

# PAPAĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT

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U.S. Fish & Wildlife Service Update



July 2009

## Wildlife and Habitat Management

### Hawaiian Islands NWR - Tern Island:

Monk seal monitoring continued, with a total of 27 pups born at French Frigate Shoals. By the end of July, 15 had weaned, 6 were still nursing, and 6 deceased. One unusual pup death occurred when a weaned seal pup was found drowned after getting stuck trying to swim through a hole in the coral. Sadly, it was only about a foot from the surface.

Although the albatross season is all but over in the NWHI, bird banding continued on Tern Island — including work on monitoring black noddies, masked and red-footed boobies.

Sea turtle hatchlings on Tern Island can face the additional hazard (besides running the gauntlet of creatures that want to eat them) of being stuck in the nest beneath pieces of coral rubble. Roughly three days after a nest has hatched, “rescue teams” have dug up 4 nests, and have saved 98 hatchlings



that could not escape from under the coral debris.



*Top: “Rescue crew” working to save baby Hawaiian green turtles stuck beneath coral rubble*

*Bottom: Bucket of hatchlings to be released after dark*

Strict water, power, fuel, and food conservation measures continued throughout the month of July at Tern. All freshwater is collected from rain, power is primarily solar-generated, and all fuel for back-up generators and boats, as well as all food, is supplied off-island. The summer population of 17 managers, scientists and volunteers welcomed the little bit of rain that added 1,700 gallons (8 days of use) to their water supply.



*Nursing monk seal pup and mother*

### Hawaiian Islands NWR - Laysan Island:

Laysan Island is doing its part to help support the critically endangered Hawaiian monk seal population. By the end of July, 30 pups had been born on Laysan, with 20 of those weaned and 7 nursing.

The native palm *Prichardia remota*, introduced to Laysan 8 years ago and flowering for the first time, has more “fans” than just the FWS. The first palm inflorescence was deflowered by Laysan finches. Screening was placed around the second set of flowers to keep the endangered finches at bay and hopefully allow pollinators go to work and make way for seed production.

...And speaking of Laysan finches, a July survey found 310 of the endangered birds on the island.

## Papahānaumokuākea

### Wildlife and Habitat Management (continued)

#### Midway Atoll NWR:

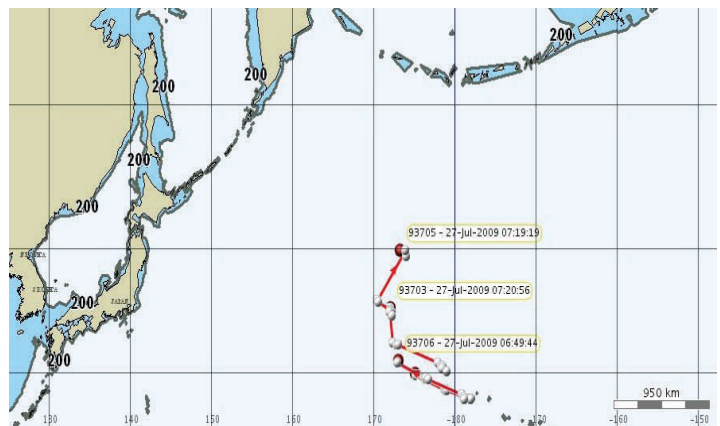
Daily monitoring continued in July in response to a small scale botulism outbreak in the Laysan duck population. In total, roughly 40 ducks have died, of the estimated population of approximately 500, with the largest percentage of losses being ducklings and hatch-year birds. To control the spread of the disease and reduce mortality, dead birds were quickly removed from the wetlands, bottom muck was cleaned out of the most problematic seeps, and vegetation was removed from the wetland edges to improve airflow and reduce anaerobic water conditions. Over a dozen sick ducks have been treated with antitoxin, rehydrated/nourished, and released after symptoms disappeared.

Coral reef biologists from the University of California Santa Cruz were joined by their principal investigator, Dr. Don Potts, and 5 volunteers. All continued the field work on monitoring coral and black-lipped oyster recruitment, lagoon sediment analysis, and Sand Island groundwater sampling.

Refuge staff and volunteers removed approximately 500 pounds marine debris (in the form of derelict fishing nets) from the shores of Spit Island.

Five of eight data loggers were recovered from red-tailed tropicbirds after several months of recording data. The loggers are part of a collaborative study by USFWS, U.C.– Santa Cruz and FWS Volunteer, Leona Laniawe to learn more about the foraging patterns of tropicbirds in relation to ocean currents and global climate shifts.

Four Laysan albatross fledglings were fitted with satellite transmitter tags by Refuge Biologist, John Klavitter. These tags are expected to last up to 2 years, and will track the location of the birds on a daily basis. As of July 27, the four were an average of 1,298 km northwest of Midway Atoll.



*Location of Laysan albatross fledglings on 7/27/09*

### Maintenance

#### Hawaiian Islands NWR - Tern Island:

Acting Tern Island Manager Pete Leary is working with FWS Engineers on long term options for Tern's sewage and wastewater, with input on potential impacts on sea turtles from the National Marine Fisheries Service. A scope of alternatives will be developed by contractors during an upcoming September construction project to rehab the island's warehouse.

One of the two generators on island is not working properly, requiring all island infrastructure to depend on only one backup generator. The September contractor will also repair the generator.

#### Midway Atoll NWR:

Environmental testing done in advance of restoration of Midway's historic Officers' Quarters led to the discovery of unexpectedly high amounts of lead-based paint on interior walls and ceilings. While refuge staff and contractors have the training and equipment necessary to safely remove the paint, a plan will be developed to appropriately deal with the approximately 2,600 cubic feet of hazardous waste that will be created. FWS environmental and contaminant specialists will oversee the project.

## Papahānaumokuākea

### Administration

For years, the crews at Laysan Island have consisted of volunteers and temporary-seasonal staff hired for a 6-month period. Hiring temporary people for Laysan is necessary because the positions are not permanently funded; however, fulfilling the process to hire and train new people every few months takes a significant effort. To resolve these issues, for the first time, FWS is hiring longer-term staff for Laysan. Andrea Kristoff joined the FWS team on a 4-year Biotech appointment. Andrea is joined by three volunteers for this season's winter crew. Led by Laysan's permanent Technician, Cindy Rehkemper, the new Laysan crew dedicated time in July to purchasing and packing supplies, as well as training, for their deployment to the Monument. They will depart to Laysan on board the NOAA ship *R/V Oscar Elton Sette* on August 7 to assist with bird banding and habitat restoration.

Student Career Intern, Joshua Silva, joined the FWS Monument team this summer. After an introduction to all FWS programs in July, he began learning logistical planning for our remote field stations and helped with ordering, purchasing, and packing supplies for them. Josh grew up in O'ahu and graduated with honors from Kamehameha High School. He is currently an undergraduate in Natural Resources and Environmental Management at University of Hawai'i at Mānoa. Josh will continue to work with FWS learning how to manage wildlife and habitats at remote field locations, while balancing his courses at UH.

FWS Papahānaumokuākea staff continued to work with contractors and the FWS radio/communications branch to replace components of the Honolulu-based radio system. Repairs are being made to the roof of the Federal Building where the antenna and ground plane are affixed. A new ground plane should improve the critical communications link between Honolulu and the NWHI field stations.

Wildlife Refuge Specialist Ty Bennally led logistical planning to ready staff and supplies to board two NOAA ships supporting activities in the

NWHI, as well as to procure and prepare critical fuel and food supplies to be shipped to field stations via the FWS-contracted M/V *Kahana*. The three vessels were originally scheduled to leave within a few days of each other, creating significant logistic challenges

A July coordination meeting between the U.S. Coast Guard and FWS resulted in enhanced commitment for on-going cooperation. Some NWHI items included potential translocation of Nihoa millerbirds, marine debris, contaminant remediation at Tern Island, and transportation and logistic support.

Over the month of July, Midway Atoll continued its role as an emergency airfield as well as an operational hub for the northern end of Papahānaumokuākea. Two U.S. Marine Corps F/A-18 jets made an emergency landing, a Marine Corps C-130 arrived with 25 personnel (19 of whom were part of the maintenance crew to repair one of the jets that had made the emergency landing), and a private jet landed carrying 4 people - all within 2 days of each other. As one might imagine, a 5-day visit by 29 healthy Marines significantly depleted the island's fresh food supplies. To remedy that situation, Permits Manager Ray Born worked with the 1st Marine Aircraft Wing Okinawa to transport Midway's food resupply ahead of its normal schedule. Later in the month, another Marine C-130 arrived with 10,000 pounds of Midway supplies, including fresh and frozen food, to replace that consumed during the emergency landing and repair mission. Lastly, the 225-ft. U.S. Coast Guard Cutter *Walnut* spent 2 days at Midway. The ship delivered 17 pallets of supplies to the island, repaired 2 navigational aids, and removed several thousand pounds of marine debris from the Refuge. In conjunction with the *Walnut*, a U.S. Coast Guard C-130 transported two contaminants specialists and several pallets of supplies to Midway, bound for the State-managed Kure Atoll Wildlife Sanctuary of Papahānaumokuākea. Our island staff assisted the transfer of the supplies from airplane to ship for deployment and eventual use during clean-up of Kure Atoll.



## Papahānaumokuākea

### Visitor Services

Visitor Services Manager Tracy Ammerman was detailed to the Honolulu office for the month of July. Tracy worked on a Papahānaumokuākea planning committee to prepare for the August 2009 visit by UNESCO World Heritage site evaluators. The Monument's interagency management will host the three person team in Honolulu, Hilo, and on a voyage through the NWHI, which will include stops at Nihoa, Mokumanamana, Laysan, Kure, and Midway. Nominated as a "mixed site," if inscribed, World Heritage designation would provide recognition of the outstanding natural and cultural universal values of Papahānaumokuākea Marine National Monument to the global community.

Six students from the University of Hawaii at Hilo Kū'ula Class presented a symposium at the 2009 Hawai'i Conservation Conference. The presentations within the symposium were based on projects created by the students that linked native Hawaiian knowledge and western sciences. Field components of the projects were explored during a week-long

class visit to Midway Atoll NWR in November 2008. To read about their projects and presentations, go to: [http://hawaiiconservation.org/2009hcc\\_presentations.asp](http://hawaiiconservation.org/2009hcc_presentations.asp)



*Gov. Linda Lingle and Department of Land and Natural Resources Chairwoman Laura Thielen speak with (from left) Jonathan Putnam, National Park Service, and UNESCO evaluators Jerker Tamelander (center) and Dr. Ian Lilley. (Photo courtesy of the Governor's Office)*

**Midway Atoll NWR : "Parking Lot Full"**  
**Three U.S. Marine Corps and one private aircraft at Henderson Field on 7/12/09**



For more information, contact: Papahānumokuākea - U.S. Fish and Wildlife Service. 808-792-9540