

Photo

Forest Birds

Maui 'Alauahio or Maui Creeper

Paroreomyza montana newtoni

SPECIES STATUS:

State recognized as endemic
Hawaii Natural Heritage Ranking G4—Apparently secure

SPECIES INFORMATION: Maui 'alauahio, or Maui creeper, are small, insectivorous Hawaiian honeycreepers endemic to the island of Maui. 'Alauahio glean invertebrates from woody and leafy parts of a variety of plants. Males and females defend small (1-2 ha) home ranges against conspecifics year round and will chase 'apapane (*Himantione sanguinea*) and Japanese white-eye (*Zosterops japonicus*) if they are too close to nests. 'Alauahio are socially monogamous and paired for life, but extra-pair copulation has been genetically confirmed. Females choose the nest site and build open-cup nests; nest material varies by habitat type. Clutch size is two; only one brood is raised. Female incubates; male feeds female on and off nest. 'Alauahio are the only honeycreepers with helpers at the nest. These are usually offspring of the pair from the previous year (siblings to the current clutch); they feed the female, nestlings and fledglings. Fledglings are fed for 2-3 months, and young remain with their parents in family groups for 18-20 months.

DISTRIBUTION: Maui 'alauahio are found in 3 disjunct populations in forests above 900 meters (3000') on the slopes of Haleakala. 'Alauahio were historically common in west Maui and on La-na'i, but these populations have been extirpated. Fossil evidence suggests that 'alauahio were common across the south side of the island and that their range extended to lower elevations.

ABUNDANCE: Estimated 'alauahio population in 1980 was 35,000 ± 5000 individuals (95% CI). Surveys from 1995-1997 suggest a similar total population, though densities have decreased in areas below 1600 meters (5250') and the range appears to have contracted.

LOCATION AND CONDITION OF KEY HABITAT: Maui 'alauahio are found in 3 disjunct populations in forests above 900 meters: 1) a swath from Waikamoi Preserve to Kipahulu Valley, 2) in exotic forests at Polipoli State Park on southwestern Haleakala, and 3) in remnant native dry forest of Kahikinui. This habitat is primarily wet and mesic montane forest dominated by 'ohi'a (*Metrosideros polymorpha*), although 'alauahio are also found in subalpine

mamane (*Sophora chrysophylla*) scrub, and in dry and mesic alien *Pinus* spp. forests. Their range includes both areas with an intact native understory and areas with severely degraded or missing understory. The northeastern part of the range is under active management for conservation by the state of Hawaii (Forest Reserve and Natural Area Reserve), the National Park Service, and private landowners including the Nature Conservancy and others, all of whom have joined into the East Maui Watershed Partnership. The exotic forest habitat is also under state or federal management and habitat conditions there are considered stable, though the habitat condition varies tremendously.

THREATS: Although the species is apparently secure, it is susceptible to the same threats as other native Hawaiian forest birds. The following are specifically quantified for Maui 'alauahio:

- Predation of nests by rats has been confirmed; eggs, nestlings, fledglings and possibly adult females are taken. The female habit of begging near the nest may exacerbate this problem.
- Avian disease likely limits the low elevation range of this species. Susceptibility to malaria is documented. At Kahikinui, very few individuals show signs of avian pox in an area where many 'amakihi (*Hemignathus virens*) and 'apapane (*Himatione sanguinea*) are infected. This may indicate either a lower susceptibility or a higher mortality rate.
- Habitat degradation continues in some areas. Of particular concern is the growing axis deer population on Maui, which is not confined by the fencing currently in place.

CONSERVATION ACTIONS: No actions specifically target Maui 'alauahio, but actions taken for endangered forest bird species on northeastern Haleakala almost certainly benefit 'alauahio as well. These efforts include fencing and ungulate control, small mammal control, forest restoration, monitoring and disease research.

- Additionally, fencing and ungulate removal are ongoing on Hawaiian Homelands at Kahikinui. Restoration of this remnant dry forest might allow the small 'alauahio population there to recover.
- Develop techniques for translocation so that newly restored or regenerated high elevation forest sites can be recolonized.

MONITORING:

- Continue population and habitat quality surveys of forest birds on Maui to assess efficacy of habitat management efforts.
- Monitor effects of predator control on survival.

RESEARCH PRIORITIES:

- Population dynamics and demography, especially with respect to management efforts to control ungulates and rodents and/or to restore higher elevation forests.

References:

Baker, H., and P. E. Baker. 2000. Maui 'Alauahio (*Paroreomyza montana*). In *The Birds of North America*, No. 504 (A. Poole and F. Gill, eds.). The Birds of North America, Inc. Philadelphia, PA.