

Caribbean coral suffers record bleaching, death

By SETH BORENSTEIN
The Associated Press

WASHINGTON — A one-two punch of bleaching from record hot water and disease has killed ancient and delicate coral in the biggest loss of reefs scientists have ever seen in Caribbean waters.

Researchers from around the globe are scrambling to figure out the extent of the loss. Early conservative estimates from Puerto Rico and the U.S. Virgin Islands find that about one-third of the coral in official monitoring sites has recently died.

"It's an unprecedented die-off," said National Park Service fisheries biologist Jeff Miller, who last week checked 40 stations in the Virgin Islands. "The mortality that we're seeing now is of the extremely slow-growing reef-building corals. These are corals that are the foundation of the reef ... We're talking colonies that were here when Columbus came by have died in the past three to four months."

Some of the devastated coral can never replace itself because it only grows the width of one dime a year, Miller said. Coral reefs are the basis for a multibillion-dollar tourism and commercial fishing economy in the Caribbean. Key fish species use coral as habitat and feeding grounds. Reefs limit the damage from hurricanes and tsunamis. More recently, many tout them as possible sources for new medicines.

If coral reefs die "you lose the goose with golden eggs" that are key parts of small island economies, said Edwin Hernandez-Delgado, a University of Puerto Rico



AP Photo/NPS, Jeff Miller

This Feb. 15 photo which the National Park Service (NPS) provided shows U.S. Geological Survey research technician Erinn Muller examining the coral reef in the Buck Island Reef National Monument in St. Croix, Virgin Islands, after bleaching from record hot water followed by disease has killed ancient and delicate Caribbean coral.

biology researcher.

On Sunday, Hernandez-Delgado found a colony of 800-year-old star coral — more than 13 feet high — that had just died in the waters off Puerto Rico.

"We did lose entire colonies," he said. "This is something we have never seen before."

On Wednesday, Tyler Smith, coordinator of the U.S. Virgin Islands Coral Reef Monitoring program, dived at a popular spot for tourists in St. Thomas and saw an old chunk of brain coral, about 3 feet in diameter, that was at least 90 percent dead from the disease called "white plague."

"We haven't seen an event of this magnitude in the Caribbean before," said Mark Eakin, coordinator of the National Oceanic and Atmospheric Administration's (NOAA) Coral Reef Watch. The Caribbean is actually better off than areas of the Indian and Pacific ocean where mortality rates — mostly from warming waters — have been in the 90 percent range in past years, said Tom Goreau of the Global Coral Reef Alliance. Goreau called what's happening worldwide "an underwater holocaust."

With global warming, scientists are pessimistic about the future of coral reefs.

"The prognosis is not

good," said biochemistry professor M. James Crabbe of the University of Luton near London.

In early April, he will investigate coral reef mortality in Jamaica. "If you want to see a coral reef, go now, because they just won't survive in their current state."

For the Caribbean, it all started with hot sea temperatures, first in Panama in the spring and early summer, and it got worse.

New NOAA sea surface temperature figures show the sustained heating in the Caribbean last summer and fall was by far the worst in 21 years of satellite monitoring, Eakin said.