

## Picture: Rothschild Collection

# **Forest Birds**

# Maui 'ākepa

Loxops coccineus ochraceus

### **SPECIES STATUS:**

Federally Listed as Endangered
State Listed as Endangered
State Recognized as Endemic
NatureServe Heritage Rank G1/TH—
Critically Imperiled/Subspecies Possibly Extinct
IUCN Red List Ranking—Endangered

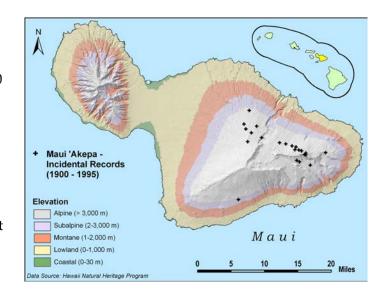
Revised Recovery Plan for Hawaiian Forest Birds – USFWS 2006

SPECIES INFORMATION: The Maui 'ākepa is a small, insectivorous Hawaiian honeycreeper (Family: Fringillidae) endemic to the island of Maui at the subspecies level. 'Ākepa also are known from the island of Hawai'i (*L. c. coccineus*) and O'ahu (*L. c. rufus*); the latter subspecies is certainly extinct. Currently, all 'ākepa are considered one species, although they are recognized as critically imperiled at the subspecies level. Adults are less colorful compared to the Hawai'i 'ākepa, and there is no information on the plumage sequence of the Maui subspecies. The lower mandible of the 'ākepa is slightly bent to one side which results in the mandible tips being offset; a characteristic shared with the 'akeke'e (*L. caeruleirostris*) and the Hawai'i 'ākepa. Although almost nothing is known about its life history, the Maui 'ākepa likely forages in a similar manner to the Hawai'i 'ākepa, and is most often observed in 'ōhi'a (*Metrosideros polymorpha*) forests. Although based on a single observation, in stark contrast to the Hawai'i 'ākepa, the Maui subspecies apparently builds an open-cup nest in the terminal foliage of 'ōhi'a trees.

#### **DISTRIBUTION:** Unknown.

Probably extinct. Last sightings occurred on the northeastern slopes of Haleakalā between 1,700 and 2,000 meters (5,500 – 7,000 feet) elevation. Historical distribution is poorly known, but like many Hawaiian forest birds the original range likely included all forested regions of the island.

**ABUNDANCE:** The Hawaiian Forest Bird Survey (1980), estimated the population at  $230 \pm 290$  (95% confidence interval) individuals, but



reliance on auditory detections may have biased this estimate. No 'ākepa were found during the Hawai'i Rare Bird Search (1995 - 1999). The last reliable sightings occurred in 1970.

**LOCATION AND CONDITION OF KEY HABITAT:** Virtually all sightings of the Maui 'ākepa in this century were in wet montane 'ōhi'a forests on the northeastern slopes of Haleakalā. These forests vary from intact to degraded. Areas where the Maui 'ākepa have most recently been observed are managed by the State of Hawai'i or by the National Park Service.

**THREATS:** Unknown. However, the Maui 'ākepa was likely susceptible to the same factors that threaten other native Hawaiian forest birds including loss and degradation of habitat, predation by introduced mammals, and disease. For Maui 'ākepa, the following was likely of particular concern:

<u>Disease</u>. The precipitous decline of the Maui and O'ahu subspecies and the restriction of the Hawai'i 'ākepa to high-elevation forests suggests that disease played an important role in the demise of Maui 'ākepa.

**CONSERVATION ACTIONS:** If the species persists, it likely benefits from actions to conserve other endangered forest birds on northeastern Haleakalā. These efforts include fencing, ungulate and small mammal control, forest restoration, habitat monitoring and studies of disease and disease vectors. Should this species be rediscovered, the Rare Bird Recovery Protocol contained in the U.S. Fish and Wildlife Service (USFWS) *Recovery Plan for Hawaiian Forest Birds* would be implemented, and management in anticipation of that possibility should include continued protection and management of wildlife sanctuaries and refuges.

MONITORING: Continue forest bird surveys and habitat monitoring.

**RESEARCH PRIORITIES:** Research priorities for most Hawaiian forest birds include improving methods for controlling rats and feral cats in native forests, determining the ecological requirements of *Culex* mosquitoes at mid- and high-elevation forests, and developing methods to control mosquito populations. Given that this species is likely extinct, there are no research priorities specific to the Maui 'ākepa.

#### **References:**

IUCN Red List of Threatened Species. 2015. Version 2014.3. Available at: <a href="www.iucnredlist.org">www.iucnredlist.org</a>. (Accessed May 2015).

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