



Picture: Rothschild Collection

## Forest Birds

# Bishop's 'ō'ō

*Moho bishopi*

### SPECIES STATUS:

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:** Known only from Moloka'i, Bishop's 'ō'ō is a large, noisy honeyeater (Family: Meliphagidae). This striking species is black with yellow ear patches, under tail coverts, and maxillary tufts; sexes are similar. The bird's vocalizations have been described as varied and "unlike any other native bird." Bishop's 'ō'ō appears to be primarily nectarivorous, preferring lobelia (Campanulaceae) flowers. Little is known about this species' life history and nothing is known about its nesting biology.

**DISTRIBUTION:** Unknown. Probably extinct. Historic range of Bishop's 'ō'ō likely included all native forests of eastern Moloka'i. Subfossils suggest it may have occurred on Maui. Sightings in the 1980s of a possible 'ō'ō species on Maui were never confirmed.

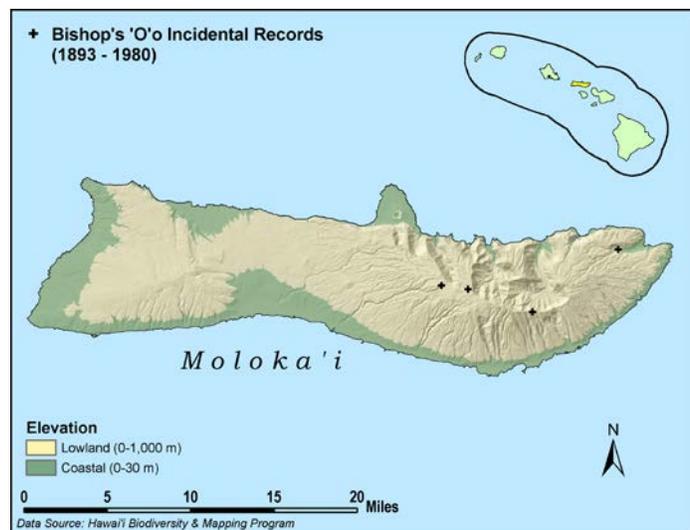
**ABUNDANCE:** Bishop's 'ō'ō was last observed in 1904 and is probably extinct. No information on historical abundance.

### LOCATION AND CONDITION OF KEY HABITAT:

Unknown. Bishop's 'ō'ō occupied the montane forests of eastern Moloka'i. The areas where the species was last observed are managed by the State of Hawai'i as a Natural Area Reserve or by private conservation entities (e.g., The Nature Conservancy) as a Natural Area Partnership Preserve.

**THREATS:** Unknown. However, Bishop's 'ō'ō likely were 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 Bishop's 'ō'ō populations, the following likely were of particular concern:

- Disease. 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.



- Hunting. Bishop's 'ō'ō were exploited for their feathers, which were used in Hawaiian featherwork articles such as capes and *kāhili* (feather standard). Exploitation may have increased with the introduction of firearms by Europeans.

**CONSERVATION ACTIONS:** If the species persists, it likely benefits from management activities to conserve other endangered forest birds on eastern Moloka'i, including the establishment and management of protected areas, regular surveys of forest bird populations, monitoring of habitat conditions, 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 continuing to protect and manage wildlife sanctuaries and refuges.

**MONITORING:** Continue forest bird surveys and habitat monitoring.

**RESEARCH PRIORITIES:** Research priorities for most Hawaiian forest birds include developing improved 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 Bishop's 'ō'ō.

**References:**

- IUCN Red List of Threatened Species. 2015. Version 2014.3. Available at: [www.iucnredlist.org](http://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.
- Sykes PW, Kepler AK, Kepler CB, Scott JM. 2000. Kaua'i 'ō'ō (*Moho braccatus*), O'ahu 'ō'ō (*Moho apicalis*), Bishop's 'ō'ō (*Moho bishopi*), Hawai'i 'ō'ō (*Moho nobilis*), and kioea (*Chaetoptila angustipluma*). In *The Birds of North America*, No. 535 (Poole A, Gill F, editors.). Philadelphia, (PA): The Academy of Natural Sciences; and Washington DC: The American Ornithologists' Union.
- U.S. Fish and Wildlife Service. 2006. Revised Recovery plan for Hawaiian forest birds. Portland, (OR): U.S. Fish and Wildlife Service.