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In an editorial and articles in this week's Nature, titled "Does Catch Reflect Abundance?", Daniel Pauly and Ray Hilborn resume their decade-long battle over the state of world fish stocks and how to manage fisheries sustainably. As Nature summarizes it, "In one piece, Daniel Pauly argues that 'catch data' of the number of fish caught are a vital tool for assessing the health of fish stocks. In their counterpoint piece, Ray Hilborn and Trevor Branch warn that over-reliance on this measure misses important subtleties and can misleadingly distil the health of entire ecosystems down to a landed tonnage. "This is far from an academic debate. If scientists cannot estimate fish numbers, and so the health of stocks, there is little hope that this resource can be exploited in a sustainable fashion," the editorial concludes.

Pauly has long been using raw catch data from FAO to pontificate about the state of world fisheries. Hilborn and colleague Trevor Branch argue that this is nonsense. They argue say that the changes in the amount of fish caught does not necessarily reflect the number of fish in the sea. In their view "A much better approach is to deduce the health of stocks region by region and fishery by fishery using scientific stock assessments, which collate all sorts of data – from the results of surveys conducted from research vessels to the catch per fishing effort, and the age and size distributions of the fish caught." Pauly argues that stock assessments are not available for many of the world's fisheries and are too costly for many third world countries. Hilborn and Branch counter that good data are available for 40% of the world's fisheries and data exist which could be assembled for another 40%.

TAGS: sustainable, fisheries, sustain, fish, fisheries management, Pauly, Hilborn, Nature, catch data, stock assessment