## **Forest Birds**



## Bishop's 'Ō 'ō

Moho bishopi

## **SPECIES STATUS:**

State recognized as Endemic NatureServe Heritage Rank GH – Known only from historic records IUCN Red List Ranking – Extinct Draft Revised Recovery Plan for Hawaiian Forest Birds – USFWS 2003

Picture: Rothschild Collection

**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 nectavorous, 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 this species may have occurred on Maui.

**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:

- <u>Disease</u>. 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.
- <u>Hunting</u>. 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 designed 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 USFWS Draft Revised Recovery Plan for Hawaiian Forest Birds would be implemented, and management in anticipation of that possibility should include:

Continue protection and management of wildlife sanctuaries and refuges.

**MONITORING:** Continue forest bird surveys and habitat monitoring. This information is needed to assess the efficacy of habitat management efforts.

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

## **References:**

- 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 o'o (*Moho braccatus*), O'ahu 'o'o (*Moho apicalis*), Bishop's 'o'o (*Moho bishopi*), Hawai'i 'o'o (*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. 2003. Draft revised Recovery plan for Hawaiian forest birds. Portland, (OR): U.S. Fish and Wildlife Service. 428 pp.