Scientists Conclude That Culling Whales Will Not Help Fisheries in Tropical Regions

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Washington, DC - 02/12/2009 - Culling whales will not increase fisheries catches in tropical waters, according to a new paper supported by the Lenfest Ocean Program and published today in the journal *Science*. For years, Japan has argued that reducing the number of baleen whales in the oceans would improve fisheries because whales eat fish that are caught for human consumption. The study published today found that even a complete eradication of whale populations in tropical waters would not lead to any significant increase in fish populations.

Many countries in Western Africa and the Caribbean have been persuaded by Japan to join the International Whaling Commission (IWC) and vote in favor of resuming commercial whaling with the understanding that culling whales would result in increased fisheries catches.

"Our models unequivocally show that removing whales would not significantly increase the amount of commercially valuable fish," said Dr. Leah Gerber, lead author and associate professor of Ecology, Evolution and Environmental Science at Arizona State University. "Instead, we found that fishing is having a far greater bearing on the health of the fish stocks in the region. Interestingly, when whales were more abundant before World War II, the fisheries were in good shape."

"The assertion that whales are competing with fisheries for food is, on the surface, very persuasive, because it seems intuitive that these large animals must be consuming enormous amounts of food," said Dr. Kristin Kaschner, an author based at the Evolutionary Biology and Ecology Lab at the University of Freiburg, Germany. "However, competition within ecosystems is a complex issue and needs to be investigated using the appropriate scientific tools."

The authors constructed ecosystem models, which account for feeding interactions between whales and fish, to understand the role that baleen whales play in tropical marine ecosystems in Western Africa and the Caribbean, where baleen whales are known to breed. The scientists used global and regional data, validated through scientific workshops in Senegal and Barbados, to determine whether competition was occurring.

"An ocean ecosystem is greater than the sum of its parts. Removing whales from the equation does not increase the number of fish and impacts the health of the overall system," said Dr. Lyne Morissette, an author based at the Institut des Sciences de la Mer de Rimouski, Canada. "We need to focus on truly effective and sustainable management approaches to recover our fisheries."

The researchers suggest these results underscore the important role of science in policy decisions about whales and fisheries interactions. They also emphasize that the goal of ecosystem-based management should not be to manipulate individual components of food webs in an attempt to maximize the amount of fish to catch, but to

manage the whole system for long-term sustainability.

"All countries should adopt leadership roles in a common effort to manage our fisheries better," said Dr. Daniel Pauly, an author from the University of British Columbia. "The assertion that fish supply is in peril is legitimate, but the problem is resolved with better management, not whaling."

Editor's Note:
For high resolution photographs of baleen whales, visit: www.lenfestocean.org/whales_fisheries.html

To read the full paper published in the journal *Science*, visit: www.eurekalert.org/jrnls/sci/. This link is for journalists only; username and pass code are required. If you need to register, please email scipak@aaas.org or call 202.326.6440.

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