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Plants

Lo'ulu

Pritchardia affinis

SPECIES STATUS:

Federally Listed as Endangered

Genetic Safety Net Species

IUCN Red List Ranking - CR A1ce+2ce, B1+2abcde, C1+2a

Hawai'i Natural Heritage Ranking - Possibly

Extinct (GHC)

Endemism – Island

of Hawai'i

Critical Habitat - Designated

SPECIES INFORMATION: *Pritchardia affinis* of the palm family (Arecaceae) is a fan palm that reaches 10 to 25 m tall with pale pinkish wool covering the undersides of the petiole that extends onto the frond. The wedge-shaped frond has a green and smooth upper surface with scattered yellowish scales. The branched hairless flower clusters are located among the leaves.

DISTRIBUTION: Today, scattered individuals can be found in the Kohala Mountains and along the western and south eastern coasts of the Island of Hawai'i.

ABUNDANCE: There are 50 to 60 individuals within 8 populations.

LOCATION AND CONDITION OF KEY HABITAT: Most plants grow within areas of human habitation or development, and the trees may have been cultivated by Hawaiians or others rather than having occurred in these areas naturally. This species typically grows in coastal mesic forests at coastal sites or in gulches further inland at elevations between sea level and 610 m.

THREATS:

- Habitat degradation by feral pigs;
- Fruit predation by rats;
- Competition from alien plant species;
- Stochastic extinction;
- Reduced reproductive vigor due to the small number of remaining individuals.

CONSERVATION ACTIONS: The goals of conservation actions are not only to protect current populations, but also to establish new populations to reduce the risk of extinction.

The USFWS has developed a recovery plan that details specific tasks needed to recover this species. In addition to common statewide and island conservation actions, specific actions include:

- Survey historical range for surviving populations;
- Establish secure *ex-situ* stocks with complete representation of remaining individuals;
- Augment wild population and establish new populations in safe harbors.

MONITORING:

- Continue surveys of population and distribution in known and likely habitats;
- Monitor plants for insect damage and plant diseases.

RESEARCH PRIORITIES:

- Develop proper horticultural protocols and pest management;
- Survey *ex-situ* holdings and conduct molecular fingerprinting;
- Conduct pollination biology and seed dispersal studies;
- Map genetic diversity in the surviving populations to guide future re-introduction and augmentation efforts.

References:

Hawai'i Natural Heritage Program, 2005. Hawaii Natural Heritage Program Search, <http://www.hinhp.org/printpage.asp?spp=PDMAL0H0A0>.

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