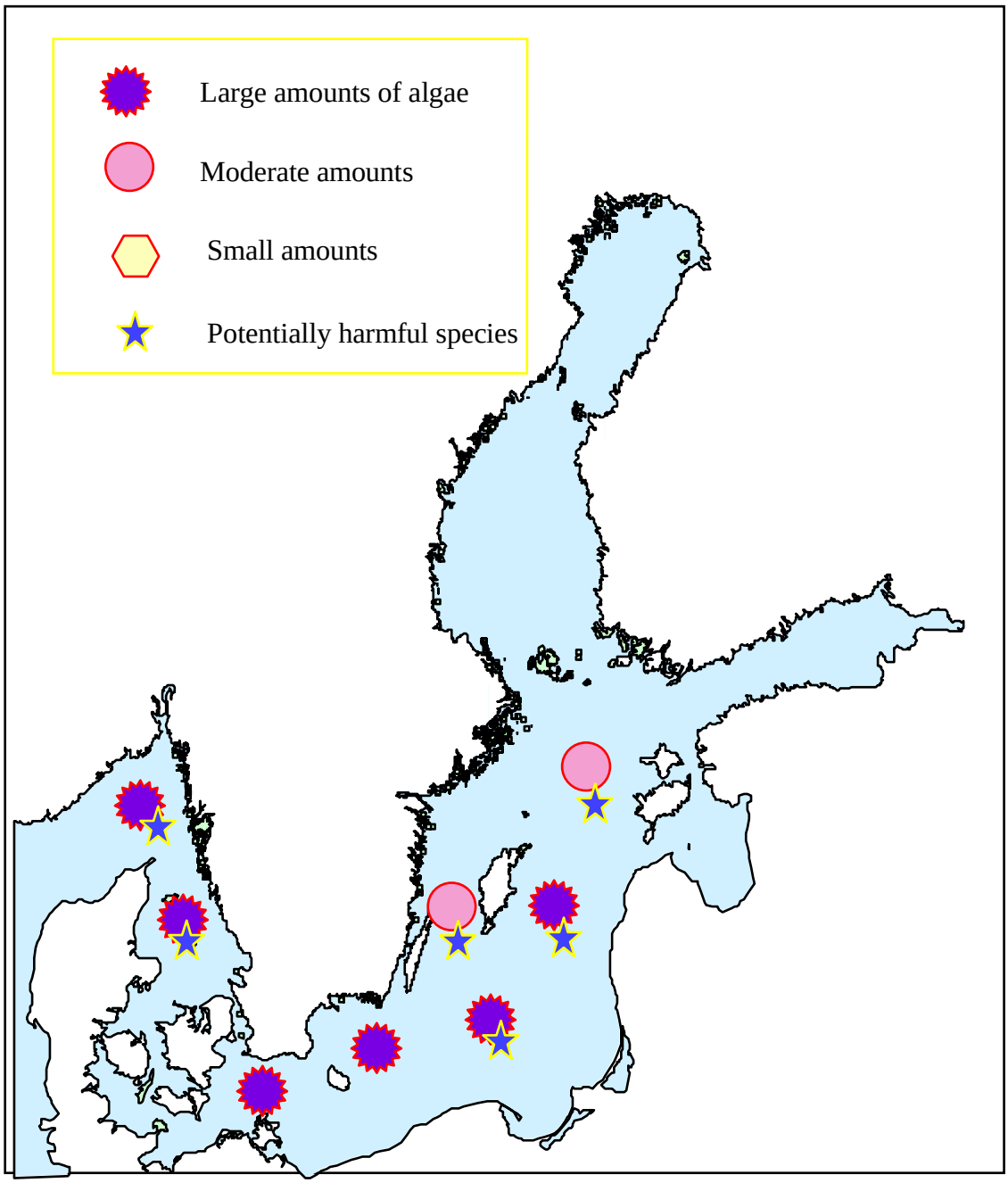
SMHI

Oceanografical Laboratory Lars Edler

ALGAL SITUATION IN SWEDISH MARINE WATERS No 6, 1998

OVERVIEW

16-20 March and 8 April, 1998



SMHI
Oceanografical Laboratory Lars Edler 1998-03-16

ALGAL SITUATION IN SWEDISH MARINE WATERS No 6, 1998 DETAILS

16-20 March and 8 April 1998 * POTENTIALLY HARMFUL SPECIES

Sampling in the Baltic Sea, Kattegat and Skagerrak

BALTIC SEA

Arkona basin, 19 March, Station **BY2**:
Springbloom situation with large amounts of the dinoflagellate Peridiniella catenata and the diatom Skeletonema costatum. Other diatoms, typical for the springbloom, such as Chaetoceros wighamii, C. holsaticus and Thalassiosira levanderii also common. The bluegreen algae Aphanizomenon sp. occurs scattered as Ebria tripartita.

Bornholm basin, 16 March, Station **BY5**:
Springbloom situation with large amounts of the diatoms Chaetoceros wighamii and Skeletonema costatum, as well as the dinoflagellate Peridiniella catenata. Other diatoms, typical for the springbloom, such as Chaetoceros holsaticus and Thalassiosira baltica also common. Spring species like Melosira arctica and Actinocyclus octonarius sparse. The bluegreen algae Aphanizomenon sp. occurs scattered.

Southeast Baltic, 16 March, Station **BCS III 10**:
Springbloom situation with large amounts of the dinoflagellate Peridiniella catenata. Other species, typical for the springbloom, such as Chaetoceros wighamii, C. holsaticus, Skeletonema costatum, Thalassiosira baltica, T. levanderii and Achnanthes taeniata scattered or rare. The bluegreen algae Aphanizomenon sp. is common. Small amounts of the dinoflagellate Dinophysis norvegica*.

Eastern Gotland basin, 16 March, Station **BY15:**
Springbloom situation with large amounts of the dinoflagellate Peridiniella catenata. Small amounts of spring diatoms. Actinocyclus octonarius, Melosira arctica and Thalassiosira baltica. Aphanizomenon sp. and Dinophysis norvegica* common. Small amounts of the dinoflagellate Dinophysis acuminata*.

Northern Baltic, 17 March, Station **BY29**:
Springbloom situation with moderate amounts of the dinoflagellate Peridiniella catenata and the diatoms Skeletonema costatum, Chaetoceros wighamii, Actinocyclus octonarius, Thalassiosira baltica. Dinophysis norvegica* and D. acuminata not uncommon. Small amounts of Melosira arctica and Mesodinium rubrum. The bluegreen algae Aphanizomenon sp. is common, whereas Woronichinia spp. occurred scattered.

Western Gotland basin, 18 March, Station **BY38:**
Springbloom situation with moderate amounts of the dinoflagellate Peridiniella catenata and the diatoms Skeletonema costatum, Thalassiosira baltica, T. levanderii. Dinophysis norvegica* and D. acuminata* present in small amounts. The bluegreen algae Aphanizomenon sp. is common, whereas Woronichinia spp. was rare.

KATTEGAT

Station **Anholt E, 19 March:**
Springbloom situation with large amounts of Phaeocystis sp*., Guinardia flaccida, Thalassiosira nordenskioeldii and several spring species of Chaetoceros. Dinophysis norvegica* and D. acuminata* present in small amounts. The potentially toxic dinoflagellate Alexandrium tamarense* observed in small amounts. Ceratium species scattered. Chlorophyll ~ 3 µg.L^{-1}.

Station **Läsö Ränna, 20 March:**
Springbloom situation with large amounts of Phaeocystis sp*., Guinardia delicatula, Chaetoceros socialis, C. debilis, Thalassiosira nordenskioeldii and several other spring diatoms. Dinophysis acuta* and D. acuminata* present in small amounts. Ceratium species and Protoperidinium depressum scattered. Chlorophyll 6.5 - 12 µg.L^{-1}.

Station **Anholt E, 8 April:**
Springbloom is about to terminate, although the diatom diversity is large with dominance of Chaetoceros spp., Skeletonema costatum, Thalassiosira nordenskioeldii and Rhizosolenia hebetata. Dinophysis norvegica* and several species of Protoperidinium present in small amounts.

SKAGERRAK
Stations **P2** and **M6, 20 March:**
Springbloom situation with large amounts of Phaeocystis sp.*, Guinardia flaccida, Skeletonema costatum, Thalassiosira nordenskioeldii and several spring species of Chaetoceros. Still high concentrations of the winterbloom species Guinardia flaccida and Proboscia alata. Dinophysis norvegica* present in small amounts. Ceratium species scattered. Chlorophyll 2.5 - 5.5 µg.L^{-1}.at P2 and ~ 3 at M6.

Station **HS5, 20 March:**
Small amounts of Phaeocystis sp.*. High concentrations of the winterbloom species. Small amounts of spring species. Ceratium species scattered. Chlorophyll 2.5 - 2.9 µg.L^{-1}.

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

FORECAST

In the Baltic the spring bloom will teminate and a situation with smaller flagellates is likely to develop. The same situation can be expected in the Kattegat and Skagerrak, where heterotrophic dinoflagellates and ciliates are also likely to occur in higher concentrations.