QUARTERLY REPORT – MARCH 2009

NEW 2009 FIELD CREW

The Maui Forest Bird Recovery Project brought on eight new research assistants to our team this January for the Maui Parrotbill breeding season. We are looking forward to a great year and have already had a very productive couple of months in the field!

(r-l) Marjorie MacIntosh, Julia Webber, Wayne Li, Kelly Iknayan, Caitlin Wells, Shane DuBay, Laura Berthold and Elliot Schunke

CHALLENGES AND STRATEGIES FOR BANDING 'AKOHEKOHE

'Akohekohe or Crested Honeycreepers (CRHO) seem to be the most aggressive species of forest birds left on Maui. We have observed individuals chasing or fighting with every other species of honeycreeper in the forest and they always come out on top. These behaviors led us to believe that we would be able to mist net CRHO using playback of other bird songs to illicit either an interested or aggressive reaction and lure individual CRHOs into our nets. Such techniques have worked remarkably well for Maui Parrotbill and Maui 'Alauahio.

Previous data suggest that CRHO are found lower in the forest canopy at certain times of the year when there are fewer ohia blooms forcing them to capitalize on other food resources. Our team set out during these periods to target CRHO, but surprisingly we were almost totally skunked! After 2 weeks in the field with nets as high as we could get them on pulleys and ropes we caught only 2 individuals. We decided that maybe we were thinking about this too scientifically and started brainstorming ideas for other lures we could try. We made moving and non-moving decoys, tried every variety of calls we had recordings of and even tried to make ohias 'bloom' with pipe cleaners made into lehua filled branches and fake flowers near our nets. The 'amakihi were fooled right away, but not the 'akohekohe. Wily as they may be, we are not giving up and are open to any creative

suggestions from fellow bird banders. A couple of weeks ago we had a CRHO jump right into a very low net in response to ‘alauahio calls! I guess you never know what can happen, and suddenly get lucky!

KUDOS FOR HANNA: RCUH OUTSTANDING EMPLOYEE OF THE YEAR

By Dusti Becker, Project Coordinator

On top of coordinating field crews to manage recovery efforts for endangered birds, Hanna Mounce successfully took on being the Interim Project Coordinator for the Maui Forest Bird Recovery Project during much of the 2008 fiscal year. Of course she had help from other capable staff, but in addition to her regular *kuleana* of organizing the complex schedule for field camps, and of teams hiking to and from Hanawi, she took a leadership role in office management, organized a fund-raiser, an Earth Day booth, and an exhibit at the local library.

All of our staff work crazy hours and weekends, and are dedicated to preventing the extinction of Maui’s endangered forest birds. Still, Hanna deserves special recognition for the extra efforts she made to fill the leadership gap during the search for a new Project Coordinator and for helping the new coordinator get a good start. There were at least 30 other worthy nominees for RCUH Employee of the Year so the competition was on. Hanna took 1st Place and was bedecked with four leis and a generous monetary award. Way to go, Hanna!

NEW SHELTER COMPLETE AT FRISBEE MEADOWS

MAHALO to Selwyn Bate, Elijah Brown and Bryon Stevens who built this more permanent shelter at Frisbee Meadows with MFBRP crew!!

After winter storms took a toll on the camp last year, we are excited to have completed a new cabin for the 2009 and years to come. We received many generous donations of used and extra building materials for the project and extend many thanks into the community for their support.

WALKING WITH GHOSTS IN HANAWI

By Marjorie MacIntosh, Research Assistant

Some days, when bird activity is slow or while gazing down at the spectacular views from Frisbee camp, my mind wanders. I dream of Hanawi at its peak, when it was a tiny part of a complex native system that covered the entire island, completely untouched by humans. I imagine how it would've been to look a Po'ouli in its mischievously masked eye or watch a Nukupu'u deftly using its long, curved beak to probe for insects. My mind drifts to a time before all of the fruit-eating birds of the island had gone extinct. I see an O'u munching on native fruits and then working its way through the tips of the Ohia branches above. As the mist flows across the mountainside, a ghostly presence surrounds me.

On the mainland one might confront such presence on occasion. Any birder must have at least once pictured long extinct Carolina Parakeets in the fields or a flock of Passenger Pigeons overhead. But this forest is different. There are *so many* species missing. It is like a big house only half full of inhabitants.

I wander through this beautiful remnant of native forest, daydreaming of the birds long and not-so-long past, but at some point I snap myself out of this trance. I remember that imagining those days is romantic and so is the allure that one of these species may still exist somewhere, but it is the story of these birds' demise that has something to teach us.

Here on this little patch of native forest on the windward side of Haleakala are a handful of species that may be packing their bags to leave this place, their home, for the same reasons their cousins have already gone. Five hundred Maui Parrotbill remain from a population that was once spread across the island. Akohekohe are down to just 3500 birds, and the rest of the native bird species are vulnerable to a similar fate. The same threats to their livelihood persist. Avian malaria restricts birds to marginal high elevation habitats; pigs still walk the fences looking for a way to get into natural reserves; and non-native bird species continue to arrive and spread themselves across the island with no regard for the last sacred native places. The natives are in critical condition but still have a good chance if we work hard to protect them. And Hanawi brings hope. This is a place that we *are* protecting. It is a place where pigs are uninvited, where the elevation protects the birds from malaria-carrying mosquitoes, and the abundance of native plants still favors its co-evolved counterparts. This is a place where these birds find refuge and where the ghosts of their ancestors remind us the power of our impact.

Every day spent working in Hanawi allows us to make a positive and powerful impact. As the lucky stewards of this place Hanawi reminds us that every piece of data is important, every detection a step closer to finding a nest, every nest found a piece of the puzzle of understanding what is happening to the Parrotbill population and how we can continue to help it. And while learning from the sad stories of the past we can look around and see every singing Parrotbill, every Apapane fledgling, every noisy pair of Akohekohe, and every grumpy Iiwi as a success story in the making.

FLATBREAD FUNDRAISER

Come Support the Maui Forest Bird Recovery Project on

APRIL 14th 2009 5:00-10:00 pm

in Paia, Maui.

A portion of all food sales (restaurant and take-out dining) from this evening will support our conservation research next season.

MAUI PARROTBILL AT HANAWI: REFLECTING ON VALUES

By Dusti Becker, Project Coordinator

The Haleakala volcanic soil crunches, mist sparkles and clears around a bend revealing a sunny day. Caitlin leads our group of five along the Halemau'u Trail. Two hours to Holua, three to the junction, six and a half to Frisbee Camp, and then just when feet are crying for relief, another two and a half hours trudging through mud to our destination - Po`ouli Camp. Six inches of rain had accumulated during the week, the camp is moldy.

Located in the Hanawi Natural Area Reserve, Po`ouli Camp is perched on Haleakala's steep northeast slope. At 5400 ft, bathed in fog and mist we are in a lush rainforest dominated by old Ohia-lehua trees, the home of a small yellow bird with a honking big beak, the Maui Parrotbill. Descended from a grosbeak-like finch, the parrotbill once ranged all over Maui and was populous in mesic and dry Koa forest. When the forests were cut and malaria arrived, parrotbill were forced to hold out in the clouds above 4500 ft on East Maui, where they are now estimated at 500 birds. That puts them solidly on the Endangered Species list, and explains why we are slogging around in the mud trying to determine how viable their tiny population might be. We are biologists working for the Maui Forest Bird Recovery Project.

It's Valentines Day and Shane and Caitlin have discovered a nest where a parrotbill female appears to be incubating. Not to be out done, Kelly and Laura find a nest just below the cabin, and then the whole team finds a third nest in a different area of the study site. We are giddy. It is really hard to find parrotbill nests. If we find a fourth nest, it would break the project's record for concurrent nests. We try, but mother nature rolls in the fog, mist, and rain.

We set up blinds to watch the three Maui parrotbill nests. The females are "on nest" most of the time incubating, stoically staring, as the rain bounces off their dorsal feathers. A typical three hour observation reads: 0700 – on nest, 0716 – off nest, forages in nest tree, 0717 – back on nest, repositions egg, incubating, 0744 – leaves nest, fed by male in Olapa tree 10 m downslope, and so on. We use these data to calculate percentage of time the females spend incubating or brooding, and how often the male feeds his mate or chick. During incubation a male feeds his mate once or twice during a three hour observation stint. He has to work overtime to feed himself and her. If it is a cold,

rainy day, he must work even harder. We suspect that nests fail because the male can't collect enough calories for his mate and the chick during winter storms.

I am contemplating family values. The father parrotbill is knocking himself out, looking for grubs. He goes for larvae in mushy Kanawao berries and he sports a purple bill. If he is lucky, he will be able to feed his mate through incubation and early brooding, and then take on most of the responsibility for feeding their one and only chick. Parrotbill are one-chick families. It is a quality, not quantity world they live in; an island with limited space and now limited habitat, and they have a specialized feeding niche extracting insects from complex woody places. Fledglings depend greatly on their father teaching them where and how to feed like a parrotbill. Apparently, their bills are not up to the task of excavating woody plants until they are around 8 months old. In the summer and fall months, young parrotbill can be heard begging loudly in the forest. Often times the next vocalization will be the male singing his descending "chewy, chewy, chewy, chewy, chewy" after helping his offspring find food.

Can it really rain another day? Yes, and another day, too. We keep watching the nests, but we can barely see them because the fog is so thick or the rain is so hard. They all have tiny chicks now. It is miserably cold. One night it drops to 27 degrees F. Will the parrotbill chicks survive? We go out in the AM chill to check the nests and radio each other the good news – they are all alive.

On February 23rd we left Po'ouli Camp for a break. Our replacements would be back to watch the nests in a few days. Next day, Frisbee Camp (7200 ft) reported that the rain was becoming heavier. Biologist Ruby Hammond, with experience from two previous breeding seasons, said it was the hardest rain she had seen in Hanawi. Four days later on February 28th all nests were reported to have been abandoned.

This was old news for those who have witnessed early nest failures over the past five years, but for us newcomers, it was pure sadness. We were warned and in fact, as Project Coordinator, I repeated the mantra – "don't get attached as they probably won't make it". Watching the struggle first hand, I let my emotional guard dwindle and rooted daily for the survival of the chicks and the success of their hard-working parents.

What would "save" the Maui Parrotbill? We can help parrotbill recover by reforesting east Maui with Koa replacing the exotic grasslands and non-native conifer plantations, especially on public land. It is doable. Not only would reforestation with native Koa help our native birds, it would sequester carbon, help reduce global warming, enhance fog and cloud capture increasing water quantity and quality on Maui, improve wildlife habitat, and help control erosion.

Can we extend our *kuleana* to families of endangered species? Why not? It seems like the humane and Hawaiian thing to do.