SMHI

AlgAware

Oceanographic Services
Lars Edler

ALGAL SITUATION IN SWEDISH MARINE WATERS

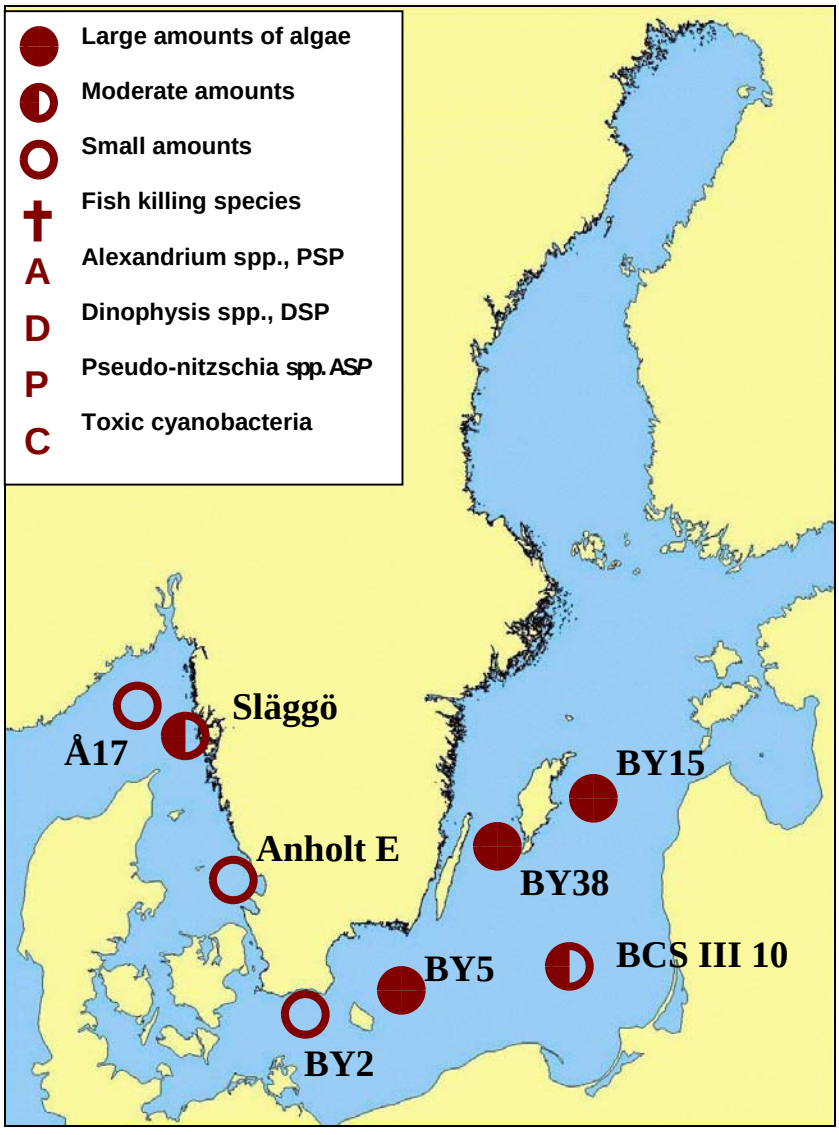
No 3,

2004 19 – 24 April

OVERVIEW

In the Skagerrak the spring bloom has passed, but the plankton flora is still relatively rich. Near the coast *Dinophysis norvegica** is very common. In the Kattegat it is a post spring bloom situation with low abundance of most species.

In the Baltic Sea the spring bloom has terminated in the southwest parts, but is still going on in the other parts. In the western Gotland Basin a bloom of *Aphanizomenon* sp. was observed.



SMHI

Oceanographic Services
Lars Edler

AlgAware

ALGAL SITUATION IN SWEDISH MARINE WATERS

No 3,

2004 19 – 24 April

DETAILS

* POTENTIALLY HARMFUL SPECIES

SKAGERRAK

Station Å17, 19 April

The spring bloom has passed and the plankton flora is dominated by small species. *Chrysochromulina* spp.*, *Chaetoceros tenuissimus* and *Peridiniella danica* are the most important species, together with small unidentified flagellates and monads. Chlorophyll values in the upper 15 m were about 1.7 µg/l.

Station Släggö, 19 April

The spring bloom has terminated, but the flora was relatively rich. Also here *Chrysochromulina* spp.*, was important. Other species with high cell densities were *Heterocapsa rotundata* and small unidentified flagellates and monads. The potentially toxic Dinophysis norvegica was present with more than 5000 cells/L, which is above the limit of 2000 cells/L. Chlorophyll values in the upper 15 m were about 2.4 µg/l.

KATTEGAT

Station Anholt E, 20 and 24 April

At this station there was a post bloom situation with a poor plankton flora. *Chrysochromulina* spp.*, was present with about 60000 cells/L and *Peridiniella danica* with 7000 cells/L. *Dinobryon balticum* was relatively common. At the later sampling the amount of phytoplankton had decreased drastically, but there was little change in species composition. Chlorophyll values in the upper 15 m were 1- 1.7 µg/l.

	Å17 2004-04-19 cells/L	Släggö 2004-04-19 cells/L	Anholt E 2004-04-20 cells/L	Anholt E 2004-04-24 cells/L
Chaetoceros tenuissimus	very common	common		
Leptocylindrus danicus			very common	common
Pseudo-nitzschia delicatissima	common			
Skeletonema costatum		present	present	present
Thalassionema nitzschioides		common	common	common
Dinophysis norvegica*	200	5 700	250	250
Heterocapsa rotundata	50 000	140 000		
Peridiniella danica	90 000	20 000	7 000	1 300
Chrysochromulina spp.*	250 000	125 000	60 000	30 000
Dinobryon balticum		present	common	present
Pyramimonas virginica	common	present		

SMHI

AlgAware

Oceanographic Services
Lars Edler

ALGAL SITUATION IN SWEDISH MARINE WATERS

No 3,

2004 19 – 24 April

BALTIC SEA

Arkona basin. Station BY2, 20 April

The spring bloom had passed and the plankton flora was relatively poor. The typical post spring bloom species *Dinobryon balticum* was important together with large amounts of ciliates. Chlorophyll in the upper layer was around 1.5 mg/m^3.

Bornholm basin. Station BY5, 21 April

The spring bloom was in a late stage, with presence of *Chaetoceros wighamii, Chaetoceros holsaticus, Skeletonema costatum, Scrippsiella hangoei* and *Peridiniella catenata*, but also *Dinobryon balticum.* Chlorophyll in the upper layer was 4-5 mg/m^3.

South East Baltic. Station BCS III 10, 21 April

Similar to BY5, but smaller amounts of phytoplankton. Chlorophyll in the upper layer was about 2.5 mg/m^3.

Eastern Gotland basin, Station BY15, 22 April

At this station the spring bloom was near the end, as nutrients were almost drained. Typical spring diatoms like *Skeletonema costatum, Chaetoceros wighamii, Chaetoceros holsaticus, Peridiniella catenata* were common. *Scrippsiella hangoei* was present with about 800 000 cells/L. *Heterocapsa rotundata* was also common. Chlorophyll in the upper layer was about 9 mg/m^3.

Western Gotland basin, Station BY38, 22 April

The situation was very similar to station BY15, but the remarkable thing was the "bloom" of *Aphanizomenon* sp. at this time of the year. Chlorophyll was about 5.5 mg/m^3.

	BY2 2004-04-20 cells/L	BY5 2004-04-21 cells/L	BCS III 10 2004-04-21 cells/L	BY15 2004-04-22 cells/L	BY38 2004-04-22 cells/L
Chaetoceros danicus		present	present	present	
Chaetoceros holsaticus		common	common	common	common
Chaetoceros impressus		present	present		present
Chaetoceros similis		present		present	common
Chaetoceros wighamii	present	common	common	common	common
Melosira arctica		present			
Skeletonema costatum	present	common	very common	common	very common
Dinophysis norvegica* with Parvilucifera			present		present
Heterocapsa rotundata			present	50 000	65 000
Peridiniella catenata		common	common	common	common
Scrippsiella hangoei	present	common	common	800 000	700 000
Dinobryon balticum	common	common	common	common	common
Teleaulax spp	present	present	present	very common	present
Chrysochromulina spp*	present			present	present
Aphanizomenon sp	present	present		present	~ 10 m/L
Ciliates	very common	very common	very common	common	common