

The Missing Middle: The Need for International Collaboration to Fill Gaps in Central Arctic Ocean Science

Henry P. HUNTINGTON, Pew Charitable Trusts, Eagle River, Alaska, USA
Thomas VAN PELT, Transboundary Ecologic LLC, Seattle, Washington, USA
Hyoung Chul SHIN, Korea Polar Research Institute, Incheon, Republic of Korea

Abstract

The Central Arctic Ocean has recently become more accessible to a range of exploration activities. Previous research, laying the foundation for our understanding of the Arctic marine ecosystem and for continuing relationships among the many participating programs, is a good starting point for supporting an international agreement currently being negotiated about fisheries in the international waters of the central Arctic Ocean. More will need to be done, however, to provide information about fisheries and fish stocks in the region. First, while some research has been conducted in the international waters of the central Arctic Ocean, far more has been done within the surrounding EEZs of the Arctic coastal states. This is the geographic “missing middle.” Second, much of the research that has been done in Arctic waters has looked at sea ice and physical oceanography or at lower trophic levels. Some studies have also examined marine mammals and seabirds, at the top of the food web, but far less work has been done on fish, the ecological “missing middle.” There are, however, excellent prospects for filling in the middle in both senses. In U.S. waters, some recent Arctic and subarctic studies have included fish. International collaborations and the work of other countries are extending into the international waters of the central Arctic Ocean. Enhancing such collaborations, broadening their scope to include fish, extending from research within the EEZs of coastal states, and creating a mechanism to coordinate and integrate cooperative activities are plausible, practical steps to filling the “missing middle.”

Keywords:

Central Arctic Ocean, fisheries, food web, international collaboration, oceanography

Contact Author:

Henry P. Huntington, Pew Charitable Trusts, 23834 The Clearing Dr., Eagle River, Alaska, 99577, USA; hhuntington@pewtrusts.org