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VANCOUVER - Canada, Russia and the United States have drastically under-estimated the size of their fisheries in the Arctic, says a new study from the University of British Columbia.

And as climate change opens up the northern ocean, the pressure will only increase on this delicate and neglected ecosystem, warn the study's authors.

Researchers with UBC's Fisheries Centre and Department of Earth and Ocean Sciences have crunched the numbers and say catches in Arctic waters are actually 75-times higher than reported to the United Nations Food and Agriculture Organization.

Collecting data from a diverse range of sources, from the limited number of government reports to anthropological records from indigenous populations, the research team looked at the fisheries covering the coastal areas in northern Siberia, Arctic Alaska and the Canadian Arctic.

In a report published this week in the journal Polar Biology, the researchers sounded the alarm over the perception that fisheries in the northern ocean have been limited.

"Ineffective reporting, due to governance issues and a lack of credible data on small-scale fisheries, has given us a false sense of comfort that the Arctic is still a pristine frontier when it comes to fisheries," Dirk Zeller, lead author of the study, said in a statement.

Their research suggested small scale, often subsistence fisheries in Russian, American and Canadian Arctic waters totalled 950,000 tonnes between 1950 and 2006. That is dramatically higher than the declared catch of just under 13,000 tonnes.

Data shows the United States claimed no catches to the UN during the study period, but 89,000 tonnes were actually hauled in. Canada also reported no catches but netted 94,000 tonnes, and Russia reported 12,700 tonnes but took a staggering 770,000 tonnes between 1950 and 2006.

"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, leader of the Sea Around Us project at UBC.

The researchers previously found a trend of fish stocks moving toward polar regions because of the effects of climate change.

In future, there will be increasing pressure on the region from fisheries, they warn.

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

The over-exploitation of the fisheries in the Arctic could threaten already endangered northern icons such as polar bears, Zeller warned.