

Hawaiian Stilt

COMMON NAME: Hawaiian stilt

HAWAIIAN NAME: Ae'o

SCIENTIFIC NAME: *Himantopus mexicanus knudseni*

LEGAL STATUS: Endangered (Federal and State). Vulnerable (IUCN Red List). MBTA protected.

APPEARANCE: The Hawaiian stilt is a slender, pink-legged, wading shorebird with black upper-parts, white under-parts, and a long black bill. It grows up to 15 inches in length. The Hawaiian subspecies differs from the North American stilt by having more black on its face and neck, and a longer bill, tarsus, and tail.

NATIVE RANGE: Hawaiian stilts are non-migratory birds, endemic to Hawai'i. They were historically known to be on all major islands except Lāna'i and Kaho'olawe. They still occur on all major islands, except Kaho'olawe, with the majority of the population occurring on Maui and O'ahu.

HABITAT: Hawaiian stilts utilize fresh, brackish, and saline coastal waters. They use little vegetation for nesting or feeding and breed in marshland, mudflats, shallow open water, flooded fields, borders of salt ponds, mangrove swamps, coastal playas, and ephemeral wetlands. They require specific water depths of around 5 inches for optimal foraging. Nest sites are separated from feeding sites.

DIET: Hawaiian stilts feed in shallow water primarily on invertebrates, crustaceans, aquatic and terrestrial insects, and small fish.



REPRODUCTION: Hawaiian stilts nest on low relief shorelines, mudflats in the Nu'upia Pond wetlands, and small islands within bodies of water. Nesting occurs from March to August with a peak in May-June. At MCBH Kaneohe Bay stilt nesting season peaks in June-July, which is later than on the south side of O'ahu but have been known to nest as late as August. During nesting, stilts move between a nesting area and a feeding area. Although chicks leave the nest immediately, immature birds stay in family groups through the winter until the next breeding season begins.

ECOLOGICAL THREATS: The primary cause of species decline is the loss and degradation of wetland habitat and predation by introduced species, especially the small Asian mongoose. Mongooses are voracious predators that are especially harmful to ground nesting birds such as the endangered Hawaiian stilt. Other factors include free roaming cats, alien plants, disease, and some environmental contaminants.

USFWS AND HAWAII DLNR CONSERVATION STRATEGIES: Hawaiian stilts are listed as a species of primary importance in the U.S. Pacific Islands Regional Shorebird Conservation Plan. Although the population is considered stable, it remains at very low levels. State and federal conservation efforts include wetland protection, enforcement of a stilt hunting ban, education, and working with private landowners. During this update period, USFWS is pursuing downlisting the Hawaiian stilt to "threatened" status.

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MCBH CONSERVATION MEASURES: Hawaiian stilts have been recorded at coastal wetlands on MCBH Kaneohe Bay within the Nu'upia Ponds WMA and other wetland locations on Kāne'ohe Bay on MCTAB, and at Pearl City Annex.

Conservation measures to benefit the stilt population include:

- **Habitat protection and enhancement.** Stilt habitat enhancement consists primarily of invasive plant species control, principally the invasive pickleweed (*Batis maritima*), also known as Akulikuli kai. Unfortunately, 3d Marine's Combat Assault Company was deactivated on July 1, 2021, so we no longer have the support of their amphibious assault vehicles (AAVs) to conduct the annual Mud Ops event. At the time of this update, we have not identified other means to control the pickleweed. Other methods for controlling the invasive pickleweed are being researched. Other invasive weeds, such as mangrove (*Rhizophora mangle*), are controlled through Weed Warrior service projects. Established BMPs and conservation measures are employed when a project may have an effect on bird behavior.
- **Limiting disturbance.** BMPs to benefit Hawaiian stilts include restrictions on construction and human activity at Nu'upia Ponds WMA and other wetlands, especially during their prime nesting seasons. Hawaiian stilts appear unfazed by human activity at a distance during the non-nesting season; however, their behavior changes drastically during the nesting season when they become very territorial; any disturbance may affect their breeding success and chick survival rates.
- **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.
- **Predator control.** Hawaiian stilts benefit from the on-going trapping of cats, mongoose, and rats within Nu'upia Ponds WMA and other wetlands. MCBH does not control native Hawaiian predators, e.g., Black-crowned night herons, Hawaiian short-eared owl or "Pueo", as well as indigenous shorebirds that have been documented damaging eggs. While the introduced barn owl and cattle egret are also known predators, we have not identified a way to effectively control them.
- **Monitoring to help direct management activities.** Natural Resources staff conduct three yearly waterbird counts as well a periodic and opportunistic monitoring during the rest of the year. The structured surveys that are conducted for waterbirds indicate that the number of Hawaiian stilts at MCBH may be declining.
- **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.



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- **Education and outreach.** Development and distribution of informational material regarding the Nu'upia Ponds habitat and stilts includes videos, fact sheets, and briefings for military personnel and civilians on base as opportunities present themselves.

REFERENCES

- DLNR. 2015. *Hawai'i's State Wildlife Action Plan*. . 6th Edition.
- Hawai'i Audubon Society. 2005. *Hawai'i's Birds*
- Rauzon, M.J., et al. 2002. *MCBH Support of Hawaiian Stilt Regional Recovery in the Ko'olaupoko District, O'ahu*. Prepared by Sustainable Resources Group Intn'l, Inc. Prepared for Marine Corps Base Hawai'i through Naval Facilities Engineering Service Center. December.
- U.S. Fish and Wildlife Service (USFWS). 2005. Draft Revised Recovery Plan for Hawaiian Waterbirds, Second Draft of Second Revision. U.S. Fish and Wildlife Service, Portland, Oregon. 155 pp.

USFWS Pacific Islands Fish and Wildlife Office. *Endangered Species in the Pacific Islands. Himantopus mexicanus knudseni*.
Updated 29 March 2010.

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

PHOTOS

1. Hawaiian stilt. MCBH.
2. Hawaiian stilt mother and chicks. MCBH.