

Ocean Survey Finds New Fish, Tuna Migration Routes

Mon Nov 22, 2004 06:24 PM ET

By Alister Doyle, Environment Correspondent

REYKJAVIK (Reuters) - A survey of the world's oceans is turning up more than two new species of fish a week and revealing huge trans-ocean migration routes by creatures from turtles to tuna, scientists say.

"We're finding new marine species almost everywhere," said Ron O'Dor, senior scientist of the Census of Marine Life, a 10-year project running until 2010 by hundreds of scientists in 70 nations.

Even in well-studied waters like off Europe, the number of species is climbing. The census will aid understanding of the oceans, the least-known part of the planet's surface, and help in monitoring threats including over-fishing and global warming.

For fish alone, the census has turned up 106 new species so far in 2004, or more than two a week, according to a 2004 report to be released on Tuesday.

The finds bring the known total of fish species to 15,482.

Among fish, new species found in 2004 include a type of striped goby that lives off Guam in the Pacific.

Other finds in 2004 included two types of octopus in chilly waters off Antarctica and a burrowing 20-cm (eight-inch) worm, dubbed a "purple orchid," in the depths of the mid-Atlantic.

The census estimates that there are about 230,000 known species of marine life, mostly tiny microbes and ranging up to blue whales, but that the real number may top two million.

"Below 3,000 meters (yards) there is a 50-50 chance that any species we find is new to science," O'Dor, a Canadian, told Reuters.

Some of the 2004 surprises were in the growing understanding of vast distances traveled by creatures from seals to fish tracked by tiny electronic tags. "It seems that these huge migrations are much more common than we believed," O'Dor said.

CALIFORNIA-JAPAN

"Bluefin tuna tagged in California turned up off Japan and then swim back to California," O'Dor said. "It's been known that tuna swim across the Atlantic but the Pacific is three times broader."

"And green turtles tagged near the equator go in huge loops around the Pacific, maybe three times in a lifetime of almost perpetual movement," he said.

And off western Canada, rare green sturgeon were also found 1,000 km (620 miles) north of their normal spawning grounds in California.

"Some people have suggested that perhaps they were moving north because of (global) warming, but we don't know," he said, adding large fish probably take several weeks to swim across the Pacific.

The census has so far registered 38,000 species, up from 13,000 a year ago.

"From some areas we have no samples yet, like the South Pacific or the Indian Ocean," O'Dor said.

Another challenge will be to map sub-sea mountains. About 14,000 sea mounts have been discovered but only 250 studied.

"They are like islands -- they have species found nowhere else," said J. Frederik Grassle of Rutgers University, chair of the census' international scientific steering committee.

He said some oil companies were cooperating in handing over seismic data of the seabed -- the firms were most interested in rocks deep below.

© Reuters 2004. All rights reserved. Republication or redistribution of Reuters content, including by caching, framing or similar means, is expressly prohibited without the prior written consent of Reuters. Reuters and the Reuters sphere logo are registered trademarks and trademarks of the Reuters group of companies around the world.

[Close This Window](#)