

Ecosystem Management Plan

Today's Army has a dual responsibility of fulfilling its mission to win in combat and its duty to protect the environment. The objective of the Ecosystem Management Plan (EMP) is to protect endangered species and their habitat and to steward native, natural communities located on Army lands. The EMP states that the Army is required to protect, conserve and enhance natural and cultural resources at PTA. The plan integrates actions for endangered species management, cultural resources management, outdoor recreation, fire control and integrated training area management.

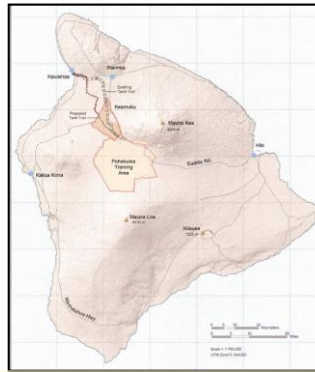
PTA contains 15 threatened and endangered plant species, 3 endangered birds and 1 endangered mammal. Under the Endangered Species Act, the Army is mandated by federal law to protect endangered flora and fauna. The Army established PTA's Environmental Office in 1996 to address and take action on this issue. Currently, the Environmental staff manage this environmentally sensitive area.

One highlight of the EMP is the successful propagation of all of the federally listed plant species in PTA's rare plant facility. "Propagation actions are important to maintain a genetic reservoir and provide a source for reestablishing populations of rare taxa in the wild" (Endangered Species Management Plan Report 1997).



For more information, please contact PTA's Environmental Office at (808) 969-3340 or email Tiana.Lackey@us.army.mil.

Pōhakuloa Training Area (PTA) Island of Hawai'i



Map by U.S. Fish & Wildlife Service

PTA was established in 1956 by the United States Army. It serves as a multi-functional facility for the U.S. Army Western Command and other Pacific Command Units.

PTA consists of 132,814 acres and is the largest national military training area outside of the continental United States. PTA is located in a tropical, sub-alpine, dryland ecosystem, one of the rarest of its kind on the planet. It is situated near the center of the island of Hawai'i. PTA consists of 23 training areas and 3 sections of PTA are designated bird and plant preserves.

PTA ranges from 4,000 to 9,000 feet above sea level. Its average annual temperatures range from 42 to 72 degrees Fahrenheit. PTA's average annual rainfall is 13.6 inches per year. PTA generally experiences lower temperatures during the winter months and is occasionally subject to fog and frost. Due to altitude, the percentage of oxygen in the air is less than at lower elevations and there is potential for sunburn and dehydration.

PTA is a very special and unique place with a rich natural and cultural history!



Māla Hō'ike'ike O Pōhakuloa (Pōhakuloa Interpretive Garden)

Exhibiting Hawai'i's Unique
Natural and Cultural Resources



Sections of the Interpretive Garden

A

Cultural Resources

This section exhibits cultural features found at PTA. It includes a replica of a religious shrine, a C-Shape temporary structure, a small fire pit and several other items related to Hawaiian culture at PTA.



C-Shape
Temporary
Structure

B

Native Plants

This section contains native grasses, shrubs and trees such as naio (*Myoporum sandwicense*), 'a'ali'i (*Dodonaea viscosa*), ilima (*Sida fallax*) akoko (*Chamaesyce olowaluana*), māmane (*Sophora chrysophylla*), and 'iliahi (*Santalum ellipticum*). These plants are abundant and provide habitat and food for native and non-native animals at PTA.



D. viscosa,
C. olowaluana,
S. chrysophylla,
S. ellipticum.

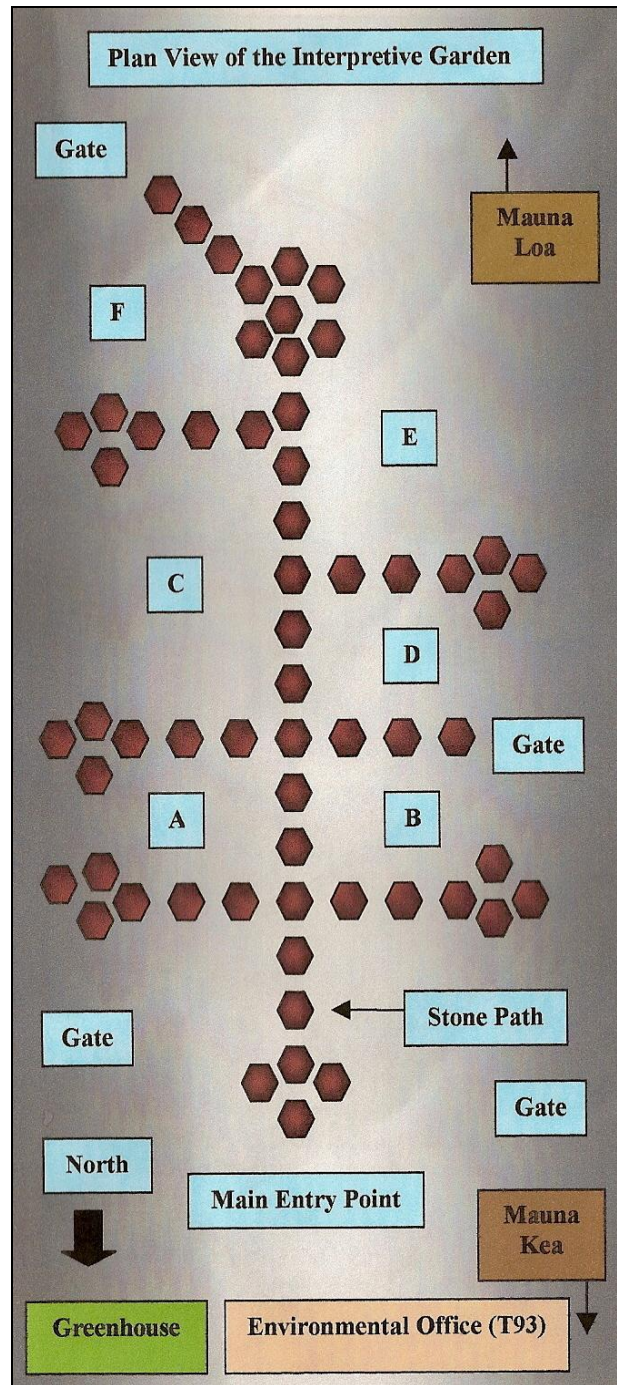
C

Rare Plants

This section includes threatened and endangered grasses, shrubs and trees including the Mauna Kea Pamakani (*Tetramolopium arenarium*), Hawaiian Prickle Leaf (*Solanum incompletum*), Hawaiian Mint (*Haplostachys haplostachya*), Lance-leaf Catchfly (*Silene lanceolata*), and Bent Lovegrass (*Eragrostis deflexa*). These plants are very rare at PTA due to fires, ungulate damage, drought, lack of pollinators, pathogens and insect pests.



S. hawaiiensis,
S. angustifolia,
T. arenarium.



Sections of the Interpretive Garden

D

Native Animals

Interpretive signs are placed throughout the garden, describing the animals present at PTA. PTA contains habitat for many native animals. Native birds are very common here in this sub-alpine ecosystem. Endangered bats, nēnē geese and Hawaiian hawks are also found here occasionally.



The Hawaiian
Hoary Bat
(*Lasiurus cinereus*)

E

Introduced Species

Introduced ungulates such as sheep, pigs, and goats are a huge problem at PTA. These species are a direct threat to rare plants because they browse most plants down to the ground. The garden is fenced to exclude ungulates which roam the cantonment area.



Wild Goats
Foraging for Food

F

Managing Natural and Cultural Resources at PTA

PTA's Natural and Cultural Resources Teams are working hard to protect this fragile, rare, dryland ecosystem. The staff is dedicated to preserving PTA's rich history. Supporting the Army's mission while promoting responsible stewardship of the land is an essential part of their work at PTA.



PTA Natural Resources Team