



Picture: Rothschild Collection

Forest Birds

Kākāwahie or Moloka'i creeper

Paroreomyza flammea

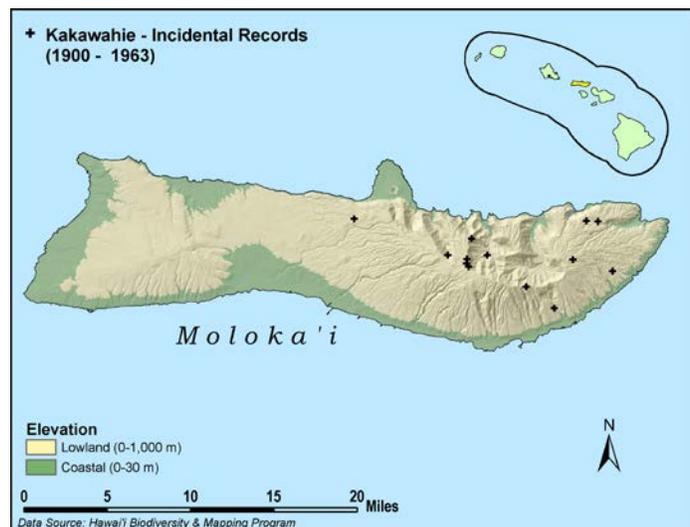
SPECIES STATUS:
 Federally Listed as Endangered
 State Listed as Endangered
 State Recognized as Endemic
 NatureServe Heritage Rank GH—Possibly Extinct
 IUCN Red List Ranking—Extinct
 Revised Recovery Plan for Hawaiian Forest Birds—USFWS 2006

SPECIES INFORMATION: The kākāwahie, or Moloka'i creeper, is a small, sexually dichromatic, insectivorous Hawaiian honeycreeper (Family: Fringillidae) endemic to the forests of eastern Moloka'i. Males are scarlet red; females are a dull rusty color. The species' Hawaiian name translates as "woodchopping" and apparently describes the species chipping call. Kākāwahie forage in groups, gleaning invertebrates from leaves, bark, and epiphytes in wet 'ōhi'a (*Metrosideros polymorpha*) forests. Little is known about the species' breeding biology, but it is assumed to be similar to that of the Maui creeper (*P. montana*). First described in 1889, the last bird was observed less than 100 years later.

DISTRIBUTION: Unknown. Probably extinct. Last observed on the west rim of Pelekunu Valley. Kākāwahie were common in native forests of eastern Moloka'i at the end of the 19th century. Original range likely included all forested regions of Moloka'i.

ABUNDANCE: Unknown. The last kākāwahie was observed in 1963 and the species is probably extinct.

LOCATION AND CONDITION OF KEY HABITAT: Unknown. Was known to occur in wet 'ōhi'a (*Metrosideros polymorpha*) forests from low to high elevations, and other heavily wooded native areas of eastern Moloka'i. The areas where the species was last observed are managed by the State as Natural Area Reserves or by The Nature Conservancy.



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

- Disease. This species rapid decline and the fact that no habitat above 1,250 meters (4,100 feet) occurs on Moloka'i suggests disease may have played an important role in the species' decline.

CONSERVATION ACTIONS: If the species persists, it likely benefits from actions to conserve other endangered forest birds of eastern Moloka'i including the establishment of the protected areas, regular surveys of forest bird populations, habitat monitoring, and studies of disease and disease vectors. Should this species be rediscovered, the Rare Bird Recovery Protocol outlined in the U.S. Fish and Wildlife Service (USFWS) *Revised 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 on all islands.

RESEARCH PRIORITIES: Research priorities for most Hawaiian forest birds include improving methods for controlling rats (*Rattus* spp.) and feral cats (*Felis silvestris*) 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 kākāwahie.

References:

Baker PE, Baker H. 2000. Kākāwahie (*Paroreomyza flammea*) and O'ahu alauahio (*Paroreomyza maculata*). In *The Birds of North America*, No. 503 (Poole A, Gill F, editors.). Philadelphia, (PA): The Academy of Natural Sciences; and Washington DC: The American Ornithologists' Union.

IUCN Red List of Threatened Species. 2015. Version 2014.3. Available at: www.iucnredlist.org. (Accessed May 2015).

Scott JM, Mountainspring S, Ramsey FL, Kepler CB. 1986. Forest bird communities of the Hawaiian islands: their dynamics, ecology and conservation. Lawrence, (KS): Cooper Ornithological Society.

U.S. Fish and Wildlife Service. 2006. Revised Recovery plan for Hawaiian forest birds. Portland, (OR): U.S. Fish and Wildlife Service.