HPA Bulletin

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Turtle Tagging Takes a New Turn



HPA'S highly successful turtle tagging program, started four years ago as a joint project with the National Marine Fisheries Service at Kiholo Bay, expanded this year to a new study site at Puako.

Faculty member Monica Traub, who administers the project for HPA, says a lot of the credit for the continuation and expansion of this vital environmental research project is due to the diligence and interest of students at the school.

The joint study involves a unique use of high school students to accomplish field work usually done by universitylevel students.

One result of HPA student involvement was the introduction of a resolution at the YMCA Youth Legislature last spring. It calls for the designation of Kiholo as a marine sanctuary. While the resolution carries no formal legal status, it has been passed along to a Big Island legislator for possible further action.

Students have been working in the turtle tagging program since 1987. George Balazs, a scientist with National Marine Fisheries, directs their efforts in capturing, measuring, tagging, and studying the threatened Hawaiian Green Sea Turtle, *Chelonia mydas*. The work began at Kiholo Bay using both active hand captures and nets. Students learned to take weight and size measure-



ments, analyze the turtles' diet, apply tags, and make capture nets. The work is part of a long term recovery program instituted by NMFS for this animal.

Because of the success of the Kiholo effort, NMFS and HPA set up an exploratory visit to the Puako coastal reef habitat last summer. The survey was successful, said Traub, and "convinced us that this would be a valuable second study area at which to cooperatively monitor the turtles' activity on a systematic basis." At the Puako site, capture and recovery efforts include the use of student SCUBA divers. In January and February, student divers were used to capture turtles at the Puako site. Twenty-two turtle have been tagged and measured at Puako and further trips were scheduled for March and June.

As at Kiholo Bay, the work at Puako includes both a research and an educational component. The studies in both areas 1) compare individual growth rates, food sources, population size, mortality, and other important life history factors; 2) look for fibropapilloma disease (the tumors widely reported to be having a devastating effect on sea turtle populations); and 3) determine the scope and magnitude of coastal movement between Puako and At left: National Marine Fisheries Scientist George Balazs (left) measures a turtle's shell with the assistance of HPA students. At right: two volunteers help a heavyweight get back into the ocean.

Kiholo Bay. The program also provides HPA high school students with a supervised field research experience under the direction of Balazs.

The work of the students has resulted in the capture in the Kiholo area of 110 turtles in a period of six days this year as well as the capture and tagging of two rare and endangered Hawaiian Hawksbill sea turtles last year.

Student group leaders involved with the Kiholo project this year include Farris Bogue, Sara Fuleihan, Kath Hannah, Kevin Kramer, Liz Miura, Marina Nogues, Glenn Pogue, Cassie Quaintance, and Amanda Roth. SCUBA divers on the Puako project were Robbie Hastings, Robert Kawasaki, Kevin Kramer, Glenn Pogue, Laura Rice, Amanda Roth, Kahea Thronas, and Bart Wyatt.

"We have had wonderful cooperation from everyone," said Traub. "I especially want to thank the faculty for their support, Marriot for provisioning our trips, the Hind family for the use of their property, and the Bakken family for their assistance with funding.

"We've found that this experience has a profound effect on students. It gives them a new outlook toward biology and furthers their interest in science."

At right: Balazs and students bring in a turtle for examination and tagging.



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