West Maui (Honokowai Section)

Island: Maui

Size: 750 acres

Elevational range: 2,500 - 5,788 feet

Year established: 1986

Date surveyed: April 1988

Description: One of four sections that make up the West Maui Natural Area Reserve, the Honokowai Section is on the wet upper northern slopes of the West Maui Mountains. The native communities include two kinds of rare bogs, as well as wet forests, shrublands and a montane lake. This section has watershed value and includes many rare plants.

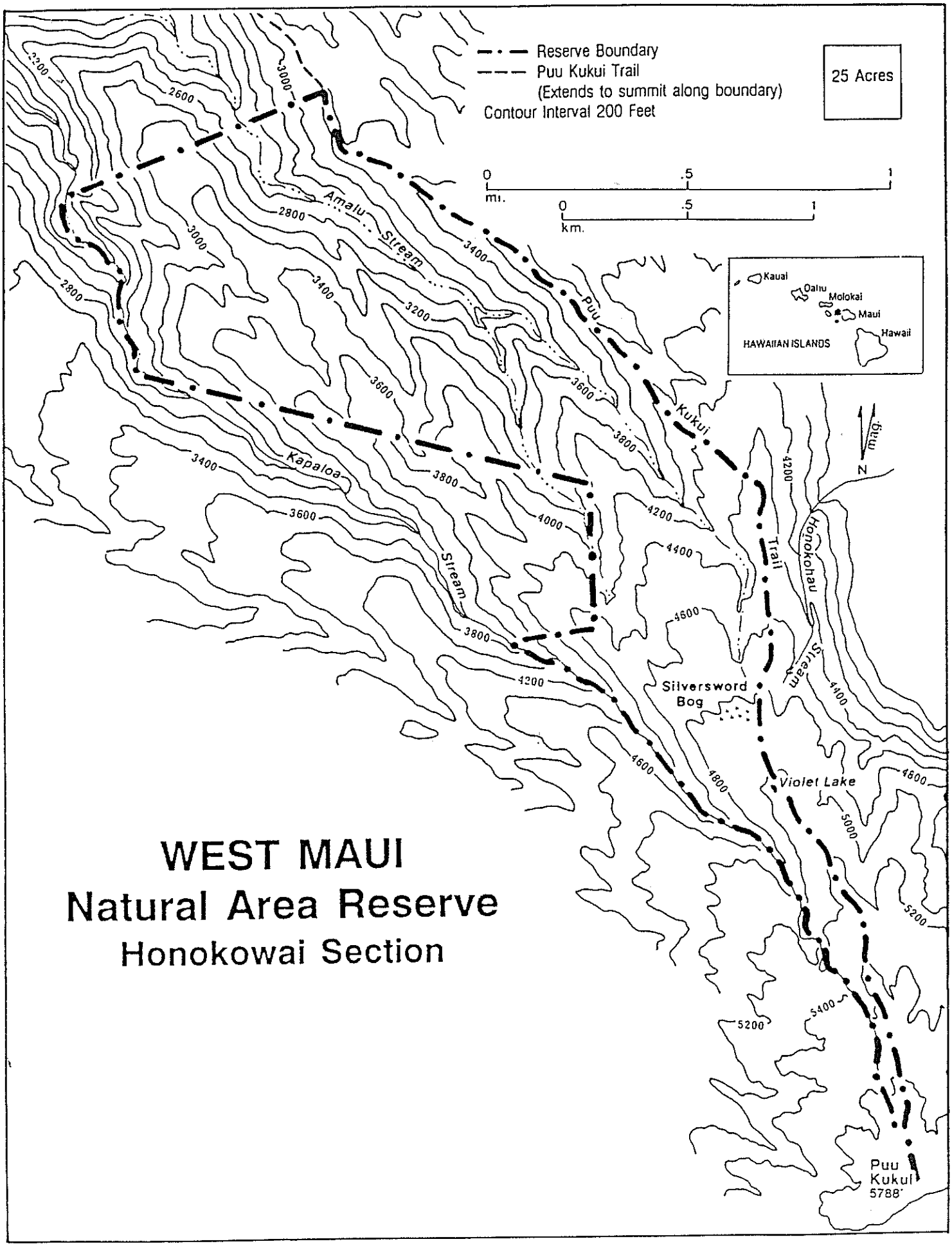
Natural Communities: 11 total, 2 rare

RANK	NAME
2	Mixed Sedge and Grass Montane Bog
2	'Ohi'a Mixed Montane Bog
3	Hawaiian Intermittent Stream
3	Hawaiian Montane Lake
3	Mamaki Lowland Wet Shrubland
3	Mixed Fern/Mixed Shrub Montane Wet Cliff
3	'Ohi'a/Mixed Shrub Montane Wet Forest
3	'Ohi'a/'Olapa Montane Wet Forest
3	'Ohi'a/Uluhe Lowland Wet Forest
3	'Ohi'a Montane Wet Shrubland
4	Uluhe Lowland Wet Shrubland

Native Plants: 315 total taxa, 81 rare (all four sections)

Native Animals: 9 total taxa, 5 rare (all four sections)

Management Highlights: Feral pig impact is the top management concern in this section. Strategic fencing, staff hunting, and a snaring program are recommended. Fence maintenance and ungulate control monitoring will be needed. Priority weeds such as blackberry and Tibouchina need removal and monitoring. A public education and volunteer program may be established.


Reserve Boundary
Puu Kukui Trail
(Extends to summit along boundary)
Contour Interval 200 Feet
25 Acres
0 .5 1
mi.
0 .5 1
km.
Kauai
Oahu
Molokai
Maui
Hawaii
HAWAIIAN ISLANDS
N
mag.
Amalu Stream
Puu Kukui Trail
Kapaloa Stream
Honokohau Stream
Silversword Bog
Violet Lake
Puu Kukui 5788'
2200
2600
3000
2800
3400
3200
3600
3800
4000
4200
4400
4600
4800
5000
5200
5400
WEST MAUI
Natural Area Reserve
Honokowai Section

West Maui (Kahakuloa Section)

Island: Maui

Size: 3,275 acres

Elevational range: 1,000 - 4,480 feet

Year established: 1986

Date surveyed: April 1988

Description: One of four sections of the West Maui Natural Area Reserve, the Kahakuloa Section lies on wet, windward slopes of the West Maui Mountains. The plateau of Eke Crater is still undisturbed by feral ungulates. This section includes the upper reaches of two perennial streams, and includes a rare montane bog surrounded by 'ohi'a wet forests. This section also has watershed value and includes many rare plants.

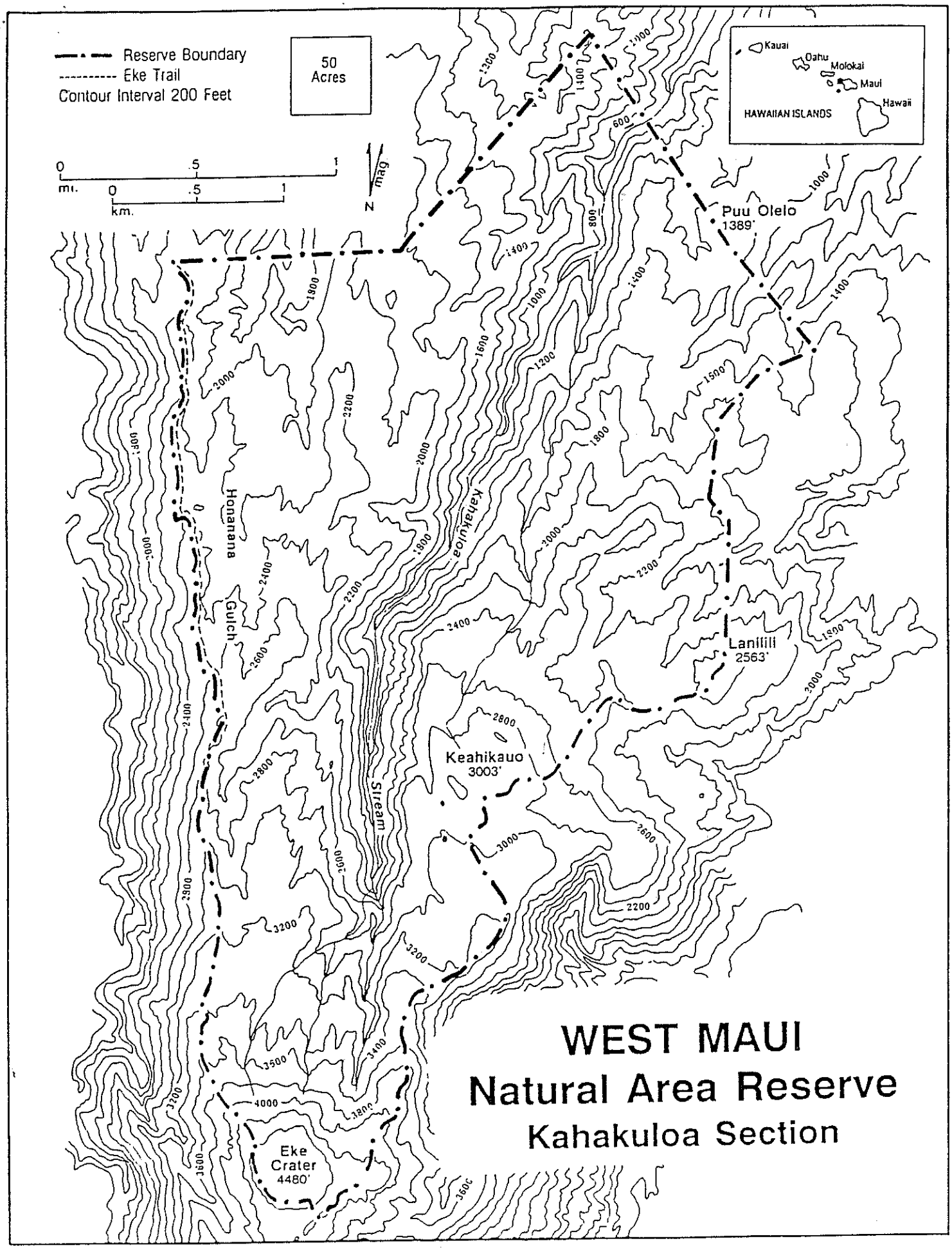
Natural Communities: 11 total, 2 rare

RANK	NAME
1	Hawaiian Continuous Perennial Stream
2	'Ohi'a Mixed Montane Bog
3	Hawaiian Intermittent Stream
3	Hawaiian Montane Lake
3	Mamaki Lowland Wet Shrubland
3	Mixed Fern/Mixed Shrub Montane Wet Cliff
3	'Ohi'a/Mixed Shrub Montane Wet Forest
3	'Ohi'a Montane Wet Shrubland
3	'Ohi'a/'Olapa Montane Wet Forest
3	'Ohi'a/Uluhe Lowland Wet Forest
4	Uluhe Lowland Wet Shrubland

Native Plants: 315 total taxa, 81 rare (all four sections)

Native Animals: 9 total taxa, 5 rare (all four sections)

Management Highlights: Feral pigs are the major threats to this section. Short fence sections have been constructed to block ungulates from Mt. Eke but other sections of fence are still needed. Pig removal by snaring and hunting both inside and outside the fences seems a feasible strategy, but fence maintenance and pig control monitoring are needed to assess results. Better access for public hunting is needed for the lower elevation areas. Priority weeds such as Clidemia and Tibouchina are targeted for management. An increased program of public education and volunteer help is recommended.


Reserve Boundary
Eke Trail
Contour Interval 200 Feet
50 Acres
0 .5 1
mi.
0 .5 1
km.
mag
N
Kauai
Oahu
Molokai
Maui
Hawaii
HAWAIIAN ISLANDS
Puu Olelo
1389'
Lanilili
2563'
Keahikauo
3003'
Eke
Crater
4480'
Honanana
Gulch
Kahakuloa
Stream
WEST MAUI
Natural Area Reserve
Kahakuloa Section

West Maui (Lihau Section)

Island: Maui

Size: 960 acres

Elevational range: 1,000 - 4,197 feet

Year established: 1986

Date surveyed: April 1988

Description: The driest of the four sections of the West Maui Natural Area Reserve, Lihau is a steep-sloped volcanic remnant that extends from dry leeward lowlands to a wet summit with cliffs on all sides. The 1988 survey indicated that the summit of Lihau remains ungulate-free. A rare grassland and shrubland occur near the lower boundaries of the reserve, and many rare plants are known from Lihau, including the federally endangered plant *Gouania hillebrandii*.

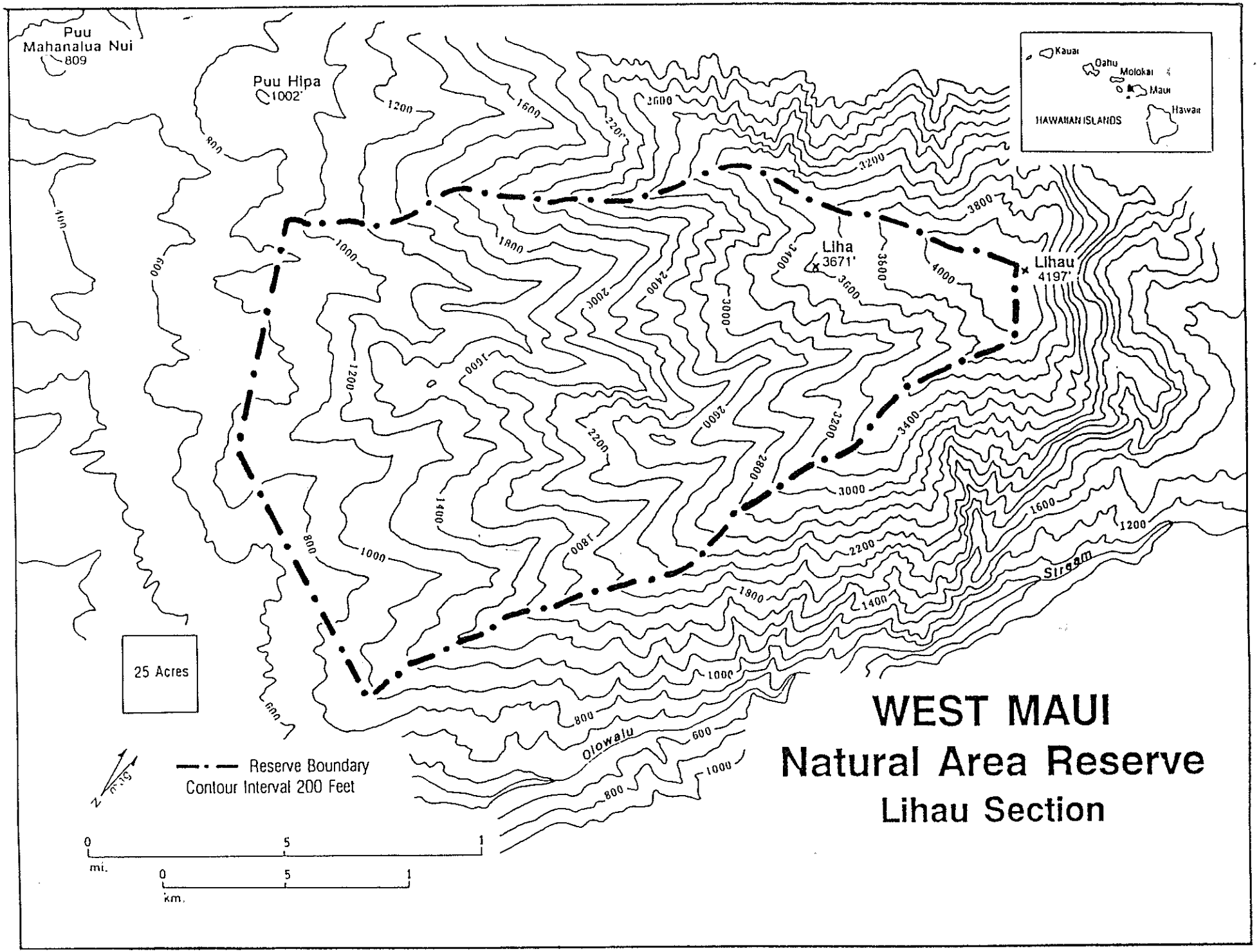
Natural Communities: 8 total, 2 rare

RANK	NAME
2	Ko'oko'olau Lowland Dry Shrubland
2	Pili Lowland Dry Grassland
3	'A'ali'i Lowland Dry Shrubland
3	Mixed Fern/Mixed Shrub Montane Wet Cliff
3	'Ohi'a/Mixed Shrub Montane Wet Forest
3	'Ohi'a Lowland Mesic Shrubland
3	'Ohi'a/'Olapa Montane Wet Forest
3	'Ohi'a/Uluhe Lowland Mesic Forest

Native Plants: 315 total taxa, 81 rare (all four sections)

Native Animals: 9 total taxa, 5 rare (all four sections)

Management Highlights: No ungulates occur at the summit of Lihau and many areas appear pristine. Much of the upper elevation areas are weed free. Management recommended is monitoring of priority weeds, expecially those present in the lower elevation areas. No fencing is recommended. Fire pre-suppression measures are recommended because of the potential for dry season fires.


Puu Mahanalua Nui
809
Puu Hipa
1002'
Liha
3671'
Lihau
4197'
Kauai
Oahu
Molokai
Maui
Hawaii
HAWAIIAN ISLANDS
Olowalu
Stream
25 Acres
Reserve Boundary
Contour Interval 200 Feet
0 5 1
mi.
0 5 1
km.
WEST MAUI
Natural Area Reserve
Lihau Section

West Maui (Panaewa Section)

Island: Maui

Size: 1,717 acres

Elevational range: 1,550 - 5,220 feet

Year established: 1986

Date surveyed: April 1988

Description: One of four sections of the West Maui Natural Area Reserve, Panaewa includes a rare montane bog, as well as representative 'ohi'a forests and shrublands. This section also includes rare plants.

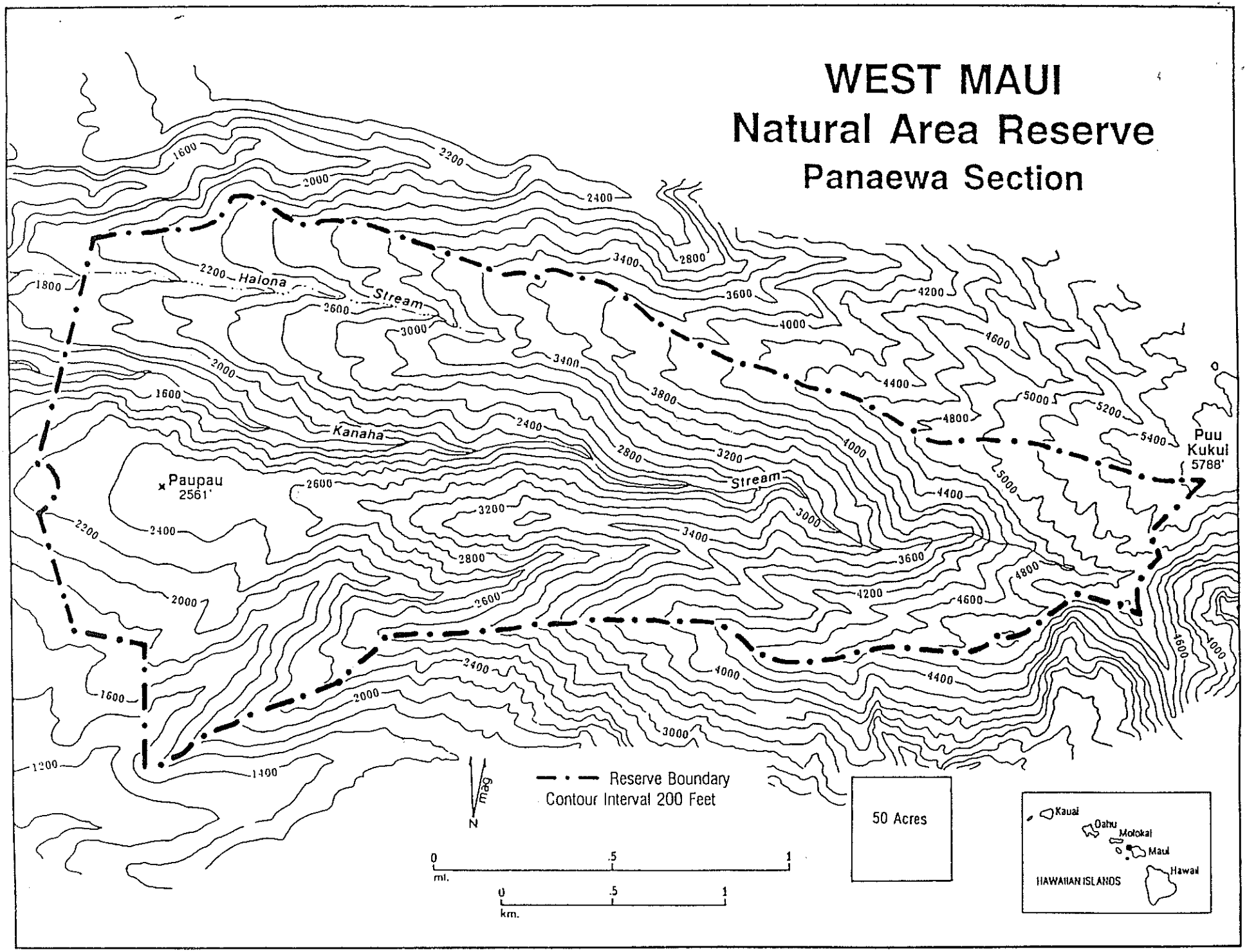
Natural Communities: 8 total, 1 rare

RANK	NAME
2	'Ohi'a Mixed Montane Bog
3	Hawaiian Intermittent Stream
3	Mamaki Lowland Wet Shrubland
3	Mixed Fern/Mixed Shrub Montane Wet Cliff
3	'Ohi'a/Mixed Shrub Montane Wet Forest
3	'Ohi'a Montane Wet Shrubland
3	'Ohi'a/'Olapa Montane Wet Forest
3	'Ohi'a/Uluhe Lowland Wet Forest

Native Plants: 315 total taxa, 81 rare (all four sections)

Native Animals: 9 total taxa, 5 rare (all four sections)

Management Highlights: Few ungulates currently exist in this section and much of the upper area is relatively pristine. No fencing is recommended, but staff control of ungulates is needed. Priority weeds such as Tibouchia need control. Monitoring will be necessary to locate priority weeds and remove them where found.


WEST MAUI
Natural Area Reserve
Panaewa Section
Halona
Stream
Kanaha
Stream
Paupau
2561'
Puu
Kukui
5788'
Reserve Boundary
Contour Interval 200 Feet
N
mag
0
.5
1
mi.
0
.5
1
km.
50 Acres
Kauai
Oahu
Molokai
Maui
Hawaii
HAWAIIAN ISLANDS