

Science Notebook

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FEWER FISH IN CARIBBEAN REEFS

Populations of both large and small fish have been declining sharply across the Caribbean in the past 10 years, say researchers, who combined data from 48 studies of 318 coral reefs conducted over more than 50 years.

The data show that fish "densities" that had held steady for decades began to drop significantly around 1995, a trend not reported previously. Although overfishing has long taken a toll on larger species, the drop in smaller species that are not fished indicates that other forces are at work, said author Michelle Paddack of Simon Fraser University in Canada.

Drastic losses in coral cover and changes in coral reef habitats, driven by warming water temperatures and coral diseases, as well as sediment and pollution from coastal development could be among the factors. Overfishing may also have secondary effects by removing species that help keep reefs free of harmful algae.

"All these factors are stressing the reefs and making them less able to recover from disturbances such as hurricanes, which also seem to be occurring more frequently," Paddack said in a statement.

Paddack and her colleagues reported last week in the journal *Current Biology* that fish densities have been declining by 2.7 percent to 6 percent every year all across the Caribbean.

"If we want to have coral reefs in our future," the researcher said, "we must ensure that we reduce damage to these ecosystems," by such personal measures as not eating species that are in decline and by pushing lawmakers and resource managers for changes in how coral habitats are sustained and protected.

-- Nils Br