

# Hawaiian Duck

**COMMON NAME:** Hawaiian Duck

**HAWAIIAN NAME:** *Koloa*

**SCIENTIFIC NAME:** *Anas wyvilliana*

**LEGAL STATUS:** Endangered (Federal and State). MBTA protected.

**APPEARANCE:** Hawaiian ducks, or koloa, are a small dabbling duck. Both sexes resemble a dark female mallard, mottled brown with blue wing bars bordered on both sides by white. Data indicate that there has been extensive hybridization between koloa and feral mallards on O'ahu. There is often difficulty distinguishing genetically pure koloa (*Anas wyvilliana*) from true mallards (*Anas platyrhynchos*) and koloa-mallard hybrids, although mallards and hybrids tend to be larger. For management purposes the three species often must be grouped together as koloa/ hybrid/ mallard.



**NATIVE RANGE:** Endemic. Previously koloa inhabited all of the main Hawaiian Islands except Lāna'i and Kaho'olawe. They are now restricted to wild populations on Kaua'i and Ni'ihau and small reestablished populations on O'ahu, Hawai'i and Maui.

**HABITAT:** Koloa occupy coastal wetlands, freshwater pools, bogs, streams, and marshy areas. They prefer shallow water with nearby dense cover and safe roosting sites (islands). Koloa feed on grass seeds and other vegetation, crustaceans, insects, nematodes, and algae.

**DIET:** Koloa feed on grass seeds and other vegetation, crustaceans, insects, nematodes, and algae.

**REPRODUCTION:** Information on the nesting biology of koloa is sparse. Nesting occurs year round with the majority of activity occurring between January and May. Koloa build their nests on the ground near water. They generally lay eight to ten eggs that incubate for less than one month.

**ECOLOGICAL THREATS:** The main threat to koloas is hybridization with feral mallards. Other threats include: habitat loss; altered hydrology (modifications to wetland habitats); alien plant encroachment; avian botulism; and introduced mammalian predators. Duckling predators include mongooses, cats, dogs, black-crowned night herons, and common mynas.

**MCBH CONSERVATION MEASURES:** Hawaiian ducks and/or hybrids have been recorded at MCBH Kaneohe Bay, MCTAB and Pearl City Annex. Regularly conducted surveys for waterbirds indicate that the number of Hawaiian duck/ hybrid/ mallards at MCBH has increased notably since 2002. Prior to 2002, surveys typically detected less than 20 ducks per visit. Between 2002 and 2010 the number present at MCBH has steadily grown, with over 100 recorded during regular counts in each year since 2010.

Conservation measures that benefit koloa include:

- **Habitat protection and enhancement.** Although maintaining healthy non-invasive vegetation is important, ducks on MCBH have adapted well to an urbanized environment. They are regularly found foraging in the open grassy areas around base and at the Water Reclamation Facility. Presence documented at Klipper Golf Course Ponds and the Percolation Ditch wetland has increased since the implementation of habitat enhancement projects in these locations in 2003 and 2007 respectively.

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- **Limiting disturbance.** Hawaiian ducks appear unfazed by human activity, including normal light and noise pollution associated with the Base, and it doesn't appear to affect their breeding success. Established BMPs and conservation measures are employed when a project may disturb or otherwise modify a koloa's behavior.
- **Predator Control.** Koloa benefit from the on-going trapping of cats, mongoose, and rats within the Wildlife Management Area and wetlands.
- **Wildlife Friendly Lighting.** Although lighting on Base does not appear to be an issue, Natural Resources staff diligently work with Base and contract planners to incorporate International Dark-Sky lighting recommendations into all projects.
- **Monitoring to help direct management activities.** Natural Resources staff record occurrences and consult with USFWS as needed. Due to recent outbreaks of avian botulism, koloa at MCBH Kaneohe Bay will be closely monitored during summer months for symptoms of avian botulism in an effort to detect the disease in the earliest stages allowing for treatment of sick ducks and potentially limiting the spread of disease and the number of associated deaths.
- **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.

**For more information:** MCBH Integrated Natural Resources Management Plan. 2016. Section 6, 7.1, 7.2, 8, 9, Appendix C & D.

### PHOTOS

1. Hawaiian Duck. USFWS, Pacific Islands Fish and Wildlife Office.

[https://www.fws.gov/refuge/Hanalei/wildlife\\_and\\_habitat/Hawaiian\\_Duck.html](https://www.fws.gov/refuge/Hanalei/wildlife_and_habitat/Hawaiian_Duck.html)