



# 'ELEPAIO

Journal of the  
Hawaii Audubon Society

For the Protection of  
Hawaii's Native Wildlife

VOLUME 62, NUMBER 1

FEBRUARY 2002

## Critical Habitat Designated for O'ahu 'Elepaio

A final rule designating critical habitat for the endangered O'ahu 'Elepaio, a Hawaiian forest bird, was published December 10 in the Federal Register by the U.S. Fish and Wildlife Service. Five areas totaling 65,879 acres were established in the Wai'anae and Ko'olau Mountains, a slightly smaller acreage than the agency originally proposed.

"Our analysis shows that this designation will not have a significant effect on landowners and managers within the critical habitat units," said Anne Badgley, regional director for the Service's Pacific region. "Most of the lands are already zoned for conservation by the state, and critical habitat designations do not affect activities on nonfederal lands unless some sort of federal action, permit, or funding is involved."

Critical habitat refers to specific geographic areas that are essential for the conservation of a threatened or endangered species and that may require special management considerations. These areas do not have to be occupied by the species at the time of designation but must provide suitable habitat. A designation does not set up a reserve or refuge, does not imply the land will be fenced or become inaccessible, and only affects situations where a federal action, federal funding, or a federal permit is involved.

"We know in these times the ability of our military to train is a major issue in Hawai'i," Badgley said. "No military training lands are included in these critical habitat units, though two impact areas for live-fire training are adjacent to critical habitat. We will continue to work closely with the U.S. Army in Hawai'i to develop and implement adequate fire management plans that will protect the native species found within its bases."

The five designated critical habitat units include almost all of the are currently occupied by O'ahu 'Elepaio, plus enough unoccupied habitat once used by 'Elepaio to provide for a self-sustaining population. The proposal resembles the species' distribution in 1975, when extensive surveys showed that 'Elepaio populations were larger and less isolated. Based on the average size of territory that each pair requires, the proposed critical habitat would be sufficient to support an 'Elepaio population of approximately 10,100 birds.

The O'ahu 'Elepaio 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



PHOTO BY ERIC VANDERWERF

breast, and white wing bars, rump, and tail-tips. Their long tail is often held up at an angle. 'Elepaio are territorial and often mate for life. They eat insects and do not migrate.

Today, an estimated 1,982 O'ahu 'Elepaio are known to exist in scattered locations, with their current range less than 4 per cent of their original range. The species will be included within the Hawaiian Forest Bird Recovery Plan, which is under development. The plan will identify recovery strategies and target population levels and distribution for the species, with the eventual goal of removing the O'ahu 'Elepaio from the endangered species list.

The designated critical habitat areas include 10,489 acres of federal lands (currently managed by the U.S. Army, U.S. Navy, and Fish and Wildlife Service); 24,821 acres of state-owned lands; 3,975 acres of land owned by the City and County of Honolulu; and 26,594 privately owned acres (including The Nature Conservancy of Hawai'i's Hono'uli'uli Preserve). The recently established O'ahu Forest National Wildlife Refuge is included within the Central Ko'olau Mountains critical habitat unit.

Based partially on public comments received after publication of the proposed critical habitat rule and on more careful review of the biological characteristics of

*continued on page 3*



## Bird of the Month - 'Apapane (*Himatione sanguinea*)

The most common of the Native Hawaiian honeycreepers, the 'Apapane can be heard in the forest by the whirring noise its wings make in flight. Adults are red with dark wings and tail, with white under-tail coverts. About 5 1/2 inches long, the abdomen is whitish. The crown is usually brighter red than the rest of the body. Juveniles are dark greyish-brown instead of red. The black bill is long and slightly decurved, and the legs are black. The 'Apapane sometimes assumes the tail-up posture of the 'Elepaio.

The 'Apapane's calls are varied, and include whistles, squeaks, clicks, rasps, and canary-like trills! At least six calls and ten songs have been recorded, with geographic variation.

Found mostly in flowering 'Ohi'a and mamane forests feeding on nectar, the 'Apapane often flies in groups of two to five birds several hundred feet above the forest canopy. Insects such as spiders also comprise a significant portion of their diet. Nesting in forks near the top of 'Ohi'a trees, the 'Apapane builds a cup-shaped nest of large twigs, ferns, mosses, roots, and lichens. Two to four eggs are laid, white with reddish-brown marks. The breeding season is approximately from February until June. Feathered capes of ancient Hawaiian ali'i (royalty) often were made of red 'Apapane and 'I'iwi feathers.

The 'Apapane can be seen, among other places, in Waimea Canyon and Alaka'i Wilderness Preserve on Kaua'i, Tantalus/Roundtop and 'Aiea Ridge Trail on O'ahu, Hosmer Grove and Waikamoi Preserve on Maui, and Hawai'i Volcanoes National Park and Pu'u La'au on Hawai'i. It is very scarce on Lana'i and Moloka'i.

[information taken from *The Birds of Hawaii and the Tropical Pacific*, by Pratt, Bruner, and Berrett (1987), *Hawaiian Birdlife* by A.J. Berger (1972), *Enjoying Birds in Hawaii*, by H.D. Pratt (1993), and *Hawaii's Birds*, by Hawaii Audubon Society (1996).]



PHOTO BY WM. J. RANCHER

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## 'ELEPAIO

ISSN 0013-6069

Managing Editor: Linda Shapin

Scientific Editor:

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Distribution: Susan Miller

The 'Elepaio is printed on recycled paper  
and published nine times per year:  
February, March, April, May, June/July,  
August/September, October, November,  
and December/January

## HAS Dues & 'Elepaio Subscription Rates for 2002

All amounts are in U.S. dollars.

### Regular Member Delivery to U.S.

Via bulk mail 15.00  
(Not forwardable)

Via first class mail 21.00  
(Hawaii residents: there is no significant  
time difference between bulk and first class  
mail to addresses within the state of Hawai'i.)

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Mexico (airmail only) 21.00

Canada (airmail only) 22.00

All other countries: surface mail no  
longer available (see airmail below)

All other countries (airmail) 28.00



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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 Keaiwa Heiau State Recreational 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.

As a result of a lawsuit by the Conservation Council for Hawai'i, the U.S. District Court for the District of Hawai'i ordered the Fish and Wildlife Service to publish a final critical habitat designation for the O'ahu 'Elepaio by October 31, 2001. This deadline was later extended to November 21. This final rule fulfills that obligation.

The final rule designating critical habitat was published in the Federal Register on December 10 and takes effect January 9, 2002.

source: U.S. Fish and Wildlife Service news release dated 12/10/01.

contact: Barbara Maxfield at 808-541-2749

## Critical Habitat for the O'ahu 'Elepaio – Questions and Answers

### 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 O'ahu. 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 populations and several smaller populations 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 mosquitoes, including avian pox and malaria; predation by introduced mammals, especially rats; and habitat degradation and loss caused by human impacts. Storms and heavy rains also are known to destroy nests.

In Hawaiian legend, 'Elepaio helped canoe makers judge the quality of koa logs used to make 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?

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). 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 species' more preferred forest types, were more recently occupied (since 1975), and form large blocks of suitable habitat.

continued on next page...



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 (figure 1), 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.

## **N E W B O O K**

### **The Sibley Guide to Bird Life and Behavior by David Allen Sibley**

\$45.00 Hardcover - (October 2001)

"Another indispensable book for bird watchers. This veritable David Allen Sibley bible to the world of birds is the collaborative effort of 48 expert birders and biologists, who combine scientific accuracy and detail with an easily readable and well-organized format. How does a tiny chickadee survive subzero temperatures? How do flocks of birds synchronize their flights? How can an albatross cross miles of ocean without flapping its wings? Which bird brains are actually intelligent? It's all here in essays giving an overview of avian evolution, biology, and the aerodynamics of flight and in chapters devoted to the 80 bird families of North America, each one detailing taxonomy, habitats, feeding, breeding, vocalizations, migrations, and more. Concerned about declining populations, Sibley also discusses the conservation status of each species and the factors that threaten them. This fascinating source of information is destined to be a well-thumbed companion." — Lesley Reed

*(this review from Amazon.com website)*

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 Hawai'i?**

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 the 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 Keaiwa Heiau State Recreational 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.



## Biologists to Attempt Matchmaking to Save Rarest of Forestbirds

Only three of these secretive birds are known to exist in the world, a male and two females, all in separate territories in some of the most remote and rugged rainforest in Hawai'i. An ambitious mission to bring one of the females into the male's home range will begin next week in an effort to prevent the extinction of a small, stocky brown forestbird with a bandit's mask, named the Po'ouli (*Melamprosops phaeosoma*)

"We considered many management options to save the po'ouli in 1999," explained Michael Buck, Division of Forestry and Wildlife administrator for Hawai'i's Department of Land and Natural Resources. "Our first priority was to expand habitat management in the East Maui watershed - their only known home - to reduce threats to the po'ouli and other native forestbirds. We had hoped to find other po'ouli in the area, but now we believe translocation may offer the only hope to continue the species."

During the past 3 years, the Maui Forest Bird Recovery Project staff has aggressively controlled invasive weeds and mammalian predators such as rats, cats, and mongooses in the Hanawi Natural Area Reserve. Construction of pig-proof fencing began in 1990 and by 1006, 10 miles of fencing were in place to protect the upper 2,000 acres that provides the best habitat for forestbirds. Despite many searches, no additional po'ouli have been located.

"We go into this translocation project with the full knowledge that it may not succeed," said Paul Henson, field supervisor for the U.S. Fish and Wildlife Service's Pacific islands office. "A trial project using Maui creepers in place of po'ouli helped develop procedures that we believe should safeguard the individual birds. But unfortunately we have no guarantees that the birds will cooperate with our game plan."

Dr. Jim Groombridge, coordinator for the Maui Forest Bird Recovery Project, will lead the 6-week project within the Hanawi Natural Area Reserve. "We learned several techniques from the surrogate project with Maui creepers that will be useful," he explained. "For instance, we found that carrying the bird in a custom-built, padded box with a perch is less stressful for the bird than using the traditional cloth bird bag inside a box, and that it is better to hike the bird to the male's territory rather than fly it by helicopter."

Both the male and female birds will be fitted with radio transmitters he help locate them and track their movements. Groombridge explained that po'ouli rarely sing, and their brown feathers tend to blend in with the tree limbs where they search for food, making them difficult to find in the dense vegetation. By tracking the male, he and his crew hope to release the female close enough to ensure the two will meet.

Groombridge acknowledges there are numerous ways in which the project may not succeed. "After being moved, the female may immediately fly back to her home range, or may decide she doesn't like the male at all - or maybe he won't like her," he said. "We have detailed contingency plans if one of the birds is injured, but of course we will make every effort to ensure that does not occur."

The ultimate goal of the project is to create a wild breeding pair of po'ouli. If the first female moved into the male's home range either leaves the area or fails to breed with the male, the second female may be captured and brought to the male. If the birds nest, crew members will protect the nest and initiate efforts to establish a captive breeding population.

"When you're only working with three birds, it's hard to think in terms of restoring the population," Groombridge said. "But when we have a chance to save one of Hawai'i's unique native species, we think this is an effort worth trying."

The po'ouli was first discovered in 1973 in the upper elevation rainforest of East Maui by college students on a University of Hawai'i expedition, the first new Hawaiian bird species discovered since 1923. Named by Hawaiian cultural authority Mary Kawena Puku'i, po'ouli means "black-faced" in Hawaiian. Never an abundant species, its population was initially estimated at fewer than 200 birds. The last known po'ouli breeding was in 1996.

Fossil evidence indicates po'ouli once inhabited other areas of Maui, including drier habitat between 1,500 and 4,500 feet in elevation on the southwestern slope of Haleakala. The bird is unique in that it is the only Hawaiian forestbird known to eat tree snails, which are its primary food source. Po'ouli also eat insects, spiders, and occasionally fruit.

Source: DLNR/USFWS news release  
dated 01/04/02

Contact: Paul Conry, Hawai'i DLNR, 808-587-0166  
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# International Bird Rescue Research Center (IBRRC)

## Hawai'i/Pacific Regional 2001 Report

by Linda Elliott, IBRRC Regional Representative

In May of this year, Dr. Greg Massey, State of Hawai'i Oiled Wildlife Response Coordinator, sponsored the IBRRC (Linda Elliott, Curt Clumpner, Deirdre Goodfriend & Dr. Marty Haulena of the Marine Mammal Center) comprehensive and hands on two-day training course on Oiled Wildlife First Responder Training. This course was presented to nearly 40 wildlife agency biologists in Hawai'i covering birds, sea turtles and marine mammals. This training added to the experience gained at the HAZWOPER/Oiled Wildlife Response course and drill organized by the FWS's, Dr. John Hickey earlier this year for over a dozen of these same biologists. Both of these training events were actively facilitated by the industry cooperative, the Clean Islands Council (CIC). Hawai'i's oiled wildlife response capabilities have also been significantly furthered by the recent US Navy, Pacific Fleet, Ehime Maru Recovery Operation in Hawai'i. IBRRC was contracted for this project to develop oiled wildlife planning and procedural capabilities, to provide technical advice and assistance during the critical stages of the operation, and first response capabilities and rehabilitation needs to respond to any oiled wildlife. This work has been a great opportunity to update the State's oiled wildlife response preparedness. IBRRC regional representative Linda Elliott developed the oiled wildlife response plan and procedures reference document for the Environmental Unit of the operation that can be used to update the area plan as well. Additionally, a supplies review and update has been performed with the

assistance of Dr. Massey and CIC, and informational charts and forms have been updated including compiling species information specifically for Hawai'i/Pacific wildlife. The Stabilization Unit developed and built by CIC in time for this operation has further enhanced first response capabilities. IBRRC also provided assistance to CIC for set up of this unit in readiness for the response operation. Additionally, IBRRC's Linda Elliott provided assistance to FWS and NMFS in the development of the Short-tailed Albatross (endangered) and seabird handling protocol for the longliner fisheries in Hawai'i, which includes a training video and handouts.

Internationally, IBRRC, including Linda, responded to the Jessica vessel oil spill in the Galapagos Islands in January of this year. Fortunately, there was a small wildlife impact and data is still being collected on the impact to the marine habitat. This was a long awaited and rewarding trip to an amazing environment rich in wildlife. For several years preceding the spill Linda was assisting in the very initial efforts to develop oiled wildlife response capabilities for this environmentally sensitive local, this spill and the follow-up work will add significantly to this cooperative effort. In South Africa the first report on the status of the threatened African penguin following the unprecedented MV Treasure spill response showed an above average breeding season, further documenting the great success of that response operation. The November oiled wildlife response in Germany furthered the ongoing joint efforts by IBRRC, IFAW and the German government to develop response facilities and capabilities in Germany and Europe. In China, there was the opening of the Beijing Raptor Rescue Center; This "Center of Excellence" was born out of the collaborative efforts by IBRRC, IFAW and the Beijing University. IBRRC personnel traveled to Beijing and provided facility development and personnel training guidelines, and consultation. Subsequent to the on site program Chinese personnel were brought to the IBRRC main office and the UC Davis Raptor Center for intensive training. At the home office of IBRRC, this fall and winter brought a lengthy response to a mystery spill off the San Mateo/Monterey coastline. This northern California response along with smaller responses throughout the state this year initiated both of the new state of the art oiled wildlife response facilities.

### Results of 2001 Society Elections Announced

The following individuals were elected in December to serve as Hawaii Audubon Society directors and officers for one and two-year terms beginning January 2002. Incumbents First Vice President Elizabeth Kumabe, Second Vice President Dan Sailer and Recording Secretary Tonnie Casey were re-elected for two year terms. Incumbent Directors at Large re-elected for two year terms include Chad Castle, John Harrison, and Alice Roberts. One member new to the Board of Directors, Arlene Buchholz, was elected as Director at Large for a one year term.

Continuing officers and directors are President Wendy Johnson.



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## Progress Report – Radiotelemetry Studies to Locate Stopover Sites and Nesting Grounds of Pacific Golden-Plovers Migrating from Hawai'i to Alaska

Oscar W. Johnson, Ph.D. & Patricia M. Johnson  
Dept. of Ecology, Montana State University, Bozeman, MT 59717

### General Information

The Pacific Golden-Plover (*Pluvialis fulva*) is among the most impressive of long-distance migrant birds. Annual movements from the breeding range on arctic and subarctic tundras to distant wintering grounds in the tropical Pacific involve extraordinary nonstop transoceanic flights (1). Although this plover is a major avifaunal component in widely separated ecosystems and travels over vast areas of the world, important features of its biology are poorly understood. This is especially true of the mostly unseen migratory phenomenon where many fundamental questions remain unanswered.

Together with various colleagues, we have studied Pacific Golden-Plovers for over 20 years both in Hawai'i and Alaska. Much of our work has involved long-term observations of uniquely color-banded individuals. These investigations have yielded extensive new information on plover ecology and behavior, including demonstration of remarkable site fidelity with interyear survival exceeding 80% (1-5). In spring 1996, we were the first to demonstrate movements from a wintering ground on O'ahu to a breeding ground in Alaska using radiotelemetry (6). Of 20 Pacific Golden-Plovers radio-tagged on Oahu just before northward migration, three were subsequently located in southwestern Alaska. We found two birds on recently discovered breeding grounds in the Lake Iliamna region (7), and signals from the third individual suggested that it was en route to the same nesting area (6). In spring 1999, we conducted a second radio-tagging study with a sample of 40 plovers. The results (10 of the 40 birds were found in Alaska) further substantiated the O'ahu/Iliamna link (7 birds) and revealed an O'ahu/Yukon-Kuskokwim Delta link with 3 birds nesting north of Bethel (8). Presumably, all of the radio-tagged birds mentioned above had followed

the mid-Pacific flyway, a route of 4,000 km or more, between Hawai'i and Alaska.

### Telemetry Research, Spring 2001

Twenty-one Pacific Golden-Plovers were captured and radio-tagged in April on their wintering grounds at three research sites on O'ahu. Each bird carried a unique frequency, and the transmitters (Holohil BD-2G) were the same as those used in our previous studies (6, 8). Funding for transmitters and partial logistical support was provided by the Hawaii Audubon Society (Honolulu) and the USGS (Anchorage).

The study populations in Hawai'i consist of territorial birds, thus departure times of tagged individuals were fixed with relative accuracy (i.e., abandonment of territories is an indicator of departure). northward migration from O'ahu occurred over a relatively few days, with the peak around 25 April. Aerial monitoring began in Alaska on 29 April at southerly locations and progressed northward with the advancement of spring. Altogether, nine plovers were located by cooperating biologists\* in Alaska including three birds on the Seward Peninsula near the northern edge of the known breeding range. Combined with our earlier telemetry findings (6, 8), the present project provides further understanding of the Hawai'i/Alaska migratory link. Such information is likely to be significant in future conservation and management of Pacific Golden-Plover populations on the mid-Pacific Flyway.

We have shown that this species tolerates the temporary attachment of transmitters extremely well with no detectable effect on survival. Of the 60 birds radio-tagged in 1996 and 1999, 51 (85%) returned to their territories on

*continued...*

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O'ahu the next fall (6, 8). In fall 2001, 17 of the 21 birds (81%) tagged the previous spring returned and reoccupied their winter territories. There was no statistical difference between the foregoing return rates and the survival of marked birds that had not carried transmitters (8).

The 2001 findings will be published in one of the ornithological journals, possibly in conjunction with another telemetry project planned for spring 2002.

\*Numerous colleagues assisted with aerial monitoring in Alaska. The individuals who located radio-tagged plovers were: Corey Adler (King Salmon), Mary Anne Bishop (Cordova), Lee Anne Ayres and John Bertrand (Kotzebue).

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## Undergraduate Scholarships Available for 2002-2003

Through a trust set up in memory of Rose Schuster Taylor, Hawaii Audubon Society is offering a full tuition scholarship to an undergraduate student in the University of Hawai'i system for the 2002-2003 school year.

Students must be or plan to be majoring in a field related to Hawaiian or Pacific natural history. Applications are available by calling (528-1432) faxing (537-5294) or emailing (hiausoc@pixi.com) the HAS office. Completed applications must be received by May 1, 2002.

Besides providing transcript(s) and three letters of recommendation, applicants are asked to respond to the following questions:

- How does your academic major relate to Hawaiian or Pacific natural history?
- How do you plan to apply your academic degree to further study or work experience in Hawaiian or Pacific natural history (for example, graduate study, career plans)?
- How might your course of study enable you to contribute to the better protection of native Hawaiian or Pacific wildlife (a major purpose of the Rose Schuster Taylor Trust)?
- Have you already made contributions to the study of Hawaiian or Pacific natural history, especially anything that might contribute to the protection of native wildlife?

Scholarships will be administered through the University of Hawai'i Financial Aid offices.

## For Joint National/HAS Members

**If you have not yet subscribed, your March 'Elepaio will be the last print copy you receive.**

**The 'Elepaio will be available on the HAS website but if you'd like to continue to subscribe by mail, please send us a check for \$15.00 (HAS, 850 Richards St. #505, Honolulu, HI 96813).**



## Mahalo to HAS Annual Appeal Donors

The following HAS members have sent us Annual Appeal Donations between November 19 to December 31, 2001. We extend our sincerest thanks to them for showing their support of the work we do! Many thanks to:

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## Windward Community College to Offer Birding for Beginners Course

Discover Hawai'i's birds and the joy of bird watching. Bird watching is an enjoyable pastime for people of all ages. It can be a daily pastime as simple as watching birds in your backyard or local park or it can be a lifelong pursuit involving extensive travel to exotic places to see as many species as possible. If you enjoy bird watching, want to learn more about Hawai'i's birds or meet others with the same passion, Windward Community College is offering a class on "Birding for Beginners".

Hawai'i is well known as the endangered species capital of the world. As a result of this distinction, each year thousands of people from all over the world flock to Hawai'i to see some of the world's rarest birds. Many kama'aina are not aware of the uniqueness of Hawai'i's birds and of the birding opportunities that are available in our "backyard".

This fun and interactive course is designed for beginners as well as experienced birders. Three Thursday evening

class sessions will cover an overview of Hawai'i's birds and the basics of bird watching, including tips on equipment and books, where to see birds, and planning your next birding adventure. Three Saturday morning field sessions will be conducted at different sites (TBA) to see where Hawai'i's birds live, to learn the basics of bird behavior through first-hand observation and to help aspiring bird watchers develop their field observation and identification skills.

For more information about the class or to register, please check the WCC Office of Continuing Education and Training Website <http://ocet.wcc.hawaii.edu/ncclass.htm> or call 235-7433. The course schedule includes three evening class sessions (February 14, 21, 28 at 7:00 p.m. to 8:30 p.m.) and three Saturday morning field trips (February 16, 23, and March 2 at 8:00 a.m. to 12:00 p.m.). Cost is \$60.00.



## Research Grants in Hawaiian or Pacific Natural History Available

The Hawaii Audubon Society offers grants for research in Hawaiian or Pacific natural history. Awards are oriented toward small-scale projects and generally do not exceed \$500.00. Special considerations are given to those applicants studying dryland forests or aeolian systems in Hawai'i. Applicants are encouraged to solicit grants from other organizations to fund research which cannot be funded entirely by the Society.

Grant recipients are expected to submit a 2-3 paragraph progress report suitable for publication in 'Elepaio within 6 months of the project termination date specified. Recipients are also encouraged to draft a more detailed 2-3 page report which would be considered for publication in 'Elepaio.

Grants are reviewed semiannually. Deadlines are April 1 for summer/fall grants and October 1 for winter/spring grants. Application guidelines are available by calling (528-1432) faxing (537-5294) or emailing (hiaudsoc@pixi.com) the HAS office.

## Field Trips for 2002

All trips with an \* are still in the process of being planned. Details will be provided as the scheduled dates get closer. A donation of \$2 per participant on all field trips is appreciated.

**February 9 (Saturday):** A walk to Ka'ena Point Natural Area Reserve with Betsy Gagne, Executive Secretary to the NARS Commission, Division of Forestry and Wildlife. Ka'ena is the site of one of the last intact dune systems in the main Hawaiian Islands. We will see nesting Laysan Albatross, Wedge-tailed shearwaters, Red-footed and Brown Boobies, Brown Noddies, and whales. Betsy will also discuss the cultural significance of Ka'ena Point. This is a 3 hour round-trip walk, come prepared with hiking shoes, sunscreen, water, lunch, binoculars, etc. Participants must be at least 12 years old. Call Alice Roberts to register at 538-3255.

**March 16 (Saturday):** Fishies! A trip to Hanauma Bay underwater park and marine life conservation district. A lecture on the history, cultural significance, and future of this lovely place will be given by a Hanauma Bay educational staff member. You may snorkel after the lecture. Recommended: sunscreen, water, lunch, snorkeling gear (you can also rent at the bay). All well-behaved ages welcome. Field trip starts at 9am. Call the HAS office to register - 528-1432.

February Program Meeting:

## Kolea Migration Mysteries

**Monday, February 18, 2002  
7:30 - 9:30 PM**

**CHAMINADE UNIVERSITY CAMPUS**

**3140 Wai'ala'e Avenue, Kaimuki  
Henry Hall Room 109**

The Kolea (Pacific Golden Plover, *Pluvialis fulva*) is Hawai'i's most visible native animal, yet many mysteries surround this familiar bird. Research by Phil Bruner and Wally Johnson has shown that Kolea leave 'Oahu for Alaska each year around April 25th - but do they leave other islands on the same days? How long does the flight take? How do the young find their way to islands throughout the Pacific without guidance from adults? Do birds from different parts of the Pacific interbreed, or are they isolated by their different migration schedules?

Such questions will be discussed at the February 18th presentation by Gus Bodner, Zoology graduate student at the University of Hawai'i. He will talk about the ecology and evolution of migration, with emphasis on Kolea, and will present current programs that are teaming researchers, K-12 students, and the general public to address unanswered questions of Kolea biology.

Students statewide are preparing to monitor the upcoming Kolea departure, through the GK-12 program at UH. The Hawai'i Nature Center is organizing volunteer radio-tracking teams to locate birds as they flock and prepare to leave for Alaska. The US Fish and Wildlife Service's Shorebird Sister Schools Program is linking schools in Hawai'i and Alaska electronically. The Bishop Museum is hosting teacher and educator workshops to promote student-centered science with the Kolea.

Come to the meeting or contact organizers directly. For the radio-tracking project, contact Mary Roney at the HNC (955-0100, [Hawaiinaturecenter@hawaii.rr.com](mailto:Hawaiinaturecenter@hawaii.rr.com)); for the Shorebird Sister Schools Program contact Ann Bell Hudgins (541-2749, [Ann\\_Hudgins@r1.fws.gov](mailto:Ann_Hudgins@r1.fws.gov)), and for school participation and teacher workshop information contact Gus Bodner (956-4717, [koleabird@hotmail.com](mailto:koleabird@hotmail.com)).

Program meetings are held at Henry Hall Room 109 on the Chaminade University campus. Meetings are from 7:30 to 9:30pm. Refreshments are served, and HAS publications, T-shirts, and maps are available for purchase.





FEBRUARY 2002

# 'ELEPAIO

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## Calendar of Events

### **Mondays, February 11 and March 11**

Conservation Committee and Education Committee monthly meetings at the HAS office at 5:45 p.m. For more information, call Conservation Chair Dan Sailer, 735-5278 or Education Chair Wendy Johnson at 261-5957.

### **Mondays, February 11 and March 11**

HAS Board meeting always open to all members, 6:30 to 8:30 p.m. at the HAS office.

### **Saturday, February 9**

A walk to Ka'ena Point Natural Area Reserve with Betsy Gagne. *See page 11*

### **Monday, February 18**

Program Meeting at Chaminade University - "Kolea Migration Mysteries" by UH Zoology graduate student Gus Bodner. *See page 11.*

### **Saturday, March 16**

Field trip to Hanauma Bay. *See page 11*

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