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Report from SMHIs monitoring cruise with KBV 002 Triton



Survey period: 2013-02-13 - 2013-02-18

Survey area: The Baltic Proper.

Principal: SMHI and the Swedish Agency for Marine and Water Management

SUMMARY

The expedition was part of SMHI's regular marine monitoring programme and covered the west, east and north part of the Baltic Proper. Winter conditions were mapped in the area.

Data presented in this report have been subject to preliminary quality control procedures only.

Surface water temperatures were normal in the whole area.

Surface nutrient concentrations were normal at most of the visited stations.

Oxygen concentrations below 2 ml/l were present at depths exceeding 70-90 metres.

Hydrogen sulphide was found deeper than 90 metres in the western Gotland Basin and deeper than 125 metres in the northern- and eastern Gotland Basins.

The next expedition is scheduled for February 26 to March 1, 2013. Winter conditions will be mapped in the southern part of the Baltic Proper.

PRELIMINARY RESULTS

The cruise, part of SMHI's ordinary monitoring programme, began in Oskarshamn on February 13th and ended in the same port on February 18th. Winter conditions were mapped in the west, east and north of the Baltic Proper.

Due to permits not granted, to enter Latvian, Estonian and Finish waters, some stations were moved to the west into Swedish EEZ or not sampled at all.

Winds during the main part of the expedition were weak except for the last day when they were moderate.

Baltic Proper

Surface water temperatures were normal throughout the area and varied from 1.0 in the north to 2.6° C in the southeastern parts.

Surface phosphate concentrations varied between 0.6 and $0.8 \mu mol/l$ and were normal at most stations. Nitrate concentrations were normal, between 2.7 and $4.9 \mu mol/l$. Surface silicate also showed normal concentrations, and varied between 11.2 and $16.0 \mu mol/l$.

Oxygen concentrations below 2 ml/l were present at depths exceeding 70-90 metres.

Hydrogen sulphide was found deeper than 90 metres in the Western Gotland Basin and deeper than 125 metres in the Northern- and Eastern Gotland Basins.

Phytoplankton activity was low throughout the whole area.

PARTICIPANTS

Name From
Anna-Kerstin Thell Cruise leader SMHI Oceanographic laboratory
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APPENDICES

Plots

Click on the button to open appendices. Note that this will only work when connected to Internet!

- Track chart
- Table over stations, parameters and sampling depths
- Map showing bottom oxygen concentrations
- Monthly average plots for selected stations
- Profiles for selected stations