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From the Los Angeles Times

Hawaiian Islands' reef fish declining, study finds

Scientists blame overfishing for the problem, which affects 75% of the species. Subsistence fishermen in coastal communities rely on the fish to feed their families.

By Kenneth R. Weiss

Los Angeles Times Staff Writer

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Sharks, jacks, parrot fish and other colorful reef fish are quickly disappearing from coral reefs encircling the Hawaiian Islands, federal scientists reported Tuesday.

The scientists blamed overfishing for the steep decline, which affects three-quarters of the species once commonly found on coral reefs, delighting snorkeling tourists and feeding subsistence fishermen in Hawaii's coastal communities.

Many of these fish, ecologists say, are key to maintaining healthy coral reefs because they keep reefs clean by grazing on algae that can quickly overgrow the stony corals and cause them to collapse.

[Alan Friedlander](#), a federal fisheries ecologist, said that Hawaii still had relatively healthy reefs. "So everything hasn't collapsed yet," he said. "But we need to protect healthy reefs, because it's so much easier and safer to conserve now than it is to try to rebuild later."

The results of the study were released at the International Coral Reef Symposium in Fort Lauderdale, Fla. Nearly 3,000 scientists, managers and conservationists have congregated there to pore over the latest science and wrestle with ways to protect the world's coral reefs, which are in a state of steep decline.

Many prominent scientists think that overfishing represents one of the greatest challenges to maintaining and restoring healthy coral reefs.

Daniel Pauly, director of the University of British Columbia's Fisheries Centre, pointed out Tuesday that international authorities and local governments on Pacific island nations had little understanding of how many fish were being removed from coral reefs by small-scale subsistence fishermen.

For the most part, catch data compiled by American Samoa and other such island nations do not include all the small-boat fishermen who paddle or motor out to catch fish for themselves and their families.

Comparing census data of per-person fish consumption and other sources, Pauly and his team of

researchers discovered that in some cases the unreported catches were 17 times higher than reported catches. On average, they were at least twice as high.

Reconstructing a clearer picture of historic catches, Dirk Zeller and Jennifer Jacquet at the Fisheries Centre found that domestic catches had declined 54% to 86% since the 1950s.

This finding is important, Pauly said, because such catch data help determine if countries should sell fishing rights to foreign fishing fleets. If the local reliance on fish is underestimated, such deals can come at the expense of an important local source of protein.

Coral reef fisheries, Pauly said, are "very important because they are supporting millions of people in the developing world." He said that countries and the United Nations' Food and Agriculture Organization needed to pay attention to these unreported catches to ensure the food security of isolated islands struggling with rising prices for imported food as fuel costs escalate.

The study also found that Hawaii's unreported recreational fisheries for reef fish and deep-dwelling bottom fish was equivalent to the total reported commercial catch.

"Overfishing is often disputed in Hawaii and elsewhere because catch data is underreported or spotty," Friedlander said. The study, conducted by Friedlander and his colleagues from the Oceanic Institute and the National Oceanic and Atmospheric Administration's biogeography branch on Oahu, got around this problem by diving into the water and meticulously counting fish.

Teams of divers looked at 55 species of fish found on coral reefs around the main Hawaiian Islands as well as the remote and largely un-fished northwestern Hawaiian Islands, which lie hundreds of miles north and west of Kauai.

Comparing the fish counts at both places, the divers determined that 75% of the species around the main islands, such as Oahu, Maui and the Big Island, were in critical condition or depleted. Another 11% were below desirable levels.

Friedlander said Hawaii would be well served by tightening fishing regulations and setting aside protected no-fishing reserves to conserve coral reefs, helping to ensure that reef fish don't disappear for future generations.

"Probably in Hawaii, more than anywhere else in the United States, people rely on fish to feed themselves and their families," Friedlander said.

ken.weiss@latimes.com

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