

Coral reefs dying faster than expected

By MICHAEL CASEY, AP Environmental Writer Tue Aug 7, 9:31 PM ET

Coral reefs in much of the Pacific Ocean are dying faster than previously thought, according to a study released Wednesday, with the decline driven by climate change, disease and coastal development.

Researchers from the University of North Carolina in Chapel Hill found that coral coverage in the Indo-Pacific — an area stretching from Indonesia's Sumatra island to French Polynesia — dropped 20 percent in the past two decades.

About 600 square miles of reefs have disappeared since the 1960s, the study found, and the losses were just as bad in Australia's well-protected Great Barrier Reef as they were in poorly managed marine reserves in the Philippines.

"We found the loss of reef building corals was much more widespread and severe than previously thought," said John Bruno, who conducted the study along with Elizabeth Selig. "Even the best managed reefs in the Indo-Pacific suffered significant coral loss over the past 20 years."

The study, which examined 6,000 surveys of more than 2,600 Indo-Pacific coral reefs done between 1968 and 2004, found the declines began earlier than previously estimated and mirror global trends. The United Nations has found close to a third of the world's corals have disappeared, and 60 percent are expected to be lost by 2030. The Indo-Pacific contains 75 percent of the world's coral reefs and provide a home for a wide range of marine plants and animals. They provide shelter for island communities and are key source of income, mostly from the benefits of fishing and tourism.

"Indo-Pacific reefs have played an important economic and cultural role in the region for hundreds of years and their continued decline could mean the loss of millions of dollars in fisheries and tourism," Selig said in a statement. "It's like when everything in the forest is gone except for little twigs."

While the study didn't examine the cause of the decline, Bruno said he believed it was driven by a range of factors including warming waters due to climate change. He also blamed storm damage, runoff from agriculture and industry, predators like fast-spreading crown-of-thorn starfish and diseases like White syndrome.

Bruno said the study demonstrated the need to better manage reefs and prevent threats such as overfishing, but acknowledged local measures would have little impact without a reduction of greenhouse gases.

"It is just one more example of the striking, far reaching effects of climate change and our behavior," Bruno said of the link between climate change and reef destruction. "It is the folks in North Carolina driving their SUVs. It is their behavior that is having an effect way out in the Indo-Pacific."

Ove Hoegh-Guldberg, director of the Center for Marine Studies at The University of Queensland in Australia, said the study should put to rest any suggestion that reefs like the Great Barrier Reef are untouched by "human pressures."

"This is a solid study that produces mounds of evidence that suggests reefs are changing counter to the untested and ungrounded claims that it isn't happening," Hoegh-Guldberg, who was not involved in the study, said in an e-mail interview."

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