



U.S. Fish & Wildlife Service

# PAPAĀNAUMOKUĀKEA

## Marine National Monument

October - November 2010 Update

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### Wildlife and Habitat Management

Hawaiian Islands NWR - French Frigate Shoals/ Tern Island: The albatross are back! The first black-footed albatross arrived on Tern Island on October 20, while the first Laysan albatross arrived on October 31. These “early birds” are leading the flock for the next breeding season.



*First albatross to return to Tern Island.*  
Keith Burnett/USFWS

A draft report on Tern Island seawall entrapments was distributed for in-house review. This report reviewed quantitative data on seawall entrapment for birds, turtles, and seals. Filling of the southwest seawall on Tern was found to be an extremely effective means of minimizing entrapment rates for albatross, although filling had little effect on the entrapment rates of other species. Filling the northeast seawall was not recommended at this time, as albatross entrapments are minimal there and the benefits are not outweighed by the cost of importing fill for this large area. Maintenance of existing fill and barricades, as well as daily entrapment observations and release, were recommended for the life of the project.

Seabird monitoring continued with end-of-season and beginning-of-season events. The last red-footed

booby chick of the year was banded, and banding of wedge-tailed shearwater chicks began. In addition, reproductive success plots are being monitored 3 days a week for black noddies (*Anous minutus*), red-tailed tropicbirds (*Phaethon rubricauda*), and red-footed boobies (*Sula sula*).

And here’s an update on the monk seals at French Frigate Shoals: 36 monk seal pups have been born; 5 are still nursing; 21 have weaned (3 of those weaned pups were taken by sharks); 1 pup died before it was weaned; 6 pups have disappeared; and finally, 2 weaned pups on East Island suffered nonfatal shark bites.

Hawaiian Islands NWR - Laysan Island: During the weekly Laysan duck (*Anas laysanensis*) surveys, a high for the past 2 months of 414 adult ducks were observed.

Laysan’s field team has also been conducting shorebird surveys. Species observed included species such as ruddy turnstones (*Arenaria interpres*), Pacific golden plovers (*Pluvialis fulva*), wandering tattlers (*Heteroscelus brevipes*), bristle-thighed curlews (*Numenius phaeopus*), sanderlings (*Calidris alba*), and long-billed dowitchers (*Limnodromus scolopaceus*.)

Efforts to eradicate invasive plant species, as well as to repopulate the island with natives, were ongoing. As an example, staff have begun to outplant Pacific island thintail (*Lepturus repens*), which is a native grass. This is a new reintroduction effort on Laysan Island.

Monk seal deworming efforts on Laysan Island have been cancelled. Results from fecal sampling did not show enough of an improvement to justify the disturbance of the animals.

## Wildlife and Habitat Management (cont'd.)

Midway Atoll NWR: Crews at Midway finished removing the obsolete concrete containment wall from around the second fuel tank at the old fuel farm. For the last 5 decades the wall was a major impediment for adult and fledgling albatross inside the containment area. The old concrete was used to shore up failing seawalls, and the sand beneath the wall was used for habitat restoration at the site.

Daily wetland checks and weekly Laysan duck surveys continued. On October 13, a total of 337 ducks were counted during a morning survey of all wetlands. This count was relatively high considering not all ducks were found at wetlands. In addition, very few ducks had been found sick or dead due to botulism in the last few weeks of October. The “botulism season” for this year is most likely coming to a close with the cooler temperatures and increasing winds. The first suspected case of avian botulism at Midway was found on June 28. Since that time, 69 percent of the “sick” birds found have been successfully treated and released (11 adult, 4 hatch-year, and 3 older ducklings). Twenty-four adult, 37 hatch-year, and 10 older ducklings are suspected mortalities.

Eradication of cattle egrets continued, with 6 adults having been removed so far this year. These nonnative birds have the potential to prey on white tern chicks, sooty tern chicks and Laysan ducklings, as well as to be a flight hazard to aircraft. Currently, there are approximately 25 cattle egrets on the Refuge.

Ninety-five percent of the invasive, nonnative Chinese banyan trees (*Ficus microcarpa*) have been removed from the Refuge. Only a few small trees remain and will be eradicated in the next few weeks. Once all the trees are removed, staff will continue to look for new seedlings that may germinate over the next year. Removal of ironwood and Chinese banyan trees has been a focus for habitat restoration to allow more air flow into wetlands and to prevent damage to buildings.

GeoEngineers completed a draft Engineering Evaluation/Cost Analysis (EE/CA) for lead contaminated soil at Midway based on their May 2010 field work. The overall objective of this EE/CA was to evaluate various cleanup alternatives and to select the best alternative to provide a long-term, effective remedy that will mitigate detrimental effects of lead-based paint on the Refuge’s wildlife. After FWS review is completed, the document will be available for public review.

SeeMore Wildlife Systems (<http://www.seemorewildlife.com>) personnel successfully installed two remote cameras on Eastern Island, one at the short-tailed albatross decoy plot and the other at the Monument wetland. The cameras send live video to an office on Sand Island where it can be recorded and eventually aired on the web once the needed band width has been purchased. The project is a collaboration between NOAA, USFWS, and SeeMore Wildlife Systems.



*Remote cameras on Eastern Island allow live viewing of Laysan ducks and short-tailed albatross.*

*John Klavitter/USFWS*



## Maintenance

Hawaiian Islands NWR - French Frigate Shoals/ Tern Island: Tern Island's water supply provided a couple of challenges in the month of October. One of the redwood holding tank's liners developed a tear, resulting in water leakage. The remaining water from the tank was transferred via hand pump to other tanks. Staff will attempt to repair the liner. In addition, the water pump that moves water from the catchment cistern to the holding tanks failed. A new pump will be installed when staff changes out in November.

On an evening in late October, a minor electrical fire was detected in the north hall of Tern Island's barracks, near the computer room. Fire extinguishers were readied, all personnel notified, and electrical breakers for the north hall were shut off. The area was carefully monitored, with no more incidents for the evening. The following morning, the acting manager inspected electrical conduit lines, which were found in good condition with no burns and no smoke stains; all smoke and smells had dissipated from the facility. Electrical breakers were turned back on and the area watched closely for several hours. Through this incident, it was discovered that the currently installed fire alarm system had been decommissioned for the past 2 years. This was an excellent warning regarding the importance of maintaining and checking these systems. Battery powered fire alarms are being sent out and installed, and a new safety checklist being developed.

The new DC batteries for the photovoltaic system have finally been installed and are working well. They will allow for continuous operation of refrigerators and freezers at this remote location.

Hawaiian Islands NWR - Laysan Island: The ARRA-funded (American Recovery and Reinvestment Act) project to install a new photovoltaic system at Laysan was successfully completed. The new system will provide enough power to run all of the equipment in camp without the need to periodically shut off refrigerators and freezers. The new system has also resolved all the



concerns with communication equipment problems and water pump problems. Deteriorating tents providing living quarters also were replaced. The successful completion

of these projects will increase the capability of the crew to propagate native plants, control invasive species, and survey migratory and endangered birds.

Midway Atoll NWR: In an effort to continue to "green" Midway Atoll NWR, the first solar vehicle on Midway became operational this week. The vehicle is a 1990's vintage electric golf cart. FWS staff installed two, 12-volt, 60 watt solar panels on the roof of the vehicle to charge six, 12-volt batteries. The vehicle has been operating well despite overcast and rainy weather. The vehicle will be used for FWS transportation to conduct habitat restoration, seabird monitoring, and other refuge projects. Also in an additional effort to "green" Midway, Chugach Industries will begin composting plant and garden material with a new composter.



*Solar panels eliminate the need to use carbon fuels.*

*John Klavitter/USFWS*

Chugach Construction has finished all of the major work on the electrical and air conditioning upgrade at the Charlie Barracks hotel funded under ARRA. The project turned out well, especially with the addition of the drop ceilings, lighting in the lobby and hallways, and painting of rooms, hallways, and stairwells.

## Administration

Permits Manager Ray Born went aboard the *M/V Tiglax* for 6 days in Alaska to evaluate the use of the ship from Alaska Maritime NWR in Hawai‘i, when the ship is not working in Alaska during the months October to May. The ship is 121 feet long, can carry up to 14 scientists with six crew members, has 4,800 cubic feet of cargo space, a fore and aft crane for loading, one wet and one dry lab, a dive locker, and a range of 10,000 miles without refueling. The *M/V Tiglax* was determined to be an excellent ship for field camp deployments and field surveys.

Midway Atoll NWR staff assisted the U.S. Coast Guard with the medevac of two Japanese students from the ship *Shonan Maru*. The Japanese training vessel that instructs cadets on tuna fishing and navigation was about 400 miles from Midway when the emergency call was received on October 25. One of the students was unable to walk without assistance, so the vessel was escorted by USFWS



*Japanese training vessel in port at Midway.*  
John Klavitter/USFWS

into the inner harbor. Due to foul weather, the USCG C130 aircraft was delayed from arriving to pick up the ill students, causing the ship to have to spend one overnight at Midway.

## Visitor Services

Tern Island staff have set up a collaboration with teachers in Hawai‘i to incorporate a class-volunteer match-up with the science class at Lāna‘i High School, an English-as-a-second-language class at Roosevelt High School, ‘Iolani School's sixth grade science class, and the Middle School science class at the Hawai‘i School for the Deaf and Blind.

This partnership will allow Hawai‘i classrooms to experience the Monument and its unique natural resources through a class project that is partnered with a Tern Volunteer. Ideally, it will also provide the volunteer with an appreciation for the USFWS’s obligation to share and educate. This experimental

program will begin in January 2011, after the students return to school from winter break.

The field team on Tern Island have started their own Tern Island 2011 Blog (<http://ffs2011.blogspot.com>), to continue where Pete Leary’s popular Tern Island Times left off. (Pete has left Tern Island to become the Refuge Biologist on Midway Atoll NWR.) Although no one could compete with Pete’s photos and dialogue, the staff hopes to keep some of the readers’ interest in activities at French Frigate Shoals with weekly updates on their adventures and wildlife at the Refuge. (NOTE: the site is not an official USFWS blog site.)

Send us your comments, or for more information contact:

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