Basking in the sun makes our green sea turtles unique



SUSAN Scott Ocean Watch'

Physicist Stephen Hawking begins his 1988 book "A Brief History of Time" with a cosmic joke: At a public lecture, a scientist explains the earth's orbit around the sun, and the sun's around the galaxy.

"That's wrong," a woman in the audience says, "The earth is a flat plate resting on a turtle's

"What's the turtle standing on?" the scientist asks. She replies, "It's turtles all the way down."

At Midway Atoll, about 1,000 miles northwest of Honolulu, that phrase often popped into my mind when I visited what is now called Turtle Beach. There, rows of green sea turtles bask in the sun from one end of the roped-off beach to the other.

These are big, fat turtles. Most had rolls of fat around their flippers and necks (turtlenecks!), and some bodies looked so rounded it seemed they might rock on a hard surface.

One day at Turtle Beach I watched one of those portly turtles (pictured) surf to the shoreline and haul its bulky body up the sand with flippers better suited to swimming. Shove by shove, with rests between, the turtle finally got above the break and then promptly fell asleep, safe from sharks and warm from the sun.

Green sea turtles are found in tropical and subtropical



COURTESY SUSAN SCOTT

A green sea turtle hauls itself up the shoreline at Turtle Beach on Midway Atoll.

waters around the world, but only Hawaii's greens routinely bask on beaches. Other populations of green turtles, as well as other turtle species, lay eggs on beaches but don't sunbathe on dry land.

Ours sure do. The highest number of turtles I counted on Turtle Beach at one time was 28, a sight to behold but no record. In late 2009, turtle biologist George Balazs photographed 35 baskers on Turtle Beach, and last week a Midway biologist counted 38. When I told an albatross worker these numbers, she said that one sunny day last year she counted, "practically stacked up," 55 turtles.

This is remarkable on several levels. In the not so distant past, there was no such thing as Turtle Beach. Greens have always grazed in Midway waters, but only in the past decade or so has basking "caught on" there.

Researchers don't know all the reasons our greens rest ashore when others don't. It's clear, though, that Hawaii's turtles need places to nap undisturbed.

Besides their beach counts increasing, Midway's turtles are also growing up. In the late 1990s only about 24 percent of the baskers were adults, the others being the equivalent of teenagers, called subadults. Volunteer turtle researchers saw in 2010 that about 67 percent were adults of breeding age.

In checking the sleeping turtles for tags, the 2010 turtle team found one adult female tagged at Midway in 1977. Because she was probably about 20 years old at the time, she's at least 54 now. And still going strong. She nested at French Frigate Shoals in 2009.

Hawaii's green sea turtles are still a threatened species and have not yet recovered their numbers, but they're getting there. The tumor disease that once plagued our turtles seems to have run its course, and the state and federal laws protecting them are working. The sight of turtles in Hawaii's waters and on beaches is now common from Kure Atoll (land's end of the Northwest Hawaiian Islands and 57 miles northwest of Midway) to the Big Island.

For Hawaii the woman in Stephen Hawking's story was right. It's turtles all the way down.

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