QUARTERLY REPORT JANUARY 1- JUNE 30, 2006





NEW SEASON, NEW CREW, NEW OBJECTIVES

As the season came to a close, we are happy to announce that it was both an exciting and productive quarter for MFBRP!

The Maui Forest Bird Recovery Project began the year with a new crew from across the country. Five temporary research technicians were welcomed to the team: Hanna Mounce, Phil Taylor, Jamie Granger, Brian Cato Cook and Mike Cacciapaglia as well as three interns: Ashley Hovis, Jackie Gaudioso, and Morgan Graham. These new faces joined Kirsty Swinnerton, our project coordinator, and Tony Chen, our senior ornithologist.



MFBRP Crew Spring 2006

We also started the year off with a new project focus, shifting from previous work to the endangered Maui Parrotbill. We needed to start an intense study to obtain productivity and survival data on this extremely vulnerable species. Our main objectives were to:

- 1) Locate parrotbill nests and collect nest observation data to analyses what the limiting factors are for nesting success
- 2) Map territories of color banded birds and increase the color banded population for survival data and pair statuses

3) Harvest parrotbill eggs for the current captive populations at MBCC.



Parrotbill Nest in HR3

To coincide with our new trajectory, we made changes to our field operations:

- 1) In order to increase our search effort we expanded our research area to include two new sites: Frisbee Meadows and Waikamoi Preserve, in addition to our Po'ouli Camp, a.k.a. HR3, where the majority of our banded honeycreeper populations are.
- 2) To increase our time in the field and eliminate delays due to weather, crew members hiked though the crater into Hanawi NAR. Hiking generally took between 7-10 hours. We had a lot of fun, as it was a great commute and it eliminated lapses in nest observations as teams switched in and out of the field.



(L to R) Jackie Gaudioso, Ashley Hovis, Phil Taylor and Huiseng Chen heading home.

PROFESSIONAL TRAINING AND ORIENTATION

In order to insure maximum safety during the field operations and the quality of data collection, all MFBRP staffs received preseason training and orientation in January. These trainings included B-3 Basic Aviation Safety training and Basic Tree Climbing Course (two days course by Tree Climbing International instructor). We wanted to be able to access nests in 'ohia trees in the safest and most unobtrusive methods possible. Besides these trainings, our team visited Haleakala National Park to learn the dos and don'ts hiking across the park with our new plans. After a four day field orientation we were ready to head out and find some parrotbill!

FRISBEE MEADOWS

A team of two researchers operated out of Frisbee Camp, a site which had not been used since USGS ended their parrotbill research there in 1997. This site was located SE of our past work sites at 6000-7000 ft in elevation. Based on the past parrotbill studies done by Thane Pratt and USGS, we were anticipating this to be a very active location during the breeding season. Parrotbill density was predicted to be very high in this area and we spent a total of 95 person-days there to set-up a camp and search for parrotbill and other honeycreeper activity.

Throughout the breeding season we had many parrotbill detections, especially of males birds singing and announcing their territories. Unfortunately, we were unable to get an idea of what areas within the grid seemed to be most active as this site is very large with extremely treacherous terrain. The lower areas at ~6000 ft. are where we observed the greatest amount of parrotbill activity. We are looking forward to focusing more efforts on this lower section of the grid in the next upcoming breeding season.



Frisbee Camp, as seen from the Park Fence.

WAIKAMOI PRESERVE

During January – April 2006 in the Waikamoi Preserve maintained a goal of resighting and nest searching with the prospective of the preserve being a new egg harvesting sight, in order to increase genetic variability in the captive population. We also surveyed for Crested Honeycreepers in the area, which seemed to be abundant along all trails, with a higher concentration in some areas. Other duties included clearing trails and setting up stations every fifty meters in order to construct a GIS map of the preserve, complete with plotted sightings for future surveyors.



Forest between Waikimoi and HR3

A camp was set up at Ko'olau Gap for a two person team which operated a five day work schedule, hiking in and out through Hosmer Grove. Due to extremely poor weather, only two field sessions were conducted using the camp. All other work was done on a day trip basis. Due to low parrotbill densities, poor weather and assistance needed at other MFBRP sights, and after TNC started their invasive species control in March, the Waikamoi Preserve sight was only surveyed

on occasional day trips for the remainder of the season spending a total of 16 persondays in the Waikamoi reserve. During this short period, we were able to reopen the main trails and detect some parrotbill and even found one breeding pair, although no nest was located. We were not able to harvest any eggs from this area but our findings in Waikamoi confirmed this area to be the eastern most boundary of the current parrotbill range.

After we pulled out our team from Waikamoi, the team was moved to Grassland (Baker) Camp to search for parrotbill and obtain resights on other honeycreepers in HR1.

GRASSLAND CAMP (HR1)

After moving to Grassland Camp, three team members were stationed at the camp from April to May, 53 person-days.

The Maui Forest Bird Project had operated extensive banding operations in this area in the past and hoped to resight parrotbill and other honeycreepers. In the end we were only able to discover two unbanded parrotbill, who were seen twice in upper edge of this area and only a few other banded individuals. We need further investigation to determine what happened to the local parrotbill population in this area.

PO'OULI CAMP (HR3)

This site had the most constant efforts this year with two teams of researchers switching out in order to have someone in this field site every day. This was particularly important for nest observations.

During the season, we were able to locate several parrotbill pairs who were banded from previous seasons. One of these pairs has been successfully breeding for at least three years now and another banded female showed up with a new male whom replaced her previous mate. Three out of four of our active breeding pairs in this area had at least one of the adults color banded from previous seasons which was particularly useful for us.

Working towards our main goals, MFBRP researchers found three parrotbill nests and four family groups in total. Two of these nests were active with small chicks when we found them and one was located in a tree where the chick had already fledged from and we were able to locate the nest in the first couple of days after the chick had fledged. We collected a lot of data from nest observations and parental care. During these observations we witnessed one nest failure. One team member observed a pueo predate the second parrotbill nest, the first confirmed observation of this. It was an unfortunate loss but a great observation.

Even with the one loss, overall breeding success in the site was much higher than last season. There were at least 3 fledged juveniles that were in good health traveling around with their parents when we left for the season. We were able to capture one of these juveniles and attach color-bands, as well as recapture two of the already banded adult females and take new measurements and plumage data.



Female breeding Maui Parrotbill

In addition to the nest observations and banding efforts, we mapped home ranges for three breeding pairs and observed a couple of banded parrotbill that moved through the study area. We also collected re-sights on the other color-banded honeycreepers for survival analyses and collected one parrotbill nest for the museum preservation after it had been abandoned.

We are looking forward to trying to locate our newly banded first-year bird in the upcoming season as well as track these parents whom we have several years of breeding data on.



Color-banded Juvenile from HR3

EAST MAUI FOREST BIRD SURVEYS

In addition to our own research, MFBRP staffs also participated in the East Maui Forest Bird Surveys. In February, we sent out two teams to reopen Transects 8 and 9 within the Hanawi NAR. MFBRP staff conducted the surveys of Transects 3 and 9, and part of Transect 8 bird count in April. In order to test the effectiveness of the count, we recounted the upper stations of transect 7, 8 and 9 twice in April and May. We were only able to record parrotbill on Transect 8 during the count and recount.

OUTREACH

Additionally, MFBRP has been generating public awareness through media coverage

(article in Maui, March 2006 and MFBRP newsletter).

During the month of May, we had an informational display at the Makawao Library. The display materials explained our mission, and facts about Maui birds, with the intent of generating public awareness of native and alien forest birds inhabiting the island. We incorporated an array of materials that would cater to a broad spectrum of age groups and levels of background knowledge. Feed back from our display was very positive; we were pleased to receive many mahalo's from library patrons and staff!



Library Exhibit and display Akohekohe and Maui parrotbill

We also presented at the Hawaii Conservation Conference, updating the scientific community on the research that we have been doing.

MAHALOS from MFBRP

MFBRP would like to give a big mahalo to all of the people that have been incredibly helpful to us this season. Thanks you for all of your time knowledge and energies: Pacific Helicopters, DOFAW, Haleakala National Park, USFWS, University of Hawaii, The Nature Conservancy and all of the individuals that helped with the East Maui Bird Counts.