

# PAPAĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT

VOLUME 1, ISSUE 5

U.S. Fish & Wildlife Service Update



June 2009

## Wildlife and Habitat Management

### Hawaiian Islands NWR - Tern Island:

The two-person NOAA/USFWS “turtle camp” has completed annual monitoring for 2009. A total of 270 nesting females were documented on East Island... and they were still coming!



*Collecting Data on Nesting Hawaiian Green Turtles*

Albatross banding is completed for this season, with over 3,000 Laysan and Black-footed chicks added to the list that can be individually identified.

As of the end of June, a total of 23 monk seal pups were known to have been born at French Frigate Shoals. By the end of June, 10 pups were weaned (aka “weaners”), 9 still nursing and 4 deceased.

The three researchers based out of Hawai‘i Institute of Marine Biology, with support from FWS and NMFS, continued research on shark movement patterns. Sixty-three galapagos, 26 tiger and 2 black-tip sharks were tagged at the end of June. An array of acoustic receivers will track movement patterns to better understand shark predation on Hawaiian monk seals in French Frigate Shoals.

### Hawaiian Islands NWR - Nihoa

FWS Ecological Services biologists are coordinating with other avian experts and refuge staff on steps to broaden and diversify population

abundances of the endangered Nihoa millerbird. The hope is to develop plans and protocols to safely move some individuals to Laysan Island, and reestablish a population of passerines on Laysan that was extirpated early in the 20th century when the island’s vegetation was denuded by invasive rabbits.

### Hawaiian Islands NWR - Laysan Island:

Laysan has had a banner year for the endangered Hawaiian monk seal. As of the end of June, 28 pups had been born, with 20 “weaners” and 7 nursing. This is a welcome addition to the overall population, which is estimated to be only about 1,200 individuals. Since a low survival rate of juveniles is one of the biggest challenges the species faces, we’re keeping our fingers crossed that these little ones make it to adulthood to have pups of their own. As for sea turtles, Laysan crews documented two turtle crawls by end June.

The native palm, *Prichardia remota*, a cousin to the extirpated palm from Laysan, was introduced to Laysan 8 years ago in an effort to restore a native species. The palms, which were germinated



*Prichardia remota* Flowers

from seeds from Nihoa and outplanted on Laysan, have now flowered for the first time. With their flowering, biologists are watching for native pollinators and are hopeful for fruit and seed production, thereby restoring a viable and essential member of the ecosystem.

## PAPAHĀNAUMOKUĀKEA

### Wildlife and Habitat Management (continued)

#### Midway Atoll NWR:

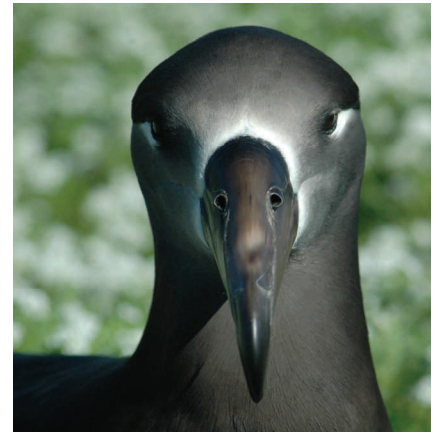
Laysan ducks on Midway are experiencing one extreme to the other this spring and early summer. On one hand, a very productive spring has “ducks all over the place!” in the words of Matt Brown, Midway Atoll NWR Manager. On the other hand, there has been an epizootic outbreak of botulism that killed 23 ducklings and 3 adults. Closely following the response management plan, Refuge staff thinned vegetation around wetland edges and have been diligently removing dead or sick birds. These efforts appear to be paying off, as the number of affected birds decreased significantly over the month of June.

Midway Atoll NWR Wildlife Biologist John Klavitter and FWS Volunteer Leona Laniawe went to Kure Atoll for 2 days via the *R/V Hi'ialakai*, to assist with the removal of all but one of the last invasive ironwoods trees (*Casuarina equisetifolia*) from the atoll. One was left as a ‘beacon’ on the flat atoll, for boaters. The mission was a great example of the Papahānaumokuākea partners

working together... USFWS staff traveling on a NOAA ship to do resource work in the State wildlife sanctuary.

Through a community effort, two species of introduced plants were eradicated from Midway - Morton Bay fig (*Ficus macrophylla*) and a cactus (*Optunia cochenillifera*.) Two down, roughly 200 more to go!

FWS Seabird Biologist Marc Romano provided one more “superlative” for the NWHI when he discovered that several of the black-footed albatrosses currently monitored on Midway are the oldest on record, at 42 years old. (The previous record was 40 years old.)



*Black-footed Albatross Portrait*

### Maintenance

#### Hawaiian Islands NWR - Tern Island:

Introduced species are causing problems, as usual. The container upon which the NMFS Tern Island communications satellite dish is mounted is sinking into the sand due to ants and termites living in the wooden base, causing misalignment of the dish. As a result, electronic communications (email and internet for all personnel) are very sporadic, sometimes out for days at a time. Unfortunately, the container is too heavy to jack up by hand. Staff will develop a better support base once birds have left.

Staff on Tern Island are also faced with a “new old problem” with septic system/sewage disposal, which cannot be fixed by on-island personnel. A drainage pipe that is normally buried in the sand (installed as a standard component of the septic

system during the earlier occupation) is becoming exposed during high surf and allowing seawater to flush gray water out of the septic tank. Replacement is recommended, with emergency funding being sought due to health, safety and resource concerns.

#### Midway Atoll NWR:

The fuel barge *Tara* arrived at Midway with a delivery of 140,000 gallons of much needed fuel. During the off-load, an unexpectedly high water content in one of the barge’s fuel compartments damaged filters on one of Midway’s fuel trucks. Most importantly, no fuel was spilled. It was later determined that the water had entered the compartment through a faulty hatch on the barge. Refuge staff are working with the barge company to replace the damaged filters.

## PAPAHĀNAUMOKUĀKEA

### Administration

In late June, Midway Atoll NWR continued its role as a “safe haven” for humans, as well as wildlife—exemplifying some of the many partnerships of Papahānaumokuākea. Midway provided logistical support via FWS airplane transportation from Midway to Honolulu to a Monument partner’s crew member. While on duty, the ship crew member suffered an eye injury that needed medical attention not available onboard the vessel or at Midway. Three days later, Midway provided logistical support during another medical emergency by transferring a patient off a Japanese flagged fishing vessel via the Refuge’s Safeboat. The U.S. Coast Guard C-130 then flew the patient on to Honolulu.

Two contaminants specialists hired by the Coast Guard arrived on Midway to await transfer to Kure Atoll for the State of Hawai‘i. Functioning as a staging area for multiple ship and flight operations, Midway will provide logistical support for the USCG-sponsored clean-up of the abandoned

LORAN station on Kure Atoll. Finally, Midway also served as a staging area in support of the U.S. Missile Defense Agency’s recent deployment of the SBX radar system in the waters off of Midway.

Along with the various wildlife populations, Tern Island’s human population is also booming this season, with FWS staff, volunteers, NMFS, and visiting scientists. As one of the many challenges and concerns associated with remote stations, very careful water, power and food conservation measures are in place to ensure adequate supplies.

GSA will be resurfacing the roof of the Prince Kuhio Federal building in Honolulu. Radio antennae and ground wires that are critical to communications with the NWHI are positioned on the roof of the building. Wildlife Refuge Specialist Ty Benally will be working with local contractors to ensure smooth operations during this maintenance project.

### Visitor Services

After spending 2.5 days on O‘ahu to meet with Native Hawaiian cultural leaders and members of the scientific community, participants in the first Papahānaumokuākea ‘Ahahui Alaka‘i headed to Midway Atoll NWR for the remainder of a 10-day experiential leadership program that brought together teachers, business people, and policy-makers, as well as potential community leaders interested in learning about and being inspired by science and traditional Hawaiian knowledge management practices. Participants in this educators’ workshop consisted of 12 carefully selected individuals (6 from Hawai‘i, 6 from the mainland states) and was planned and facilitated through the joint efforts of the USFWS, NOAA and the State of Hawai‘i. You are encouraged to read about their experiences and reflections on the web at: <http://paaprogram.blogspot.com>.



*Researchers Discuss Tagging of Monk Seal Pups With Participants (pup on beach, in background)*

## PAPAHĀNAUMOKUĀKEA

### Visitor Services (continued)

Eight board members from the Friends of Midway Atoll National Wildlife Refuge (FOMA) visited the atoll for one week at the beginning of June. They assisted with numerous projects, including marine debris monitoring, habitat restoration, and bolus collection. In addition, much discussion was had with Refuge management in regard to specific, resource enhancement projects that FOMA could support in the upcoming years, as well as how FOMA will ultimately fit in with the developing Monument Alliance.

Conservation International visited Midway Atoll NWR with a group of 12 potential donors for a Hawaii marine conservation initiative. Three days of diving and one day of exploring the terrestrial natural and historic resources highlighted the intact predator dominated marine ecosystem as a comparison to the highly impacted ecosystem in the main Hawaiian islands, as well as the atoll's significant World War II history.

Two different television crews (one Japanese and one from Current TV) visited Midway to document the significant impacts of marine debris on the Monument's wildlife.

On June 3rd, Midway Atoll NWR residents and guests gathered to commemorate the anniversary of the Battle of Midway. Attendees participated in a wreath laying ceremony and moment of silence at the Ensign Kelly Memorial, at what was believed to be the exact time the battle started 67 years earlier.



*67th Anniversary of the Battle of Midway*

### *Prichardia remota* on Laysan Island



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