## Fewer big fish in the sea: scientists

Fewer big, predatory fish are swimming in the world's oceans because of overfishing by humans, leaving smaller fish to thrive and double in force over the past 100 years, scientists said Friday.

Big fish, such as cod, tuna, and groupers have declined worldwide by two-thirds while the number of anchovies, sardines and capelin has surged in their absence, said University of British Columbia researchers.



"Overfishing has absolutely had a 'when cats are away, the mice will play' effect on our oceans," said Villy Christensen, a professor in the UBC Fisheries Centre who presented the research findings at the American Association for the Advancement of Science annual conference in Washington. "By removing the large, predatory species from the ocean, small forage fish have been left to thrive." The researchers also found that more than half (54 percent) of the decline in the predatory fish population has taken place over the last 40 years.

Christensen and his team examined more than 200 global marine ecosystem models and extracted more than 68,000 estimates of fish biomass from 1880 to 2007 for the study. afp