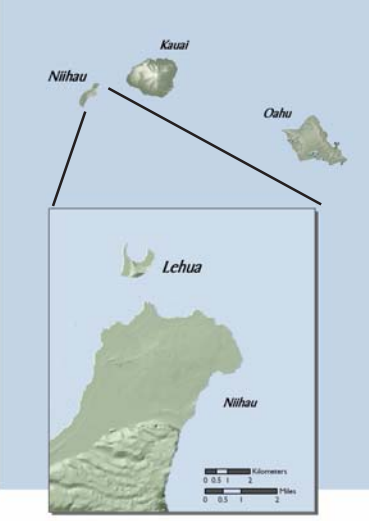


# LEHUA ISLAND ECOSYSTEM RESTORATION PROJECT



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## ***Where is Lehua?***

Lehua Island is located about 3/4 of a mile north of Niihau and 20 miles west of Kauai. It is a 275-acre, crescent-shaped island administered by the U.S. Coast Guard and managed by the Hawaii Department of Land and Natural Resources as a State Seabird Sanctuary.

## ***What is the goal of ecosystem restoration on Lehua?***

The goal of ecosystem restoration is to provide a safe place for Hawaii's native seabirds, plants, and insects by removing the destructive alien species that harm them.

## ***Does anyone live there?***

No. Lehua's lack of drinkable water and rugged terrain make it a very difficult place to live. There is no evidence that permanent settlements ever existed on Lehua. Public access is not allowed, so there is no camping or hunting.

## ***Does Lehua have any archaeological sites?***

Yes. A 2003 archaeological survey located and mapped stone platforms and ahu (rock cairns). One site is over 800 years old. Ancient Hawaiians may have visited Lehua for fishing and feather collecting.

## ***What kinds of wildlife and plants are found on the island?***

Recent surveys estimated approximately 50,000 seabirds are on Lehua. Seventeen seabird species are present, including eight species known to nest on the island. Four additional species may be nesting in small numbers.

Some of the bird species found include Laysan and Black-footed Albatross, Red-footed and Brown Boobies, Red-tailed Tropicbirds, Hawaiian Petrels, Band-rumped Storm Petrels, and Newell's and Wedge-tailed Shearwaters. Migratory shorebirds also visit the island.

Twenty-three species of native plants exist on the island, although Lehua is now dominated by introduced weeds. At least thirteen native insect species are present, including twelve found only in Hawaii.

Monk seals are also seen in the waters around Lehua and will occasionally haul out on Lehua's rock ledges.

Rats, rabbits, and other non-native species are also present on Lehua. It's hard to know how many rats and rabbits are there, but their numbers do appear to increase following rainfall periods.

Rats and rabbits were first documented on Lehua in the 1930s, but it's uncertain exactly when they were introduced to the island or who brought them.

### ***Why is Lehua important to wildlife?***

- It's one of the few undisturbed places left in Hawaii for nesting seabirds, monk seals, and other native coastal species.
- It's one of the largest seabird colonies in the main Hawaiian Islands.
- If restored, it has the potential to become a safe haven for many more species of Hawaii's seabirds, plants, and insects that cannot survive near people or aggressive alien species.

### ***How do rats harm native birds and plants?***

Observations from Hawaii and around the world have shown that rats will eat seabird eggs and chicks, and even attack adult birds. Scientists estimate that rats have caused 40-60% of all bird and reptile extinctions on islands

worldwide. Rats also eat native plants and seeds. As a result, native birds and insects that rely on these plants will decline or disappear.

### ***What harm do rabbits cause?***

Rabbits, a non-native species, will eat most native plants. For example, rabbits introduced to Hawaii's Laysan Island in the early 1900s ate all of the plants on the island and caused the extinction of three native species of birds that could not survive without the vegetation. Loss of island plants causes soil to erode into the ocean, damaging coral reefs and other nearshore environments. Rabbits also compete with seabirds for burrows and force the birds to leave.

If alien species are removed, seabirds prospecting for new nesting areas will re-colonize Lehua. Some plants will return on their own and others can be re-introduced. Because Lehua is isolated, it has the potential to serve as a safe haven for native species for many years, without costing much to manage. It's one more step toward preserving Hawaii's past for future generations.



*Rat on Kure Atoll attacking an adult Laysan Albatross*



*Rats in Alaska ate most of this seabird chick before it hatched*



*Beach morning glory disappeared from Lehua*

Photo credits: Mark Rauzon, Ken Wood, David Ledig and Chris Swenson