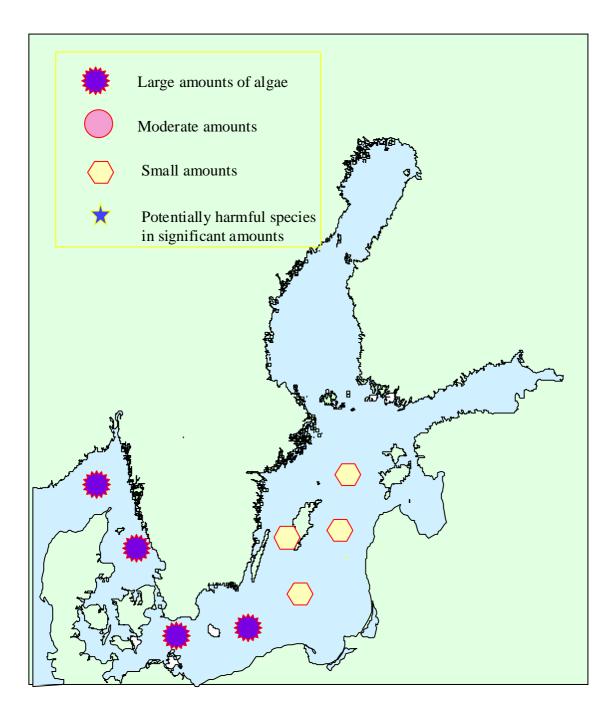


# ALGAL SITUATION IN SWEDISH MARINE WATERS No 3, 1999, 25-29 March

# **OVERVIEW**

# Sampling in the Skagerrak, the Kattegat and the Baltic Sea





# Oceanographic Services

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## **DETAILS**

\* POTENTIALLY HARMFUL SPECIES

Sampling in the Skagerrak, the Kattegat and the Baltic Sea

## **SKAGERRAK**

#### Station M6, 29 March

Chlorophyll concentrations in the upper 20 m about 3 µg.L<sup>-1</sup> with a peak at 10 m of about 15 µg.L<sup>-1</sup>.

Spring bloom situation with large amounts of diatoms. Most common were <u>Chaetoceros socialis (c. 5 million cells/L)</u>, <u>C. debilis</u>, <u>Pseudo-nitzschia seriata</u>, <u>Skeletonema costatum</u> and <u>Thalassiosira nordeskioeldii</u>. Small amounts of <u>Chrysochromulina</u> spp..

#### **KATTEGAT**

#### Station Anholt E, 28 March

Chlorophyll concentrations in the upper 20 m  $1-4 \mu g.L^{-1}$  with a peak at 10 m of about  $8 \mu g.L^{-1}$ .

Rich spring bloom flora with many diatom species. Several <u>Chaetoceros</u> species, with <u>C. socialis (c. 100 000 cells/L)</u>as the most common. <u>Pseudo-nitzschia seriata, Skeletonema costatum</u> and <u>Thalassiosira nordeskioeldii</u> also common. Small amounts of <u>Chrysochromulina</u> spp.. Few dinoflagellates. <u>Dinophysis norvegica\*</u> present with about 1000 cells/L.

# BALTIC SEA

### Arkona basin, Station BY2, 27 March

Chlorophyll concentrations down to 10 m 10-12 µg.L<sup>-1</sup>.

Spring bloom situation. The plankton flora was dominated by the dinoflagellate <u>Peridiniella catenata</u>. (25 000 cells/L) and the diatom <u>Skeletonema costatum</u> (200 000 cells/L). The bluegreen algae <u>Aphanizomenon</u> sp. present in small amounts together with the diatom <u>Chaetoceros danicus</u> and the dinoflagellate <u>Heterocapsa rotundatum</u>. The ciliate <u>Mesodinium rubrum</u> quite common.

# Bornholm basin, Station BY5, 27 March

Chlorophyll concentrations down to 10 m 1-3 μg.L<sup>-1</sup> with a peak at 5m of about 9μg.L<sup>-1</sup>.

Spring bloom situation. The plankton flora was dominated by diatoms with several species of <u>Chaetoceros</u>, <u>C. ceratosporum</u>, <u>C. holsaticus</u>, <u>C. similis</u>, <u>C. wighamii</u>. The dinoflagellate <u>Peridiniella catenata</u> and the diatom <u>Skeletonema costatum</u> also relatively common. The bluegreen algae <u>Aphanizomenon</u> sp. present in small amounts. Single cells of <u>Dinophysis norvegica\*</u>. The ciliate <u>Mesodinium rubrum</u> quite common.

#### Southeast Baltic Sea, Station BCS III 10, 27 March

Chlorophyll concentrations down to 20 m 1-2 µg.L<sup>-1</sup>.

Poor plankton flora. Small amounts of the dinoflagellate <u>Peridiniella catenata</u> and the diatom <u>Skeletonema costatum</u>. The bluegreen algae <u>Aphanizomenon</u> sp. present in small amounts. The ciliate <u>Mesodinium rubrum</u> quite common.

# Eastern Gotland basin, Station BY15, 26 March

Chlorophyll concentrations down to 15m 1-3 µg.L<sup>-1</sup>.

Poor plankton flora, with bluegreen algae; <u>Aphanizomenon</u> sp. and single chains of <u>Nodularia spumigena</u>. Small amounts of <u>Peridiniella catenata and Dinophysis acuminata\*</u>.

## Northern Baltic, Station BY29, 26 March

Chlorophyll concentrations down to 20m about 0.5-1 µg.L<sup>-1</sup>.

Very poor plankton flora. Small amounts of the dinoflagellate <u>Peridiniella catenata</u>. The diatom <u>Thalassiosira</u> <u>baltica</u> <u>Actionocyclus octonarius</u> and <u>Melosira arctica</u> present as single cells. Ciliates common.

#### Western Baltic, Station BY38, 25 March

Chlorophyll concentrations down to 20 m about 1-1.5 µg.L<sup>-1</sup>.

Very poor plankton flora. Small amounts of the dinoflagellate <u>Peridiniella catenata</u>. The diatom <u>Actionocyclus octonarius</u> and the dinoflagellate <u>Dinophysis acuminata\*</u> present as single cells. Ciliates common.

This report is based on an overview of qualitative and quantitative samples from the upper 20 m. Chlorophyll values were measured fluorometrically.

#### **FORECAST**

In the Skagerrak the spring bloom is going on.

In the Kattegat the spring bloom is in the final stage.

In the southern part of the Baltic, the Arkona and Bornholm basins the spring bloom is going on. Further north it is a late winter situation, but some species signal the oncoming spring bloom.