

Laysan Duck image

## Water Birds

# Laysan Duck

*Anas laysanensis*

### **SPECIES STATUS:**

Federally Listed as Endangered

State Listed as Endangered

State recognized as indigenous

IUCN Red List Ranking-Critically Endangered

**SPECIES INFORMATION:** A relatively long-lived species with a low reproduction rate, nocturnal in its habits, the duck, compared to other waterfowl, is very sedentary and terrestrial. During the day, the duck takes cover under vegetation such as bunchgrass or shrub. Though it feeds primarily on insects (e.g. Dipteran brine fly, larvae and pupae of noctuid moth *Agrotis dislocatae*, brine shrimp), the duck is an opportunistic feeder that also eats seeds, leaves, and algae. Due to the fact that it evolved with avian predators, when surprised, the duck tends to walk away rather than fly, and freeze rather than flush, making them extremely vulnerable to mammalian predators.

**DISTRIBUTION:** The Laysan duck was the common duck (up to 5,000 and more) in pre-contact Hawai'i. Historically found on the Laysan and Lisianski islands in the Northwestern Hawaiian Islands as well as the main Hawaiian Islands of Hawai'i, Moloka'i, Maui, O'ahu, and Kaua'i, current distribution is limited only to Laysan Island, with failed introductions at Pearl and Hermes Reef. Recent introductions to Lisianski also occurred in 2004.

Map of Laysan Duck distribution

**ABUNDANCE:** Estimated population is 459.

**LOCATION AND CONDITION OF KEY HABITAT:** Four habitats have been identified on Laysan Island: terrestrial, coastal, lake and camp. The ducks were found to visit different habitat types (terrestrial, coastal, lake), with most activity occurring during morning or at night. Habitat preferences were also found to change with seasonality. During the day, the duck takes cover under vegetation such as bunchgrass or shrub. In addition, they nest in terrestrial upland areas.

**THREATS:** Historic threats included introduced rabbits which decimated habitat and human hunting for sport and mining of guano. Present day threats to the Laysan Duck result from its small size, population, restricted geographic range, uneven sex ratio, and inbreeding, all of which make it highly vulnerable to severe weather, disease, invasive species, and habitat degradation (e.g. filling of the lake).

**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 with native plants as well as continued maintenance of existing habitat (e.g. weed control, stabilization of dunes and vegetation to prevent blowouts from filling the lake);
- Restoration of invertebrate species to increase food availability;
- Continue efforts to increase populations and establish multiple populations.

**MONITORING:**

- Continue surveys of population and distribution in known and likely habitats;
- Monitor for invasive species.

**RESEARCH PRIORITIES:**

- Improve understanding of foraging ecology and needs;
- Improve population monitoring methods.

**References:**

- U.S. Fish and Wildlife Service. 2004. Draft Revised Recovery Plan for the Laysan Duck (*Anas laysanensis*). U.S. Fish and Wildlife Service, Portland, OR. Vii+94 pp.
- IUCN Red List of Threatened Species. <http://www.redlist.org/search/details.php?species=1229>
- Moulton, Daniel W. and Ann P. Marshall. 1996. Laysan Duck (*Anas laysanensis*). In the Birds of North America, No. 242 (A. Poole and F. Gill, eds). The Academy of Natural Sciences, Philadelphia, PA and The American Ornithologists' Union, Washington, D.C.