## [student] spotlight

## HPA Sea Turtle Research Program Travels to Midway Island

Sophomore Meimei Nakahara Accompanies Group



he Oceanic Society invited George Balazs, leader of the Marine Turtle Research Program, Pacific Islands Fisheries Science Center, National Marine Fisheries Service, NOAA, and Marc Rice, director of HPA's Sea Turtle Research Program, to join them on one of their weeklong expeditions to Midway Atoll April 19-26, 2010. The purpose of Balazs' and Rice's trip was to see if it was logistically and institutionally feasible to mount a significant research expedition to Midway in the future.

Balazs and Rice last traveled to Midway about 10 years ago and while much has happened since then, very little has occurred in the way of formal research related to green turtles. The U.S. Fish and Wildlife Service has been diligent in recording sightings and even recorded several successful nests on Sand and Eastern Islands.

Naturalist Wayne Sentman and three other participants with a particular interest in sea turtles, including HPA sophomore, Meimei Nakahara, joined Balazs, Rice, and the Oceanic Society. The group worked together to monitor the basking behavior of the Sand Island turtles and carefully read tags on eight basking turtles that had been equipped with PIT tags during previous trips. One of the turtles, tagged in 1977 by a Coral Kings Dive Club diver, was seen nesting on East Island, French Frigate Shoals in 2009. In 1977, this female turtle measured 90 centimeters. The group read this animal's tag on April 18, 2010 while it was basking on Turtle Beach. She



TOP: Marc Rice, Meimei Nakahara, and other members of the Oceanic Society prepare to snorkel under the cargo pier on Sand Island. LEFT: Nakahara is surrounded by resident Laysan albatross and chicks on Eastern Island. RIGHT: Nakahara observes Earth Day by working with other volunteers to pull verbesina weeds on Midway.



measured about 100 centimeters in 2010, illustrating "how slowly mature turtles grow, as this animal has potentially been a mature female for about 30 years," noted Rice.

"It was satisfying to see that there is a very healthy looking population of adult green turtles that commonly come out to bask at 'Turtle Beach' on Sand Island," said Rice.

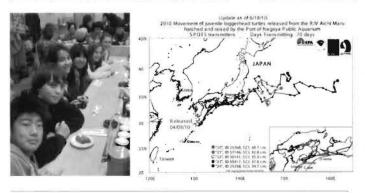
During this time of year, about 1.3 million Laysan albatross are nesting and 50,000 black-footed albatross are raising their young on Midway. "It was an exciting time and we enjoyed the antics of these wonderful creatures as they tried to feed their chicks, interact with their mates, and land and take off...after all, they are called Gooney Birds!" said Rice. "In addition, we photographed

Bonin petrels, wedge-tailed shearwaters, redtailed tropicbirds, masked and brown boobies, frigatebirds, white terns, and the very rare short-tailed albatross and Laysan duck. On top of the turtles and birds, we witnessed the birth of a rare Hawaiian monk seal on 'Turtle Beach!"

For more information, visit:
http://www.oceanicsociety.org/
http://www.pifsc.noaa.gov/
http://akepa.hpa.edu/%7Emrice/pwp/mrice/
welcome.html
http://www.hpa.edu/turtle.html
http://naturefinder.blogspot.com/







Clockwise from top left: The team visits the Aichi Maru to say aloha to the turtles and wish them a safe journey; Former HPA classmate Sho Mehring (front, left), who now lives in Japan, met the group at the Port of Nagoya Public Aguarium; The team outside the Port of Nagoya Public Aquarium; Team leader Marc Rice and the students share information about their work at the aquarium during a videoconference with Kristin Tarnas' fifth grade class and Lisa Van Kirk's sixth grade math class; Team members enjoy a meal at a local sushi restaurant; A recent satellite tracking chart shows movements of five juvenile loggerhead turtles.

## Middle and Upper School Students Assist with Project in Nagoya, Japan

For the eighth year, HPA students assisted in a satellite tagging project in cooperation with NOAA and the Port of Nagova Public Aquarium.

Student team members were seventh graders Hideyoshi Akai, Eliana Kaplan, and Maiah Police; eighth graders Bo Bleckel, Kimi Cantyne, and Caylin Kojima; and sophomore Abigail Wolfenberger. George Balazs, leader, Marine Turtle Research Program, Pacific Islands Fisheries Science Center, National Marine Fisheries Service, NOAA: Marc Rice, director of the HPA Sea Turtle Research Program: and Laura Jim, HPA Middle School science teacher, directed the students' work April 1-10, 2010.

The team attached 29 wildlife computer SPOT 5 satellite tags to juvenile loggerhead turtles raised at the aquarium. These turtles are part of a continuing study to determine the pelagic migratory paths of the Japanese loggerhead turtles in the North Pacific Ocean.

Nineteen of the 29 juvenile loggerhead turtles were outfitted with a Spot 5 tag set on a duty cycle of 4 hours on and 92 hours off. Six more loggerheads were outfitted with Spot 5 tags with a duty cycle of 4 hours on and 44 hours off. The theory behind this is that the 4/92 tags will have a longer battery life because they use less power.

After their work sessions at the aquarium, students had an opportunity to tour Nagoya with former classmate Sho Mehring. The group also took the bullet train to Kyoto, where they visited Sanjusangendo Temple, Kiyomizu Temple, and the stunning Golden Pavilion. The Akai family also hosted the group for a tour of Nara, including the Todaiji Temple, and a visit to Osaka.

The turtles were released at 9 a.m. on April 9, 2010 into the Kuroshio current to the south of Japan near Okinawa from the Miya Fisheries School training vessel Aichi Maru.

For the latest tracking information, visit http://akepa.hpa. edu/~mrice/turtle/nagoya1o/nagoyatracks2010.html.