The Norwegian Institute of Marine Research and VNIRO Arctic

Barents Sea Ecosystem Survey

Elena Eriksen elena.eriksen@hi.no

The joint Norwegian/Russian autumn ecosystem survey in the Barents Sea and adjacent waters (BESS) monitors the status and changes in abiotic and biotic variables, providing background for environmental and fisheries advice.

BESS is based upon in-situ measurements from scientific vessels (normally three). It provides a broad range of inter-disciplinary observations by means of demersal and pelagic trawls, vertical phyto- and zooplankton nets, CTD probes with water bottles rosette, and more. The survey is run each August-October since 2004. It is an extension of earlier IMR surveys, in particular the O-group survey initiated in 1965. https://www.hi.no/resources/IMR-PINRO-Report-2019-survey.pdf

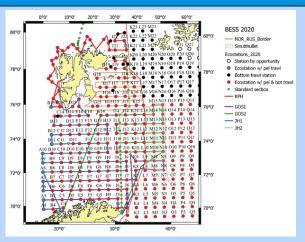


Figure 1. Planned Norwegian part of BESS autumn 2020. Trawl sampling stations and vessel tracks.

Information from BESS is used extensively as a basis for advice to environmental and fisheries management and various applied and more basic research projects.

Numerous scientific papers have been written on analyses of the globally unique BESS data, and results were also shown in IPCC's 2019 Special Report on the Ocean and Cryosphere in a Changing Climate.

Data are handled by the Norwegian Marine Data Centre and stored in a national repository.

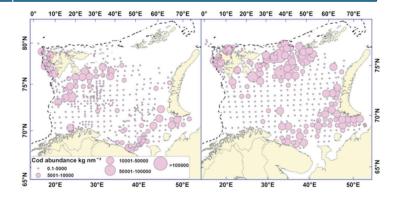


Figure 2. Major ecosystem changes in the Barents Sea. Spatial distribution of cod in 2007 (left panel) and 2013 (right panel). Maps based on data from BESS.





The Russian Polar Branch of FSBSI VNIRO (PINRO)



