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**“IT WAS VERY EXCITING IN THOSE DAYS.
WE WERE EXPLORERS.”**

Marie-Tharp (1920–2006), Oceanographer, Faculty 1948–83

A pioneer of modern oceanography, Tharp was the first to map details of the ocean floor on a global scale. Her observations became crucial to the eventual acceptance of the theories of plate tectonics and continental drift in the earth sciences.

Wednesday, 28th May 2014, 2:00 p.m.

GEOMAR Lecture Hall West (R.B54) | Düsternbrooker Weg 20, 24105 Kiel

The Changing Arctic Ocean: Ecological Effects of Warming and Sea Ice Melt



One of the big questions of our time is as to the future of ocean ecosystems in response to climate change. This lecture assesses current knowledge of changes in Arctic sea ice, productivity, particle flux and benthic remineralization, as well as in the distribution and diversity of Arctic Ocean life. It gives an overview of new methods and technologies used to assess ecological responses to sea ice melt and warming, from the ocean surface to the deep-sea floor.

Case studies of the ecological consequences of warming anomalies in the Arctic are presented to highlight the speed of change and to visualize responses of ocean life, including new photo and video footage from ice-covered regions of the Arctic. The lecture also discusses what changes in the biogeochemistry and biodiversity of the ice-covered Arctic basins are to be expected if the sea-ice retreat continues, and which approaches are needed to better observe and understand the future of the Arctic Ocean.