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Fish waste reduces CO2 levels in oceans

By editorial
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The world's oceans are getting help controlling harmful acid levels from an unseemly source, according to a new study that found fish waste plays a key role in neutralizing carbon dioxide in the marine environment.

Canadian scientists discovered that when fish drink seawater, they excrete calcium as calcium carbonate—a chalky substance that can make seawater more alkaline and diminish the carbon dioxide in the water.

The unusual finding is helping researchers understand the marine carbon cycle and how nature works to reduce CO2 levels that can raise sea temperatures and harm sea life.

The teams of researchers from Ontario, British Columbia, the United States, and the U.K. discovered the bulk of the world's fish species, excluding sharks and rays, produced the carbonate to counter the salt they ingested in seawater.

Researchers said they knew before that something in the water was producing carbonate, but believed it came from other sources such as microscopic marine plankton near the bottom of the food chain.

But they didn't understand why they were seeing so much of the carbonate at shallower depths.

The researchers, some of whom spent three years working on the project, also came up with the first estimate of the total number of bony fish, which comprise about 90 percent of the marine species.

Villy Christensen, a fisheries professor at the University of British Columbia, said they used two models to determine that there are between 812 million and 2,050 million tonnes of fish in the oceans.

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