

No 3, 4 – 9 April 2005

Sammanfattning

I öppna **Skagerrak** var planktonfloran fattig, men i kustområdet fanns rikligt med diatoméer, t.ex. *Skeletonema costatum* och *Rhizosolenia hebetata*. I **Kattegat** var både diatoméer och dinoflagellater mycket vanliga. *Skeletonema costatum* fanns med mer än 1 miljon celler per liter.

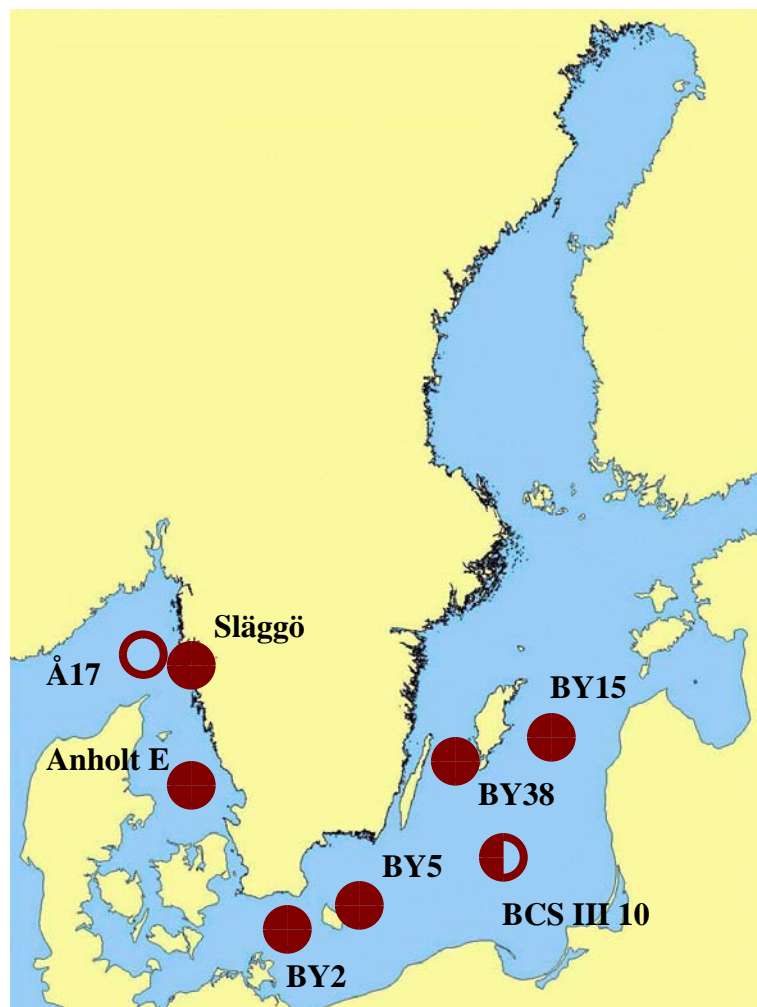
I **Östersjön** pågick kraftig vårbloomning i de flesta områden. Vissa diatoméer nådde flera miljoner celler per liter. *Skeletonema costatum* och *Chaetoceros wighamii* var de vanligaste arterna.

Summary

In the open **Skagerrak** the plankton flora was poor, but in the coastal area diatoms were very common with highest densities of *Skeletonema costatum* and *Rhizosolenia hebetata*. In the **Kattegat** there was a lot of diatoms and dinoflagellates. *Skeletonema costatum* had more than 1 million cells per litre.

In the Baltic the spring bloom was intense. *Skeletonema costatum* and *Chaetoceros wighamii* were the most common species.

- Large amounts of algae
- ◐ Moderate amounts
- Small amounts
- † Fish killing species
- A Alexandrium spp., PSP
- D Dinophysis spp., DSP
- P Pseudo-nitzschia spp. ASP
- C Toxic cyanobacteria



DETAILS Based on quantitative samples 0-10 m depth and net samples *POTENTIALLY HARMFUL SPECIES

SKAGERRAK

Å17 4 April

Only a few diatoms were present, among them *Pseudo-nitzschia* spp.* with 3000 cells per litre. There were even less dinoflagellates. Small flagellates dominated and *Chrysochromulina* spp.* reached 25000 cells per litre. The chlorophyll concentration was about 0.4 µg/L.

Släggö 4 April

A rich diatom flora with many species of *Chaetoceros*, *Rhizosolenia* and other diatoms was present. *Skeletonema costatum* dominated with about 250000 cells per litre. Some dinoflagellates were seen, but except for *Peridiniella danica* and *Gymnodinium* spp. the abundances were low. The chlorophyll concentration was about 1.3 µg/L.

KATTEGAT

Anholt E 5 and 9 April

A rich flora of more than 20 species of diatoms was present in the beginning of April. *Chaetoceros* species were common, but *Rhizosolenia hebetata* and *Skeletonema costatum* were the most common with about 100000 and 1 million cells per litre respectively. *Pseudo-nitzschia* spp.* had about 5000-cells per litre. *Peridiniella danica* and *Protoperdinium pellucidum* were common dinoflagellates, and *Chrysochromulina* spp.* was present with 50000 cells per litre. At the second sampling 9th April diatoms and dinoflagellates had decreased considerably.

	Recommended limit	Å17 2005-04-04 cells/L	Släggö 2005-04-04 cells/L	Anholt E 2005-04-05 cells/L	Anholt E 2005-04-09 cells/L
<i>Chaetoceros curvisetus</i>			present	common	common
<i>Detonula confervacea</i>				present	
<i>Pseudo-nitzschia pseudodelicatissima</i> -group	1 million cells/liter	2 000	present	present	4 500
<i>Pseudo-nitzschia seriata</i> -group	1 million cells/liter	present	6 500	4 000	4 500
<i>Rhizosolenia hebetata</i> f. <i>semispina</i>		present	40 000	90 000	25 000
<i>Skeletonema costatum</i>		present	250 000	1 000 000	360 000
<i>Dinophysis norvegica</i>	2000 cells/liter		200	100	50
<i>Peridiniella danica</i>			20 000	10 000	20 000
<i>Protoperdinium reticulatum</i>			600		
<i>Chrysochromulina</i> spp.		25 000	40 000	15 000	35 000
<i>Apedinella radians</i>				20 000	30 000

BALTIC SEA

Arkona basin BY2 6 April

The spring bloom was going on, showing large amounts of diatoms. *Skeletonema costatum* and *Chaetoceros wighamii* reached 5 and 3 million cells per litre respectively. Other *Chaetoceros* species were also common with densities from 10000 to 550000 cells per litre. Among dinoflagellates *Heterocapsa rotundata* was the most common.

Bornholm basin BY5 6 April

The spring bloom was going on in this area too, with more than 6 million *Skeletonema costatum* and 1.5 million *Chaetoceros wighamii* per litre. *Chaetoceros ceratosporus* and *C. holsaticus* were also very common. Among dinoflagellates *Scrippsiella hangoei* was the most common.

South East Baltic BCS III 10 6 April

In this area of the southeast Baltic the spring bloom was in an early stage and only *Skeletonema costatum*, *Chaetoceros subtilis* and *Thalassiosira levanderi* had densities of more than 30000 cells per litre. The dinoflagellate *Peridiniella catenata* was present with about 5000 cells per litre.

Eastern Gotland basin BY15 7 April

The spring bloom was well on its way here. *Chaetoceros wighamii*, *Thalassiosira levanderi* and *Skeletonema costatum* had several hundred thousand cells per litre each. *Chaetoceros holsaticus*, *C. subtilis* and *Melosira arctica* were also common. The dinoflagellates *Peridiniella catenata*, *Scrippsiella hangoei* and *Wolozynskia halophila* were common.

Western Gotland basin BY38 8 April

Skeletonema costatum, *Chaetoceros wighamii*, *C. holsaticus*, *C. subtilis* were very common diatoms during the spring bloom development. The dinoflagellates *Peridiniella catenata* and *Wolozynskia halophila* were also quite common.

	BY2 2005-04-06 cells/L	BY5 2005-04-06 cells/L	BCS III 10 2005-04-06 cells/L	BY15 2005-04-07 cells/L	BY38 2005-04-08 cells/L
<i>Chaetoceros ceratosporus</i>	very common	very common	common	present	common
<i>Chaetoceros holsaticus</i>	500 000	very common	common	common	very common
<i>Chaetoceros cf. salsugenus</i>	common	common	present	present	common
<i>Chaetoceros subtilis</i>	very common	very common	very common	very common	150 000
<i>Chaetoceros wighamii</i>	3 000 000	1 700 000	common	200 000	650 000
<i>Skeletonema costatum</i>	5 200 000	6 300 000	common	750 000	2 600 000
<i>Thalassiosira levanderi</i>	present	common	common	500 000	present
<i>Dinophysis norvegica</i>					100
<i>Peridiniella catenata</i>			present	present	10 000
<i>Scrippsiella hangoei</i>	present	present		present	present
<i>Wolozynskia halophila</i>	present	present	present	20 000	200 000
<i>Aphanizomenon</i> sp.				present	