

SPRING 2009 MAKE KULA

## HPA Team Assists with Turtle Research on O'ahu

Story > Marc Rice, Director, Sea Turtle Research Program at HPA

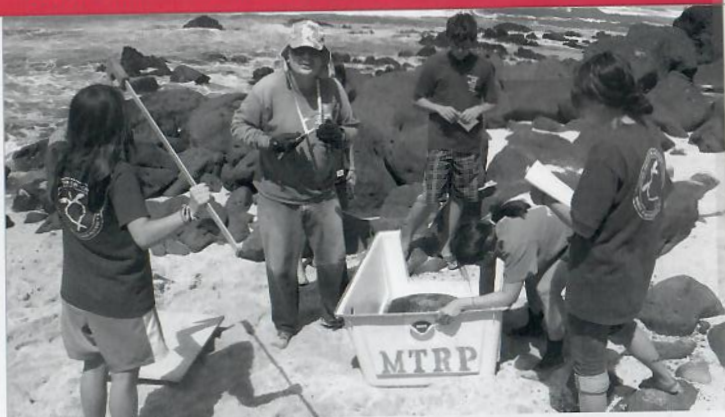
**O**n February 24, Upper School students John White and Rebecca Wong and Middle School students Kimi Cantyne and Caylin Kojima traveled with me to O'ahu to continue research on the diving behavior of adult green turtles during their reproductive migration to French Frigate Shoals (FFS). Melanie Wong '84 kindly hosted the entire team at her home and we are very grateful for her tremendous generosity and support.

In 2004, we successfully placed time-depth recorders (TDR) on three adult green turtles at Laniakea, O'ahu. These three green turtles made a reproductive migration in late February and early March to FFS. Subsequently, they all made a safe return trip to Laniakea where we could retrieve the TDRs and acquire all their dive data. The data of their diving behavior led to a publication in the *Journal of Experimental Marine Biology and Ecology*. Last year, we were able to place a tag on another adult female turtle, L18. L18 migrated to FFS and we mapped her travel to FFS (see <http://akepa.hpa.edu/~mrice/turtle/Laniakea08-L18/L18-08.html>).

Unfortunately, L18 lost her right front flipper to a shark and, after she was seen laying one clutch of eggs, she was never seen again. We suspect that she was killed by sharks because of her compromised condition. As a result, we were unable to obtain any diving data from the TDR.

Upon our arrival on O'ahu, we joined George Balazs, leader of the Marine Turtle Research Program at NOAA's National Marine Fisheries Service Pacific Islands Fisheries Science Center in another attempt to place satellite tags and TDRs on adult turtles at Laniakea, hoping one or more of the turtles would make the migration to FFS. The team captured a turtle named Hiwahiwa (L2) and we carefully attached a SPOT5 satellite tag and a TDR to her. The whole process took about three hours and she was released back into the water at Laniakea at 5 p.m. We have received position data from L2 so we know the satellite tag is working.

On February 25, the students and I joined George and his team at the state Halawa quarantine facility to participate in the necropsy



L to r: Kimi Cantyne (with caliper), George Balazs, John White, Melanie Wong '84, and Rebecca Wong measure a turtle captured while it was basking at Jocko's Cove, a beach located north of Laniakea on O'ahu.

of six stranded turtles. The purpose of the necropsies is to determine the cause of death of the turtles, if possible. George explained that they are only able to determine the cause of death in about 60 percent of the cases, but that the information gathered from the procedure is extremely valuable.

At noon, everyone made their way out to Laniakea again in an attempt to find another adult turtle to attach a tag to. At about 2 p.m., we hand-captured a 205-pound female (L4). L4 was a 2004 nester that had carried a TDR and was featured prominently in our 2008 paper. We attached three tags to her in a matter of three hours and she was back in the water at about 7 p.m. She also has been sending data to the ARGOS satellites and we are hopeful that both L4 and L2 will begin their journey to FFS very soon.

We spent our final day, February 26, capturing and tagging green turtles near "Jockos," a popular surfing spot. The team tagged nine turtles in the morning before it was time to head back to HPA. The HPA students were outstanding and I am very proud of their work. We could not have done the research without them. ■