

Friends of Hakalau

WINTER 2013

FOREST NATIONAL WILDLIFE REFUGE

ISSUE 16



Jim Kraus, Jamie Tanino, (Volunteer of the Year) and Baron Horiuchi

Teaching Change to Local Youth is Steve Kendall, refuge biologist for Hakalau

Difficult Times for Refuges

Budget challenges continue to manifest as the agency hiring freeze imposed last spring continues. Three full time employee positions listed on our organization chart from 1 year ago remain unfilled. The Deputy Refuge Manager, the Maintenance Supervisor, and the Refuge Law enforcement Officer were put on indefinite hold last winter, in fact a more recent decision was made to abolish the law enforcement position on the Big Island due to budget constraints. Current staffing level consists of 5 permanent staff and 5 term staff.

The recent government shutdown lasted officially from October 1 through 16, but considering planning and preparations involved as well as start-up procedures after employees were called back, the episode effectively disrupted our normal 7 day a week work schedule at the refuge for an entire month. It is now December and for the most part we still running a month behind.

Effects of the Shutdown on BINWR Complex: Cancelled events at HFNWR due to the Government shutdown include...

- 1) Annual October Open House event at HFNWR during National Wildlife Refuge Week. We typically get 400-500 visitors at this annual event, many coming from neighbor islands.
- 2) Three weekend Volunteer Service groups (Approximately 30 people) scheduled to conduct greenhouse work and out plantings at HFNWR. This delayed the planting schedule for native reforestation efforts (including T&E species). Volunteers have reported frustration over cancellation of airfares made at personal expense and subsequent penalties and/or complications with refunds.
- 3) Local environmental education programs involving school children were cancelled.
- 4) Special Use Permit holders, including university and partner agency researchers and commercial tour guides were denied access for three weeks.
- 5) A teacher education workshop sponsored by the FOHF and UH partners involving over 20 local teachers conducting environmental education work on the Big Island was unable to visit the refuge and had to go elsewhere.

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FRIENDS OF HAKALAU FOREST NATIONAL WILDLIFE REFUGE

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Refuge Manager's Update continued

- 6) The pig control and fence maintenance program in endangered forest bird habitats was suspended.
- 7) Time sensitive cultural resource survey planning, Wilderness Suitability analysis, and other compliance needs for pending projects and contracts were delayed.

We deeply regret the inconvenience caused to all by the closing and are working hard to catch up. The annual refuge Open House has been postponed until **April 19, 2014**, which we will celebrate in conjunction with Earth Day. Then we hope to resume our normal schedule of the traditional October Refuge Week event as well as beginning a new tradition of a Spring Open House as well.



Reduction in staffing, expected to last for some time, will require an equivalent "downscaling" of projects and programs on the refuge. This will mean a greater need for directed volunteer effort in program areas such as maintenance, where we are able to oversee necessary projects. Volunteers are currently needed for fleet and facility maintenance, numerous painting projects, data entry assistance, and of course, in future years, the Service Group greenhouse/out-planting program (they are very popular and are booked up many months in advance).

Koa Moth Defoliation: Nothing new to report on the defoliation event. The effects on the refuge are widespread, but not consistent across the landscape. Certainly nothing on this scale has occurred in the 27 year history of the refuge. Most, if not all of the koa out-plantings were hit. The effects further into the forest are harder to gauge. We should know more about the lasting effects of the event next summer once we are past winter and can see normal new growth, whether additional outbreaks of defoliation occur, and whether tree mortality is apparent and at what levels. We view it for what it is, a dramatic natural event involving a native insect, and an opportunity from which to learn. We are banking on the natural resilience of the forest, and hopeful of getting adequate rainfall to avoid further stressing of the koa trees.

Jim Kraus, Refuge Director

President's Perch



As I mentioned in my last article FOHF is a young organization with nearly 150 members. That is not a very large member base but if active, the Friends can support the Refuge. In early November the Refuge recognized Jamie Tanino as an outstanding volunteer with a surprise lunch award ceremony. The Friends were represented by J.B. Friday, Secretary, Dick Wass, Treasurer, and me. The Refuge cannot use government funding for food and beverages; so there was a service the Friends provided. With continued federal budget cuts and the effect of sequestration such support by the Friends helps the Refuge protect native Hawaiian flora and fauna – yes insects, too.

Native birds continue to do well on the Refuge, a point that was made at a recent Forest Bird Symposium. The Refuge is one of few places in Hawaii with stable to increasing populations of Amakihi, Apapane, and 3 endangered species, Akepa, Creeper and Akiapolaau. These positive trends are likely an outcome of the management to improve and restore native forests; the work of Refuge staff and teams of volunteers that help propagate and out plant native trees and shrubs.

Working with Refuge staff the FOHF Board has developed several projects that need immediate help from FOHF members:

- Teaching Change youth conservation education program: members to help establish long-term support
- Maulua Development project: members to help plan and organize development of the Maulua unit
- 30th Anniversary Party: members to help plan and organize the celebration
- Management Endowment: members to help plan and organize to establish a capital campaign



The Friends has many other projects, e.g., the Lecture series has immediate needs – someone to solicit and arrange future presentations or helping at the display as we familiarize the visitors with native birds during Earth Day. As I stated in the last Newsletter, active participation on the part of our membership is essential to make these projects successful. Your contributions of time and effort say more than money ever will. Don't just support the change, be part of the change to support the Refuge, which will improve the world we will leave to our children.

Send an email with subject "Volunteering" to friendsofhakalauforest@gmail.com to participate.

Rick Camp, President FOHF

Teaching Change to Local Youth at Hakalau Forest National Wildlife Refuge – Take II

by *Scott Laursen and Creighton M. Litton*

Since 2011, FOHF has developed and run a youth conservation education program, called *Teaching Change*, in collaboration with the University of Hawaii at Manoa, the U.S. Fish and Wildlife Service, the U.S. Geological Survey, and the U.S. Forest Service. This program is designed for local middle and high school students where we use the Hakalau Forest NWR as an outdoor classroom for experiential, immersion learning. Last year we reported on our monthly trips to the refuge with local youth. This year, we provide a summary of that program as well as two new programs we organized and ran this past year – a Conservation Career Day and a Teacher Training Workshop.

This year we continued to run monthly two-day field courses to Hakalau Forest NWR, which has included 158 students to date from nine different local middle and high schools. These monthly courses are currently fully booked through Aug. 2014. In each course students learn basic ecological principles of native Hawaiian forests, climate change, and phenology first-hand through (i) interactive discussions, (ii) restoration of native forests through outplanting, (iii) participation in avian mist netting research, and (iv) gathering phenological data on koa and ohia. See <https://sites.google.com/a/hlwtech.k12.hi.us/digital-tools-for-digital-students/teaching-change-hakalau-fall-2013> for videos that 8th grade students from Mrs. Tabitha Booth's Waiakea Intermediate School made after their trip to the refuge this past August.



This year we offered the first annual Conservation Career Day (CCD) where students and their families had the opportunity to interact with professionals and educators in Hawaii's conservation biology community. The overall objective of CCD is to inform students of the professional opportunities in conservation biology in Hawaii, and to provide information on the post-secondary educational opportunities to make them competitive for these jobs so that they can get the training needed to be the next generation of land managers, researchers, and educators for Hawaii. The first CCD was May 4, 2013 at UH Hilo and was attended by a wide array of local natural resource professionals and educators, and students. Keep an eye out for fliers and banners around Hilo advertising our 2nd CCD sometime

in the Spring of 2014.

Finally, this past year we offered our first Teacher Training Workshop (TTW) on Oct. 18-19, 2013. The goal of the TTW is to provide teachers with background knowledge in the key subjects of the *Teaching Change* program. The ultimate goal is to enable these teachers with key information to be able to share the subject matter with their students in their classrooms. The first TTW consisted of one day of interactive lecture and discussion, and a second day in the field along the Pu'u O'o trail with renowned

biologist and naturalist extraordinaire Jack Jeffrey. The TTW was a great success, bringing in 12 teachers from across the Islands of Hawaii and Oahu. As with the CCD, keep an eye out for fliers and banners around Hilo advertising our 2nd TTW sometime in the Fall of 2014.

The *Teaching Change* programs are only possible through extensive partnerships and a steadily growing network of local schools. In particular, FOHF would like to thank **Steve Kendall** (Hakalau Forest NWR) and **Eben Paxton** (USGS), along with their field crews, for their many hours in the field sharing with students. Above all we would like to thank the many teachers and students who have participated in our programs. Their excitement is

deeply inspiring for everyone involved with *Teaching Change*. If you have any questions about *Teaching Change*, are interested in bringing a group of students to the refuge, would like to donate, and/or would like to help with the overall effort, please contact Mr. Scott Laursen (slaursen@hawaii.edu) or Dr. Creighton M. Litton (litton@hawaii.edu).



Pictures courtesy of Dr. Creighton Litton

A new program for preventing extinction of rare native plants at Hakalau

J. B. Friday

Hakalau Forest National Wildlife Refuge was established for the forest birds, but as anyone who has worked at the nursery knows, the Refuge is also home to many rare, threatened, and endangered native plants. Five of these are currently being propagated in the Refuge nursery but that leaves many more with declining populations in the wild.

This year the Refuge received a \$485,000 grant from the Fish and Wildlife Service through the Cooperative Recovery Initiative to propagate and outplant rare plant species. Twelve plants on the Refuge have been prioritized by the Hawaii Plant Extinction Prevention Program, mostly native Hawaiian mints (*Phyllostegia* spp.) and lobeliads (*Clermontia* and *Cyanea* spp.) The grant is funding construction of a new greenhouse, five exclosures, pest control measures, and an intern to work on the project. The new greenhouse will be located directly mauka of the existing greenhouse and construction began in December. The goal of the program is to grow and plant at least 25 to 100 individuals of each species every year.

Plants will be planted in the Maulua Unit, north of the main Hakalau Unit of the Refuge, because previous outplants of rare species have done well there. Although the upper Maulua unit is fenced, five small exclosures will be constructed for the rare plants to make doubly sure they are protected. Additional work will be done to keep the area free of ungulates.

The Refuge is seeking additional funding to survey for more rare plants, both to protect them and to obtain planting material to expand the genetic base for the propagation program.

Hawaii Plant Extinction Program www.hepphi.org

Species	Common Name	Federal Status
<i>Clermontia peleana</i> ssp. <i>peleana</i>	'ōhā wai	Endangered
<i>Clermontia pyrularia</i>	'ōhā wai	Endangered
<i>Cyanea marksii</i>	hāhā	PE
<i>Cyanea platyphylla</i>	hāhā	Endangered
<i>Cyanea shipmanii</i>	hāhā	Endangered
<i>Cyanea stictophylla</i>	hāhā	Endangered
<i>Phyllostegia brevidens</i>	Hawaiian mintless mint	Extinct in the wild
<i>Phyllostegia floribunda</i>	Hawaiian mintless mint	PE
<i>Phyllostegia racemosa</i>	Hawaiian mintless mint	Endangered
<i>Platydesma remyi</i>		PE
<i>Ranunculus hawaiiensis</i>	makou, Hawaiian buttercup	C
<i>Sicyos macrophyllus</i>	'ānunu	C



Ranunculus hawaiiensis

Cyanea shipmanii



Phyllostegia brevidens flowers

