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Plants

Ma'aloa

Neraudia ovata

SPECIES STATUS:

Federally Listed as Endangered

Genetic Safety Net Species

IUCN Red List Ranking – Critically Endangered (CR C2a)

Hawai'i Natural Heritage Ranking –

Critically Imperiled (G1)

Endemism – Island of Hawai'i

Critical Habitat - Designated

SPECIES INFORMATION: *Neraudia ovata*, of the nettle family (Urticaceae), is a sprawling or rarely erect shrub to a small tree, with stems 1 to 3 m (3 to 10 ft) long, and branches bearing short, somewhat erect hairs. The alternate, thin, stalked leaves are smooth-margined, grayish on the undersurface, 5 to 14 cm (2 to 5.5 in) long and 2 to 6.5 cm (0.8 to 2.6 in) wide, and have spreading, curved, nearly translucent hairs. Male and female flowers are found on separate plants.

DISTRIBUTION: Current range: north Kona region of Hawai'i; known historically from south Kona region of Hawai'i.

ABUNDANCE: Currently, five individuals are known to exist.

LOCATION AND CONDITION OF KEY HABITAT: Dry forests on lava flows. Open dry lowland forest with *Metrosideros*, *Reynoldsia sandwicensis*, *Capparis sandwichiana*, *Cocculus trilobus*. The one extant population is known from privately owned land in Kaloko. The habitat of *N. ovata* has been degraded by grazing sheep and goats. The spread of invasive alien plant species could be a serious problem for the survival of this species.

THREATS:

- Habitat loss and degradation due to agriculture, livestock, and infrastructure development;
- Competition with invasive alien species, especially *Pennisetum setaceum*;
- Fire.

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. 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:

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