



U.S. Fish & Wildlife Service

Critical Habitat for the O`ahu `Elepaio

Once described as “the commonest native land bird to be found on the island,” the O`ahu `elepaio is now an endangered species. To further protect this small forest bird, the U.S. Fish and Wildlife Service has designated five areas of critical habitat encompassing 65,879 acres for the O`ahu `elepaio.



Photo by Eric VanderWeert

What is an O`ahu `elepaio?

The O`ahu `elepaio (*Chasiempis sandwichensis ibidis*) is a small forest bird that is found only on the Hawaiian island of Oahu. It is a member of the monarch flycatcher family. Adults have a dark brown crown and back, white underparts with light brown streaks on the upper breast, and white wing bars, rump, and tail-tips. Their long tail is often held up at an angle. `Elepaio are nonmigratory, territorial, and often mate for life. The O`ahu `elepaio was placed on the list of endangered species by the U.S. Fish and Wildlife Service on May 18, 2000.

The O`ahu `elepaio was once common and widespread in forested areas throughout the island at all elevations. Currently, it is most often found in streamside vegetation and in mesic forest with a tall canopy and well-developed understory. The species is thought to occupy less than four percent (about 13,600 acres) of its original range.

Six core subpopulations and several smaller subpopulations totaling

approximately 1,982 birds are thought to remain in the world. The number of birds is divided about evenly between the Wai`anae Mountains in the west and the Ko`olau Mountains in the east.

Primary threats to the O`ahu `elepaio are diseases carried by introduced mosquitos, including avian pox and malaria; predation by introduced mammals, especially rats; and habitat degradation and loss caused by human impacts. Storms with high winds and heavy rains also are known to destroy nests.

In Hawaiian legend, `elepaio helped canoe makers judge the quality of koa logs to make into canoes. If the bird landed on the log and pecked at it, the wood was considered to be of poor quality. If, however, it landed on the log and sang “ono-ka-ia,” the log was considered sound. Because the `elepaio is an insect-eater, its ability to identify insect-infested wood made it a valuable resource to early Hawaiians.

`Elepaio also are often the first birds to sing in the morning, and their

songs were thought to warn spirits of the night that their work must end because dawn was approaching.

What is critical habitat?

Critical habitat is the term used in the Endangered Species Act to define those areas with the physical and biological features essential to the “conservation” of a threatened or endangered species, and that may require special management considerations or protection. “Conservation” means to *recover* a species to the point where it is no longer threatened or endangered. So, critical habitats are those areas of habitat that are needed by an endangered or threatened species in order to recover and that may require special management or protection.

How did you determine what areas to consider as critical habitat?

The Fish and Wildlife Service considers the species’ current range (*i.e.*, areas in which the species currently exists) and historical range (*i.e.*, areas that the species formerly occupied within historical memory).



Photo by Eric VanderWerf

Then, we identify elements of the habitat within those areas that are needed for the species to live, reproduce, and recover to the point where it can be removed from the list of endangered species.

In the case of the O'ahu 'elepaio, identification of critical habitat began with its current range. 'Elepaio are highly territorial, and each pair of 'elepaio defends a territory of a certain size. The currently occupied area is too small and fragmented to support a population that is safe from extinction. Recovery will require restoration of 'elepaio in areas where they do not occur currently but did in the past. Therefore, we added unoccupied lands containing the elements needed by 'elepaio that were part of its historical range.

Because a recovery plan that would identify target population levels and distribution for this species has not been completed, we turned to the historical range for the best and most recent information available on the distribution of what we believe was a viable O'ahu 'elepaio population to propose critical habitat areas. Extensive surveys in 1975 showed that subpopulations of 'elepaio were larger, less isolated, and probably viable at that time. The distribution of this historical population provided a basis for identifying areas needed for recovery.

In selecting currently unoccupied lands, we gave priority to lands that provide the species' more preferred forest types, were more recently occupied (since 1975), and form large blocks of suitable habitat.

Unoccupied areas will allow existing populations to expand, and help link subpopulations by encouraging genetic exchange as single birds move from one area to another.

Based on the known size of territory that each pair requires, the designated critical habitat would be sufficient to support a population of approximately 10,100 'elepaio.

Within the boundaries of the critical habitat units shown on the map on the next page, existing features and structures such as buildings, roads, aqueducts, antennas, water tanks, agricultural fields, paved areas, lawns, and other urban landscaped areas are not proposed as critical habitat because they do not contain the habitat elements needed by the 'elepaio.

How does critical habitat affect the State or private landowner?

Critical habitat designation does not affect activities on State or private lands unless some sort of Federal permit, license, or funding is involved. Activities of the State or a private landowner, such as farming, grazing, and logging, generally are not affected by a critical habitat designation, even if the landowner's property is within the geographical boundaries of the critical habitat.

The designation has no impact on individual, town, county, or State actions if there is no Federal involvement, nor does it signal any intent of the Federal government to acquire or control the land. It does not in any way create a wilderness area, preserve, or wildlife refuge, nor does it close an area to human access or use.

How does critical habitat affect Federal agencies?

Federal agencies are required to ensure that any activity they fund, carry out, or authorize is not likely to

jeopardize the survival of a listed species or destroy or adversely modify its critical habitat. By consulting with the Fish and Wildlife Service, an agency can usually minimize or avoid any potential conflicts with listed species and their critical habitat, and the proposed project may be undertaken.

Will this designation affect the U.S. Army's ability to train in Hawaii?

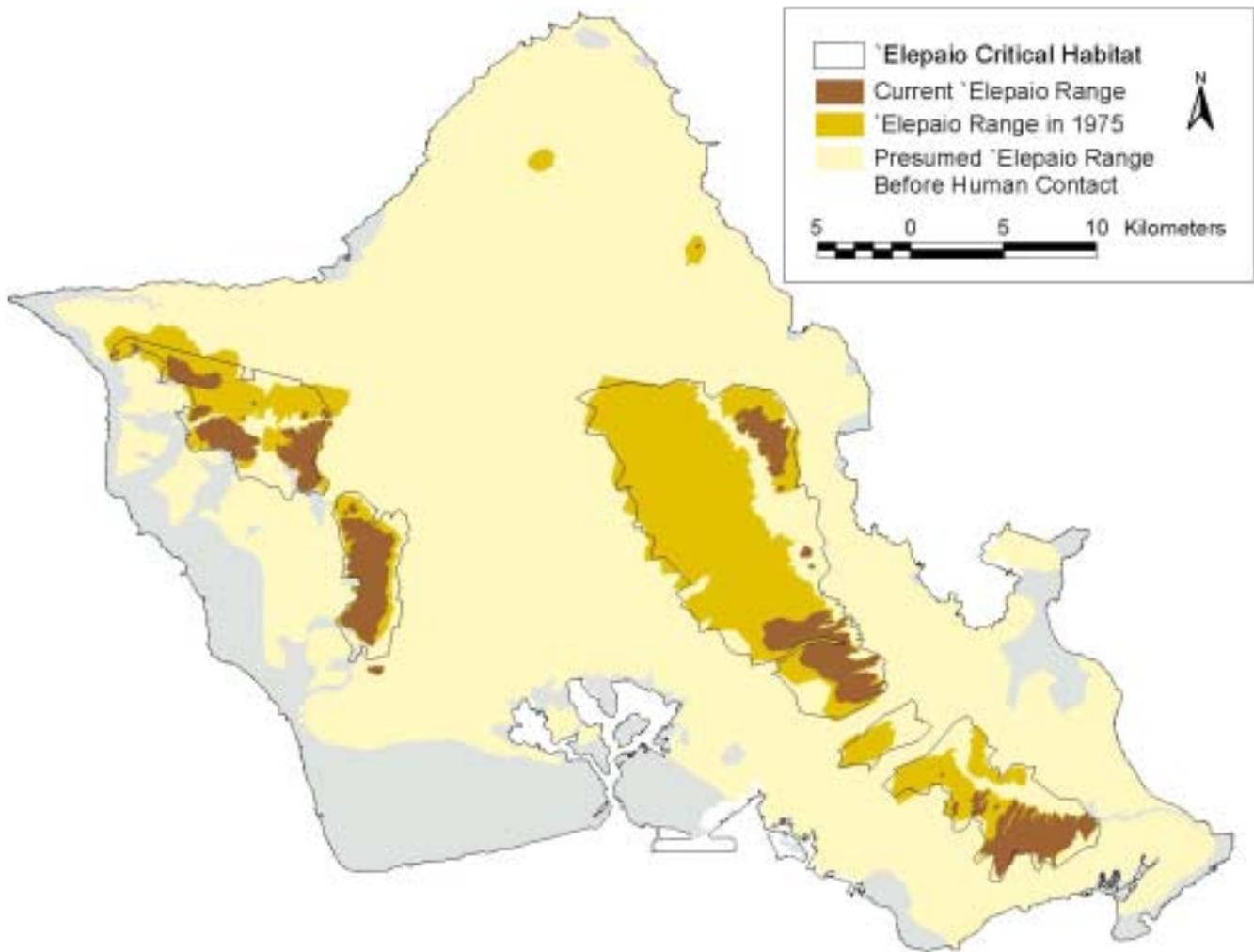
This designation is not expected to compromise the ability of the Army to train at Schofield Barracks or Makua Military Reservation. The critical habitat units do not include lands within training areas, but two impact areas for live-fire training are adjacent to critical habitat. If adequate fire management plans are implemented, critical habitat should have no effect on military training. Since these areas are occupied by the O'ahu 'elepaio, the Army already was required to consult with the Service if their proposed activities may affect the species.

How does the designated critical habitat compare with the proposed critical habitat?

Based partially on public comments received after publication of the proposed critical habitat rule and on more careful review of the biological characteristics of several areas, a total of 513 acres of land proposed for critical habitat designation were eliminated in the final rule.

Of this total, 119 acres in Schofield Barracks West Range were removed because their dryland habitat contained only small areas of wetter 'elepaio habitat. Another 77 acres along Palehua Road were removed due to extensive development. In Nanakuli Valley, 156 acres were eliminated since they were mostly dry shrubland and grassland, unsuitable habitat for the 'elepaio.

A total of 121 acres of developed areas in the Keiwa Heiau State Recreation Area were also removed. The final 40 acres eliminated in the final critical habitat rule were landscaped areas in and near Lyon Arboretum in Manoa Valley.



Approximate Area of Critical Habitat Units by Land Ownership

<u>Unit</u>	<u>Federal Lands</u>	<u>State Lands</u>	<u>County Lands</u>	<u>Private Lands</u>	<u>Total</u>
Northern Wai`anae Mountains	1,913 acres	7,494 acres	1,596 acres	2 acres	11,005 acres
Southern Wai`anae Mountains	1,522 acres	761 acres		3,702 acres	5,985 acres
Central Ko`olau Mountains	7,047 acres	9,276 acres	761 acres	19,489 acres	36,573 acres
Kalihi-Kapalama		981 acres	442 acres	564 acres	1,987 acres
Southern Ko`olau Mountains	7 acres	6,309 acres	1,176 acres	2,837 acres	10,329 acres
Total	10,489 acres	24,821 acres	3,975 acres	26,594 acres	65,879 acres