

OCEAN FLOOR

Photos prove damage caused by trawlers

Vessels turn firm sea bottoms into ooze, destroying habitats



MARK HUME
MAY 10, 2007

VANCOUVER -- When world-renowned fisheries scientist Daniel Pauly clicked open his e-mail recently, he was stunned by the picture that flashed onto his screen.

There before the University of British Columbia researcher was a satellite image that confirmed something he'd long known, and that he'd written groundbreaking research papers about, but which he'd never seen so graphically illustrated.

The image, sent to him by Kyle Van Houtan, an environmental scientist at Duke University in North Carolina, was a picture of a Chinese trawler fleet at work in the ocean off the mouth of the Yangtze River.

Behind the trawlers were what Mr. Pauly has named "mud trails" - great plumes of sediment churned up as the weighted nets plowed along the ocean floor.

More Stories

- 'Inherently toxic' chemical faces its future
- TURNING FARMING ON ITS EAR



"Divers have filmed this mud before," said Mr. Pauly, who in 1998 wrote a seminal research paper that coined the term "fishing down the food web" to describe how commercial fishing is depleting the world's oceans.

"What was not known before was that you could see these mud trails from space. I was flabbergasted by it."

Mr. Pauly said Mr. Van Houtan had found the pictures by looking at images shot from a QuickBird satellite, owned by DigitalGlobe.

"He wanted to know what we were seeing in these pictures," said Mr. Pauly.

The answer, he said yesterday, is that the satellite images show in stark reality just how destructive ocean trawlers are.

"They lift up huge quantities of mud. Basically the implications are terrifying," said Mr. Pauly. "Trawling is destroying bottom habitat."

Mr. Van Houtan provided Mr. Pauly with a number of pictures of trawlers at work in oceans around the world. Some are in such sharp detail you can see birds whirling around the sterns of the vessels to feed on discarded fish.

One was of a fleet of trawlers at work off the Yangtze.

"The one from China blew everyone's mind," said Mr. Pauly, who has shared it with his colleagues around the world. "This really shows the impact of trawling is like agriculture on land. There is no chance for wild animals to live there.

"All the [ocean] shelves on Earth are being trawled. The damage being done is enormous.

"I say it is like a geological force, because firm ocean bottoms are being turned into soft, oozy bottoms on a gigantic scale."

Mr. Pauly said the trawlers destroy coral reefs and other hard bottoms, replacing them with soft, muddy bottoms. Storms, tidal currents and the continual passage of trawlers stirs up the sediment, which drifts back to the bottom smothering life.

"These mud flats [that are created] are good for the production of shrimps only and nothing else," said Mr. Pauly.

"An environment that was dominated by large animals essentially becomes a microbial vat."

The first of the pictures was to appear today in the science journal Nature.

© Copyright 2007 CTVglobemedia Publishing Inc. All Rights Reserved.

CTVglobemedia

globeandmail.com and The Globe and Mail are divisions of CTVglobemedia Publishing Inc., 444 Front St. W., Toronto, ON Canada M5V 2S9
Phillip Crawley, Publisher

