

Hawksbill hatchlings put on a show
By India Young Big Island Weekly
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Turtle enthusiasts sporting big smiles and buzzing with excitement crowded around a hawksbill sea turtle nest located on the now closed Punalu'u beach road last week.

Clad with cameras, adults and children were there to witness the excavation of a nest laid by an endangered hawksbill known as "Turtle 99" on Wednesday, Nov. 11. Hosting the event was Hawai'i Volcanoes National Parks' Hawksbill Turtle Recovery Project.

"While most people are familiar with the "honu" or green sea turtle that is commonly seen basking on Punalu'u beach, very few people have ever seen or even heard of the "honu'ea" or hawksbill turtle which nests on Hawaii Island," said project manager Will Seitz.

The hawksbill is the rarest turtle in the Pacific Ocean, and this year marks the project's 20th anniversary. From May to December, volunteers come together and donate 10 or more weeks "to monitoring beaches for nesting activity, protecting mama turtles and their hatchlings and educating beach users," said Seitz. Loss of nesting habitat, predators and poaching of hawksbill shells, have reduced turtle populations to critically low levels.

The Punalu'u turtle was the 99th female hawksbill tagged by the project since its inception in 1989.

"It's been the most successful year in project history... we have never seen this many nests at Punalu'u," Seitz said. Turtle 99 has laid a total of five nests on Punalu'u beach and although volunteers observed tracks in previous seasons, this is the first documented nest at Punalu'u since 2003.

"On average, hawksbills lay about three nests and up to six; individuals typically come back every three years to nest," he said.

Nesting is a challenge for female hawksbills with Hawai'i Island's rocky shorelines, and nests can be found several hundred feet from the shore. Females will often false nest or prospect many times before finding a suitable site to deposit on average, 178 eggs.

The eggs incubate for about two months before the hatchlings work together to

move sand from the roof of the nest to the floor, in order to climb closer to the surface. After testing for the sand's coolness, hatchlings determine if it's dark outside and safe to emerge.

"Fortunately for the hatchlings at Punalu'u, volunteers are there to guide them to the ocean," Seitz said.

John Lindelow, president of the non-profit organization World Turtle Trust (<http://World-Turtle-Trust.org>), said that the closure of the beach road in 2005, "has had several beneficial effects... turtles won't get run over by vehicles, their eggs won't get crushed by the weight of vehicles going over their nests, and there will be less light sources to disorient newly emerged hatchlings."

Problems occur when artificial lights mislead hatchlings away from the ocean, where they become stranded and die.

"In addition, the road closure has provided better nesting habitat available for the turtles. Formerly, hawksbills nested mostly under the coconut palms where hatchlings had to struggle to dig themselves out from under roots," Seitz said.

"Now they have a much greater habitat area for nesting," Lindelow added.

County councilman for the Ka'u district and Pahala native Guy Enriques was present at the event. He there are locals and beach residents who want the road opened again.

"I would be happy to keep the road like it is... I just don't want to lose this beach," he said. Enriques said over the years he's seen a great change in the beach profile with the retreat of sand into the naupaka vegetation lining the beach. He said that reopening the road would keep the sand accumulated near the ocean and out of people's private property.

Turtle 99, however, doesn't recognize a road as off-limits, and the migration of sand mauka offers a suitable habitat for her to deposit eggs. The Department of Land and Natural Resources reports that, "turtles require 2 to 2 1/2 feet of deep dry loose sand for nesting."

Turtle 99 would know about hospitable beaches around Hawai'i Island, having been first flipper tagged as "Y-254" in 1989 at Kiholo Bay by Marine Turtle Researcher George Balazs.

"She was a juvenile, no bigger than the palms of my hands put together, when we first found her," he explained.

She was seen again in 1990 and 1992 by Balazs and team at Kiholo Bay, but later thought for dead.

"We honestly and sadly thought she was dead, caught and killed in gill nets at Kiholo, common back then, but not now," said Balazs after she reappeared this summer to dig at Kamehame beach and ultimately nest at Punalu'u.

Balazs said the scientific significance of Turtle 99 is exciting.

"This turtle is no longer an adolescent," he said. "She grew up in under 25 years and is now laying eggs. Previously, we didn't know how long it would take hawksbills to reach maturity in Hawai'i. In some parts of the world it takes 30-40 years to reach maturity."

Balazs congratulated the people of Ka'u for their efforts in protecting the turtles.

Volunteers detected that the hatchling emergence was starting on Monday, Nov. 9, when a depression formed and 42 turtles trickled out toward the ocean. With a depression already formed and after a natural hatchling emergence, Seitz decided to make the excavation public so residents, especially children could participate.

"A large part of the project is public outreach and education," Seitz said. Most Hawai'i Island nesting sites are located on isolated beaches in the Ka'u district away from the public eye.

"Punalu'u provides a tremendous learning opportunity for residents to experience these rare and magnificent hawksbills," Seitz said.

"Forty-three live turtles were excavated on Wednesday, totaling 85 from the nest, and a 58.4 percent success rate," said volunteer Meghan Jerolaman. Children set the hatchlings in the sand affronting the ocean and enthusiastically watched as they raced on an impromptu sand track toward their new home. The hatchlings will face even bigger obstacles once they are at sea searching for food trying to hide from predators.

"Although it's not well known, there is a one and 1,000 chance they will

survive to adulthood; they need all the help they can get. It will be interesting to see if Turtle 99 comes back for a sixth nest," Seitz added.

The Hawksbill Turtle Recovery Project needs at least 16 volunteers at a time who enjoy camping, strenuous hikes and interacting with public, and can handle four-wheel driving, nightly turtle monitoring, flipper tagging, data collection and euthanization of predators. Seitz credited turtle volunteers for their dedication to hawksbill conservation, "even though they receive little financial return, the rewards are immeasurable and life changing."

More information or to volunteer

<http://www.nps.gov/havo/naturescience/turtles.htm> or contact Will Seitz at: Will_Seitz@contractor.nps.gov.