Megalagrion oceanicum. Photo: Dan Polhemus, USFWS.

Oceanic Hawaiian damselfly

Megalagrion oceanicum

SPECIES STATUS:
Federally Listed as Endangered
State Listed as Endangered
State Recognized as Endemic

GENERAL INFORMATION: *Megalagrion oceanicum* (McLachlan, 1883) is a large, relatively robust damselfly. Like its relatives *M. heterogamias* of Kaua'i and *M. blackburni* of Hawai'i, males are predominantly red except near the tip of the abdomen, while females have a dull greenish thorax and a dark abdomen. The size and the predominantly red coloration of the males make them conspicuous when flying about. Adults are found along stream corridors in the vicinity of fast-moving stream sections that serve as breeding sites; they are strong fliers and may also be found in adjacent forest.

DISTRIBUTION: Endemic to O'ahu, it formerly occurred on both sides of the island but is now apparently extirpated from the Wai'anae range. In the Ko'olau range, it occurs in scattered locations along streams on the windward side of the central and northern region. Twelve populations are currently known.

ABUNDANCE: Unknown. The population is thought to be relatively small due to the highly constrained habitat available.

LOCATION AND CONDITION OF KEY HABITAT: The naiads live in fast-flowing sections of perennial montane streams, but may come out of the water to forage on mossy banks and rocks. Like most native damselflies, this species cannot survive where introduced fish and frogs are present. Although it historically occurred close to sea level and in all habitable streams, it is now restricted to upper elevations in streams where barriers such as waterfalls prevent upstream movement of aquatic predators.

THREATS:

- Habitat loss and degradation. Habitat is lost or degraded by erosion, the presence of feral ungulates, stream diversion and alteration, and alien aquatic plants.
- Predation. Non-native predators, including invasive fish, frogs, ants, birds, and reptiles, consume this species.

CONSERVATION ACTIONS: The goals of conservation actions are not only to protect current populations and key breeding habitats, but also to establish additional populations, thereby reducing the risk of extinction. For *Megalagrion oceanicum* specifically, management needs include the following:

- Conduct surveys around known populations to determine threat levels and control needs.

- Conduct studies on life history and essential habitats to better direct conservation measures.
- Use these results to create a management plan for species recovery.

MONITORING: Periodically census populations in order to assess their stability and trends.

RESEARCH PRIORITIES:
- Survey for additional populations, in both historical and novel sites.
- Conduct studies to determine if reintroduction to additional sites is feasible.

References:

Polhemus DA, and Asquith AA. 1996. Hawaiian Damselflies: A Field Identification Guide. Bishop Museum Press, Honolulu, Hawai'i.

U.S. Fish and Wildlife Service. 2012. Endangered and threatened wildlife and plants; endangered status for 23 species on Oahu and designation of critical habitat for 124 species; final rule. Federal Register 77:57648–57862.