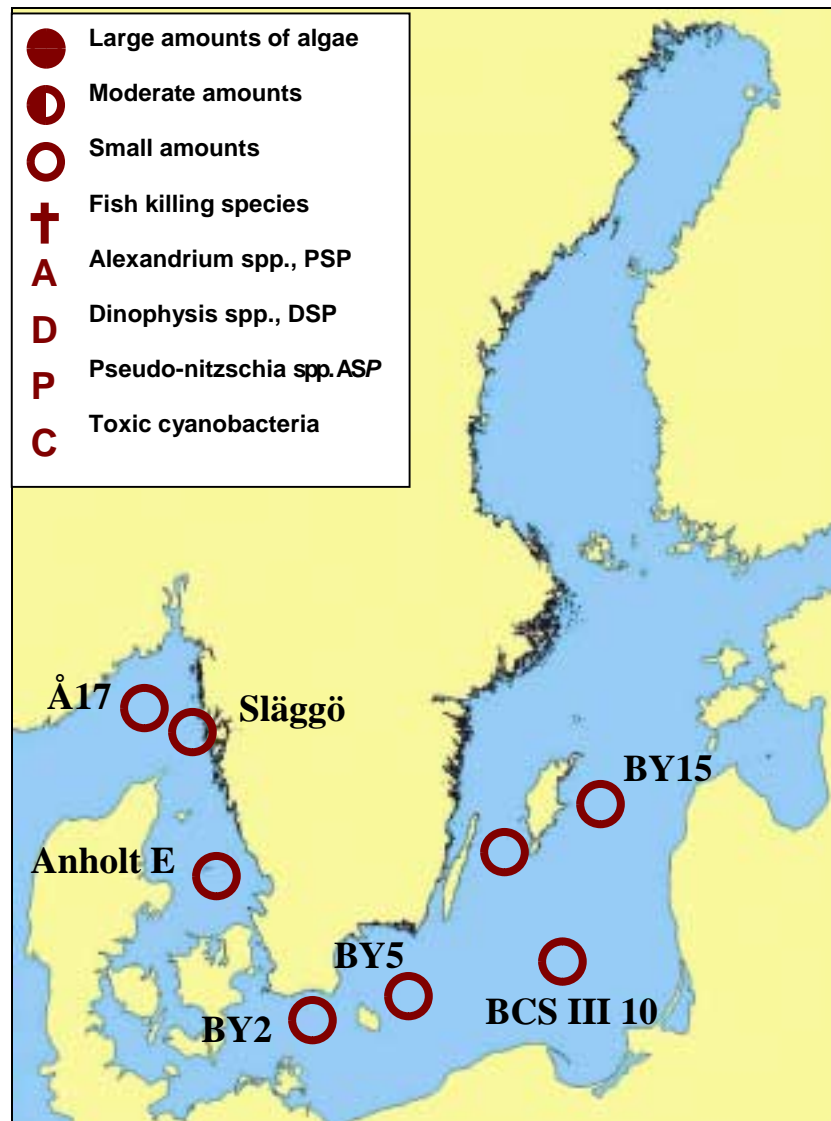


No 11, 2003, 20 - 24 October

### OVERVIEW

In the Skagerrak and the Kattegat the autumn bloom was passed and the succession went towards a winter situation with small amounts of phytoplankton.

In the Baltic cyanobacteria had almost disappeared and large diatoms, a few dinoflagellates and small flagellates dominated. West of Gotland there was a *Prorocentrum minimum*\* bloom.



Oceanographic Services

Lars Edler

## ALGAL SITUATION IN SWEDISH MARINE WATERS

No 11, 2003, 20 - 24 October

### DETAILS

\* POTENTIALLY HARMFUL SPECIES

#### SKAGERRAK

##### Station Å17, 24 October

This sampling showed an autumn situation with many diatoms, but low in numbers. *Guinardia delicatula* and *Chaetoceros tenuissimus* were the most common species. Small *Gymnodiniales* dominated the dinoflagellates together with *Prorocentrum minimum*. *Ceratium* and *Dinophysis* species were rare.

##### Station Släggö, 24 October

Here the phytoplankton succession was at a later stage and diatoms were not very common. Large species, such as *Coscinodiscus wailesii* and *C. radiatus* were present in low numbers. *Ceratium* and *Dinophysis* species were more common here, than at Å17, but still in low numbers.

#### KATTEGAT

##### Station Anholt E, 24 October

Also here the autumn bloom was passed and the diversity and cell concentrations were low. Among diatoms *Chaetoceros socialis* v. *radians* was the most common. Large dinoflagellates like *Ceratium* and *Dinophysis* species were present in low numbers. Small species like *Heterocapsa rotundata* and *Scrippsiella* sp. dominated.

|   | 2003-10-24  | 2003-10-24  | 2003-10-24  |
|---|-------------|-------------|-------------|
|   | Å17         | Släggö      | Anholt E    |
|   | cells/liter | cells/liter | cells/liter |
| <i>Chaetoceros socialis</i> f. <i>radians</i> |             |             | ~ 30000     |
| <i>Guinardia delicatula</i>                   | common      | present     | present     |
| <i>Pseudo-nitzschia delicatissima</i> -group  | present     | present     | present     |
| <i>Ceratium fusus</i>                         | common      | present     | common      |
| <i>Dinophysis acuminata</i>                   | ~ 50        | ~ 100       | ~ 50        |
| <i>Dinophysis acuta</i>                       | ~ 50        | ~ 150       | 300         |
| <i>Dinophysis dens</i>                        |             | present     |             |
| <i>Dinophysis norvegica</i>                   |             | 50          | ~ 50        |
| <i>Gymnodinium vestificii</i>                 | common      | common      |             |
| <i>Prorocentrum minimum</i>                   | ~ 12000     | present     |             |
| <i>Plagioselmis prolunga</i>                  | common      |             |             |
| <i>Teleaulax</i> spp.                         | common      | common      | common      |
| <i>Pyramimonas</i> spp.                       | very common | present     | present     |
| <i>Chrysochromulina</i> spp.                  | common      |             | very common |

BALTIC SEA

Oceanographic Services

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## ALGAL SITUATION IN SWEDISH MARINE WATERS

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### Arkona basin. Station BY2, 23 October

Cyanobacteria were not present any more. The plankton flora was poor with a few large diatoms and some dinoflagellates. Small flagellates such as *Teleaulax* spp. and *Pyramimonas* spp. dominated.

### Bornholm basin. Station BY5, 20 October

Here the plankton flora was somewhat richer. The diatoms present were large forms: *Coscinodiscus granii*, *Chaetoceros impressus* and *Actinocyclus octonarius*. Small amounts of *Aphanizomenon* sp. and *Nodularia spumigena*\* were seen in the net sample. *Ebria tripartita* was common.

### Southeast Baltic. Station BCS III 10, 20 October

Cyanobacteria were almost absent and only a few *Aphanizomenon* sp. were seen in the net sample. The diatoms were the same as at BY5 as well as the small flagellates. In addition *Apedinella radians* and *Prorocentrum minimum*\* were found.

### Eastern Gotland basin, Station BY15, 21 October

Also here there were only remains of the cyanobacteria with a few *Aphanizomenon* sp.. The large diatoms were also present at this station, as was *Prorocentrum minimum*\*, *Heterocapsa rotundata* and *Teleaulax* spp.

### Western Gotland basin, Station BY38, 21 October

Very small amounts of *Aphanizomenon* sp. were present. A few *Coscinodiscus* sp. and *Chaetoceros impressus* were seen, as well as *Ebria tripartita*. *Prorocentrum minimum*\* was common and bloomed with about 75 000 cells/l.

|                                | 2003-10-23  | 2003-10-20  | 2003-10-20  | 2003-10-21  | 2003-10-21  |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|
|                                | BY2         | BY5         | BCS III 10  | BY15        | BY38        |
|                                | cells/liter | cells/liter | cells/liter | cells/liter | cells/liter |
| <i>Actinocyclus octonarius</i> |             | present     |             |             |             |
| <i>Chaetoceros danicus</i>     | present     |             | present     | present     |             |
| <i>Chaetoceros impressus</i>   | present     | present     | present     | present     | present     |
| <i>Coscinodiscus granii</i>    |             | present     | present     | present     |             |
| <i>Coscinodiscus</i> sp.       | present     | present     | present     | present     | present     |
| <i>Dinophysis norvegica</i>    |             | present     |             |             |             |
| <i>Dinophysis rotundata</i>    | present     | present     |             |             |             |
| <i>Heterocapsa rotundata</i>   | present     |             |             | present     |             |
| <i>Prorocentrum minimum</i>    | present     |             | present     | present     | 75000       |
| <i>Ebria tripartita</i>        |             | common      |             |             | present     |
| <i>Hemiselmis virescens</i>    | present     | present     |             |             |             |
| <i>Plagioselmis prolonga</i>   |             | present     | present     |             |             |
| <i>Teleaulax</i> spp.          | present     | present     | present     | present     |             |
| <i>Aphanizomenon</i> sp.       |             | present     | present     | present     | present     |
| <i>Nodularia spumigena</i>     |             | present     |             |             |             |