

BACKGROUND

The aim of the survey is to monitor the status and changes of the Barents Sea ecosystem. The survey plan and tasks were agreed upon at the annual IMR-PINRO Meeting in March 2015. However, the agreed cruise plan was not followed for several reasons. IMR changed the cruise tracks of “G.O.Sars” and thus the timing of the coverage of different parts of the Barents Sea. This corrupted the synoptic coverage of the south-western part of Barents Sea. PINRO experienced a delayed cruise start with the vessel “Vilnyus”. This corrupted the synoptic coverage of the area along the Novaya Zemlya. The problems with changed cruise plan mainly influenced the survey estimates of 0-group and polar cod.

It should be also noted that the annual Norwegian-Russian Fishing Commission in recent years have assembled in early October, some days after the survey is finished. All survey data, especially capelin data for the Barents Sea capelin assessment, must be prepared prior to the Commission. Therefore, it is important to avoid any delay of the survey start in the future.

The survey procedures were not followed by “Vilnyus” and “G.O. Sars” in the first part of the cruise. About the first 40 pelagic trawl hauls taken with small meshed net mounted inside of pelagic trawl at “Vilnyus”. “G.O. Sars” followed neither standard trawling procedures (towed the pelagic trawl with high speed) nor procedure for treatment of the catch.

The Norwegian vessels did not carried out bottom trawl in the Loop hole in the Barents Sea, outside the economic zones. This was due to discrepancies in national legislations. This issue have not been discussed at the pre-planning survey meeting in March 2015. Thus, important information on the bottom species (cod, halibut and snow crab) in this area has been lost.

Except these unfortunate events the rest of the work was performed according to the procedures and plan.

The 12th joint Barents Sea autumn ecosystem survey (BESS) was carried out during the period from 13th August to 9th October 2015. Research vessel tracks and trawl stations during the 2015 ecosystem survey are shown in Figure 1.1. Hydrography and plankton stations are shown in Figure 1.2.

Research vessel “Johan Hjort” covered the western, central and some northern parts of the Barents Sea from 13.08 to 29.09. “Helmer Hanssen”, covered the area northwest and north of Svalbard (Spitsbergen) from 17.08 to 7.09. “G.O. Sars” covered the south-western part of Barents Sea from 11.09 to 27.09. Research vessel “Vilnyus” covered the eastern and northern part of Barents Sea from 18.08 to 09.10 (Figure 1.1).

This report presents most of the survey aspects, but some parts will be available later on the Internet (www.imr.no). A website dedicated to collating all information from the ecosystem survey including all the previous reports, maps, etc. is currently under preparation (http://www.imr.no/tokt/okosystemtokt_i_barentshavet/nn-no). Post-survey information which is not included in the written report (e.g. plankton and fish stomach samples which need long processing time) may also be found at this website.

The scientists and technicians taking part in the survey onboard the research vessels are listed in Appendix 1.

The sampling manual for this survey has been developed since 2004 and published on the Ecosystem Survey homepage by specialist and experts from IMR and PINRO (http://www.imr.no/tokt/okosystemtokt_i_barentshavet/sampling_manual/nb-no). This manual includes methodological and technical descriptions of equipment, the trawling and capture procedures by the samplings tools, and the methods that are used in calculating the abundance and biomass for the biota. This manual is continuously updated.

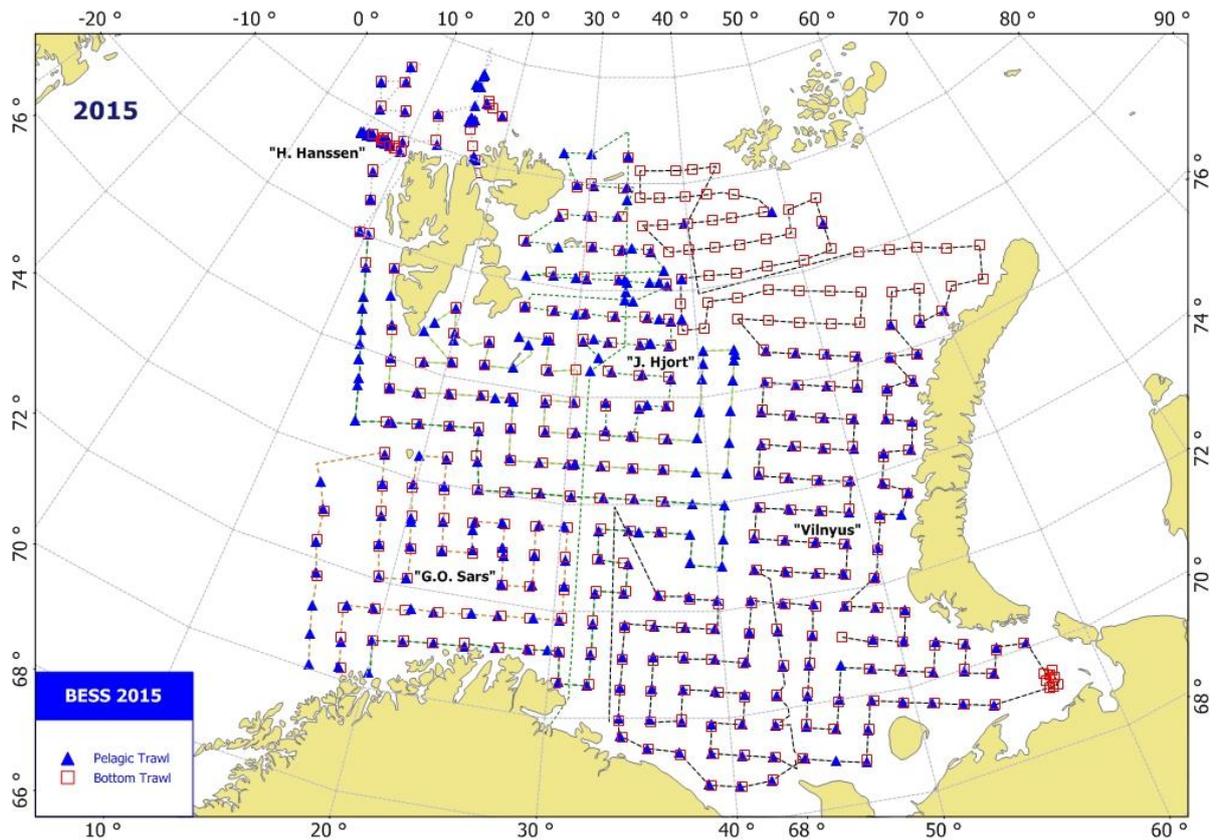


Figure 1.1 Ecosystem survey, August-October 2015. Research vessel tracks and trawl stations.

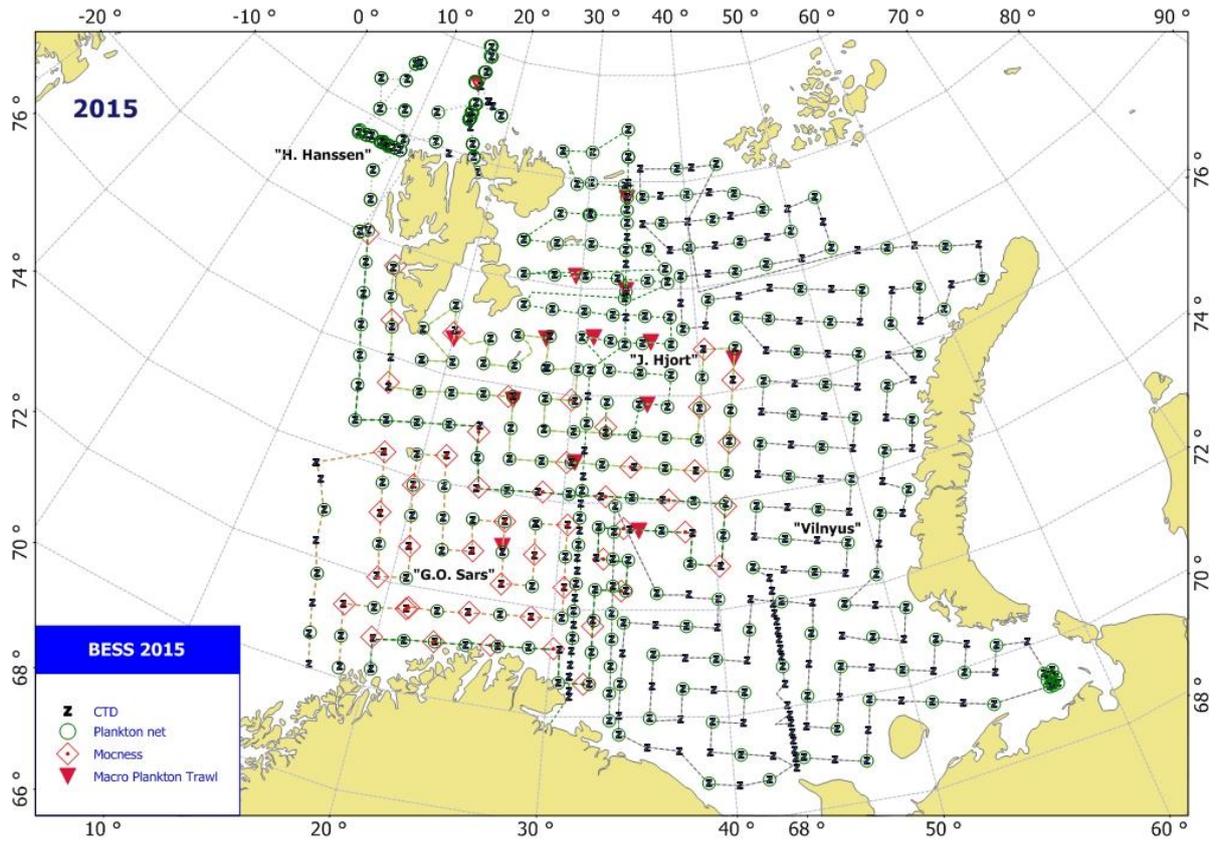


Figure 1.2 Ecosystem survey, August-October 2015. Hydrography and plankton stations.