

MEDIA RELEASE

NEWS FROM THE INSTITUTE FOR MARINE AND ANTARCTIC STUDIES

DATE: THURSDAY 16 MAY, 2013

ATTENTION: CHIEFS OF STAFF, NEWS DIRECTORS

Embargoed until 0300 AUS EST 16 May 2013

Newly published research reveals the impact of warming oceans on global fish stocks

Research published today in the prestigious science journal *Nature* has demonstrated the previously unknown impact of climate change on global fisheries.

The impact of climate change and ocean warming has been shown in individual fisheries, but it has not been demonstrated before on global fisheries.

The study shows that ocean warming has already affected global fisheries over the past four decades, by increasing the proportion of warmer-water fish species caught.

“Given global fisheries contribute hugely to the world’s economy and food security, this is a significant finding,” said co-author Dr Reg Watson from the University of Tasmania’s specialist Institute for Marine and Antarctic Studies.

“We are no longer talking about future hypotheticals – we are talking about impacts on a global scale that we can already demonstrate. Last year we showed that one of the consequences of climate change and excessive fishing is that globally marine fishes are smaller,” said Dr Watson, referring to his research published in the journal *Nature Climate Change* last year.

The authors of this paper, lead by Assistant Professor William Cheung, University of British Columbia, Canada calculated an index, the mean temperature of the catch (MTC), and examined 698 exploited species in most of the world’s productive coastal areas or large marine ecosystems.

“Our results show that, after accounting for factors like increased fishing and large-scale marine variability, the global MTC increased at a rate of nearly 0.2 degrees Celsius per decade between 1970 and 2006, and for non-tropical MTC increased at a rate over 0.2 degrees Celsius per decade,” said Dr Watson.

Essentially these findings demonstrate that the distribution of fish stocks has already shifted, with an increase in the number of warmer-water fish being caught globally, particularly in non-tropical areas.

“Now that new light has been shed on the impact of climate change on global fisheries, timely changes in management practices are needed and the development of adaptation plans is a must,” said Dr Watson.

Information released by:

UTAS Communications and Media Office

Phone: (03) 6226 6683 or 0418 299 470 (Sam East, IMAS Communications Manager)

Email: Sam.East@utas.edu.au; Media.Office@utas.edu.au

The paper can be viewed here:

www.nature.com/nature/journal/v497/n7449/full/nature12156.html