Journal of the Hawaii Audubon Society

For the Protection of Hawaii's Native Wildlife

VOLUME 78, NUMBER 4 JULY / AUGUST 2018

AS MUCH AS ONE HALF OF MALAMA KĪ FOREST RESERVE IMPACTED BY ERUPTION; 'Alalā Project Restoration Area Not Currently Impacted



'Alalā in Pu'u Maka'ala Natural Area Reserve: (Jan. 24, 2018). Photo credit: Hawai'i Department of Land and Natural Resources.

(HILO) – Forestry managers on Hawai'i island report one-third to one-half of the total acreage of the Malama Kī Forest Reserve has been impacted by the month-long East Rift Zone volcanic eruption.

Malama Kī is a relatively small reserve, at 1,514 acres, and is home to young 'ohi'a-dominated forest which has served as habitat to sub-populations of native forest birds. Hawaiian honeycreepers, the Hawai'i 'amakihi and 'apapane are resident to this reserve, with previous work showing that Hawai'i 'amakihi make up 24-50% of the bird community, despite the high prevalence of avian malaria and avipox virus. These low-land populations of Hawai'i 'amakihi have been documented as being uniquely

tolerant to avian disease. The Hawaiian hawk, or 'io is also known to be resident in low-moderate numbers in lower Puna, and the Hawaiian hoary bat, or 'ōpe'ape'a is known to occur in relatively low numbers.

According to DLNR Division of Forestry and Wildlife (DOFAW) Hawai'i Island Branch Manager Steve Bergfeld, "Due to current and further expected loss of this forest habitat due to lava inundation, and defoliation due to volcanic emissions in lower Puna, these remnant and subpopulations of wildlife may no longer persist, rapidly decline, or become further fragmented and/or contract in range." Foresters also indicate there will be a loss in the continuity of research on disease tolerance, sub-population genetics, and the measurable effects of rapid 'ohi'a death (ROD) to



Aerial photograph of Malama Kī Forest Reserve. Photo credit: Hawai'i Department of Land and Natural Resources.



'Alalā in Pu'u Maka'ala Natural Area Reserve: (Jan. 24, 2018). Photo credit: Hawai'i Department of Land and Natural Resources.

the forest bird community in the reserve and surrounding area. The reserve also serves, in part, as a public year-round hunting area, which may be greatly reduced due to the loss of forest and the effects to feral animals.

In upwind areas, birds are okay and wildlife has been observed within yards upwind of the flows. Anything downwind would face a sulfur dioxide (SO2) hazard but would likely leave the area. Bergfeld explained, "We don't plan to go catch wildlife and remove them. There is a unique subpopulation of Hawai'i 'amakihi in Malama Kī that will be affected and/or lost by the lower Puna eruption."

Site visits conducted so far show a lot of the vegetation downwind of the eruption plume is dead. More than 200 acres of Malama Kī Forest Reserve have also been damaged by wild land fires sparked by the lava flows. Forestry staff have not been able to do accurate assessments of the forest since it is downwind of the fumes a majority of the time.

In the Pu'u Maka'ala Natural Area Reserve, higher up on the slopes of Kīlauea, staff involved in the recovery of the endangered Hawaiian crow, the 'alalā, are keeping a close watch on the eleven birds released back into the mostly native forest last fall, as well as about 80 'alalā at the Keauhou Bird Conservation Center

(KBCC).

Jackie Levita-Gaudioso, the DOFAW 'Alalā Project Coordinator said, "We are continuing to monitor the ongoing situation and are prepared and ready. The released birds are in an area where SO2 and ash fallout are being closely monitored, as conditions change. The field team's continued and ongoing daily observations allow observers to notice changes in the birds' behaviors and health conditions. Staff onsite, in the release area, are prepared to recapture birds and transport them, if needed." Field staff and KBCC workers have been briefed on human and bird health and safety measures if ash does reach the Center.

While the forest area affected by the current East Rift Zone lava eruption and flows is not large, the loss of remnant and unique flora and fauna is concerning and warrants further assessment as soon as conditions are safe.

This article first appeared as a news release by the State of Hawai'i Department of Land and Natural Resources (DLNR) on June 3, 2018.

https://dlnr.hawaii.gov/blog/2018/06/03/nr18-099/

At the end of June, the eruption continues and "there is tremendous alteration of the landscape on a broad scale and daily basis..." (Chair Suzanne Case). About 50% of the 1,514 acre Malama Kī Forest Reserve has been closed for weeks, with a lot of the forest burned by lava and hundreds of trees defoliated by volcanic emissions.

Update from a news release by the State of Hawai'i Department of Land and Natural Resources on June 24, 2018.

https://dlnr.hawaii.gov/blog/2018/06/24/nr18-119/

Symphony of Birds: Raising Awareness of Hawaiian Forest Birds through Art and Music



Symphony of the Hawaiian Birds concert. Photo credit: Philip Kitamura

Few Hawai'i residents have seen or heard one of Hawai'i's native forest birds, but a partnership between the University of Hawai'i and the Hawai'i Symphony Orchestra aims to introduce the birds to the next generation through music and art.

The Symphony of the Hawaiian Birds is a multidisciplinary effort to educate elementary and secondary students on O'ahu about Hawai'i's endangered native bird species and the importance of conservation efforts.

"The sound of extinction isn't silence, but a decrease in complexity as species, or variations on a theme, disappear," said Melissa Price, assistant professor in the Department of Natural Resources and Environmental Management. "Whether cars and city noise or the sound of introduced species, the sounds of the extinct species are often replaced."

On May 9, an educational concert by the Hawai'i Symphony Orchestra brought together approximately 3,000 students, teachers, parents, scientists, educators, composers, artists and conservationists to celebrate Hawai'i's endangered native forest birds and hear their songs.

Composers worked with visual artists to create six new movements partnered with video and animation all illustrating Hawaiian forest birds.

"We delved into the subject, appreciating the specific nature and characteristics of these endangered and extinct birds that we were tasked to bring to life through animation," said Laura Margulies, lecturer in the Academy for Creative Media System and one of the artists for the project. "Not only did the keiki become enriched, the artists did as well."

Experts in many fields

The project is a collaboration of UH Mānoa's College of Tropical Agriculture and Human Resources, College of Education, Music Department, Academy for Creative Media System, UH West O'ahu, Windward Community College, Hawai'i Symphony Orchestra, Bishop Museum and local artists. More information about the varied experts involved in the project is available on the Symphony of the Hawaiian Birds website.

"There are so many creative minds and talent in our community, and it was thrilling to have so many of them come together for a project that everyone believed in so deeply," said Takuma Itoh, associate professor in the Music Department.

Prior to the concert, the nearly 30 public, private and home schools involved were asked to participate in a set of lesson plans, available at the Symphony of the Hawaiian Birds website, to introduce the birds through science, music, art, social studies and other means.

Educating future conservationists

"During the symphony, I recalled Maya Angelou's words, 'People will forget what you *said* and *did*, but people will never forget how you made them *feel*," said Charlotte Frambaugh-Kritzer, associate professor in the Institute for Teacher Education. "Indeed, the music and animation presented at the symphony became the vehicle for us all to feel the plight of the Hawaiian forest birds. In my opinion, you cannot receive a more compelling learning opportunity for our keiki."

Teachers had access to full lesson plans for grades 4–12 developed by the College of Education and a graduate student in the College of Tropical Agriculture and Human Resources. The plans included links to readings and audio and video resources to prepare students for the concert. The lessons focused on the biology of Hawaiian forest birds, their place in culture and the threats to their continued survival, while also exploring the structure of a symphony and how some instruments can sound like birds. UH Mānoa music education students visited many of the participating schools to teach the students an original hula about Hawaiian birds that was created specifically for this project, so the students could join in with music and movement during the concert.

"This project shows what new art can do: We can react to issues important to us today, create something that is unique and local, and bring entire communities together," said Itoh. "There was nowhere else besides Hawai'i that this project could have been created, and I think it resonated with people here so much more profoundly as a result."

Going forward, the project members are planning to adapt the music and visuals for display at the Bishop Museum, as well as future performances to bring the music of Hawaiian forest birds to an even greater audience on O'ahu and the neighbor islands.

"If we could get every fourth grade class learning the hula, learning the science, learning the music and attending the symphony every year, that would be a dream come true," said Price.

This article first appeared as University of Hawai'i Online News on May 15, 2018. https://www.hawaii.edu/news/2018/05/15/symphony-of-the-hawaiian-birds/



Image from *Vanished Voices: a farewell to the O'o*, animation by Kayla Abalos and Jeanine Higa; music by Takuma Itoh.

Migratory Bird Treaty Act Under Attack

The National Audubon Society Sues the Federal Government

On May 24, 2018, the National Audubon Society announced they were suing the Federal Government. Along with other national environmental groups, the National Audubon Society filed the landmark lawsuit National Audubon Society v. Department of the Interior in federal court to defend our country's most important bird protection law—the Migratory Bird Treaty Act.

Congress passed the Migratory Bird Treaty Act 100 years ago in response to public outcry over the mass slaughter of birds for their feathers. In December, bucking decades of policy and practice, the Department of the Interior declared it won't enforce the law for any unintentional bird deaths caused by industry.

Article first appeared on May 24, 2018 by National Audubon Society President and CEO David Yarnold.

https://www.audubon.org/news/were-suing-federal-government-protect-birds

Hawaii Audubon Society Responds to Changes in Migratory Bird Protections

In response to the changes in the Migratory Bird Treaty Act issued by the Department of the Interior, the Hawaii Audubon Society signed on to an appeal to senators issued by the American Bird Conservancy. Hawai'i's senators, Senator Schatz and Senator Hirono, sent their thoughts on the Migratory Bird Treaty Act to the Hawaii Audubon Society president, Linda Paul. These letters provide a nice background of the protections and history of the Migratory Bird Treaty Act and how the new changes may put Hawai'i's birds at risk.

June 1, 2018 Dear Ms Paul.

Thank you for contacting me regarding the Migratory Bird Treaty Act. I appreciate hearing from you on this important issue. At the turn of the 20th century, many migratory bird populations throughout North America were on the verge of extinction due to excessive hunting and poaching. The sharp decline of migratory bird populations, coupled with natural resource exploitation, ultimately led to the enactment of the Lacey Act of 1908, the Migratory Bird Treaty Act (MBTA) of 1918, and other conservation laws. These laws laid the foundation for modern environmental protection laws and continue to play a critical role in protecting imperiled plants and animals as well as their habitats. A century later, the MBTA continues to be an essential tool to protect migratory birds, which are particularly sensitive to habitat loss and climate change. Currently, over 1,000 migratory bird species are protected under the MBTA, including a number of threatened and endangered native Hawaiian birds like the nene goose and the akepa.

Unfortunately, members of the Trump administration and Congress have sought to reverse the progress made in conserving migratory bird populations. On December 22, 2017, the Department of the Interior's Solicitor's Office announced that it was reversing its existing legal opinion regarding the MBTA. This change means that the Department no longer views the incidental or accidental taking of migratory birds, their nests, or their eggs as a violation of the law. Some in Congress have attempted to codify this legal interpretation into law, including a provision in a bill to expand oil drilling in the U.S., H.R. 4239, the Strengthening the Economy with Critical Untapped Resources to Expand (SECURE) American Energy Act.

The actions taken to date by the Trump administration and members of Congress threaten the progress that has been made to conserve migratory bird populations. I will work to oppose legislative changes that would permanently threaten this progress, and will continue to advocate for strong funding so that the U.S. can maintain its commitments under the MBTA. Please be assured that I will keep your views in mind should the Senate consider legislation related to the Migratory Bird Treaty Act during the 115th Congress.

Again, thank you for contacting me. If you would like to stay in touch with me on this or other issues of importance to you, please visit my website at: http://www.hirono.senate.gov. Please do not hesitate to contact me again in the future if I may be of assistance to you in any way.

Aloha,

Mazie K. Hirono United States Senator

Dear Ms. Paul,

Thank you for contacting me regarding the Neotropical Migratory Bird Conservation Act.

Protecting bird species is an important issue, especially in Hawaii, where birds face unique challenges. One-third of the bird species listed under the U.S. Endangered Species Act are native to Hawaii. These birds face increased threats due to the prevalence of invasive species, habitat destruction, disease, and feral cats. Full funding of government programs related to bird conservation programs is necessary to help address these threats. As a member of the Senate Appropriations Committee, I support robust funding for endangered bird protection. I will continue to advocate for needed funding to support bird conservation.

Please be assured that as the Senate considers legislation related to the Neotropical Migratory Bird Conservation Act, I will keep your thoughts in mind. Thank you again for contacting me.

Sincerely,

BRIAN SCHATZ U.S. Senator

New Customized Nests Installed at Freeman Seabird Preserve

New ceramic nests were installed for wedge-tailed shearwaters at the Freeman Seabird Preserve. Hawaii Audubon manages the Preserve, which is located at Black Point on the southside of O'ahu. Through ongoing native plant restoration, predator control, and seabird nest monitoring, we are conserving a rare urban refuge for these protected shearwaters. In the main Hawaiian Islands suitable seabird nesting locations are limited due to development and introduced predators, such as cats and mongoose. Consequently, there is a need to create more habitat at the Preserve for this growing population of wedge-tailed shearwaters.

After documenting that breeding birds in this colony will readily use artificial nests, Dr. David Hyrenbach at Hawaii Pacific University and Hawaii Audubon began a new partnership with the Ceramic Nest Program to improve and customize these nests. This Program is a collaboration between scientists at the non-profit Oikonos and artists at the California College of the Arts with the goal to design safe nests specific to the needs and threats of burrowing seabirds. For this new project, artists and students from Windward Community College joined the effort and helped build and install 10 nests at the Preserve. These strong ceramic nests are designed to stay cool and exclude cats. This collaboration with scientists, artists, and students will provide stable and safe nesting sites for this growing shearwater colony.



New ceramic habitats that were installed at the Freeman Seabird Preserve. Photo Credit: Alice Roberts

White Tern: Honolulu's Special Bird

It is a surprise to most people that the official bird of the City and County of Honolulu is the White Tern (*Gygis alba*). It was given this official designation in 2007. For the past couple of years Hawaii Audubon Society has conducted White Tern Walks with the goal of increasing awareness of the bird and the special relationship it has with Honolulu. These Walks fulfill the mission of the Hui Manu o Kū: "To enhance awareness, appreciation, understanding and conservation of manu o Kū." The Hui Manu o Kū is composed of Hawaii Audubon Society, US Fish and Wildlife Service, Pacific Rim Conservation, 'Iolani School, State of Hawaii Department of Land and Natural Resources, Hawai'i Wildlife Center, and public citizens.

White Terns nest on many islands in the tropical and subtropical Pacific, Atlantic, and Indian Oceans and came to be called Manu o Kū by the ancient Polynesians. Today, they are common in the northwestern Hawaiian Islands, but in the main Hawaiian Islands they live and breed only on O'ahu in the urban area of Honolulu. The White Tern Walks allow participants to stroll through Honolulu and view birds in locations where they are actively laying eggs and rearing chicks. The Manu o Kū is unique among tree roosting seabirds in that they don't build nests. Instead they lay a single egg directly on a branch where both parents take turns incubating until the egg hatches after about 35 days. The parents will then spend the next few months flying back and forth between the nesting spot in the tree and the ocean to catch fish. Often you can see them flying overhead with their beak full of small fish, which they feed to their chick whole. For reasons still not completely understood, all of this activity occurs in some of the busiest, most developed parts of greater Honolulu often with the birds only a few feet above the heads of the people with whom they share this urban space.

Whether soaring high in the sky above the city or raising their chicks in one of the several hundred trees where they've been documented nesting, these white seabirds are fascinating to watch. If you'd like to learn more about Honolulu's official bird join us on one of the White Tern Walks that take place throughout the year, usually on the third Saturday of the month. The next White Tern Walk is scheduled for July 21 at 9:30 AM. Please see details below on page 34. Also there are highlights from the Manu o Kū Festival that occurred in May to celebrate this special bird on page 35.

Article by Rich Downs, Hawaii Audubon Society Board Member and Leader of the White Tern Walks



Male white tern with fish. Photo credit Rich Downs.

Hawaii Audubon Society Research Grants



Sarah Donahue at work in lab. Photo credit: Sarah Donahue

The 2018 Winter/Spring Grant Awardee

Sarah Donahue

<u>Project Title</u>: Gifts from the sky: diet and trophic position of provisioning white terns (Gygis alba, Manu o Kū) on Oʻahu, Hawaiʻi.

About Sarah: Sarah is a Master's at Hawai'i Pacific University studying Marine Science. She has worked for the last three years with Dr. K. David Hyrenbach, Michelle Hester, and other seabird conservationists around O'ahu. She enjoys working in the lab and conducting field work.

Hawaii Audubon Research Grants

Research grants are awarded semi-annually by the Hawaii Audubon Society. Awards are oriented toward small-scale projects and generally do not exceed \$500. Applicants are encouraged to solicit grants from other organizations to fund research that cannot be funded entirely by the Society. Grants are reviewed semi-annually.

Applicants should include:

- 1) Research Project Title
- 2) Problem and Objectives
- 3) Methods
- 4) Budget
- 5) Curriculum vitae
- 6) Two letters of recommendation

Further details can be found on the Hawaii Audubon Website http://hawaiiaudubon.org



Sarah Donahue in the field. Photo credit: Sarah Donahue

Upcoming Events and Field Trips

EVENTS

25th Annual Hawai'i Conservation Conference

When: July 24 to 26th, 2018

Where: Hawai'i Convention Center, Honolulu

<u>Description:</u> The Hawai'i Conservation Conference allows a diverse group of scientists, policy makers, conservation practitioners, educators, students and community members from Hawai'i and the Pacific to converge and discuss conservation.

Information:

http://www.hawaiiconservation.org/conference/2018-hawaii-conservation-conference/

Hawai'i Island Festival of the Birds

When: September 14 to 17, 2018

Where: Sheraton Kona Resort and Spa at

Keauhou Bay

Description: Third annual Hawai'i Island Festival of Birds. The 2018 theme is "Back from the Brink: Hawai'i's Battle Against Extinction." The program will highlight the ongoing efforts to protect the most rare bird species found in the Aloha State. The schedule includes a community fair, film festival, bird excursions and presentations by Hawai'i naturalists and bird experts. There will also be evening events and entertainment such as the "Brews, Birds and Binos," featuring a street food-inspired menu, craft beers, live music and the festival's signature auction.

Information: www.birdfesthawaii.org.

FIELD TRIPS

Just a Summertime Low Tide: Paikō Lagoon Wildlife Sanctuary, Oʻahu

When: Saturday, July 14, 2018, 8:30-10:00 AM

Where: Paikō Lagoon Wildlife Sanctuary, O'ahu

<u>Leader:</u> Alice Roberts (HAS Board Member)

<u>Description</u>: Visit Paikō Lagoon during mid-summer at a very low tide (-0.2'). Learn about the many native plants at the water's edge. We may see some shorebirds that have remained behind and did not migrate, as well as, a resident pair of Hawaiian stilts, year-round 'iwa, egrets, & herons, and lots of urban birds & ducks.

RSVP: Please RSVP with Alice Roberts with your name and phone number at (808) 864-8122



Hawaiian stilts, *Himantopus mexicanus knudseni* at Paikō lagoon, Oʻahu on April 14, 2018. Photo credit: Jim Koermer

'ELEPAIO · 78:4 · JULY / AUGUST

Upcoming Events and Field Trips

Field Trips (continued)

White Tern (Manu o Kū) Walk, Honolulu, Oʻahu

When: Saturday, July 21, 2018, 9:30-11:00 AM. Following walk at 11:00 am, there will be an orientation session on the white tern citizen science program.

<u>Where:</u> Honolulu (specific location to be announced).

Leader: Rich Downs (HAS Board Member)

<u>Description:</u> Join us for another White Tern Walk as we visit nests around town.

At 11:00, after the walk, we'll provide a brief orientation session for anyone interested in learning how to monitor white tern nests and submit reports on their observations.

RSVP: Please text 808-379-7555 or email huimanuoku@gmail.com and let us know if you'll be attending the orientation session and/or the tern walk.

A Walk on Maui's Coastal Boardwalk, Kealia Pond National Wildlife Refuge, Maui

When: Thursday, July 26th, 2018, 8:00-9:00 AM

Where: Kealia Pond National Wildlife Refuge, Maui. The tour is located at the Kealia Coastal Boardwalk and Viewing Area on North Kihei Road (south side of North Kihei Road, Route 31). You can only enter the small parking lot driving eastbound from Ma'alaea or West Maui. From Kihei or South Maui, you will need to pass the boardwalk and come back from the other direction.

<u>Leader:</u> Yolanda Solorio (HAS volunteer)

<u>Description:</u> This is an informational tour explaining the purpose of the Kealia Pond National Wildlife Refuge, why it exists and what birds and other wildlife are benefitting from its protection. Bring comfortable shoes, water, sunscreen, binoculars, cameras and lots of curiosity for an exhilarating and informative morning walk among Maui's wildlife!

<u>Information:</u> Meet at the boardwalk parking lot. This is an easy hike on the boardwalk through the refuge area. Please note that there are no restrooms at this location. There is limited parking in the parking lot, but additional parking is located along the highway.

<u>RSVP</u>: Please RSVP with Yolanda via email yolandaonmaui@gmail.com by July 15 if you are interested in participating.

O'ahu Forest Birds Hike

When: Saturday August, 25th 2018, time to be announced

Where: O'ahu Forest, specific location to be announced.

<u>Leader:</u> Tony (HAS Board Member)

<u>Description:</u> We will take a hike through the forest looking and listening for native birds and other birds as well.

<u>Information:</u> This hike will be moderate to strenuous and located on uneven ground. Participants will need to be fit.

More information will be provided on our website and in our newsletter closer to the date of the event

RSVP: Please RSVP at hiaudsoc@pixi.com.

Hawaii Audubon Society Membership/Donation Form □\$25 Regular Member International Membership: □\$15 Student Member □ \$28 Canada & Mexico □\$33 Other □ \$40 Family Membership □\$100 Supporting Member □\$ Donation Donations are tax-deductible and greatly appreciated. Name: Address: Phone: Email: □ E-mail me the 'Elepaio □ Mail me the 'Elepaio □ E-mail me volunteer opportunities, updates, & field trips. Thank you for your concern and commitment to protecting Hawaii's native wildlife and ecosystems. Pay by credit/debit card at www.hawaiiaudubon.org. Please make checks payable to **Hawaii Audubon Society**

Mail form and payment to 850 Richards St., Suite 505, Honolulu, HI 96813

'Elepaio ISN 0013-6069 Managing Editor: Jennifer Stahl Scientific Editor: Glenn Metzler AUDU SON SOLLARIA

The 'Elepaio is printed on recycled paper and published six times per year.

The Hawaii Audubon Society (HAS) was founded in 1939. Its mission is to foster community values that result in the protection and restoration of native ecosystems and conservation of natural resources through education, science and advocacy in Hawai'i and the Pacific. Although HAS joined forces with the National Audubon Society (NAS) in 1976, it remains an independent non-profit 501(c)(3) organization. Dues paid to NAS are not shared with HAS, although HAS provides the electronic version of the 'Elepaio (our scientific journal) to NAS members every other month. To receive the full benefits of HAS membership you need to join HAS separately. HAS members receive not only electronic versions of the 'Elepaio and a monthly web-based newsletter, but also access to archived issues of the 'Elepaio and mailed hardcopies, if preferred, as well as the latest updates on events. field outings. and tours.

READ YOUR 'ELEPAIO MAILING LABEL

Please check that your HAS membership is current and your address is correct. Your membership expiration date is printed on the address label. Expired members have a 6 month "grace period" before the 'Elepaio will stop being mailed to them. Please renew promptly to ensure uninterrupted service/delivery.

To **renew** please do **one** of the following:

- Detach and fill out the "Hawaii Audubon Society Membership/Donation Form" and mail it back to us with appropriate payment.
- Visit <u>www.hawaiiaudubon.org/renewals</u> and select the best-fit membership and pay online.

Hawaii Audubon Society, 850 Richards St, Suite 505 Honolulu, HI 96813, Phone: (808) 528-1432, Email: hiaudsoc@pixi.com

http://www.hawaiiaudubon.org

http:/www.facebook.com/hawaiiaudubonsociety

Manu O Kū Festival Highlights

Hawaii Audubon Society joined other groups to celebrate the white tern at the Manu O Kū Festival at the Honolulu Zoo. Highlights of this festival included: talks by author Susan Scott and rehabilitators/rescuers Keith Swindle and Rae Okawa, guided walks by Rich Downs to spot nesting white terns and chicks on zoo grounds, and lots of booths with information and games for the keikis. The festival included music and dancers with a beautiful hula with dancers dressed in feathers and white to honor the city's special bird.



Manu O Kū (white tern) feeding chick. Photo credit: Rich Downs



HAWAII AUDUBON SOCIETY 850 RICHARDS ST, SUITE 505 HONOLULU, HI 96813-4709

www.hawaiiaudubon.org (808) 528-1432 hiaudsoc@pixi.com www.facebook.com/hawaiiaudubonsociety Nonprofit Organization U.S. Postage **PAID** Honolulu, Hawai'i Permit Number 1156

ADDRESS SERVICE REQUESTED

Become a Member

'Elepaio Journal Available Online

The 'Elepaio has been electronically archived and issues from 1939 to the present are now available!

Table of Contents

F
To access archived issues:
1) Become a Hawaii Audubon Society member or subscribe to the journal at www.hawaiiaudubon.org or
mail a check to 850 Richards St., Suite 505, Honolulu,
HI 96813 with checks payable to Hawaii Audubon
Society

- 2) Email hiaudsoc@pixi.com to receive password.
- 3) Enter password at http://www.hawaiiaudubon.org/elepaio-journal

As Much as One Half of Malama Kī Forest Reserve Impacted By Eruption; 'Alala Project Restoration Area Not Currently Impacted
Symphony of Birds: Raising Awareness of Hawaiian Forest Birds through Art and Music
The Migratory Bird Treaty Act Under Attack
New Customized Nests Installed at Freeman Seabird Preserve
White Tern Walking Tour: Learn Why the Manu o Kū is Honolulu's Special Bird31
Hawaii Audubon Society Grants
Upcoming Events and Field Trips
Manu O Kū Festival Highlights34