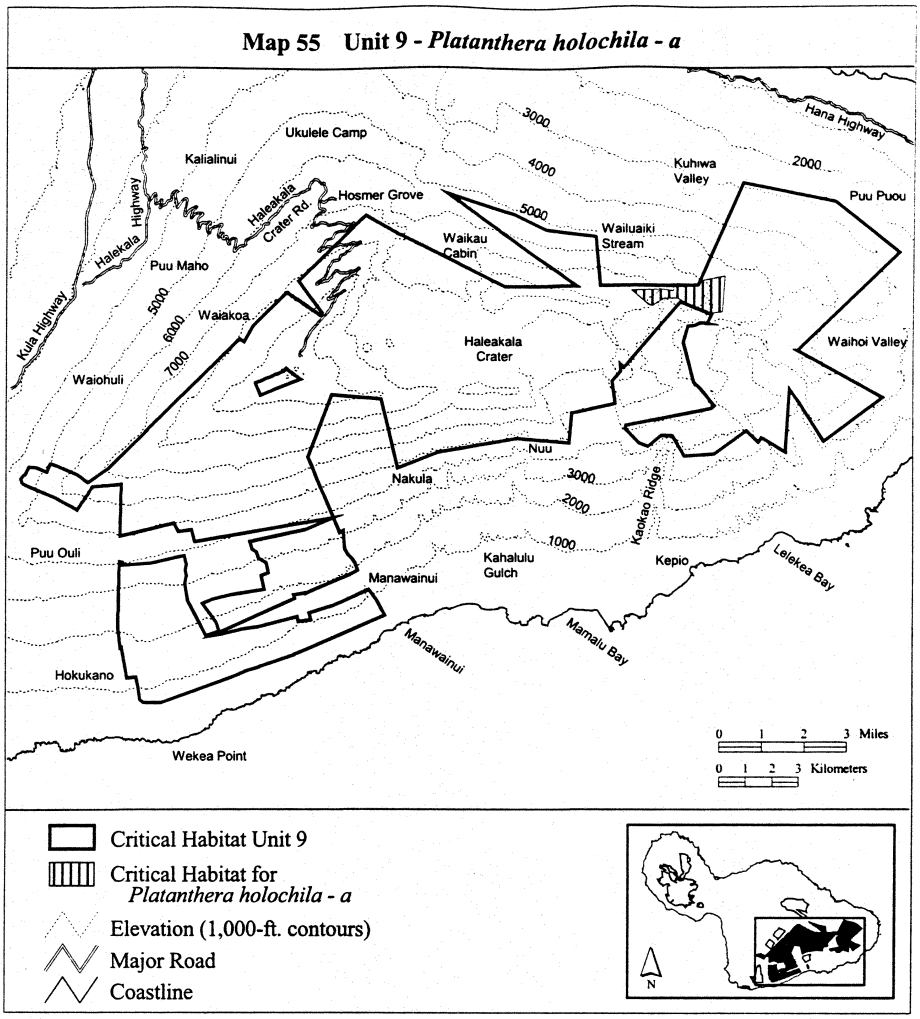
(B) NOTE: Map 54 follows:



(lv) Maui 9—*Platanthera holochila*—a (241 ha; 596 ac).

(A) Unit consists of the following 18 boundary points: Start at 800379, 2295672; 800982, 2295684; 801296, 2295688; 801297, 2295688; 801367, 2295845; 802309, 2296025; 802197, 2294658; 801820, 2294614; 801346, 2294743; 801343, 2294744; 800511, 2295191; 800001, 2295168; 799735, 2294991; 799557, 2294880; 799402, 2294969; 798778, 2295470; 799935, 2295528; 800349, 2295462; return to starting point.

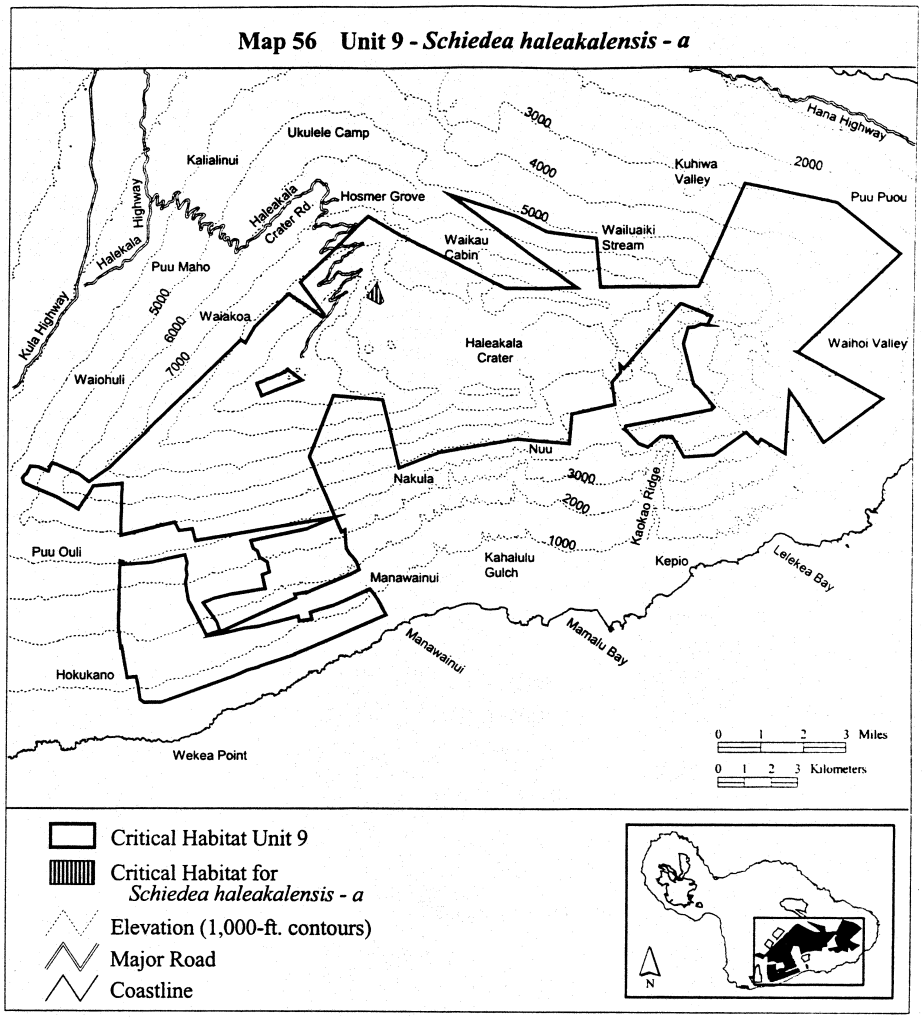
(B) NOTE: Map 55 follows:



(lvi) Maui 9—*Schiedea haleakalensis*—a (26 ha; 64 ac).

(A) Unit consists of the following 4 boundary points: Start at 789350, 2295087; 789223, 2294975; 788711, 2295251; 789089, 2295825; return to starting point.

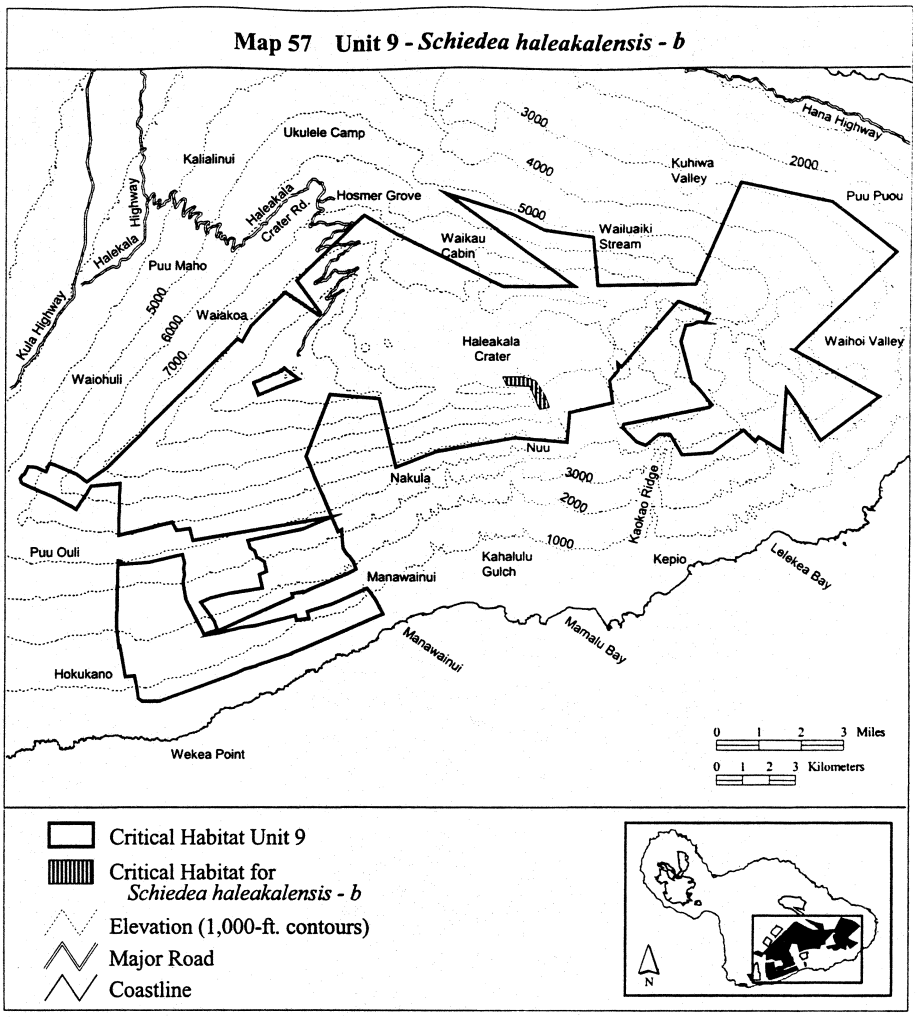
(B) NOTE: Map 56 follows:



(lvii) Maui 9—*Schiedea haleakalensis*—b (77 ha; 189 ac).

(A) Unit consists of the following 8 boundary points: Start at 794791, 2292187; 795274, 2292032; 795602, 2291475; 795788, 2291001; 795397, 2290929; 795031, 2291796; 794146, 2291863; 793984, 2292184; return to starting point.

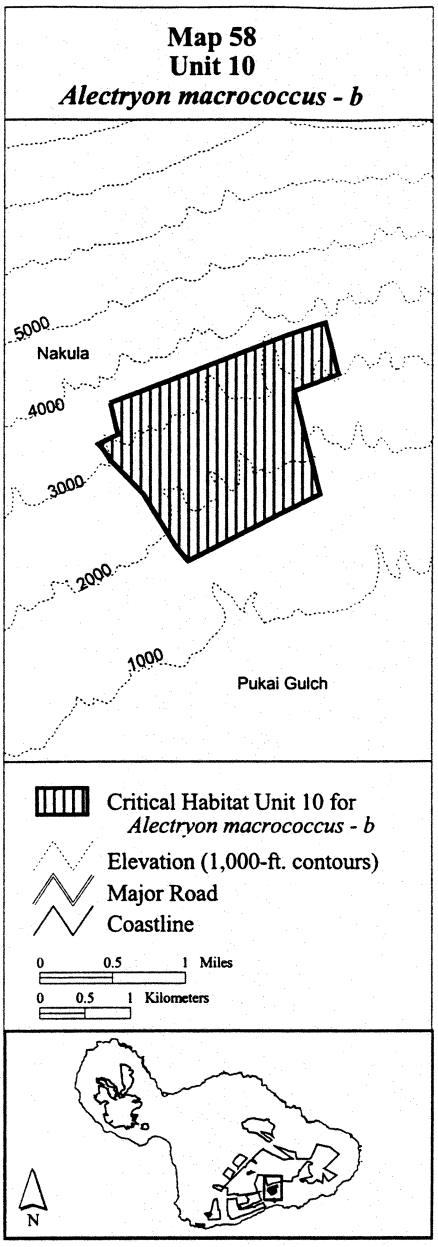
(B) NOTE: Map 57 follows:



(lviii) Maui 10—*Alectryon macrococcus*—b (402 ha; 992 ac).

(A) Unit consists of the following 25 boundary points: Start at 790161, 2287892; 790167, 2287894; 792132, 2288649; 792550, 2288788; 792695, 2288207; 792207, 2288023; 792491, 2286865; 792021, 2286624; 791018, 2286111; 790896, 2286265; 790745, 2286503; 790526, 2286863; 790525, 2286864; 790342, 2287060; 790170, 2287235; 790166, 2287238; 790160, 2287244; 790149, 2287257; 790135, 2287278; 790113, 2287317; 790099, 2287341; 790085, 2287359; 790061, 2287386; 790031, 2287426; 790244, 2287538; return to starting point.

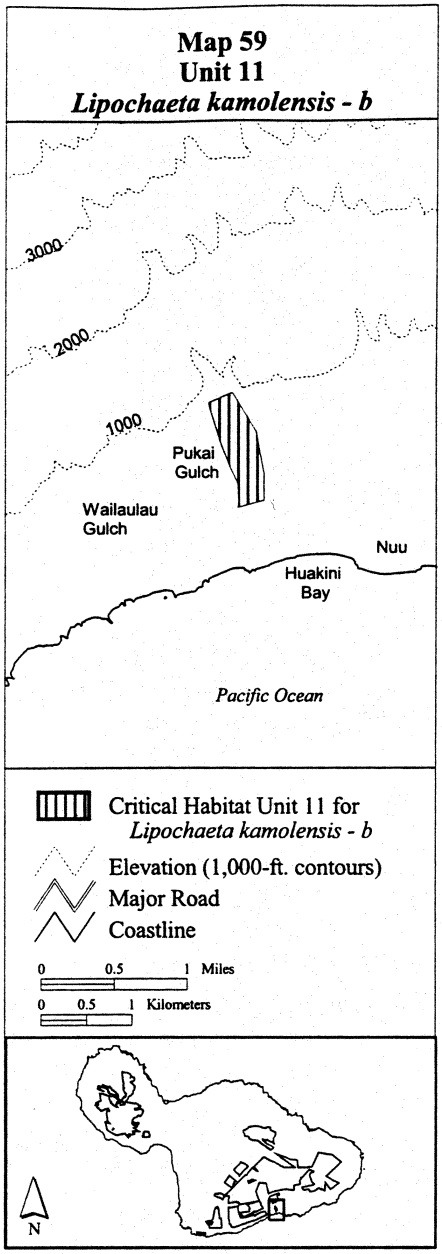
(B) NOTE: Map 58 follows:



(lix) Maui 11—*Lipochaeta kamolensis*—b (42 ha; 105 ac).

(A) Unit consists of the following 16 boundary points: Start at 791492, 2285251; 791757, 2285370; 791758, 2285368; 792019, 2284935; 792107, 2284459; 792107, 2284447; 792107, 2284163; 792103, 2284162; 791825, 2284087; 791831, 2284136; 791831, 2284137; 791825, 2284347; 791825, 2284348; 791736, 2284527; 791629, 2284802; 791506, 2285203; return to starting point.

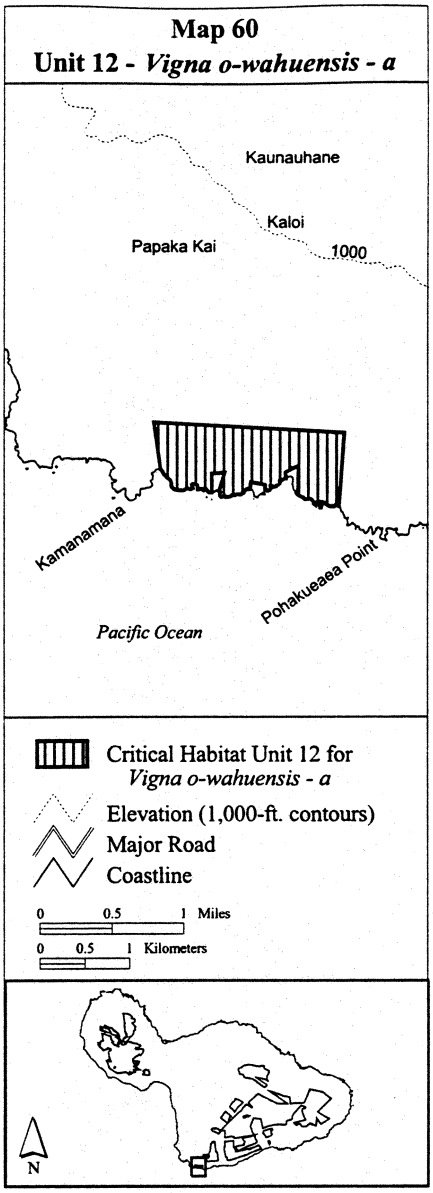
(B) NOTE: Map 59 follows:



(lx) Maui 12—*Vigna o-wahuensis*—a (144 ha; 357 ac).

(A) Unit consists of the following 27 boundary points and the intermediate coastline: Start at Start at 771207, 2278581; 771207, 2278581; 772344, 2278517; 773349, 2278461; 773349, 2278461; 773349, 2278461; 773296, 2277638; 773294, 2277610; 772830, 2277758; 772830, 2277758; 772839, 2278087; 772691, 2278009; 772697, 2277944; 772464, 2277817; 772464, 2277818; 772464, 2277873; 772302, 2277904; 772291, 2277823; 772291, 2277823; 771941, 2277804; 772001, 2278009; 771861, 2277996; 771858, 2277785; 771283, 2278049; 771283, 2278049; 771283, 2278049; 771207, 2278581; return to starting point.; return to starting point.

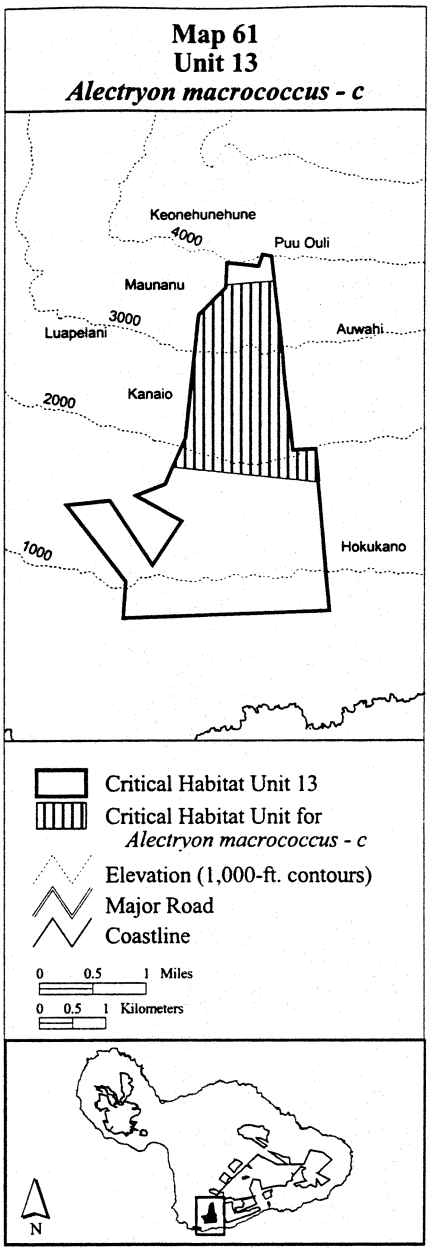
(B) NOTE: Map 60 follows:



(lxi) Maui 13—*Alectryon macrococcus*—c (418 ha; 1,034 ac).

(A) Unit consists of the following 20 boundary points: Start at 777409, 2281715; 777399, 2281716; 775210, 2281944; 775397, 2282390; 775399, 2282405; 775595, 2284266; 776003, 2284682; 776042, 2284722; 776732, 2284778; 776737, 2284731; 776802, 2284151; 776861, 2283642; 776886, 2283406; 776919, 2283097; 776983, 2282542; 777020, 2282206; 777020, 2282205; 777021, 2282204; 777365, 2282220; 777408, 2281728; return to starting point.

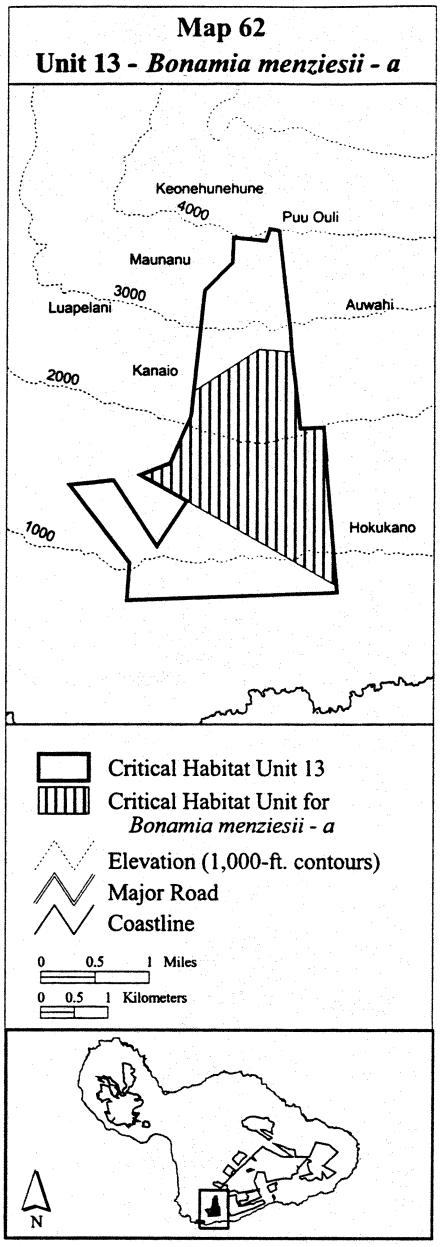
(B) NOTE: Map 61 follows:



(lxii) Maui 13—*Bonamia menziesii*—a (536 ha; 1,325 ac).

(A) Unit consists of the following 18 boundary points: Start at 777534, 2280121; 777558, 2279855; 777557, 2279856; 775339, 2281114; 774656, 2281501; 775099, 2281680; 775397, 2282390; 775399, 2282405; 775433, 2282731; 775436, 2282755; 776398, 2283391; 776891, 2283357; 776919, 2283097; 776983, 2282542; 777020, 2282206; 777020, 2282205; 777021, 2282204; 777348, 2282219; return to starting point.

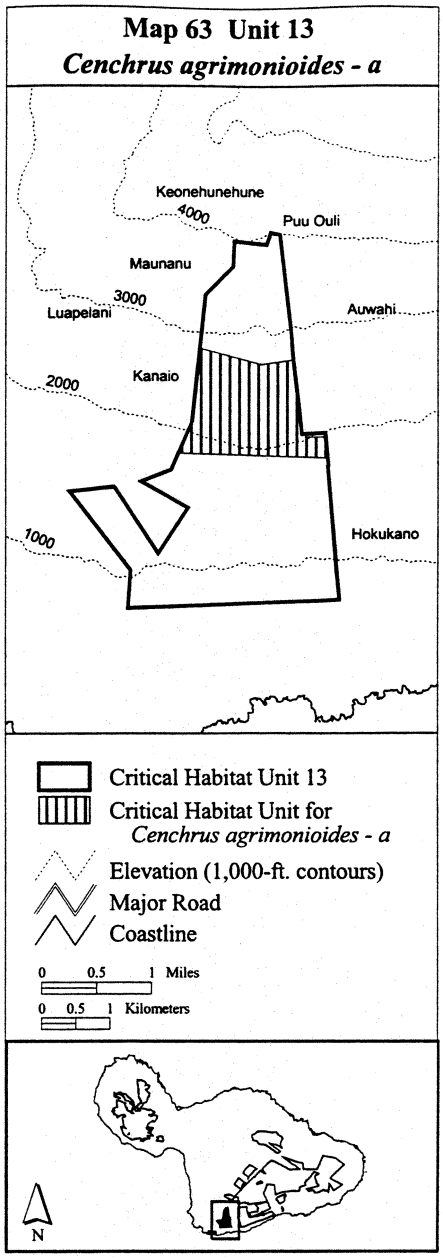
(B) NOTE: Map 62 follows:



(lxiii) Maui 13—*Cenchrus agrimonioides*—a (237 ha; 586 ac).

(A) Unit consists of the following 15 boundary points: Start at 775397, 2282390; 775399, 2282405; 775513, 2283488; 776422, 2283239; 776896, 2283308; 776919, 2283097; 776983, 2282542; 777020, 2282206; 777020, 2282205; 777021, 2282204; 777071, 2282206; 777077, 2282162; 777341, 2282162; 777390, 2281851; 775204, 2281929; return to starting point.

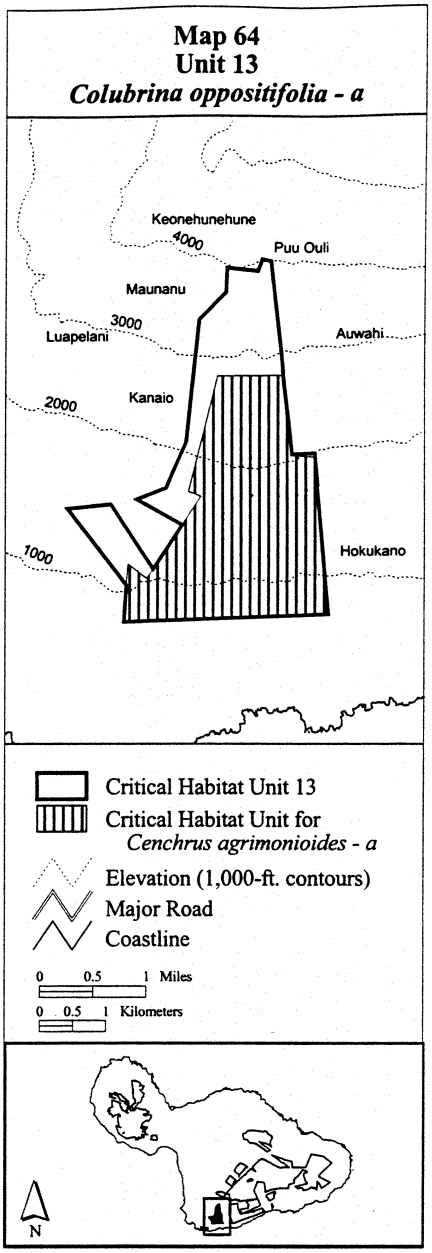
(B) NOTE: Map 63 follows:



(lxiv) Maui 13—*Colubrina oppositifolia*—a (739 ha; 1,827 ac).

(A) Unit consists of the following 20 boundary points: Start at 777399, 2281716; 777534, 2280121; 777557, 2279856; 777566, 2279748; 774460, 2279633; 774498, 2280191; 774520, 2280511; 774805, 2280290; 774901, 2280438; 775339, 2281114; 775626, 2281557; 775438, 2281627; 775884, 2283410; 776885, 2283418; 776886, 2283406; 776919, 2283097; 776983, 2282542; 776985, 2282522; 777010, 2282190; 777361, 2282167; return to starting point.

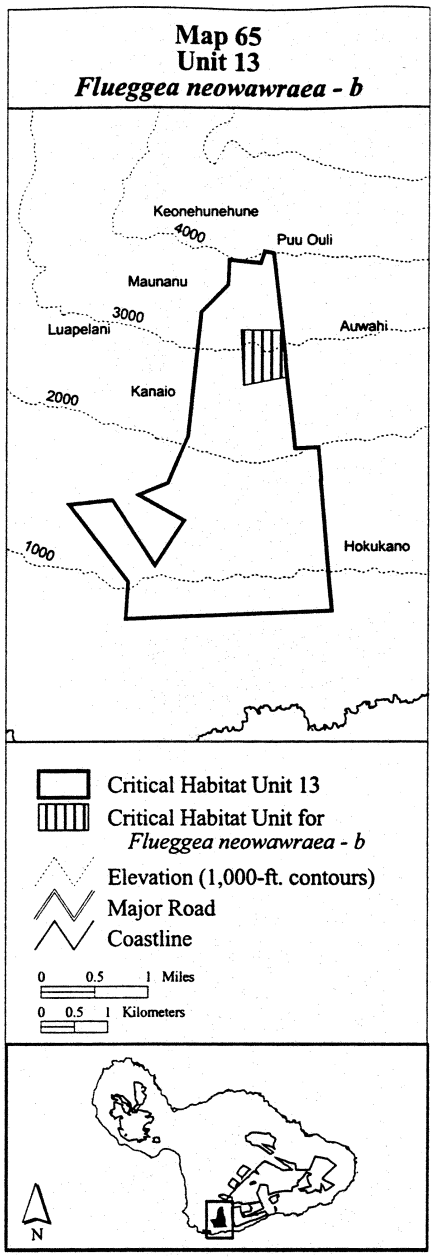
(B) NOTE: Map 64 follows:



(lxv) Maui 13—*Flueggea neowawraea*—b (50 ha; 123 ac).

(A) Unit consists of the following 6 boundary points: Start at 776821, 2283991; 776861, 2283642; 776886, 2283406; 776899, 2283288; 776236, 2283166; 776192, 2283998; return to starting point.

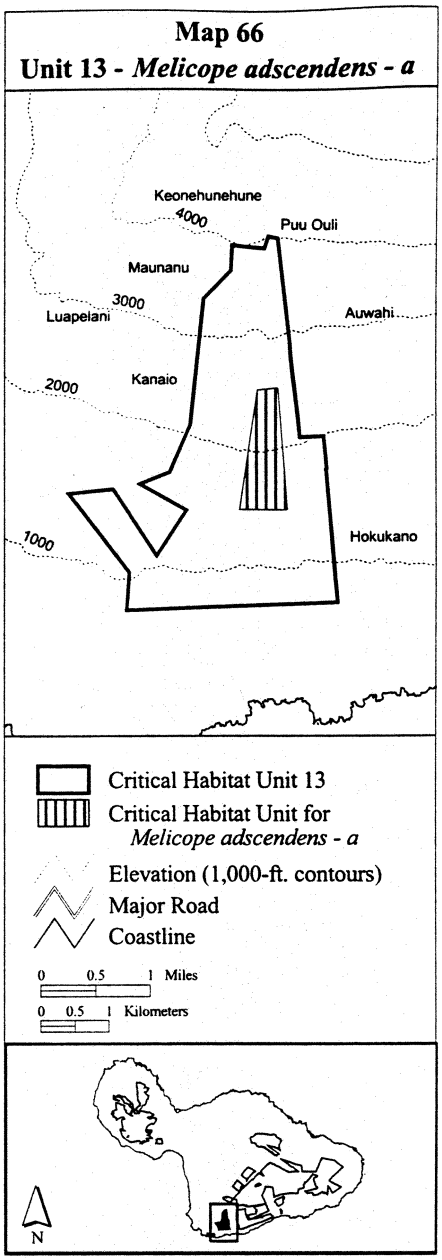
(B) NOTE: Map 65 follows:



(lxvi) Maui 13—*Melicope adscendens*—a (161 ha; 397 ac).

(A) Unit consists of the following 12 boundary points: Start at 776003, 2284682; 776019, 2285054; 776489, 2284998; 776709, 2284972; 776737, 2284731; 776802, 2284151; 776844, 2283785; 776865, 2283600; 776886, 2283406; 776919, 2283097; 776928, 2283019; 775938, 2283164; return to starting point.

(B) NOTE: Map 66 follows:

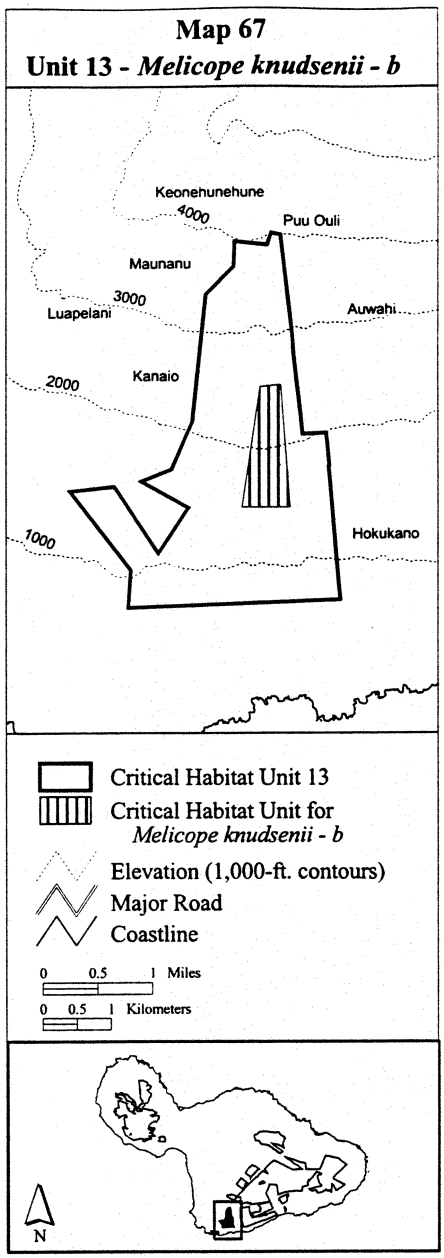


(lxvii) Maui 13—*Melicope knudsenii*—b (163 ha; 403 ac).

(A) Unit consists of the following 11 boundary points: Start at 776489, 2284998; 776552, 2285180; 776688, 2285156; 776737, 2284731; 776802, 2284151; 776854,

2283698; 776863, 2283625; 776886, 2283406; 776919, 2283097; 776948, 2282847; 775700, 2282749; return to starting point.

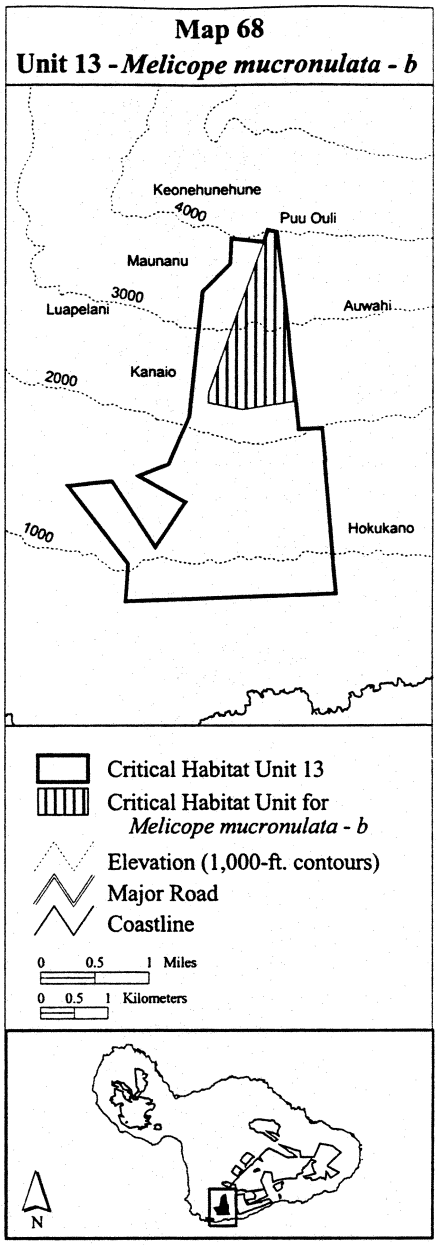
(B) NOTE: Map 67 follows:



(lxviii) Maui 13—*Melicope mucronulata*—b (195 ha; 481 ac).

(A) Unit consists of the following 13 boundary points: Start at 776560, 2285179; 776688, 2285156; 776737, 2284731; 776802, 2284151; 776834, 2283873; 776873, 2283524; 776886, 2283406; 776919, 2283097; 776973, 2282631; 776189, 2282501; 775681, 2282604; 775689, 2282754; 776094, 2283897; return to starting point.

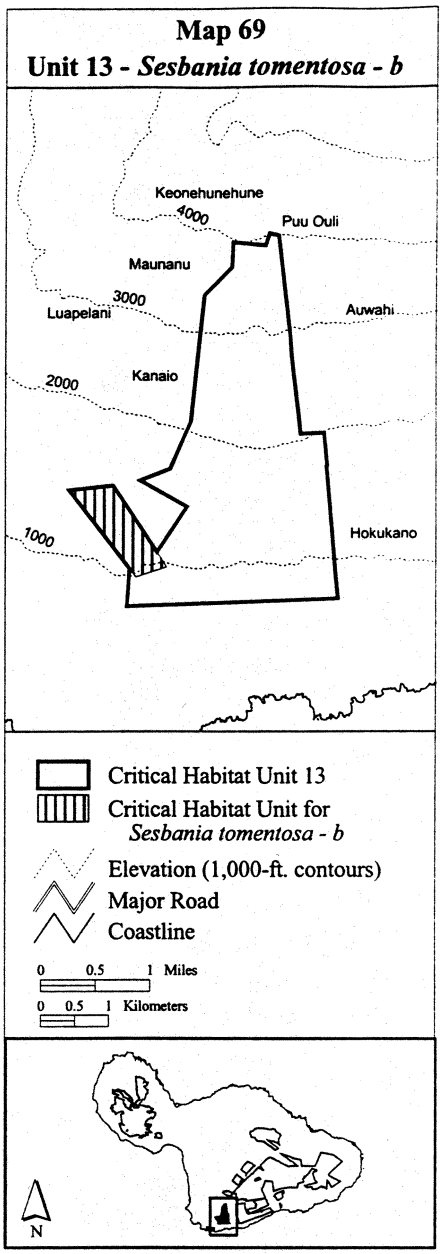
(B) NOTE: Map 68 follows:



(lxix) Maui 13—*Sesbania tomentosa*—b (79 ha; 195 ac).

(A) Unit consists of the following 6 boundary points: Start at 774498, 2280191; 773607, 2281357; 774253, 2281429; 774901, 2280438; 775045, 2280217; 774598, 2280060; return to starting point.

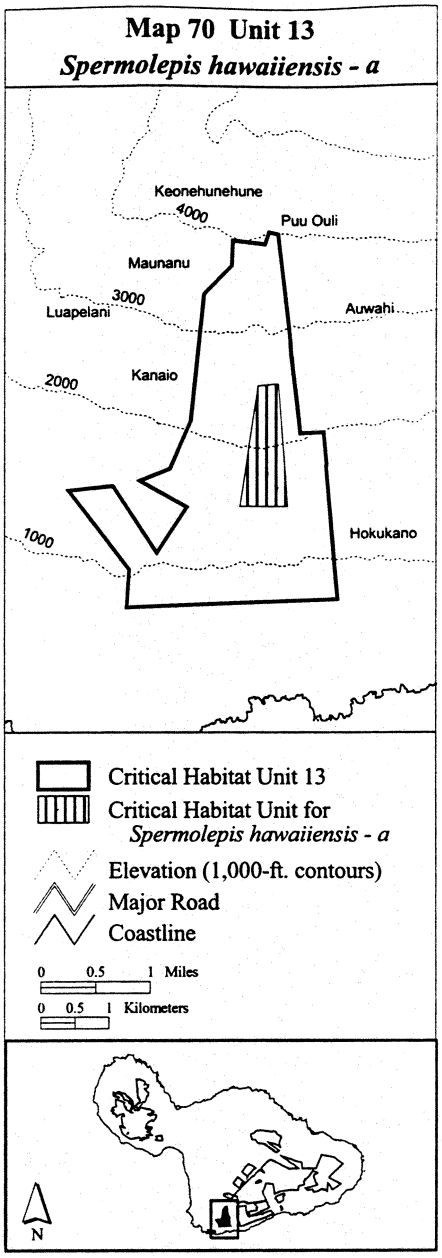
(B) NOTE: Map 69 follows:



(lxx) Maui 13—*Spermolepis hawaiiensis*—a (91 ha; 225 ac).

(A) Unit consists of the following 4 boundary points: Start at 776697, 2282941; 776828, 2281119; 776127, 2281124; 776388, 2282905; return to starting point.

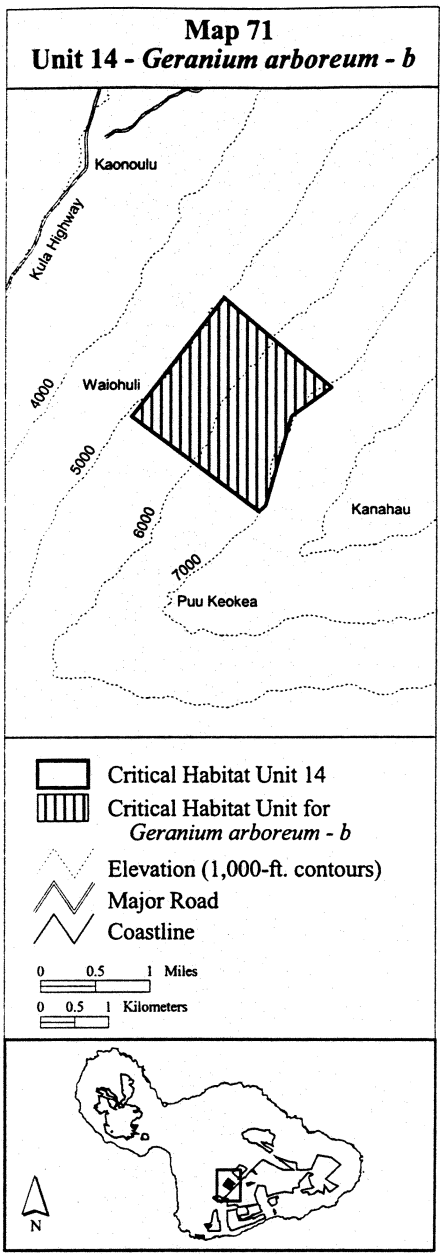
(B) NOTE: Map 70 follows:



(lxxi) Maui 14—*Geranium arboreum*—b (452 ha; 1,116 ac).

(A) Unit consists of the following 9 boundary points: Start at 780754, 2291599; 780710, 2291446; 780373, 2290270; 780279, 2290173; 780278, 2290174; 778398, 2291590; 779750, 2293350; 781334, 2292030; 781340, 2292025; return to starting point.

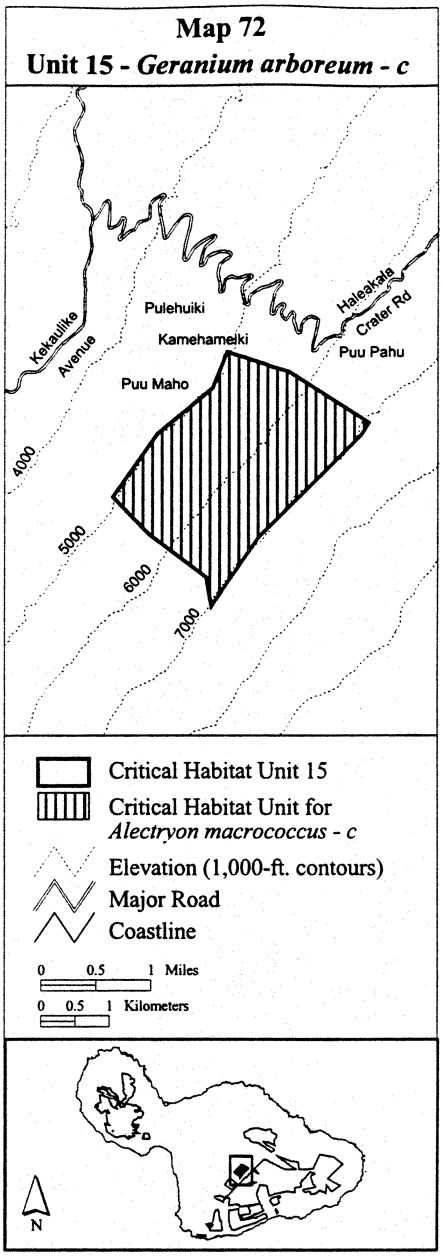
(B) NOTE: Map 71 follows:



(lxxii) Maui 15—*Geranium arboreum*—c (667 ha; 1,648 ac).

(A) Unit consists of the following 39 boundary points: Start at 783428, 2296641; 784570, 2295895; 784440, 2295690; 784206, 2295457; 782957, 2294208; 782956, 2294207; 782421, 2293422; 782263, 2293191; 782223, 2293416; 782187, 2293615; 781338, 2294254; 781096, 2294510; 780818, 2294804; 781473, 2295735; 782282, 2296409; 782490, 2296948; 782522, 2296937; 782582, 2296918; 782616, 2296907; 782636, 2296900; 782656, 2296893; 782679, 2296886; 782713, 2296875; 782816, 2296841; 782839, 2296833; 782858, 2296827; 782895, 2296816; 782965, 2296793; 783029, 2296772; 783050, 2296765; 783073, 2296758; 783093, 2296751; 783114, 2296744; 783182, 2296721; 783227, 2296707; 783263, 2296695; 783282, 2296689; 783304, 2296681; 783388, 2296654; return to starting point.

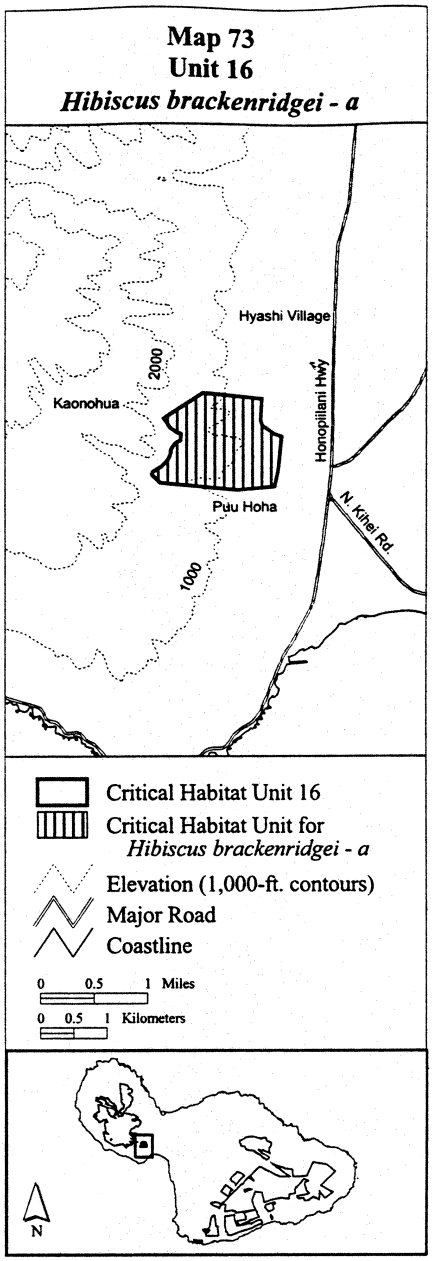
(B) NOTE: Map 72 follows:



(lxxiii) Maui 16—*Hibiscus brackenridgei*—a (212 ha; 523 ac).

(A) Unit consists of the following 27 boundary points: Start at 756769, 2303771; 756794, 2303787; 756914, 2303864; 757007, 2303958; 757033, 2304013; 757058, 2304068; 757053, 2304123; 757071, 2304153; 757104, 2304208; 757162, 2304244; 757198, 2304267; 757206, 2304365; 757138, 2304395; 757037, 2304471; 756959, 2304605; 757541, 2304994; 758421, 2304900; 758402, 2304566; 758427, 2304491; 758605, 2304369; 758716, 2304323; 758665, 2303806; 758665, 2303805; 758615, 2303558; 758067, 2303509; 756894, 2303623; 756774, 2303746; return to starting point.

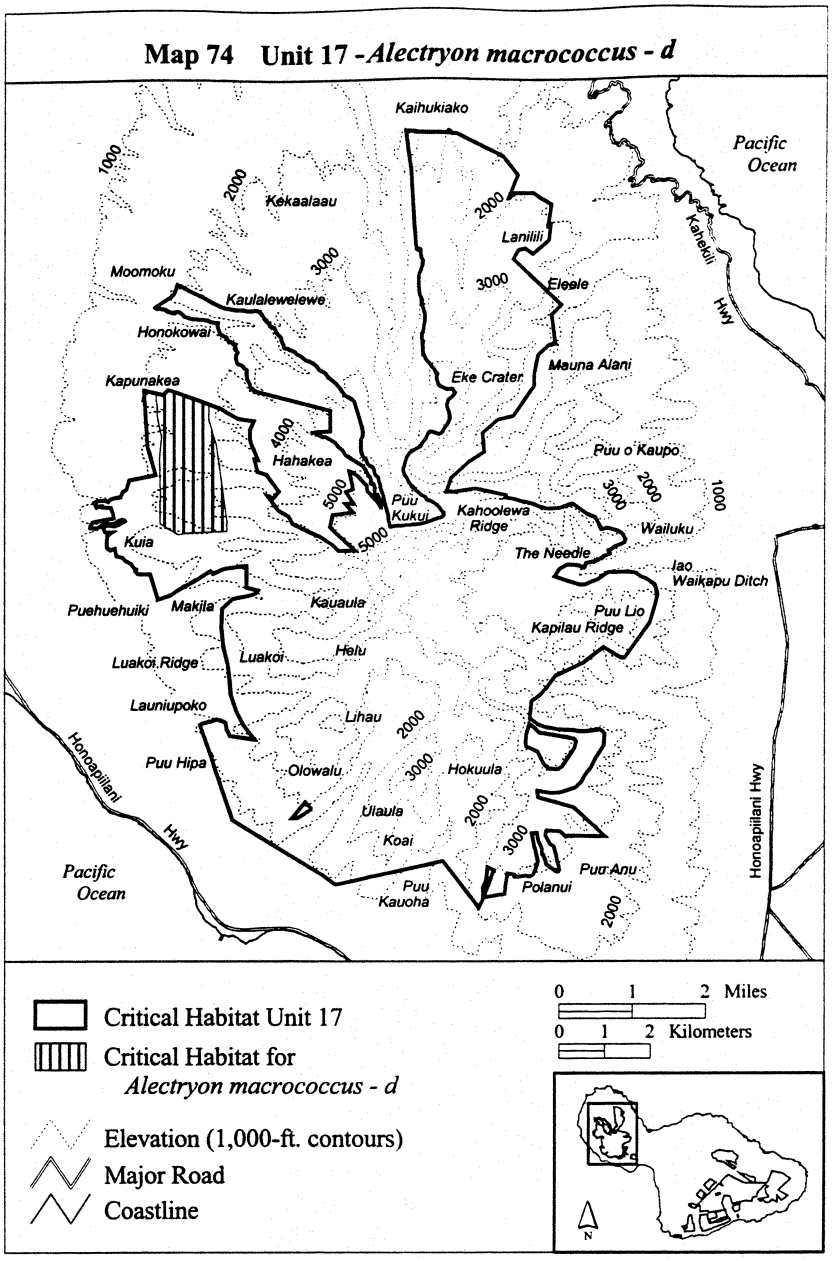
(B) NOTE: Map 73 follows:



(lxxiv) Maui 17—*Alectryon macrococcus*—d (391 ha; 965 ac).

(A) Unit consists of the following 27 boundary points: Start at 746095, 2314835; 746096, 2314835; 746207, 2314953; 746887, 2314706; 747096, 2314630; 747103, 2314277; 747172, 2314023; 747194, 2313958; 747189, 2313958; 747258, 2313703; 747500, 2311983; 747492, 2311912; 747502, 2311779; 746629, 2311755; 746420, 2311719; 746022, 2311962; 746024, 2312026; 746020, 2312039; 746014, 2312318; 746038, 2312650; 746002, 2313394; 746052, 2313940; 746048, 2313940; 745960, 2314381; 745954, 2314592; 745934, 2314718; 745938, 2314873; return to starting point.

(B) NOTE: Map 74 follows:

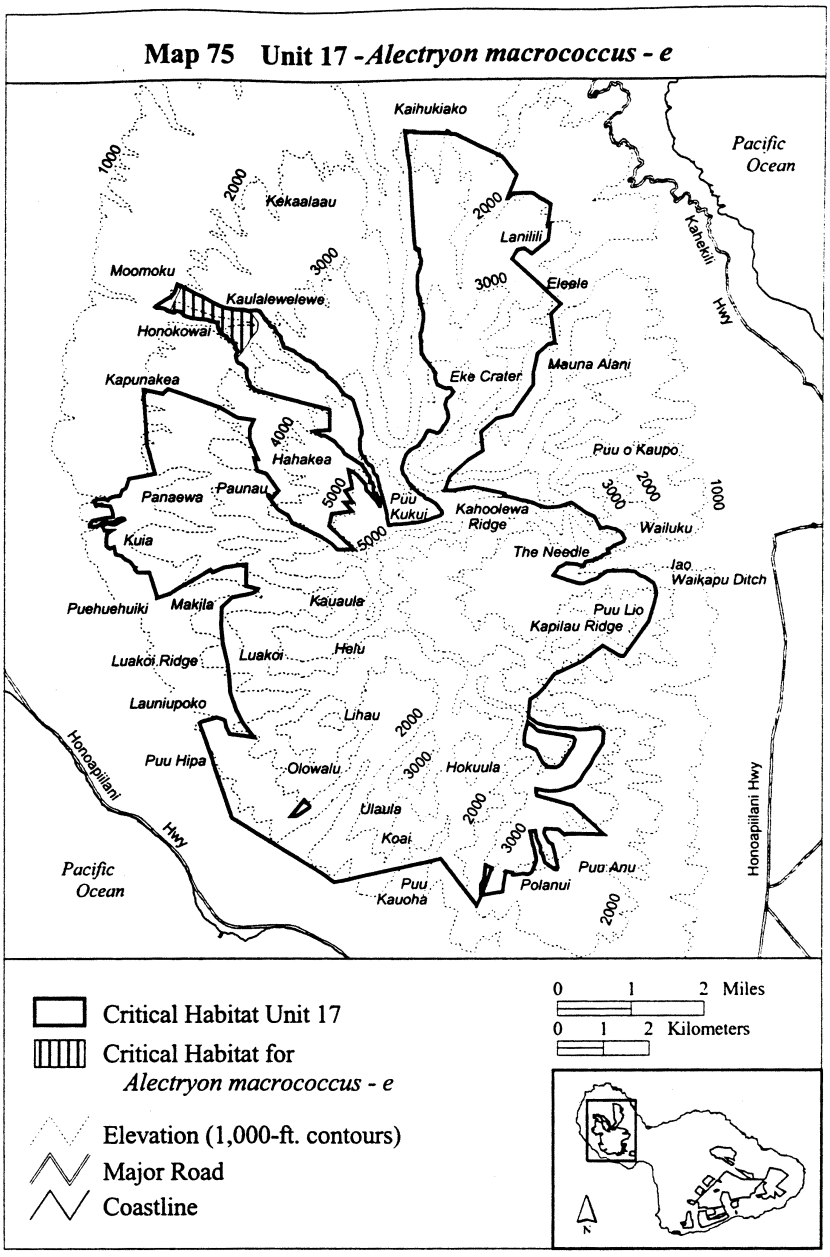


(lxxv) Maui 17—*Alectryon macrococcus*—e (110 ha; 271 ac).

(A) Unit consists of the following 105 boundary points: Start at 747695, 2315652; 747693, 2315665; 747695, 2315687; 747702, 2315718; 747713, 2315745; 747728, 2315775; 747729, 2315792; 747729, 2315793; 747717, 2315811; 747717, 2315812; 747697,

2315822; 747681, 2315836; 747675, 2315860; 747677, 2315876; 747681, 2315899; 747681, 2315918; 747667, 2315950; 747648, 2315974; 747620, 2315996; 747585, 2316012; 747546, 2316034; 747526, 2316055; 747508, 2316086; 747494, 2316109; 747476, 2316129; 747447, 2316142; 747409, 2316159; 747389, 2316169; 747365, 2316186; 747345, 2316212; 747336, 2316228; 747328, 2316244; 747312, 2316282; 747299, 2316323; 747290, 2316361; 747289, 2316384; 747289, 2316392; 747296, 2316429; 747296, 2316430; 747296, 2316431; 747260, 2316441; 747214, 2316449; 747159, 2316459; 747125, 2316462; 747109, 2316472; 747100, 2316476; 747078, 2316500; 747077, 2316501; 747055, 2316503; 747024, 2316497; 746977, 2316510; 746946, 2316512; 746922, 2316518; 746881, 2316516; 746836, 2316520; 746786, 2316524; 746741, 2316526; 746698, 2316533; 746655, 2316550; 746617, 2316562; 746584, 2316571; 746551, 2316595; 746533, 2316622; 746505, 2316643; 746458, 2316680; 746457, 2316680; 746411, 2316689; 746410, 2316689; 746348, 2316682; 746338, 2316683; 746337, 2316682; 746335, 2316658; 746329, 2316659; 746231, 2316679; 746501, 2317239; 746647, 2317164; 746706, 2317135; 746859, 2317060; 746968, 2317006; 747190, 2316887; 747229, 2316866; 747344, 2316808; 747418, 2316781; 747517, 2316751; 747602, 2316733; 747628, 2316729; 747715, 2316716; 747716, 2316715; 747717, 2316715; 747937, 2316652; 748040, 2316630; 748046, 2316620; 748049, 2316619; 748181, 2316434; 748179, 2316409; 748181, 2316406; 748176, 2316380; 748164, 2316249; 748053, 2316110; 747990, 2316024; 747963, 2315953; 747889, 2315855; 747846, 2315782; 747792, 2315728; 747733, 2315650; return to starting point.

(B) NOTE: Map 75 follows:

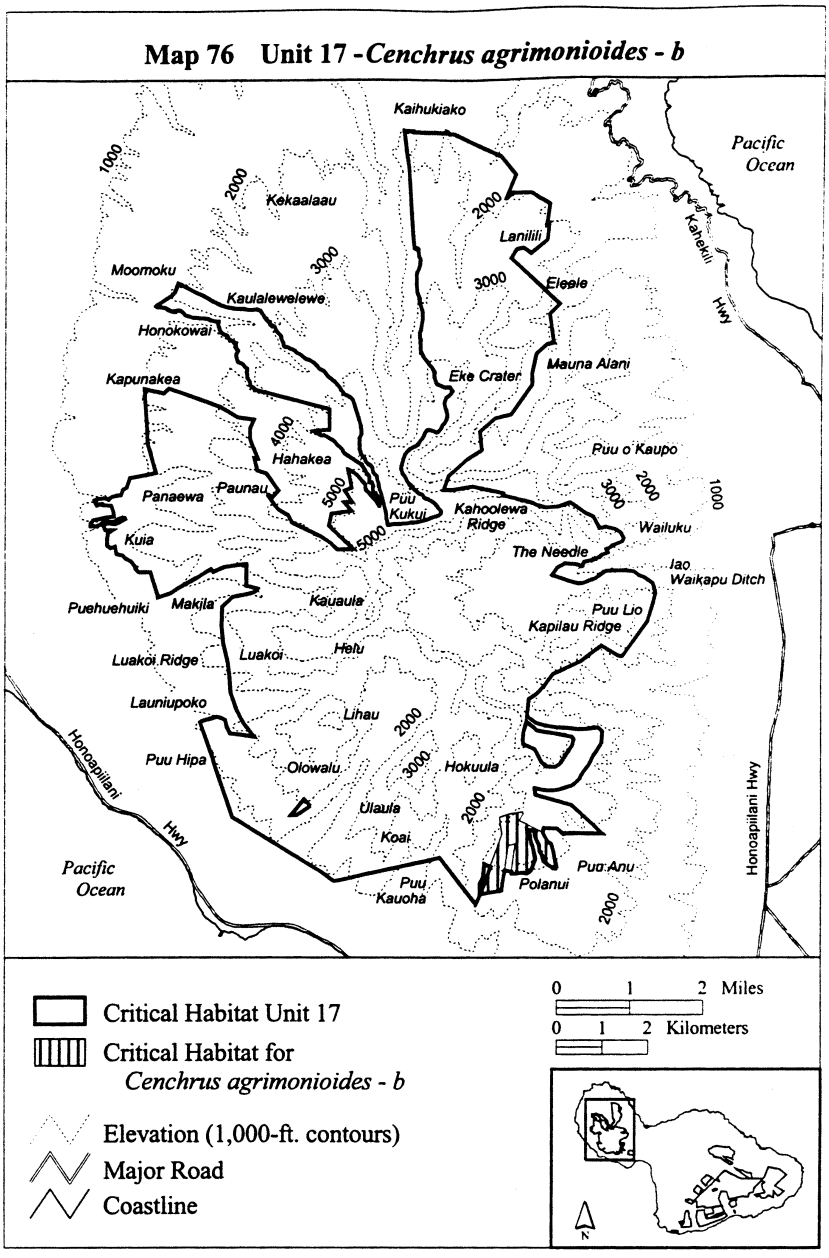


(lxxvi) Maui 17—*Cenchrus agrimonioides*—b (119 ha; 293 ac).

(A) Unit consists of the following 55 boundary points: Start at 753366, 2304292; 753617, 2305024; 753566, 2305394; 753780, 2305464; 754068, 2305512; 754084, 2305461; 754013, 2305321; 754480, 2305078; 754546, 2305000; 754621, 2304863; 754699,

2304812; 754764, 2304356; 754769, 2304263; 754770, 2304254; 754759, 2304261; 754670, 2304324; 754542, 2304415; 754352, 2305097; 754319, 2305108; 754132, 2305170; 754163, 2305075; 754239, 2304985; 754242, 2304971; 754278, 2304785; 754347, 2304463; 754340, 2304443; 754333, 2304422; 754326, 2304400; 754314, 2304365; 754314, 2304364; 754278, 2304259; 754277, 2304259; 754068, 2304164; 754067, 2304164; 754066, 2304164; 754065, 2304164; 753918, 2304149; 753825, 2304139; 753832, 2304195; 753908, 2304800; 753751, 2304765; 753675, 2304217; 753632, 2303912; 753617, 2303805; 753611, 2303762; 753577, 2303756; 753550, 2303751; 753534, 2303749; 753531, 2303748; 753152, 2303682; 753163, 2303713; 753304, 2304113; 753310, 2304130; 753365, 2304285; 753367, 2304292; return to starting point.

(B) NOTE: Map 76 follows:

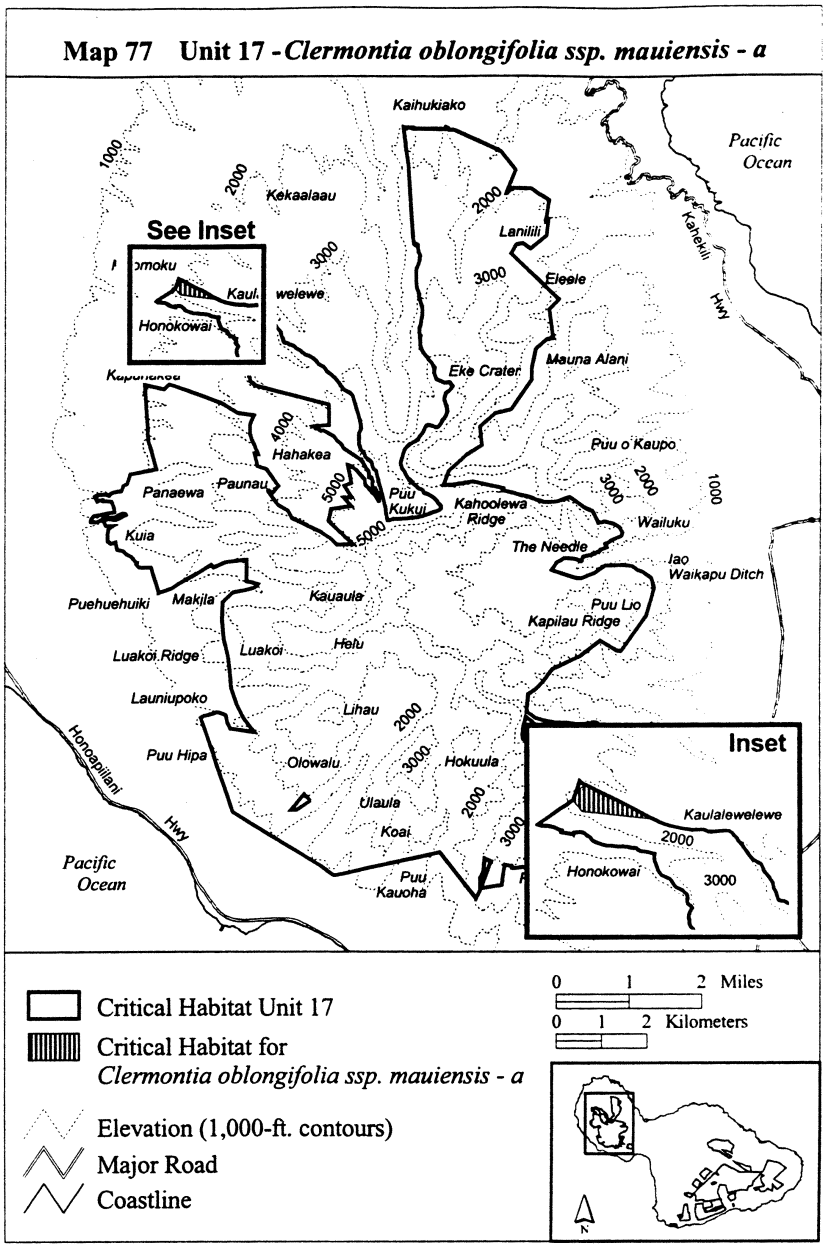


(lxxvii) Maui 17—*Clermontia oblongifolia* ssp. *mauiensis*—a (16 ha; 40 ac).

(A) Unit consists of the following 12 boundary points: Start at 746327, 2317071; 746357, 2317155; 746471, 2317255; 746647, 2317164; 746706, 2317135; 746859,

2317060; 746968, 2317006; 747190, 2316887; 747229, 2316866; 747288, 2316836; 746433, 2316935; 746323, 2317068; return to starting point.

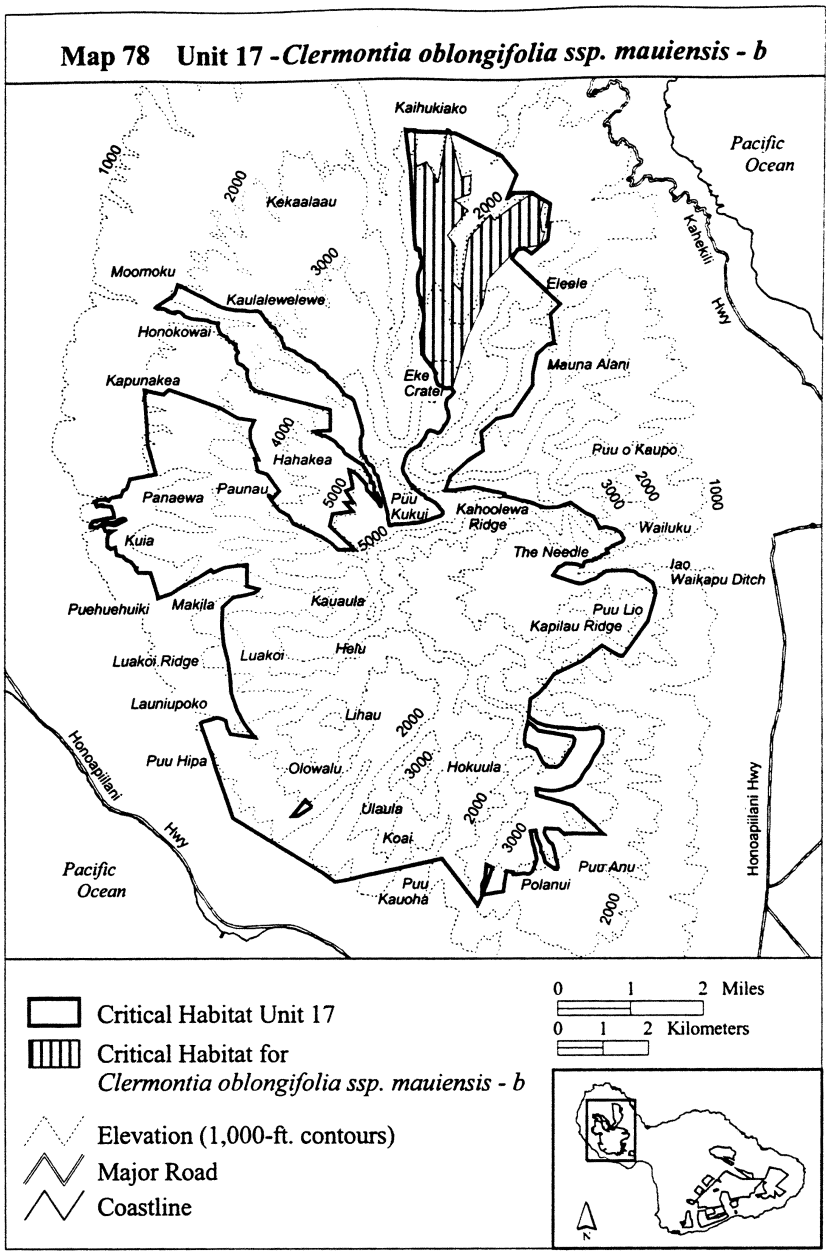
(B) NOTE: Map 77 follows:



(lxxviii) Maui 17—*Clermontia oblongifolia* ssp. *mauiensis*—b (696 ha; 1,720 ac).

(A) Unit consists of the following 130 boundary points: Start at 752453, 2314975; 752453, 2314976; 752416, 2314975; 752381, 2314973; 752342, 2314967; 752250, 2315013; 752158, 2315058; 752138, 2315091; 752117, 2315151; 752108, 2315196; 752103, 2315252; 752113, 2315300; 752112, 2315302; 752096, 2315325; 752085, 2315344; 752070, 2315374; 752051, 2315406; 752026, 2315438; 751991, 2315478; 751949, 2315532; 751900, 2315589; 751856, 2315640; 751831, 2315694; 751805, 2315739; 751802, 2315745; 751780, 2316007; 751791, 2316023; 751792, 2316024; 751792, 2316025; 751785, 2316046; 751774, 2316078; 751771, 2316121; 751767, 2316164; 751778, 2316192; 751794, 2316230; 751799, 2316258; 751807, 2316311; 751812, 2316339; 751828, 2316408; 751840, 2316469; 751842, 2316535; 751836, 2316587; 751832, 2316640; 751828, 2316678; 751828, 2316679; 751812, 2316711; 751793, 2316765; 751774, 2316831; 751763, 2316879; 751754, 2316929; 751744, 2317001; 751727, 2317051; 751703, 2317090; 751693, 2317225; 751691, 2317254; 751693, 2317261; 751698, 2317290; 751694, 2317322; 751695, 2317366; 751697, 2317415; 751702, 2317462; 751715, 2317522; 751728, 2317571; 751747, 2317619; 751767, 2317682; 751769, 2317710; 751778, 2317751; 751782, 2317790; 751782, 2317791; 751769, 2317829; 751750, 2317859; 751741, 2317901; 751738, 2317949; 751738, 2317997; 751730, 2318034; 751729, 2318035; 751714, 2318045; 751713, 2318046; 751712, 2318046; 751690, 2318034; 751665, 2318030; 751651, 2318051; 751640, 2318085; 751632, 2318124; 751599, 2318608; 751517, 2319810; 751458, 2320229; 751458, 2320252; 751458, 2320253; 751454, 2320260; 751411, 2320566; 751402, 2320630; 751401, 2320638; 751430, 2320630; 751621, 2320578; 751649, 2319822; 751885, 2319941; 752122, 2319497; 752334, 2320586; 752346, 2320647; 752379, 2320632; 752380, 2320629; 752654, 2319615; 752861, 2319645; 752861, 2319260; 752506, 2319113; 752802, 2318906; 752358, 2318344; 752506, 2318166; 752477, 2317338; 752654, 2317131; 752832, 2318285; 753305, 2318817; 753393, 2318669; 753778, 2318965; 754192, 2319231; 754441, 2319131; 754485, 2319104; 754399, 2318787; 754458, 2318403; 754519, 2318419; 754431, 2318127; 754060, 2318058; 753902, 2318028; 753875, 2318023; 753250, 2317363; 753146, 2316807; 752799, 2316077; 752486, 2315000; 752460, 2314964; return to starting point.

(B) NOTE: Map 78 follows:

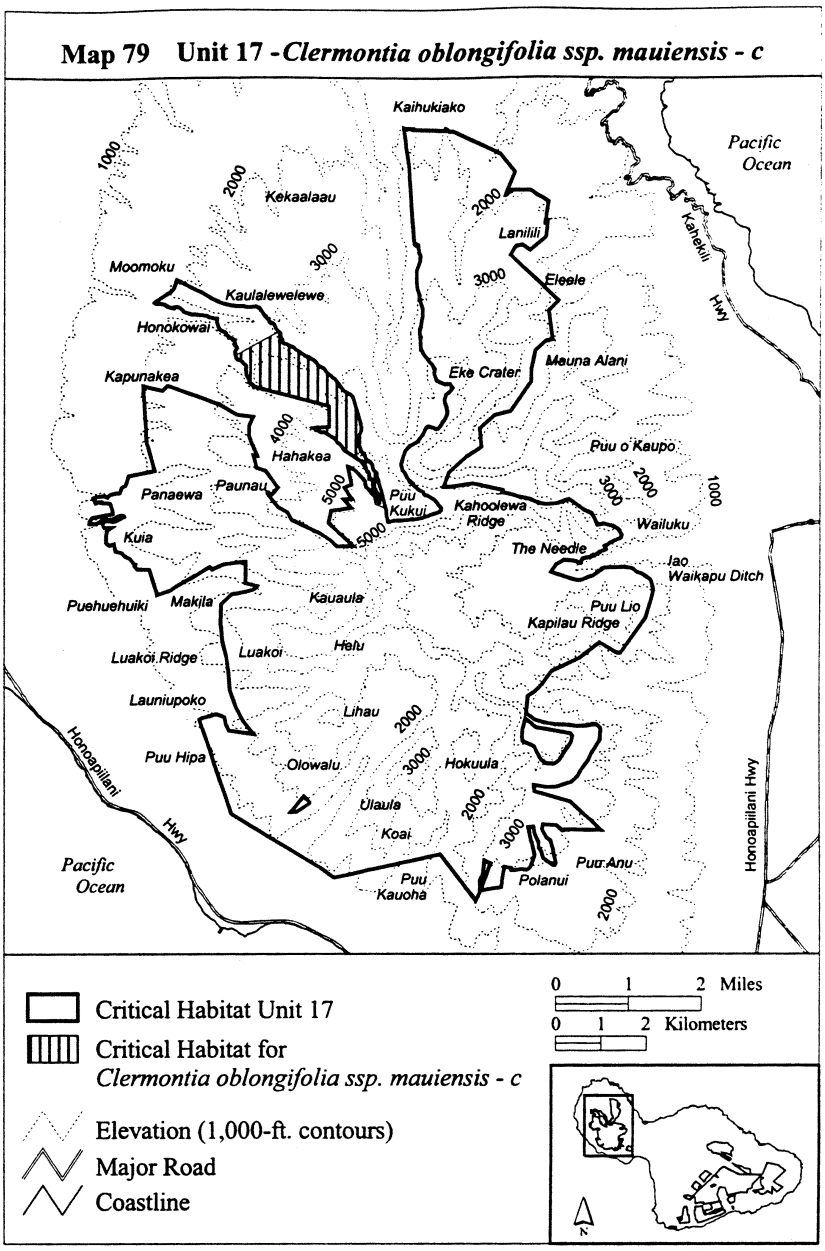


(lxxix) Maui 17—*Clermontia oblongifolia* ssp. *mauiensis*—c (296 ha; 732 ac).

(A) Unit consists of the following 262 boundary points: Start at 750654, 2312939; 750658, 2312963; 750658, 2312964; 750644, 2312989; 750610, 2313159; 750421,

2313289; 750102, 2313508; 750074, 2313542; 750046, 2313594; 750046, 2313595; 749977, 2313657; 749957, 2313674; 749879, 2313766; 749865, 2313785; 749864, 2313785; 749692, 2313889; 749655, 2313912; 749653, 2313912; 749594, 2313900; 749427, 2313998; 749481, 2314008; 749517, 2314015; 749719, 2314022; 749762, 2314024; 749763, 2314024; 749764, 2314024; 749764, 2314025; 749764, 2314060; 749776, 2314062; 749776, 2314445; 749768, 2314447; 749769, 2314498; 749768, 2314500; 749767, 2314500; 748184, 2314906; 748105, 2314940; 748092, 2314945; 748090, 2314947; 748089, 2314948; 748069, 2314973; 748068, 2314973; 748029, 2314987; 748007, 2315005; 748001, 2315029; 748005, 2315065; 748005, 2315083; 747994, 2315106; 747975, 2315127; 747954, 2315161; 747942, 2315193; 747940, 2315201; 747933, 2315253; 747929, 2315289; 747930, 2315329; 747935, 2315356; 747931, 2315379; 747914, 2315403; 747887, 2315423; 747857, 2315454; 747831, 2315482; 747792, 2315504; 747772, 2315512; 747727, 2315626; 748615, 2316119; 748666, 2316120; 748680, 2316102; 748682, 2316095; 748687, 2316079; 748691, 2316057; 748698, 2316026; 748698, 2316025; 748717, 2315987; 748727, 2315962; 748733, 2315944; 748738, 2315922; 748743, 2315901; 748750, 2315885; 748758, 2315876; 748759, 2315875; 748770, 2315868; 748796, 2315863; 748806, 2315862; 748826, 2315861; 748849, 2315847; 748876, 2315834; 748913, 2315824; 748949, 2315807; 748960, 2315800; 749000, 2315773; 749021, 2315756; 749067, 2315724; 749090, 2315709; 749140, 2315671; 749173, 2315647; 749188, 2315640; 749205, 2315627; 749223, 2315614; 749244, 2315605; 749332, 2315568; 749353, 2315555; 749385, 2315535; 749404, 2315524; 749421, 2315514; 749470, 2315477; 749479, 2315464; 749486, 2315451; 749500, 2315430; 749524, 2315402; 749550, 2315385; 749571, 2315373; 749617, 2315351; 749628, 2315342; 749652, 2315326; 749666, 2315306; 749677, 2315288; 749682, 2315280; 749701, 2315256; 749720, 2315236; 749736, 2315224; 749781, 2315186; 749804, 2315173; 749833, 2315147; 749874, 2315098; 749888, 2315088; 749934, 2315046; 749960, 2315009; 750020, 2314928; 750057, 2314876; 750072, 2314855; 750097, 2314830; 750120, 2314809; 750138, 2314798; 750173, 2314786; 750215, 2314763; 750223, 2314758; 750232, 2314754; 750246, 2314737; 750265, 2314720; 750286, 2314703; 750288, 2314702; 750454, 2314143; 750461, 2314125; 750462, 2314110; 750462, 2314098; 750469, 2314075; 750476, 2314039; 750478, 2314029; 750479, 2314015; 750481, 2313991; 750479, 2313958; 750479, 2313946; 750479, 2313933; 750476, 2313919; 750468, 2313903; 750450, 2313871; 750441, 2313851; 750441, 2313850; 750438, 2313827; 750440, 2313794; 750439, 2313772; 750436, 2313747; 750437, 2313723; 750437, 2313700; 750439, 2313671; 750438, 2313647; 750435, 2313610; 750436, 2313597; 750436, 2313596; 750441, 2313585; 750451, 2313562; 750456, 2313545; 750463, 2313528; 750465, 2313510; 750469, 2313497; 750469, 2313496; 750477, 2313484; 750491, 2313465; 750505, 2313443; 750510, 2313432; 750515, 2313420; 750526, 2313409; 750541, 2313398; 750551, 2313389; 750560, 2313367; 750565, 2313356; 750572, 2313334; 750578, 2313319; 750591, 2313304; 750609, 2313283; 750640, 2313257; 750643, 2313255; 750652, 2313247; 750674, 2313233; 750689, 2313219; 750704, 2313203; 750713, 2313180; 750725, 2313151; 750736, 2313118; 750747, 2313077; 750753, 2313062; 750767, 2313040; 750774, 2313031; 750792, 2313015; 750803, 2313003; 750815, 2312997; 750834, 2312921; 750866, 2312797; 750864, 2312784; 750864, 2312768; 750864, 2312767; 750868, 2312756; 750877, 2312736; 750881, 2312727; 750882, 2312717; 750888, 2312691; 750895, 2312668; 750904, 2312647; 750904, 2312646; 750905, 2312646; 751008, 2312240; 751019, 2312199; 751038, 2312126; 751038, 2312124; 751038, 2312092; 751037, 2312087; 751022, 2312131; 751013, 2312201; 750784, 2312291; 750742, 2312502; 750763, 2312476; 750804, 2312434; 750835, 2312384; 750877, 2312324; 750877, 2312323; 750878, 2312323; 750879, 2312323; 750880, 2312324; 750889, 2312378; 750889, 2312379; 750885, 2312387; 750887, 2312412; 750887, 2312413; 750876, 2312455; 750851, 2312517; 750819, 2312576; 750799, 2312595; 750799, 2312596; 750798, 2312596; 750757, 2312591; 750749, 2312590; 750747, 2312611; 750734, 2312726; 750739, 2312751; 750739, 2312752; 750730, 2312793; 750712, 2312846; 750711, 2312846; 750711, 2312847; 750691, 2312851; 750690, 2312851; 750687, 2312849; 750672, 2312852; return to starting point.

(B) NOTE: Map 79 follows:

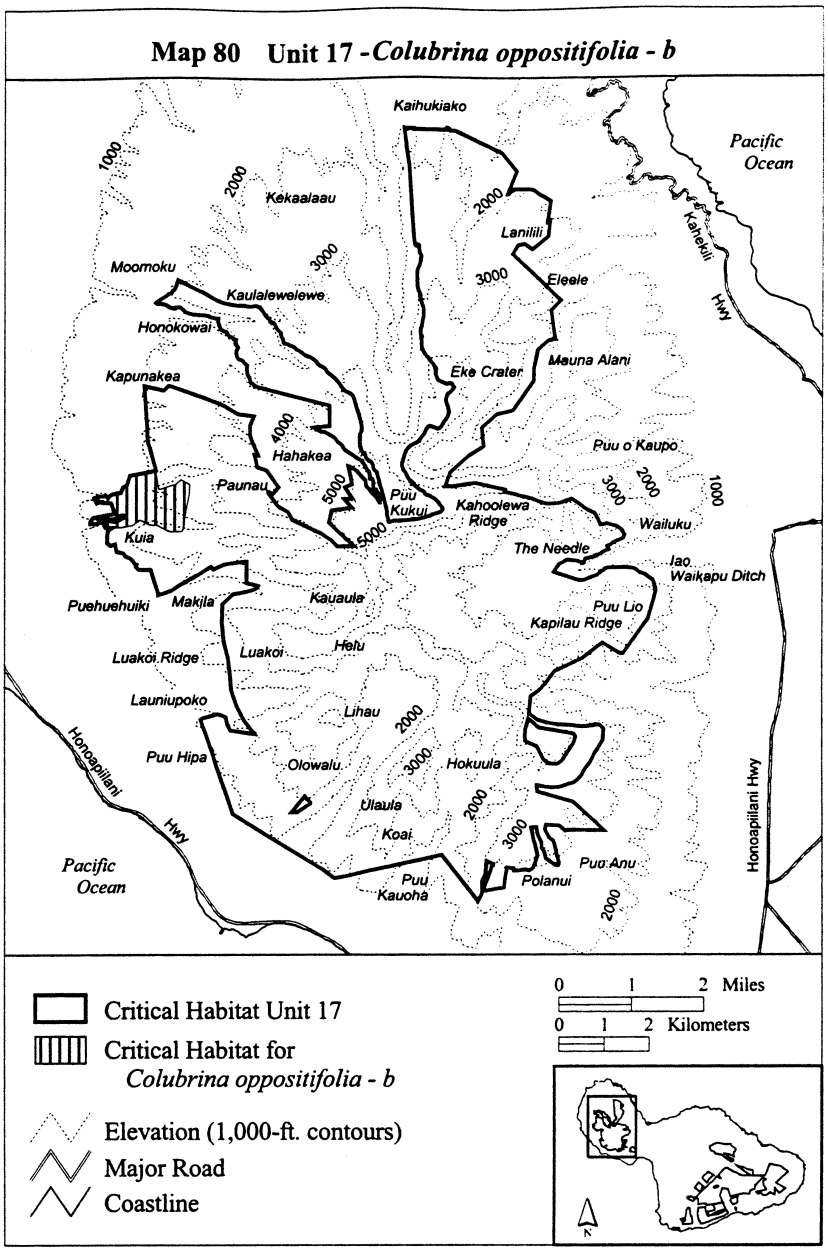


(lxxx) Maui 17—*Colubrina oppositifolia*–b (176 ha; 436 ac).

(A) Unit consists of the following 67 boundary points: Start at 744959, 2311780; 744794, 2311780; 744757, 2311853; 744803, 2311913; 744873, 2311930; 745003, 2311908; 745103, 2311941; 745246, 2312013; 745237, 2312047; 745184, 2312054; 745082,

2312024; 744998, 2311962; 744940, 2311972; 744855, 2311959; 744843, 2311979; 744786, 2311969; 744644, 2311877; 744574, 2311856; 744542, 2311859; 744531, 2311866; 744526, 2311860; 744468, 2311866; 744468, 2311918; 744513, 2311972; 744523, 2311989; 744820, 2312059; 744992, 2312075; 744984, 2312177; 744929, 2312317; 744741, 2312341; 744737, 2312339; 744736, 2312339; 744734, 2312365; 744653, 2312345; 744609, 2312328; 744558, 2312437; 744633, 2312480; 744679, 2312478; 744722, 2312477; 744785, 2312485; 744871, 2312454; 744945, 2312517; 745143, 2312557; 745196, 2312680; 745264, 2312714; 745351, 2312931; 745805, 2313017; 745826, 2313019; 745913, 2313025; 745975, 2312628; 746367, 2312736; 746475, 2312844; 746618, 2312761; 746666, 2312733; 746657, 2312639; 746654, 2312523; 746558, 2311971; 746539, 2311801; 746492, 2311692; 746250, 2311692; 746219, 2311706; 746197, 2311706; 745959, 2311825; 745773, 2311844; 745572, 2311939; 745404, 2311822; 745147, 2311780; return to starting point.

(B) NOTE: Map 80 follows:

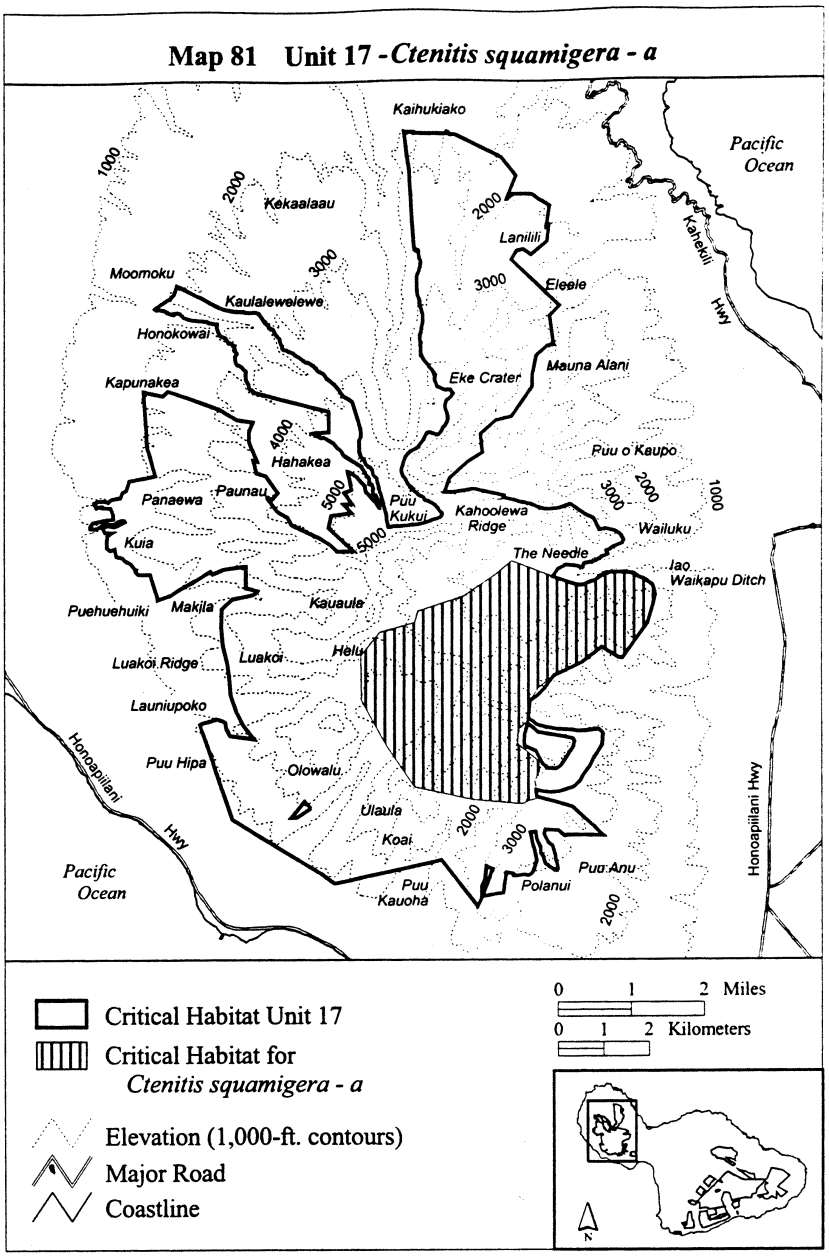


(lxxxi) Maui 17—*Ctenitis squamigera*—a (1,979 ha; 4,891 ac).

(A) Unit consists of the following 58 boundary points: Start at 754711, 2310770; 755224, 2310599; 755234, 2310596; 755269, 2310584; 755320, 2310567; 755364, 2310585; 755366, 2310585; 755661, 2310703; 755670, 2310709; 756015, 2310849; 756300,

2310859; 756582, 2310767; 756724, 2310720; 756903, 2310594; 756939, 2310479; 756941, 2310469; 756961, 2310369; 756961, 2310368; 756967, 2310338; 756918, 2310152; 756801, 2309745; 756244, 2308954; 756153, 2308971; 755784, 2309203; 755328, 2308843; 754727, 2308566; 754703, 2308555; 754391, 2308291; 754206, 2308013; 754199, 2308002; 754164, 2307624; 754157, 2307555; 753944, 2307384; 753924, 2307060; 754322, 2306732; 754390, 2306683; 754409, 2306473; 754314, 2306226; 754335, 2306032; 754344, 2305953; 754346, 2305896; 754350, 2305895; 754350, 2305894; 754356, 2305843; 754191, 2305795; 754037, 2305734; 752927, 2305830; 751646, 2306112; 751009, 2307051; 750478, 2308025; 750460, 2309016; 750885, 2309547; 751648, 2309754; 751721, 2310011; 752535, 2310277; 752735, 2310348; 753433, 2310829; 753806, 2311124; return to starting point.

(B) NOTE: Map 81 follows:

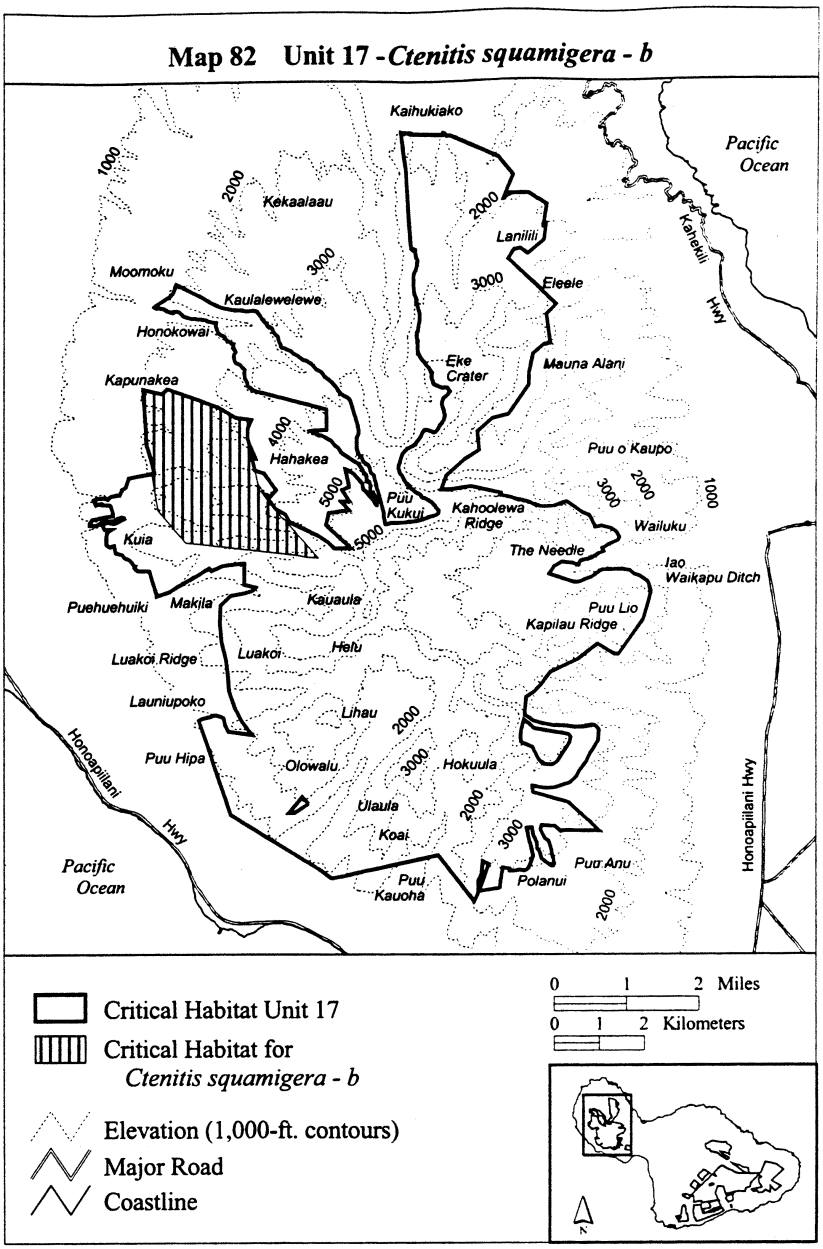


(lxxxii) Maui 17—*Ctenitis squamigera*—b (816 ha; 2,017 ac).

(A) Unit consists of the following 33 boundary points: Start at 745855, 2313035; 745916, 2313043; 745773, 2313571; 745745, 2313671; 745742, 2313671; 745733, 2313825; 745726, 2313936; 745666, 2314939; 746095, 2314835; 746096, 2314835; 746207,

2314953; 746887, 2314706; 747359, 2314534; 747735, 2314300; 747988, 2314266; 747997, 2314050; 748006, 2313828; 748025, 2313740; 748103, 2313389; 748166, 2313105; 748233, 2312800; 748392, 2312568; 748570, 2312307; 748631, 2312228; 748652, 2312200; 748748, 2312058; 748822, 2312005; 749297, 2311460; 749584, 2311129; 749324, 2311150; 749143, 2311192; 746617, 2311468; 745999, 2312213; return to starting point.

(B) NOTE: Map 82 follows:

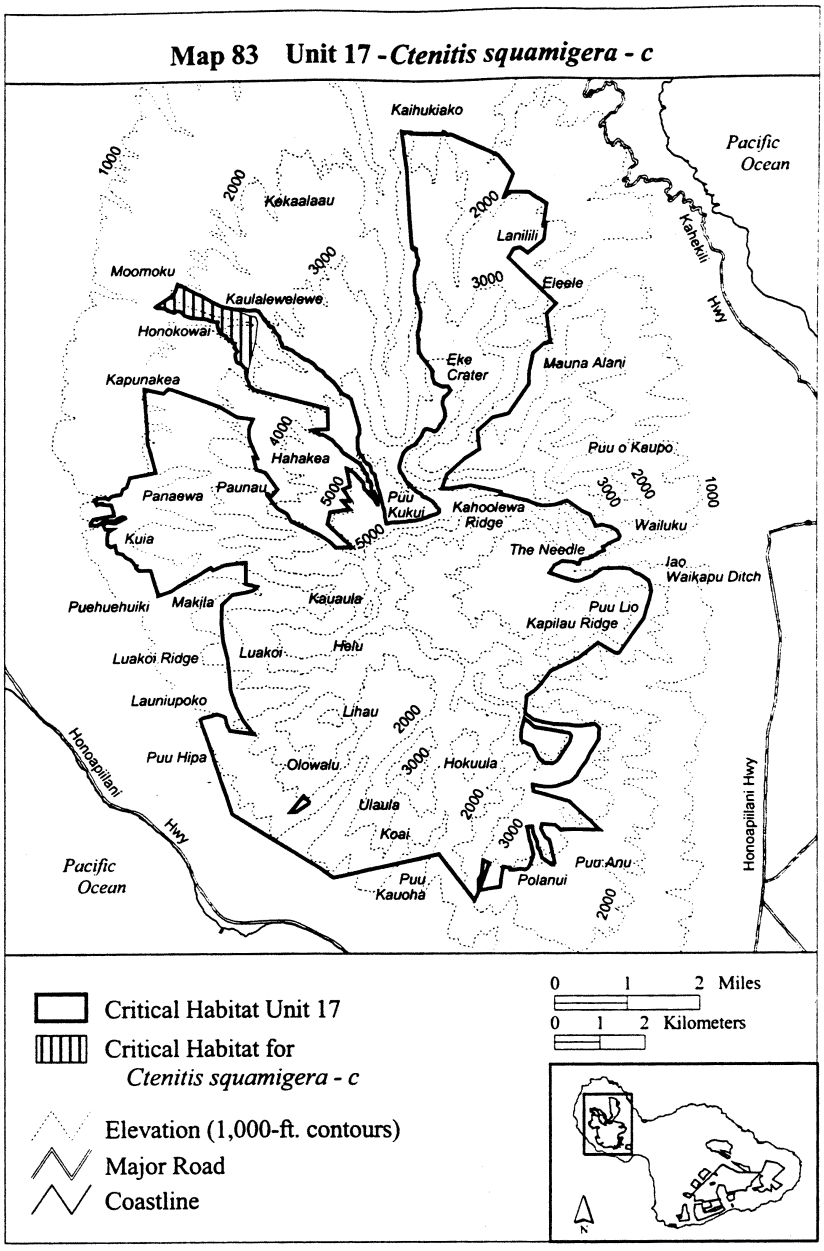


(lxxxiii) Maui 17—*Ctenitis squamigera*—c (137 ha; 338 ac).

(A) Unit consists of the following 133 boundary points: Start at 747966, 2315141; 747954, 2315161; 747942, 2315193; 747940, 2315201; 747933, 2315253; 747929, 2315289; 747930, 2315329; 747935, 2315356; 747931, 2315379; 747914, 2315403; 747887,

2315423; 747857, 2315454; 747831, 2315482; 747792, 2315504; 747750, 2315521; 747726, 2315545; 747722, 2315552; 747704, 2315583; 747698, 2315635; 747693, 2315665; 747695, 2315687; 747702, 2315718; 747713, 2315745; 747728, 2315775; 747729, 2315792; 747729, 2315793; 747717, 2315811; 747717, 2315812; 747702, 2315820; 747691, 2315827; 747681, 2315836; 747675, 2315860; 747677, 2315876; 747681, 2315899; 747681, 2315918; 747667, 2315950; 747648, 2315974; 747620, 2315996; 747585, 2316012; 747546, 2316034; 747526, 2316055; 747508, 2316086; 747494, 2316109; 747476, 2316129; 747447, 2316142; 747409, 2316159; 747389, 2316169; 747365, 2316186; 747345, 2316212; 747336, 2316228; 747328, 2316244; 747312, 2316282; 747299, 2316323; 747290, 2316361; 747289, 2316384; 747289, 2316392; 747296, 2316429; 747296, 2316430; 747296, 2316431; 747260, 2316441; 747214, 2316449; 747159, 2316459; 747125, 2316462; 747109, 2316472; 747100, 2316476; 747078, 2316500; 747077, 2316501; 747055, 2316503; 747024, 2316497; 746977, 2316510; 746946, 2316512; 746922, 2316518; 746881, 2316516; 746836, 2316520; 746786, 2316524; 746741, 2316526; 746698, 2316533; 746655, 2316550; 746617, 2316562; 746584, 2316571; 746551, 2316595; 746533, 2316622; 746505, 2316643; 746458, 2316680; 746457, 2316680; 746411, 2316689; 746410, 2316689; 746348, 2316682; 746338, 2316683; 746337, 2316682; 746335, 2316658; 746329, 2316659; 746194, 2316687; 746199, 2316707; 746200, 2316707; 746199, 2316708; 746198, 2316709; 746186, 2316712; 746160, 2316720; 746128, 2316738; 746127, 2316738; 746095, 2316749; 746058, 2316757; 746020, 2316765; 745994, 2316766; 745962, 2316761; 745913, 2316779; 745961, 2316812; 746173, 2316962; 746267, 2317022; 746270, 2317031; 746278, 2317037; 746327, 2317071; 746357, 2317155; 746377, 2317211; 746405, 2317289; 746423, 2317280; 747344, 2316808; 747450, 2316773; 747517, 2316751; 747602, 2316733; 747628, 2316729; 747715, 2316716; 747716, 2316715; 747719, 2316715; 747767, 2316674; 747991, 2316589; 748152, 2316547; 748190, 2316422; 748188, 2316396; 748181, 2316327; 748153, 2316030; 747996, 2315412; return to starting point.

(B) NOTE: Map 83 follows:

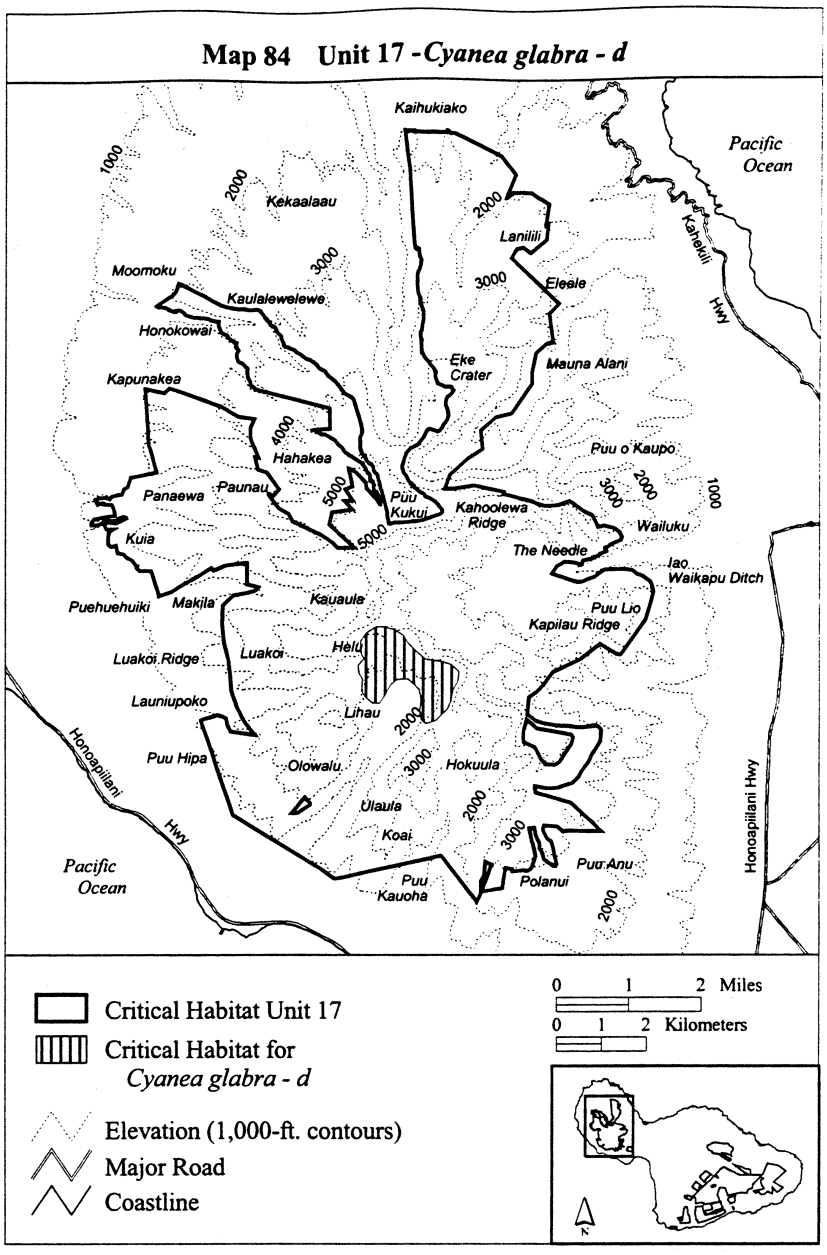


(lxxxiv) Maui 17—*Cyanea glabra*—d (255 ha; 630 ac).

(A) Unit consists of the following 36 boundary points: Start at 750480, 2308143; 750494, 2308421; 750414, 2308545; 750406, 2308713; 750523, 2308867; 750465, 2308969; 750450, 2309254; 750575, 2309437; 750794, 2309576; 750969, 2309576; 751203,

2309517; 751401, 2309386; 751474, 2309254; 751664, 2309057; 751905, 2308859; 752286, 2308801; 752468, 2308742; 752636, 2308589; 752607, 2308362; 752505, 2308165; 752461, 2307938; 752381, 2307755; 752125, 2307492; 751913, 2307434; 751803, 2307507; 751766, 2307712; 751781, 2307880; 751781, 2308019; 751744, 2308194; 751511, 2308421; 751262, 2308406; 751130, 2308296; 750969, 2308019; 750882, 2307872; 750736, 2307872; 750545, 2308026; return to starting point.

(B) NOTE: Map 84 follows:

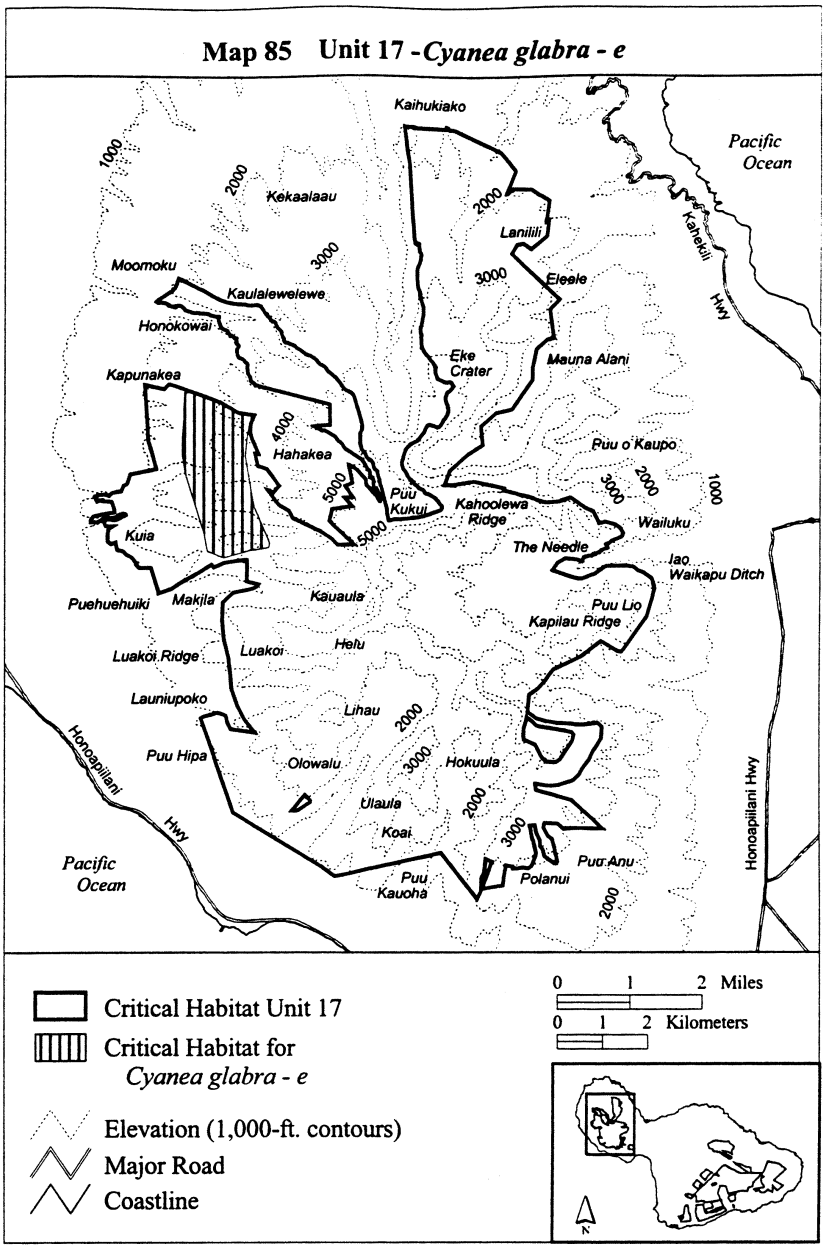


(lxxxv) Maui 17—*Cyanea glabra*—e (470 ha; 1,163 ac).

(A) Unit consists of the following 28 boundary points: Start at 746593, 2314813; 746887, 2314706; 747359, 2314534; 747735, 2314300; 748095, 2314252; 748080, 2314231; 747997, 2314050; 747967, 2313985; 747921, 2313749; 747890, 2313343; 748044,

2312415; 748090, 2312169; 748396, 2311456; 748418, 2311379; 748403, 2311287; 748254, 2311251; 747983, 2311220; 747495, 2311082; 747412, 2311052; 747044, 2311200; 746967, 2311589; 746567, 2312918; 746485, 2313343; 746485, 2313738; 746526, 2314164; 746521, 2314359; 746546, 2314733; 746555, 2314791; return to starting point.

(B) NOTE: Map 85 follows:

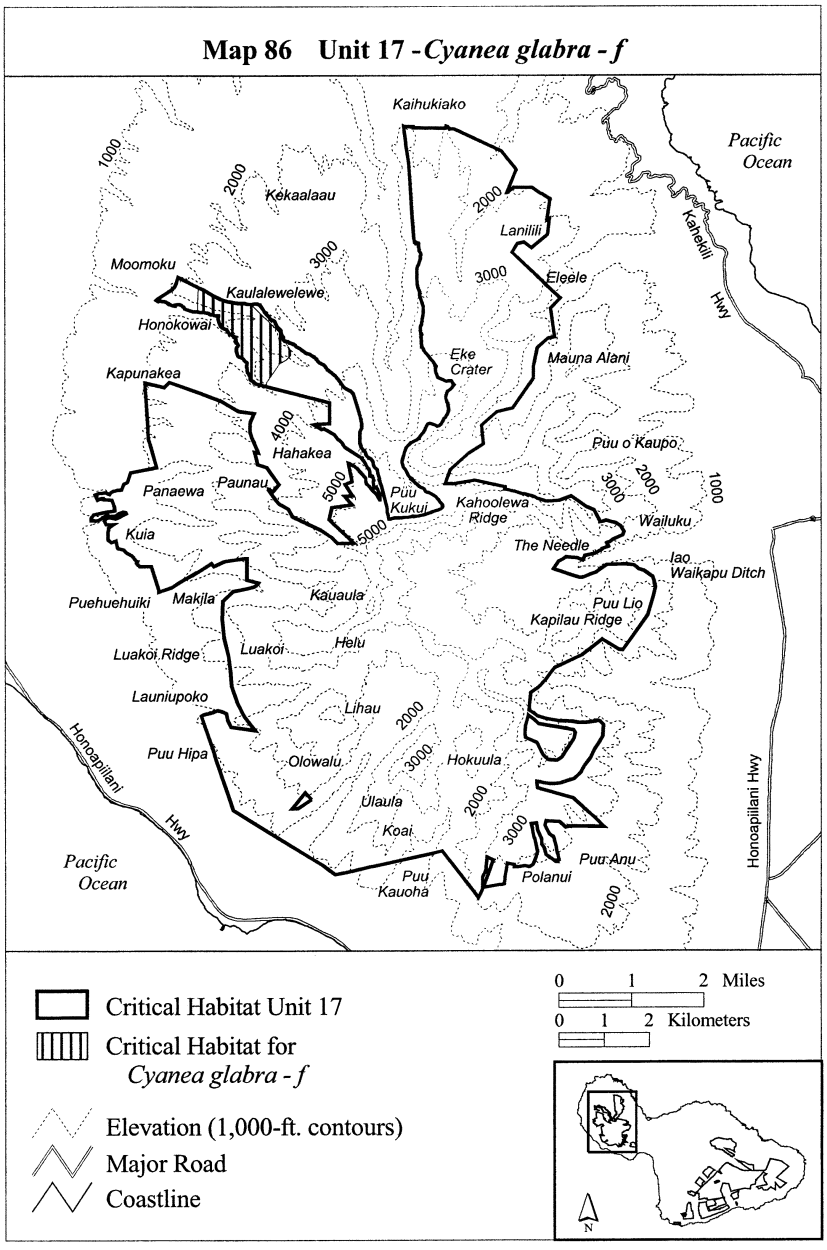


(lxxxvi) Maui 17—*Cyanea glabra*—f (188 ha; 465 ac).

(A) Unit consists of the following 122 boundary points: Start at 748090, 2314947; 748089, 2314948; 748069, 2314973; 748068, 2314973; 748029, 2314987; 748007, 2315005; 748001, 2315029; 748005, 2315065; 748005, 2315083; 747994, 2315106; 747975,

2315127; 747954, 2315161; 747942, 2315193; 747940, 2315201; 747933, 2315253; 747929, 2315289; 747930, 2315329; 747935, 2315356; 747931, 2315379; 747914, 2315403; 747887, 2315423; 747857, 2315454; 747831, 2315482; 747792, 2315504; 747750, 2315521; 747726, 2315545; 747722, 2315552; 747704, 2315583; 747698, 2315635; 747693, 2315665; 747695, 2315687; 747702, 2315718; 747713, 2315745; 747728, 2315775; 747729, 2315792; 747729, 2315793; 747717, 2315811; 747717, 2315812; 747697, 2315822; 747681, 2315836; 747675, 2315860; 747677, 2315876; 747681, 2315899; 747681, 2315918; 747667, 2315950; 747648, 2315974; 747620, 2315996; 747585, 2316012; 747546, 2316034; 747526, 2316055; 747508, 2316086; 747494, 2316109; 747476, 2316129; 747447, 2316142; 747409, 2316159; 747389, 2316169; 747365, 2316186; 747345, 2316212; 747336, 2316228; 747328, 2316244; 747312, 2316282; 747299, 2316323; 747290, 2316361; 747289, 2316384; 747289, 2316392; 747296, 2316429; 747296, 2316430; 747296, 2316431; 747260, 2316441; 747214, 2316449; 747159, 2316459; 747125, 2316462; 747109, 2316472; 747100, 2316476; 747078, 2316500; 747077, 2316501; 747055, 2316503; 747024, 2316497; 746977, 2316510; 746946, 2316512; 746922, 2316518; 746881, 2316516; 746836, 2316520; 746828, 2316521; 746834, 2316631; 746839, 2316939; 746859, 2317060; 746968, 2317006; 747190, 2316887; 747229, 2316866; 747344, 2316808; 747418, 2316781; 747450, 2316773; 747628, 2316729; 747716, 2316715; 747717, 2316715; 747733, 2316713; 747829, 2316717; 747887, 2316715; 747903, 2316702; 747932, 2316692; 747932, 2316691; 747967, 2316688; 748003, 2316690; 748029, 2316693; 748649, 2316082; 748735, 2315935; 748738, 2315922; 748743, 2315901; 748750, 2315885; 748758, 2315876; 748759, 2315875; 748770, 2315868; 748775, 2315867; 748793, 2315836; 748906, 2315667; 748901, 2315549; 748798, 2315451; 748660, 2315374; 748372, 2314933; 748352, 2314863; 748326, 2314870; return to starting point.

(B) NOTE: Map 86 follows:

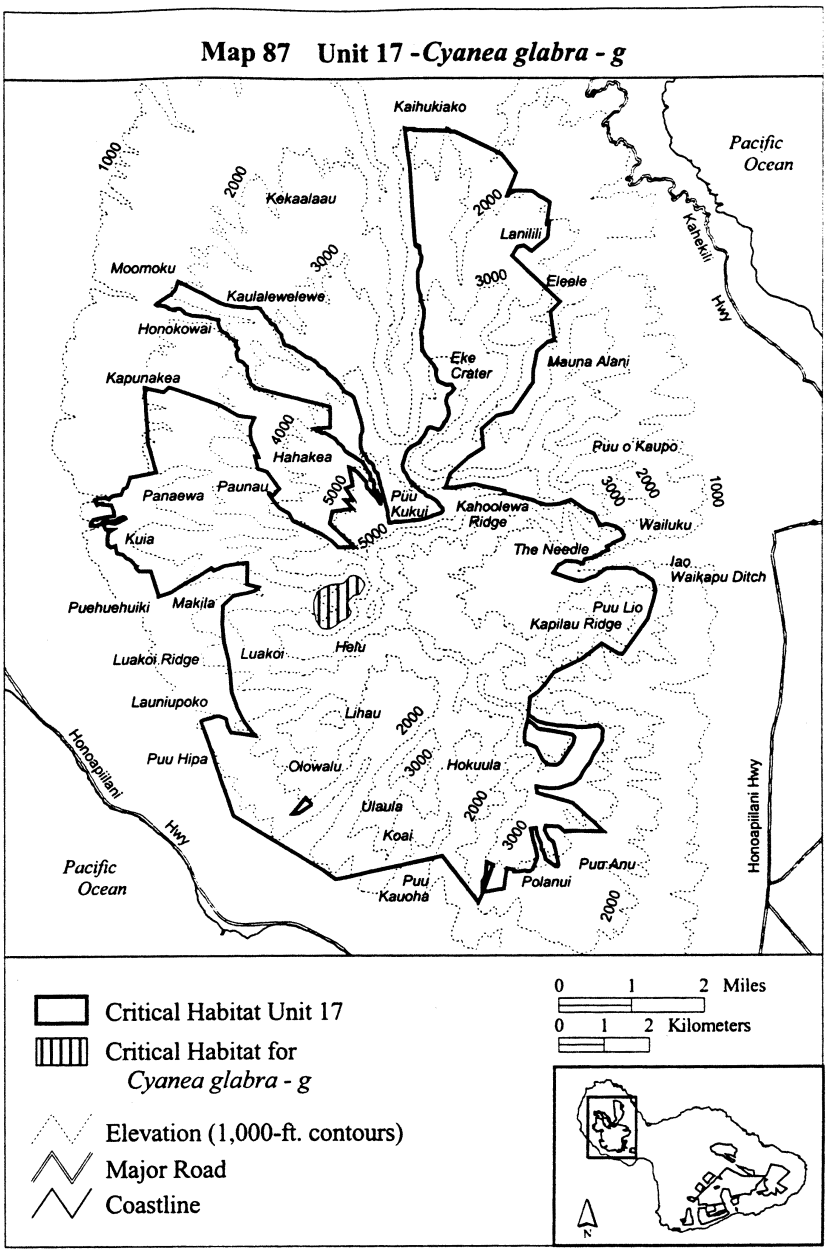


(lxxxvii) Maui 17—*Cyanea glabra*—g (79 ha; 195 ac).

(A) Unit consists of the following 33 boundary points: Start at 749398, 2310143; 749470, 2310348; 749639, 2310451; 749793, 2310523; 750055, 2310548; 750137, 2310615; 750188, 2310687; 750190, 2310697; 750274, 2310725; 750348, 2310711; 750440,

2310656; 750505, 2310582; 750523, 2310503; 750496, 2310420; 750440, 2310332; 750385, 2310295; 750292, 2310277; 750204, 2310203; 750149, 2310105; 750167, 2310022; 750223, 2309925; 750209, 2309842; 750144, 2309773; 750006, 2309708; 749881, 2309611; 749770, 2309532; 749691, 2309527; 749585, 2309541; 749502, 2309629; 749437, 2309759; 749444, 2309766; 749408, 2309876; 749398, 2309979; return to starting point.

(B) NOTE: Map 87 follows:

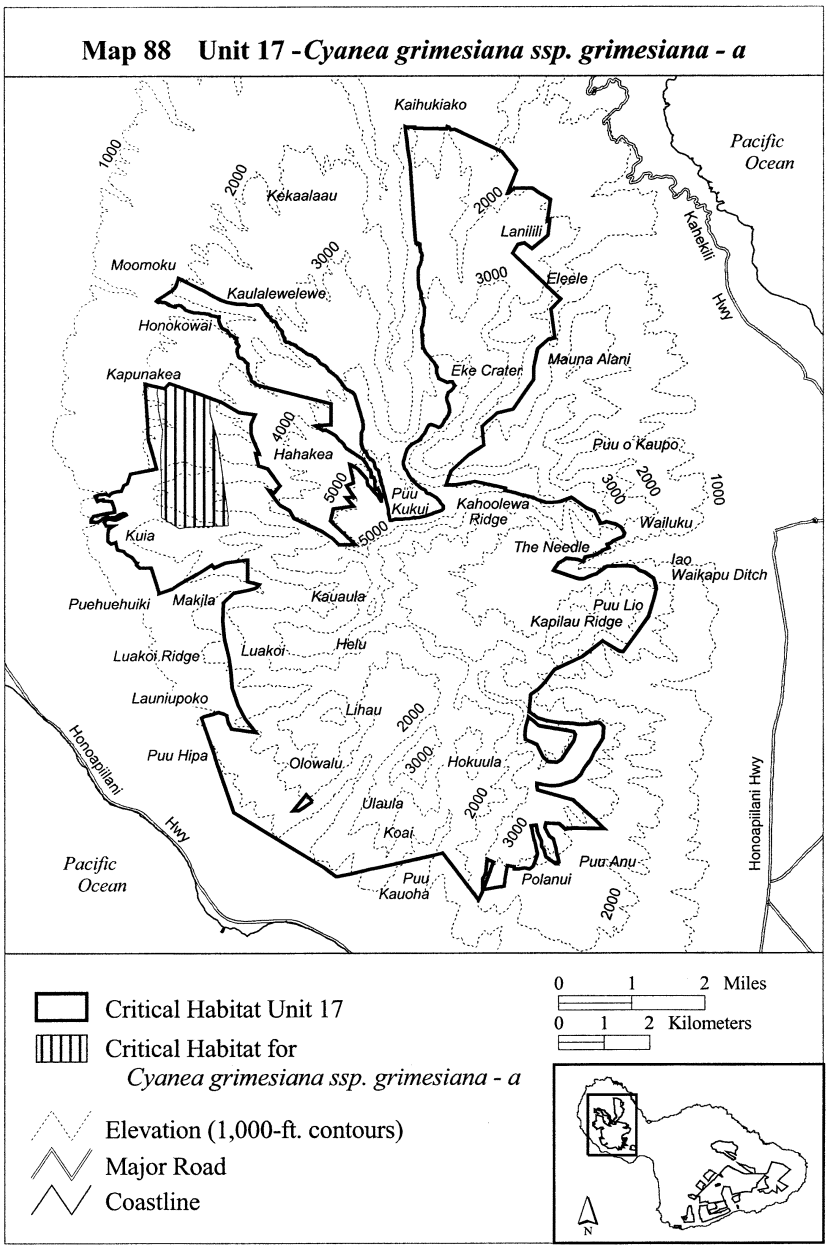


(lxxxviii) Maui 17—*Cyanea grimesiana* ssp. *grimesiana*—a (920 ha; 2,273 ac).

(A) Unit consists of the following 26 boundary points: Start at 755402, 2311063; 755355, 2310968; 755230, 2311019; 755226, 2311019; 754833, 2311178; 753854, 2311761; 753088, 2311437; 753109, 2310920; 752629, 2309941; 753391, 2309839; 754118,

2310001; 755127, 2310494; 755241, 2309743; 754863, 2309251; 753812, 2308620; 751175, 2309545; 751031, 2309863; 750935, 2311100; 751464, 2311599; 751968, 2311905; 753055, 2312211; 753463, 2312289; 754058, 2312313; 754688, 2312061; 755127, 2311731; 755547, 2311353; return to starting point.

(B) NOTE: Map 88 follows:

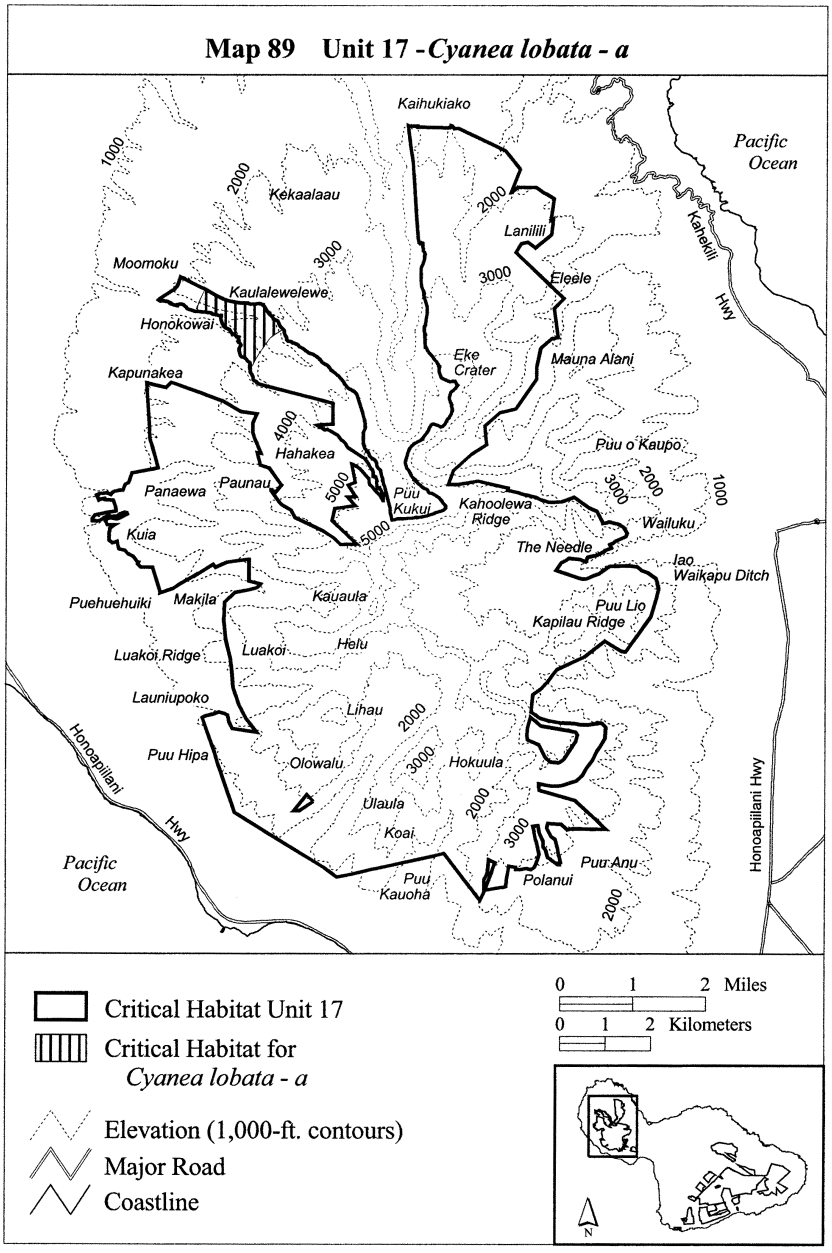


(lxxxix) Maui 17—*Cyanea lobata*—a (131 ha; 324 ac).

(A) Unit consists of the following 133 boundary points: Start at 747973, 2315130; 747957, 2315156; 747952, 2315167; 747942, 2315193; 747940, 2315201; 747933, 2315253; 747929, 2315289; 747930, 2315329; 747935, 2315356; 747931, 2315379; 747914,

2315403; 747887, 2315423; 747857, 2315454; 747831, 2315482; 747792, 2315504; 747750, 2315521; 747726, 2315545; 747722, 2315552; 747704, 2315583; 747698, 2315635; 747693, 2315665; 747695, 2315687; 747702, 2315718; 747713, 2315745; 747728, 2315775; 747729, 2315792; 747729, 2315793; 747717, 2315811; 747717, 2315812; 747697, 2315822; 747681, 2315836; 747675, 2315860; 747677, 2315876; 747681, 2315899; 747681, 2315918; 747667, 2315950; 747648, 2315974; 747620, 2315996; 747585, 2316012; 747546, 2316034; 747526, 2316055; 747508, 2316086; 747494, 2316109; 747476, 2316129; 747447, 2316142; 747409, 2316159; 747389, 2316169; 747365, 2316186; 747345, 2316212; 747336, 2316228; 747328, 2316244; 747312, 2316282; 747299, 2316323; 747290, 2316361; 747289, 2316384; 747289, 2316392; 747296, 2316429; 747296, 2316430; 747296, 2316431; 747260, 2316441; 747214, 2316449; 747159, 2316459; 747125, 2316462; 747109, 2316472; 747103, 2316475; 747094, 2316483; 747078, 2316500; 747077, 2316501; 747055, 2316503; 747024, 2316497; 746977, 2316510; 746946, 2316512; 746922, 2316518; 746881, 2316516; 746850, 2316519; 746759, 2316594; 746828, 2316776; 746943, 2317018; 747229, 2316866; 747344, 2316808; 747418, 2316781; 747517, 2316751; 747602, 2316733; 747628, 2316729; 747716, 2316715; 747717, 2316715; 747733, 2316713; 747887, 2316715; 747903, 2316702; 747932, 2316692; 747932, 2316691; 747967, 2316688; 748003, 2316690; 748041, 2316695; 748056, 2316696; 748113, 2316703; 748141, 2316706; 748159, 2316704; 748168, 2316702; 748201, 2316684; 748211, 2316678; 748218, 2316670; 748236, 2316643; 748254, 2316624; 748267, 2316607; 748276, 2316584; 748310, 2316551; 748349, 2316494; 748389, 2316441; 748415, 2316408; 748446, 2316368; 748446, 2316367; 748505, 2316331; 748531, 2316319; 748548, 2316311; 748549, 2316310; 748562, 2316282; 748574, 2316250; 748575, 2316245; 748585, 2316225; 748587, 2316220; 748589, 2316217; 748596, 2316201; 748610, 2316189; 748613, 2316186; 748649, 2316141; 748655, 2316134; 748446, 2315991; 748398, 2315949; 748126, 2315586; 748029, 2315400; 748003, 2315327; 747976, 2315313; return to starting point.

(B) NOTE: Map 89 follows:

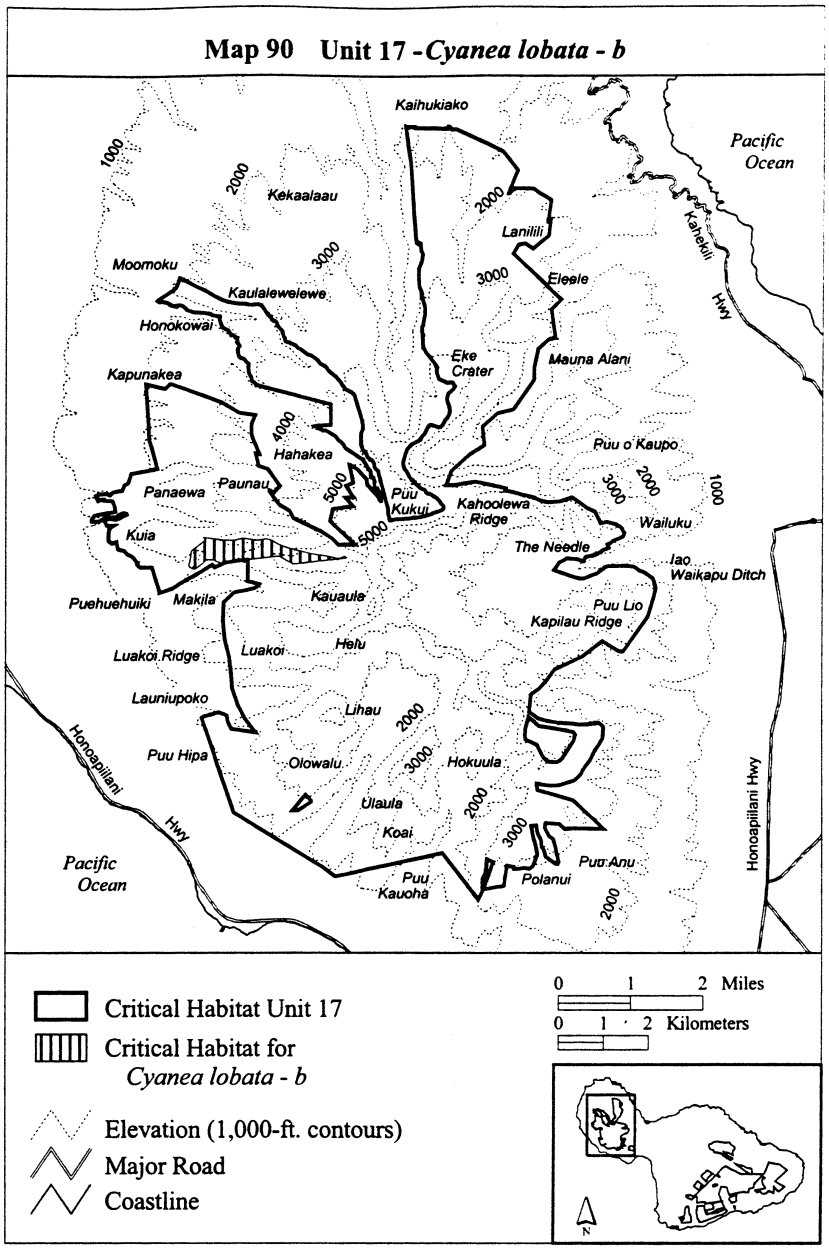


(xc) Maui 17—*Cyanea lobata*—b (114 ha; 282 ac).

(A) Unit consists of the following 35 boundary points: Start at 747903, 2311009; 747443, 2310953; 747432, 2310952; 747407, 2310938; 747319, 2310932; 747154, 2311018; 747024, 2311018; 746814, 2310852; 746755, 2310801; 746678, 2310811; 746652,

2310844; 746630, 2310853; 746617, 2310888; 746652, 2311053; 746661, 2311200; 746971, 2311433; 746952, 2311505; 747422, 2311441; 747662, 2311441; 747812, 2311501; 748142, 2311441; 748322, 2311471; 748472, 2311441; 748564, 2311384; 748784, 2311284; 748999, 2311226; 749324, 2311150; 749769, 2311083; 749908, 2311040; 749987, 2311042; 750063, 2311077; 750068, 2311092; 750118, 2311050; 748942, 2310916; 748618, 2311096; return to starting point.

(B) NOTE: Map 90 follows:

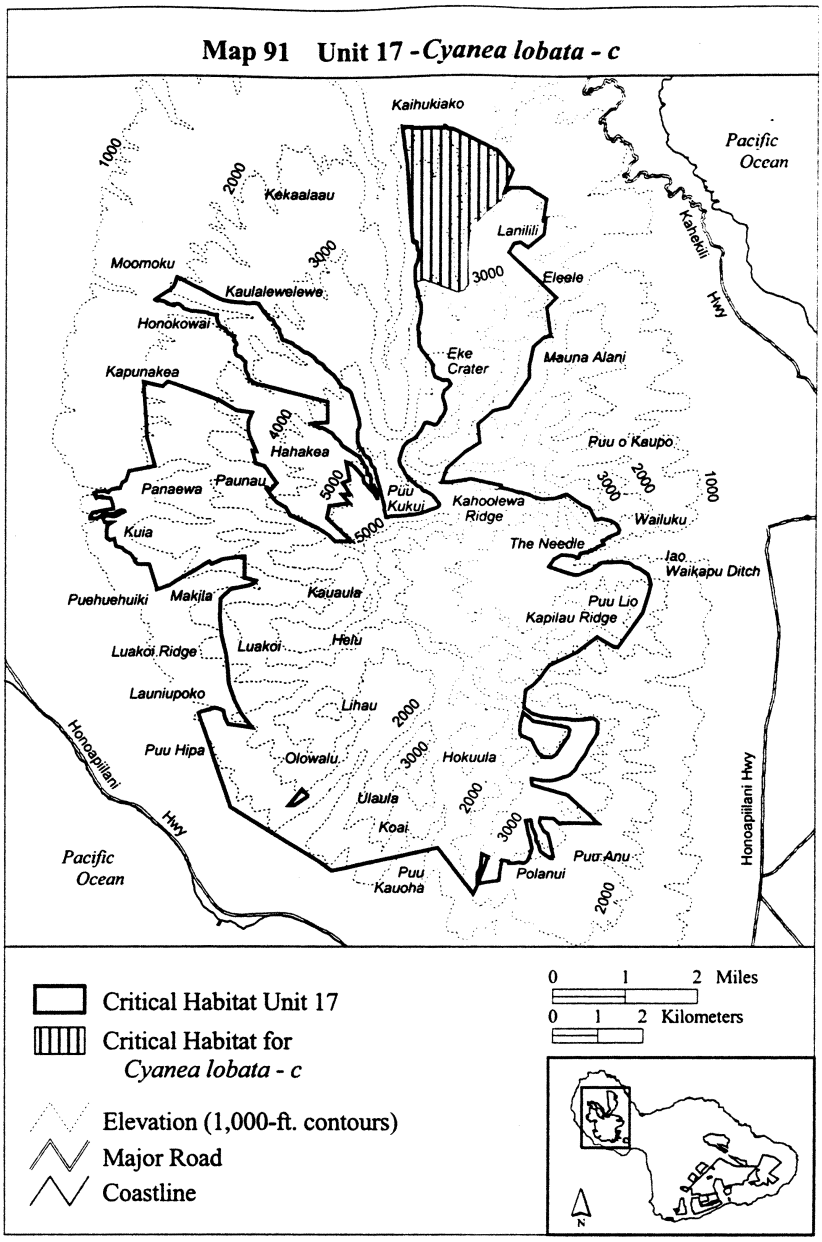


(xci) Maui 17—*Cyanea lobata*—c (578 ha; 1,427 ac).

(A) Unit consists of the following 62 boundary points: Start at 751691, 2317255; 751693, 2317261; 751698, 2317290; 751694, 2317322; 751695, 2317366; 751697, 2317415; 751702, 2317462; 751715, 2317522; 751728, 2317571; 751747, 2317619; 751767,

2317682; 751769, 2317710; 751778, 2317751; 751782, 2317790; 751782, 2317791; 751769, 2317829; 751750, 2317859; 751741, 2317901; 751738, 2317949; 751738, 2317997; 751730, 2318034; 751729, 2318035; 751714, 2318045; 751713, 2318046; 751712, 2318046; 751690, 2318034; 751665, 2318030; 751651, 2318051; 751640, 2318085; 751632, 2318124; 751599, 2318608; 751517, 2319810; 751458, 2320230; 751458, 2320252; 751458, 2320253; 751454, 2320260; 751411, 2320566; 751406, 2320602; 751619, 2320598; 752334, 2320586; 752403, 2320585; 752415, 2320564; 752418, 2320564; 752509, 2320573; 752522, 2320567; 753547, 2320078; 753862, 2319691; 753884, 2319664; 753681, 2319159; 753622, 2319012; 753234, 2318678; 753089, 2318512; 752913, 2318248; 752876, 2317830; 752886, 2317088; 752845, 2317055; 752810, 2316993; 752718, 2316956; 752684, 2316929; 752465, 2317006; 751895, 2317211; 751704, 2317136; return to starting point.

(B) NOTE: Map 91 follows:

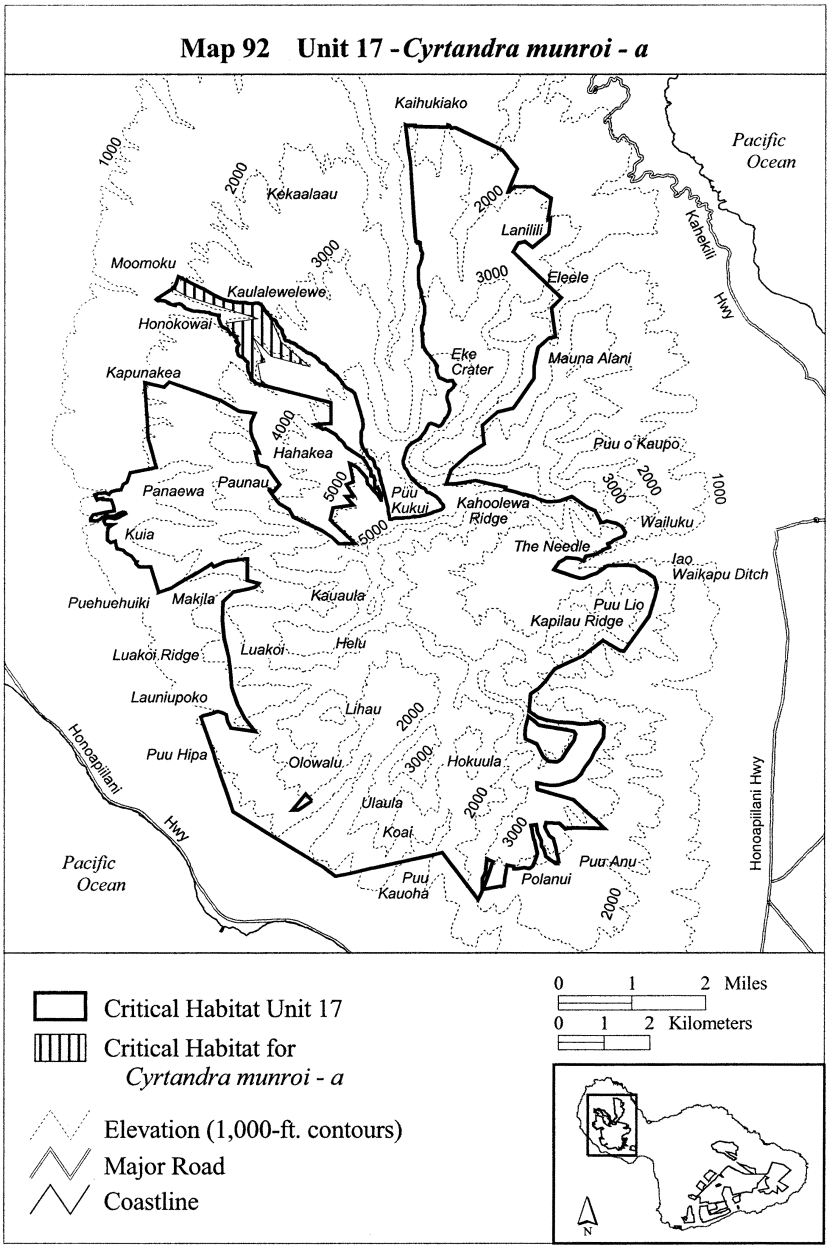


(xcii) Maui 17—*Cyrtandra munroi*—a (156 ha; 386 ac).

(A) Unit consists of the following 95 boundary points: Start at 748364, 2314860; 748184, 2314906; 748126, 2314931; 748112, 2314937; 748019, 2315110; 747987, 2315114; 747975, 2315127; 747954, 2315161; 747942, 2315193; 747940, 2315201; 747933,

2315253; 747929, 2315289; 747930, 2315329; 747935, 2315356; 747931, 2315379; 747914, 2315403; 747887, 2315423; 747857, 2315454; 747831, 2315482; 747792, 2315504; 747750, 2315521; 747726, 2315545; 747722, 2315552; 747704, 2315583; 747698, 2315635; 747693, 2315665; 747695, 2315687; 747702, 2315718; 747713, 2315745; 747728, 2315775; 747728, 2315776; 747736, 2315775; 747729, 2315788; 747729, 2315792; 747729, 2315793; 747717, 2315811; 747717, 2315812; 747711, 2315815; 747676, 2315871; 747677, 2315876; 747681, 2315899; 747681, 2315918; 747667, 2315950; 747648, 2315974; 747620, 2315996; 747594, 2316008; 747441, 2316258; 748156, 2316363; 746590, 2316862; 746278, 2317037; 746327, 2317071; 746397, 2317266; 746423, 2317280; 746706, 2317135; 747190, 2316887; 747344, 2316808; 747418, 2316781; 747517, 2316751; 747602, 2316733; 747628, 2316729; 747716, 2316715; 747717, 2316715; 747733, 2316713; 747829, 2316717; 747887, 2316715; 747903, 2316702; 747932, 2316692; 747932, 2316691; 747967, 2316688; 748003, 2316690; 748041, 2316695; 748056, 2316696; 748113, 2316703; 748141, 2316706; 748159, 2316704; 748168, 2316702; 748201, 2316684; 748211, 2316678; 748218, 2316670; 748236, 2316643; 748254, 2316624; 748267, 2316607; 748276, 2316584; 748310, 2316551; 748349, 2316494; 748389, 2316441; 748415, 2316408; 748434, 2316383; 748660, 2315859; 749291, 2315291; 748450, 2315523; 748051, 2315943; 748324, 2315397; 748156, 2315355; 748219, 2314997; return to starting point.

(B) NOTE: Map 92 follows:

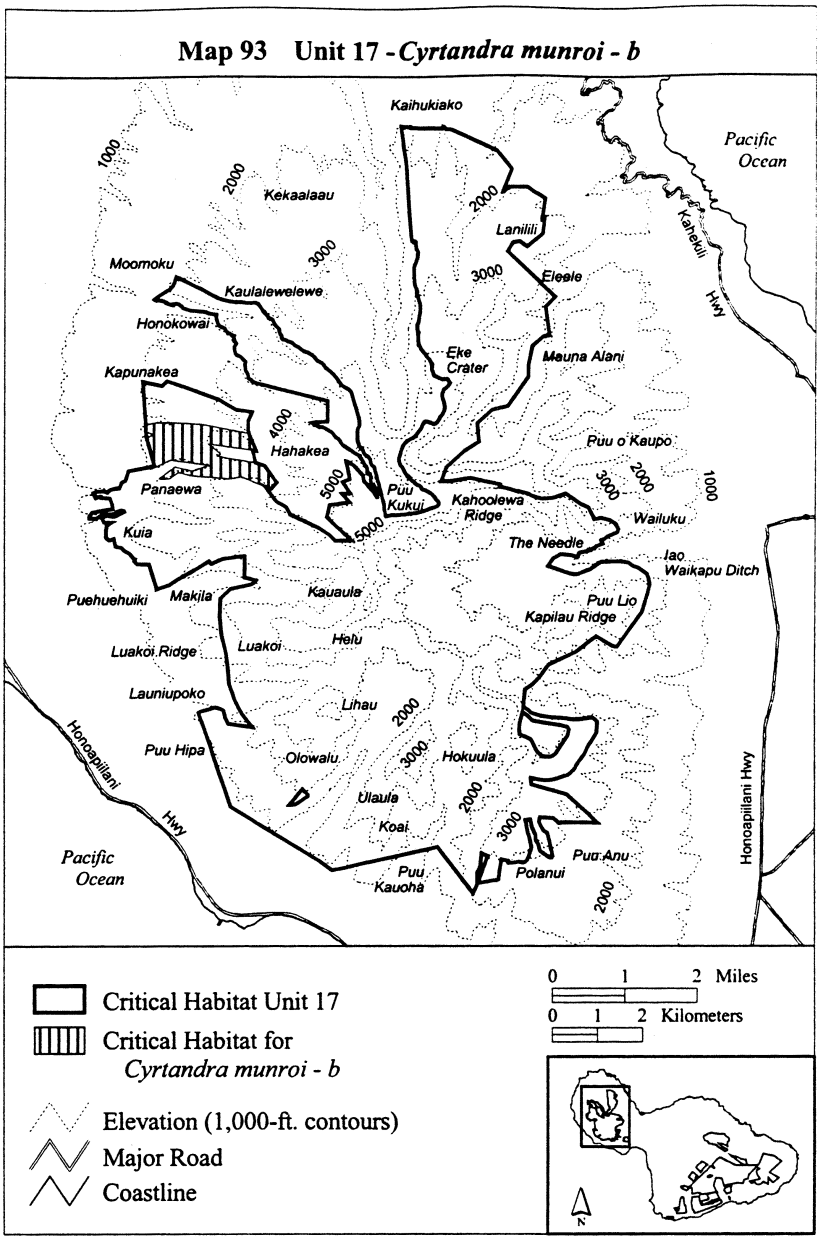


(xciii) Maui 17—*Cyrtandra munroi*—b (238 ha; 589 ac).

(A) Unit consists of the following 40 boundary points: Start at 745826, 2313019; 745846, 2313034; 745916, 2313043; 745773, 2313571; 745748, 2313661; 745886, 2313757; 745733, 2313825; 745730, 2313826; 745724, 2313911; 745726, 2313936; 745729,

2313970; 745961, 2314006; 746362, 2314006; 746980, 2313974; 748012, 2313772; 748025, 2313740; 748177, 2313379; 748103, 2313389; 747126, 2313526; 747399, 2313295; 747315, 2313253; 748093, 2313127; 748166, 2313105; 748366, 2313043; 748639, 2312664; 748513, 2312517; 748392, 2312568; 747862, 2312790; 747601, 2312741; 746746, 2312824; 746468, 2312889; 746275, 2312760; 746103, 2312739; 746034, 2312754; 746391, 2313022; 746769, 2312917; 747126, 2313043; 746286, 2313169; 745836, 2312964; 745821, 2313015; return to starting point.

(B) NOTE: Map 93 follows:

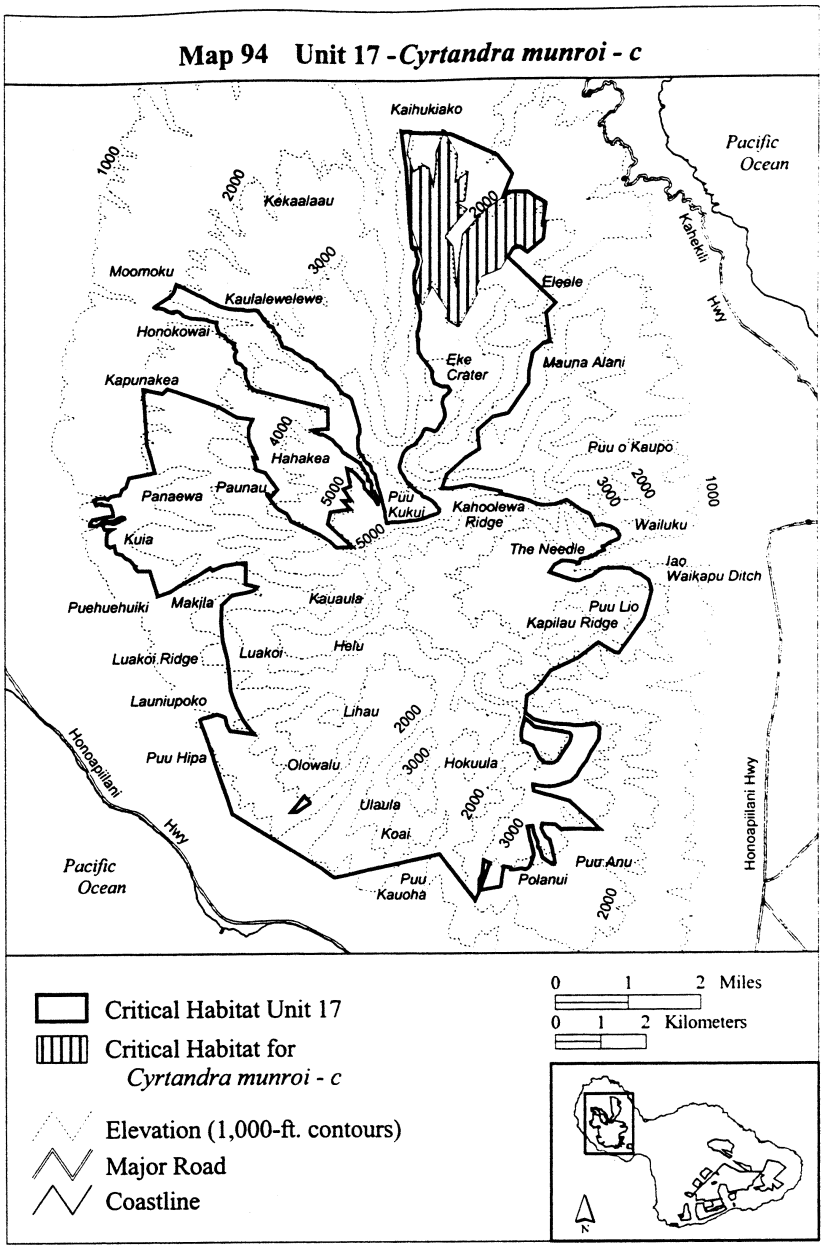


(xciv) Maui 17—*Cyrtandra munroi*—c (603 ha; 1,490 ac).

(A) Unit consists of the following 62 boundary points: Start at 751599, 2318608; 751517, 2319810; 751458, 2320238; 751458, 2320252; 751458, 2320253; 751454, 2320260; 751411, 2320566; 751402, 2320630; 751430, 2320630; 751624, 2320630; 751619,

2320598; 751540, 2320146; 751687, 2319726; 751897, 2319894; 752023, 2319831; 752128, 2319390; 752191, 2319978; 752191, 2320188; 752380, 2320629; 752380, 2320630; 752418, 2320564; 752675, 2320125; 752612, 2319495; 752906, 2319726; 752843, 2319096; 752654, 2319053; 752885, 2318906; 752401, 2318318; 752570, 2318087; 752633, 2317183; 752780, 2318339; 753263, 2318864; 753681, 2319159; 753684, 2319161; 753684, 2319160; 753831, 2319264; 754230, 2319264; 754381, 2319169; 754437, 2319134; 754441, 2319131; 754485, 2319104; 754628, 2319014; 754566, 2318549; 754622, 2318566; 754580, 2318228; 754222, 2317936; 754060, 2318058; 753962, 2318131; 753902, 2318028; 753788, 2317835; 753638, 2317579; 753215, 2317416; 753086, 2317157; 753119, 2317020; 752717, 2316300; 752443, 2316447; 752443, 2316679; 752107, 2317204; 751897, 2316784; 751861, 2316826; 751721, 2317157; 751884, 2317774; return to starting point.

(B) NOTE: Map 94 follows:

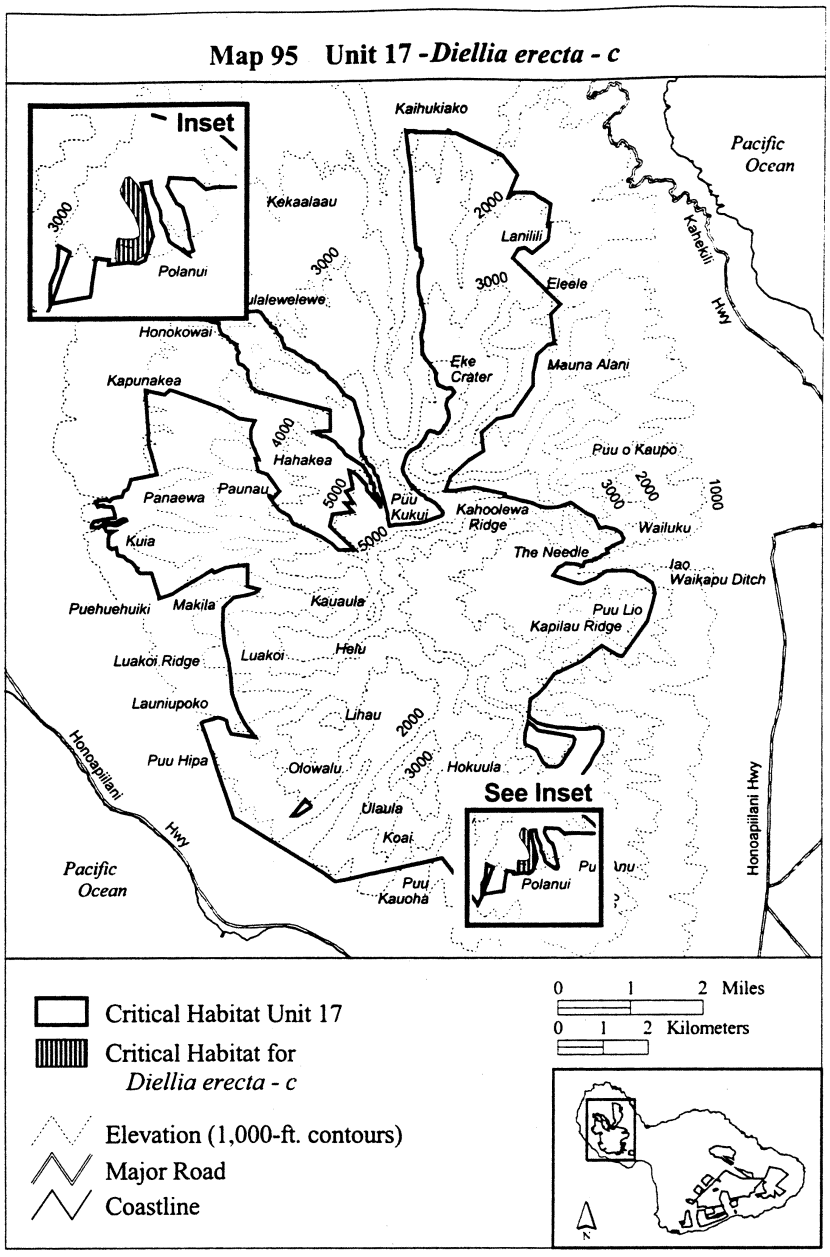


(xcv) Maui 17—*Diellia erecta*—c (22 ha; 55 ac).

(A) Unit consists of the following 28 boundary points: Start at 754348, 2304465; 754342, 2304448; 754333, 2304422; 754330, 2304413; 754327, 2304404; 754314, 2304365; 754306, 2304342; 754244, 2304245; 754151, 2304186; 753923, 2304157; 753916,

2304179; 753904, 2304271; 753923, 2304437; 753945, 2304452; 753997, 2304441; 754126, 2304441; 754188, 2304474; 754185, 2304570; 754133, 2304717; 753971, 2304953; 753963, 2305019; 754019, 2305159; 754078, 2305174; 754177, 2305056; 754236, 2304923; 754258, 2304820; 754258, 2304743; 754306, 2304647; return to starting point.

(B) NOTE: Map 95 follows:

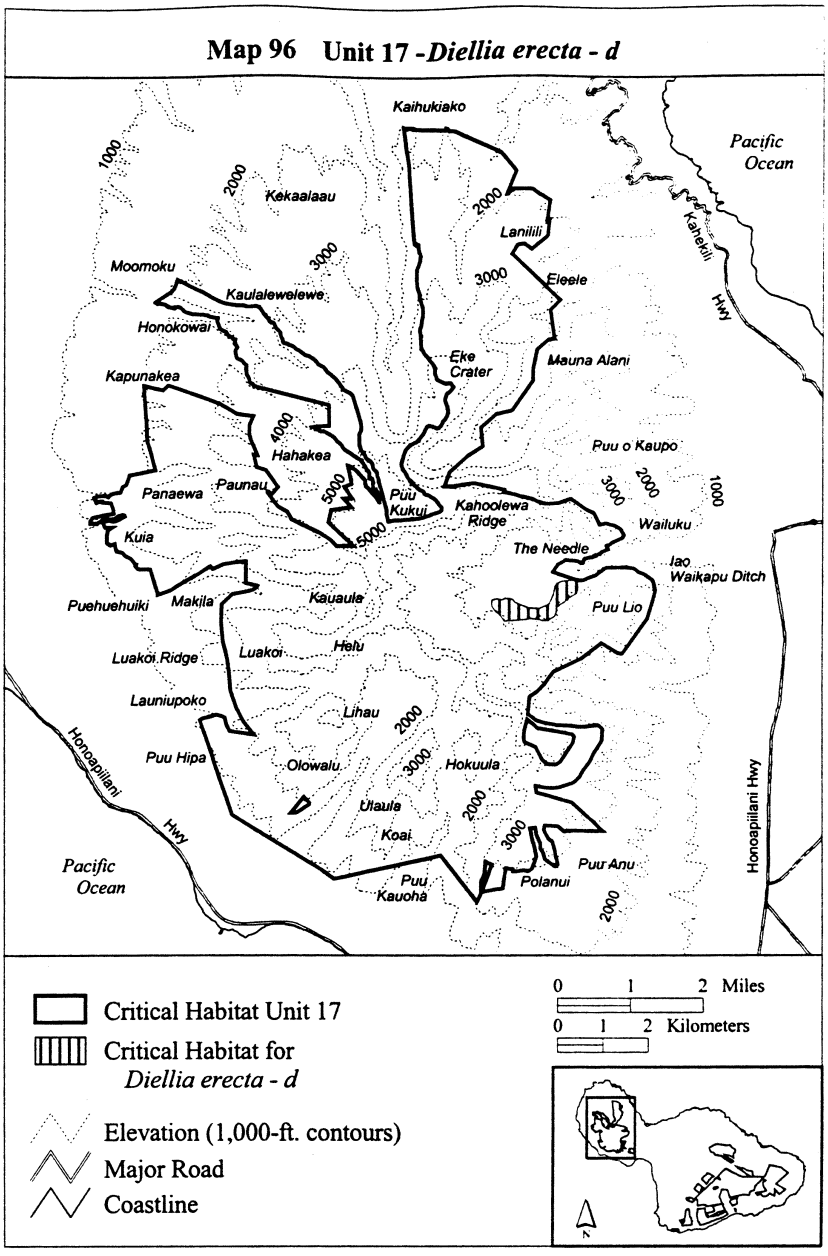


(xcvi) Maui 17—*Diellia erecta*—d (70 ha; 172 ac).

(A) Unit consists of the following 36 boundary points: Start at 755224, 2310599; 755233, 2310600; 755234, 2310596; 755254, 2310511; 755254, 2310380; 755223, 2310289; 755066, 2310201; 754953, 2310084; 754848, 2310040; 754796, 2309997; 754796,

2309936; 754748, 2309779; 754591, 2309692; 754495, 2309692; 754404, 2309722; 754277, 2309731; 754216, 2309744; 754129, 2309718; 753641, 2309683; 753549, 2309805; 753423, 2309923; 753362, 2310023; 753362, 2310136; 753480, 2310171; 753589, 2310145; 753658, 2310188; 753754, 2310193; 753811, 2310162; 753863, 2310097; 754173, 2309970; 754408, 2309962; 754626, 2310066; 754713, 2310276; 754744, 2310446; 754796, 2310524; 754922, 2310572; return to starting point.

(B) NOTE: Map 96 follows:

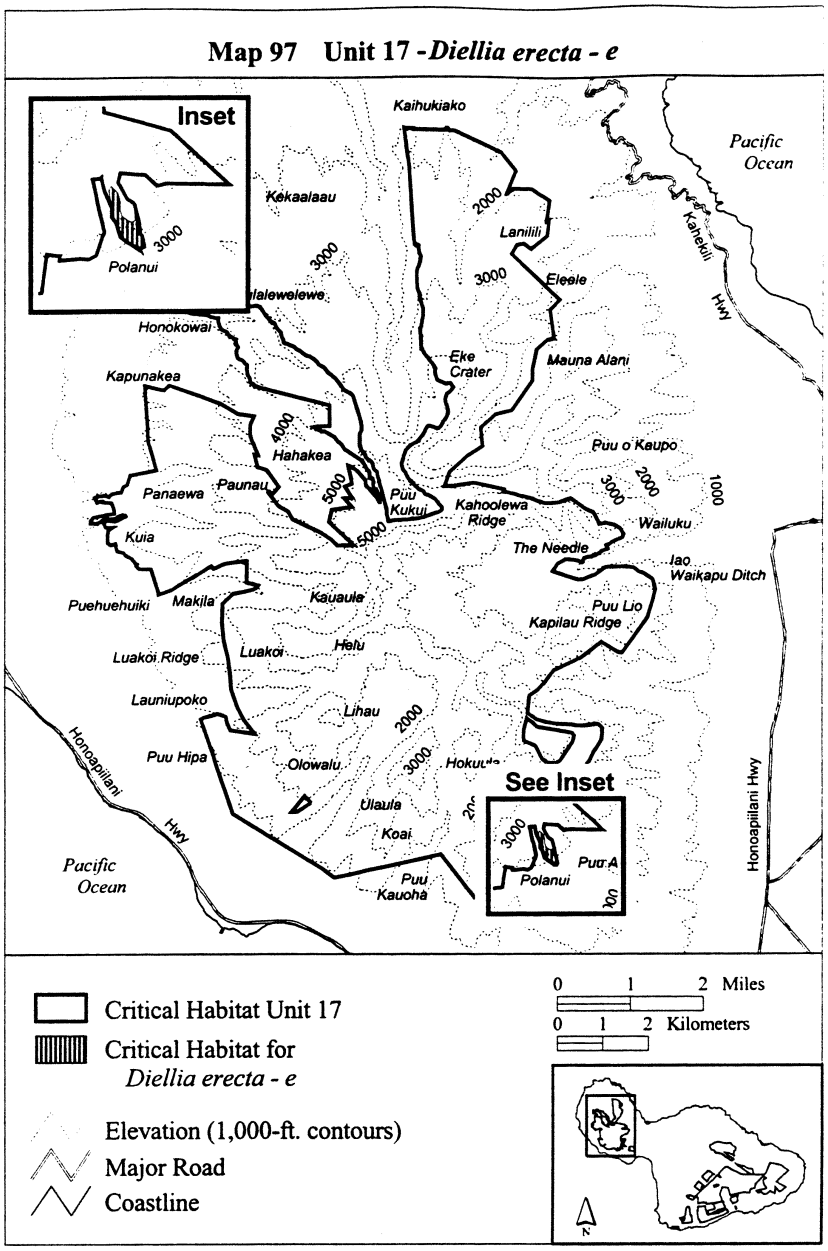


(xcvii) Maui 17—*Diellia erecta*—e (12 ha; 29 ac).

(A) Unit consists of the following 29 boundary points: Start at 754760, 2304616; 754771, 2304529; 754782, 2304447; 754796, 2304431; 754826, 2304297; 754824, 2304296; 754782, 2304278; 754773, 2304280; 754723, 2304289; 754601, 2304370; 754538,

2304427; 754486, 2304579; 754443, 2304647; 754438, 2304725; 754437, 2304765; 754435, 2304770; 754432, 2304809; 754406, 2304960; 754432, 2305008; 754513, 2304931; 754542, 2304817; 754542, 2304724; 754561, 2304654; 754638, 2304599; 754693, 2304584; 754715, 2304617; 754708, 2304702; 754712, 2304743; 754722, 2304737; return to starting point.

(B) NOTE: Map 97 follows:

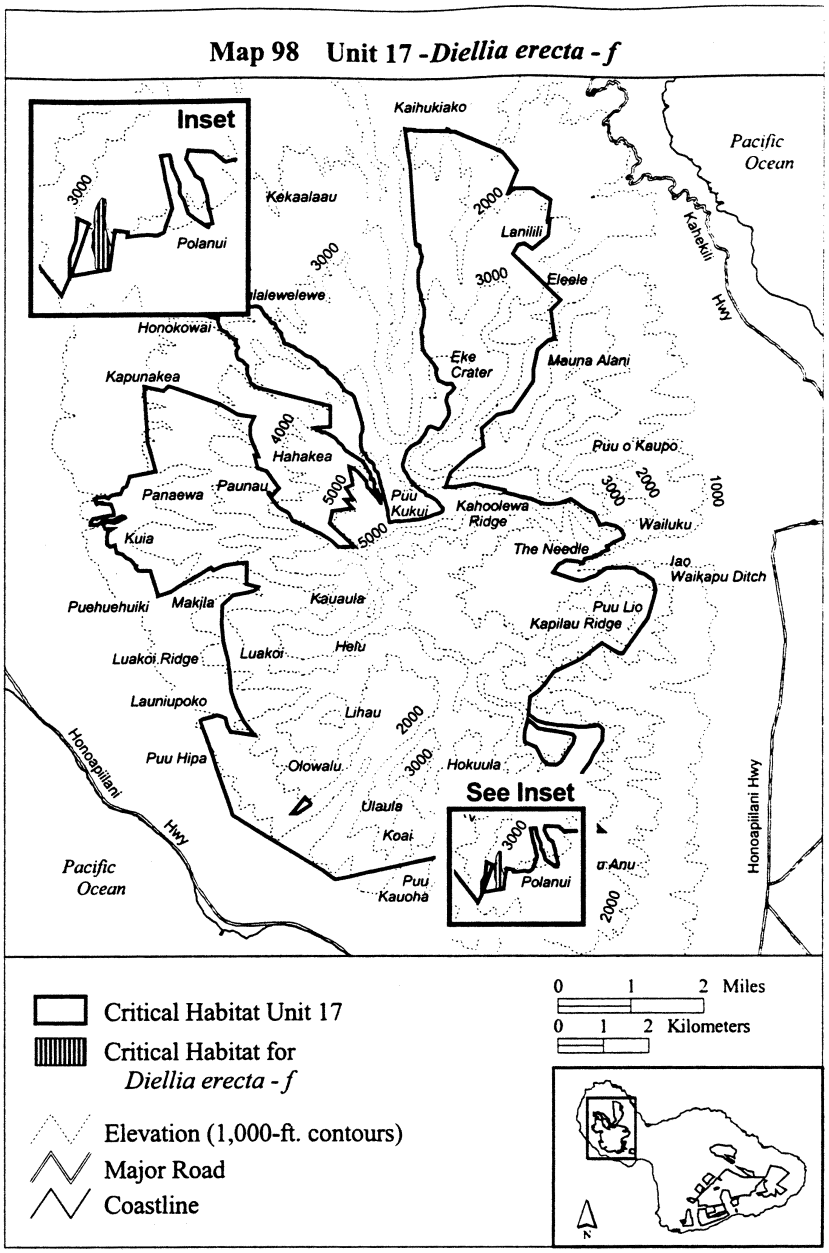


(xcviii) Maui 17—*Diellia erecta*—f (14 ha; 34 ac).

(A) Unit consists of the following 26 boundary points: Start at 753632, 2303912; 753625, 2303862; 753619, 2303819; 753617, 2303805; 753606, 2303762; 753541, 2303750; 753534, 2303749; 753531, 2303748; 753440, 2303770; 753436, 2303843; 753444,

2303891; 753396, 2304028; 753410, 2304101; 753403, 2304190; 753429, 2304234; 753422, 2304323; 753436, 2304448; 753469, 2304533; 753517, 2304603; 753565, 2304584; 753569, 2304536; 753565, 2304407; 753558, 2304356; 753569, 2304289; 753565, 2304238; 753632, 2304017; return to starting point.

(B) NOTE: Map 98 follows:

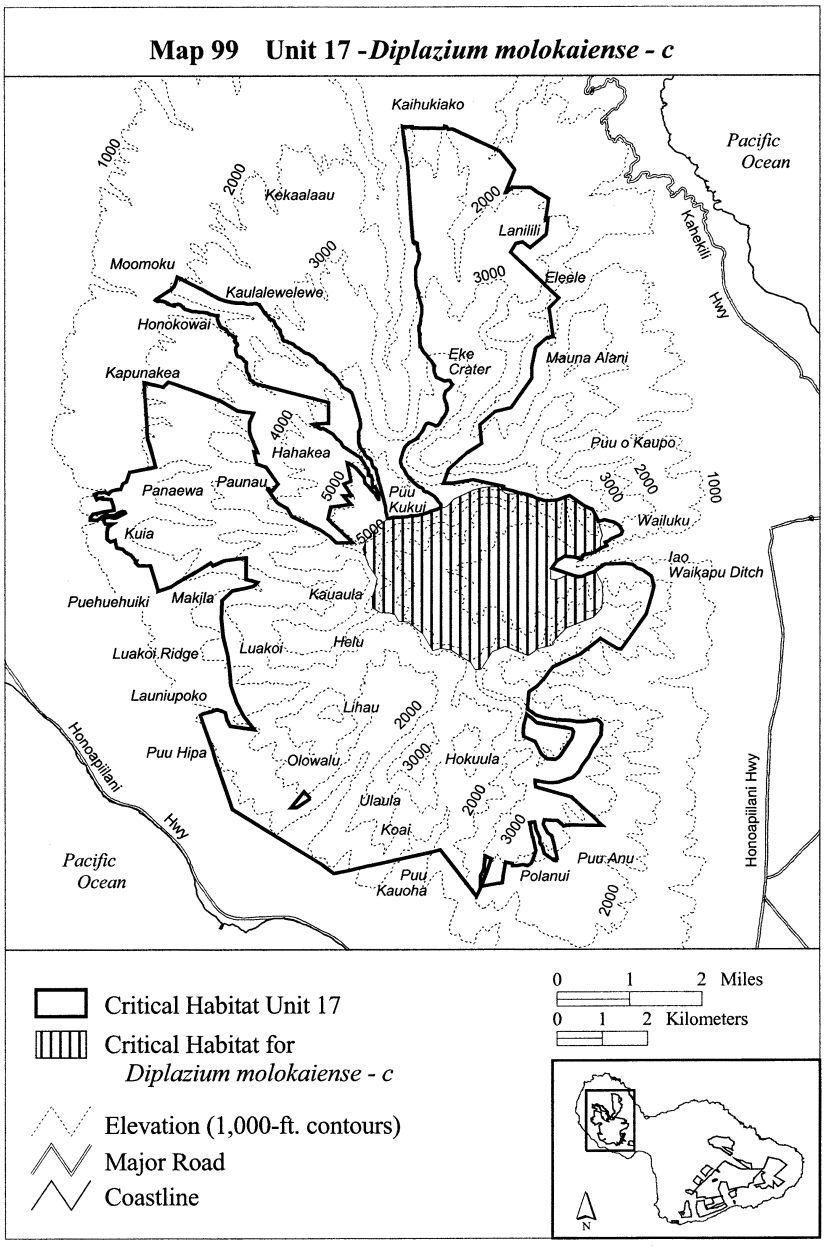


(xcix) Maui 17—*Diplazium molokaiense*—c (1,495 ha; 3,693 ac).

(A) Unit consists of the following 104 boundary points: Start at 754546, 2312287; 754606, 2312288; 754610, 2312288; 754834, 2312292; 755095, 2312393; 755436, 2312152; 755603, 2312078; 755737, 2311831; 755740, 2311819; 755830, 2311503; 755790,

2311369; 755790, 2311220; 755790, 2311209; 755633, 2311121; 755402, 2311063; 755230, 2311019; 754988, 2311042; 754931, 2311008; 754820, 2310941; 754711, 2310770; 754680, 2310721; 754687, 2310533; 754794, 2310520; 754921, 2310553; 755041, 2310620; 755269, 2310584; 755294, 2310580; 755295, 2310580; 755357, 2310584; 755364, 2310585; 755366, 2310585; 755395, 2310587; 755690, 2310701; 755823, 2310420; 755837, 2310132; 755810, 2309871; 755636, 2309671; 755034, 2309443; 754723, 2309107; 754733, 2309062; 754399, 2308969; 754265, 2308862; 754185, 2308821; 753679, 2309015; 753403, 2308902; 753162, 2308507; 753021, 2308494; 752921, 2308661; 752767, 2308768; 752647, 2308828; 752480, 2308948; 752259, 2308982; 752072, 2308935; 751858, 2309310; 751530, 2309577; 751323, 2309597; 751242, 2309744; 751129, 2309778; 750935, 2309778; 750741, 2309898; 750741, 2310145; 750801, 2310333; 750841, 2310553; 750661, 2310848; 750527, 2311202; 750607, 2311396; 750888, 2311744; 751101, 2311891; 751115, 2311894; 751125, 2311897; 751138, 2311901; 751197, 2311915; 751210, 2311916; 751252, 2311917; 751334, 2311913; 751353, 2311910; 751415, 2311923; 751428, 2311924; 751575, 2311921; 751719, 2311957; 751730, 2311960; 751766, 2311969; 751772, 2311971; 751845, 2311984; 751888, 2311992; 751889, 2311992; 751963, 2312014; 751997, 2312034; 752095, 2312064; 752096, 2312064; 752393, 2312158; 752547, 2312326; 752774, 2312419; 752975, 2312526; 753137, 2312560; 753296, 2312593; 753510, 2312586; 753690, 2312439; 753831, 2312419; 754009, 2312447; 754051, 2312453; 754245, 2312393; 754379, 2312336; 754499, 2312286; return to starting point.

(B) NOTE: Map 99 follows:

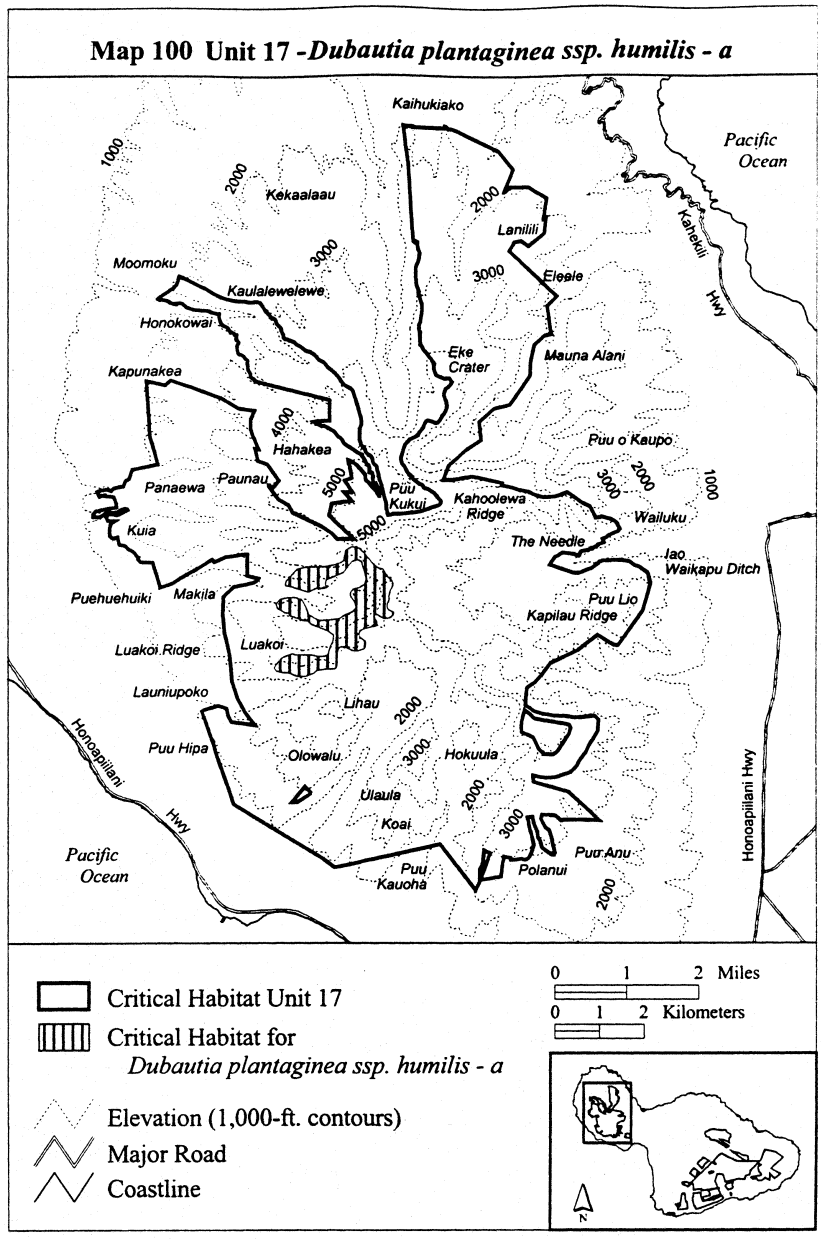


(c) Maui 17—*Dubautia plantaginea* ssp. *humilis*—a (293 ha; 723 ac).

(A) Unit consists of the following 125 boundary points: Start at 750756, 2309574; 750804, 2309536; 750834, 2309494; 750822, 2309406; 750716, 2309394; 750457, 2309300; 750422, 2309212; 750451, 2309153; 750581, 2309053; 750581, 2308953; 750557,

2308895; 750410, 2308848; 750298, 2308848; 750116, 2308936; 750004, 2308936; 749946, 2308818; 749940, 2308653; 749940, 2308495; 749916, 2308454; 749810, 2308430; 749722, 2308430; 749505, 2308412; 749410, 2308336; 749228, 2308271; 749058, 2308271; 748869, 2308348; 748681, 2308365; 748587, 2308383; 748528, 2308459; 748617, 2308589; 748711, 2308689; 748922, 2308783; 749016, 2308753; 749158, 2308753; 749352, 2308753; 749516, 2308712; 749652, 2308718; 749734, 2308753; 749804, 2308971; 749840, 2309042; 749860, 2309196; 749755, 2309277; 749635, 2309321; 749341, 2309445; 749279, 2309518; 749193, 2309518; 748880, 2309633; 748847, 2309691; 748794, 2309691; 748592, 2309801; 748577, 2309878; 748659, 2309998; 748847, 2310041; 749020, 2310032; 749159, 2309974; 749231, 2309825; 749293, 2309657; 749447, 2309561; 749553, 2309522; 749735, 2309527; 749995, 2309570; 750105, 2309647; 750283, 2309719; 750360, 2309806; 750322, 2309931; 750230, 2310080; 750240, 2310137; 750298, 2310229; 750447, 2310267; 750548, 2310344; 750596, 2310459; 750524, 2310671; 750471, 2310849; 750389, 2310887; 750269, 2310849; 750077, 2310599; 749687, 2310426; 749673, 2310363; 749678, 2310306; 749711, 2310262; 749659, 2310238; 749466, 2310238; 749313, 2310157; 749106, 2310209; 748952, 2310267; 748779, 2310301; 748799, 2310402; 749039, 2310671; 749245, 2310728; 749495, 2310724; 749639, 2310728; 749841, 2310757; 750048, 2310820; 750077, 2310863; 750120, 2311094; 750274, 2311175; 750432, 2311146; 750466, 2311103; 750557, 2311031; 750610, 2310949; 750663, 2310887; 750716, 2310805; 750845, 2310709; 750956, 2310680; 751009, 2310589; 751042, 2310536; 751124, 2310459; 751172, 2310407; 751182, 2310320; 751163, 2310248; 751124, 2310176; 751105, 2310075; 751095, 2309974; 751066, 2309888; 751057, 2309811; 751081, 2309767; 751143, 2309739; 751211, 2309700; 751196, 2309643; 751163, 2309614; 751095, 2309580; 750990, 2309566; 750927, 2309604; 750831, 2309652; 750778, 2309652; return to starting point.

(B) NOTE: Map 100 follows:

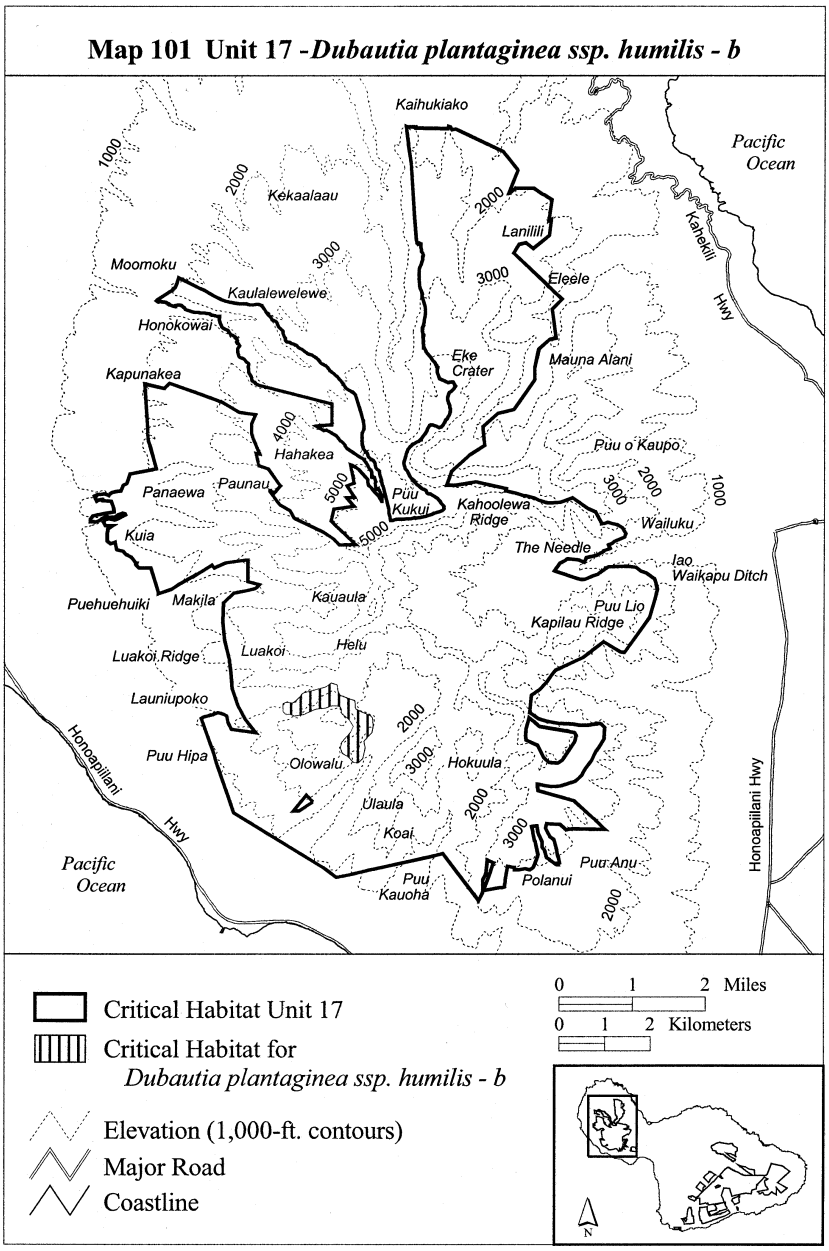


(ci) Maui 17—*Dubautia plantaginea* ssp. *humilis*—b (114 ha; 283 ac).

(A) Unit consists of the following 42 boundary points: Start at 748770, 2307854; 748911, 2307842; 749022, 2307918; 749146, 2308060; 749652, 2308195; 749769, 2308283; 749887, 2308248; 749916, 2308101; 749969, 2308007; 750287, 2307895; 750298,

2307813; 750304, 2307713; 750457, 2307630; 750628, 2307566; 750681, 2307507; 750698, 2307336; 750669, 2307178; 750492, 2306983; 750510, 2306836; 750463, 2306601; 750363, 2306507; 750263, 2306519; 750146, 2306648; 750010, 2306719; 749963, 2306831; 749999, 2306960; 750198, 2307195; 750257, 2307325; 750157, 2307466; 749987, 2307619; 749993, 2307666; 749975, 2307748; 749904, 2307771; 749775, 2307771; 749646, 2307724; 749428, 2307695; 749146, 2307571; 748964, 2307542; 748834, 2307583; 748758, 2307583; 748699, 2307654; 748705, 2307830; return to starting point.

(B) NOTE: Map 101 follows:

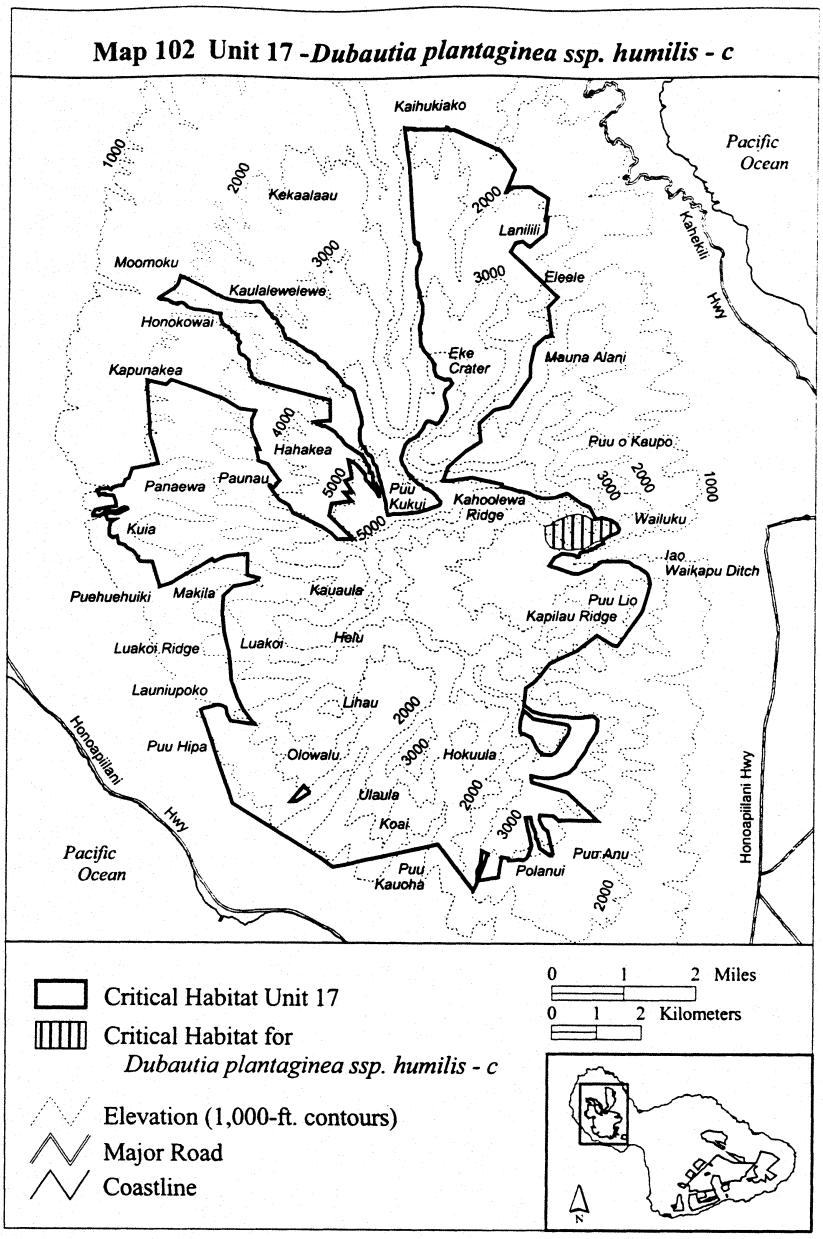


(cii) Maui 17—*Dubautia plantaginea* ssp. *humilis*—c (95 ha; 234 ac).

(A) Unit consists of the following 38 boundary points: Start at 755740, 2311819; 755809, 2311825; 755868, 2311853; 756001, 2311820; 756000, 2311819; 756067, 2311803; 756113, 2311777; 756198, 2311730; 756271, 2311594; 756244, 2311522; 756130,

2311477; 756013, 2311418; 755972, 2311382; 755885, 2311350; 755759, 2311305; 755487, 2311142; 755383, 2311142; 755306, 2311137; 755211, 2311119; 755098, 2311119; 755016, 2311160; 754948, 2311155; 754917, 2311105; 754908, 2311137; 754808, 2311160; 754713, 2311191; 754627, 2311327; 754627, 2311336; 754604, 2311481; 754604, 2311617; 754627, 2311667; 754740, 2311690; 754754, 2311721; 754971, 2311830; 755143, 2311893; 755356, 2311925; 755537, 2311875; 755664, 2311812; return to starting point.

(B) NOTE: Map 102 follows:

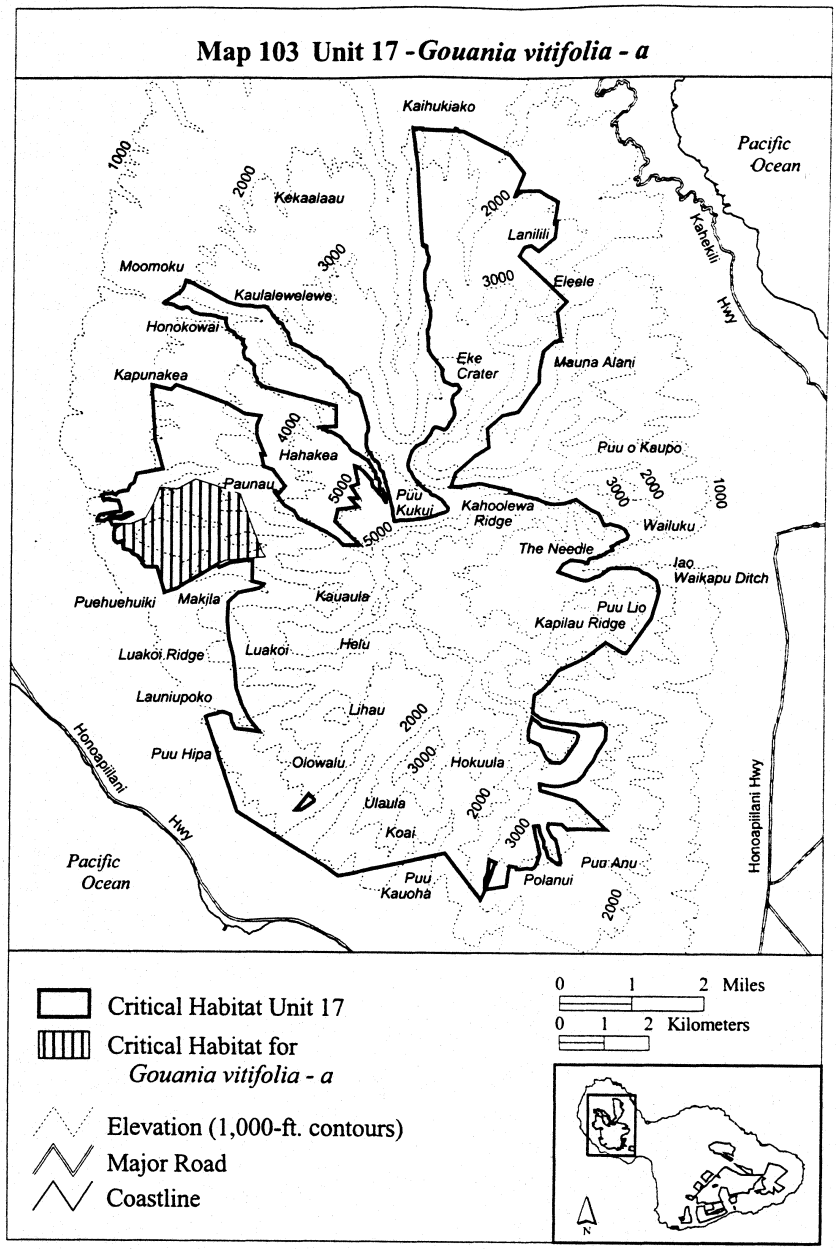


(ciii) Maui 17—*Gouania vitifolia*—a (485 ha; 1,198 ac).

(A) Unit consists of the following 41 boundary points: Start at 747141, 2310897; 746995, 2310813; 746754, 2310674; 746408, 2310474; 746263, 2310363; 745972, 2310265; 745966, 2310304; 745798, 2310840; 745541, 2310836; 745477, 2310914; 745480,

2310933; 745471, 2310939; 745465, 2310964; 745411, 2311024; 745368, 2311075; 745241, 2311145; 745197, 2311199; 745057, 2311247; 745052, 2311257; 745043, 2311276; 745010, 2311405; 744912, 2311365; 744842, 2311439; 744842, 2311486; 744842, 2311603; 744848, 2311671; 744847, 2311673; 744850, 2311702; 744959, 2311780; 744998, 2311808; 745212, 2311808; 745549, 2311923; 745721, 2312269; 745854, 2312631; 746251, 2312595; 746652, 2312824; 747641, 2312506; 747841, 2311974; 748141, 2311198; 748215, 2311076; 747319, 2311000; return to starting point.

(B) NOTE: Map 103 follows:

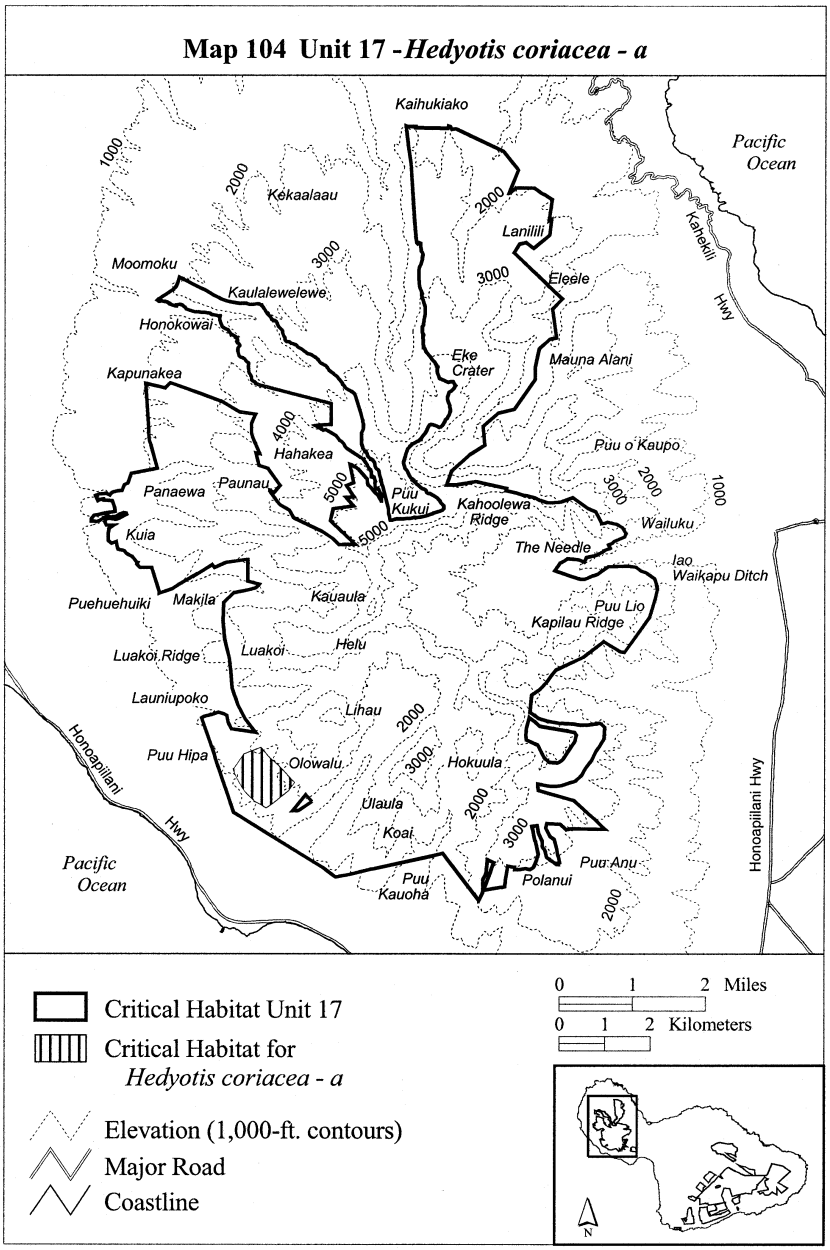


(civ) Maui 17—*Hedyotis coriacea*—a (106 ha; 262 ac).

(A) Unit consists of the following 17 boundary points: Start at 748229, 2306846; 748395, 2306645; 748650, 2306411; 748979, 2306067; 748838, 2305871; 748820, 2305865; 748469, 2305574; 748339, 2305505; 748218, 2305574; 748077, 2305651; 747887,

2305845; 747810, 2305946; 747709, 2306127; 747636, 2306281; 747610, 2306361; 747634, 2306377; 747850, 2306700; return to starting point.

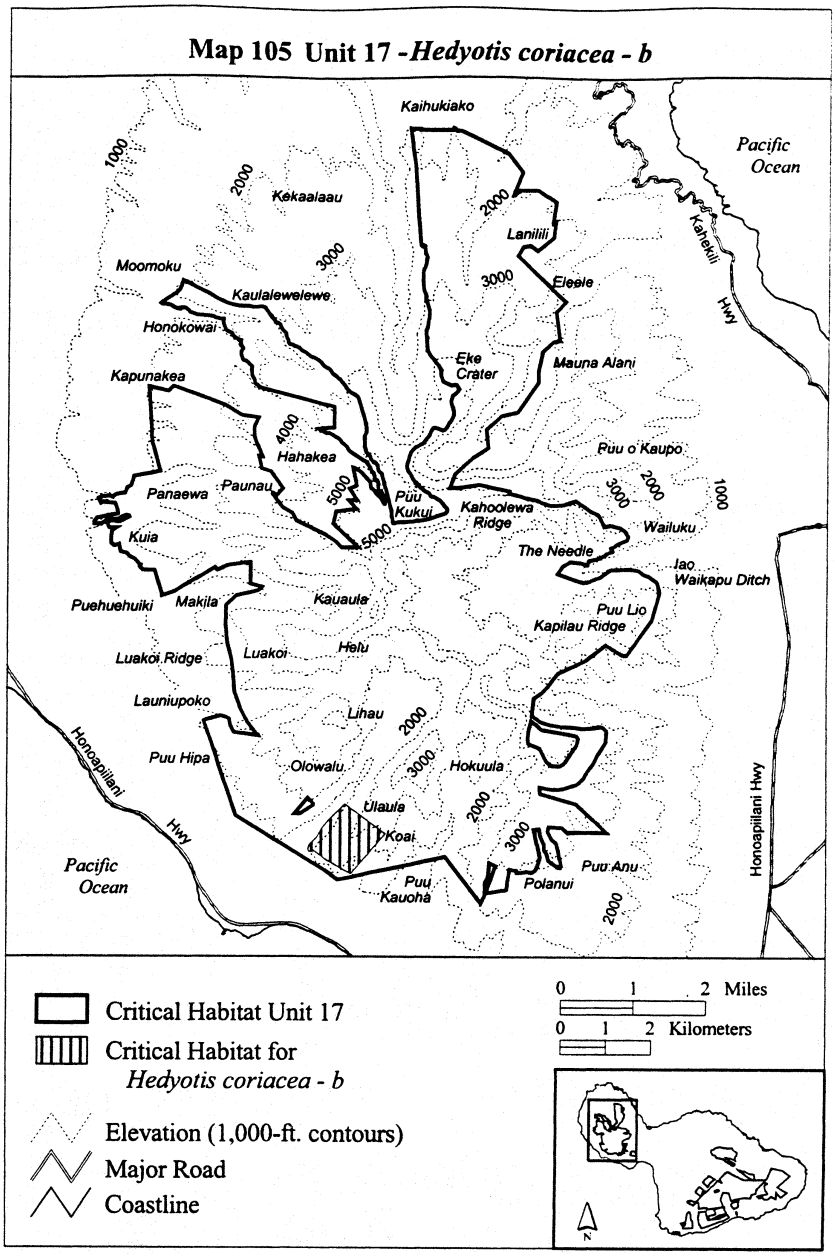
(B) NOTE: Map 104 follows:



(cv) Maui 17—*Hedyotis coriacea*—b (138 ha; 340 ac).

(A) Unit consists of the following 15 boundary points: Start at 750175, 2304106; 750114, 2304143; 749603, 2304436; 749378, 2304612; 749292, 2304605; 749240, 2304605; 749225, 2304642; 749247, 2304740; 749311, 2304807; 749416, 2304901; 749540, 2305122; 749716, 2305336; 749855, 2305464; 750041, 2305656; 750931, 2304991; return to starting point.

(B) NOTE: Map 105 follows:

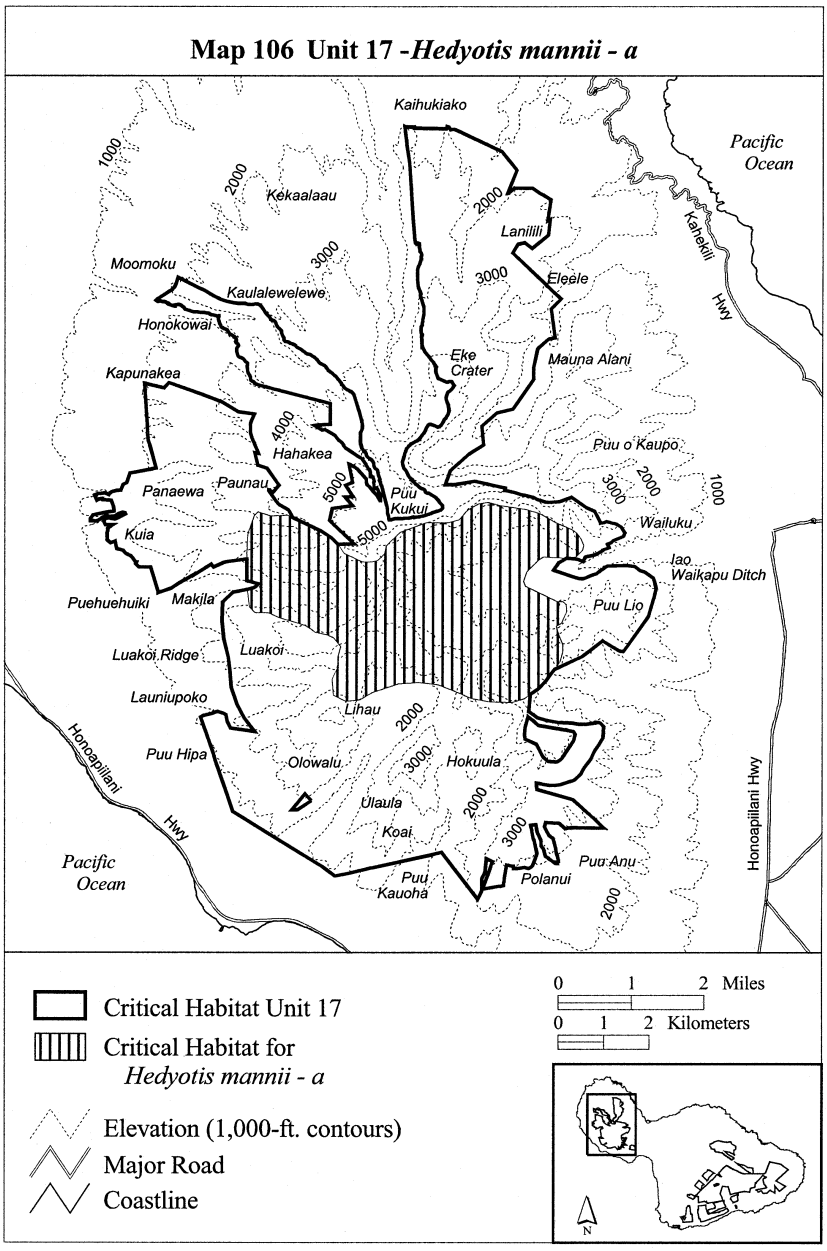


(cvi) Maui 17—*Hedyotis mannii*—a (2,234 ha; 5,521 ac).

(A) Unit consists of the following 91 boundary points: Start at 754727, 2308566; 754627, 2308441; 754539, 2308313; 754379, 2308137; 754206, 2308013; 754067, 2307913; 753787, 2307825; 753291, 2307841; 752907, 2307913; 752547, 2308073; 752153,

2308222; 751739, 2308265; 751304, 2308250; 750705, 2308040; 750420, 2307876; 750121, 2307846; 749836, 2307996; 749821, 2308340; 749939, 2308602; 749944, 2308823; 750001, 2309070; 749859, 2309265; 749711, 2309330; 749709, 2309329; 749451, 2309383; 749360, 2309453; 749225, 2309542; 748982, 2309613; 748668, 2309703; 748413, 2309823; 748114, 2309823; 747994, 2309943; 747935, 2310342; 747935, 2310343; 748094, 2310374; 748180, 2310466; 747930, 2310531; 747921, 2311010; 747919, 2311126; 747942, 2311477; 747949, 2311590; 748084, 2311980; 748174, 2312070; 748443, 2311980; 748833, 2311995; 748934, 2311945; 749571, 2311633; 749803, 2311489; 749939, 2311346; 749971, 2311313; 750085, 2311145; 750491, 2310953; 750699, 2310953; 750827, 2310993; 750971, 2311129; 750974, 2311127; 751010, 2311307; 751322, 2311611; 751900, 2311832; 752386, 2311832; 752622, 2311893; 752820, 2312105; 753056, 2312250; 753254, 2312280; 753543, 2312212; 754098, 2312113; 754402, 2312029; 754775, 2311832; 755109, 2311680; 755208, 2311596; 755307, 2311467; 755368, 2311315; 755337, 2311208; 755201, 2311071; 754934, 2311041; 754496, 2311070; 754383, 2311003; 754117, 2310737; 754049, 2310524; 754079, 2310418; 754794, 2310076; 754904, 2310075; 754980, 2310014; 754995, 2309839; 754919, 2309679; 754889, 2309596; 754767, 2309514; 754827, 2309305; 754907, 2309113; 754907, 2308945; 754851, 2308721; return to starting point.

(B) NOTE: Map 106 follows:

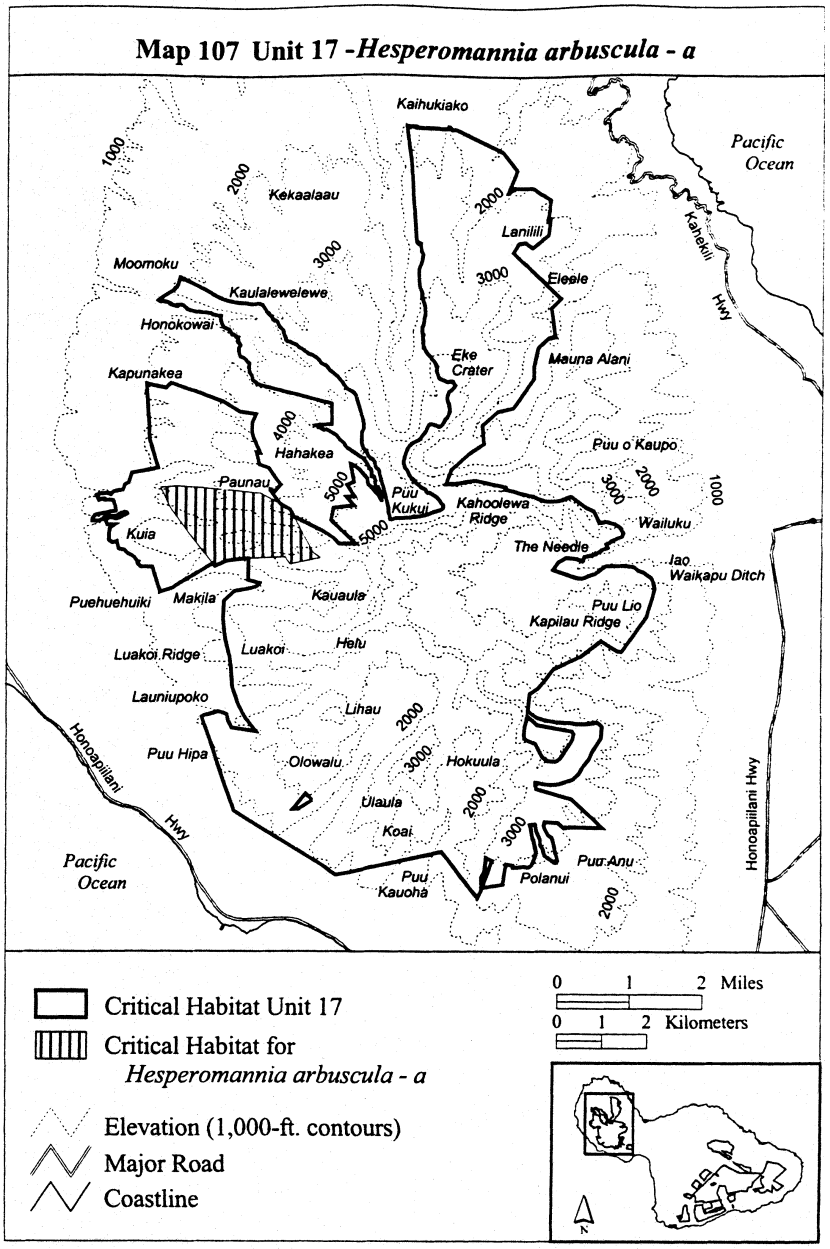


(cvii) Maui 17—*Hesperomannia arbuscula*—a (392 ha; 968 ac).

(A) Unit consists of the following 19 boundary points: Start at 747921, 2311010; 747903, 2311009; 747525, 2310992; 747443, 2310953; 747190, 2310834; 747141, 2310897; 746634, 2311554; 746203, 2312157; 745979, 2312604; 746368, 2312645; 748186,

2312479; 748631, 2312228; 748848, 2312105; 748934, 2311945; 749268, 2311327; 749365, 2311159; 749509, 2311034; 748847, 2310882; 748737, 2311047; return to starting point.

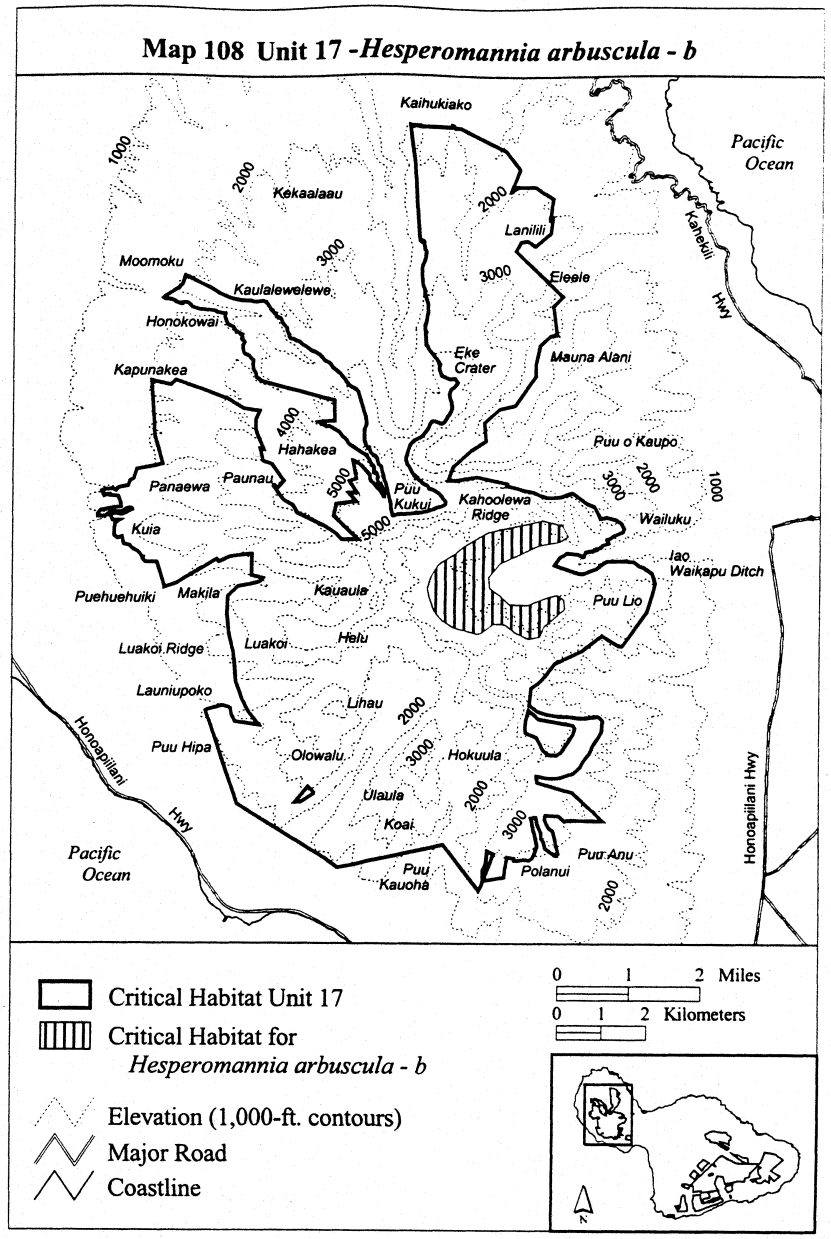
(B) NOTE: Map 107 follows:



(cviii) Maui 17—*Hesperomannia arbuscula*—b (435 ha; 1,076 ac).

(A) Unit consists of the following 36 boundary points: Start at 752168, 2310821; 752476, 2311020; 752645, 2311166; 753026, 2311401; 753239, 2311511; 754450, 2311761; 754890, 2311665; 755015, 2311408; 754831, 2311291; 754347, 2311203; 753481, 2310799; 753232, 2310491; 753247, 2310271; 753459, 2310095; 753701, 2309890; 754112, 2309875; 754567, 2310044; 754773, 2310102; 754912, 2310014; 754949, 2309787; 754736, 2309611; 754479, 2309391; 754391, 2309156; 754142, 2309105; 753841, 2309244; 753599, 2309427; 753349, 2309449; 753078, 2309251; 752982, 2309229; 752461, 2309361; 752190, 2309530; 751999, 2309758; 751904, 2310058; 751860, 2310256; 751955, 2310528; 752087, 2310748; return to starting point.

(B) NOTE: Map 108 follows:



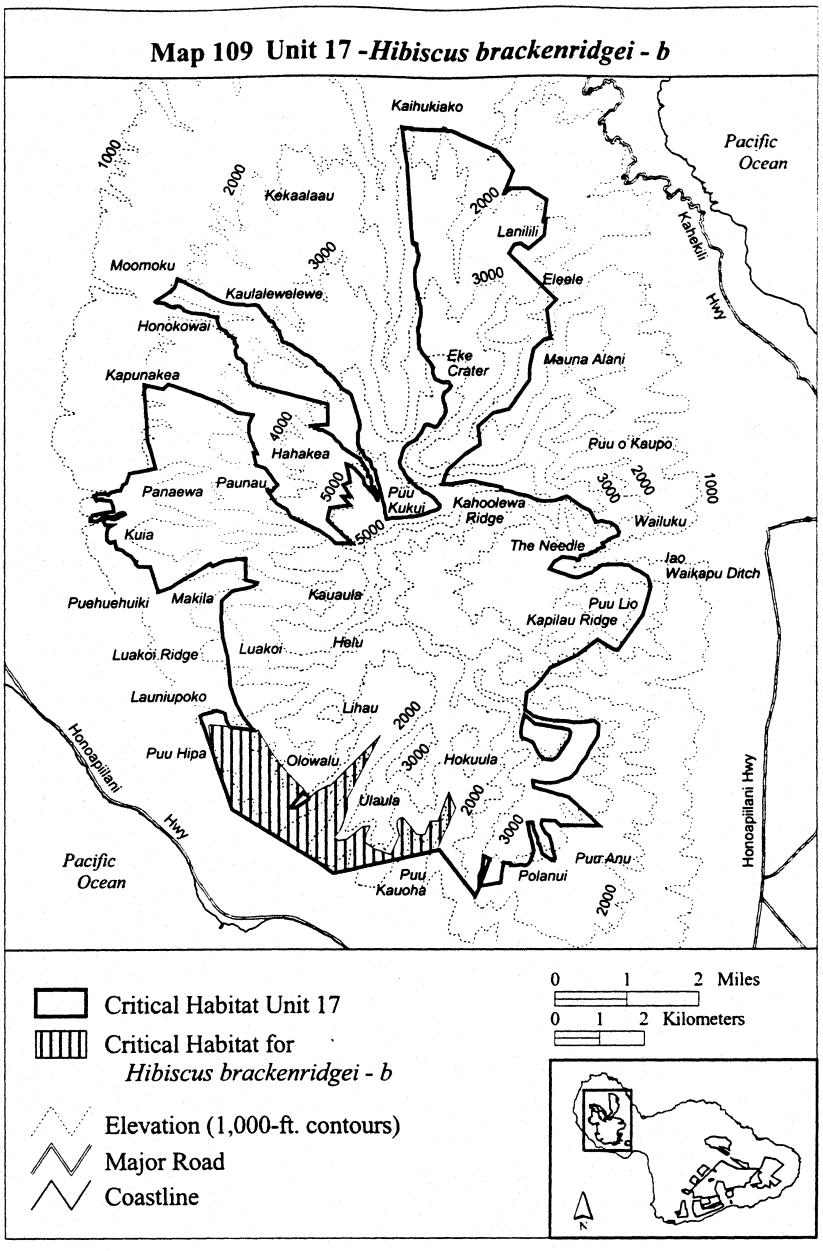
(cix) Maui 17—*Hibiscus brackenridgei*—b (672 ha; 1,661 ac).

(A) Unit consists of the following 60 boundary points: Start at 752075, 2304457; 752048, 2304451; 750687, 2304151; 750686, 2304151; 750403, 2304088; 749884, 2303974; 749722, 2304095; 749666, 2304138; 749584, 2304189; 748359, 2304949; 747620,

2305411; 747479, 2305820; 747343, 2306214; 747263, 2306446; 747200, 2306630; 747191, 2306692; 747101, 2307299; 747121, 2307299; 747120, 2307301; 747329, 2307289; 747571, 2307254; 748096, 2307179; 748214, 2307162; 748499, 2306705; 748671, 2306455; 749034, 2306050; 749215, 2305860; 749378, 2305670; 749491, 2305783; 749783, 2305937; 749811, 2305928; 750938, 2307038; 750193, 2305638; 750202, 2305598; 750197, 2305412; 750122, 2305158; 750027, 2304930; 749905, 2304760; 750011, 2304702; 750197, 2304744; 750446, 2304940; 750546, 2305015; 750695, 2305036; 750679, 2304967; 750621, 2304845; 750589, 2304670; 750818, 2304506; 751161, 2304400; 751352, 2304808; 751305, 2304993; 751305, 2305126; 751352, 2305195; 751442, 2305221; 751741, 2304837; 751924, 2304837; 752039, 2305135; 752222, 2305135; 752452, 2305777; 752612, 2305410; 752197, 2304484; return to starting point.

(B) Excluding the area bounded by the following 11 boundary points (6ha; 15ac): Start at 749362, 2305641; 749057, 2305433; 748930, 2305439; 749226, 2305793; 749363, 2305641; 749363, 2305641; 749363, 2305641; 749363, 2305641; 749363, 2305641; 749363, 2305641; 749362, 2305640; return to starting point.

(C) NOTE: Map 109 follows:

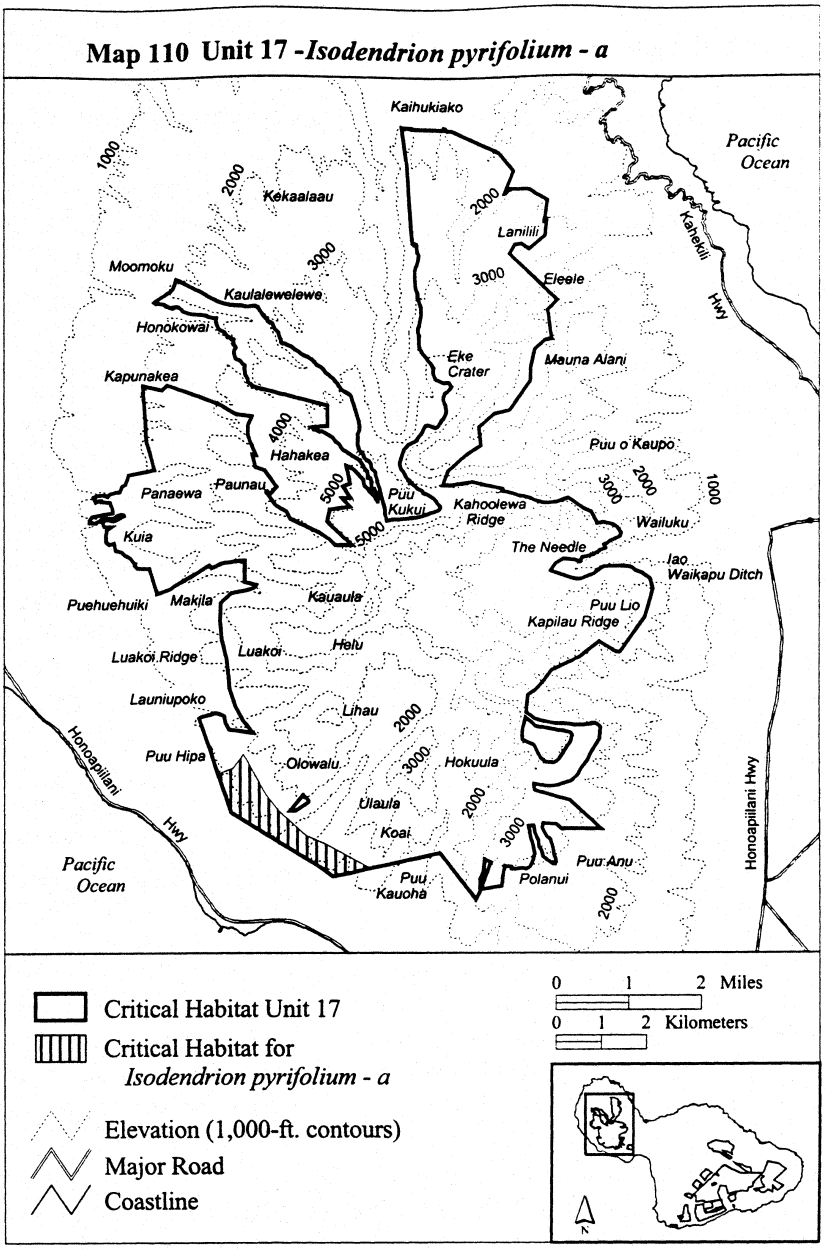


(cx) Maui 17—*Isodendrion pyrifolium*—a (224 ha; 555 ac).

(A) Unit consists of the following 20 boundary points: Start at 750686, 2304151; 750460, 2304101; 750214, 2304047; 749928, 2303984; 749903, 2303978; 749898, 2303977; 749722, 2304095; 749584, 2304189; 749409, 2304307; 748359, 2304949; 747620,

2305407; 747479, 2305820; 747331, 2306254; 747670, 2306395; 747898, 2306699; 748388, 2305794; 748679, 2305440; 749287, 2304896; 749758, 2304696; 750700, 2304154; return to starting point.

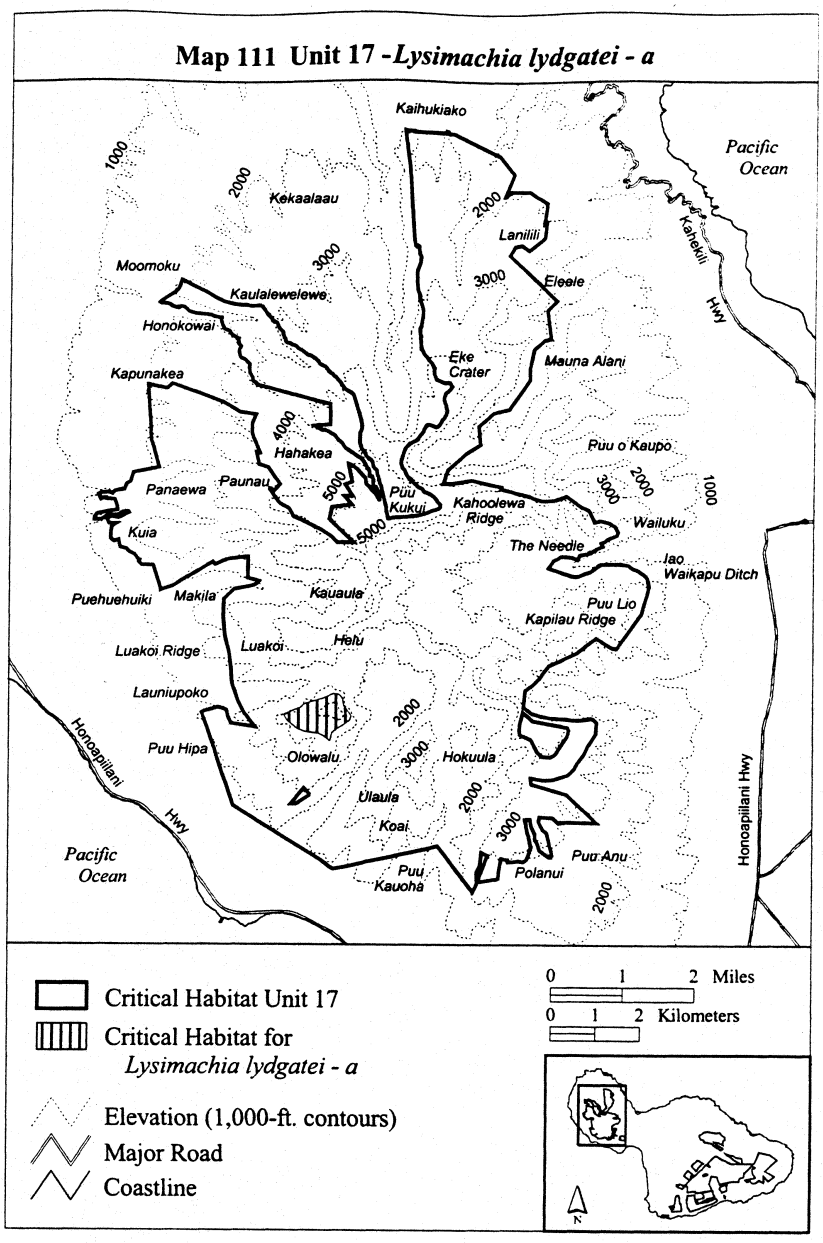
(B) NOTE: Map 110 follows:



(cxi) Maui 17—*Lysimachia lydgatei*—a (89 ha; 221 ac).

(A) Unit consists of the following 28 boundary points: Start at 748761, 2307434; 748761, 2307462; 748898, 2307517; 749159, 2307627; 749233, 2307705; 749329, 2307723; 749389, 2307755; 749654, 2307824; 749737, 2307865; 749879, 2307929; 750007, 2307916; 750080, 2307833; 750099, 2307732; 750103, 2307664; 750186, 2307558; 750273, 2307434; 750250, 2307334; 750076, 2307201; 749911, 2307100; 749842, 2307040; 749801, 2306857; 749663, 2306972; 749549, 2307022; 749480, 2307040; 749242, 2307059; 749086, 2307127; 748830, 2307334; 748761, 2307421; return to starting point.

(B) NOTE: Map 111 follows:



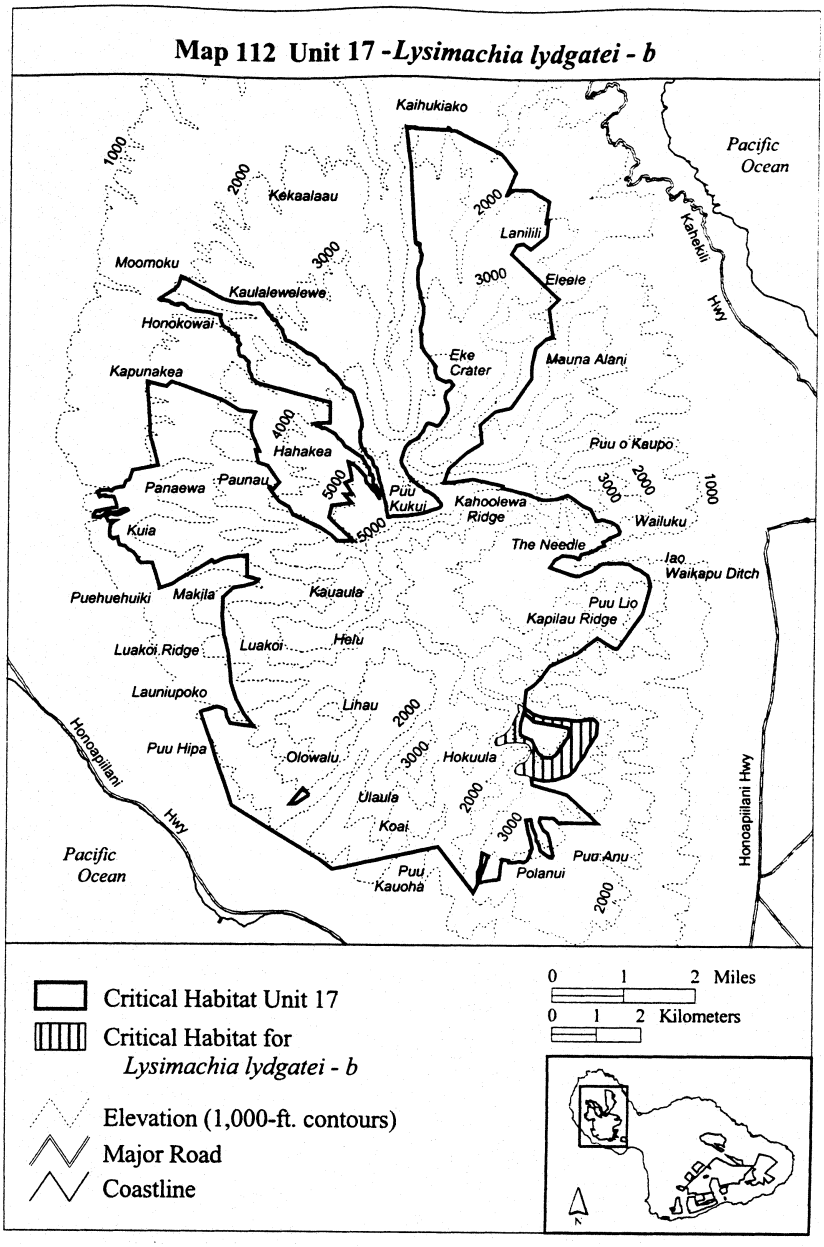
(cxii) Maui 17—*Lysimachia lydgatei*—b (220 ha; 544 ac).

(A) Unit consists of the following 67 boundary points: Start at 754164, 2307624; 754188, 2307607; 754367, 2307487; 754541, 2307436; 754599, 2307426; 754834, 2307383; 755113, 2307365; 755261, 2307345; 755428, 2307345; 755624, 2307370; 755652,

2307375; 755657, 2307376; 755704, 2307385; 755734, 2307365; 755806, 2307294; 755803, 2307069; 755794, 2307046; 755803, 2307043; 755697, 2306874; 755624, 2306756; 755515, 2306552; 755490, 2306519; 755377, 2306367; 755334, 2306276; 755319, 2306243; 755262, 2306193; 755163, 2306105; 755088, 2306079; 755078, 2306075; 754935, 2306024; 754857, 2305996; 754748, 2305990; 754614, 2305982; 754412, 2306019; 754341, 2306032; 754341, 2306031; 754336, 2306037; 754319, 2306054; 754254, 2306105; 754083, 2306112; 753970, 2306152; 753941, 2306203; 753985, 2306280; 754050, 2306349; 754192, 2306403; 754247, 2306469; 754327, 2306603; 754312, 2306694; 754272, 2306781; 754214, 2306829; 753999, 2306850; 753861, 2306832; 753774, 2306836; 753618, 2306774; 753523, 2306770; 753494, 2306847; 753541, 2306949; 753640, 2306978; 753730, 2307025; 753825, 2307130; 753890, 2307243; 753940, 2307388; 754036, 2307519; 754021, 2307625; 754007, 2307650; 754021, 2307697; 754054, 2307701; return to starting point.

(B) Excluding the area bounded by the following 19 boundary points (62ha; 153ac): Start at 754495, 2306605; 754472, 2306625; 754334, 2306901; 754090, 2307018; 754065, 2307098; 754087, 2307266; 754141, 2307512; 754162, 2307496; 754243, 2307436; 754381, 2307316; 755039, 2307210; 755145, 2307181; 755188, 2307116; 755155, 2306981; 755028, 2306781; 754890, 2306567; 754808, 2306523; 754788, 2306512; 754588, 2306523; return to starting point.

(C) NOTE: Map 112 follows:

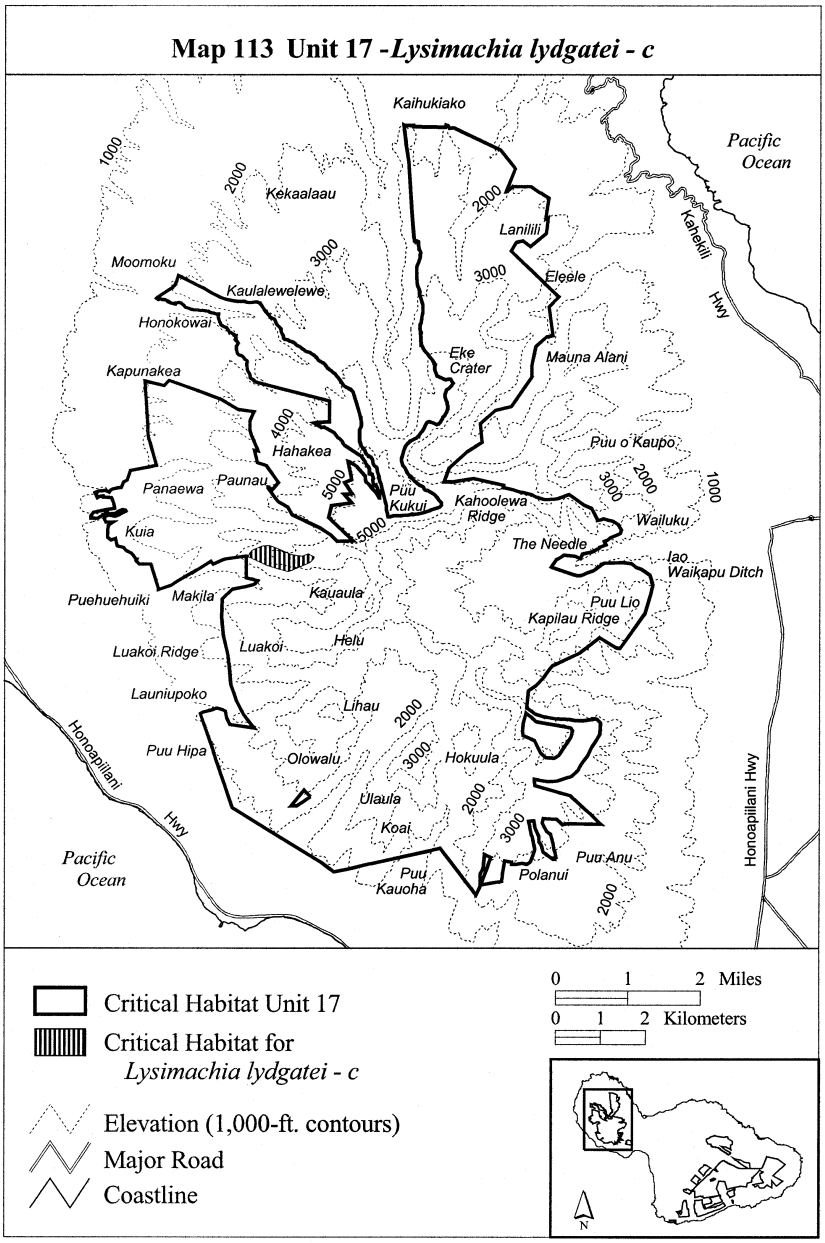


(cxiii) Maui 17—*Lysimachia lydgatei*—c (47 ha; 117 ac).

(A) Unit consists of the following 18 boundary points: Start at 748746, 2311133; 748917, 2311048; 749167, 2311011; 749305, 2311059; 749438, 2311006; 749422, 2310952; 749353, 2310873; 749060, 2310745; 748858, 2310670; 748624, 2310729; 748411,

2310793; 748135, 2310920; 747970, 2311000; 747997, 2311080; 748066, 2311154; 748289, 2311240; 748433, 2311255; 748512, 2311234; return to starting point.

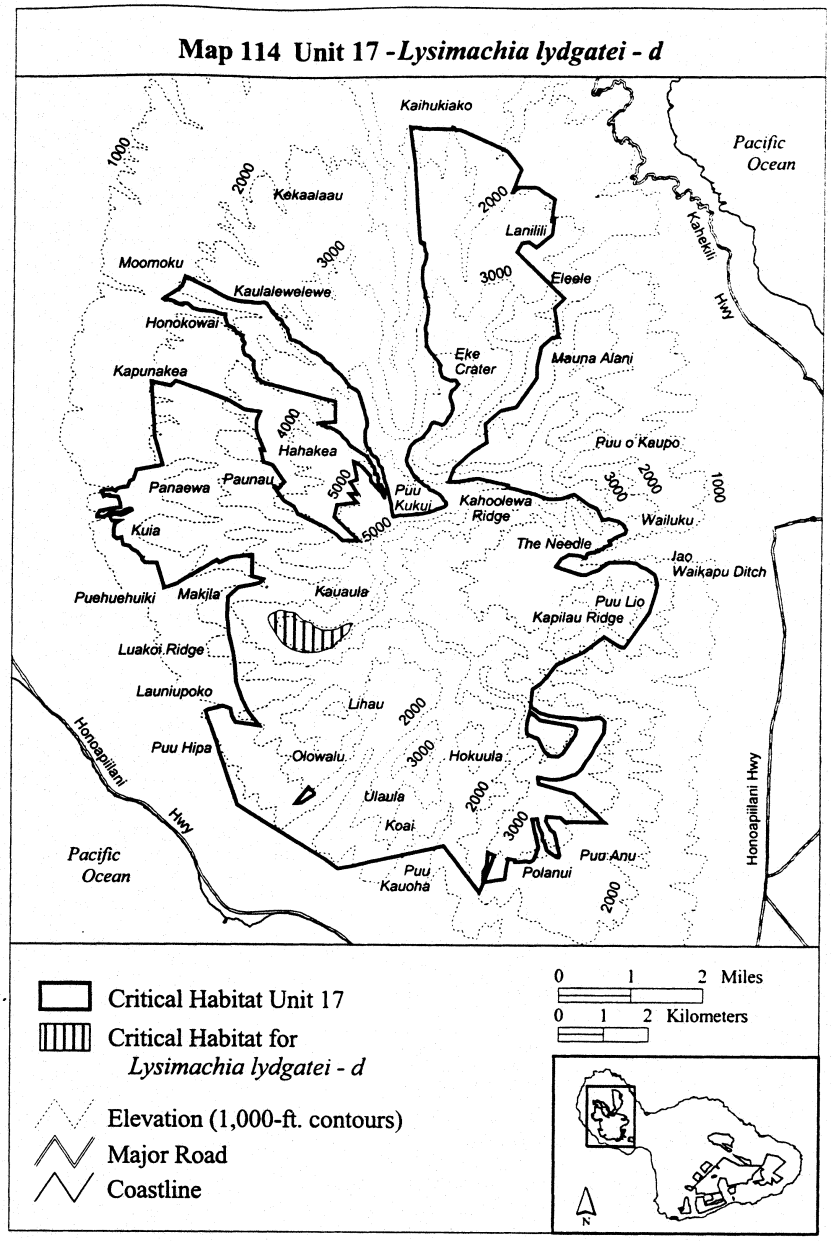
(B) NOTE: Map 113 follows:



(cxiv) Maui 17—*Lysimachia lydgatei*—d (98 ha; 241 ac).

(A) Unit consists of the following 30 boundary points: Start at 750135, 2309496; 750181, 2309483; 750177, 2309446; 750122, 2309373; 750090, 2309281; 749925, 2309130; 749801, 2309038; 749773, 2308951; 749416, 2308836; 749077, 2308814; 748834, 2308882; 748623, 2309020; 748486, 2309217; 748335, 2309450; 748293, 2309574; 748321, 2309638; 748385, 2309698; 748523, 2309757; 748582, 2309771; 748738, 2309734; 748885, 2309721; 748999, 2309606; 749123, 2309519; 749251, 2309487; 749329, 2309405; 749498, 2309322; 749682, 2309322; 749842, 2309350; 749906, 2309400; 750025, 2309450; return to starting point.

(B) NOTE: Map 114 follows:

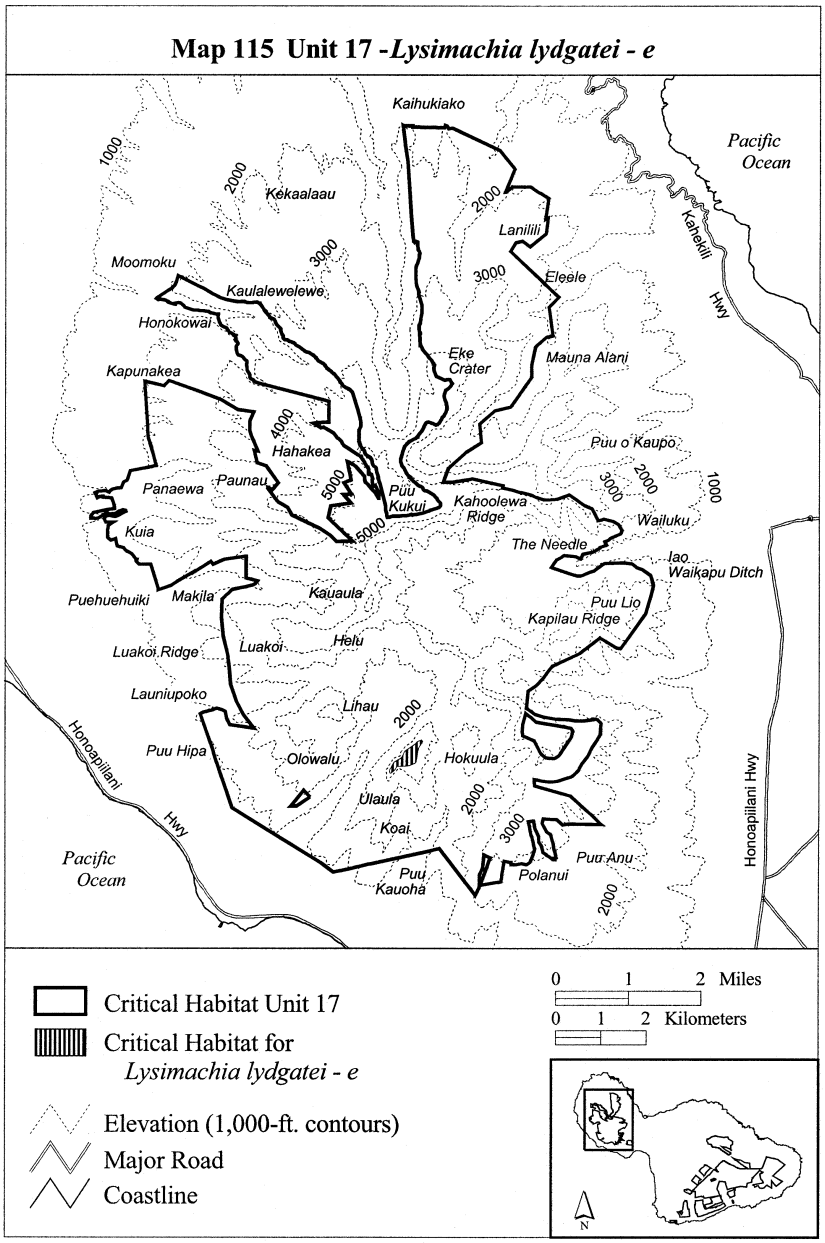


(cxv) Maui 17—*Lysimachia lydgatei*—e (18 ha; 44 ac).

(A) Unit consists of the following 22 boundary points: Start at 751408, 2306523; 751429, 2306563; 751478, 2306669; 751724, 2306831; 751767, 2306892; 751846, 2306916; 751871, 2306886; 751843, 2306831; 751785, 2306736; 751755, 2306654; 751746,

2306529; 751718, 2306404; 751575, 2306347; 751374, 2306334; 751307, 2306322; 751264, 2306246; 751164, 2306182; 751133, 2306194; 751136, 2306234; 751188, 2306328; 751240, 2306423; 751359, 2306493; return to starting point.

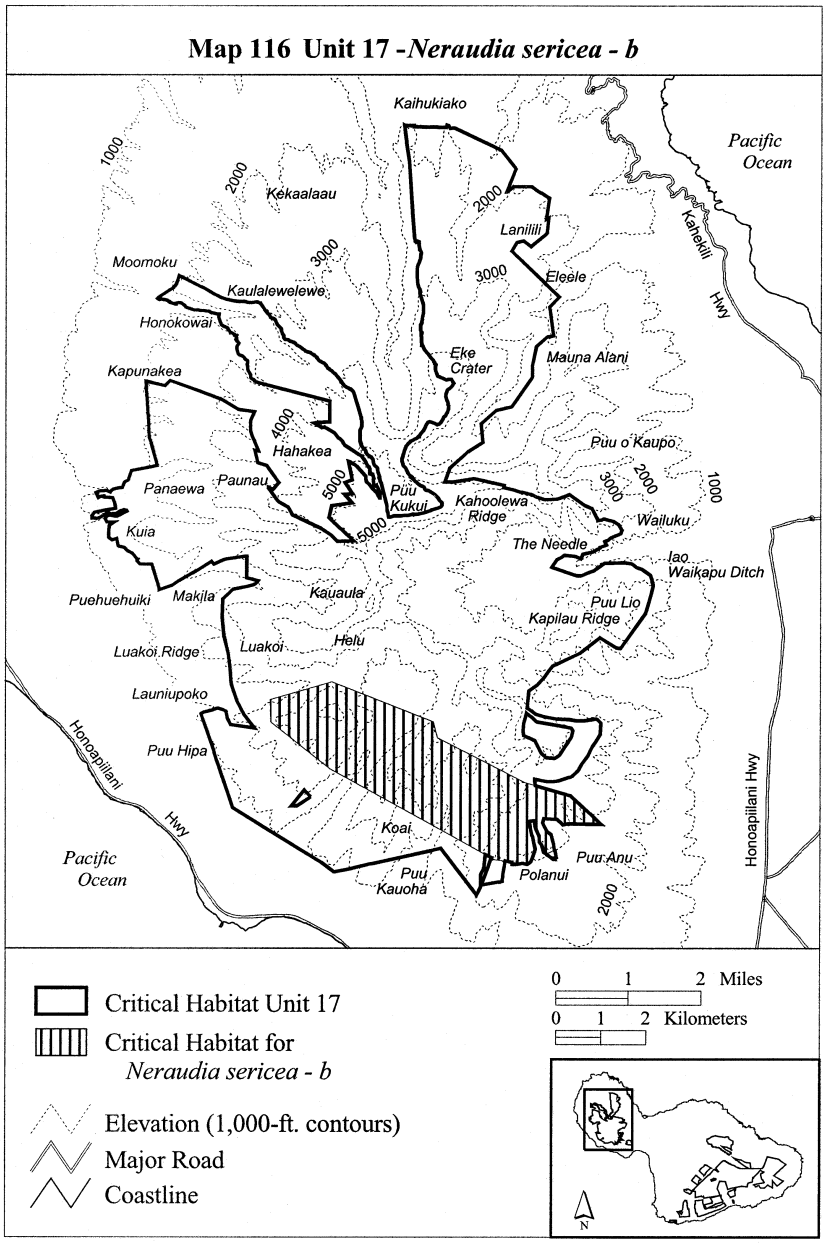
(B) NOTE: Map 115 follows:



(cxvi) Maui 17—*Neraudia sericea*—b (1,189 ha; 2,938 ac).

(A) Unit consists of the following 56 boundary points: Start at 754350, 2305894; 755139, 2305668; 755567, 2305273; 755828, 2305033; 755089, 2305043; 755087, 2305045; 754979, 2305016; 754831, 2305142; 754762, 2305147; 754540, 2305162; 754519, 2305074; 754515, 2305057; 754540, 2305011; 754546, 2305000; 754546, 2305000; 754621, 2304863; 754699, 2304812; 754760, 2304616; 754771, 2304529; 754777, 2304488; 754780, 2304459; 754601, 2304367; 754542, 2304415; 754486, 2304579; 754439, 2304653; 754438, 2304725; 754437, 2304765; 754435, 2304770; 754349, 2304956; 754320, 2305103; 754319, 2305108; 754309, 2305107; 754214, 2305093; 754235, 2304991; 754278, 2304785; 754282, 2304767; 754351, 2304474; 754342, 2304448; 754333, 2304422; 754324, 2304394; 754323, 2304390; 754277, 2304259; 754255, 2304193; 754171, 2304150; 754067, 2304164; 753832, 2304195; 753811, 2304198; 753675, 2304217; 753449, 2304247; 749789, 2306260; 748476, 2307315; 748455, 2307820; 749832, 2308208; 752082, 2307325; 752168, 2306959; 754128, 2305958; return to starting point.

(B) NOTE: Map 116 follows:

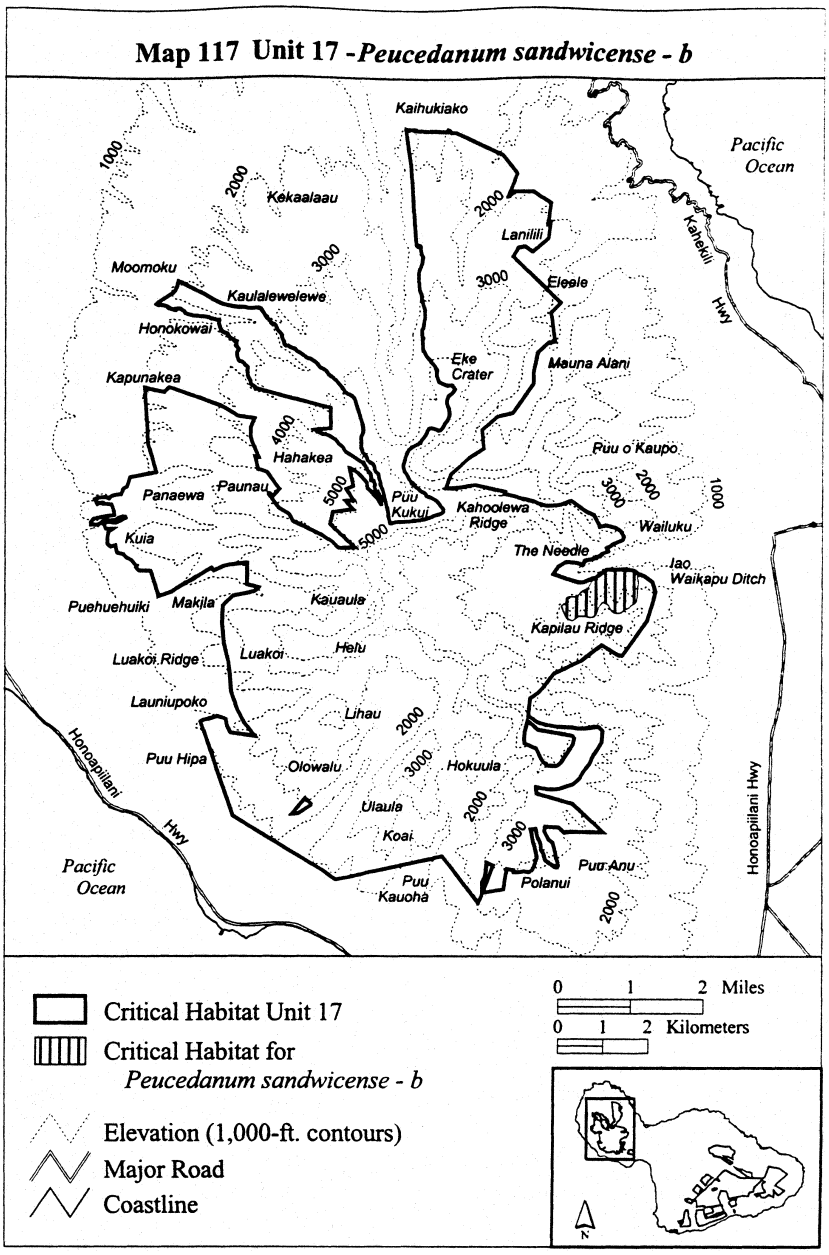


(cxvii) Maui 17—*Peucedanum sandwicense*—b (117 ha; 289 ac).

(A) Unit consists of the following 41 boundary points: Start at 755661, 2310703; 755670, 2310709; 755718, 2310743; 755890, 2310863; 755896, 2310864; 756325, 2310873; 756497, 2310849; 756549, 2310816; 756582, 2310768; 756582, 2310767; 756578,

2310701; 756602, 2310559; 756578, 2310444; 756578, 2310273; 756549, 2310135; 756463, 2310087; 756387, 2310011; 756287, 2309973; 756216, 2309911; 756116, 2309892; 756068, 2309906; 755992, 2309963; 755930, 2310082; 755806, 2310140; 755735, 2310078; 755697, 2309982; 755659, 2309873; 755587, 2309811; 755502, 2309811; 755430, 2309835; 755292, 2309835; 755140, 2309730; 755002, 2309797; 754882, 2310059; 754982, 2310125; 755002, 2310244; 755068, 2310268; 755221, 2310259; 755344, 2310382; 755492, 2310463; 755573, 2310625; return to starting point.

(B) NOTE: Map 117 follows:

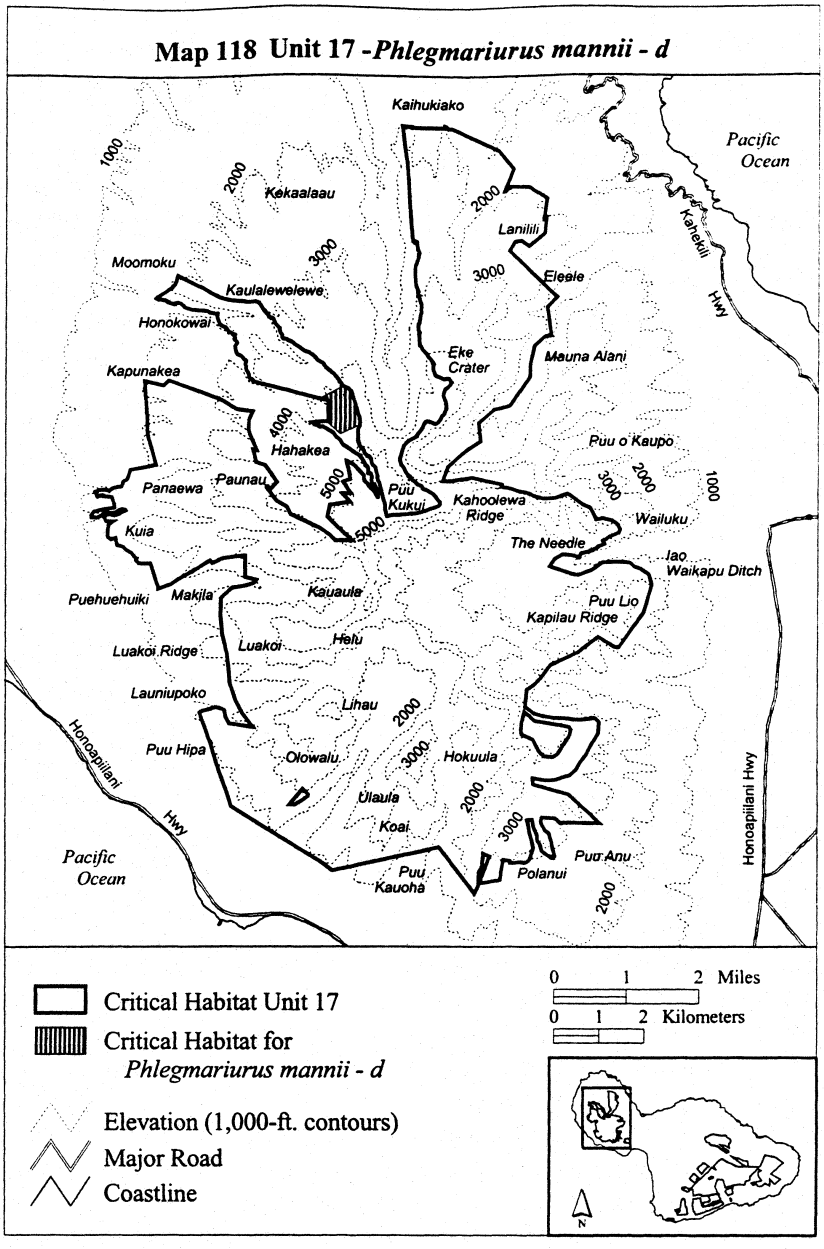


(cxviii) Maui 17—*Phlegmariurus mannii*—d (57 ha; 140 ac).

(A) Unit consists of the following 34 boundary points: Start at 749731, 2314023; 749762, 2314024; 749763, 2314024; 749764, 2314024; 749764, 2314025; 749766, 2314245; 749769, 2314498; 749768, 2314500; 749767, 2314500; 749602, 2314542; 750115,

2314813; 750120, 2314809; 750138, 2314798; 750173, 2314786; 750215, 2314763; 750223, 2314758; 750232, 2314754; 750246, 2314737; 750265, 2314720; 750286, 2314703; 750288, 2314702; 750386, 2314362; 750454, 2314143; 750461, 2314125; 750462, 2314110; 750462, 2314098; 750469, 2314075; 750476, 2314039; 750478, 2314029; 750479, 2314015; 750481, 2313991; 750479, 2313958; 750479, 2313948; 750046, 2313750; return to starting point.

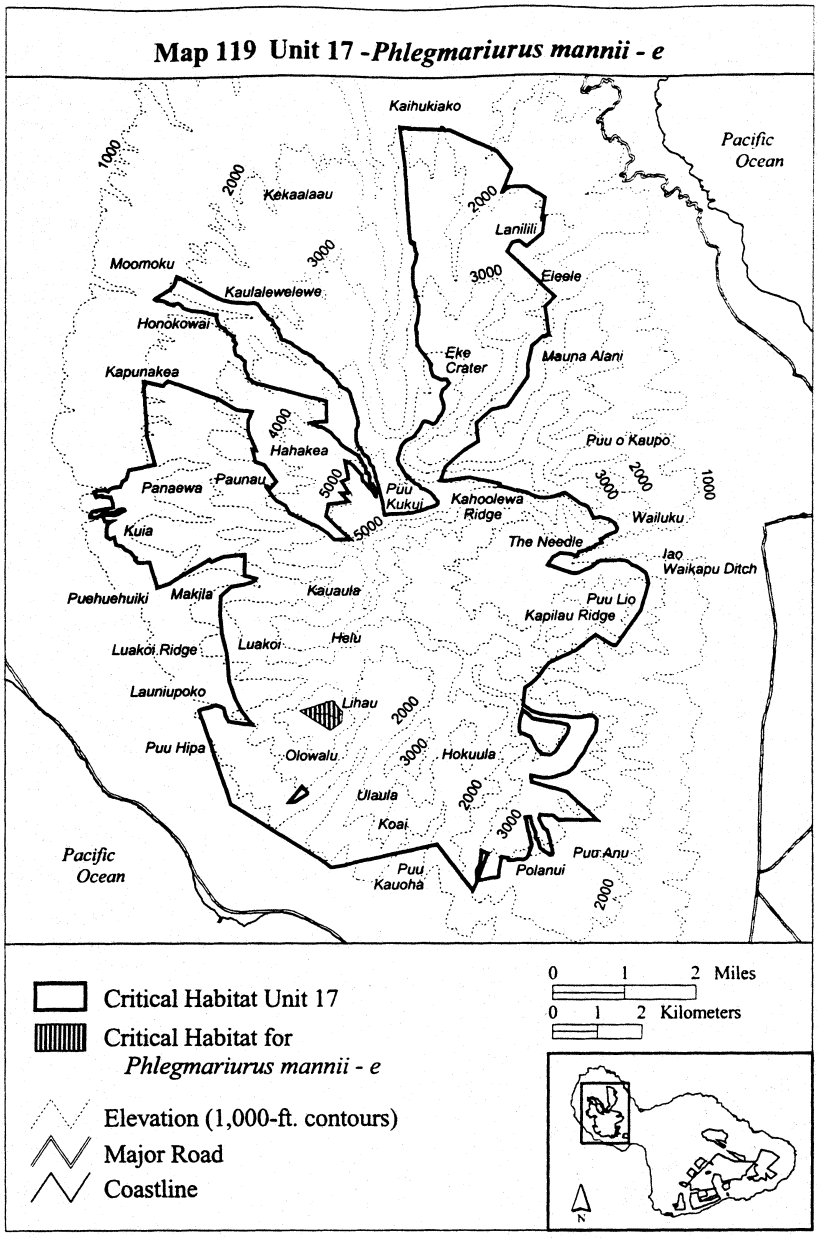
(B) NOTE: Map 118 follows:



(cxix) Maui 17—*Phlegmariurus mannii*—e (35 ha; 87 ac).

(A) Unit consists of the following 5 boundary points: Start at 749857, 2307053; 749164, 2307491; 749922, 2307722; 750135, 2307470; 750105, 2307233; return to starting point.

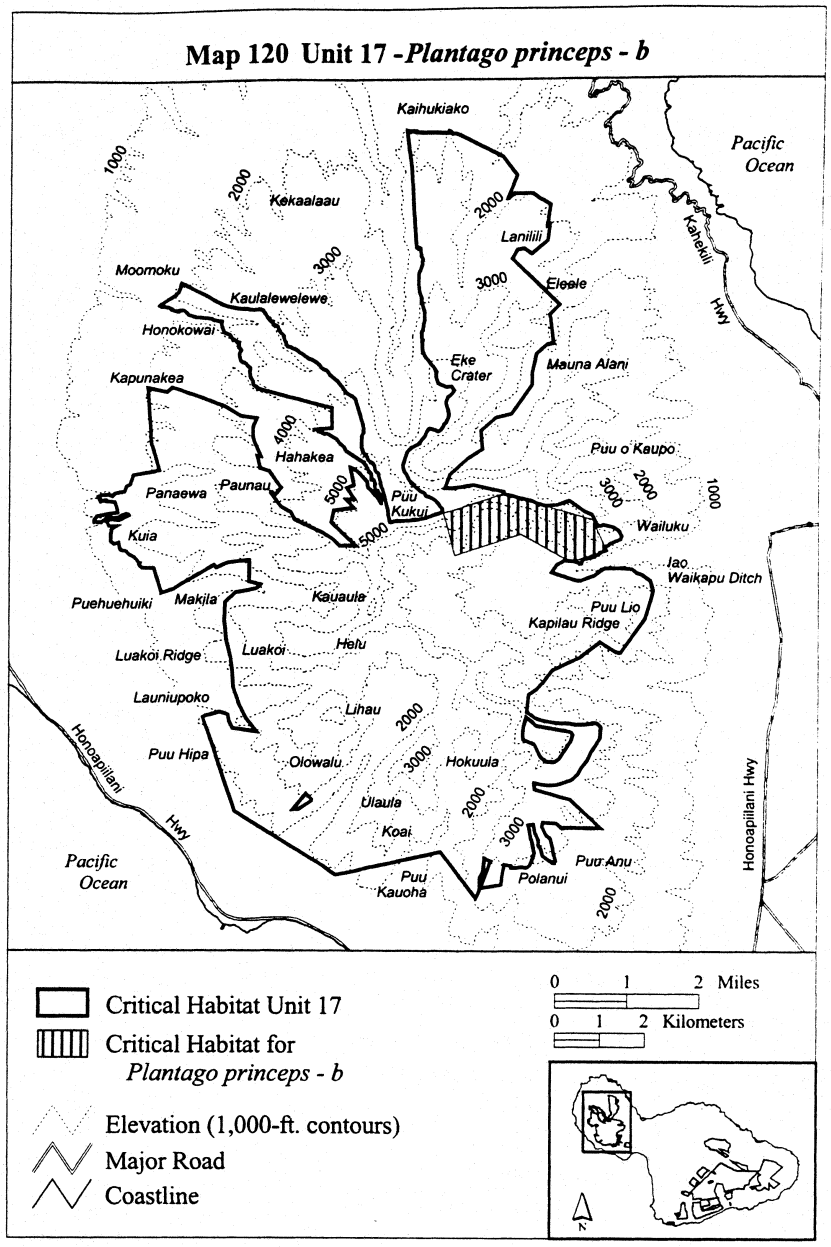
(B) NOTE: Map 119 follows:



(cxx) Maui 17—*Plantago princeps*—b (327 ha; 808 ac).

(A) Unit consists of the following 16 boundary points: Start at 755885, 2311350; 755922, 2311264; 755790, 2311220; 755197, 2311022; 755103, 2311031; 754021, 2311640; 752538, 2311146; 752284, 2312106; 752542, 2312180; 753629, 2312550; 753645, 2312555; 753846, 2312495; 754009, 2312447; 754379, 2312336; 754546, 2312287; 755617, 2311968; return to starting point.

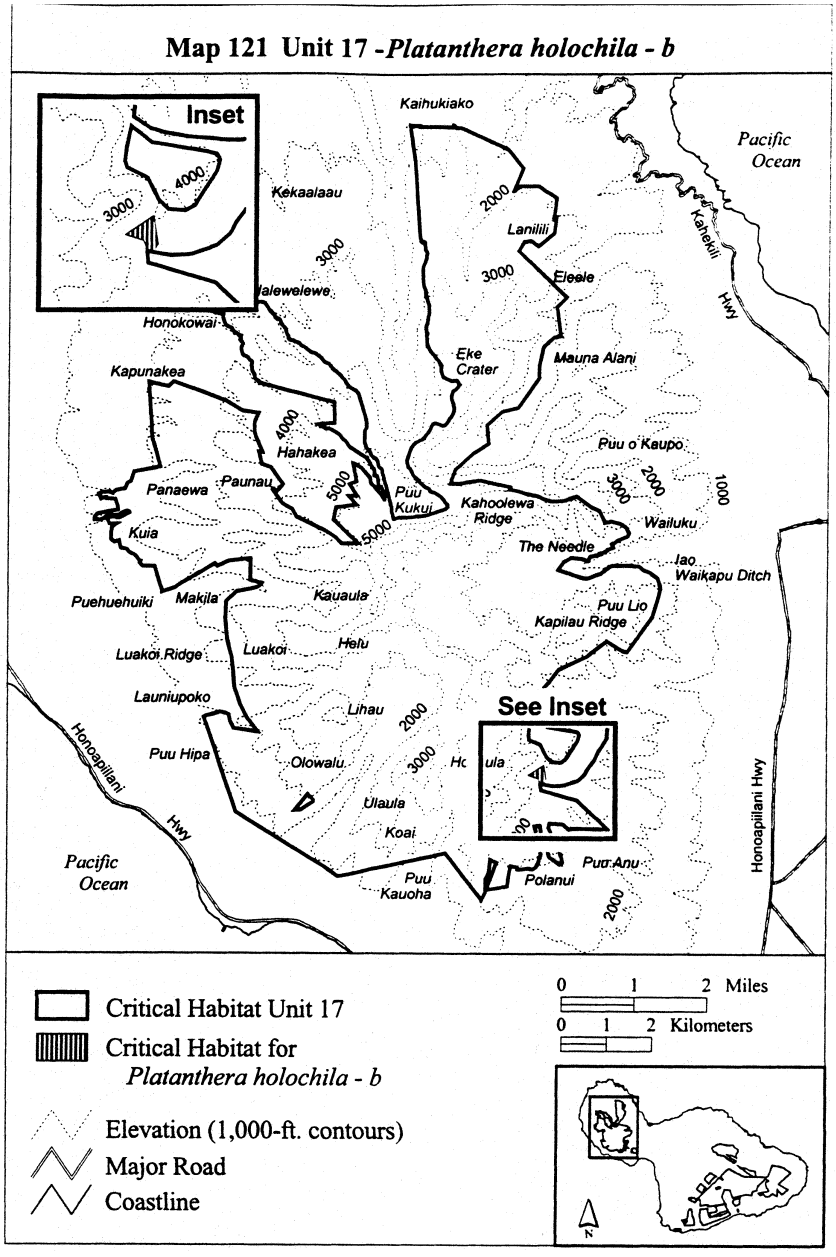
(B) NOTE: Map 120 follows:



(cxxi) Maui 17—*Platanthera holochila*—b (8 ha; 19 ac).

(A) Unit consists of the following 7 boundary points: Start at 754412, 2306019; 754341, 2306032; 754341, 2306031; 754290, 2306152; 754075, 2306222; 754409, 2306447; 754465, 2306113; return to starting point.

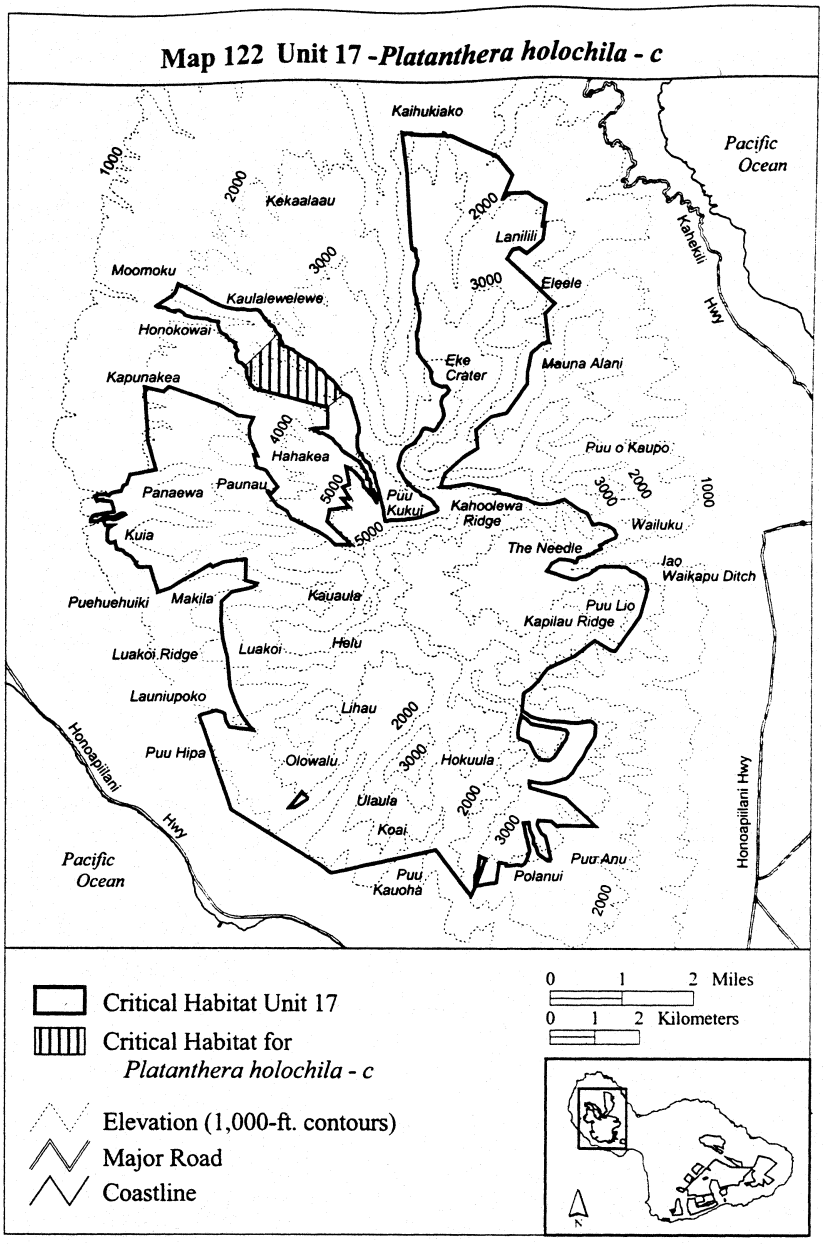
(B) NOTE: Map 121 follows:



(cxxii) Maui 17—*Platanthera holochila*—c (189 ha; 467 ac).

(A) Unit consists of the following 99 boundary points: Start at 749766, 2314500; 748184, 2314906; 748128, 2314930; 748092, 2314946; 748091, 2314947; 748090, 2314947; 748089, 2314948; 748069, 2314973; 748068, 2314973; 748029, 2314987; 748007, 2315005; 748001, 2315029; 748005, 2315065; 748005, 2315083; 747994, 2315106; 747975, 2315127; 747954, 2315161; 747942, 2315193; 747940, 2315201; 747933, 2315253; 747929, 2315289; 747930, 2315329; 747935, 2315356; 747931, 2315379; 747914, 2315403; 747887, 2315423; 747885, 2315426; 748574, 2316083; 748639, 2316154; 748649, 2316141; 748680, 2316102; 748682, 2316095; 748687, 2316079; 748691, 2316057; 748698, 2316026; 748698, 2316025; 748717, 2315987; 748731, 2315953; 748738, 2315922; 748743, 2315901; 748750, 2315885; 748758, 2315876; 748759, 2315875; 748770, 2315868; 748796, 2315863; 748806, 2315862; 748826, 2315861; 748849, 2315847; 748876, 2315834; 748913, 2315824; 748949, 2315807; 748960, 2315800; 749000, 2315773; 749021, 2315756; 749067, 2315724; 749090, 2315709; 749140, 2315671; 749173, 2315647; 749188, 2315640; 749205, 2315627; 749223, 2315614; 749244, 2315605; 749315, 2315575; 749336, 2315565; 749353, 2315555; 749385, 2315535; 749404, 2315524; 749421, 2315514; 749470, 2315477; 749479, 2315464; 749486, 2315451; 749500, 2315430; 749524, 2315402; 749550, 2315385; 749571, 2315373; 749617, 2315351; 749628, 2315342; 749652, 2315326; 749666, 2315306; 749677, 2315288; 749682, 2315280; 749701, 2315256; 749720, 2315236; 749736, 2315224; 749781, 2315186; 749797, 2315177; 749814, 2315164; 749833, 2315147; 749874, 2315098; 749888, 2315088; 749934, 2315046; 749960, 2315009; 750020, 2314928; 750057, 2314876; 750072, 2314855; 750097, 2314830; 750120, 2314809; 750138, 2314798; 750139, 2314798; return to starting point.

(B) NOTE: Map 122 follows:

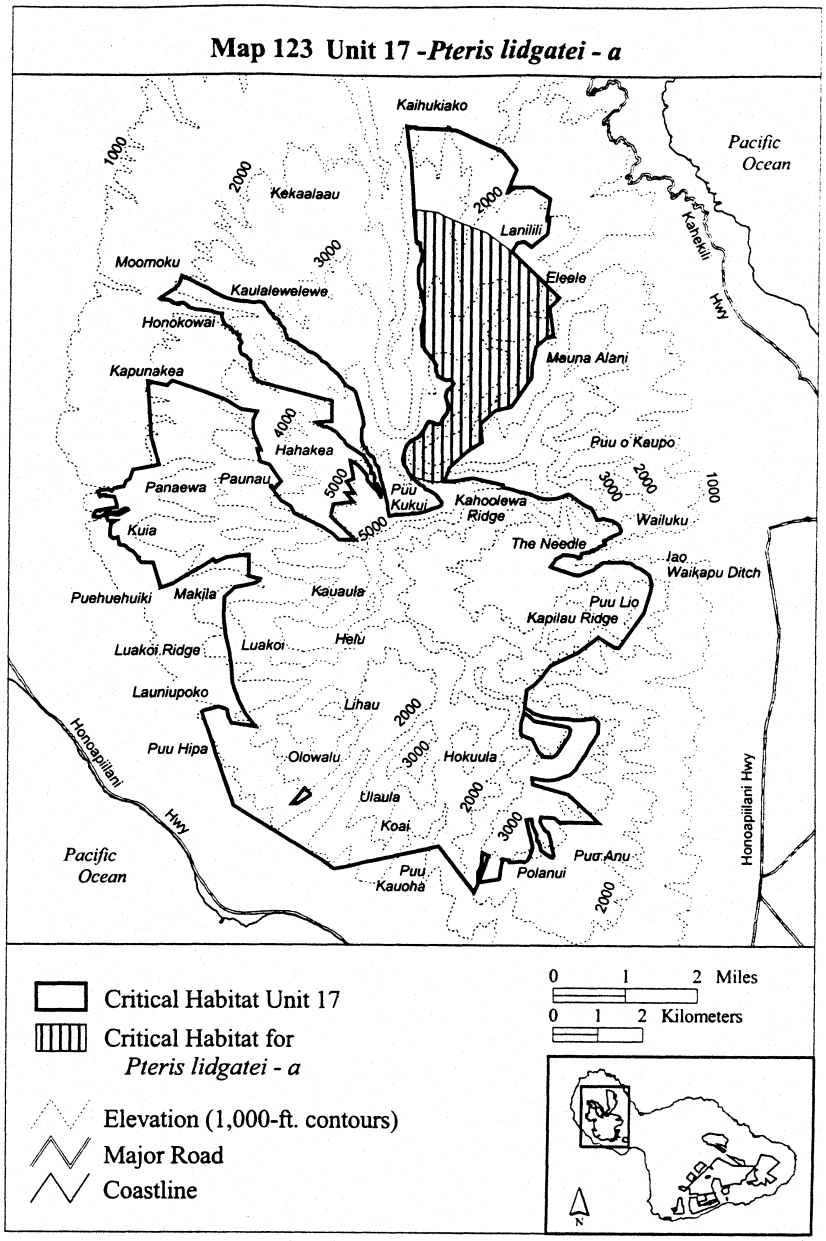


(cxxiii) Maui 17—*Pteris lidgatei*—a (1,168 ha; 2,887 ac).

(A) Unit consists of the following 211 boundary points: Start at 751582, 2312795; 751577, 2312796; 751528, 2312835; 751509, 2312866; 751494, 2312898; 751477, 2312924; 751470, 2312949; 751455, 2312970; 751447, 2312990; 751430, 2313008; 751409,

2313034; 751396, 2313055; 751392, 2313077; 751379, 2313115; 751372, 2313144; 751371, 2313166; 751372, 2313195; 751376, 2313220; 751378, 2313242; 751391, 2313266; 751395, 2313289; 751399, 2313300; 751407, 2313325; 751423, 2313372; 751434, 2313402; 751442, 2313431; 751445, 2313445; 751458, 2313470; 751460, 2313473; 751483, 2313503; 751510, 2313537; 751525, 2313552; 751530, 2313556; 751547, 2313568; 751557, 2313585; 751561, 2313589; 751596, 2313611; 751632, 2313629; 751663, 2313639; 751692, 2313653; 751724, 2313678; 751730, 2313685; 751736, 2313691; 751741, 2313698; 751753, 2313712; 751774, 2313739; 751802, 2313779; 751812, 2313796; 751834, 2313826; 751848, 2313852; 751858, 2313865; 751891, 2313928; 751915, 2313975; 751943, 2314006; 751962, 2314018; 751999, 2314023; 752033, 2314016; 752081, 2313996; 752123, 2313971; 752153, 2313965; 752154, 2313965; 752187, 2313971; 752206, 2313984; 752220, 2314004; 752241, 2314040; 752255, 2314066; 752280, 2314106; 752298, 2314135; 752326, 2314169; 752350, 2314207; 752375, 2314234; 752375, 2314235; 752380, 2314285; 752390, 2314310; 752394, 2314322; 752394, 2314323; 752390, 2314361; 752385, 2314401; 752376, 2314456; 752359, 2314508; 752350, 2314542; 752334, 2314592; 752332, 2314632; 752340, 2314668; 752351, 2314710; 752369, 2314743; 752392, 2314761; 752420, 2314774; 752451, 2314798; 752466, 2314821; 752482, 2314848; 752505, 2314885; 752505, 2314886; 752505, 2314887; 752495, 2314905; 752453, 2314975; 752453, 2314976; 752448, 2314976; 752453, 2314984; 752376, 2314996; 752366, 2314973; 752362, 2314970; 752342, 2314967; 752250, 2315013; 752158, 2315058; 752138, 2315091; 752117, 2315151; 752108, 2315196; 752103, 2315252; 752113, 2315300; 752112, 2315302; 752096, 2315325; 752085, 2315344; 752070, 2315374; 752051, 2315406; 752026, 2315438; 751991, 2315478; 751949, 2315532; 751900, 2315589; 751856, 2315640; 751831, 2315694; 751805, 2315739; 751802, 2315745; 751780, 2316007; 751791, 2316023; 751792, 2316024; 751792, 2316025; 751785, 2316046; 751774, 2316078; 751771, 2316121; 751767, 2316164; 751778, 2316192; 751794, 2316230; 751799, 2316258; 751807, 2316311; 751812, 2316339; 751828, 2316408; 751840, 2316469; 751842, 2316535; 751836, 2316587; 751832, 2316640; 751828, 2316678; 751828, 2316679; 751812, 2316711; 751793, 2316765; 751774, 2316831; 751763, 2316879; 751754, 2316929; 751744, 2317001; 751727, 2317051; 751703, 2317090; 751693, 2317225; 751691, 2317254; 751693, 2317261; 751698, 2317290; 751694, 2317322; 751695, 2317366; 751697, 2317415; 751702, 2317462; 751715, 2317522; 751728, 2317571; 751747, 2317619; 751767, 2317682; 751769, 2317710; 751778, 2317751; 751782, 2317790; 751782, 2317791; 751769, 2317829; 751750, 2317859; 751741, 2317901; 751738, 2317949; 751738, 2317997; 751730, 2318034; 751729, 2318035; 751714, 2318045; 751713, 2318046; 751712, 2318046; 751690, 2318034; 751665, 2318030; 751651, 2318051; 751640, 2318085; 751632, 2318124; 751632, 2318131; 751630, 2318160; 751587, 2318788; 752124, 2318723; 752171, 2318701; 752172, 2318700; 752441, 2318572; 753228, 2318261; 753719, 2317901; 753788, 2317835; 754546, 2317117; 754543, 2317112; 754622, 2317045; 754855, 2316824; 754646, 2316585; 754736, 2315958; 754586, 2315928; 754347, 2315718; 754257, 2315300; 754257, 2315031; 753809, 2314373; 753450, 2314284; 753121, 2313985; 753151, 2313566; 752822, 2313357; 752434, 2312998; 752317, 2312676; 752314, 2312669; 752040, 2312664; return to starting point.

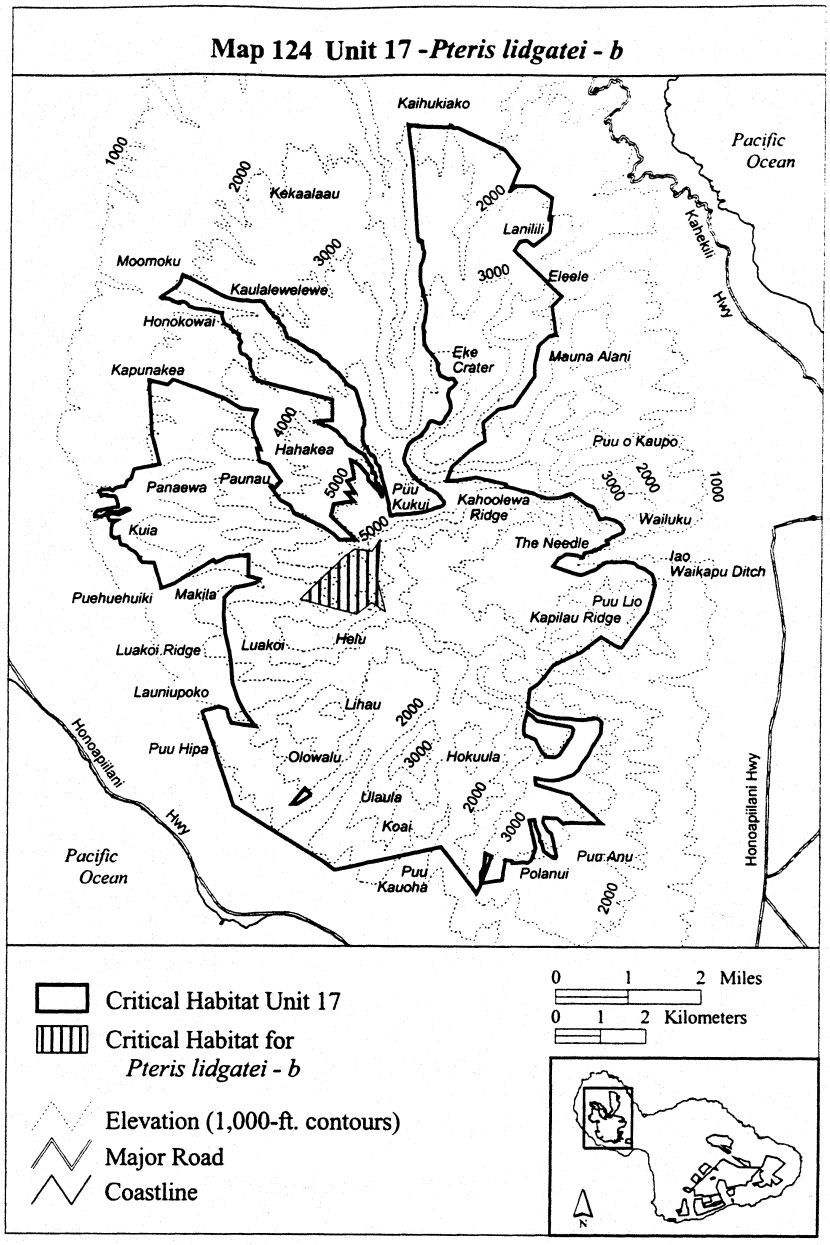
(B) NOTE: Map 123 follows:



(cxxiv) Maui 17—*Pteris lidgatei*—b (164 ha; 404 ac).

(A) Unit consists of the following 9 boundary points: Start at 750072, 2310995; 750282, 2311145; 750670, 2311085; 750850, 2311354; 750790, 2310427; 750969, 2309740; 750670, 2309949; 750341, 2309680; 749086, 2310009; return to starting point.

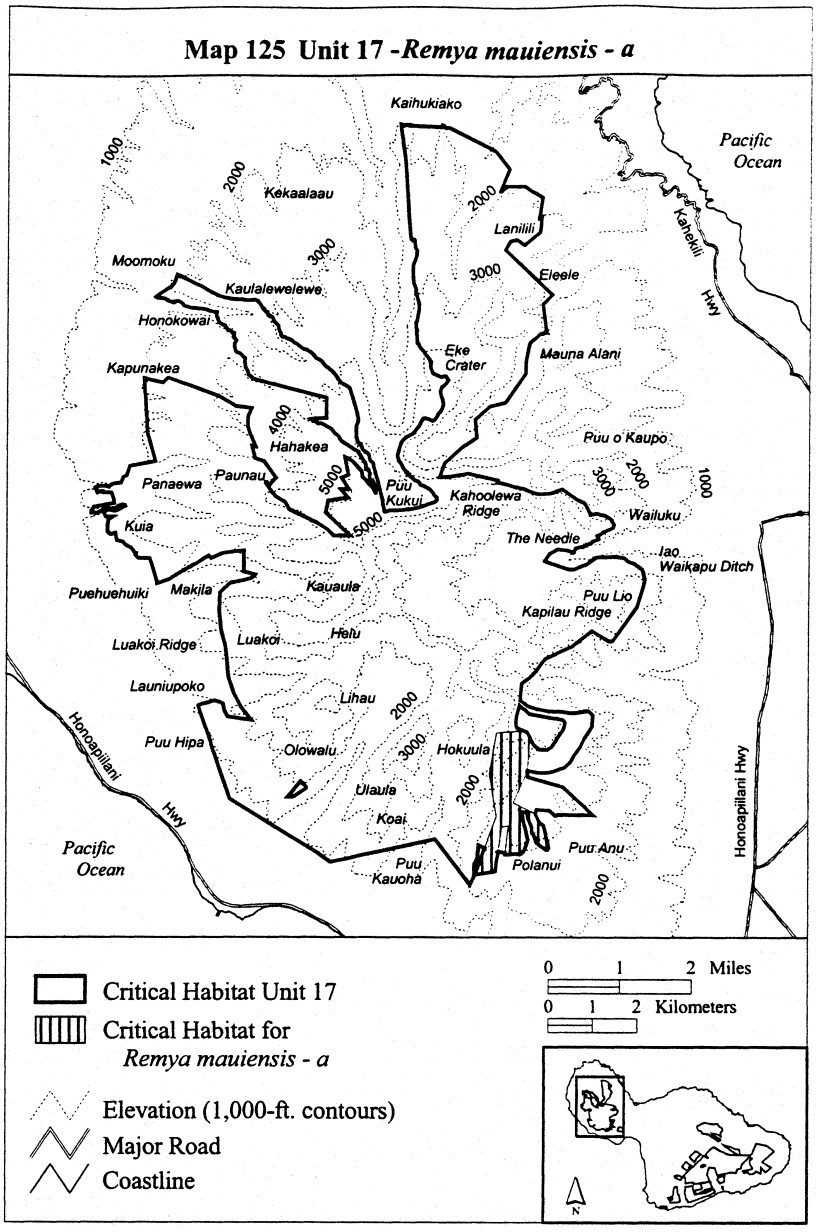
(B) NOTE: Map 124 follows:



(cxxv) Maui 17—*Remya mauiensis*—a (228 ha; 564 ac).

(A) Unit consists of the following 61 boundary points: Start at 754336, 2306037; 754335, 2306032; 754334, 2306014; 754022, 2305314; 754484, 2305080; 754534, 2305022; 754537, 2305016; 754540, 2305011; 754621, 2304863; 754699, 2304812; 754773, 2304280; 754776, 2304259; 754769, 2304263; 754670, 2304324; 754605, 2304364; 754603, 2304366; 754542, 2304415; 754499, 2304541; 754356, 2305091; 754320, 2305103; 754319, 2305108; 754309, 2305107; 754122, 2305169; 754172, 2305069; 754235, 2304991; 754238, 2304988; 754242, 2304971; 754278, 2304785; 754282, 2304767; 754312, 2304638; 754336, 2304537; 754343, 2304451; 754343, 2304450; 754342, 2304448; 754333, 2304422; 754327, 2304403; 754279, 2304263; 754165, 2304205; 754078, 2304169; 753828, 2304146; 753911, 2304797; 753750, 2304769; 753606, 2303761; 753602, 2303760; 753576, 2303756; 753552, 2303751; 753534, 2303749; 753531, 2303748; 753515, 2303745; 753154, 2303686; 753252, 2303966; 753304, 2304113; 753310, 2304130; 753365, 2304285; 753367, 2304292; 753628, 2305002; 753472, 2305975; 753622, 2306887; 754189, 2306927; 754311, 2306887; 754387, 2306765; return to starting point.

(B) NOTE: Map 125 follows:

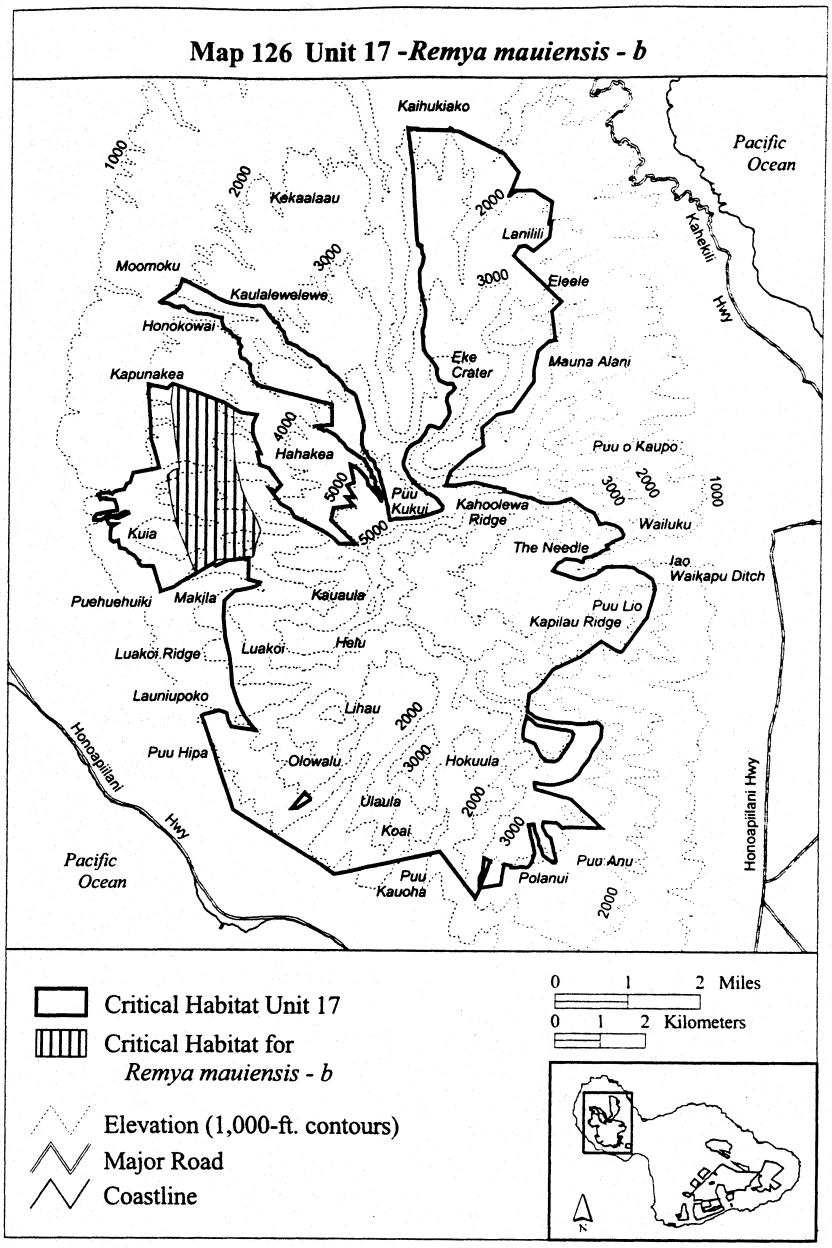


(cxxvi) Maui 17—*remya mauiensis*—b (567 ha; 1,401 ac).

(A) Unit consists of the following 30 boundary points: Start at 746995, 2310813; 746762, 2310659; 746754, 2310674; 746719, 2310734; 746452, 2311437; 746303, 2311773; 746170, 2312397; 746101, 2312866; 746244, 2312994; 746324, 2313016; 746372,

2313015; 746273, 2313672; 746174, 2314527; 746227, 2314946; 746887, 2314706; 747359, 2314534; 747564, 2314406; 747564, 2313642; 747609, 2313176; 747674, 2312935; 747689, 2312936; 747743, 2312584; 747871, 2312291; 748089, 2311885; 748185, 2311619; 748123, 2311444; 748084, 2311336; 748036, 2311038; 747487, 2310984; 747263, 2310990; return to starting point.

(B) NOTE: Map 126 follows:

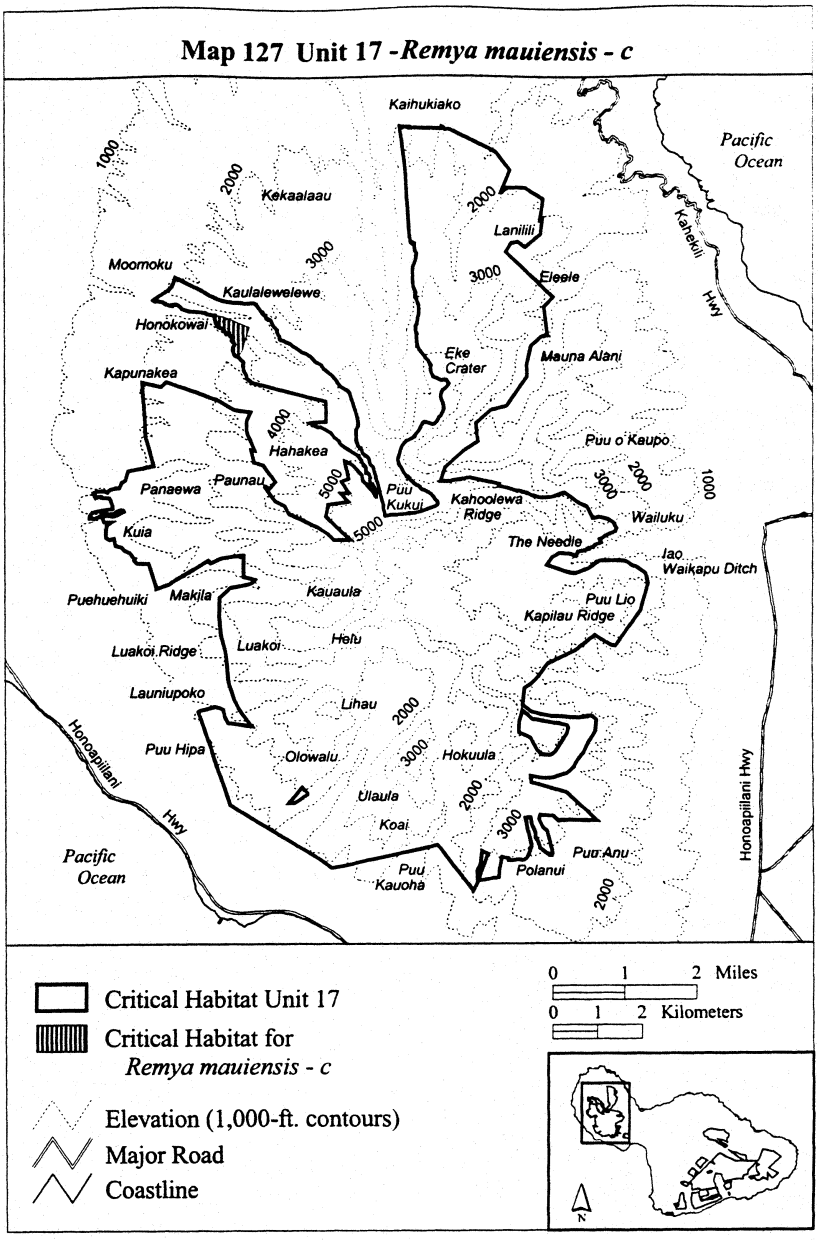


(cxxvii) Maui 17—*Remya mauiensis*—c (32 ha; 78 ac).

(A) Unit consists of the following 52 boundary points: Start at 747792, 2315504; 747750, 2315521; 747726, 2315545; 747722, 2315552; 747704, 2315583; 747698, 2315635; 747693, 2315665; 747695, 2315687; 747702, 2315718; 747713, 2315745; 747728,

2315775; 747729, 2315792; 747729, 2315793; 747717, 2315811; 747717, 2315812; 747697, 2315822; 747681, 2315836; 747675, 2315860; 747677, 2315876; 747681, 2315899; 747681, 2315918; 747667, 2315950; 747648, 2315974; 747620, 2315996; 747585, 2316012; 747546, 2316034; 747526, 2316055; 747508, 2316086; 747494, 2316109; 747476, 2316129; 747447, 2316142; 747409, 2316159; 747389, 2316169; 747365, 2316186; 747345, 2316212; 747336, 2316228; 747328, 2316244; 747312, 2316282; 747299, 2316323; 747290, 2316361; 747289, 2316384; 747289, 2316392; 747296, 2316429; 747296, 2316430; 747296, 2316431; 747295, 2316431; 747296, 2316436; 747510, 2316405; 748060, 2316161; 747945, 2315810; 747915, 2315650; 747824, 2315486; return to starting point.

(B) NOTE: Map 127 follows:

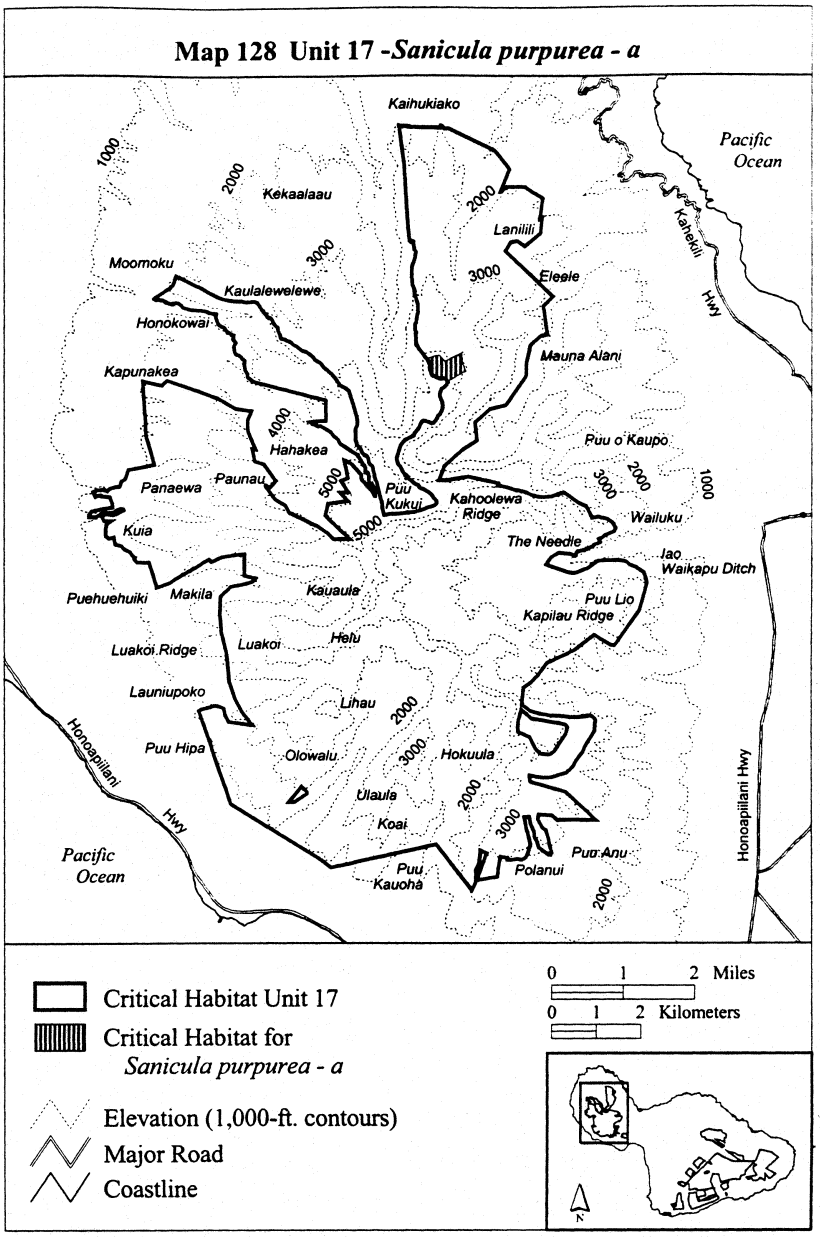


(cxxviii) Maui 17—*Sanicula purpurea*—a (34 ha; 84 ac).

(A) Unit consists of the following 26 boundary points: Start at 752495, 2314905; 752453, 2314975; 752453, 2314976; 752416, 2314975; 752381, 2314973; 752342, 2314967; 752250, 2315013; 752158, 2315058; 752138, 2315091; 752117, 2315151; 752108,

2315196; 752103, 2315252; 752113, 2315300; 752112, 2315302; 752096, 2315325; 752085, 2315344; 752070, 2315374; 752051, 2315406; 752043, 2315416; 752194, 2315469; 752315, 2315502; 752449, 2315352; 752817, 2315548; 752838, 2315319; 752900, 2315143; 752499, 2314898; return to starting point.

(B) NOTE: Map 128 follows:

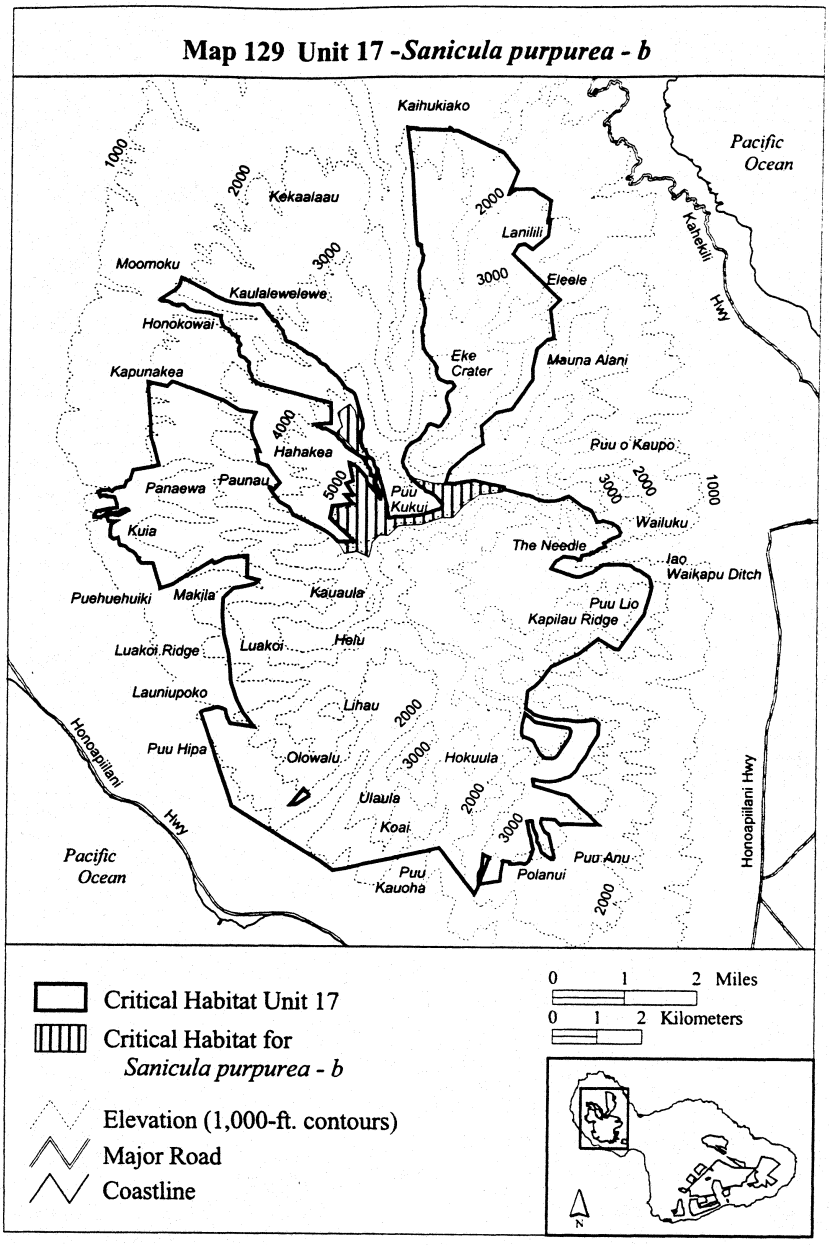


(cxxix) Maui 17—*Sanicula purpurea*—b (306 ha; 756 ac).

(A) Unit consists of the following 270 boundary points: Start at 749939, 2311346; 750305, 2311362; 749759, 2311879; 749818, 2312144; 750261, 2312204; 750099, 2312396; 750276, 2312410; 750113, 2312661; 750261, 2312735; 750185, 2313139; 750220,

2313118; 750265, 2313091; 750306, 2313067; 750358, 2313037; 750373, 2313023; 750566, 2312802; 750568, 2312798; 750565, 2312761; 750564, 2312729; 750574, 2312687; 750574, 2312686; 750581, 2312676; 750586, 2312670; 750636, 2312621; 750675, 2312576; 750701, 2312549; 750729, 2312518; 750733, 2312514; 750763, 2312476; 750804, 2312434; 750835, 2312384; 750877, 2312324; 750877, 2312323; 750878, 2312323; 750879, 2312323; 750880, 2312324; 750889, 2312378; 750889, 2312379; 750885, 2312387; 750887, 2312412; 750887, 2312413; 750876, 2312455; 750851, 2312517; 750819, 2312576; 750799, 2312595; 750799, 2312596; 750798, 2312596; 750757, 2312591; 750749, 2312590; 750747, 2312611; 750734, 2312726; 750739, 2312751; 750739, 2312752; 750730, 2312793; 750712, 2312846; 750711, 2312846; 750711, 2312847; 750691, 2312851; 750690, 2312851; 750687, 2312849; 750671, 2312852; 750654, 2312855; 750651, 2312867; 750650, 2312873; 750649, 2312880; 750650, 2312898; 750652, 2312927; 750658, 2312963; 750658, 2312964; 750636, 2313003; 750632, 2313007; 750567, 2313111; 750565, 2313117; 750562, 2313122; 750571, 2313119; 750482, 2313247; 750468, 2313267; 749907, 2313828; 750025, 2313946; 749907, 2314271; 750187, 2314463; 750305, 2314315; 750379, 2313917; 750339, 2314523; 750386, 2314362; 750414, 2314272; 750454, 2314143; 750461, 2314125; 750462, 2314110; 750462, 2314098; 750469, 2314075; 750476, 2314039; 750478, 2314029; 750479, 2314015; 750481, 2313991; 750479, 2313958; 750479, 2313946; 750479, 2313933; 750476, 2313919; 750468, 2313903; 750450, 2313871; 750441, 2313851; 750441, 2313850; 750438, 2313827; 750440, 2313794; 750439, 2313772; 750436, 2313747; 750437, 2313723; 750437, 2313700; 750439, 2313671; 750438, 2313647; 750435, 2313610; 750436, 2313597; 750436, 2313596; 750441, 2313585; 750451, 2313562; 750456, 2313545; 750463, 2313528; 750465, 2313510; 750469, 2313497; 750469, 2313496; 750477, 2313484; 750491, 2313465; 750505, 2313443; 750510, 2313432; 750515, 2313420; 750526, 2313409; 750541, 2313398; 750551, 2313389; 750560, 2313367; 750565, 2313356; 750572, 2313334; 750578, 2313319; 750591, 2313304; 750609, 2313283; 750640, 2313257; 750643, 2313255; 750652, 2313247; 750674, 2313233; 750689, 2313219; 750704, 2313203; 750713, 2313180; 750725, 2313151; 750736, 2313118; 750747, 2313077; 750753, 2313062; 750767, 2313040; 750774, 2313031; 750792, 2313015; 750803, 2313003; 750815, 2312997; 750834, 2312921; 750866, 2312797; 750864, 2312784; 750864, 2312768; 750864, 2312767; 750868, 2312756; 750877, 2312736; 750881, 2312727; 750882, 2312717; 750888, 2312691; 750895, 2312668; 750904, 2312647; 750904, 2312646; 750905, 2312646; 751008, 2312240; 751038, 2312126; 751038, 2312124; 751038, 2312088; 751038, 2312083; 751034, 2312059; 751040, 2312045; 751059, 2311963; 751065, 2311938; 751066, 2311935; 751077, 2311889; 751077, 2311888; 751078, 2311887; 751079, 2311887; 751095, 2311890; 751115, 2311894; 751125, 2311897; 751154, 2311907; 751190, 2311915; 751210, 2311916; 751266, 2311917; 751317, 2311916; 751353, 2311910; 751415, 2311923; 751455, 2311926; 751502, 2311927; 751574, 2311945; 751610, 2311953; 751637, 2311945; 751638, 2311945; 751682, 2311949; 751730, 2311960; 751772, 2311971; 751845, 2311984; 751888, 2311992; 751889, 2311992; 751963, 2312014; 752001, 2312036; 752045, 2312060; 752095, 2312064; 752133, 2312081; 752177, 2312098; 752226, 2312119; 752255, 2312146; 752255, 2312147; 752257, 2312154; 752258, 2312161; 752260, 2312173; 752260, 2312174; 752259, 2312178; 752259, 2312186; 752255, 2312201; 752254, 2312203; 752242, 2312224; 752209, 2312264; 752181, 2312294; 752174, 2312305; 752146, 2312343; 752130, 2312360; 752109, 2312384; 752089, 2312404; 752052, 2312430; 752018, 2312454; 751992, 2312468; 751944, 2312486; 751906, 2312492; 751887, 2312501; 751874, 2312514; 751860, 2312545; 751852, 2312558; 751828, 2312576; 751812, 2312583; 751790, 2312588; 751769, 2312599; 751747, 2312616; 751708, 2312656; 751683, 2312672; 751660, 2312697; 751625, 2312730; 751609, 2312742; 751590, 2312761; 751567, 2312785; 751582, 2312795; 751605, 2312809; 752078, 2312676; 752317, 2312676; 752521, 2312676; 752964, 2312750; 753643, 2312602; 753629, 2312550; 753611, 2312482; 753082, 2312425; 752728, 2312174; 752491, 2311908; 752255, 2311908; 751812, 2311746; 751295, 2311716; 751059, 2311495; 750881, 2311509; 750704, 2311347; 750630, 2311007; 750360, 2311126; 750081, 2311078; 749999, 2311246; 749928, 2311346; return to starting point.

(B) NOTE: Map 129 follows:

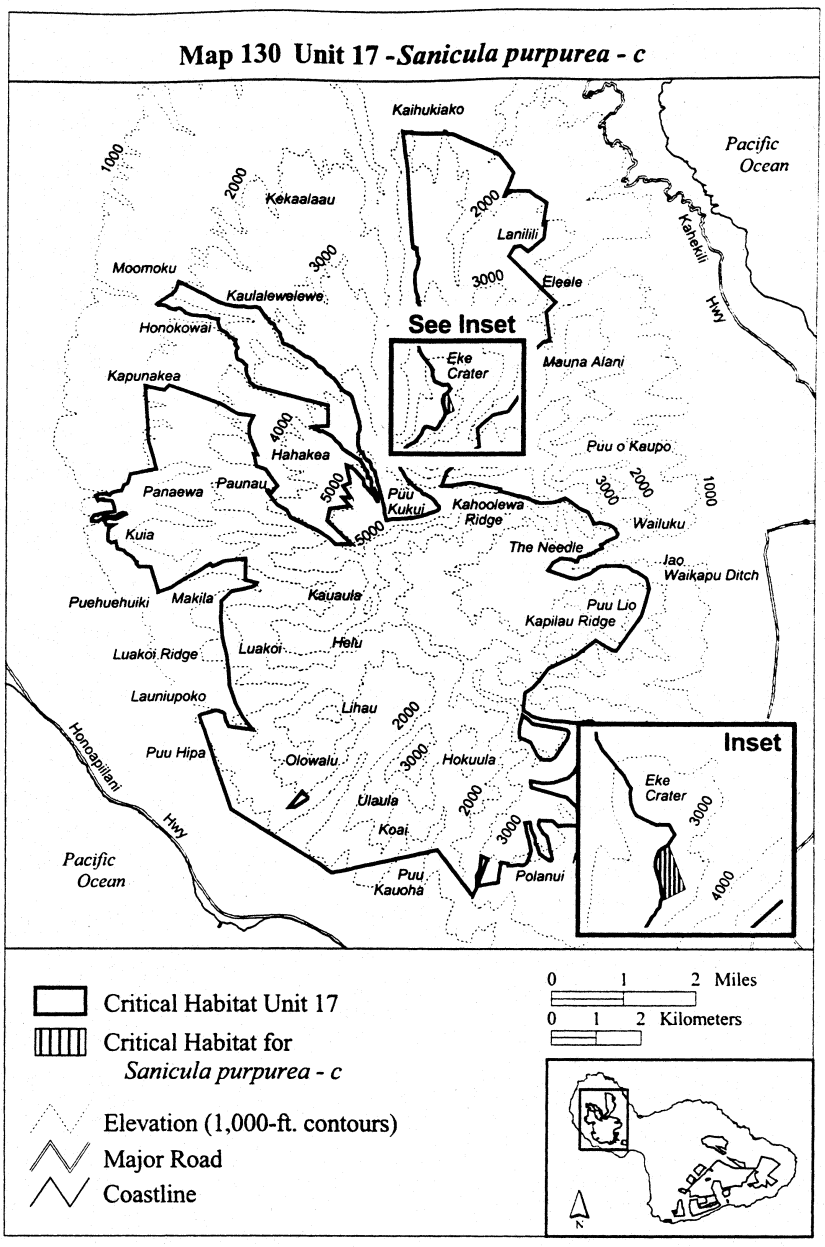


(cxxx) Maui 17—*Sanicula purpurea*—c (8 ha; 19 ac).

(A) Unit consists of the following 19 boundary points: Start at 752386, 2314300; 752390, 2314310; 752394, 2314322; 752394, 2314323; 752390, 2314361; 752385, 2314401; 752376, 2314456; 752359, 2314508; 752350, 2314542; 752334, 2314592; 752332,

2314632; 752340, 2314668; 752351, 2314710; 752369, 2314743; 752392, 2314761; 752420, 2314774; 752448, 2314795; 752604, 2314395; 752382, 2314282; return to starting point.

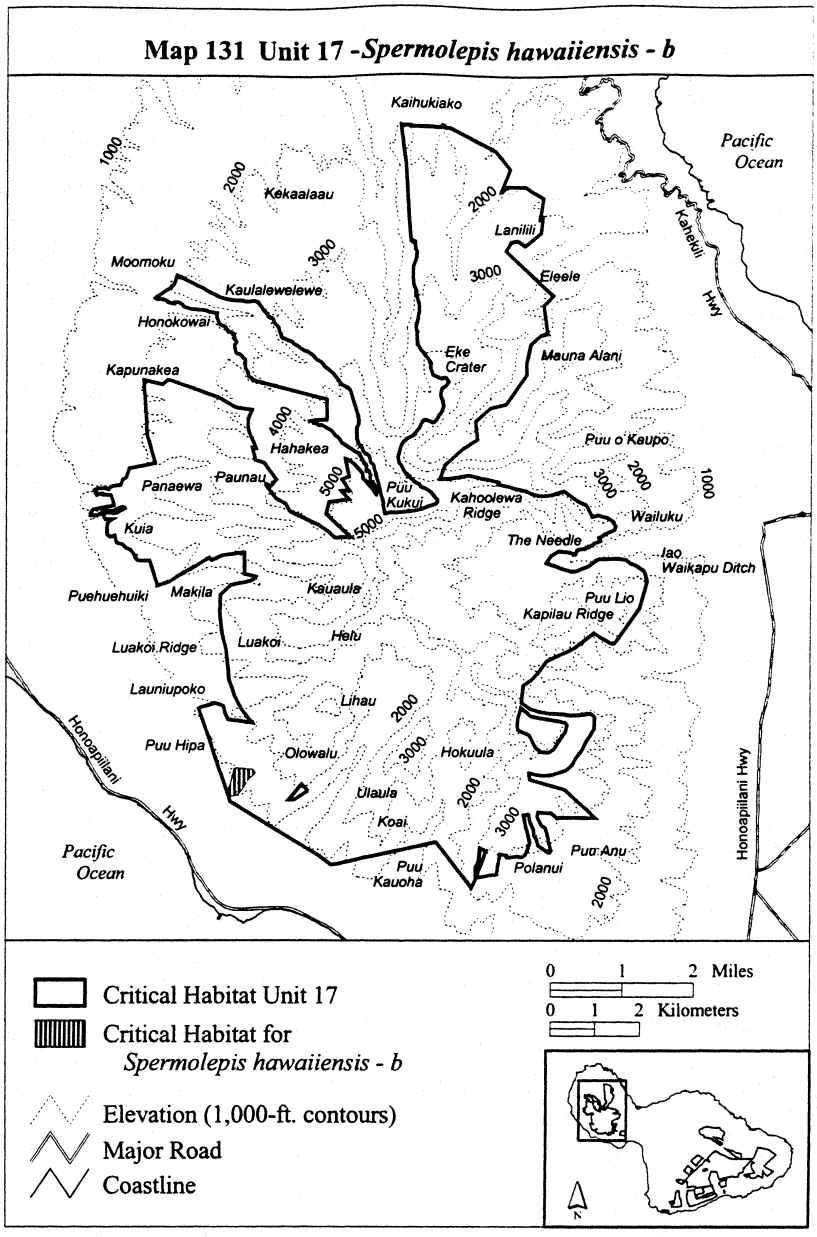
(B) NOTE: Map 130 follows:



(cxxxi) Maui 17—*Spermolepis hawaiiensis*—b (23 ha; 56 ac).

(A) Unit consists of the following 15 boundary points: Start at 747559, 2305612; 747617, 2305791; 747703, 2306156; 747789, 2306167; 747843, 2306153; 747942, 2306144; 748010, 2306130; 748096, 2306137; 748170, 2306086; 748184, 2306061; 748161, 2306016; 748049, 2305919; 747908, 2305689; 747771, 2305547; 747640, 2305517; return to starting point.

(B) NOTE: Map 131 follows:



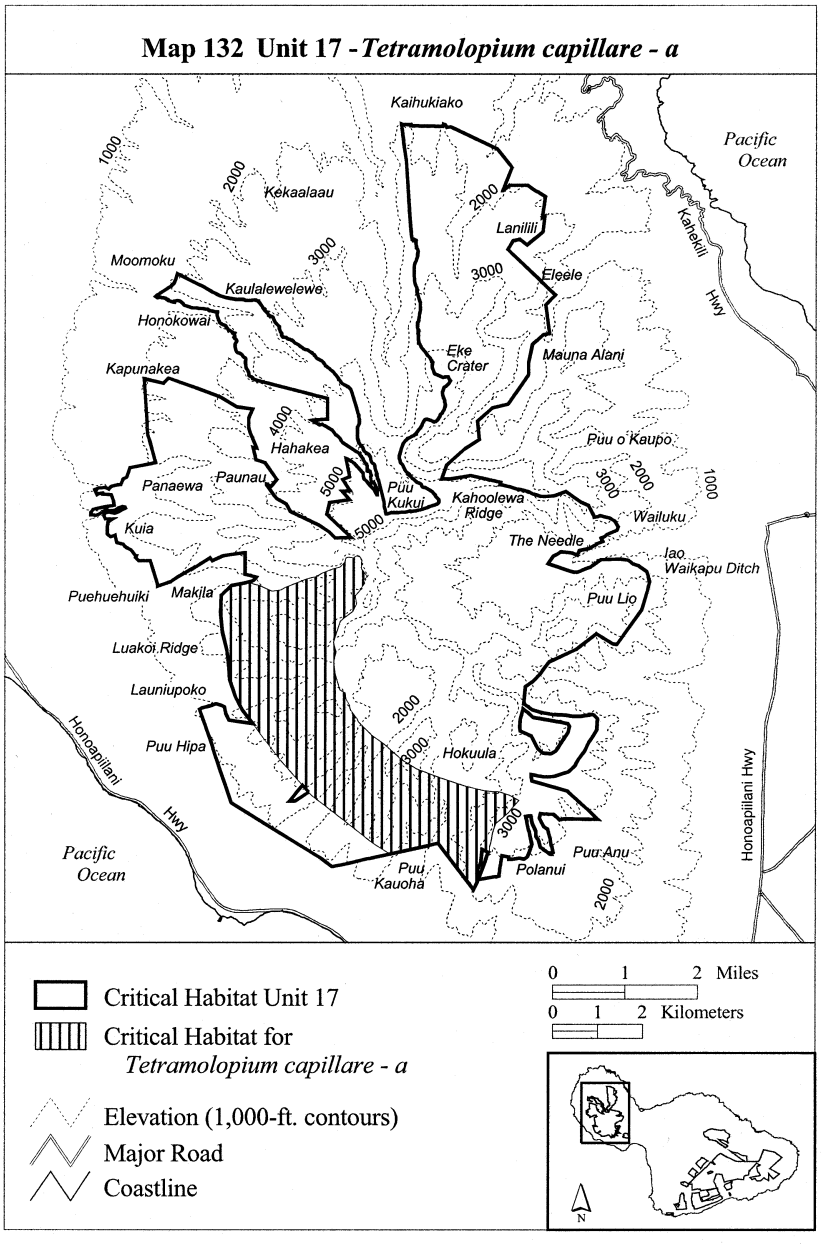
(cxxxii) Maui 17—*Tetramolopium capillare*—a (1,783 ha; 4,405 ac).

(A) Unit consists of the following 106 boundary points: Start at 753165, 2303717; 753304, 2304113; 753310, 2304130; 753365, 2304285; 753367, 2304292; 753234, 2304365; 753213, 2304104; 753136, 2303909; 753136, 2303821; 753136, 2303653; 753134,

2303650; 753042, 2303454; 752244, 2304494; 752075, 2304457; 751171, 2304258; 750787, 2304513; 750132, 2305024; 749428, 2305569; 749226, 2305793; 748731, 2306342; 748269, 2306956; 748096, 2307179; 747868, 2307474; 747703, 2307791; 747578, 2308164; 747558, 2308516; 747523, 2308819; 747420, 2309233; 747378, 2309647; 747392, 2310068; 747618, 2310281; 747935, 2310342; 747979, 2310351; 748255, 2310282; 748531, 2310151; 748738, 2310172; 748844, 2310234; 749327, 2310432; 749542, 2310481; 749646, 2310558; 749937, 2310662; 750058, 2310701; 750146, 2310783; 750157, 2310794; 750168, 2310853; 750181, 2310898; 750231, 2310909; 750364, 2310903; 750415, 2310935; 750473, 2310938; 750521, 2310903; 750537, 2310855; 750542, 2310826; 750524, 2310786; 750524, 2310648; 750566, 2310619; 750648, 2310507; 750656, 2310478; 750627, 2310436; 750582, 2310409; 750574, 2310385; 750590, 2310361; 750601, 2310316; 750582, 2310287; 750555, 2310253; 750534, 2310213; 750502, 2310197; 750509, 2310184; 750399, 2310047; 750432, 2309865; 750350, 2309706; 750179, 2309579; 750058, 2309475; 749910, 2308997; 749965, 2308782; 749916, 2308579; 749932, 2308442; 749954, 2308271; 750042, 2307941; 750166, 2307867; 750187, 2307736; 750256, 2307612; 750284, 2307494; 750442, 2307287; 750465, 2307217; 750753, 2306922; 751036, 2306728; 751439, 2306361; 751774, 2306157; 752327, 2305947; 752871, 2305768; 753260, 2305683; 753470, 2305652; 753563, 2305652; 753626, 2305636; 753874, 2305566; 754007, 2305496; 754053, 2305450; 753820, 2305169; 753540, 2304928; 753462, 2304711; 753427, 2304482; 753399, 2304426; 753396, 2304292; 753299, 2304046; 753237, 2303876; return to starting point.

(B) Excluding the area bounded by the following 11 boundary points (6ha; 15ac): Start at 749362, 2305641; 749057, 2305433; 748930, 2305439; 749226, 2305793; 749363, 2305641; 749363, 2305641; 749363, 2305641; 749363, 2305641; 749363, 2305641; 749362, 2305640; return to starting point.

(C) NOTE: Map 132 follows:

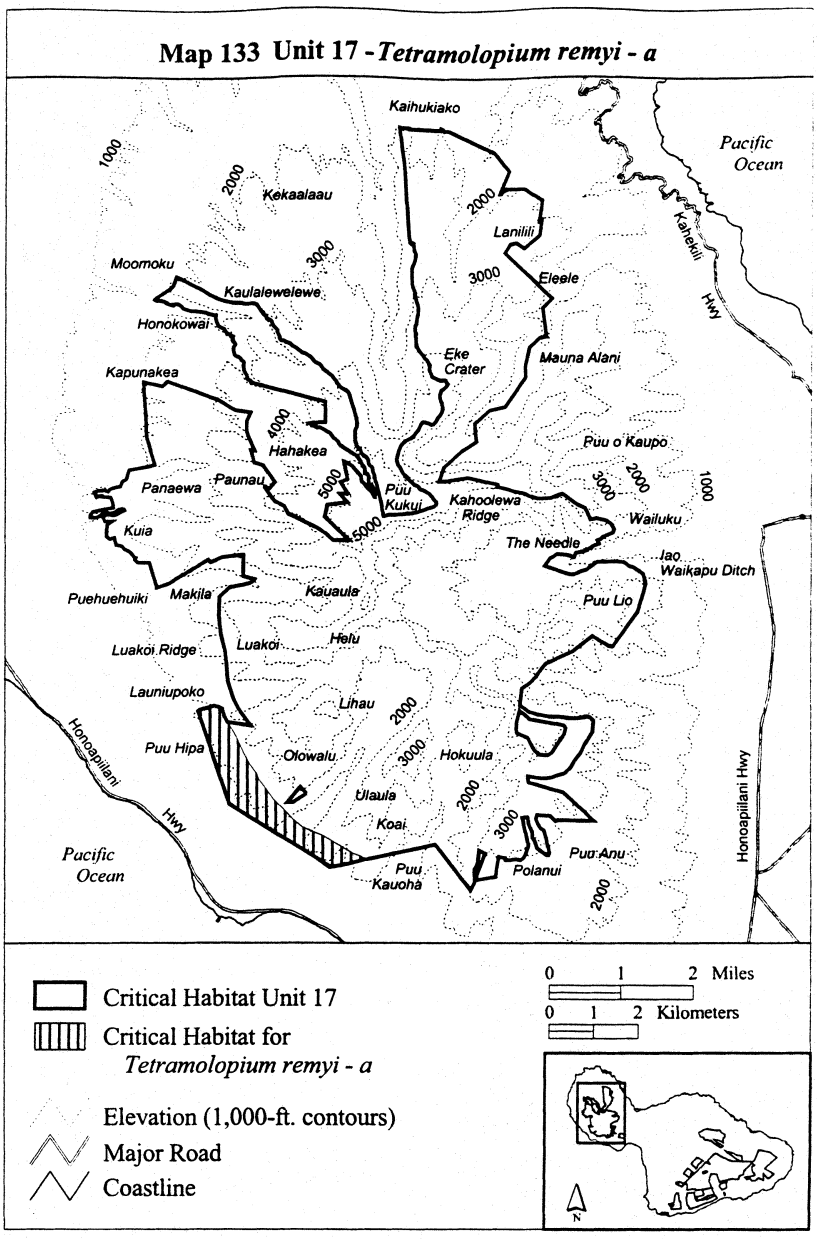


(cxxxiii) Maui 17—*Tetramolopium remyi*—a (288 ha; 711 ac).

(A) Unit consists of the following 34 boundary points: Start at 750702, 2304154; 750687, 2304151; 750686, 2304151; 750680, 2304150; 749916, 2304019; 748359, 2304949; 747628, 2305445; 747343, 2306214; 747283, 2306377; 747263, 2306446; 747206,

2306648; 747191, 2306692; 746912, 2307495; 746967, 2307530; 747135, 2307579; 747275, 2307621; 747405, 2307590; 747464, 2307541; 747496, 2307408; 747571, 2307254; 747576, 2307243; 747664, 2307114; 747769, 2306921; 747937, 2306568; 748094, 2306298; 748227, 2306099; 748294, 2305966; 748613, 2305521; 748914, 2305226; 749056, 2305056; 749264, 2304887; 749718, 2304706; 750413, 2304302; 750566, 2304230; return to starting point.

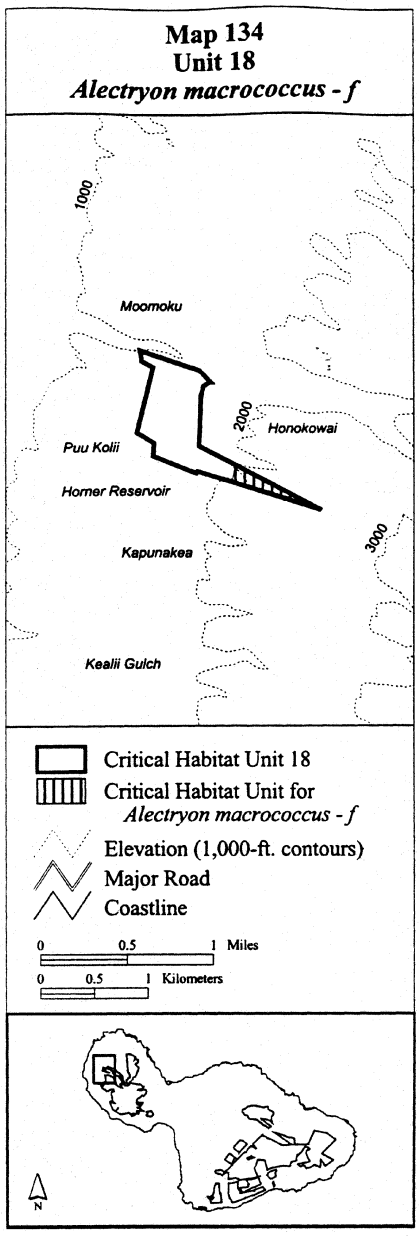
(B) NOTE: Map 133 follows:



(cxxxiv) Maui 18—*Alectryon macrococcus*—f (7 ha; 18 ac).

(A) Unit consists of the following 7 boundary points: Start at 745986, 2315882; 746238, 2315748; 746249, 2315743; 746785, 2315459; 746095, 2315676; 746082, 2315680; 745946, 2315723; return to starting point.

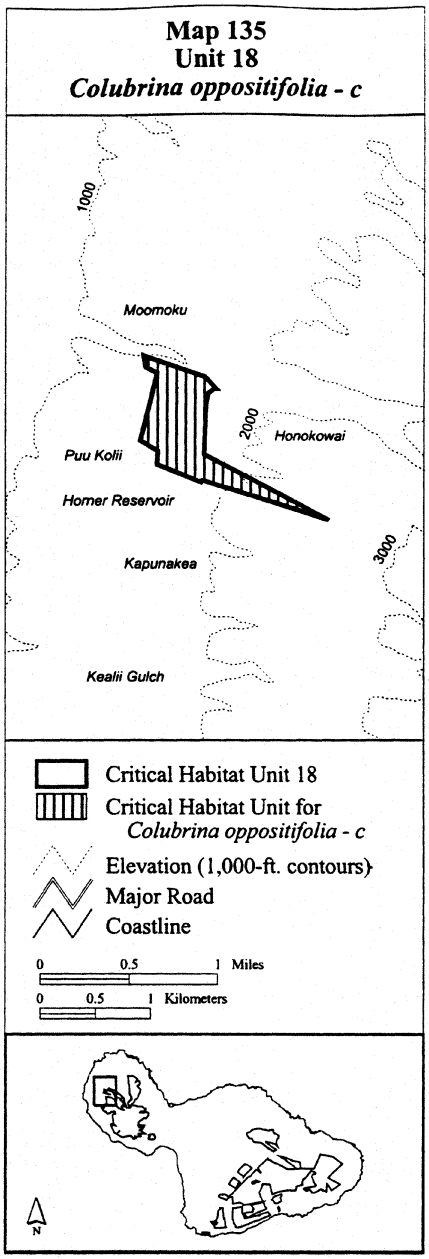
(B) NOTE: Map 134 follows:



(cxxxv) Maui 18—*Colubrina oppositifolia*—c (64 ha; 157 ac).

(A) Unit consists of the following 34 boundary points: Start at 745633, 2315799; 745216, 2315967; 745220, 2316095; 745062, 2316193; 745156, 2316554; 745218, 2316810; 745110, 2316866; 745095, 2316969; 745651, 2316773; 745745, 2316673; 745748, 2316670; 745741, 2316666; 745700, 2316637; 745682, 2316625; 745668, 2316564; 745666, 2316551; 745660, 2316498; 745660, 2316496; 745660, 2316495; 745656, 2316346; 745650, 2316196; 745644, 2316064; 745644, 2316063; 745645, 2316063; 746238, 2315748; 746249, 2315743; 746713, 2315497; 746710, 2315483; 746095, 2315676; 746082, 2315680; 745637, 2315820; 745636, 2315820; 745635, 2315819; 745634, 2315807; return to starting point.

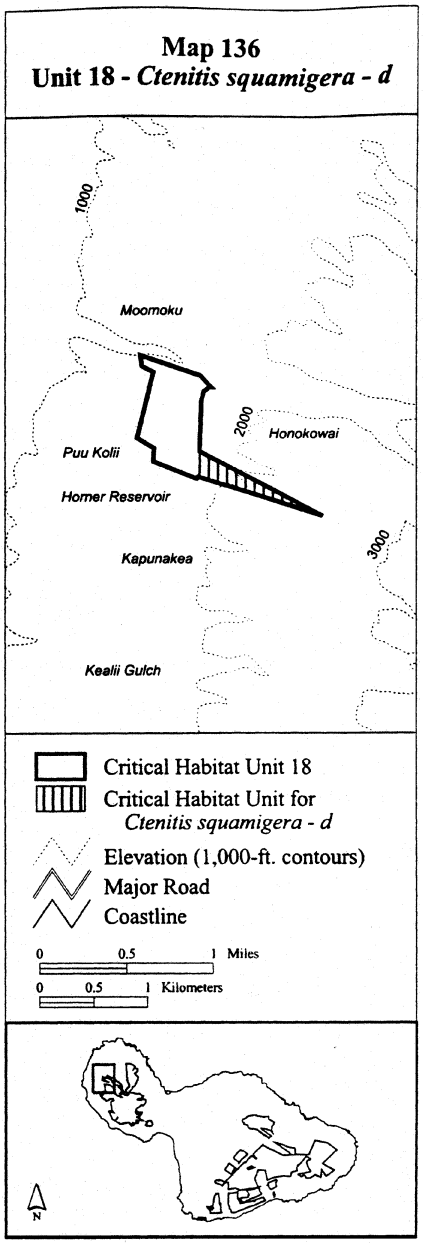
(B) NOTE: Map 135 follows:



(cxxxvi) Maui 18—*Ctenitis squamigera*—d (14 ha; 35 ac).

(A) Unit consists of the following 13 boundary points: Start at 745644, 2316064; 745644, 2316063; 745645, 2316063; 746238, 2315748; 746249, 2315743; 746785, 2315459; 746095, 2315676; 746082, 2315680; 745637, 2315820; 745636, 2315820; 745635, 2315819; 745641, 2316066; 745644, 2316067; return to starting point.

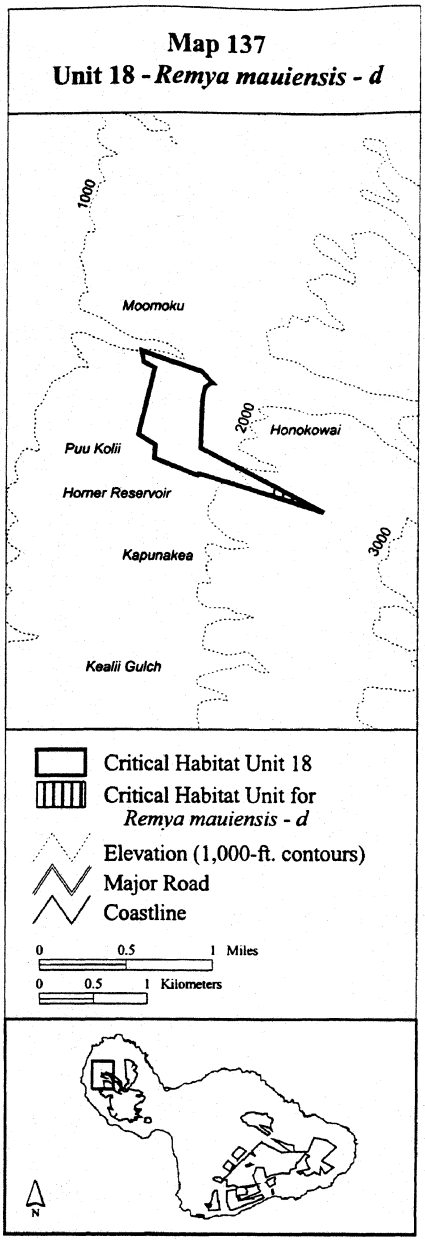
(B) NOTE: Map 136 follows:



(cxxxvii) Maui 18—*Remya mauiensis*—d (2 ha; 6 ac).

(A) Unit consists of the following 3 boundary points: Start at 746322, 2315704; 746785, 2315459; 746309, 2315609; return to starting point.

(B) NOTE: Map 137 follows:



(cxxxviii) Table of Protected Species Within Each Critical Habitat Unit for Maui

Unit name	Species occupied	Species unoccupied
Maui 1—*Centaurium sebaeoides*—a	*Centaurium sebaeoides.*	
Maui 1—*Sesbania tomentosa*—a	*Sesbania tomentosa.*	
Maui 2—*Brighamia rockii*—a	.....	*Brighamia rockii.*
Maui 2—*Brighamia rockii*—b	.....	*Brighamia rockii.*
Maui 2—*Centaurium sebaeoides*—b	*Centaurium sebaeoides.*	
Maui 3—*Brighamia rockii*—c	.....	*Brighamia rockii.*
Maui 4—*Brighamia rockii*—d	.....	*Brighamia rockii.*
Maui 4—*Peucedanum sandwicense*—a	*Peucedanum sandwicense.*	
Maui 5—*Brighamia rockii*—e	.....	*Brighamia rockii.*
Maui 6—*Ischaemum byrone*—a	*Ischaemum byrone.*	
Maui 6—*Mariscus pennatiformis*—a	*Mariscus pennatiformis.*	
Maui 7—*Ischaemum byrone*—b	*Ischaemum byrone.*	
Maui 8—*Cyanea copelandii* ssp. *haleakalaensis*—a	*Cyanea copelandii* ssp. *haleakalaensis.*	
Maui 8—*Cyanea glabra*—a	.....	*Cyanea glabra.*
Maui 8—*Cyanea hamatiflora* ssp. *hamatiflora*—a	*Cyanea hamatiflora* ssp. *hamatiflora..*	
Maui 8—*Cyanea mceldowneyi*—a	*Cyanea mceldowneyi.*	
Maui 8—*Diplazium molokaiense*—a	*Diplazium molokaiense.*	
Maui 8—*Geranium multiflorum*—a	.....	*Geranium multiflorum.*
Maui 8—*Melicope balloui*—a	*Melicope balloui.*	
Maui 8—*Phlegmariurus mannii*—a	*Phlegmariurus mannii.*	
Maui 8—*Phyllostegia mannii*—a	.....	*Phyllostegia mannii.*
Maui 8—*Phyllostegia mollis*—a	.....	*Phyllostegia mollis.*
Maui 8—*Zanthoxylum hawaiiense*—a	*Zanthoxylum hawaiiense.*	
Maui 9—*Alectryon macrococcus*—a	.....	*Alectryon macrococcus.*
Maui 9—*Argyroxiphium sandwicense* ssp. *macrocephalum*—a	*Argyroxiphium sandwicense* ssp. *macrocephalum.*	
Maui 9—*Asplenium fragile* var. *insulare*—a	.....	*Asplenium fragile* var.*insulare.*
Maui 9—*Bidens micrantha* ssp. *kalealaha*—a	*Bidens micrantha* ssp. *kalealaha.*	
Maui 9—*Bidens micrantha* ssp. *kalealaha*—b	*Bidens micrantha* ssp. *kalealaha.*	
Maui 9—*Clermontia lindseyana*—a	*Clermontia lindseyana.*	
Maui 9—*Clermontia lindseyana*—b	.....	*Clermontia lindseyana.*
Maui 9—*Clermontia samuelii*—a	*Clermontia samuelii.*	
Maui 9—*Cyanea copelandii* ssp. *haleakalaensis*—b	*Cyanea copelandii* ssp. *haleakalaensis.*	
Maui 9—*Cyanea glabra*—b	.....	*Cyanea glabra.*
Maui 9—*Cyanea glabra*—c	.....	*Cyanea glabra.*
Maui 9—*Cyanea hamatiflora* ssp. *hamatiflora—b*	*Cyanea hamatiflora* ssp. *hamatiflora.*	
Maui 9—*Diellia erecta*—a	.....	*Diellia erecta.*
Maui 9—*Diellia erecta*—b	.....	*Diellia erecta.*
Maui 9—*Diplazium molokaiense*—b	.....	*Diplazium molokaiense.*
Maui 9—*Flueggea neowawraea*—a	*Flueggea neowawraea.*	
Maui 9—*Geranium arboreum*—a	*Geranium arboreum.*	
Maui 9—*Geranium multiflorum*—b	*Geranium multiflorum.*	
Maui 9—*Geranium multiflorum*—c	.....	*Geranium multiflorum.*
Maui 9—*Lipochaeta kamolensis*—a	*Lipochaeta kamolensis.*	
Maui 9—*Melicope balloui*—b	*Melicope balloui.*	
Maui 9—*Melicope knudsenii*—a	*Melicope knudsenii.*	
Maui 9—*Melicope mucronulata*—a	.....	*Melicope mucronulata.*
Maui 9—*Melicope ovalis*—a	*Melicope ovalis.*	

Unit name	Species occupied	Species unoccupied
Maui 9—*Neraudia sericea*—a	*Neraudia sericea.*	
Maui 9—*Nototrichium humile*—a	.....	*Nototrichium humile.*
Maui 9—*Phlegmariurus mannii*—b	*Phlegmariurus mannii.*	
Maui 9—*Phlegmariurus mannii*—c	*Phlegmariurus mannii.*	
Maui 9—*Phyllostegia mollis*—b	.....	*Phyllostegia mollis.*
Maui 9—*Plantago princeps*—a	*Plantago princeps.*	
Maui 9—*Platanthera holochila*—a	.....	*Platanthera holochila.*
Maui 9—*Schiedea haleakalensis*—a	*Schiedea haleakalensis.*	
Maui 9—*Schiedea haleakalensis*—b	*Schiedea haleakalensis.*	
Maui 10—*Alectryon macrococcus*—b	.....	*Alectryon macrococcus.*
Maui 11—*Lipochaeta kamolensis*—b	.....	*Lipochaeta kamolensis.*
Maui 12—*Vigna o-wahuensis*—a	*Vigna o-wahuensis.*	
Maui 13—*Alectryon macrococcus*—c	.....	*Alectryon macrococcus.*
Maui 13—*Bonamia menziesii*—a	*Bonamia menziesii.*	
Maui 13—*Cenchrus agrimonioides*—a	*Cenchrus agrimonioides.*	
Maui 13—*Colubrina oppositifolia*—a	.....	*Colubrina oppositifolia.*
Maui 13—*Flueggea neowawraea*—b	.....	*Flueggea neowawraea.*
Maui 13—*Melicope adscendens*—a	*Melicope adscendens.*	
Maui 13—*Melicope knudsenii*—b	.....	*Melicope knudsenii.*
Maui 13—*Melicope mucronulata*—b	.....	*Melicope mucronulata.*
Maui 13—*Sesbania tomentosa*—b	*Sesbania tomentosa.*	
Maui 13—*Spermolepis hawaiiensis*—a	*Spermolepis hawaiiensis.*	
Maui 14—*Geranium arboreum*—b	*Geranium arboreum.*	
Maui 15—*Geranium arboreum*—c	*Geranium arboreum.*	
Maui 16—*Hibiscus brackenridgei*—a	*Hibiscus brackenridgei.*	
Maui 17—*Alectryon macrococcus*—d	.....	*Alectryon macrococcus.*
Maui 17—*Alectryon macrococcus*—e	*Alectryon macrococcus.*	
Maui 17—*Cenchrus agrimonioides*—b	.....	*Cenchrus agrimonioides.*
Maui 17—*Clermontia oblongifolia* ssp. *mauiensis*—a	.....	*Clermontia oblongifolia* ssp. *mauiensis.*
Maui 17—*Clermontia oblongifolia* ssp. *mauiensis*—b	.....	*Clermontia oblongifolia* ssp. *mauiensis.*
Maui 17—*Clermontia oblongifolia* ssp. *mauiensis*—c	*Clermontia oblongifolia* ssp. *mauiensis.*	
Maui 17—*Colubrina oppositifolia*—b	.....	*Colubrina oppositifolia.*
Maui 17—*Ctenitis squamigera*—a	*Ctenitis squamigera.*	
Maui 17—*Ctenitis squamigera*—b	*Ctenitis squamigera.*	
Maui 17—*Ctenitis squamigera*—c	*Ctenitis squamigera.*	
Maui 17—*Cyanea glabra*—d	.....	*Cyanea glabra.*
Maui 17—*Cyanea glabra*—e	.....	*Cyanea glabra.*
Maui 17—*Cyanea glabra*—f	.....	*Cyanea glabra.*
Maui 17—*Cyanea glabra*—g	*Cyanea glabra.*	
Maui 17—*Cyanea grimesiana* ssp. *grimesiana*—a	*Cyanea grimesiana* ssp. *grimesiana.*	
Maui 17—*Cyanea lobata*—a	*Cyanea lobata.*	
Maui 17—*Cyanea lobata*—b	.....	*Cyanea lobata.*
Maui 17—*Cyanea lobata*—c	.....	*Cyanea lobata.*
Maui 17—*Cyrtandra munroi*—a	.....	*Cyrtandra munroi.*
Maui 17—*Cyrtandra munroi*—b	*Cyrtandra munroi.*	
Maui 17—*Cyrtandra munroi*—c	.....	*Cyrtandra munroi.*
Maui 17—*Diellia erecta*—c	.....	*Diellia erecta.*
Maui 17—*Diellia erecta*—d	*Diellia erecta.*	

Maui 17—*Diellia erecta*—e	*Diellia erecta.*	
Maui 17—*Diellia erecta*—f	*Diellia erecta.*	
Maui 17—*Diplazium molokaiense*—c		*Diplazium molokaiense.*
Maui 17—*Dubautia plantaginea* ssp. *humilis*—a		*Dubautia plantaginea* ssp. *humilis.*
Maui 17—*Dubautia plantaginea* ssp. *humilis*—b		*Dubautia plantaginea* ssp. *humilis.*
Maui 17—*Dubautia plantaginea* ssp. *humilis*—c	*Dubautia plantaginea* ssp. *humilis.*	
Maui 17—*Gouania vitifolia*—a	*Hedyotis coriacea.*	*Gouania vitifolia.*
Maui 17—*Hedyotis coriacea*—a	*Hedyotis coriacea.*	
Maui 17—*Hedyotis coriacea*—b		*Hedyotis coriacea.*
Maui 17—*Hedyotis mannii*—a	*Hedyotis mannii.*	
Maui 17—*Hesperomannia arbuscula*—a		*Hesperomannia arbuscula.*
Maui 17—*Hesperomannia arbuscula*—b	*Hesperomannia arbuscula.*	
Maui 17—*Hibiscus brackenridgei*—b	*Hibiscus brackenridgei.*	
Maui 17—*Isodendrion pyrifolium*—a		*Isodendrion pyrifolium.*
Maui 17—*Lysimachia lydgatei*—a	*Lysimachia lydgatei.*	
Maui 17—*Lysimachia lydgatei*—b		*Lysimachia lydgatei.*
Maui 17—*Lysimachia lydgatei*—c		*Lysimachia lydgatei.*
Maui 17—*Lysimachia lydgatei*—d	*Lysimachia lydgatei.*	
Maui 17—*Lysimachia lydgatei*—e	*Lysimachia lydgatei.*	
Maui 17—*Neraudia sericea*—b	*Neraudia sericea.*	
Maui 17—*Peucedanum sandwicense*—b		*Peucedanum sandwicense.*
Maui 17—*Phlegmariurus mannii*—d	*Phlegmariurus mannii.*	
Maui 17—*Phlegmariurus mannii*—e	*Phlegmariurus mannii.*	
Maui 17—*Plantago princeps*—b	*Plantago princeps.*	
Maui 17—*Platanthera holochila*—b	*Platanthera holochila.*	
Maui 17—*Platanthera holochila*—c		*Platanthera holochila.*
Maui 17—*Pteris lidgatei*—a	*Pteris lidgatei.*	
Maui 17—*Pteris lidgatei*—b	*Pteris lidgatei.*	
Maui 17—*Remya mauiensis*—a	*Remya mauiensis.*	
Maui 17—*Remya mauiensis*—b	*Remya mauiensis.*	
Maui 17—*Remya mauiensis*—c		*Remya mauiensis.*
Maui 17—*Sanicula purpurea*—a		*Sanicula purpurea.*
Maui 17—*Sanicula purpurea*—b	*Sanicula purpurea.*	
Maui 17—*Sanicula purpurea*—c	*Sanicula purpurea.*	
Maui 17—*Spermolepis hawaiiensis*—b	*Spermolepis hawaiiensis.*	
Maui 17—*Tetramolopium capillare*—a	*Tetramolopium capillare.*	
Maui 17—*Tetramolopium remyi*—a		*Tetramolopium remyi.*
Maui 18—*Alectryon macrococcus*—f		*Alectryon macrococcus.*
Maui 18—*Colubrina oppositifolia*—c	*Colubrina oppositifolia.*	
Maui 18—*Ctenitis squamigera*—d		*Ctenitis squamigera.*
Maui 18—*Remya mauiensis*—d		*Remya mauiensis.*

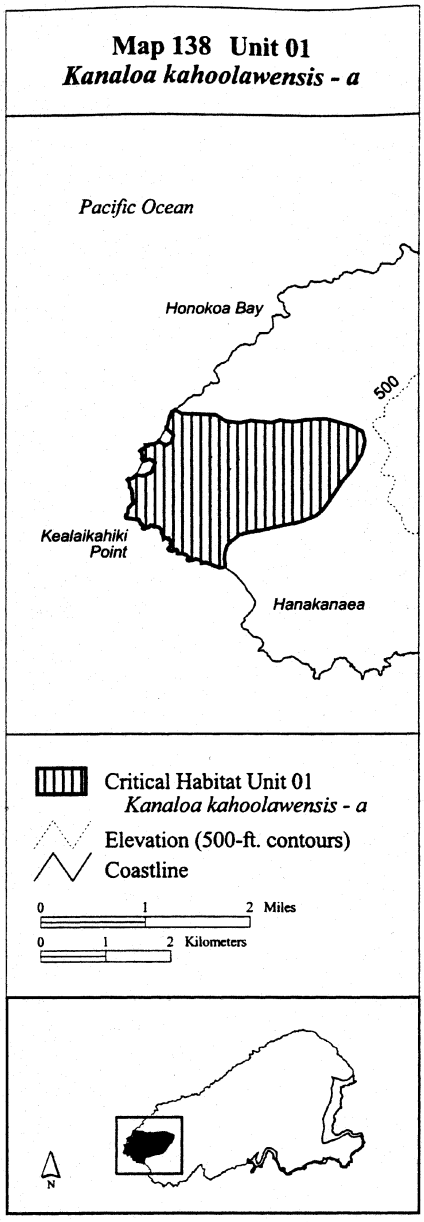
(cxxxix) Critical habitat unit descriptions and maps, and a description of primary constituent elements, for Family Rhamnaceae: *Gouania hillebrandi* on the island of Maui is provided in 50 CFR 17.96(a).

(2) *Kahoolawe.* Critical habitat units are described below. Coordinates in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83).

(i) Kahoolawe 1—*Kanaloa kahoolawensis*—a (62 ha; 1,388 ac).

(A) Unit consists of the following 53 boundary points and the intermediate coastline: 741288, 2270367; 739913, 2271787; 739924, 2271802; 740037, 2271790; 740156, 2271842; 740226, 2271995; 740142, 2272051; 740036, 2272014; 740031, 2272022; 740031, 2272025; 740030, 2272030; 740266, 2272329; 740273, 2272338; 740375, 2272265; 740467, 2272316; 740500, 2272422; 740407, 2272520; 740392, 2272537; 740396, 2272546; 740401, 2272558; 740521, 2272815; 740529, 2272822; 740631, 2272765; 741148, 2272741; 741302, 2272644; 741524, 2272620; 741689, 2272648; 742016, 2272620; 742142, 2272660; 742340, 2272628; 742578, 2272668; 742844, 2272680; 743224, 2272571; 743406, 2272470; 743438, 2272325; 743389, 2272115; 743244, 2271885; 743103, 2271711; 742901, 2271404; 742784, 2271259; 742687, 2271170; 742453, 2271077; 742344, 2271053; 742190, 2271025; 741883, 2270952; 741673, 2270912; 741508, 2270875; 741415, 2270795; 741326, 2270714; 741290, 2270597; 741282, 2270508; 741286, 2270423; 741288, 2270367; return to starting point.

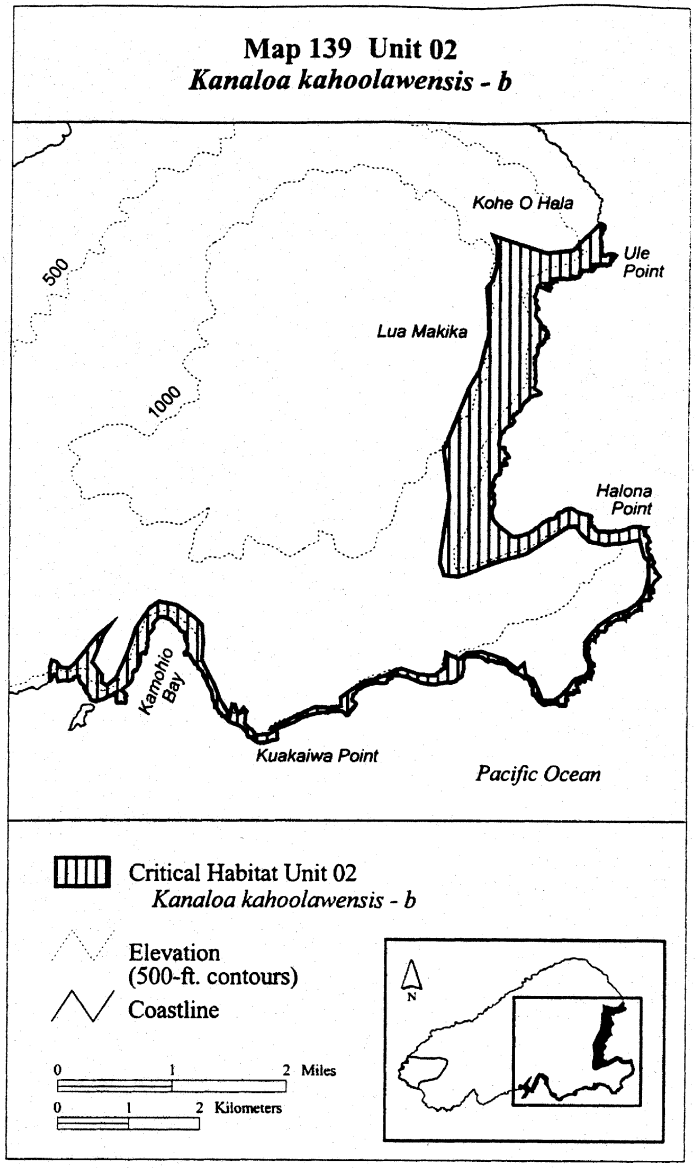
(B) NOTE: Map 138 follows :



(ii) Kahoolawe 2—*Kanaloa kahoolawensis*—b (613 ha; 1,516 ac).

(A) Unit consists of the following 131 boundary points and the intermediate coastline: 756526, 2276870; 756534, 2276893; 748810, 2270407; 748804, 2270414; 748801, 2270602; 748829, 2270694; 748896, 2270675; 748956, 2270592; 749080, 2270581; 749149, 2270650; 749452, 2271037; 749659, 2271200; 749547, 2271037; 749432, 2270760; 749397, 2270670; 749534, 2270492; 749529, 2270389; 749599, 2270339; 749724, 2270439; 749837, 2270680; 749914, 2270865; 749962, 2271002; 750002, 2271142; 750187, 2271420; 750335, 2271525; 750605, 2271469; 750812, 2271310; 750943, 2271192; 750958, 2270952; 750945, 2270692; 751093, 2270402; 751195, 2270154; 751278, 2270019; 751272, 2270015; 751343, 2269909; 751373, 2270074; 751419, 2270068; 751438, 2269987; 751483, 2269952; 751538, 2270023; 751576, 2269978; 751565, 2269934; 751553, 2269794; 751670, 2269694; 751700, 2269639; 751893, 2269652; 751933, 2269679; 751928, 2269742; 752308, 2269927; 752533, 2270032; 752756, 2270029; 752909, 2270054; 752896, 2270169; 753054, 2270282; 753219, 2270392; 753537, 2270482; 753667, 2270557; 753667, 2270551; 753757, 2270587; 754009, 2270497; 754207, 2270480; 754355, 2270585; 754382, 2270807; 754562, 2270710; 754677, 2270807; 754877, 2270822; 755212, 2270710; 755390, 2270580; 755480, 2270660; 755510, 2270495; 755605, 2270439; 755680, 2270285; 755747, 2270135; 755897, 2270132; 755995, 2270202; 756108, 2270312; 756168, 2270405; 756226, 2270450; 756341, 2270495; 756393, 2270550; 756401, 2270645; 756338, 2270782; 756333, 2270950; 756408, 2271057; 756523, 2271185; 756716, 2271328; 756763, 2271353; 756916, 2271408; 757056, 2271503; 757164, 2271635; 757209, 2271808; 757224, 2271970; 757214, 2271970; 757214, 2272116; 757154, 2272171; 757116, 2272326; 757101, 2272408; 756891, 2272366; 756608, 2272333; 756386, 2272378; 756271, 2272488; 756198, 2272593; 756078, 2272571; 755795, 2272388; 755508, 2272205; 755210, 2272115; 754942, 2272025; 754947, 2272036; 754785, 2271960; 754550, 2271868; 754339, 2271898; 754289, 2272068; 754297, 2272223; 754327, 2272463; 754339, 2272518; 754412, 2273006; 754327, 2273668; 754665, 2274523; 754833, 2274812; 754954, 2275312; 754948, 2275650; 754918, 2275963; 755008, 2276059; 755062, 2276282; 755068, 2276565; 755008, 2276710; 755767, 2276457; 756140, 2276495; 756363, 2276718; 756518, 2276871; 756526, 2276870; return to starting point.

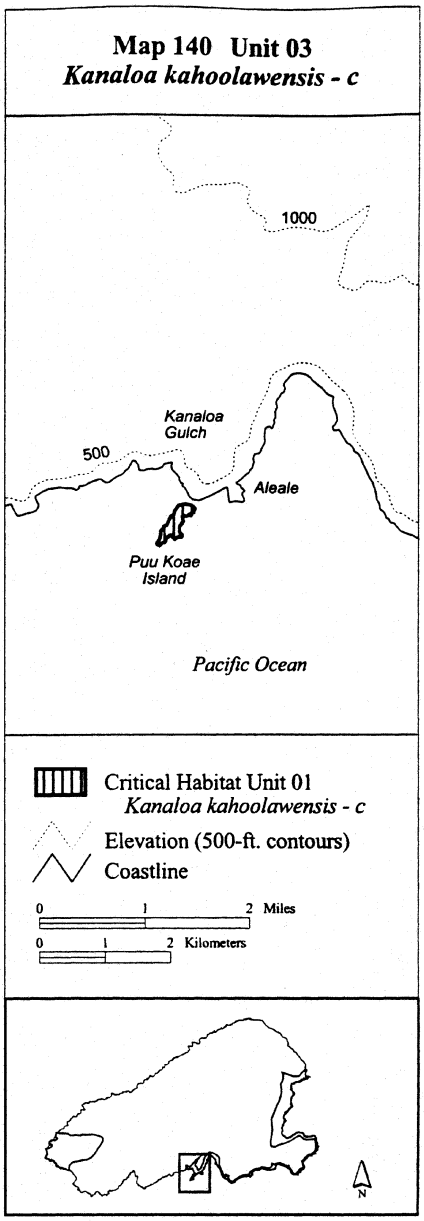
(B) NOTE: Map 139 follows:


Map 139 Unit 02
Kanaloa kahoolawensis - b
Kohe O Hala
Ule Point
Lua Makika
500
1000
Halona Point
Kamohio Bay
Kuakaiwa Point
Pacific Ocean
Critical Habitat Unit 02
Kanaloa kahoolawensis - b
Elevation (500-ft. contours)
Coastline
0 1 2 Miles
0 1 2 Kilometers
N

(iii) Kahoolawe 3—*Kanaloa kahoolawensis*—c (5 ha; 12 ac).

(A) Unit consists of the entire offshore island located at approximately: 749231, 2269900.

(B) NOTE: Map 140 follows:



(iv) Table of Protected Species Within Each Critical Habitat Unit for Kahoolawe

Unit name	Species occupied	Species unoccupied
Kahoolawe 1—*Kanaloa kahoolawensis*—a	.....	*Kanaloa kahoolawensis.*
Kahoolawe 2—*Kanaloa kahoolawensis*—b	*Kanaloa kahoolawensis.*	
Kahoolawe 3—*Kanaloa kahoolawensis*—c	.....	*Kanaloa kahoolawensis.*

(f) *Plants on Maui and Kahoolawe; Constituent elements.*

(1) *Flowering Plants.*

FAMILY AMARANTHACEAE: ***Nototrichium humile*** (KULUI)

Maui 9—*Nototrichium humile*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Nototrichium humile* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Old cinder cones in dry shrubland containing one or more of the following associated native species: *Dodonaea viscosa, Erythrina sandwicensis, Heteropogon contortus,* or *Nototrichium sandwicense;* and

(ii) Elevations between 338 and 734 m (1,110 and 2,407 ft).

FAMILY APIACEAE: ***Peucedanum sandwicense*** (MAKOU)

Maui 4—*Peucedanum sandwicense*—a and Maui 17—*Peucedanum sandwicense*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Peucedanum sandwicense* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Sparsely vegetated steep to vertical cliff habitats with little soil in mesic or coastal communities and containing one or more of the following associated native species: *Artemisia australis, Bidens* spp., *Carex* spp., *Chamaesyce* spp., *Diospyros sandwicensis, Eragrostis* spp., *Hedyotis littoralis, Lysimachia mauritiana, Metrosideros polymorpha, Pandanus tectorius, Peperomia* spp., *Scaevola taccada,* or *Schiedea globosa;* and

(ii) Elevations between 0 and 1,132 m (0 and 3,714 ft).

FAMILY APIACEAE: ***Sanicula purpurea*** (NCN)

Maui 17—*Sanicula purpurea*—a, Maui 17—*Sanicula purpurea*—b, and Maui 17—*Sanicula purpurea*—c, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Sanicula purpurea* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Open *Metrosideros polymorpha* mixed montane bogs and containing one or more of the following associated native plant taxa: *Argyroxiphium caliginis, Argyroxiphium grayanum, Gahnia beecheyi, Geranium hillebrandii, Lagenifera maviensis, Leptecophylla tameiameiae, Lycopodium* sp., *Machaerina* sp., *Myrsine vaccinioides, Oreobolus furcatus, Plantago pachyphylla,* or *Viola maviensis;* and

(ii) Elevations between 1,195 and 1,761 m (3,921 and 5,778 ft).

FAMILY APIACEAE: ***Spermolepis hawaiiensis*** (NCN)

Maui 13—*Spermolepis hawaiiensis*—a, and Maui 17—*Spermolepis hawaiiensis*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Spermolepis hawaiiensis* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Shady spots in *Dodonaea viscosa* lowland dry shrubland and containing one or more of the following associated native species: *Diospyros* sp., *Eragrostis variabilis, Erythrina sandwicensis, Gouania hillebrandii, Heteropogon contortus, Melanthera lavarum, Myoporum sandwicense, Pleomele* sp., *Santalum ellipticum, Sida fallax,* or *Wikstroemia* sp.; and

(ii) Elevations between 221 and 742 m (725 and 2,434 ft).

FAMILY ASTERACEAE: ***Argyroxiphium sandwicense*** SSP. ***macrocephalum*** (AHINAHINA)

Maui 9—*Argyroxiphium sandwicense* ssp. *macrocephalum*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Argyroxiphium sandwicense* ssp. *macrocephalum* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Lava flows and otherwise barren, unstable slopes of recent (less than several thousand years old) volcanic cinder cones, or *Deschampsia* grasslands; or a mean annual precipitation of approximately 75 to 250 cm (29.6 to 98.4 in); or substrate with almost no soil development and subject to frequent formation of ice at night and extreme heating during cloudless days; or alpine dry shrubland; and the presence of one or more of the following associated native plant species: *Agrostis sandwicensis, Deschampsia nubigena, Dubautia menziesii, Leptecophylla tameiameiae, Silene struthioloides, Tetramolopium humile,* or *Trisetum glomeratum;* and

(ii) Elevations between 1,508 and 3,053 m (4,947 and 10,016 ft).

FAMILY ASTERACEAE: ***Bidens micrantha*** SSP. ***kalealaha*** (KOOKOOLAU)

Maui 9—*Bidens micrantha* ssp. *kalealaha*—a and Maui 9—*Bidens micrantha* ssp. kalealaha—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Bidens micrantha* ssp. *kalealaha* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Blocky lava flows with little or no soil development, or deep pit craters, or sheer rock walls in open canopy *Metrosideros polymorpha-Acacia koa* forest; montane shrubland; *Sophora chrysophylla* forest or cliff face, and the presence of one or more of the following associated native plant species: *Coprosma montana, Dodonaea viscosa, Dubautia menziesii, Dubautia platyphylla, Leptecophylla tameiameiae, Santalum haleakalae,* or *Vaccinium reticulatum;* and

(ii) Elevations between 1,317 and 2,565 m (4,321 and 8,414 ft).

FAMILY ASTERACEAE: ***Dubautia plantaginea*** SSP. ***humilis*** (NAENAE)

Maui 17—*Dubautia plantaginea* ssp. *humilis*—a, Maui 17—*Dubautia plantaginea* ssp. *humilis*—b, and Maui 17—*Dubautia plantaginea* ssp. *humilis*—c, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Dubautia plantaginea* ssp. *humilis* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Wet, barren, steep, rocky, windblown cliffs containing one or more of the following associated native plant species: *Bidens* sp., *Carex* sp., *Eragrostis variabilis, Hedyotis formosa, Lysimachia remyi, Metrosideros polymorpha, Pipturus albidus, Plantago princeps,* or *Pritchardia* sp.; and

(ii) Elevations between 291 and 1,593 m (955 and 5,226 ft).

FAMILY ASTERACEAE: ***Hesperomannia arbuscula*** (NCN)

Maui 17—*Hesperomannia arbuscula*—a and Maui 17—*Hesperomannia arbuscula*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Hesperomannia arbuscula* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep forested slopes and ridges in mesic forest dominated by *Metrosideros polymorpha* or *Diospyros sandwicensis* and containing one or more of the following associated native plant species: *Alyxia oliviformis, Bidens* sp., *Cheirodendron* sp., *Clermontia* sp., *Cyanea* sp., *Psychotria* sp., or *Tetraplasandra* sp.; and

(ii) Elevations between 412 and 1,422 m (1,352 and 4,665 ft).

FAMILY ASTERACEAE: ***Lipochaeta kamolensis*** (NEHE)

Maui 9—*Lipochaeta kamolensis*—a and Maui 11—*Lipochaeta kamolensis*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Lipochaeta kamolensis* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulches or gentle slopes outside gulches in dry shrubland and containing one or more of the following associated native plant species: *Dodonaea viscosa, Ipomoea indica,* or *Plumbago zeylanica*; and

(ii) Elevations between 40 and 602 m (132 and 1,974 ft).

FAMILY ASTERACEAE: ***Remya mauiensis*** (NCN)

Maui 17—*Remya mauiensis*—a, Maui 17—*Remya mauiensis*—b, Maui 17—*Remya mauiensis*—c, and Maui 18—*Remya mauiensis*—d, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Remya mauiensis* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, north or northeast-facing slopes in mixed mesophytic forests or *Metrosideros polymorpha* montane wet forests and containing one or more of the following associated native species: *Alyxia oliviformis, Diospyros sandwicensis, Diplazium sandwichianum, Dodonaea viscosa, Leptecophylla tameiameiae, Lysimachia remyi, Melicope* sp., *Microlepia strigosa, Myrsine lessertiana, Nestegis sandwicensis, Pleomele auwahiensis, Psychotria mariniana, Wikstroemia* sp., or *Xylosma hawaiiense;* and

(ii) Elevations between 435 and 1,228 m (1,427 and 4,029 ft).

FAMILY ASTERACEAE: ***Tetramolopium capillare*** (PAMAKANI)

Maui 17—*Tetramolopium capillare*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Tetramolopium capillare* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rocky substrates in *Heteropogon contortus* lowland dry forest or in *Metrosideros polymorpha-Leptecophylla tameiameiae* montane mesic or wet shrubland and wet cliff faces and containing one or more of the following associated plant species: *Dodonaea viscosa* or *Myoporum sandwicense;* and

(ii) Elevations between 155 and 1,432 m (509 and 4,698 ft).

FAMILY ASTERACEAE: ***Tetramolopium remyi*** (NCN)

Maui 17—*Tetramolopium remyi*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Tetramolopium remyi* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry, exposed ridges or flats in lowland dry shrubland and containing one or more of the following associated native plant species: *Bidens mauiensis, Bidens menziesii, Dodonaea viscosa, Eragrostis atropioides, Heteropogon contortus, Lipochaeta heterophylla,* or *Waltheria indica;* and

(ii) Elevations between 85 and 550 m (279 and 1,804 ft).

FAMILY CAMPANULACEAE: ***Brighamia rockii*** (PUA ALA)

Maui 2—*Brighamia rockii*—a, Maui 2—*Brighamia rockii*—b, Maui 3—*Brighamia rockii*—c, Maui 4—*Brighamia rockii*—d, and Maui 5—*Brighamia rockii*—e, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Brighamia rockii* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep sea cliffs, often within the spray zone, in coastal dry to mesic forests and shrublands and containing one or more of the following associated plant species: *Diospyros sandwicensis, Osteomeles anthyllidifolia, Psydrax odorata,* or *Scaevola taccada;* and

(ii) Elevations between 0 and 146 m (0 and 479 ft).

FAMILY CAMPANULACEAE: ***Clermontia lindseyana*** (HAHA)

Maui 9—*Clermontia lindseyana*—a and Maui 9—*Clermontia lindseyana*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Clermontia lindseyana* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Acacia koa* mesic forest containing one or more of the following associated native plant species: *Coprosma* sp., *Cyrtandra* spp., *Ilex anomala, Myrsine* sp., or native fern species; and

(ii) Elevations between 1,147 and 1,868 m (3,762 and 6,129 ft).

FAMILY CAMPANULACEAE: ***Clermontia oblongifolia*** SSP. ***mauiensis*** (OHA EAI)

Maui 17—*Clermontia oblongifolia* ssp. *mauiensis*—a, Maui 17—*Clermontia oblongifolia* ssp. *mauiensis*—b, and Maui 17—*Clermontia oblongifolia* ssp. *mauiensis*—c, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Clermontia oblongifolia* ssp. *mauiensis* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) The sides and tops of ridges in *Metrosideros polymorpha*-dominated montane wet forest and containing one or more of the following associated native plant species: *Cheirodendron* sp., *Clermontia* sp., *Coprosma* sp., *Dicranopteris linearis, Hedyotis* sp., *Ilex anomala, Melicope* sp., or *Myrsine* sp.; and

(ii) Elevations between 539 and 1,738 m (1,768 and 5,702 ft).

FAMILY CAMPANULACEAE: ***Clermontia samuelii*** (OHA WAI)

Maui 9—*Clermontia samuelii*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Clermontia samuelii* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Wet *Metrosideros polymorpha* and *M. polymorpha-Dicranopteris linearis* forest or wet *M. polymorpha* and *M. polymorpha-Cheirodendron trigynum* forest containing one or more of the following associated native plant species: *Adenophorus tamariscinus, Broussaisia arguta, Carex alligata, Cibotium* spp., *Clermontia arborescens* ssp. *waihiae, Clermontia* sp., *Diplazium sandwichianum, Dubautia* sp., *Hedyotis hillebrandii, Hedyotis terminalis, Hedyotis* sp., *Melicope clusiifolia, Melicope* spp., *Peperomia obovatilimba, Psychotria mariniana, Rubus hawaiiensis, Tetraplasandra oahuensis,* or *Vaccinium* spp.; and

(ii) Elevations between 724 and 2,244 m (2,375 and 7,362 ft).

FAMILY CAMPANULACEAE: ***Cyanea copelandii*** SSP. ***haleakalaensis*** (HAHA)

Maui 8—*Cyanea copelandii* ssp. *haleakalaensis*—a and Maui 9—*Cyanea copelandii* ssp. *haleakalaensis*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea copelandii* ssp. *haleakalaensis* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Stream banks or wet scree slopes or forest understory in montane wet or mesic forest dominated by *Acacia koa* and/or *Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Broussaisia arguta, Cibotium* sp., *Hedyotis acuminata, Perrottetia sandwicensis,* or *Psychotria hawaiiensis;* and

(ii) Elevations between 616 and 1,411 m (2,021 and 4,630 ft).

FAMILY CAMPANULACEAE: ***Cyanea glabra*** (HAHA)

Maui 8—*Cyanea glabra*—a, Maui 9—*Cyanea glabra*—b, Maui 9—*Cyanea glabra*—c, Maui 17—*Cyanea glabra*—d, Maui 17—*Cyanea glabra*—e, Maui 17—*Cyanea glabra*—f, and Maui 17—*Cyanea glabra*—g, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for

Cyanea glabra on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Soil and rock stream banks in wet lowland forest dominated by *Acacia koa* and/or *Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Boehmeria grandis, Cheirodendron trigynum, Christella cyatheoides, Cibotium* sp., *Clermontia kakeana, Coprosma* sp., *Cyanea elliptica, Diplazium* sp., *Dodonaea viscosa, Dubautia plantaginea, Perrottetia sandwicensis, Pipturus albidus, Psychotria* sp., *Sadleria* sp., *Touchardia latifolia,* or *Xylosma hawaiiense* or; and

(ii) Elevations between 413 and 1,569 m (1,355 and 5,149 ft).

FAMILY CAMPANULACEAE: ***Cyanea grimesiana*** SSP. ***grimesiana*** (HAHA)

Maui 17—*Cyanea grimesiana* ssp. *grimesiana*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Cyanea grimesiana* ssp. *grimesiana* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rocky or steep slopes of stream banks in wet forest gulch bottoms often dominated by *Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Antidesma* sp., *Bobea* sp., *Myrsine* sp., *Nestegis sandwicensis, Psychotria* sp., or *Xylosma* sp.; and

(ii) Elevations between 312 and 1,617 m (1,024 and 5,305 ft).

FAMILY CAMPANULACEAE: ***Cyanea hamatiflora*** SSP. ***hamatiflora*** (HAHA)

Maui 8—*Cyanea hamatiflora* ssp. *hamatiflora*—a and Maui 9—*Cyanea hamatiflora* ssp. *hamatiflora*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea hamatiflora* ssp. *hamatiflora* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Montane wet forest dominated by *Metrosideros polymorpha,* with a Cibotium sp. and/or native shrub understory or closed *Acacia koa-Metrosideros polymorpha* wet forest containing one or more of the following associated native plant species: *Athyrium microphyllum, Broussaisia arguta, Cheirodendron trigynum, Cyanea aculeatiflora, Cyanea kunthiana, Dicranopteris linearis, Diplazium sandwichianum, Melicope* sp., *Myrsine* sp., or *Vaccinium* sp.; and

(ii) Elevations between 767 and 1,553 m (2,515 and 5,095 ft).

FAMILY CAMPANULACEAE: ***Cyanea lobata*** (HAHA)

Maui 17—*Cyanea lobata*—a, Maui 17—*Cyanea lobata*—b, and Maui 17—*Cyanea lobata*—c, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea lobata* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep stream banks in deep shade in wet forest and containing one or more of the following associated native plant species: *Antidesma* sp., *Athyrium* sp., *Clermontia kakeana, Cyrtandra* spp., *Freycinetia arborea, Metrosideros polymorpha, Morinda trimera, Peperomia* sp., *Pipturus albidus, Pleomele* sp., *Psychotria* sp., *Touchardia latifolia,* or *Xylosma* sp.; and

(ii) Elevations between 260 and 1,530 m (853 and 5,020 ft).

FAMILY CAMPANULACEAE: ***Cyanea mceldowneyi*** (HAHA)

Maui 8—*Cyanea mceldowneyi*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Cyanea mceldowneyi* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Montane wet and mesic forest with mixed *Metrosideros polymorpha-Acacia koa* and containing one or more of the following associated native plant species: *Broussaisia arguta, Cheirodendron trigynum, Cibotium* sp., *Clermontia arborescens, Cyrtandra* sp.,

Dicranopteris linearis, Diplazium sandwichianum, Hedyotis sp., or *Melicope clusiifolia;* and

(ii) Elevations between 837 and 1,348 m (2,745 and 4,423 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea haleakalensis*** (NCN)

Maui 9—*Schiedea haleakalensis*—a and Maui 9—*Schiedea haleakalensis*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Schiedea haleakalensis* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rock cracks on sheer cliffs adjacent to barren lava and subalpine shrublands; or grasslands with cinder, or weathered volcanic ash, or bare lava substrate with little or no soil development and periodic freezing temperatures; and containing one or more of the following associated native plant species: *Artemisia mauiensis, Bidens micrantha, Dubautia menziesii, Leptecophylla tameiameiae, Vaccinium reticulatum,* or *Viola chamissoniana;* and

(ii) Elevations between 1,678 and 2,434 m (5,505 and 7,986 ft).

FAMILY CONVOLVULACEAE: ***Bonamia menziesii*** (NCN)

Maui 13—*Bonamia menziesii*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Bonamia menziesii* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Aa lava in mixed open dry forest or *Erythrina sandwicensis* lowland dry forest, or in mesic mixed *Metrosideros polymorpha* forest and containing one or more of the following associated native plant species: *Acacia koaia, Achyranthes splendens, Alphitonia ponderosa, Alyxia oliviformis, Diospyros sandwicensis, Dodonaea viscosa, Lipochaeta rockii, Myoporum sandwicense, Nestegis sandwicensis, Nothocestrum latifolium, Nototrichium* sp., *Osteomeles anthyllidifolia, Pleomele auwahiensis, Pouteria sandwicensis, Reynoldsia sandwicensis, Santalum ellipticum, Sicyos* sp., *Sida fallax,* or *Xylosma hawaiiensis;* and

(ii) Elevations between 221 and 836 m (725 and 2,743 ft).

FAMILY CYPERACEAE: ***Mariscus pennatiformis*** (NCN)

Maui 6—*Mariscus pennatiformis*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Mariscus pennatiformis* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliffs with brown soil and talus within reach of ocean spray in *Pandanus tectorius* coastal wet forests and containing one or more of the following associated native plant species: *Cyperus laevigatus, Eragrostis* spp., *Ipomoea* sp., *Lysimachia mauritiana,* or *Sadleria pallida;* and

(ii) Elevations between 0 and 134 m (0 and 440 ft).

FAMILY EUPHORBIACEAE: ***Flueggea neowawraea*** (MEHAMEHAME)

Maui 9—*Flueggea neowawraea*—a and Maui 13—*Flueggea neowawraea*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Flueggea neowawraea* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry or mesic forest containing one or more of the following associated native plant species: *Alectryon macrococcus, Antidesma pulvinatum, Bobea timonioides, Charpentiera* sp., *Diospyros* sp., *Diplazium sandwichianum, Myrsine lanaiensis, Nesoluma polynesicum, Nestegis sandwicensis, Pleomele auwahiensis, Pleomele* sp., *Pouteria sandwicensis, Psydrax odorata, Rauvolfia sandwicensis,* or *Tetraplasandra* sp.; and

(ii) Elevations between 633 and 971 m (2,078 and 3,186 ft).

FAMILY FABACEAE: ***Kanaloa kahoolawensis*** (KOHE MALAMA MALAMA O KANALOA)

Kahoolawe 1—*Kanaloa kahoolawensis*—a, Kahoolawe 2—*Kanaloa kahoolawensis*—b, and Kahoolawe 3—*Kanaloa kahoolawensis*—c, identified in the legal descriptions in paragraph (e)(2) of this section, constitute critical habitat for *Kanaloa kahoolawensis* on Kahoolawe. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, rocky talus slopes in mixed coastal shrubland and containing one or more of the following associated native plants: *Bidens mauiensis, Capparis sandwichiana, Melanthera lavarum, Portulaca molokiniensis, Senna gaudichaudii,* or *Sida fallax;* and

(ii) Elevations between 0 and 305 m (0 and 1,000 ft).

FAMILY FABACEAE: ***Sesbania tomentosa*** (OHAI)

Maui 1—*Sesbania tomentosa*—a and Maui 13—*Sesbania tomentosa*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Sesbania tomentosa* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Windswept slopes, sea cliffs, and cinder cones in *Scaevola taccada* coastal dry shrublands and containing one or more of the following associated native plant species: *Bidens* sp., *Diospyros sandwicensis, Dodonaea viscosa, Jacquemontia ovalifolia* ssp. *sandwicensis, Melanthera integrifolia,* or *Sida fallax;* and

(ii) Elevations between 0 and 542 m (0 and 1,778 ft).

FAMILY FABACEAE: ***Vigna o-wahuensis*** (NCN)

Maui 12—*Vigna o-wahuensis*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Vigna o-wahuensis* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry or mesic grassland or shrubland containing one or more of the following associated plant species: *Chamaesyce* sp., or *Dodonaea viscosa;* and

(ii) Elevations between 0 and 50 m (0 and 164 ft).

FAMILY GENTIANACEAE: ***Centaurium sebaeoides*** (AWIWI)

Maui 1—*Centaurium sebaeoides*—a and Maui 2—*Centaurium sebaeoides*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Centaurium sebaeoides* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Volcanic or clay soils or cliffs, in windward coastal areas, containing one or more of the following associated native plant species: *Bidens mauiensis, Lycium sandwicense, Melanthera integrifolia, Panicum torridum, Lysimachia mauritiana, Scaevola taccada,* or *Schiedea globosa;* and

(ii) Elevations between 0 and 129 m (0 and 423 ft).

FAMILY GERANIACEAE: ***Geranium arboreum*** (NOHOANU)

Maui 9—*Geranium arboreum*—a, Maui 14—*Geranium arboreum*—b, and Maui 15—*Geranium arboreum*—c, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Geranium arboreum* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, damp and shaded narrow canyons and gulches, steep banks, and intermittent streams in *Sophora chrysophylla* subalpine dry shrubland or *Metrosideros polymorpha* montane forest and containing one or more of the following associated native plant species: *Dodonaea viscosa, Dryopteris wallichiana, Leptecophylla tameiameiae, Rubus hawaiiensis,* or *Vaccinium reticulatum;* and

(ii) Elevations between 1,472 and 2,184 m (4,830 and 7,164 ft).

FAMILY GERANIACEAE: ***Geranium multiflorum*** (NOHOANU)

Maui 8—*Geranium multiflorum*—a, Maui 9—*Geranium multiflorum*—b, and Maui 9—*Geranium multiflorum*—c, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Geranium multiflorum* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Wet or mesic *Metrosideros polymorpha* montane forest or alpine mesic forest, *Leptecophylla tameiameiae* shrubland, *Sophora chrysophylla* subalpine dry forest, open sedge swamps, fog-swept lava flows, or montane grasslands and containing one or more of the following associated native plant species: *Coprosma montana, Dryopteris glabra, Dryopteris wallichiana, Hedyotis* sp., *Leptecophylla tameiameiae Metrosideros polymorpha, Rubus hawaiiensis, Sadleria cyatheoides,* or *Vaccinium* sp.; and

(ii) Elevations between 1,538 and 2,710 m (5,045 and 8,890 ft).

FAMILY GESNERIACEAE: ***Cyrtandra munroi*** (HAIWALE)

Maui 17—*Cyrtandra munroi*—a, Maui 17—*Cyrtandra munroi*—b, and Maui 17—*Cyrtandra munroi*—c, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyrtandra munroi* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rich, moist to wet, moderately steep talus slopes in lowland wet *Metrosideros polymorpha* forest and containing one or more of the following associated native plant species: *Alyxia oliviformis, Bobea* sp., *Clermontia* sp., *Coprosma* sp., *Cyrtandra* spp., *Diospyros* sp., *Freycinetia arborea, Hedyotis acuminata, Melicope* sp., *Myrsine* sp., *Perrottetia sandwicensis, Pipturus* sp., *Pittosporum* sp., *Pouteria sandwicensis, Psychotria* sp., *Sadleria* sp., *Scaevola* sp., *Sicyos* sp., *Strongylodon ruber, Xylosma* sp., or *Zanthoxylum kauense;* and

(ii) Elevations between 468 and 1,108 m (1,535 and 3,635 ft).

FAMILY LAMIACEAE: ***Phyllostegia mannii*** (NCN)

Maui 8—*Phyllostegia mannii*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Phyllostegia mannii* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gentle slopes and the steep sides of gulches in mesic to wet forest dominated by *Acacia koa* and/or *Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Alyxia oliviformis, Cheirodendron trigynum, Dicranopteris linearis, Diplazium sandwichianum, Melicope* spp., or *Myrsine lessertiana;* and

(ii) Elevations between 1,069 and 1,348 m (3,506 and 4,421 ft).

FAMILY LAMIACEAE: ***Phyllostegia mollis*** (NCN)

Maui 8—*Phyllostegia mollis*—a and Maui 9—*Phyllostegia mollis*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Phyllostegia mollis* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes and gulches in mesic forest dominated by *Metrosideros polymorpha* and/or *Acacia koa* and containing one or more of the following associated native plant species: *Alyxia oliviformis, Cheirodendron trigynum, Diplazium sandwichianum, Melicope* spp., or *Myrsine lessertiana;* and

(ii) Elevations between 1,164 and 1,878 m (3,818 and 6,161 ft).

FAMILY MALVACEAE: ***Hibiscus brackenridgei*** (MAO HAU HELE)

Maui 16—*Hibiscus brackenridgei*—a and Maui 17—*Hibiscus brackenridgei*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Hibiscus brackenridgei* on Maui. Within these units, the currently known primary

constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Lowland dry forest sometimes with *Erythrina sandwicensis* as the dominant tree containing one or more of the following associated native plant species: *Achyranthes* sp., *Chamaesyce celastroides* var. *lorifolia, Chenopodium* sp., *Diospyros* sp., *Dodonaea viscosa, Melanthera lavarum, Myoporum sandwicense, Nototrichium* sp., annual *Panicum* spp., *Psydrax odorata, Schiedea salicaria,* or *Sida fallax;* and

(ii) Elevations between 85 and 771 m (279 and 2,530 ft).

FAMILY ORCHIDACEAE: ***Platanthera holochila*** (NCN)

Maui 9—*Platanthera holochila*—a, Maui 17—*Platanthera holochila*—b, and Maui 17—*Platanthera holochila*—c, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Platanthera holochila* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest, *M. polymorpha* mixed montane bog, or mesic scrubby *M. polymorpha* forest and containing one or more of the following associated native plant species: *Broussaisia arguta, Cibotium* sp., *Clermontia* sp., *Coprosma ernodeoides, Deschampsia nubigena, Dubautia scabra, Gahnia gahniiformis, Leptecophylla tameiameiae, Luzula hawaiiensis, Lycopodiella cernua, Oreobolus furcatus, Polypodium pellucidum, Sadleria* sp., *Scaevola chamissoniana, Sisyrinchium acre, Vaccinium reticulatum,* or *Wikstroemia* sp.; and

(ii) Elevations between 669 and 2,314 m (2,195 and 7,592 ft).

FAMILY PLANTAGINACEAE: ***Plantago princeps*** (LAUKAHI KUAHIWI)

Maui 9—*Plantago princeps*—a and Maui 17—*Plantago princeps*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Plantago princeps* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Basalt cliffs that are windblown with little vegetation in *Metrosideros polymorpha* lowland wet forest, *Acacia koa-M. polymorpha* montane wet forest, or *M. polymorpha* montane wet shrubland and containing one or more of the following associated native plant species: *Bidens micrantha* ssp. *kalealaha, Chamaesyce celastroides, Cyanea* spp., *Dryopteris* sp., *Dubautia menziesii, Dubautia plantaginea* ssp. *humilis, Eragrostis variabilis, Hedyotis formosa, Leptecophylla tameiameiae, Melicope ovalis, Perrottetia sandwicensis, Pipturus albidus,* or *Touchardia latifolia;* and

(ii) Elevations between 281 and 2,460 m (922 and 8,070 ft).

FAMILY POACEAE: ***Cenchrus agrimonioides*** (KAMANOMANO (= SANDBUR, AGRIMONY))

Maui 13—*Cenchrus agrimonioides*—a, and Maui 17—*Cenchrus agrimonioides*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cenchrus agrimonioides* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry forest or *Pleomele* sp.-*Diospyros* sp. forest and containing one or more of the following associated native plant species: *Alyxia oliviformis, Dodonaea viscosa, Osteomeles anthyllidifolia,* or *Santalum ellipticum;* and

(ii) Elevations between 528 and 1,091 m (1,732 and 3,579 ft).

FAMILY POACEAE: ***Ischaemum byrone*** (HILO ISCHAEMUM)

Maui 6—*Ischaemum byrone*—a and Maui 7—*Ischaemum byrone*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Ischaemum byrone* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Close proximity to the ocean, among rocks or on basalt cliffs in windward coastal dry shrubland and containing one or more of the following associated native plant species: *Bidens* sp., *Fimbristylis cymosa,* or *Scaevola taccada;* and

(ii) Elevations between 0 and 132 m (0 and 432 ft).

FAMILY PRIMULACEAE: ***Lysimachia lydgatei*** (NCN)

Maui 17—*Lysimachia lydgatei*—a, Maui 17—*Lysimachia lydgatei*—b, Maui 17—*Lysimachia lydgatei*—c, Maui 17—*Lysimachia lydgatei*—d, and Maui 17—*Lysimachia lydgatei*—e, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Lysimachia lydgatei* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Sides of steep ridges in *Metrosideros polymorpha-Dicranopteris linearis*-dominated wet to mesic shrubland or *M. polymorpha-Cheirodendron* spp. montane forest and containing one or more of the following associated native plant species: *Astelia* sp., *Broussaisia arguta, Coprosma* spp., *Dodonaea viscosa, Eurya sandwicensis, Ilex anomala, Leptecophylla tameiameiae, Lycopodium* spp., *Ochrosia* spp., *Vaccinium spp.,* or mat ferns such as *Dicranopteris* spp.; and

(ii) Elevations between 829 and 1,432 m (2,720 and 4,698 ft).

FAMILY RHAMNACEAE: ***Colubrina oppositifolia*** (KAUILA)

Maui 13—*Colubrina oppositifolia*—a, Maui 17—*Colubrina oppositifolia*—b, and Maui 18—*Colubrina oppositifolia*—c, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Colubrina oppositifolia* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Lowland dry and mesic forests dominated by *Diospyros sandwicensis* and containing one or more of the following associated native plant species: *Bidens micrantha* spp. *micrantha, Canavalia* spp., *Dodonaea viscosa, Freycinetia arborea, Metrosideros polymorpha, Microlepia strigosa, Pleomele auwahiensis, Psydrax odorata, Reynoldsia sandwicensis,* or *Wikstroemia* sp.; and

(ii) Elevations between 193 and 844 m (633 and 2,769 ft).

FAMILY RHAMNACEAE: ***Gouania vitifolia*** (NCN)

Maui 17—*Gouania vitifolia*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Gouania vitifolia* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) The sides of ridges and gulches in dry to mesic forests and containing one or more of the following associated native plant species: *Bidens* sp., *Carex meyenii, Chamaesyce* spp., *Diospyros sandwicensis, Dodonaea viscosa, Erythrina sandwicensis, Hedyotis* sp., *Hibiscus* spp., *Melicope* sp., *Nestegis sandwicensis, Pipturus albidus, Psychotria* sp., or *Urera glabra;* and

(ii) Elevations between 357 and 1,167 m (1,171 and 3,829 ft).

FAMILY RUBIACEAE: ***Hedyotis coriacea*** (KIOELE)

Maui 17—*Hedyotis coriacea*—a and Maui 17—*Hedyotis coriacea*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Hedyotis coriacea* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, rocky slopes in dry lowland *Dodonaea viscosa*-dominated shrublands and containing one or more of the following associated native plant species: *Bidens menziesii, Gouania hillebrandii, Melanthera lavarum, Myoporum sandwicense, Schiedea menziesii,* or *Sida fallax;* and

(ii) Elevations between 159 and 754 m (522 and 2,474 ft).

FAMILY RUBIACEAE: ***Hedyotis mannii*** (PILO)

Maui 17—*Hedyotis mannii*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Hedyotis mannii* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Basalt cliffs along stream banks in *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest and containing one or more of the following associated native plant species: *Boehmeria grandis, Carex meyenii, Cyrtandra grayi, Cyrtandra hawaiensis, Cyrtandra platyphylla, Cyanea* sp., *Hedyotis acuminata, Isachne distichophylla, Machaerina* sp., *Phyllostegia* sp., *Pipturus albidus, Psychotria* sp., *Touchardia latifolia,* or *Urera glabra;* and

(ii) Elevation between 340 and 1,593 m (1,115 and 5,226 ft).

FAMILY RUTACEAE: ***Melicope adscendens*** (ALANI)

Maui 13—*Melicope adscendens*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Melicope adscendens* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Aa lava with pockets of soil in *Nestegis sandwicensis-Pleomele auwahiensis-Dodonaea viscosa* lowland mesic forest or open dry forest and containing one or more of the following associated native plant species: *Alphitonia ponderosa, Chamaesyce celastroides* var. *lorifolia, Leptecophylla tameiameiae, Osteomeles anthyllidifolia, Pouteria sandwicensis, Santalum ellipticum,* or *Xylosma hawaiiensis;* and

(ii) Elevations between 761 and 1,209 m (2,497 and 3,967 ft).

FAMILY RUTACEAE: ***Melicope balloui*** (ALANI)

Maui 8—*Melicope balloui*—a and Maui 9—*Melicope balloui*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Melicope balloui* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mesic to wet forest containing one or more of the following associated native plant species: *Acacia koa, Cibotium chamissoi, Cibotium glaucum, Diplazium sandwichianum, Melicope clusiifolia, Metrosideros polymorpha,* or *Sadleria pallida;* and

(ii) Elevations between 781 and 1,544 m (2,561 and 5,267 ft).

FAMILY RUTACEAE: ***Melicope knudsenii*** (ALANI)

Maui 9—*Melicope knudsenii*—a and Maui 13—*Melicope knudsenii*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Melicope knudsenii* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Forested flats or talus slopes in *Nestegis sandwicensis-Pleomele* sp. mixed open dry forests and containing one or more of the following associated native plant species: *Alphitonia ponderosa, Dodonaea viscosa, Osteomeles anthyllidifolia, Santalum ellipticum,* or *Xylosma hawaiiensis;* and

(ii) Elevations between 648 and 1,231 m (2,125 and 4,039 ft).

FAMILY RUTACEAE: ***Melicope mucronulata*** (ALANI)

Maui 9—*Melicope mucronulata*—a and Maui 13—*Melicope mucronulata*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Melicope mucronulata* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gentle south-facing slopes in lowland dry to mesic forest and containing one or more of the following associated species: *Antidesma pulvinatum, Dodonaea viscosa, Melicope hawaiensis, Nestegis sandwicensis, Pleomele auwahiensis, Pouteria sandwicensis,* or *Streblus pendulinus;* and

(ii) Elevations between 625 and 1,232 m (2,050 and 4,042 ft).

FAMILY RUTACEAE: ***Melicope ovalis*** (ALANI)

Maui 9—*Melicope ovalis*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Melicope ovalis* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Acacia koa* and *Metrosideros polymorpha*-dominated montane wet forests along streams and containing one or more of the following associated species: *Broussaisia arguta, Cheirodendron trigynum, Dicranopteris linearis, Dubautia plantaginea, Hedyotis hillebrandii, Labordia hedyosmifolia, Machaerina angustifolia, Perrottetia sandwicensis,* or *Wikstroemia oahuensis;* and

(ii) Elevations between 753 and 1,537 m (2,469 and 5,042 ft).

FAMILY RUTACEAE: ***Zanthoxylum hawaiiense*** (AE)

Maui 8—*Zanthoxylum hawaiiense*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Zanthoxylum hawaiiense* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Open lowland dry or mesic *Nestegis sandwicensis-Pleomele auwahiensis* forest or Acacia koa-Pleomele auwahiensis forest or montane dry forest and containing one or more of the following associated native species: *Alectryon macrococcus, Alphitonia ponderosa, Charpentiera* sp., *Diospyros sandwicensis, Dodonaea viscosa, Melicope* sp., *Metrosideros polymorpha, Myrsine lanaiensis, Osteomeles anthyllidifolia, Pisonia* sp., *Santalum ellipticum, Sophora chrysophylla, Streblus pendulinus,* or *Xylosma hawaiiensis;* and

(ii) Elevations between 869 and 1,298 m (2,852 and 4,260 ft).

FAMILY SAPINDACEAE: ***Alectryon macrococcus*** (MAHOE)

Maui 9—*Alectryon macrococcus*—a, Maui 10—*Alectryon macrococcus*—b, Maui 13—*Alectryon macrococcus*—c, Maui 17—*Alectryon macrococcus*—d, Maui 17—*Alectryon macrococcus*—e, and Maui 18—*Alectryon macrococcus*—f, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Alectryon macrococcus* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mesic to wetter mesic and upper dryland forest and containing one or more of the following associated native plant species: *Alphitonia ponderosa, Antidesma platyphylla, Antidesma pulvinatum, Bobea sandwicensis, Diospyros sandwicensis, Dodonaea viscosa, Nestegis sandwicensis, Osteomeles anthyllidifolia, Pittosporum confertiflorum, Pittosporum glabrum, Pouteria sandwicensis, Santalum ellipticum, Streblus pendulinus, Xylosma hawaiiensis,* or *Xylosma* sp.; and

(ii) Elevations between 333 and 1,191 m (1,092 and 3,909 ft).

FAMILY URTICACEAE: ***Neraudia sericea*** (NCN)

Maui 9—*Neraudia sericea*—a and Maui 17—*Neraudia sericea*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Neraudia sericea* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry to mesic *Metrosideros polymorpha-Dodonaea viscosa-Leptecophylla tameiameiae* shrubland or forest or *Acacia koa* forest and containing one or more of the following associated native plant species: *Bobea* sp., *Coprosma* sp., *Cyrtandra oxybapha, Cyrtandra* spp., *Diospyros* sp., *Hedyotis* sp., *Sida fallax,* or *Urera glabra;* and

(ii) Elevations between 198 and 1,658 m (650 and 5,439 ft).

FAMILY VIOLACEAE: ***Isodendrion pyrifolium*** (AUPAKA)

Maui 17—*Isodendrion pyrifolium*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Isodendrion pyrifolium* on Maui. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry shrubland containing one or more of the following associated native plant taxa: *Capparis sandwichiana, Dodonaea viscosa, Myoporum sandwicense,* or *Psydrax odorata;* and

(ii) Elevations between 85 and 534 m (279 and 1,752 ft).

(2) *Ferns and Allies.*

FAMILY ADIANTACEAE: ***Pteris lidgatei*** (NCN)

Maui 17—*Pteris lidgatei*—a and Maui 17—*Pteris lidgatei*—b, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Pteris lidgatei* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep stream banks in wet *Metrosideros polymorpha-Dicranopteris linearis* montane forest and containing one or more of the following native plant species: *Christella cyatheoides, Cibotium chamissoi, Dicranopteris linearis, Elaphoglossum crassifolium, Sadleria squarrosa,* or *Sphenomeris chinensis;* and

(ii) Elevations between 213 and 1,593 m (699 and 5,226 ft).

FAMILY ASPLENIACEAE: ***Asplenium fragile*** VAR. ***insulare*** (NCN)

Maui 9—*Asplenium fragile* var. *insulare*—a, identified in the legal description in paragraph (e)(1) of this section, constitutes critical habitat for *Asplenium fragile* var. *insulare* on Maui. Within this unit, the primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streamside hollows and grottos in gulches in mesic to dry subalpine shrubland dominated by *Leptecophylla tameiameiae* and *Sadleria cyatheoides,* with scattered *Metrosideros polymorpha* and containing one or more of the following native plant species: *Dryopteris wallichiana, Grammitis hookeri,* or *Pteris cretica;* and

(ii) Elevations between 1,964 and 2,407 m (6,445 and 7,896 ft).

FAMILY ASPLENIACEAE: ***Ctenitis squamigera*** (PAUOA)

Maui 17—*Ctenitis squamigera*—a, Maui 17—*Ctenitis squamigera*—b, Maui 17—*Ctenitis squamigera*—c, and Maui 18—*Ctenitis squamigera*—d, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Ctenitis squamigera* on Maui. Within these units, the primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Forest understory in *Metrosideros polymorpha* montane wet forest, mesic forest, or diverse mesic forest and containing one or more of the following native plant species: *Alyxia oliviformis, Antidesma* sp., *Bobea* sp., *Canavalia* sp., *Coprosma* sp., *Dicranopteris linearis, Doodia* sp., *Dryopteris* sp., *Freycinetia arborea, Hedyotis terminalis, Hibiscus kokio* ssp. *kokio, Myrsine* sp., *Peperomia* sp., *Pittosporum* sp., *Pleomele* sp., *Pritchardia* sp., *Psychotria* sp., *Remya mauiensis, Sadleria* sp., *Schiedea pubescens* var. *pubescens,* or *Xylosma* sp.; and

(ii) Elevations between 275 and 1,421 m (902 and 4,662 ft).

FAMILY ASPLENIACEAE: ***Diellia erecta*** (NCN)

Maui 9—*Diellia erecta*—a, Maui 9—*Diellia erecta*—b, Maui 17—*Diellia erecta*—c, Maui 17—*Diellia erecta*—d, Maui 17—*Diellia erecta*—e, and Maui 17—*Diellia erecta*—f, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Diellia erecta* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes or gulch sides in deep shade in *Acacia koa-Metrosideros polymorpha* low- to mid-elevation mesic forest and containing one or more of the following associated native plant species: *Coprosma* sp., *Dodonaea viscosa,*

Dryopteris unidentata, Leptecophylla tameiameiae, Melicope sp., *Myrsine* sp., *Osteomeles anthyllidifolia,* or *Psychotria* sp.; and

(ii) Elevations between 338 and 1,695 m (1,109 and 5,561 ft).

FAMILY ASPLENIACEAE: ***Diplazium molokaiense*** (NCN)

Maui 8—*Diplazium molokaiense*—a, Maui 9—*Diplazium molokaiense*—b, and Maui 17—*Diplazium molokaiense*—c, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Diplazium molokaiense* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Water courses, often in proximity to waterfalls, in lowland or montane mesic *Metrosideros polymorpha-Acacia koa* forest; and

(ii) Elevations between 273 and 1,885 m (896 and 6,186 ft).

FAMILY LYCOPODIACEAE: ***Phlegmariurus mannii*** (WAWAEIOLE)

Maui 8—*Phlegmariurus mannii*—a, Maui 9—*Phlegmariurus mannii*—b, Maui 9—*Phlegmariurus mannii*—c, Maui 17—*Phlegmariurus mannii*—d, and Maui 17—*Phlegmariurus mannii*—e, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Phlegmariurus mannii* on Maui. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

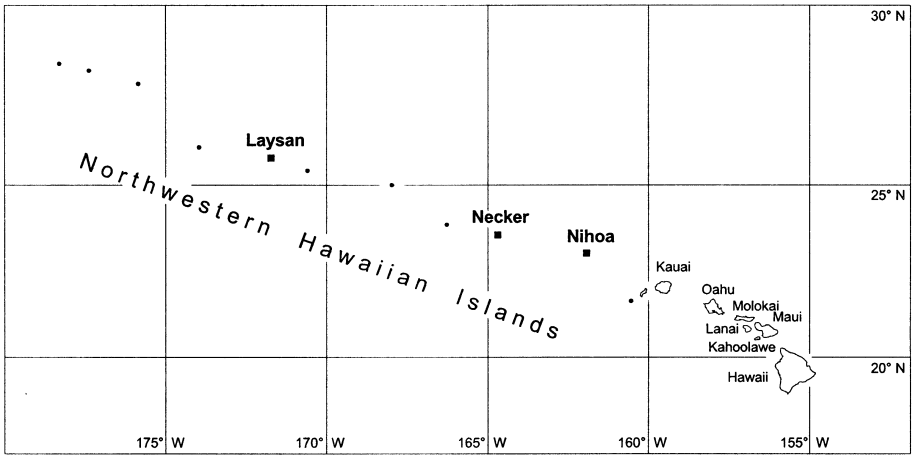
(i) Epiphytic growth on *Metrosideros polymorpha, Dodonaea viscosa,* or *Acacia koa* trees in moist protected gulches or mossy tussocks in mesic to wet montane M*etrosideros polymorpha-Acacia koa* forests and containing one or more of the following associated native plant species: *Astelia menziesii, Athyrium* sp., *Cheirodendron trigynum, Coprosma* sp., *Cyanea* sp., *Cyrtandra* sp., *Ilex anomala, Leptecophylla tameiameiae, Machaerina* sp., *Myrsine* sp., *Sadleria* sp., *Thelypteris* sp., or *Vaccinium* sp.; and

(ii) Elevations from 952 and 1,688 m (3,122 and 5,539 ft).

(g) *Maps and critical habitat unit descriptions for the Northwestern Hawaiian Islands.* The following paragraphs contain the legal descriptions of the critical habitat units designated for the Northwestern Hawaiian Islands. Existing manmade features within boundaries of the mapped areas, such as water features, telecommunications equipment, arboreta and gardens, and heiau (indigenous places of worship or shrines) and other archaeological sites do not contain one or more of the primary constituent elements described for each species in paragraphs (h) of this section and therefore are not included in the critical habitat designations. Coordinates are in WGS84 datum. See Map 1 for the the general locations of the seven critical habitat units designated for the islands of Laysan, Nihoa, and Necker.

(1) Index map—Map 1—follows:

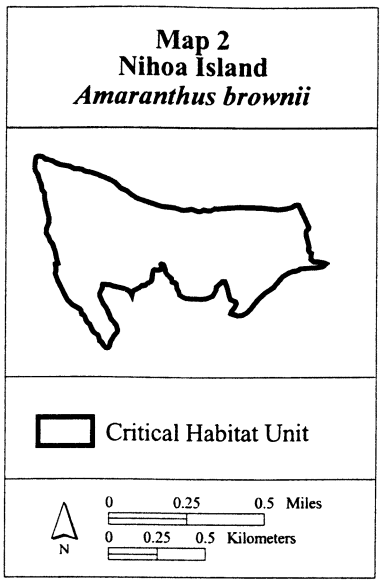
Map 1 - General Locations of Units for Five Species of Plants
Islands of Laysan, Necker, and Nihoa



(2) Nihoa 1—*Amaranthus brownii*—entire island (approximately 69 ha; 171 ac).

(i) Nihoa Island is located between 23°3′ N. and 23°4′ N. and between 161°54′ W. and 161°56′ W.

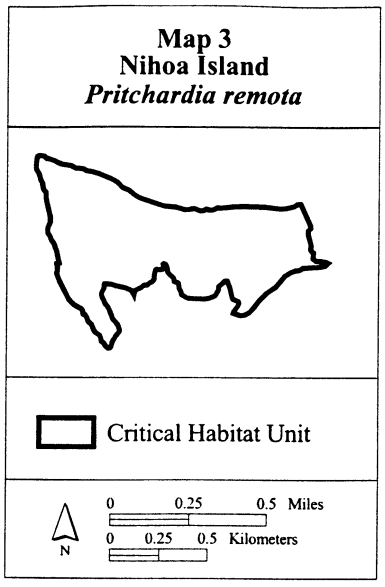
(ii) NOTE: Map 2 follows:



(3) Nihoa 2—*Pritchardia remota*—entire island (approximately 69 ha; 171 ac).

(i) Nihoa Island is located between 23°3′ N. and 23°4′ N. and between 161°54′ W. and 161°56′ W.

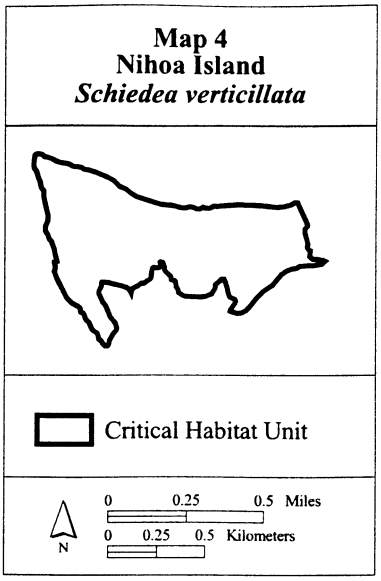
(ii) NOTE: Map 3 follows:



(4) Nihoa 3—*Schiedea verticillata*—entire island (approximately 69 ha; 171 ac).

(i) Nihoa Island is located between 23°3′ N. and 23°4′ N. and between 161°54′ W. and 161°56′ W.

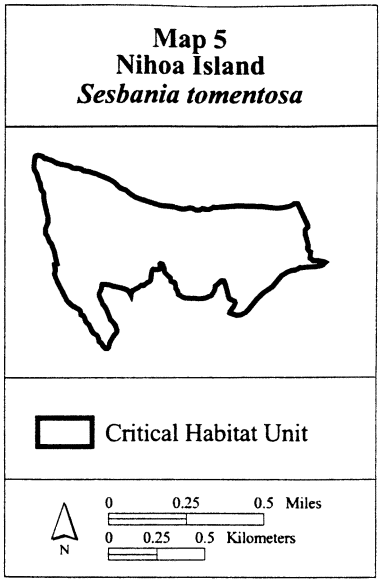
(ii) NOTE: Map 4 follows:



(5) Nihoa 4—*Sesbania tomentosa*—entire island (approximately 69 ha; 171 ac).

(i) Nihoa Island is located between 23°3′ N. and 23°4′ N. and between 161°54′ W. and 161°56′ W.

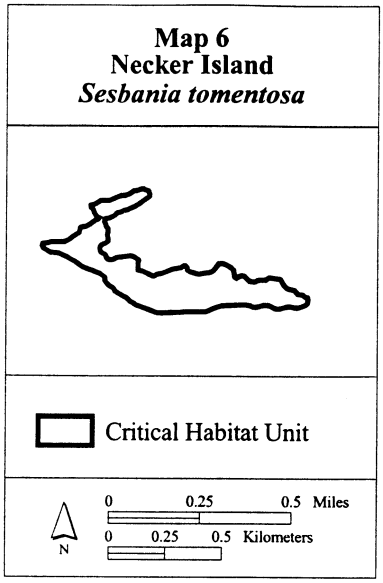
(ii) NOTE: Map 5 follows:



(6) Necker 1—*Sesbania tomentosa*—entire island (approximately 18 ha; 46 ac).

(i) Necker Island is located between 23°34′ N. and 23°35′ N. and between 164°41′ W. and 164°43′ W.

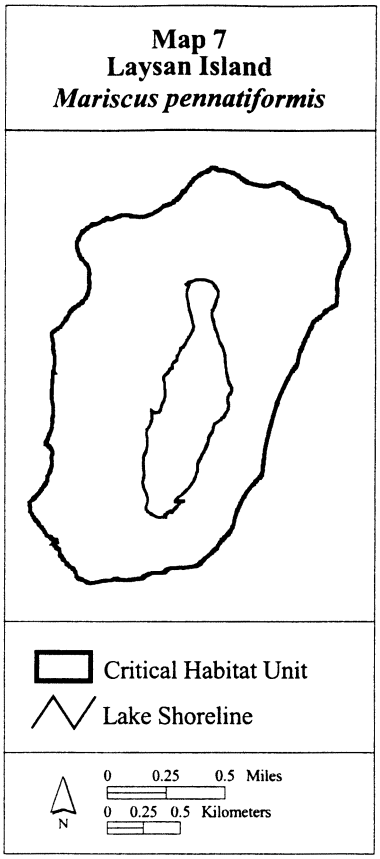
(ii) NOTE: Map 6 follows:



(7) Laysan 1—*Mariscus pennatiformis*—entire island (approximately 405 ha; 1,219 ac).

(i) Laysan Island is located between 25°45′ N. and 25°47′ N. and between 171°43′ W. and 171°45′ W.

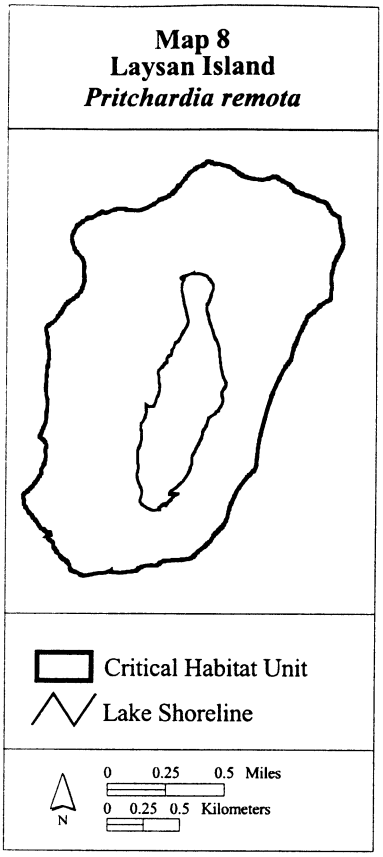
(ii) NOTE: Map 7 follows:



(8) Laysan 2—*Pritchardia remota*—entire island (approximately 405 ha; 1,219 ac).

(i) Laysan Island is located between 25°45′ N. and 25°47′ N. and between 171°43′ W. and 171°45′ W.

(ii) NOTE: Map 8 follows:



(9) Table of protected species within each critical habitat unit for the Northwestern Hawaiian Islands.

Island	Species—Occupied	Species—Unoccupied
Laysan	*Mariscus pennatiformis*	*Pritchardia remota*
Necker	*Sesbania tomentosa.*	
Nihoa	*Pritchardia remota, Schiedea verticillata, Sesbania tomentosa.*	*Amaranthus brownii*

(h) *Plants on the Northwestern Hawaiian Islands; Constituent elements.*

FAMILY AMARANTHACEAE: ***Amaranthus brownii*** (NCN)

Nihoa 1—*Amaranthus brownii,* identified in the legal description in paragraph (g) of this section, constitutes critical habitat for *Amaranthus brownii.*

On Nihoa, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(1) Shallow soil in fully exposed locations on rocky outcrops and containing one or more of the following associated native plant species: *Chenopodium oahuense, Eragrostis variabilis, Ipomoea indica, Ipomoea pes-caprae* ssp. *brasiliensis, Panicum torridum, Scaevola sericea, Schiedea verticillata, Sicyos pachycarpus, Sida fallax,* or *Solanum nelsonii;* and (2) Elevations between 30 and 242 m (100 and 800 ft).

FAMILY ARECACEAE: ***Pritchardia remota*** (LOULU)

Nihoa 2—*Pritchardia remota,* and Laysan 2— *Pritchardia remota,* identified in the legal descriptions in paragraph (g) of this section, consitute critical habitat for *Pritchardia remota.*

(1) On Nihoa, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Pritchardia remota* coastal forest community and containing one or more of the following associated native plant species: *Chenopodium oahuense, Sesbania tomentosa, Sida fallax,* or *Solanum nelsonii;* and

(ii) Elevations between sea level and 151 m (500 ft).

(2) On Laysan Island, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Coastal strand habitat with *Chenopodium oahuensee* and *Solanum nelsonii;* and

(ii) Elevations between sea level to 12 m (0 to 40 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea verticillata*** (NCN)

Nihoa 3—*Schiedea verticillata,* identified in the legal description in paragraph (g) of this section, constitutes critical habitat for *Schiedea verticillata.* On Nihoa, the currently known primary constituent elements of critical habitat for *Schiedea verticillata* include, but are not limited to, the habitat components provided by:

(1) Rocky scree, soil pockets, and cracks on coastal cliff faces and in *Pritchardia remota* coastal mesic forest and containing one or more of the following associated native plant species: *Eragrostis variabilis, Rumex albescens, Tribulus cistoides,* or lichens; and

(2) Elevations between 30 and 242 m (100 and 800 ft).

FAMILY CYPERACEAE: ***Mariscus pennatiformis*** (NCN)

Laysan 1—*Mariscus pennatiformis,* identified in the legal description in paragraph (g) of this section, constitutes critical habitat for *Mariscus pennatiformis.* On Laysan Island, the currently known primary constituent elements of critical habitat for *Mariscus pennatiformis* include, but are not limited to, habitat components provided by:

(1) Coastal sandy substrate containing one or more of the following associated native plant species: *Cyperus laevigatus, Eragrostis variabilis,* or *Ipomoea* sp.; and

(2) Elevation of 5 m (16 ft).

FAMILY FABACEAE: ***Sesbania tomentosa*** (OHAI)

Nihoa 4—*Sesbania tomentosa,* and Necker 1—*Sesbania tomentosa,* identified in the legal descriptions in paragraph (g) of this section, constitute critical habitat for *Sesbania tomentosa.* On Nihoa and Necker, the currently known primary constituent elements of critical habitat for *Sesbania tomentosa* include, but are not limited to, habitat components provided by:

(1) Shallow soil on sandy beaches and dunes in *Chenopodium oahuense* coastal dry shrubland or mixed coastal dry cliffs and containing one or more of the following associated native plant species: *Pritchardia remota, Scaevola sericea, Sida fallax,* or *Solanum nelsonii;* and

(2) Elevations between sea level and 84 m (0 and 276 ft).

[68 FR 9241, Feb. 27, 2003, as amended at 68 FR 13055, Mar. 18, 2003; 68 FR 26038, May 14, 2003; 68 FR 28072, May 22, 2003

EDITORIAL NOTE: The remainder of § 17.99 appears in 50 Part 17, Vol. 3 of 3, §§ 17.99(i)–End and 17.100–End.

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17.96 (b) added 1269
(a) amended 12851, 12874, 16988
(a)(7) corrected 20083
17.99 Added 9241
Heading and (a) heading amended; (c) and (d) added 13055
(e) and (f) added; heading revised 26038
Heading revised; (g) and (h) added 28072
Heading revised 36080
Heading revised 39704