

11. TECHNICAL REPORT

From 2003, the survey has been part of a joint Barents Sea autumn ecosystem survey (BESS), designed and carried out in cooperation between the Institute of Marine Research (IMR), Norway and the Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO). Most aspects of the ecosystem are covered, from physical and chemical oceanography, pollution, garbage, phytoplankton and zooplankton to fish (both young and adults), sea mammals, benthic invertebrates and birds.

The 10th joint Barents Sea autumn ecosystem survey (BESS) was carried out during the period from 9th August to 31st October 2013. The state of the ecosystem of the Barents Sea, the northern Kara Sea and a part of the Arctic basin was observed during the survey. Three Norwegian (“Johan Hjørt”, “G.O. Sars” and “Helmer Hanssen”) and one Russian (“Vilnys”) research vessels participated in the BESS in 2013. All research vessels spent more days on the survey than in 2012 (178 vs 154) due to “Vilnyus” had extra-days. But most of these extra-days were the bunkering and time loss during the military activity. So the quantity of working days the 2013 survey was approximately the same as in 2012. But the surveyed area in 2013 was larger than in the previous year due to the investigations in the northern Kara Sea and areas north of Franz Josef Land. In general, all the tasks have been completed, and the weather conditions were favorable for the work.

“Technical Report” presents all types of deviations from the standards presented in the “Sampling Manual” (http://www.imr.no/tokt/okosystemtokt_i_barentshavet/sampling_manual/nb-no). In addition to the standard monitoring of the Barents Sea, several studies and experiments are carried out.

11.1 Deviations from the standards presented in the “Sampling Manual”

Text by T. Wenneck and D. Prozorkevich

Equipment:

1: Differences in trawl rigging and trawl procedure between PINRO and IMR vessels as well as among all the vessels of both institutes are present. So both pelagic and bottom trawls need calibrating.

11.2 Special investigations

Some special investigations were carried out during the Ecosystem survey in the Barents Sea in 2013. Description of aim, methods and some results of special investigations are given in the following chapters:

- 10.1 Standardization of survey equipment and testing of DeepVision.
- 10.2 Nets inter calibration.