

Hawaiian Gallinule

COMMON NAME: Hawaiian moorhen or Hawaiian gallinule

HAWAIIAN NAME: 'Alae 'ula

SCIENTIFIC NAME: *Gallinula galeata sandvicensis*

LEGAL STATUS: Endangered (Federal and State)

APPEARANCE: The Hawaiian common moorhen is black on the top portion of its body with dark slate blue below and a white stripe on the flanks. They have a red shield over their red and yellow bill and feet are lobed rather than webbed. The 'alae 'ula is associated with the goddess Hina and with legends about bringing the secret of fire-making to the Hawaiian people.

NATIVE RANGE: The Hawaiian common moorhen is a non-migratory, endemic subspecies of the common moorhen (*Gallinula galeata sandvicensis*). Historically they occurred on all of the main Hawaiian Islands except Lāna'i and Kaho'olawe.



HABITAT: Hawaiian common moorhens generally occur in freshwater wetlands below 400 feet elevation. They are found in freshwater marshes, wetland agricultural areas, reservoirs, wet pastures, and occasionally brackish water.

DIET: The Hawaiian common moorhen's diet varies with habitat but includes algae, grass seeds, plant material, insects, and snails.

REPRODUCTION: Nesting habitat is restricted to areas of standing freshwater less than 2 feet deep with dense emergent vegetation. Nesting occurs year-round, but mainly takes place during spring and summer months. Floating nests are constructed in dense vegetation; in Hawai'i that is commonly the invasive California grass.



ECOLOGICAL THREATS: Hawaiian gallinules are threatened by habitat loss, non-native invasive plants, introduced predators, avian disease, and environmental contaminants.

USFWS AND HAWAII DLNR CONSERVATION STRATEGIES: General conservation activities involve protecting current populations as well as establishing new populations to reduce the risk of extinction. Conservation efforts also include protection and management of existing habitat (including key breeding habitat), restoration of wetlands, and population monitoring.

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MCBH CONSERVATION MEASURES: Hawaiian gallinules occur in wetlands at MCBH Kaneohe Bay, primarily at the Klipper Golf Course Ponds, the Percolation Ditch wetland, and the fresh-water influenced sections of Nu'upia Ponds WMA. They are also found at MCTAB.

Regular conservation measures that benefit Hawaiian common moorhens include:

- **Habitat protection and enhancement.** Maintaining healthy non-invasive vegetation is important for gallinules on MCBH. Breeding activity documented at Klipper Golf Course Ponds and the Percolation Ditch wetland has increased/stabilized since the implementation of habitat enhancement projects in these locations in 2003 and 2007, respectively. Established BMPs and conservation measures are employed when a project may have an effect on birds.
- **Limiting disturbance.** Hawaiian gallinule is a secretive bird that flees from human activity. It is unknown what level of human activity would affect their breeding success and chick survival rates.
- **Predator control.** Moorhen benefit from the on-going trapping of cats, mongoose, and rats within the WMA and wetlands.
- **Wildlife friendly lighting.** All exterior lights for new construction, replacement of existing fixtures, and renovations shall meet or exceed light requirements developed in consultation with U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA), which incorporate International Dark-Sky Association (IDA) standards and research focused on identifying wildlife-friendly lighting. Natural Resources staff work with base planners to incorporate wildlife-friendly lighting standards into all projects, which will address seabird fallout concerns. Appendix E defines the requirements for wildlife-friendly lighting.
- **Monitoring to help direct management activities.** Natural Resources staff conduct three yearly waterbird counts as well as periodic and opportunistic monitoring during the rest of the year.
- **Biological monitoring.** Contracted biological monitoring is now being regularly incorporated into all projects whose action areas include MCBH wetlands. The Biological Monitor Roles, Methods, and Survey Standards are presented in Appendix D.
- **Education and outreach.** Development and distribution of informational material, including videos, fact sheets, and briefings for military personnel and civilians on base, including new arrivals, and outreach with volunteers.

REFERENCES

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For more information: MCBH Integrated Natural Resources Management Plan. 2022. Sections 6, 7.1, 7.2, and 7.3.

PHOTOS

1. Hawaiian common moorhen. MCBH.
2. Hawaiian common moorhen eggs. MCBH.
3. Hawaiian common moorhens parents and chicks. MCBH.