



Commercial fisheries not sustainable reports study

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Worldwide fisheries have expanded to the extent to which they can no longer be accommodated sustainably a recent study confirms.

The joint investigation conducted by the University of British Columbia (UBC) and the National Geographic Society is the first of its kind to analyse the geographic expansion of global fisheries.

Published in the journal PLoS ONE, on 2nd December 2010, the study lends additional credibility to reports, which state that current fishing practices are unsustainable.

Researchers involved in the study holistically evaluated the ecological footprint of commercial fisheries. The process involved analysing primary production—the tiny organisms that make up the bottom of the food chain—and calculating the amount that would have been necessary to support current fishing yields around the world from 1950 to 2005. The outcome of the study was that there is far from enough primary production available to maintain commercial fishing at present levels.

Primary production was used as the tool for determining the ecological footprint of fisheries because it allows for indirect comparisons between species. By regarding the entire ecosystem, a broader picture of the situation was developed. The researchers subsequently used this footprint to quantify the expansions of fisheries and expose patterns.

"This method allows us to truly gauge the impact of catching all types of fish, from large predators such as bluefin tuna to small fish such as sardines and anchovies," says Daniel Pauly, Co-author and Principal Investigator of the Sea Around Us Project at UBC Fisheries Centre.

By 2005 the ecological footprint of commercial fishing had expanded by about one degree of latitude yearly, to include most of the productive waters around the globe. According to the investigation, the expansion resulted in a 500 per cent increase in catch rates, from 19 million tons in 1950 to 87 million tons in 2005, resulting in an ecological footprint of 45 billion tons of primary productivity.

"The era of great expansion has come to an end, and maintaining the current supply of wild fish sustainably is not possible," says Co-author and National Geographic Ocean Fellow Enric Sala. "The sooner we come to grips with it—similar to how society has recognized the effects of climate change—the sooner we can stop the downward spiral by creating stricter fisheries regulations and more marine reserves," he said.

Fisheries expansion experienced its greatest rate of growth during the 1980s and 1990s. A peak was reached during the mid-1990s, after which expansion declined, which can be misleading.

"The decline of spatial expansion since the mid-1990s is not a reflection of successful conservation efforts but rather an indication that we've simply run out of room to expand fisheries," says Wilf Swartz, a PhD student at UBC Fisheries Centre and Lead Author of the study.

According to Protect Planet Ocean figures, only 0.1 per cent of the world's oceans are designated as marine reserves. This study, along with many others, advises imposing stricter fishing regulations and quotas, anticipating that the biodiversity held in global waters can be preserved.

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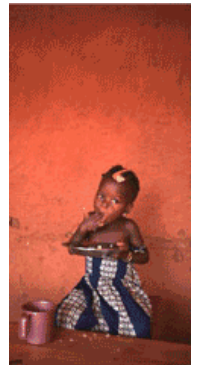
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Climate Action Programme, Floor 2, Trans-World House, 100 City Road, London, EC1Y 2BP, United Kingdom