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Plants

Ma‘o hau hele

Hibiscus brackenridgei subsp. *molokaiana*

SPECIES STATUS:
Genetic Safety Net Species
Hawai‘i Natural Heritage Ranking – Critically Imperiled; Possibly Extinct (G1TH)
Endemism – Moloka‘i

SPECIES INFORMATION: *Hibiscus brackenridgei* subsp. *molokaiana*, a member of the mallow family (Malvaceae), is a sprawling to erect shrub or small tree. Leaves 6-8 cm long, deeply lobed, calyx 1.5-2.5 cm long, involucral bracts 1/2 as long to as long as the calyx, and petals with or without basal maroon spotting, 3.5-5(-6) cm long.

DISTRIBUTION: *Hibiscus brackenridgei* subsp. *molokaiana* is endemic to the island of Moloka‘i. It has been recorded at only a single location near the southwestern tip of the island, the most arid part.

ABUNDANCE: The occurrence was noted to consist of “a number of plants.”

LOCATION AND CONDITION OF KEY HABITAT: Today, the vegetation on this part of Moloka‘i consists of dry alien shrublands and forests. The original native vegetation of this area was most likely dry grasslands and shrublands, with forests in gulch bottoms.

THREATS:

- Browsing by axis deer;
- Continued cattle grazing;
- Competition from alien plants;
- 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.

RESEARCH PRIORITIES: (if relocated)

- 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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