



Forest Birds

'Ōma'ō

Myadestes obscurus

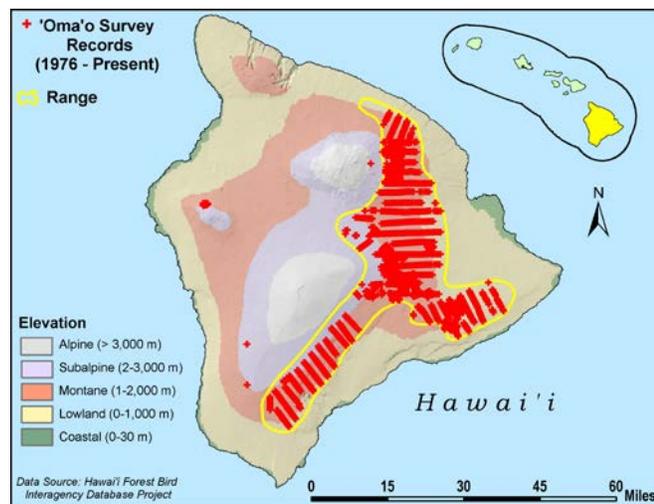
SPECIES STATUS:

State Recognized as Endemic
NatureServe Heritage Ranking G3 –
Vulnerable
IUCN Red List Ranking – Vulnerable

SPECIES INFORMATION: One of five species of Hawaiian solitaires (family: Turdidae), the 'ōma'ō is endemic to the island of Hawai'i. They often perch silently for long periods and are usually detected by their song; however males perform a flight-song display known as "skylarking." Like all adult Hawaiian solitaires, 'ōma'ō have drab olive-brown and gray plumage. Diet consists primarily of fruits of native and introduced understory plant species, although they also take koa (*Acacia koa*) flowers from the canopy and prey on invertebrates, including earthworms, snails, spiders, and insects. The life history is well-studied. Both sexes defend small nesting territories. Nests are built by females in a variety of locations (e.g., cavities, trunk forks); females also perform most incubation and brooding. Clutch size is one or two eggs, and double brooding occurs. The young remain in natal territories for four to six months after fledging. A male-biased sex-ratio exists, but its significance to populations is unknown.

DISTRIBUTION: Primarily occurs in two populations on the eastern and southern slopes of the island of Hawai'i at elevations greater than 1,000 meters (3,300 feet). A third, smaller population occurs in alpine scrub between 2,000 and 3,000 meters (6,500 – 9,750 feet). Currently occupies about 30 percent of their former range, which historically included habitats between 300 and 3,000 meters (1,000 – 9,750 feet).

ABUNDANCE: The Hawaiian Forest Bird Surveys (1976-79, 1983) estimated the population at 170,000 birds. Based on more recent surveys, populations appear stable and may be increasing below 1,200 meters (3,450 feet).



LOCATION AND CONDITION OF KEY HABITAT: Mesic and wet montane 'ōhi'a (*Metrosideros polymorpha*) or mixed 'ōhi'a and koa forests in the Hāmākua, Ka'ū, and Kīlauea districts. These forests support important food plants, including 'ōlapa (*Cheirodendron trigynum*), kōlea (*Myrsine lessertiana*), kāwa'u (*Ilex anomala*), naio (*Myoporum sandwicense*), pīlo (*Coprosma*

spp.), pūkiawe (*Styphelia tameiameia*), 'ōhelo (*Vaccinium* spp.), and 'ākala (*Rubus hawaiiensis*). In the small alpine scrub population on Mauna Loa, pūkiawe, 'ōhelo, kūkaenē (*Coprosma ernodeoides*), and 'a'ali'i (*Dodonea viscosa*) are important food plants. Although most of the current range occurs on State and federal lands, habitat conditions vary considerably.

THREATS: 'Ōma'o are 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 'ōma'o, the following are of particular concern:

- Disease. The prevalence of disease in areas tested is low and five 'ōma'o exposed to malaria recovered quickly, suggesting a greater disease resistance compared to other native forest birds. However, the species' disappearance from lower elevations is the pattern of decline noted in other Hawaiian birds susceptible to mosquito-borne diseases.
- Predation. Nests are very accessible and vulnerable to predation by rats (*Rattus* spp.). Predation by native raptors also is likely.
- Habitat degradation. 'Ōma'o occur at lower densities in degraded habitat. Pigs (*Sus scrofa*) and other ungulates likely destroy important food plants.

CONSERVATION ACTIONS: 'Ōma'o likely have benefited from management efforts designed to conserve other endangered forest birds and native habitat at Hakalau Forest National Wildlife Refuge, Hawai'i Volcanoes National Park, and the 'Ōla'a/Kīlauea Watershed Partnership. These efforts include fencing, ungulate and small mammal control, forest restoration, habitat monitoring, and studies of disease and disease vectors. In addition to these efforts, future actions specific to the protection of 'ōma'o may include the following:

- Protect and restore native forests above 1,500 meters (4,500 feet), and eliminate feral ungulates and non-native plants.
- Conduct control or eradication of rats and feral cats in areas occupied by 'ōma'o.
- Conduct public education and outreach.
- Continue 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 ecological requirements of *Culex* mosquitoes at mid- and high-elevation forests, and developing methods to control mosquito populations. Research priorities specific to 'ōma'o include the following:

- Identify disease-resistant individuals.
- Develop improved techniques to control alien weed species.

References:

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.

Wakelee KM, Fancy SG. 1999. 'Ōma'o (*Myadestes obscurus*), kama'o (*Myadestes myadestinus*), oloma'o (*Myadestes lanaiensis*), and 'amaui (*Myadestes woahensis*). In *The Birds of North America*, No. 460 (Poole A, Gill F, editors.). Philadelphia, (PA): The Academy of Natural Sciences; and Washington DC: The American Ornithologists' Union.