Climate Change Impacts Countered By Stricter Fisheries Management

WCS study finds strong management can protect fisheries – and local fishing-based economies – otherwise affected by climate disturbances

NEW YORK (October 24, 2014) – A new study has found that implementing stricter fisheries management overcame the expected detrimental effects of climate change disturbances in coral reef fisheries badly impacted by the 1997/98 El Niño, according to the Wildlife Conservation Society.

The 17-year study led by WCS fisheries scientists found that rapid implementation of fisheries restrictions countered adverse climate effects and actually increased fisheries catches, counter to predictions and findings in other studies without stricter management. This is good news for the millions of people who depend on coral reefs fisheries, as it provides a management solution for fisheries predicted to decline with global warming.

The authors examined the environment and fisheries catches before and after the severe El Niño event of 1997−1998, an unprecedented climate disturbance that killed half of the corals in the Indian Ocean. A comparison of catch rates in southern Kenya found a preliminary decline in catches that was followed by an increase of catches. This increase was closely associated with improved fisheries restrictions that were implemented shortly after the disturbance.

The study titled appears in the current edition of the journal Marine Ecology Progress Series. The study’s authors are Tim McClanahan and Caroline Abunge of the Wildlife Conservation Society.

The authors concluded that reducing fishing intensity and restricting fishing gear known to be destructive to corals and fish populations were the likely causes for the rise in catch rates and fishers’ revenues. The authors note that this positive response may not occur in all coral reef fisheries but, because the fishery was composed of fast-growing, generalist species with broad diet and habitat needs, they may be less sensitive to reef conditions than to direct fishing mortality. These findings indicate that coral reefs management restrictions can override the detrimental effects of climate disturbances in heavily fished reefs.

“The response suggests we can do something about countering lost fisheries production even in poor countries,” said lead author Tim McClanahan of WCS. “Common sense fisheries restrictions can increase the capacity to adapt to climate change and should be accelerated to mitigate losses arising from inaction.”

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To access the study, click here: http://www.int-res.com/articles/meps_oa/m513p201.pdf

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Wildlife Conservation Society (WCS)
MISSION: WCS saves wildlife and wild places worldwide through science, conservation action, education, and
inspiring people to value nature. VISION: WCS envisions a world where wildlife thrives in healthy lands and seas, valued by societies that embrace and benefit from the diversity and integrity of life on earth. To achieve our mission, WCS, based at the Bronx Zoo, harnesses the power of its Global Conservation Program in more than 60 nations and in all the world’s oceans and its five wildlife parks in New York City, visited by 4 million people annually. WCS combines its expertise in the field, zoos, and aquarium to achieve its conservation mission. Visit: www.wcs.org; http://www.facebook.com/TheWCS; http://www.youtube.com/user/WCSMedia Follow: @thewcs.

Wildlife Conservation Society’s New York Aquarium is open every day of the year. Summer hours are 10 a.m. to 6 p.m. daily. Fall/winter/spring hours are 10 a.m. to 4:30 p.m., daily. Admission is $9.95 per person; children under 3 years of age are admitted free. Fridays after 4 p.m. in the summer and after 3 p.m. in the fall, admission is by pay-what-you-wish donation. The aquarium is located on Surf Avenue at West 8th Street in Coney Island. The New York Aquarium is located on property owned by the City of New York, and its operation is made possible in part by public funds provided through the New York City Department of Cultural Affairs. For directions, information on public events and programs, and other aquarium information, call 718-265-FISH or visit our web site at http://www.nyaquarium.com. Now is the perfect time to visit and show support for the WCS New York Aquarium, a beloved part of Brooklyn and all of the City of New York. Due to Hurricane Sandy we are partially opened. Check our website for more information.

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