**Hakalau Forest Refuge Management Endowment:**

**Frequently Asked Questions**

**What is the National Wildlife Refuge System?**

 The NWRS is the world’s largest network of public lands and waters set aside specifically for conserving wildlife and protecting ecosystems. The System covers more than 150 million acres of public lands on 552 refuges and four national marine monuments. The System is administered by the U.S. Fish and Wildlife Service, an agency within the U.S. Department of Interior.

**How many national wildlife refuges are there in the Hawaiian Islands?**

 There are 18 national wildlife refuges in the Pacific islands of which 11 are found within the state of Hawai’i. They include Hakalau Forest, Kealia Pond, Kakahaia, Oahu Forest, James Campbell, Pearl Harbor, Huleia, Hanalei, Kilauea Pt., Hawai’i Islands and Midway Atoll.

**What is the Hakalau Forest National Wildlife Refuge?**

Prior to 1975, very little was known about the distribution and abundance of many of Hawai’i’s forest birds or the extent and quality of their forest habitat. From 1976 to 1981, the U.S. Fish and Wildlife Service (FWS) conducted intensive forest bird and habitat surveys on the main Hawaiian Islands. Data from this “Hawai’i Forest Bird Survey” demonstrated a high density of endangered forest birds within and around the Shipman Ranch, a large privately owned parcel surrounded by State and other private lands, on the eastern side of Hawai’i Island. In 1985, the FWS, with the active involvement and support of The Nature Conservancy, purchased Shipman Ranch lands and established the Hakalau Forest NWR. Later, other nearby privately owned parcels were purchased or donated to the refuge, protecting almost 33,000 acres of native forest. In 1997, a 5,300-acre forested parcel on the western slope of Mauna Loa was added to the Hakalau Forest NWR as the Kona Forest Unit. The refuge added an additional 10,000 acres to the Kona unit in 2019 through the purchase of McCandless Ranch lands that are adjacent to the original parcel making the total acreage for the Kona Forest Unit more than 15,000 acres. The FWS continues to survey other forested lands for possible addition to the Refuge, but funding has been difficult to secure. That said, the Service has recently submitted a land acquisition proposal to further expand the Hakalau Forest NWR that would be funded by the Great American Outdoors Act (2020). Initial impressions suggest these proposals are receiving favorable attention by decision makers.

**What is so special about Hakalau Forest NWR?**

 The forested lands on this refuge provide important habitat for 29 critically endangered species including seven birds, one insect, one mammal and 20 plants found nowhere else. Currently, it is the only place in Hawai’i where all the endangered forest bird populations are stable or increasing. This is the direct result of aggressive management efforts by the Refuge that include fencing, control of feral ungulates and invasive weeds, and reforestation of former pasture lands. This increase in quality habitat has led to the expansion of forest bird distribution into formerly grazed lands and an increase in density of native birds within the forested areas of the refuge. All endangered species benefit from these habitat restoration efforts. As a result of a very active propagation and out-planting program for endangered plants, the number and distribution of several endangered plants has increased.

**What endangered birds are found at the refuge and how is the refuge important for their survival?**

The refuge provides essential habitat for four species of endangered/threatened Hawaiian forest birds and one threatened waterfowl species (nene). Reforestation at the upper elevations of the refuge has increased available habitat and control of feral animals has enhanced habitat quality. Because of this management effort, the refuge has the highest density of three Hawai’i island endemic endangered bird species, the ‘Akiapola’au, Hawai’i Creeper and Hawai’i ‘Akepa, each with populations in the low thousands. These birds are also found in a few other areas of Hawai’i Island but are in lower densities. The threatened Nene, Hawai’i’s state bird, was reintroduced to the refuge in 1996. The refuge is one of the few areas on Hawai’i Island where Nene can reproduce freely thanks to protection and small-mammal predator control. Occasionally, Hawaiian Ducks or Koloa are found in stock ponds and along rivers in remote areas in the Hakalau Forest Unit. The few remaining wild Hawaiian Crows, or ‘Alala, were found as recently as 2002 in the Kona Forest Unit of Hakalau Forest but have not been seen since. Hakalau Forest is one of the only areas in the Hawaiian Islands where six species of Hawaiian honeycreepers can be found in high numbers. These species include the three endangered honeycreepers (‘Akiapola’au, Hawai’i Creeper ‘Alawi and Hawai’i ‘Akepa), one threatened species (‘I’iwi), and ‘Apapane and ‘Amakihi. An endemic Hawai’i Island thrush (Oma’o) and an endemic flycatcher (Elepaio) also thrive on the refuge.

**What do we know about the Honeycreepers at Hakalau Forest NWR?**

Six small birds at Hakalau Forest, three endangered, one threatened and two relatively common, are members of the Hawai’i Honeycreeper family. This finch family is endemic to the Hawaiian Islands. It evolved from a single colonization of a finch-like ancestor from Asia, about 5 million years ago. Amazingly, over 50 bird species have evolved from this one colonization. Sadly, only 18 survive today.

The endangered ‘Akiapola’au is endemic to Hawaii island. This unusual bird feeds, for the most part, on one kind of insect (a wood boring beetle larvae) on one kind of tree (Koa). This bird has one of the longest periods of parental care among all passerines, almost a year. It also has one of the largest home ranges of any passerine, nearly 60 acres. The ‘Akiapola’au can mandibulate both the upper and lower bills. It feeds with its mouth wide open, pecking into the tree bark with its straight lower bill, like a woodpecker. Then it reaches into a cavity with its long curved upper bill, plucking an insect to eat. The ‘Akiapola’au can also make its upper and lower bills touch like a pair of tweezers.

Endemic to Hawai’i Island, the endangered Hawai’i ‘Akepa is one of the smallest of the Hawaiian Honeycreepers. The males of this 10-gram bird are day-glo orange, while the females are drab gray-green with a yellow-orange wash on the breast. The tips of the ‘Akepa’s bill are crossed, allowing this tiny bird to feed in the Ohia tree canopy, wrenching micro insect larvae and spiders from their hiding places in the leaf buds. The Hawai’i ‘Akepa is the only known obligate cavity nesting honeycreeper. Since Hawai’i doesn’t have any creatures that make cavities, only old growth trees, several hundred years old, can provide cavities for ‘Akepa nests. The old growth forest that this refuge provides is essential for continued ‘Akepa survival.

Both sexes of the Hawai’i Creeper are drab green-gray. Endemic to Hawai’i Island, this honeycreeper needs old growth forest for its livelihood. Often traveling in small family groups, this bird peruses the trunks and branches of native trees searching under bark for arthropods, its main food source. Creepers often nest in protected tree crotches and semi cavities as well as in thick leafed tree canopy branches.

Three common Hawaiian Honeycreepers found at Hakalau Forest are the scarlet-red ‘I’iwi, the maroon-red ‘Apapane and the yellow-green ‘Amakihi. Due to rapidly declining populations elsewhere in the state, ‘I’iwi were listed as threatened in 2017. All three of these birds feed on nectar as well as arthropods for the protein boost during the breeding season. Native birds are important to Hawai’i’s forests as almost 60% of Hawai’i’s flora is either bird-pollinated or produces seeds that are dispersed by birds. The ‘I’iwi is a particularly important pollinator of many endemic plants. With its long sickle bill, it is able to feed on nectar and pollinate many native plants which have long tubular flowers that fit the birds’ bill like a glove.

**May the public visit Hakalau Forest NWR?**

 Hakalau Forest National Wildlife Refuge is ‘exceptional’ to the Refuge System network in the sense that it is not open to public access. At will public access is not allowed at HFNWR for a variety of reasons with the primary one being that the analysis and public scoping conducted during the development of the current management plan found the risks posed to the sensitive native resources were too great. These risks include the introduction of invasive plants and animals, diseases, and hazards such as fire. Furthermore, HFNWR does not have the types of infrastructure necessary to accommodate public visitation in a safe and manageable manner. Despite HFNWR not being an ‘open’ refuge, there are still ways for the public to experience the wonders of the refuge, these include: 1) Refuge-sponsored events and tours, 2) a private tour with one of the guides that is permitted to conduct tours at the Refuge, and 3) by participating in a volunteer service trip. During these trips, the volunteers plant native trees, work in the greenhouses, or help with other refuge tasks. The Friends of Hakalau Forest NWR arrange visits for volunteers.

**Is the refuge open to educational groups?**

 Several environmental education groups visit Hakalau Forest NWR each year. Since 1995, Imi Pono No Ka Aina, an environmental education program for children 12-16 years old, has brought students to the refuge for a 3-day session. Teaching Change was started in 2012 and each month brings local middle and high school students to the Refuge for a 2-day field ecology class. Students are taught about Hawai’i’s native species, their habitats and conservation ethics. While at the refuge, the students plant native trees, work in the greenhouse, collect seeds from native plants and remove invasive weeds. Two additional programs (Youth Conservation Corps and Americorps) bring high-school-age youth to the refuge to assist staff with wildlife management and maintenance projects.

**Is Hakalau Forest NWR a valuable site for research?**

The Fish and Wildlife Service believes that appropriate, compatible research activities contribute to, and are essential to, accomplishing the conservation and management of native wildlife populations and their habitats. The staff at Hakalau Forest NWR has enjoyed a long-standing collaboration with conservation agencies and academic institutions to learn about the habitat requirements of individual species. Several studies on the refuge have also focused on the effects of management actions on refuge wildlife. The University of Hawai’i operates a field station on the refuge which provides temporary living quarters, lab space, and other facilities to support on-refuge research.

**What role has the Fish and Wildlife Service played in the conservation of forest birds, plants and other native and endangered species at Hakalau Forest NWR?**

In the 35 years since this refuge was established, more than a half-million native plant seedlings, including thousands that are endangered, have been planted on more than 5,000 acres of former pasture lands by refuge staff and volunteers. More than 60 miles of fencing have been constructed to protect native forest and aid in the control of feral pigs and cattle. Invasive plant species such as gorse, blackberry, and banana poka, have been controlled over thousands of acres allowing regeneration of native forest habitat. Collaboration with landowners, agencies and academic institutions has facilitated development of outstanding research and youth education programs.

**What role has the Friends of Hakalau Forest NWR played at Hakalau?**

 The Friends of Hakalau Forest NWR (FOHF) was established in 2006 and is a 501(c)(3) non-profit organization. FOHF has contributed directly to the quality of habitat at Hakalau Forest NWR by providing volunteer labor to propagate and out-plant native trees and rare plants, conduct weed control efforts, and by raising funds for the construction of much needed facilities including a 10,000 gal tank to store water for the plant nursery and a new roof for the Volunteer Cabin. FOHF has maintained and repaired refuge buildings and has constructed and maintained an educational trail complete with a trail guide describing plants and other features. FOHF has purchased equipment for volunteers and refuge staff. They also promote understanding and enjoyment of the natural and cultural resources of the refuge by sponsoring public events on the refuge and by leading special tours and arranging public lectures about the refuge and related subjects. FOHF members also work with Refuge and University of Hawai’i staff to sponsor educational field trips for local schools.

**How can I join the Friends of Hakalau Forest National Wildlife Refuge?**

Go to the FOHF website at FriendsofHakalauForest.org, click the Membership button at the top of the Home page and download the Membership/Donation Form. Complete the form and mail it with your membership dues to Friends of Hakalau Forest NWR, P.O. Box 6065, Hilo, HI 96720.

**What are the most serious challenges faced by refuge staff at Hakalau Forest NWR?**

 Invasive animals, such as feral pigs and cattle, and invasive plants are extremely difficult to control. The problem is exacerbated by the ongoing deterioration of fences and access roads. Shifting Federal budgetary priorities have resulted in a “two-steps forward and one step back” scenario. In years when agency funding is particularly tight, fences are not adequately maintained, feral pig populations increase, and invasive plants reappear in formerly treated areas causing decline in habitat quality. These losses reverse hard-fought and costly conservation gains and threaten the integrity, diversity, and health of the refuge.

**What strategies are planned to address the uncertainties of agency funding?**

 A group of Establishing Donors has provided the initial funding needed to create an Endowment Fund (Hakalau Forest Refuge Management Endowment) that will be administered by the Hawai’i Community Foundation (HCF). The Purpose of the Endowment is “to support the Hakalau Forest NWR in their efforts to conserve the integrity, diversity and health of native species and ecosystems of the Refuge. The Endowment shall be used to support a diversity of ecological management projects including, but not limited to, invasive plant and animal control, fence construction and maintenance, and propagation and out-planting of native plant species.” The Establishing Donors have identified the Friends of Hakalau Forest NWR (FOHF) as the designated non-profit that will benefit from the Endowment. The HCF will receive all donations where they will be pooled and invested with funds donated by other non-profits. Each year, the HCF will pay to the FOHF approximately 4% of the Endowment’s average market value, based on the payout policy at that time. The FOHF and the Refuge will jointly determine how these funds will be used to address refuge management priorities.

**What is the Hawai’i Community Foundation?**

 Established in 1916, HCF manages more than 700 charitable funds set up by individuals, families, non-profits, and businesses across the State. These funds reflect the charitable grant making interests of their donors. They can vary from unrestricted grants to those for very specific areas. HCF distributes these charitable funds to Hawai’i’s nonprofit organizations through a variety of grant programs.

**How can an individual donor contribute to the Hakalau Forest Refuge Management Endowment?**

 Charitable contributions can be made at any time and in any dollar amount via check or on-line via HCF’s secure website ([www.Hawaiicommunityfoundation.org](http://www.Hawaiicommunityfoundation.org)). If you donate $100 - $1,999 to the Hakalau Forest Refuge Management Endowment you will automatically receive a free one-year membership in the Friends of Hakalau Forest NWR. If you donate $2,000 or more, you will automatically receive a lifetime Friends membership. Donors may also contribute real estate and publicly held stock. In addition, donors may name the “Hakalau Forest Refuge Management Endowment” as a beneficiary in their will or trust. The donor may choose to be anonymous. Contact HCF regarding details.

**How will a donor benefit by contributing to the Hakalau Forest Refuge Management Endowment?**

 The donor knows that his/her contribution is a permanent endowment that will directly benefit the conservation of native species and their habitat at Hakalau Forest National Wildlife Refuge. Through HCF’s prudent stewardship, the intent of the donor will be honored forever. In addition, the donor will receive an immediate tax benefit for donations made to the fund because HCF is a tax-exempt public charity under section 501(c)(3) of the U.S. Internal Revenue Code. We recommend that you consult with your personal CPA or advisor for additional details on tax benefits.

**What are the fees for an endowed designated fund at HCF?**

 The fees include (a) a 1% annual fee calculated monthly, (b) a 0.20% Quarterly Vanguard Fund Investment Fee and (c) a one-time 1.0% fee on incoming contributions. There is an additional one-time merchant fee of 2.6% if the contribution is made on-line using a credit card.

**How are HCF’s Endowed Funds managed?**

 Contributions that are made to Hakalau Forest Refuge Management Endowment, an endowed fund, are invested and never spent. Endowed funds provide a sustainable level of resources in perpetuity. Endowed funds are invested with HCF’s pooled funds to protect principal, generate income, and ensure capital growth.