

Photo of Moorhen

Water Birds

‘Alae ‘Ula or Hawaiian Moorhen

Gallinula chloropus sandvicensis

SPECIES STATUS:

Federally Listed as Endangered

State Listed as Endangered

State recognized as indigenous

Hawai‘i Natural Heritage Ranking G5-Demonstrably Globally Secure

SPECIES INFORMATION: Little is known about breeding biology and feeding habits. Generally nest in areas with standing freshwater less than 24 inches deep, placed within dense emergent vegetation over shallow water. Particular species of emergent plant used for nest construction is not as important as stem density and vegetation height. Nesting occurs year round, but most occur from March through August. Nesting is tied to water levels and vegetation growth, with an average clutch size of 8.4 eggs. Food items consist of algae, aquatic insects, and mollusks and snails. They are opportunistic feeders so diet may vary with particular habitat. Very secretive, preferring to forage in dense emergent vegetation. Good swimmers that cross open water to reach foraging sites. In Hawaiian mythology, a moorhen brought fire to human kind, which explains the red on its forehead, a symbol of the scorching from the fire.

DISTRIBUTION:

Historically common on the main Hawaiian Islands (except La-na‘i and Ka-ho‘olawe), but by the 1940s its status was declining on islands such as O‘ahu, Maui and Moloka‘i. Current distributions are found on Kaua‘i and O‘ahu (however, moorhens are quite secretive and current survey methods are inadequate to accurately determine populations). On Kaua‘i, sizable populations exist in the Hanalei and Wailua River valleys with other populations found at the irrigation canals on the Mana Plain of western Kaua‘i and wetland agricultural areas such as taro fields. On O‘ahu, distribution is widely spread but is most common in between Haleiwa and Waimanalo. Small numbers are found at Pearl Harbor and the leeward coast at Lualualei Valley. Six birds were released by the USFWS on Moloka‘i, with unsubstantiated reports of moorhen from Keanae Peninsula on Maui and the island of Hawai‘i.

Map of Moorhen distribution

ABUNDANCE: Estimated population is ?.

LOCATION AND CONDITION OF KEY HABITAT: Habitat consists of freshwater marshes, wetland agricultural areas (e.g. taro patches), reedy margins of water courses (streams, irrigation ditches, etc.), reservoirs, and wet pastures. They do not habit frequent brackish water and are rarely seen in saline habitats. The densest populations can be found on Hanalei National Wildlife Refuge on Kaua'i, and the Kahuku and Ukoa wetlands and Waialua lotus fields on O'ahu. Critical habitat features for this species are dense stands of robust emergent vegetation near open water, floating or barely emergent mats of vegetation, water depths less than 3.3 feet, and freshwater. Some habitats are located in National Wildlife Refuges as well as State sanctuaries (see distribution) and can be considered stable. Those areas outside of such protection and management, particularly those facing urban development or industry decline (such as plantations and aquaculture industries), can be considered critical. Examples include: Playa Lakes on Niihau, Opaekaa Marsh, Mana and Lumahai Wetlands on Kaua'i, Amorient prawn farms, Laie Wetlands, Uko, Punahoolapa, and Waihee Marshes, Waialua lotus fields, and Waipio Peninsula Ponds on O'ahu.

THREATS: In addition to facing shared threats from loss of wetland habitat, introduced predators, altered hydrology, invasion of habitats from alien plants, avian diseases, and environmental contaminants, specific threats to the Hawaiian moorhen are:

CONSERVATION ACTIONS: The goals of conservation actions are to not only protect current populations, but to also establish further populations to reduce the risk of extinction. In addition to common state-wide and island conservation actions, specific actions include:

- Restoration of habitat as well as continued maintenance of existing habitat;
- Restore populations to Maui Nui and Hawai'i by reintroductions.

MONITORING:

- Continue surveys of population and distribution in known and likely habitats;

RESEARCH PRIORITIES:

- Research on better understanding breeding biology;
- Research on better understanding feeding habits;
- Develop better census methods.

References:

U.S. Fish and Wildlife Service. 1999. Draft Revised Recovery Plan for Hawaiian Waterbirds, Second Revision. U.S. Fish and Wildlife Service, Portland, OR. 107 pp.
Bannor, Brett K. and Erik Kiviat. 2002. Common Moorhen (*Gallinula chloropus*). In the Birds of North America, No. 685 (A. Poole and F. Gill, eds). The Academy of Natural Sciences, Philadelphia, PA and The American Ornithologists' Union, Washington, D.C.