

NI'HAU

Ni'ihau is a small, privately owned island located approximately 27 kilometers (17 miles) west of Kaua'i. The island's highest point is 390 meters (1,281 feet). Among Ni'ihau's most unique natural features are several intermittent lakes, which provide habitat for 'alae ke'oke'o (*Fulica alai* [Hawaiian coot]), ae'o (*Himantopus mexicanus knudseni* [Hawaiian stilt]), and koloa maoli (*Anas wyvilliana* [Hawaiian duck]). Due to restricted access, there is limited biological information available about Ni'ihau (e.g., the percent cover of native vegetation, the distribution and abundance of native species, and the condition of habitats used by wildlife species). While the seasonal lakes are known to be an important natural wetland feature for waterbirds, the use and importance of this island by other species groups, such as seabirds or invertebrates, is largely unknown.

OVERVIEW

Geology and Hydrology

Ni'ihau was formed from a single shield volcano approximately 4.89 million years ago, making it slightly younger in age than Kaua'i. It is approximately 18,130 hectares (70 square miles or 44,800 acres), and sea cliffs are a prominent feature of the eastern coast. Approximately 78 percent of the island is below 150 meters (500 feet) in elevation. Ni'ihau has no perennial streams. Halulu Lake is a natural freshwater lake covering approximately 74 hectares (182 acres) and Halāli'i Lake is an intermittent lake covering approximately 340 hectares (841 acres).

Climate

Located inside Kauai's rain shadow, Ni'ihau receives only about 50 to 100 centimeters (20 to 40 inches) of rain per year.

Land and Water Use

The entire island is located in the State Agricultural District. The primary economic activities are cattle and sheep ranching, commercial game hunting, and limited military training exercises.

Human Landscape

Part of the County of Kaua'i, Ni'ihau is privately owned. A Native Hawaiian community of approximately 160 people lives there in relative isolation. There are no resorts, and public access is allowed only with permission of the owners.

SPECIES AND HABITATS OF IMPORTANCE

Habitat on Ni'ihau includes only lowland dry systems and coastal systems. It is thought that Ni'ihau may have some of the best coastal habitats in the State.

Information on species' distribution on Ni'ihau is limited. Appendix A provides information on the wildlife Species of Greatest Conservation Need present on Ni'ihau. There are no wildlife species known to be endemic to Ni'ihau. Known species present are primarily waterbirds, seabirds, and migratory shorebirds. The U.S. Fish and Wildlife Service has designated critical habitat for one plant, *Brighamia insignis*.

SUMMARY OF KEY THREATS TO SPECIES AND HABITATS

Many general threats to native wildlife are discussed in Chapter 4 (Statewide Conservation Needs) and Chapter 5 (Marine Conservation Needs). Threats more acute or specific to Ni‘ihau are listed below. Because Ni‘ihau has no perennial streams, there are no identified threats specific to freshwater species on Ni‘ihau.

- Lack of permanent conservation status for known wetland habitat;
- Habitat degradation (loss of vegetation and subsequent erosion) caused by domestic and feral ungulates;
- Limited information on species presence or abundance, habitat conditions, or the importance of existing habitat for wildlife.

ISLAND STRATEGIES

In addition to the statewide strategies identified in association with the seven conservation objectives in Chapter 4 (Statewide Conservation Needs) (main bullet), additional island-specific strategies for Ni‘ihau include the following (sub-bullet):

- Maintain, protect, manage, and restore native species and habitats in sufficient quantity and quality to allow native species to thrive.
 - Support existing conservation management and implement future needs as identified below in ‘Management Needs’ section;
 - Develop and/or implement recovery plans for threatened and endangered species on Ni‘ihau;
 - Encourage long-term protection and management of known wetland habitat (including ephemeral playa lakes) for nesting waterbirds;
 - Encourage long-term protection of remaining native-dominated coastal or lowland vegetation from degradation by ungulates;
 - Develop management plans for all Marine Managed Areas.
- Combat invasive species through a three-tiered approach combining prevention and interdiction, early detection and rapid response, and ongoing control or eradication.
 - Inventory existing terrestrial and aquatic invasive species and prioritize control actions.
- Develop and implement programs to obtain, manage, and disseminate information needed to guide conservation management and recovery programs.
 - Complete an inventory of native wildlife and plants;
 - Determine population estimates for rare or unique species of native wildlife;
 - Coordinate research to assess threats and conservation needs of species.
- Strengthen existing and create new partnerships and cooperative efforts.
 - Establish a partnership with the private landowner to protect the wetland habitat and improve knowledge about native species and their habitats;
 - Explore opportunities for partnership with local community.
- Expand and strengthen outreach and education to improve understanding of our native wildlife resources among the people of Hawai‘i.
 - Explore opportunities for community-based wildlife surveys and monitoring.
- Support policy changes aimed at improving and protecting native species and habitats.
 - Assess ways to support increased enforcement capacities, including cross-deputization between agencies;

- Evaluate all current Marine Managed Areas for purpose and management effectiveness and consider need for new Marine Managed Areas.

PLANS AND TOOLS TO AID MANAGEMENT

No management plans and tools specific to Ni‘ihau exist to address some of the threats listed in the Summary of Key Threats to Species and Habitats section.

MANAGEMENT NEEDS

Current Management of Species and Habitats

The following section addresses the current management actions and future needs of key habitats on Ni‘ihau. The discussion of future management needs is highlighted within each current managed area. Unlike other islands, Ni‘ihau is entirely privately owned and has no State or Federal management presence. There are no formalized or long-term conservation management actions currently occurring on terrestrial Ni‘ihau. In the marine waters surrounding Ni‘ihau, there is one Bottomfish Restricted Area (BRA).

Bottomfish Restricted Area, DAR

Species: Seven bottomfish species.

Habitats: Marine ecosystem.

Current Management: No Take of bottomfish.

Future Needs: Evaluate all BRAs for purpose and management effectiveness and consider need for new Marine Managed Areas.

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