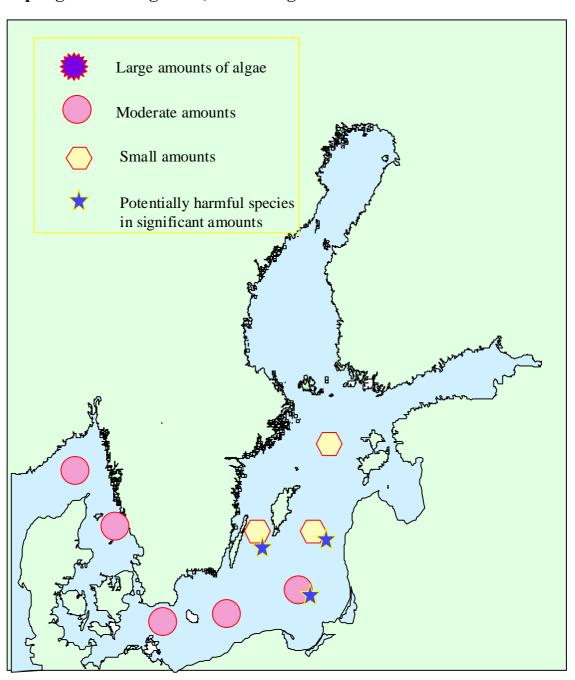


# ALGAL SITUATION IN SWEDISH MARINE WATERS No 6, 1999, 8-12 June

## **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, 8 June

Chlorophyll concentrations in the upper 20 m 2-3 µg.L<sup>-1</sup>, with a peak at 15 m of about 7 µg.L<sup>-1</sup>.

Rich flora with many diatoms and dinoflagellates. Among diatoms <u>Chaetoceros curvisetus</u> dominated, followed by <u>Dactyliosolen fragilissimus</u>. <u>Ceratium tripos</u>, <u>C. longipes</u> and <u>Dinophysis norvegica\*</u> were the most common dinoflagellates. Small amounts of <u>Alexandrium ostenfeldii\*</u>, <u>Lingulodinium polyedra</u> and <u>Dinophysis acuminata\*</u> were also observed.

#### **KATTEGAT**

#### Station Anholt E, 8 and 12 June

Chlorophyll concentrations in the upper  $10m\ 1-2\ \mu g.L^{-1}$ , with a peak at 15 m of about  $4\mu g.L^{-1}$ .

Rich flora of diatoms and dinoflagellates. A development to more species and higher abundance could be seen from the first sampling to the second. Chaetoceros curvisetus dominated and Dactyliosolen fragilissimus increased markedly between the two samplings. Other diatoms e.g. Chaetoceros decipiens, Skeletonema costatum and Thalassionema nitzschioides were also of importance. Ceratium tripos, C. longipes and Dinophysis norvegica\* were the most important dinoflagellates. Alexandrium ostenfeldii\* was seen in small amounts. The silicoflagellate Dichtyocha speculum was relatively common.

## **BALTIC SEA**

#### Arkona basin, Station BY2, 9 June

Chlorophyll concentrations down to 20 m 1-3 µg.L<sup>-1</sup>.

Clear dominance of <u>Aphanizomenon</u> sp.. Among other bluegreen algae <u>Anabaena</u> sp. and <u>Woronichinia/Snowella</u> were also seen. <u>Dinophysis norvegica</u>\* and <u>Planktonema lauterbornii</u> not uncommon. Small amounts of <u>Pyramimonas</u> sp. and <u>Teleaulax</u> spp.

## Bornholmbasin, Station BY5, 9 June

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

Few species. Dominance of Aphanizomenon sp.. Among other bluegreen algae Anabaena sp was

also observed. <u>Dinophysis norvegica</u>\* and <u>Planktonema lauterbornii</u> not uncommon. Small amounts of <u>Chaetoceros similis</u>, <u>Cyclotella</u> sp. and <u>Plagioselmis</u> sp..

## Southeast Baltic Sea, Station BCS III 10, 10 June

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

Rich flora dominated by <u>Aphanizomenon</u> sp.. Among other bluegreen algae <u>Nodularia spumigena\*</u> and <u>Woronichinia/Snowella</u> spp. were seen in small amounts. <u>Dinophysis norvegica</u>\* very common, <u>D. acuminata</u>\* to a lesser degree. Small amounts of <u>Peridiniella catenata</u> still present. Single cells of <u>Gonyaulax digitale</u>. <u>Chaetoceros similis</u>, <u>Cyclotella</u> sp. and some <u>Skeletonema costatum</u> observed. <u>Planktonema lauterbornii</u> and <u>Dinobryon balticum</u> relatively common.

## Eastern Gotland basin, Station BY15, 10 June

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

<u>Aphanizomenon</u> sp. together with <u>Dinophysis norvegica</u>\* and <u>D. acuminata</u>\* dominate completely. <u>Planktonema lauterbornii</u> and <u>Ebria tripartita</u> relatively common. Small amounts of <u>Cyclotella</u> sp.

#### Northern Baltic, Station BY29, 11 June

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

Poor flora dominated by <u>Aphanizomenon</u> sp., <u>Dinophysis norvegica</u>\* and <u>D. acuminata</u>\*. <u>Gonyaulax digitale</u> relatively common. Small amounts of <u>Cyclotella</u> sp. and <u>Chaetoceros similis</u>.

### Western Gotland basin, Station BY38, 11 June

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

Poor flora dominated by <u>Aphanizomenon sp., Dinophysis norvegica</u>\* and <u>D. acuminata</u>\*. <u>Gonyaulax digitale</u> and <u>Peridiniella catenata</u> relatively common. Small amounts of <u>Cyclotella</u> sp..

This report is based on an overview of qualitative and quantitative samples from the upper 20 m. Chlorophyll values are raw data from fluorometrical profiling.

#### **FORECAST**

In the Skagerrak and Kattegat the plankton flora is turning to a summer stage and the diatoms seem to develop blooms.

In the Baltic it is a similar situation and a summer stage with increased amounts of bluegrenn algaeand <u>Dinophysis</u> spp. is developing