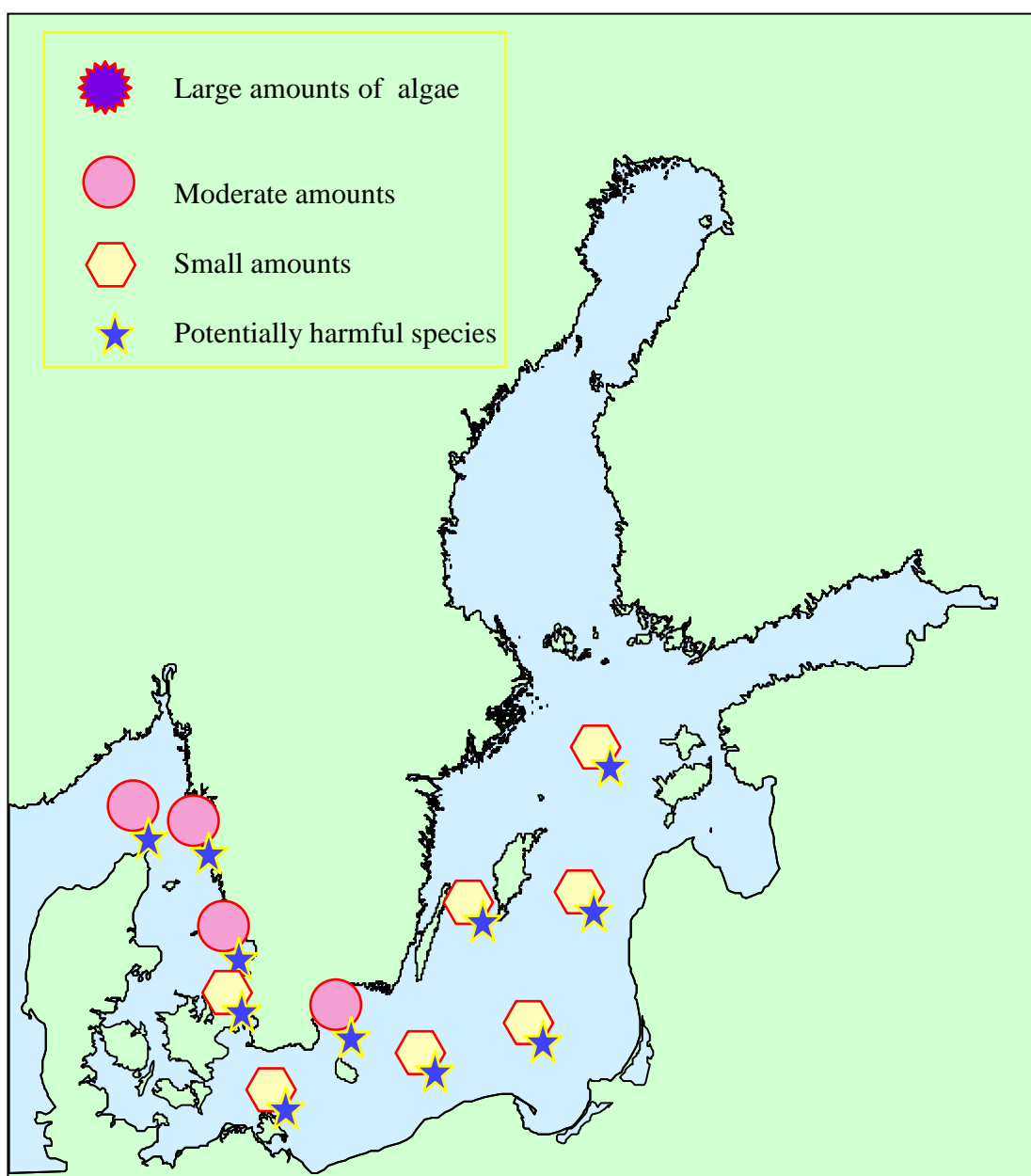


## **ALGAL SITUATION IN SWEDISH MARINE WATERS No 11**

**22-27 June, 1998**

### **OVERVIEW**

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



## **ALGAL SITUATION IN SWEDISH MARINE WATERS No 11**

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#### **DETAILS**

\* POTENTIALLY HARMFUL SPECIES

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

##### **SKAGERRAK**

###### **Station P2, 22 June**

Chlorophyll concentrations in the upper 20 m about 2.5 µg.L<sup>-1</sup>.

Several species of dinoflagellates present in small amounts. Species of Ceratium most common. Dinophysis acuminata\* and D. norvegica\* scattered. Few diatoms with dominance of Proboscia alata and Guinardia flaccida. Pseudo-nitzschia pungens observed in small numbers.

###### **Station M6, 22 June**

Chlorophyll concentrations in the upper 20 m about 2-3 µg.L<sup>-1</sup> with a peak of about 7 µg.L<sup>-1</sup> at 10-12 m depth.

Several species of dinoflagellates present in small amounts. Ceratium longipes and C. tripos most common. Dinophysis acuminata\* and D. norvegica\* scattered. Single cells of Alexandrium tamarense\* present. Several species of diatoms with dominance of Chaetoceros curvisetus, followed by Leptocylindrus danicus, Guinardia flaccida and Pseudo-nitzschia delicatissima.

##### **KATTEGAT**

###### **Station Anholt E, 23 and 27 June**

Chlorophyll concentrations in the upper 10 m about 1 µg.L<sup>-1</sup> and between 10 and 20 m depth 2-3 µg.L<sup>-1</sup>. On June 27 a peak of about 5 µg.L<sup>-1</sup> was found at 18-20 m depth.

The phytoplankton and the relative abundance did not show any large difference between the two samplings four days apart.

Diatoms dominated. Dactyliosolen fragilissimus followed by Proboscia alata and Guinardia flaccida were most common. Chaetoceros curvisetus, Cerataulina pelagica and Thalassiosira angulata were present in small amounts. Dinoflagellates were dominated by Ceratium longipes and C. tripos. Small numbers of Dinophysis acuminata\* were also present.

###### **Station Kullen, 23 June**

Chlorophyll concentrations in the upper 10 m 1-2 µg.L<sup>-1</sup> and between 10 and 20 m depth 3-6 µg.L<sup>-1</sup>.

Diatoms dominated. Dactyliosolen fragilissimus, Proboscia alata and Chaetoceros curvisetus were most common. Guinardia flaccida was present in smaller amounts. Dinoflagellates were dominated by Ceratium tripos. Small amounts of Dinophysis acuminata\* were also present.

## BALTIC SEA

### Arkona basin. Station BY2, 24 June

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

The bluegreen algae Aphanizomenon sp. dominated. Small amounts of Ceratium tripos, C. longipes and Dinophysis norvegica\*. The diatoms Chaetoceros sp. A (danicus), Actinocyclus octonarius and Thalassiosira levanderi scattered. Single cells of Ebria tripartita and Planktonema lauterbornii.

### Bornholm basin. Station BY5, 24 June

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

The bluegreen algae Aphanizomenon sp. dominated. Small amounts of Nodularia spumigena\*. Dinophysis norvegica\* not uncommon. The diatoms Chaetoceros sp. A (danicus) and Actinocyclus octonarius scattered. Single cells of Ebria tripartita, Planktonema lauterbornii and Oocystis sp..

### Southeast Baltic, Station BCS III 10, 24 June

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

The bluegreen algae Aphanizomenon sp. dominated. Small amounts of Nodularia spumigena\*. Dinophysis norvegica\* relatively common. Several species of small Protooperidinium. The diatom Chaetoceros sp. A (danicus) scattered. Single cells of Ebria tripartita and Planktonema lauterbornii.

### Eastern Gotland basin, Station BY15, 25 June

Chlorophyll concentrations down to 25 m 1-2 µg.L<sup>-1</sup>.

The bluegreen algae Aphanizomenon sp. common. Small amounts of Nodularia spumigena\* and Anabaena sp.. Dinophysis norvegica\* common. Dinophysis acuminata\* scattered. Several species of Protooperidinium, eg. P. pellucidum. The diatom Chaetoceros sp. A (danicus) and Thalassiosira levanderi scattered. Ebria tripartita common. Small amounts of Planktonema lauterbornii.

### Northern Baltic, Station BY29, 25 June

Chlorophyll concentrations down to 25 m 1-2 µg.L<sup>-1</sup>.

The bluegreen algae Aphanizomenon sp. common. Small amounts of Nodularia spumigena\*. Dinophysis norvegica\* and Dinophysis acuminata\* scattered. Several species of other dinoflagellates, e.g. Amylax triacantha, Protooperidinium granii, Heterocapsa triquetra and Peridiniella catenata. Several species of diatoms present, e.g. Chaetoceros wighamii, C. danicus, C. similis and C. sp. A (danicus), Thalassiosira levanderi and T. baltica. Small amounts of Ebria tripartita and Planktonema lauterbornii.

### Western Gotland basin, Station BY38, 26 June

Chlorophyll concentrations down to 25 m 1-2 µg.L<sup>-1</sup>.

The bluegreen algae Aphanizomenon sp. common. Small amounts of Nodularia spumigena\* and Anabaena sp.. Dinophysis norvegica\* common and Dinophysis acuminata\* scattered. Several species of other dinoflagellates, e.g. Amylax triacantha, Protooperidinium granii and Heterocapsa triquetra. Small amounts of diatoms present, e.g. Chaetoceros danicus, C. sp. A (danicus) and Thalassiosira levanderi. Small amounts of Ebria tripartita and Planktonema lauterbornii.

### Hanö Bight, Station Hanö 6, 26 June

Surface accumulation of the bluegreen algae Nodularia spumigena\*.

This report is based on net samples from the upper 20 m.

## FORECAST

In the Skagerrak and Kattegat smaller blooms of diatoms may develop if the weather situation improves. In the Baltic bluegreen blooms dominated by *Nodularia spumigena* has been seen in the Hanö Bight and the species is present in most of the Baltic proper. There is thus a potential for bloom development also in other areas, but the prerequisite is a better weather.