

CRUISE REPORT FROM R/V ARGOS

Survey period: 20000221-20000227

Survey area: The Skagerrak, the Kattegat,
the Sound, and the Baltic Proper

Principal: SMHI

SUMMARY

The expedition was performed within SMHI's regular marine monitoring programme and covered the Skagerrak, the Kattegat, the Sound, and the Baltic Proper. Mapping of winter nutrient conditions in the Baltic was performed. Temperature as well as nutrient conditions in the surface layer were normal for the season in all areas. Oxygen concentrations below 2 ml/l were generally found at depths exceeding 60 to 70 metres in the whole Baltic Proper. Hydrogen sulphide was found in the deep water in the eastern Gotland Basin, at Landsortsdjupet and in the Bay of Gdansk.

PRELIMINARY RESULTS

The expedition, which was a part of the SMHI ordinary monitoring programme, started in Göteborg on the 21^h of February and ended in Karlskrona on the 27th. The winds during the expedition were weak to moderate from various directions.

The Skagerrak

A marked halocline was found at a depth of 10 metres along the Swedish west-coast. Surface water temperatures varied from 2.5 degrees at the coast to 5.5 degrees in the central parts. All nutrients showed, for the season normal values.

The Kattegat and the Sound

Surface water temperatures varied between 2.5 and 3.5 degrees. The halocline was located at a depth of 15 metres. All nutrients showed typical winter concentrations. In the northern parts there were some locations with enhanced fluorescence, indicating that the spring bloom was about to start.

The Baltic Sea

Surface water temperatures varied from 2 degrees in the north to 3.5 degrees in the south. The halocline was found at a depth of 40 to 60 metres in the southern parts, while it was found at 90 to 100 metres in the central and northern areas. Nutrient concentrations showed normal winter values in the surface water. No sign of any beginning spring bloom was found. Oxygen conditions in the deep water were generally very bad. At depths exceeding 60 to 70 metres the concentrations were below 2 ml/l in all areas. Hydrogen-sulphide was found in the eastern Gotland Basin at depths greater than 125 metres, in the Landsort Deep from 225 metres and downwards and in the bottom water, in the Bay of Gdansk.

PARTICIPANTS

Name	From
Lars Andersson, chief scientist	SMHI Oceanographical lab.
Tuulikki Jaako	- " -
Bodil Thorstensson	- " -
Jorge Valderrama	- " -
Bengt Yhlen	- " -

APPENDICES

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