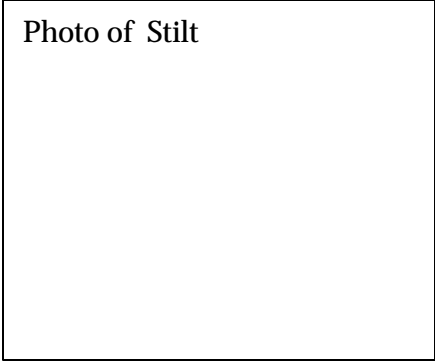


Water Birds

Photo of Stilt



Ae`o or Hawaiian Stilt

Himantopus mexicanus knudseni

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: Prefer to nest on freshly exposed mudflats with low growing vegetation. Nesting occurs on island either natural or manmade in fresh or brackish ponds. Stilt are defensive of nest areas around 66-99 feet and are semi-colonial. Nesting season occurs from March through August, with peaks in May and June. Eggs are usually laid in numbers of 3 or 4. They are opportunistic feeders and eat a variety of invertebrates as well as vertebrates available in shallow water and mudflats. Examples include polychaete worms, small crabs, aquatic insects, and small fish. They feed in shallowly flooded wetlands, which are ephemeral and can appear at any time of the year (usually in winter). Inter island movement occurs.

DISTRIBUTION: With the exception of La-na'i, Ka-ho'olawe and possibly the island of Hawai'i, stilts were known to inhabit all the major Hawaiian Islands historically. Today, they can be found on all the main Hawaiian Islands except Ka-ho'olawe. Statewide populations have been relatively stable or slightly increasing. For Kaua'i and Ni'ihau, the population moves annually between the two island in response to rainfall patterns and flooding and drying of Ni'ihau's ephemeral lakes. On Kaua'i, stilts are found in large river valleys such as Hanalei, Wailua, and Lumahai, on the Mana Plain, and at reservoirs and sugarcane effluent ponds in Lihue and Waimea. For O'ahu, which supports the largest stilt numbers for the state, the majority can be found on the north and windward coast at Kahuku Point on James Campbell National Wildlife Refuge, Kahuku Point oyster ponds, Amorient aquaculture ponds, and Roland Pond and at Nuupia Ponds in Kaneohe. Other populations can be found at Pearl Harbor and along the leeward coast. For Maui, Kanaha and Kealia coastal wetlands house a large number of stilts, both have critical nesting, feeding, loafing and roosting habitat. Stilt are also found at reservoirs and aquaculture areas. Molokai's south coast wetlands and playa lakes serve as important habitats. On Lanai City, its wastewater treatment ponds have permanent resident stilt populations. The island of Hawaii's Kona coast from Kawaihai Harbor south to Kailua house supports the largest number of stilts for the island. Other areas are Makalawena and Aimakapa Ponds (key breeding areas) and Cyanotech Ponds and Kona wastewater treatment ponds. Stilts are also found along the Hamakua Coast and in the Kohala River valleys of Waipio, Waimanu, and Pololu. Anchialine ponds along the Kona coast provide prime feeding sites.

Map of Stilt distribution



ABUNDANCE: Estimated population is 1,500.

LOCATION AND CONDITION OF KEY HABITAT: Though stilts use a variety of aquatic habitats, water depth and vegetation cover are the limiting factors. They require early successional marshlands with water depth less than 9 inches, perennial vegetation that is limited and low growing, or exposed tidal flats. Ephemeral lakes on Moloka‘i, Maui, and Ni‘ihau are critical for stilts. Foraging habits such as prawn farms and anchialine pools are important as well. Feeding habitat consist of shallow water that is fresh, brackish or saline. Stilts forage and nest in different wetland sites, with sites usually adjacent to or on low-relief island within bodies of fresh, brackish or salt water. Examples can include irrigation reservoirs, settling basins, natural or manmade ponds, marshes, taro patches, silted ancient fish ponds, salt evaporation pans, and other wetlands. Feeding habitat consist of shallow water that is fresh (irrigation reservoirs, settling basins, natural or manmade ponds, sugar settling basins, and marshes), brackish (coastal ponds, silted ancient fish ponds, and estuaries), or saline (inshore reefs, silted beach areas, and tidal flats). Foraging habits such as prawn farms and anchialine pools are important as well. Loafing areas are usually open mudflats or open flooded pasture lands where visibility is good and predator populations are low. Some stilt 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 Ni‘ihau, 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, Paialoa and Ooia Playa fishponds on Moloka‘i, and Opaepala, Montane Stock, and Waiakea-Loko Waka Ponds on the island of Hawai‘i.

THREATS: Past threats leading to a decline in population were attributed to hunting pressures and loss of habitat. Currently, 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 stilt are:

- High predation from feral cat, rat, mongoose, and bullfrogs;
- High predation also from avian predators due to exposed nests (e.g. Short-eared owl, Black-crowned Night Heron, Cattle egret, Laughing Gull, Ruddy Turnstone, etc.).

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;

MONITORING:

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

RESEARCH PRIORITIES:

- Better understanding of adult survival data;
- Development of effective predator control methods as well as vegetation control.

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.

Robinson, Julie A., J. Michael Reed, Joseph P. Skorupa, and Lewis W. Oring. 1999. Black-necked Stilt (*Himantopus mexicanus*). In the Birds of North America, No. 449 (A. Poole and F. Gill, eds). The Academy of Natural Sciences, Philadelphia, PA and The American Ornithologists' Union, Washington, D.C.