



SEMI-ANNUAL REPORT – SEPTEMBER 2012

NAKULA EXPERIMENTAL RESTORATION PROJECT

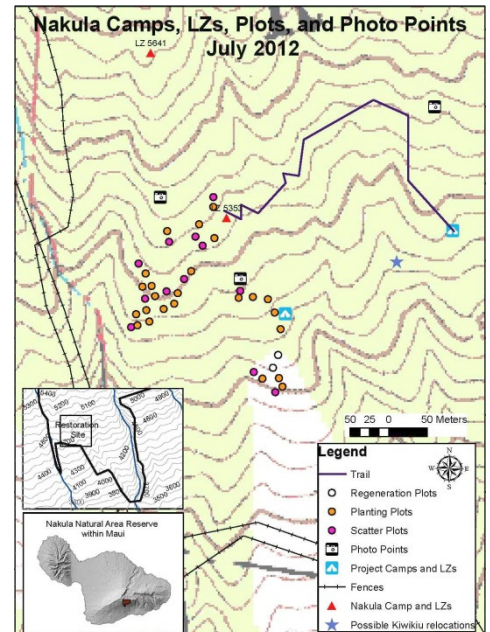
A long term goal, identified by USFWS, for the recovery of the Kiwikiu is the establishment of a second population. The leeward side of Haleakala, East Maui, has been identified as the most suitable location. Before extensive habitat degradation, these birds were found all across Maui, including this area. By encouraging a second population on this side, it will provide additional habitat to increase the total population and also safeguard the species' from any natural disasters that could occur on the windward side, where their population currently exists.

Our goal is to restore the forest on this part of the island and eventually reintroduce birds there through either translocations or captive releases. After much planning, this process is finally underway. Hanna Mounce and Laura Berthold of MFBRP, Chris Farmer of the American Bird Conservancy, and Jeff Friedman, volunteer for MFBRP went into Nakula Natural Area Reserve this July.

Last year a section of this reserve (150 acres) was fenced off by the State of Hawaii's Natural Area Reserves team to exclude ungulates. Ungulates like cow, pigs, goats, and deer, all wreak havoc on the forest- eating seedlings, causing erosion, and creating wallows for mosquito breeding grounds. Once they are excluded, restoration can begin, both through our help and naturally.

MFBRP is now implementing an experimental restoration protocol to test what methods of reforestation will be best to extrapolate out onto the landscape scale. MFBRP has started by collecting seeds from native plants in the reserve. These will either be given to Native Nursery, LCC in Kula to grow plants to be planted in Nakula or they will be scattered in plots. MFBRP is setting up 27- 10mx15m outplanting plots (to plant seedlings), 16- 5mx10m seed scatter plots (to scatter seeds), and 24- 10mx10m natural regeneration plots (to see how the reserve does naturally). Every few months, we will go into Nakula to collect seeds. Next fall we will begin outplanting the seedlings. Photo points are also being set up. Photos will be taken every few months in the same spot to see the progress of the forest. In five years, we hope to release the first experimental reintroduction of a few Kiwikiu pairs.

In July, we were able to set up most of the plots and collect some seeds. We will be going in again in October and January with a few volunteers to continue setting up plots and collecting seeds.



Above: GIS map of the area with plots. Below: Photos of camp, koa tree, and seed collection in Nakula.



NEW NAKULA CAMP

A new camp was set up earlier this month in the Nakula Natural Area Reserve for future restoration work.

Volunteers, Chris Brosius of the West Maui Mountain Watershed Partnership and Jamie Davidson both took the lead on this project along with MFBRP staff. We can not thank them enough for volunteering their skills and craftsmanship. The water catchment will reduce the costs of accessing the area and the deck will soon hold a shelter.



Left: Team that built the camp. From left to right: Jenn Atkinson, Laura Berthold, Hanna Mounce, Jamie Davidson, and Chris Brosius. Right: Camp deck and water catchment from the air.

FIELD SEASON 2012 WRAP UP

This field season, we began intensely monitoring Kiwikiu in The Nature Conservancy's Waikamoi Preserve. Previous trips in Waikamoi over the past few years have prepared us to work in the area. This was the first year, though, that we intensely followed and monitored breeding Kiwikiu pairs and tried to get a better idea of the population's demographics in Waikamoi. We've monitored the Kiwikiu within the core of their range in the Hanawi Natural Area since 2006 and are now focusing on the edge of their population range in Waikamoi.

Demographic monitoring was conducted from February to June. Full time staff and AmeriCorps intern, Peter Motyka were joined by five research assistants, Matt Boone, Katherine Caldwell, Jonathan Gunther, Jaan Kolts, and Jennifer Milikowsky. One volunteer, Hannah Wickenden, joined us from University of Kent, England, for a few days as well.



2012 Field Crew (left to right, top to bottom): Laura Berthold, Peter Motyka, Jon Gunther, Jaan Kolts, Katherine Caldwell, Matt Boone, Jen Milikowskv.

For the seven person team, 455 person days amounted to 2941 hours of research work. Within this time, 17 individual parrotbill were re-sighted and 8 were newly banded. Overall, 19 Kiwikiu pairs were located and 9 of them were seen with hatch-year birds, giving us a 47% productivity estimate. Total adult parrotbill within the 158 ha of the study area was estimated at 48 birds, a rough density estimate of 24 birds/km². We also found five nests. One was never active, two fledged, and two failed.



In addition to productivity monitoring, we also experimented with providing supplementary food to the Kiwikiu. Unfortunately, no parrotbill used the feeders in the short time that they were up. We will take what we learned from this year's trial and improve upon it next year. A poster presentation of our findings was shown at the Hawaii Conservation Conference and is available on our website.

In October and January, we will be going into Waikamoi Preserve with several volunteers to band known unbanded Kiwikiu as well as target last year's hatch-year birds. This will help our estimates for next year, as we will be better able to tell birds a part, locate them, and figure out pairs.

All of our staff worked very hard this year and we appreciate their efforts and talents to enable this research.

CASE OF THE TWINS

An interesting finding that we had this year was 2 hatch-year birds being found with one pair. This is unusual in Kiwikiu. They typically lay a 1 egg clutch and will rear one successful juvenile each season. They have only been seen with two possible hatch-years about 10 times. In 2009, we saw a pair with 2 hatch-years in Frisbee Meadows within Hanawi Natural Area Reserve. And now this year we had one case in Waikamoi. Fortunately, we were able to color-band one of the juveniles and the male was seen feeding both at the same time. We were only able to re-locate the unbanded hatch-year by the end of this season, though. We will have to see if we re-sight the other juvenile next year.



Left: Color-banded male Kiwikiu singing in an olapa.
Right: One of the young Kiwikiu found in Waikamoi.



THANK YOU FOR YOUR SUPPORT OF ROCKET HUB

MFBRP had a fundraiser from May to August on RocketHub. We were able to raise \$2,290 towards our Parrotbill genetics project. To view our fundraiser page and video, visit <http://www.rockethub.com/projects/7855-hawaiian-honeycreeper-conservation-genetics>

Mahalo to all who donated:

Bobbi Becker	Erika Fabian	Dusti Becker	Alan Knue	Peter Sanzenbach
Holly Childs	Barbara Dunn	Laura Berthold	Nancy Laytham	Jupiter Nielsen
Cathy Motyka	Susan O'Leary	Robin O'Leary	Sharon Milikowsky	Joella Schiepan
Caroline Tepley	Jon Plissner	Vince Cavalieri	Peggy Macres	Emily Scholz
Virginia Walker	Nora Mounce	Jamie Davidson	Randall Carpenter	Anne Carter
Charlene Mounce	Matt Hale	Dave McPherson	Tobias Doerr	Robynn Yim

GRAD STUDENTS TO BEGIN WORK

Peter Motyka, MFBRP volunteer from 2009 and AmeriCorps Intern 2012, began his graduate studies this fall at Northern Arizona University with advisor Jeff Foster. Peter will be looking at demographics and habitat use of Maui Alauahio in non-native forest area within Poli Poli State Forest. This study may be able to give managers insight into how we can manage non-native landscapes for the benefit of native forest birds.

Alex Wang, AmeriCorps Intern 2011, also began graduate studies at the University of Hawaii at Hilo with adviser Pat Hart. Alex will be investigating Akohekohe dispersal and resource use and how these may be mechanisms for increased probabilities of avian malaria infections. This could prove especially useful to help guide future management decisions.



Both Alex and Pete will begin their graduate project field work next year with the Maui Forest Bird Recovery Project.

Photos: Top right: Peter Motyka with Maui Alauahio.
Bottom left: Alex Wang with liwi. Bottom right: Akohekohe.





HAWAIIAN AIRLINES CHARITY PROGRAM

MFBRP became a Hawaiian Airlines "Give Wings to Great Causes" Charity in March. Supporters have been able to donate their Hawaiian Miles free of charge through the HA website.

We will use donated miles for inter-island collaborations, conferences, and meetings. At the end of the year, Hawaiian Airlines will match the donations we are able to gather with up to a half a million miles to each participating charity.

Visit <http://www.hawaiianair.com/hawaiianmiles/donate-miles/> to donate your miles today! Mahalo!



MAUI BREWING COMPANY BENEFIT NIGHTS

Friday, **September 28th** and **December 28th**, are the Maui Brewing Company Pint Night fundraisers for Maui Forest Birds. From **6pm to midnight**, half of the night's pint sales will go to bird research.

Maui Brewing Company is located at Kahana Gateway Shopping Center, 4405 Honoapiilani Highway - Just north of Lahaina



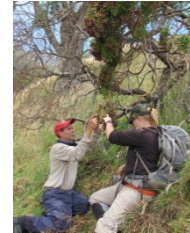
Please join us and help support the recovery of Maui's native forest birds!!

THANK YOU TO MFBRP VOLUNTEERS AND SUPPORTERS

MFBRP is lucky to have such dedicated partners, volunteers, and supporters. Thank you to all who have donated their time and equipment to us so far this year.

West Maui Mountains Watershed Partnership
 East Maui Watershed Partnership
 Leeward Haleakala Watershed Partnership
 The Nature Conservancy
 Maui Invasive Species Committee
 American Bird Conservancy
 Natural Area Reserves
 Volkan Bilen
 Isabelle Walker
 Jamie Davidson
 Joey Leibrecht

Hannah Wickenden
 Jeff Friedman
 Chris Brosius
 Hawaii Youth Conservation Corps



DONATE TO MAUI FOREST BIRDS



If you'd like to support our work, please send your tax-deductible donation at any time. Either visit our website to donate through credit card or mail a check made out to Tri-Isle RC&D to MFBRP, 2465 Olinda Road, Makawao, HI 96768. Donations help to fund gear purchases, outreach materials, and other research needs. Check out our website for other ways to help MFBRP. We accept donations of rain gear, dry bags, rubber boots, landscaping and office volunteer work, and more.

Photo by Robby Kohley.