



COURTESY PHOTO BY URSULA KEUPER-BENNETT

This sea turtle is covered with tumors due to fibropapillomatosis, a disease that appears to be spreading.

Scientists seek insight on lethal turtle malady

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By **Timothy Hurley**
thurley@staradvertiser.com

Scientists have come to Hawaii from all over the world to report findings of a deadly tumor disease in turtles that appears to be spreading globally.

Ironically, Hawaii is one of the few places where fibropapillomatosis has been on the decline.

The 2015 International Summit on Fibropapillomatosis convened Thursday at the National Oceanic and Atmospheric Administra-

tion's Pacific Islands Fisheries Science Center in Honolulu and will conclude Sunday.

The forum aims to assess the status and trends of the disease globally and convene an expert group to evaluate data and identify areas where more data is needed, among other things.

The summit chairman is longtime Hawaii turtle researcher George Balazs of NOAA's Turtle Research Program.

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fibropapillomatosis

TURTLES: Disease on decline in Hawaii

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Twenty-five scientists from as far away as Africa, Europe, South America and Australia are comparing notes and exchanging ideas, said Thierry Work, a U.S. Geological Survey wildlife disease specialist from Honolulu.

"We're trying to figure out what happens next and where we go from here," Work said Friday.

In Hawaii, fibropapillomatosis, also known as FP, is the leading cause of green sea turtle strandings.

Turtles with FP often show tumors on the skin of the flippers, neck, eyes, corners of the mouth and internal organs.

Some of these grotesque tumors can exceed the size of a cantaloupe, and turtles burdened with lots of these tumors can become severely emaciated and die.

The good news in Hawaii is that while FP peaked in the mid-1990s, when nearly half of all green turtles were seen here with tumors, the

disease has since declined to less than 10 percent of the population, Work said.

What's more, he said, the numbers of nesting turtles have been increasing at about 5 percent annually since the 1970s.

Elsewhere, the news about FP isn't so promising. It's either stable or increasing in most regions of the world, with the disease continuing to show up on new shores, according to turtle scientists.

A 2013 paper by Balazs and Work described the disease as an "insidious menace."

The tumors are essentially a form of cancer, according to Balazs and Work, and it almost exclusively affects green turtles and, to a lesser degree, olive ridleys and loggerheads.

So much about the disease is baffling, with FP expressing itself differently in different parts of the world.

In Florida, for example, liver tumors are common, while in Hawaii they are rare, the biologists said. Tu-

mors in the mouth are relatively common in Hawaii turtles but rare elsewhere.

In addition, tumor regression is much more common in Florida than it is in Hawaii.

There are mysteries on the local level, too. For example, FP is prevalent in turtles along the east coast of Hawaii island but not so much on the west side, they said.

In Florida, turtles in the inner reefs of the Indian River Lagoon suffer from a high prevalence of the disease while those on a nearby reef are affected hardly at all.

Work said FP is common in coastal areas that suffer from wastewater, agricultural and storm runoff, which means finding a cause may lead to responsible coastal development and cleaner oceans for all marine life.

The summit wraps up Sunday with guided field trips to Oahu green turtle foraging and basking habitats.