



U.S. Fish & Wildlife Service

# PAPAHĀNAUMOKUĀKEA Marine National Monument

December 2009 Update

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## Wildlife and Habitat Management

### Hawaiian Islands NWR - Tern Island:

Counts within the “albatross plots” on Tern Island were completed weekly to determine the number of active Laysan and black-footed albatross nests. In addition, Tern Island is very fortunate to have volunteer assistance of Dr. Ruth Brown from Great Britain who is providing excellent input on surveys, and Melinda Connors from UC– Santa Cruz who is conducting research on diet and foraging areas of both albatross species.

### Hawaiian Islands NWR - Laysan Island:

A new infestation of *Sporobolus pyramidatus*, an invasive grass, was discovered within a patch of invasive *Pluchea indica* on the southeast part of Laysan Island. A new survey plot will be set up to define the area once albatross monitoring counts are completed. In addition to locating and eradicating the invasive plant, replanting native plants is key to successful habitat restoration. Laysan’s plant propagation program continued full swing throughout the month with seed and cutting collections, as well as actual sowing seeds into planting flats.

Laysan field staff continued to assist National Marine Fisheries Service (NMFS) with its Hawaiian monk seal management. As part of this project, “yearling” pups are given deworming



Photo credit: Beth Starr

*‘Ilio-holo-i-ka-uaua “dog that runs in rough water”*

medication in an effort to help improve their overall health and nutrition. The removal of parasites is hoped to enable the pups to get the most out of the food they do find, and get them “over the hump” of

the first few years of being on their own. On average, the monk seal population is currently declining at about 4% a year, with only about 1,100 remaining.

A short-tailed albatross arrived on Laysan, where it is expected to spend the breeding season. Once estimated at over 7 million birds, this regal species was decimated due to the feather trade, introduced predators, and habitat destruction. The world population is currently estimated to be about 2,200 individuals.

### Hawaiian Islands NWR - Mokumanamana:

A team of Native Hawaiian researchers voyaged to Mokumanamana to conduct cultural studies over the December winter solstice in an effort to gain better understanding of the historic and cultural resources found there. FWS is pleased to have provided



*One of numerous Native Hawaiian archaeological sites found on Mokumanamana*

communication equipment and field supplies to support the trip. Learning from this trip and the ancient and current Hawaiian connections to Papahānaumokuākea will guide management decisions regarding this sacred island today and into the future.

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

### Midway Atoll NWR:

In mid December, volunteers reported sighting a group of oiled albatrosses near the power plant. Refuge staff responded and found roughly 15 albatross with oil on them sitting on nests in close proximity to a very old manhole cover, which had slid open a few inches. After further investigation, it was determined that the manhole led to an abandoned waste-oil discharge line that ran from the original power plant to the inner harbor. The line had not been used in decades; and during the U.S. Navy clean-up 90% of the line was capped and filled. However, it seems this particular section was missed.



*Chugach Industries staff working to pump oily water out of abandoned line. Note impacted albatross in left foreground.*

One week earlier, Midway received approximately 2.5" of rain in less than an hour, creating significant flooding throughout the island. It appears that the flood waters worked their way into the abandoned line and flushed oily water onto the surface. The oil impacted an area approximately 20' x 20'. After confirming the background of the manhole and abandoned line, 2,500 gallons of oily water was pumped out of the line. The discharge line was then filled with gravel and capped with concrete to prevent further flooding-related contamination. Refuge and FWS Migratory Bird staff consulted with the USGS Wildlife Disease Team and the

Hawai'i Wildlife Center to determine the proper course of action in dealing with the oiled birds. The immediate impact of the oil on the albatross was recorded and the area and birds will be monitored throughout the season to record the long-term impact on adult birds and eggs.

The counting has begun! Nice weather enabled the Annual Atoll-wide Albatross nest count to begin on Midway in late December. Over a three week period, volunteers will have walked every square inch of Sand, Eastern and Spit

Islands, and counted over 400,000 nests. Counts have been going on consecutively since 1992 for black-footed albatross and 2001 for Laysan albatross. This data set is unusual in that it is actually based on real numbers, not population estimates based on mathematical modeling. So, by the end of the count...we will know exactly how many active albatross nests there are at Midway Atoll NWR.

Twenty-five of 30 "data loggers" that were attached to Laysan albatrosses last year were retrieved on Midway this season. These small devices, which are attached to the leg, record the bird's location, ambient temperature, and if the device is wet or dry. This information enables researchers to know where the bird has traveled, the water temperatures it has experienced, and the length of time it has spent both sitting on the water surface and flying.



*Every active nest gets a paint splotch to note that it has been counted.*

## Maintenance

### Hawaiian Islands NWR - Tern Island:

The renovation of Tern Island's warehouse was completed. In addition, the Niking contractors facilitated the removal of construction debris, including more than 20 crates of asbestos containing material (ACM) taken from the old building. The debris and ACM was hauled off of Tern Island during the *M/V Kahana's* December service trip, and properly disposed of in Honolulu.

The Tern Island radio system is operational again, thanks to Station Manager Pete Leary. Internet communications, however, remain inoperable and will require additional work. Currently, there is only simple text email capability with no chance of improvement until NMFS satellite dish modem equipment can be replaced. Adequate computer communications are a vital tool to keep staff informed of monument operations, weather conditions, and potential threats.

### Hawaiian Islands NWR - Laysan Island:

Biologist Cindy Rehkemper and FWS Regional Engineer Mark Harris held a teleconference "virtual site visit" of Laysan Island to introduce several prospective contractors to the island's operational challenges, as well as the American Recovery and Reinvestment Act (ARRA) projects. Next summer, ARRA projects will replace degrading photovoltaic systems and sleeping tents that are necessary to continuing the effective habitat restoration at Laysan Island.

## Administration

Station Manager Pete Leary returned to Tern after attending training and much deserved vacation. Kudos go out to Ty Benally, Wildlife Refuge Specialist, who "held down the fort" while Pete was away. Ty dealt with everything from Hurricane Neki evacuation to broken computers.

The *M/V Kahana* once again serviced the monument including delivering 20,000 gallons of

### Midway Atoll NWR:

One of Midway's two main generators experienced an emergency shut-down on December 26 after the exciter voltage regulator failed. The second generator automatically started, resulting in only a 30 second power loss to the island and minimal disruption to communication and airfield navigational equipment. Midway will likely be down to one back-up generator until repair parts can be sent out on the next ship, scheduled to arrive in March.

On December 11, Midway received over 2.5" of rain in less than an hour, resulting in significant flooding of the runway's apron and taxiway. Refuge staff are working with FWS Engineering and the Federal Aviation Administration to develop a long-term solution to the problem, which, although greatly impacts airport operations, did not seem to bother the refuge's Laysan ducks at all.



*Laysan ducks and Laysan albatross enjoying a paddle around the flooded runway.*

fuel and 100,000 pounds of ARRA project supplies for restoring and improving energy efficiency of the historic officers' quarters. *Kahana* also transported two staff off Laysan (FWS & NMFS), delivering them to Midway to catch the plane home after completing their seasonal tour of duty. Ship support is absolutely invaluable to completing our missions in the Northwestern Hawaiian Islands!

## Visitor Services

On December 7, Midway residents gathered to commemorate the valor demonstrated by the U.S. Marines 68 years earlier (1941) when Midway was attacked by the Japanese as part of a broad offensive that also included the attack on Pearl Harbor. The first U.S. Marine to be awarded the Medal of Honor in World War II was Lt. George Cannon, who, although mortally wounded, refused to be evacuated from his post at the original power plant and command center until after the attack, until his men had received medical care, and until order had been restored in the communications center.



*A small monument outside the original power plant and command center memorializes the December 7, 1941 attack on Midway...and the men who lost their lives on that day.*



Send us your comments, or for more information contact:

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