World's annual fishery catch is far more than reported, UBC expert says

Dr. Daniel Pauly, principal investigator for the Sea Around Us Project at UBC's Institute for the Oceans and Fisheries and co-author of Global Atlas of Marine Fisheries, spearheaded an all-encompassing, 10-year research project that discovered the global fisheries catch is actually 50 per cent higher than is reported. Paul Joseph / UBC
With worldwide catches already falling for 20 years, more fish than thought are still being taken from the world’s oceans, a fisheries expert from the University of B.C. says.

A lot, lot more.

Daniel Pauly, co-author of the recently released Global Atlas of Marine Fisheries, said the UN — relying on member countries to provide information — has under-reported fish catches by at least 50 per cent.

“For instance, Canada reports not a single fish caught in the Arctic, none,” Pauly, principal investigator for the Sea Around Us Project at UBC’s Institute for the Oceans and Fisheries, said.

Nor are the large number of fish discarded by the East Coast fishery counted, he added.

So when the worldwide fish catch peaked in 1996 and the UN, through its Food and Agriculture Organization (FAO), reported a catch of 86 million tonnes, the number should have really been 130 million tonnes, Pauly said.

“On the one hand, the results have shown the catch has been higher than people anticipated, meaning the ocean is more productive than thought and that’s a good thing,” he said. “On the negative side, since 1996 the catch has declined steadily year by year by 1.4 million tonnes a year.

“We’re past peak catch. We’re fishing like crazy with more and more fishing boats deployed and catches are going down.

“In the past we could just go somewhere else. Now we have fishing everywhere.”

The groundbreaking Global Atlas of Marine Fisheries was published after a 10-year study of the catch numbers from 1950 to 2010. It is the only book of its kind that offers country-by-country data on fisheries. (It’s too early yet for peer reviews to have been published.)

Pauly is cited exhaustively by peers around the world, has won several prestigious awards (most recently in November, the Albert ler Grand medal in science from Maison des Océan in Paris) and criss-crosses the planet for research and to consult.

Governments do not supply the following numbers to the FAO, Pauly said: Discarded fish, subsistence and artisanal fishing (big numbers in tropical and poorer regions) or recreational fishing (Finland excepted).

“Sports fishing is very big in South Africa and Australia,” Pauly said. “In Florida, the recreational catch is bigger than the commercial catch.”

Then there are illegal fisheries, which are not included in catch counts even when they’re caught.
“It’s all unreported, they don’t even make an estimate.”

And in places like Central America, only exported fish are counted, Pauly said, not fish consumed locally.

“All these things add up,” he said. “You wind up with a database with a lack of knowledge that translates into a catch of zero.

“We replaced this zero with the best information we could get and ended up with (an under-reporting of) 50 per cent. I’m very confident our figure of 50 per cent is conservative, it could very well be more.”

Canada lacks an overall target or goal for its fisheries, Pauly said.

“Policy moves with the political wind.”

He has, however, seen hopeful signs coming from the Trudeau government.

He points to the U.S. and its sustainable 1976 fisheries management and conservation act called Magnuson-Stevens (named after its authors, senators from Washington State and Alaska).

“Globally, it looks bleak,” Pauly said. “But the example of the U.S. shows it’s possible for a country to change course.

“How to fix the mess is not mysterious, you draft legislation that is clear and then implement it.”