

Fish face overexploitation even in Arctic, study finds

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Courtesy of the University of British Columbia
and World Science staff

Almost 75 times more fish are being caught in the Arctic than United Nations figures show, scientists say. The alarming findings, they add, raise a warning flag that the fishing could quickly become unsustainable.

“Ineffective reporting... has given us a false sense of comfort that the Arctic is still a pristine frontier when it comes to fisheries,” or commercial fishing areas, said the University of British Columbia's Dick Zeller. “Conservation efforts in the Arctic have so far focused on the exploitation of marine mammals – seals and polar bears are frankly easy on the eye and plain to see,” added Zeller, author of a report on the new findings. “None of them would survive, however, if we allow over-exploitation of fish in this delicate but so-far neglected ecosystem.”

His team estimates that fisheries catches in the Arctic totaled 950,000 tons from 1950 to 2006. The group reconstructed fisheries catch data from various sources – including limited governmental reports and anthropological records of native population activities – for the U.N. Food and Agriculture Organization's Fisheries Statistical Area 18, which covers Arctic coastal areas in northern Siberia, Alaska and Canada.

The Arctic is one of the last great ocean wildernesses. The extent of the sea ice in the region has declined in recent years due to global warming, scientists say, raising concerns over loss of biodiversity as well as the expansion of industrial fisheries into this area. The new findings are published this week in the journal *Polar Biology*.

Official U.N. data on fish catches in Area 18 from 1950 to 2006 were based solely on statistics supplied by Russia and amounted to 12,700 tons.

Zeller and colleagues performed a detailed analysis and found while the U.S. National Marine Fisheries Service's Alaska branch reports zero catches to the organization for the Arctic area, the state Department of Fish and Game has collected commercial

data and undertaken studies on 15 Arctic coastal communities that rely on fisheries. The estimated fish catch during this period in Alaska alone totaled 89,000 tons.

While no catches were reported to the U.N. organization by Canada, the research team found that commercial and small-scale fisheries actually amounted to 94,000 tons in catches in the same time span. Meanwhile, Russia's total catch was actually a staggering 770,000 tons from 1950 to 2006, or nearly 12,000 tons per year.

“Our work shows a lack of care by the Canadian, U.S. and Russian governments in trying to understand the food needs and fish catches of northern communities,” said Daniel Pauly of the university, who led the study. Researchers from the school's Sea Around Us Project, also led by Pauly, have previously found a trend of fish stocks moving towards polar regions due to climate change. This, coupled with increased accessibility of the Arctic areas due to melting sea ice, is expected to put huge pressure on the region for future large-scale fisheries.

“This research confirms that there is already fishing pressure in this region,” he said. “The question now is whether we should allow the further expansion of fisheries into the Arctic.”