

NEWSLETTER

The Roof is Complete!



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 following - “The Iconic Hawaiian Goose”

Generous Donors

Prentiss Adkins, Christine Ahia, Gloria Amaral, Paul Banko, Rebecca Browning, Sara Burgess, Tim Burr, Robert Butchart, Richard Camp, Randy Ching, Patrick Conant & Steph Nagata, Niklaas & Debbie Dumroese, Lorraine Ellison, J. B. & Katie Friday, Kerry Glass & Susan Munro, Joshua & Liba Goldstein, Richard Heller, Margaret Hu, Hidoe & Seiko Imoto, Ruth Iwata, Mark & Carol Johnson, David Jung, Pauline & Lyle Kawabata, Tracy Kazunaga, Cameron & Bonnie Keppler, Dennis Lapointe, Jerry Leinecke, Greg Leo, Devin & Christina Leopold, David Lipp, Reid Loo, Don Mitchell, Stephen Mosher, Earl & Jeanne Naue, Ron & Emily Needham, Linda & Norman Nelson, Al & Sandy Nibecker, Liba Pejchar, Lois Pollock, Les & June Sakamoto, Michael & Sharon Scott, Art & Mary Spears, Danny Taka, Janet Taylor, Debbie Walsh, Richard & Carol Wass, Ed Wetherell, James Wiley, Sylvianne & Curtis Yee, James Yoshiyama, and the The HPM Foundation.

We are pleased to report that replacement of the roof on the Volunteer Cabin at Hakalau Forest National Wildlife Refuge is complete. Since its construction in 1986, the cabin has housed refuge staff and thousands of volunteers who have planted a half million native trees, propagated more than 200,000 native and endangered plants, removed many acres of invasive weeds, and expended hundreds of hours to maintain refuge facilities.

Early in 2012 the Friends of Hakalau Forest took on this project because the old roof had developed some serious leaks and the refuge lacked funds to address the problem. A local contractor (Monty Miranda Construction) was selected to replace the roof and gutters. We reached out to Friends members, local businesses, refuge permittees and others with a request to donate funds and other support to complete the project. More than 51 individual donors contributed funds and the HPM Foundation provided a critical shot in the arm with their donation

of roofing materials. Nearly a dozen employees of Miranda Construction and Yama Roofing completed the roof and gutters during a single day in late August. A total of \$6,185 in funds and materials has been contributed towards the project thus far. We are sincerely appreciative of those who contributed funds and materials to make this project possible. A list of their names appears beside this article. A permanent sign will be mounted on the cabin exterior to recognize the contributions.

Rob Shallenberger

FROM THE PRESIDENT'S PERCH...



As 2012 draws to a close, I would like to briefly review some of the major Friends of Hakalau Forest (FOHF) accomplishments for 2012. Our biggest project, of course, was replacement of the Volunteer Cabin roof in August which is described elsewhere in this newsletter in the article by Rob Shallenberger. Almost half of the roof's \$13,300 cost has been covered by a special fundraising effort which will end in December 2012.

FOHF's long-term goals to encourage conservation education and to use Hakalau Forest National Wildlife Refuge as a training site were boosted by the award of the third annual \$1,000 JJ Conservation Education grant to 'Imi Pono no ka 'Āina to train students to propagate and outplant native and endangered plants at Hakalau. The 'Imi Pono students, along with other groups from local public charter schools, also participated in the "Nature of Learning" program supported by a \$8,125 grant that FOHF obtained from the National Fish and Wildlife Foundation. This grant was used to develop a curriculum on climate change and to train students to collect phenology (fruiting and flowering seasonality) data from Koa and 'Ohia trees at Hakalau as a measure of climate change. Recently, FOHF and Hakalau Forest NWR partnered to receive a \$4,125 Connecting People with Nature grant from the U.S. Fish and Wildlife Service to continue the youth education and phenology data collection program. And last month, FOHF was awarded two more grants (\$49,832 from the Hawaii P-20 program and \$20,000 from the Hawaii Community Foundation) to greatly expand FOHF's youth education program at Hakalau! Creighton Litton's article, found elsewhere in this newsletter, describes FOHF's exciting youth education program and grants in greater detail.

Educational booths with poster displays, brochure and other give-aways, and Friends tee-shirt sales at Hawaii Community College's Earth Day Fair and the Refuge's annual Open House served to recruit new

Friends members and to inform people of the work and purpose of FOHF and the Refuge. Member-targeted service trips to the Refuge to assemble FOHF-donated picnic tables, to remove English holly and to perform trail maintenance also helped to recruit, maintain and educate our membership, as did a members-only birding tour of the Refuge led by Jack Jeffrey and public talks at the Mokupapapa Discovery Center by Dr. Frank Bonaccorso on Hawaiian Bats and by J.B. Friday on Koa trees. Join us in 2013 at similar outings, events and talks starting with the January 10 showing of "Endangered Hawaii" at the Mokupapapa Discovery Center in Hilo.

Plan to attend the Annual General Membership Meeting on January 19, 2013 to hear a more detailed summary of 2012 accomplishments. I thank the Hakalau Forest NWR staff, the FOHF Board of Directors, Hawaii's conservation community and, especially, the FOHF membership for your contributions to the success of our year.

Richard Wass, President



2012 Board of Directors

WHAT'S UP ON THE REFUGE?

by Jim Kraus, Refuge Manager

Personnel matters: Our advertisement for a Maintenance Supervisor was closed out in early November—and we received the list of eligible candidates from personnel on December 6. Applications are under currently review. We hope to have the new supervisor on board early in the new year.

Deputy Project Leader James Glynn announced his decision to retire at the end of December. Jim has been with the refuge since 1997. He previously served in refuges on Kauai, the Caribbean and the southeast U.S. region as well as earlier stints with the National Park Service, the Peace Corps, and the Coast Guard. Please join us in wishing Jim all the best in his retirement from a long and productive Federal career. Well done Jim!

Four new Seasonal Volunteers have joined us as of December. Keith Burnett, a former Americorps intern at the refuge has returned for the next few months to keep an eye on our nene population as nesting season progresses. Joining him are three new volunteers, Royce Daniels, Leslie Ann Parker, and Andy Van Deusen, that originally were slated to spend 6 months on Laysan Island refuge. Due to a medical emergency involving their crew leader the team was evacuated and graciously accepted reassignment to Hakalau. They are keeping very busy assisting Baron and Steve with greenhouse operations, outplantings and various biological data collection projects.

Law Enforcement: A decision was recently made to transfer a full time Refuge LE officer to the Big Island NWR Complex in Hilo. The officer in that position accepted another federal job, so we expect to be recruiting for that position soon. We welcome an LE presence here to discourage vandalism and trespass on our refuges which have caused among other problems, chronic fence cutting and gate damage that allowed a resurgence of wild pigs. The position was originally assigned to Midway Refuge, and this move was a part of a larger redistribution of resources among Pacific Islands.

Funding: The refuge, working with Endangered Species, recently submitted a substantial funding request entitled “*Preventing the Imminent Extinction of 27 Hawaiian Plants thru Protection, Propagation, and Outplanting*”. This project request is for over \$800,000 and will support plant related recovery that would aid rare plant species on the Big Island and Oahu refuges. If we compete successfully, funds would provide for fencing, greenhouse expansion, outplantings, and staffing focused in the Maulua portion of the refuge. You may not be surprised to hear that funding for plant recovery is very hard to come by, but we have a lot of people pulling for us on this project and we believe it will compete well nationally.

Discussions are continuing with our nene partners on possible collaboration on funding and construction of predator proof fencing for securing nene nesting habitat at the Hakalau Forest. Stay tuned on this!

Communications: We are currently involved in switching over to a new email system and there have been a few glitches. Please be patient while we work through things if you suspect emails may have been going awry, they probably have! It will get better— so if in doubt, please call us.

Budget: No news yet but like everyone in America, we are waiting with keen interest in what happens in Washington DC over the new few weeks and months. Common sense dictates that we conserve our funds and proceed carefully with all spending, repairs, travel, etc., until we know more about the severity of expected cuts. The situation just underscores the importance of continuing public support, volunteerism and the partnership of Friends organizations around the country. Thanks to all of you for your time and commitment to **your** wildlife refuges!



Dr Eben Paxton

ANNUAL GENERAL MEMBERSHIP MEETING

Members and guests of Friends of Hakalau Forest NWR (FOHF) are invited to attend the annual general membership meeting in the Conference Room at the Institute of Pacific Islands Forestry, 60 Nowelo Street, Hilo at 2:00 p.m. on Saturday **January 19, 2013**. As the featured speaker, Dr. Eben Paxton will discuss the bird research he is conducting at Hakalau Forest NWR. The agenda will also include election of a new board member, a report on the FOHF youth conservation education program at the Refuge, a summary of the major happenings at the Refuge during 2012 and a report on the major FOHF accomplishments during the past year.

HAKALAU FOREST ANNUAL OPEN HOUSE 2012

The Annual Open House at Hakalau Forest NWR on October 20th, attracted 226 visitors, who enjoyed a day of perfect weather on the flanks of Mauna Kea Volcano, joining some 50 refuge staff, Friends members, partners, and volunteers in celebrating National Wildlife Refuge Week. Guided rainforest bird hikes, greenhouse tours, environmental exhibits, and a walk through our 150 year-old koa cabin rich in Big Island ranching history were all on the agenda. 95 visitors travelled to the refuge greenhouse to see the rare plants and native seedlings propagated for our out planting program and to talk story with staff and volunteers surrounded by lush koa reforestation corridors. The Friends of Hakalau reported nearly \$1500 in sales of t-shirts, caps, and other merchandise.

Our partners in celebration included Friends of Hakalau Forest, USGS, University of Hawai'i, Mauna Kea Watershed Alliance, Three Mountain Alliance/Imi Pono No Ka Aina, Hawai'i Land Trust, Hawai'i Wildlife Center, Mauna Kea Forest Restoration Project, and Hawaii DLNR/Department of Forestry and Wildlife/Natural Areas Reserve System.

“Endangered Hawaii”

This 30-minute film produced by the American Bird Conservancy explores the on-going extinction crisis in Hawaii. Chris Farmer, the ABC's Science coordinator for Hawaiian birds, will introduce and present the film including a Q & A afterwards.

Hosted by Friends of Hakalau Forest NWR, the film will be shown on Thursday,

January 10, 2013 at 7 pm at the
Mokupapapa Discovery Center,
308 Kamehameha Avenue in Hilo.

Admission is free.



Coming soon - a lecture by [Scott Laursen](#) about “Teaching Change..at Hakalau Forest.”



Teaching Change to Local Youth at Hakalau Forest National Wildlife Refuge

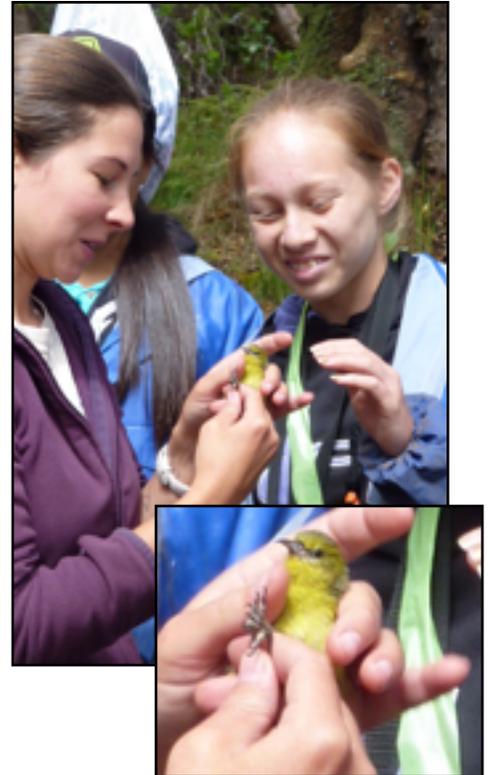
by Dr Creighton M. Litton

Around this time last year, we ran an article announcing that FOHF had been funded by the National Fish and Wildlife Foundation, Nature of Learning Program (a National Wildlife Refuge System community-based environmental education program). This initial funding, along with generous support from the College of Tropical Agriculture and Human Resources of the University of Hawaii at Manoa, was used to develop a youth conservation education curriculum at Hakalau Forest NWR for local middle and high school students. This curriculum focuses on climate change (natural and anthropogenic) and phenology (timing of life history events such as leaf flush, fruiting, flowering), where students visit Hakalau to collect data in a citizen science framework. The short- and long-term objectives of this program are to: (i) engage local youth in conservation biology at Hakalau Forest NWR by teaching them about climate change and its potential impacts on native Hawaiian flora and fauna; (ii) generate a long term dataset on plant phenology for Hakalau Forest NWR; and (iii) foster a long term partnership between Hakalau Forest NWR, FOHF, and local public and public charter schools and educational programs to greatly increase visitation to the refuge by local youth. We are pleased to report on our accomplishments over the past year, and the future directions of this program.

Over the past 18 months, we fully developed this curriculum and it was offered to ~50 local middle and high school students from the Ka ‘Umeke Kā‘eo Hawaiian Immersion Public Charter School, the Hawaii Academy of Arts and Sciences Public Charter School, and students involved in the Spring and Summer enrichment programs run by ‘Imi Pono no ka ‘Aina (the Environmental Education Component of the Three Mountain Alliance Watershed Partnership). The curriculum has evolved into a two day program that includes: (1) a greenhouse and restoration site visit to discuss the importance of conserving and restoring native Hawaiian flora and fauna (with a service project to plant native trees and work in the greenhouse); (2) two interactive “classroom” sessions to introduce students to concepts of climate change, plant phenology, and native Hawaiian forest ecosystems, including the plants and endemic birds that rely on them; (3) an overnight stay at Hakalau Forest NWR; (4) mist netting activities to learn about native and non-native birds common in the refuge; and (5) hands-on measurements of koa and ohia tree phenology, where data are later uploaded to the USA National Phenology Network (we are the first and only site in Hawaii to participate in the USA National Phenology Network!). In all activities, students are encouraged to use their senses (sight, sound, touch, and smell) to ‘experience’ the environment at Hakalau.

Over the past six months we have worked hard to continue this program given the widespread support and interest by students and teachers, and are very pleased to announce that we have recently been successful in garnering additional funding to continue the program over the next several years. Specifically, we received \$49,832 from the Hawaii P-20 Program via a College Access Challenge Grant. With this funding, we will continue the monthly trips to the refuge with groups of local middle and high school students to utilize our recently developed curriculum. The focus of these trips will be underrepresented and underprivileged youth from public Department of Education schools on the Island of Hawaii. Our first group of students with this new funding, from the Hawaiian Immersion Public Charter School Ke Kula ‘O Nāwahīokalani‘ōpu‘u (commonly known as Nāwahī), was at the refuge Dec. 11-12, 2012. In addition to the monthly trips to the refuge, we will provide annual “conservation career days” for students, their families, and teachers to

interact first-hand with professionals and educators in the conservation biology community in Hawaii. The primary purpose of these “conservation career days” will be to educate students on professional opportunities in Hawaii in conservation biology, and the educational programs at local colleges and universities that are available to make them competitive for these positions upon graduation. That is, we hope to not only inspire the next generation of land managers for Hawaii, but also to empower them with the information needed to get the proper education to make a profession in conservation biology in Hawaii a reality. In addition, we recently received \$20,000 from the Omidyar ‘Ohana Fund, a donor advised fund of the Hawai‘i Community Foundation. These funds will also be used to continue our monthly curriculum at the refuge for local middle and high school students throughout 2013, as well as to provide teacher training workshops to local teachers to incorporate our curriculum into their classrooms. Finally, we partnered with Hakalau Forest NWR on a Connecting People with Nature proposal that was funded for \$4,125, which was used to purchase additional binoculars and a spotting scope to support the increasing number of youth participating in our field curriculum. Together, these additional funds - (\$75,000!!!) represent the future of this program over the next two years.



This program has been a tremendous success and would not be possible without the commitment and effort of a whole group of people. In particular, FOHF would like to thank the following individuals for making this program a reality for our local youth: Scott Laursen (UHM) and Colin Phifer (UHH) for developing and administering the curriculum; Kainana Francisco (USDA FS) for willingly jumping in to fill Colin’s shoes when he moved on to a position at Hawaii Volcanoes National Park (Congrats Colin!); Steve Kendall (Hakalau Forest NWR) and Eben Paxton (USGS) for countless volunteer hours to educate and inspire students; and the many others that have given their time, energy and resources. Thank you!



If you have any questions about our youth conservation education curriculum, are interested in bringing a group of students to the refuge to utilize the curriculum, and/or would like to help with the overall effort, please contact Dr. Creighton M. Litton (litton@hawaii.edu).