

Turtle Tagging at UH-Hilo to Celebrate 25 Years of Research and Education

Jason Trimble, Associate Editor

Turtle tagging at UH-Hilo has been a flagship activity for over two decades. It started in the Fall of 1983 when John Coney, currently the Marine Option Program (MOP) Coordinator for UH-Hilo was just a freshman



UH Hilo students participating in the Turtle Tagging Project.

and new to the MOP program. His roommate, Chris Doll, had convinced him to join an exciting new opportunity with MOP called the "Turtle Project". The project involved catching turtles for research on the Kau coastline of the Big Island of Hawaii. It was the start of an era: a partnership lasting 25 years with MOP and George Balasz of the National Marine Fisheries Service (NMFS) where students would go out into the waters along the Kau shoreline and retrieve turtles for scientific research.

Mr. Balasz had received a \$14,952 dollar grant to study turtles on the Big Island and enlisted the help of the newly-established Marine Option Program as well as several local schools and members of the community. Balasz's goals for the project were not only research-oriented, but had an educational component that informed the students and any beach-goers where he conducted

his research. He invited members of the public to reach out and get to know their honu (turtles) so that they could contribute to their conservation. This idea of both research and education in the field would reverberate through the 25 years of turtle tagging that followed and is very much alive today.

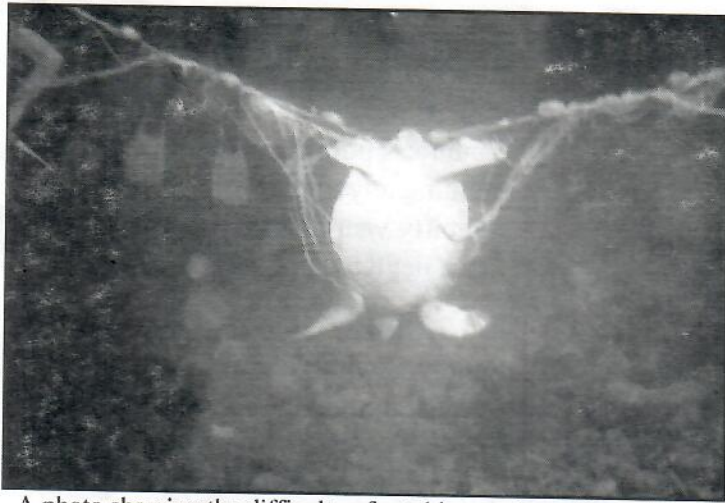
The Turtle Project quickly found a home at Punaluu Beach Park. The area is a traditional hotspot for green sea turtles, which regularly feed on the *Pterocladia* limu on the inside of the bay. This algae is a dark purplish-red color found in large pools and lagoons in the lower intertidal and shallow sub-tidal. At the dawn of turtle tagging in 1983, green sea turtles (*Chelonia mydas*) were much less prevalent than they are today. Years of hunting had diminished their numbers causing them to be a rare sighting. Catching the turtles then would have been impossible using today's hand grabbing technique. Instead, researchers had to set out "tangle nets" to catch the turtles and then



A photo dating back to the early 1980's when "tangle nets" were used to capture turtles for tagging. Dr. Walter Dudley, Professor of Geological Oceanography at UH-Hilo can be seen in this photograph third from left.

make sure to quickly retrieve them in case they weren't able to get to the surface to breathe. This made the whole

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A photo showing the difficulty of catching turtles with a net. The resulting entanglement produces logistical problems for the students trying to tag the turtle. In addition these tasks were done at night, further complicating the effort, but was necessary at the time due to the scarcity of turtles in comparison to today.

just last fall at Punaluu, meaning that these turtles have no memory of ever being hunted by humans and exhibit much less fear.

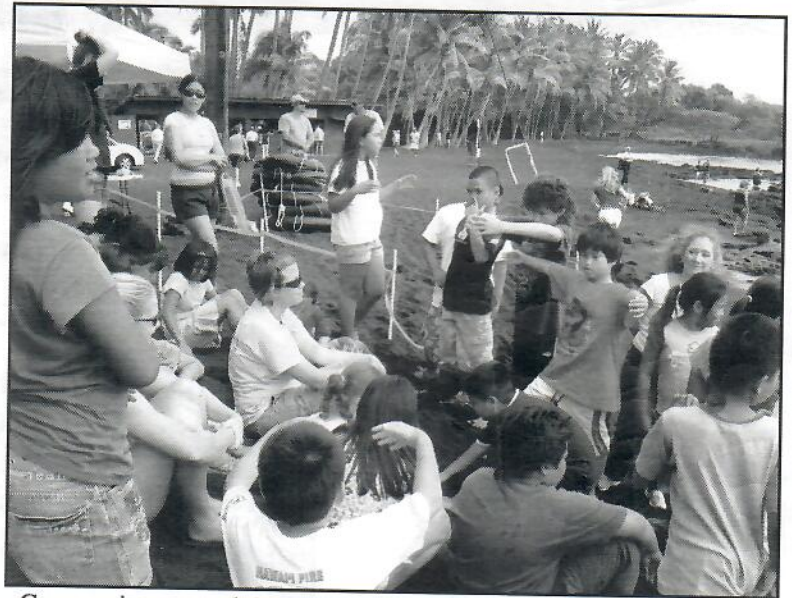
Katie Wills-Valdez has been involved with turtle tagging since the fall of 2003. She noted that “she hasn’t missed a single event”. She has been a member of the Sea Turtle Stranding Response Team since 2006 and is considered to be the most active member today. The team responds to calls of entangled, sick, or stranded sea turtles on the Big Island and is funded by the National Marine Fisheries Service under George Balazs. Currently she is working on obtaining her Masters Degree in Tropical Conservation Biology and Environmental Science. Her thesis is investigating the foraging ecology of the threatened Hawaiian Green Sea Turtle at Kapoho Bay.

The goal of the Turtle Tagging Project “has always been to take continuous data on the size, growth and over-all health of these remarkable animals” according to Katie. While some spectators have questioned the necessity of the continued monitoring of green sea turtle populations, Katie believes this is ridiculous. “Green turtles can live upwards of 80 years, so a 30 year study is only touching on a portion of one generation of turtles. I think the value of this study will only grow in the future,” she remarked.

The one thing that has not changed over the 25 years of Turtle Tagging at Punaluu is the massive amount of public outreach conducted by the MOP students and George Balasz. “Public outreach has been, and will continue to be of most importance in the recovery

process a very delicate and cumbersome activity requiring great care. The activity also required a lot of time, necessitating a camp-out over the weekend in a remote area in Kau, Hawaii, where only a few turtles were caught each day.

Today there is little problem finding turtles at Punaluu Beach Park. MOP students form teams and encircle a turtle while it is foraging or swimming and grab its shell and fins to place it on an inner-tube float in order to get it to shore. The float immobilizes the turtle to allow for an easier swim back to shore. The turtles are more docile now, and seem to be more trusting of humans, perhaps since it has been about 30 years since they were last hunted. The Endangered Species Act (ESA) was passed in 1978, extending a moratorium on the take of green sea turtles. Turtles that were born in or after 1978 are now at a sub-adult size and weigh in the range of 50-60 lbs. This weight is close to the average weight of the turtles caught



Community outreach has been a goal of MOP students and other agencies participating in the Turtle Tagging Project funded by the National Marine Fisheries Service.

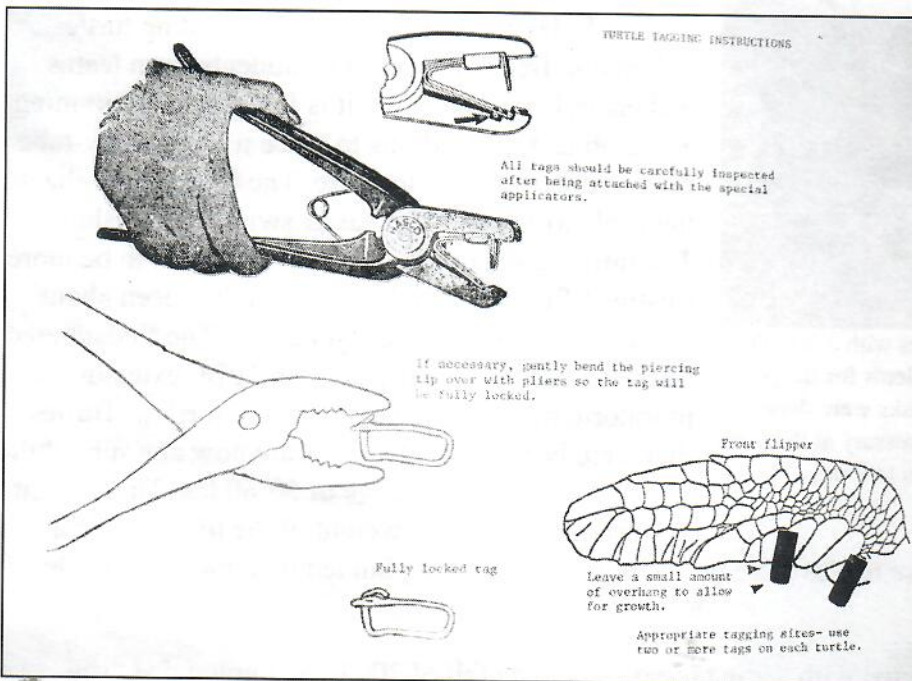
of the sea turtles,” Katie remarked. She has a particular skill for communicating with children during the tagging events as seen in the photograph.

The data taken from Punaluu over the 25 years of turtle tagging with MOP and George Balasz have been used for a variety of studies looking into size and population monitoring. Balasz has used his data in

countless publications with topics ranging anywhere from growth rates to thirty year recovery trends in a once depleted population.

MOP students were very involved with the Turtle Tagging Project in the fall of 2007. This fall marked the first tagging event in two years. Fifteen turtles were caught in a few hours, a testament to recovery of the green sea turtle. Five of these turtles were never seen before by the researchers, showing them that the population is ever-recovering.

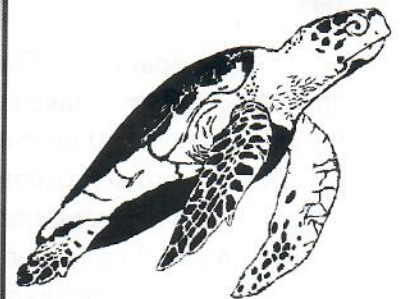
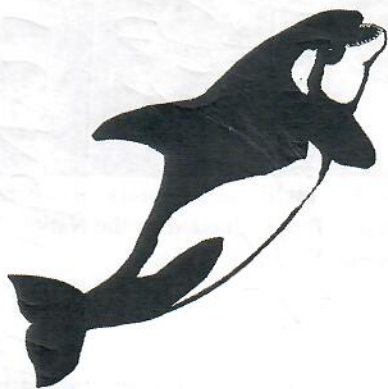
A date for turtle tagging in the spring 2008 semester has not been set, but plans are in the works for the 25 year anniversary of the event. If you are interested in participating, contact the UH- Hilo Marine Option Program at uhhmop@hawaii.edu.



Instructions prepared by George H. Balasz in May of 1982 on how to apply a turtle tag. While electronic PIT tags are now used these older tags are still attached to many turtles all over Hawaii and are used to identify turtle movements and patterns.

UH-Hilo Schedule of Events January

- 21 Holiday
- 22 QUEST introduction and about the program, 6-7, MSB-101
- 24 QUEST ID workshop (MSB-101, 6-8pm)
- 29 QUEST ID workshop II (MSB-101, 6-8pm)
- 31 QUEST ID workshop III (MSB-101, 6-8pm)



Hanauma Bay Outreach

February Events

Every Thursday at 6:30 p.m.
Free and open to the public

Humpback Whale Awareness Month

February 7th: "Understanding Strandings, Marine Mammal Beaching" by Dr. Kristi West, Professor of Biology, University of Hawai'i

February 14th: "Whales in Crisis" a documentary produced by National Geographic

February 21st: "Talking Trash! Marine Debris and Wildlife Entanglement" by Carey Morishige of NOAA's Marine Debris Program

February 28th: Lecture TBA, Humpback Whale Awareness Month Contest Awards begin at 6:15 p.m.

Free parking after 5:30 pm

For more information contact the Hanauma Bay Education Program at (808) 397-5840 or by e-mail: hanauma@hawaii.edu.

SOEST Centennial Lecture Series on the Changing Climate and Its Significance to Hawai'i



Chip Fletcher

(Chair of the Geology and Geophysics Department)

"Impact of Rising Sea Level on Hawaii"

***New time and location:**

Wednesday, Feb. 12 • 3–5 pm
HIG 110, UH Manoa Campus

This free event is open
to the public.

Submissions Welcome!

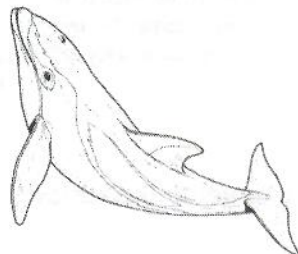
*Any artists, poets, writers,
photographers, or scientists out there
with marine-related interests?*

Share your talent with the marine community
and get your work published in *Seawords*.

We accept any original work having to do with
the ocean.

All work should be submitted to your nearest
MOP office for delivery to *Seawords*,
or email us at
seawords@hawaii.edu

Please be sure to
include your full
name and contact
information so we can
give you credit for
your work.



Hanauma Bay Nature Preserve Hours of Operation

Summer Session: April - September

- 6:00 AM – 7:00 PM Wednesday – Monday
- On the second and fourth Saturdays of the month the preserve remains open until 10:00 PM

Winter Session: October - March

- 6:00 AM – 6:00 PM Wednesday – Monday
- On the second Saturday of the month the preserve remains open until 10:00 PM

The preserve is closed all day Tuesday

For more information on the hours of operation consult the
Hanauma Bay website:
<http://www.honolulu.gov/parks/facility/hanaumabay/welcome.htm>