

Sammanfattning

I **Skagerraks** kustområde dominerade sommar-diatoméer, medan planktonfloran var fattig i öppna Skagerrak.

I **Kattegatt** fanns rikligt med små flagellater och diatoméerna *Proboscia alata* och *Dactyliosolen fragilissimus*.

I **Östersjön** dominerade små flagellater. *Pyramimonas* spp. blomnade i Arkona- och Bornholmsbassängen och *Chrysochromulina* spp.* var också vanlig. *Nodularia** var i avtagande i hela området, medan *Aphanizomenon* sp. och *Cyanodictyon balticum* blomnade rikligt öster och väster om Gotland.

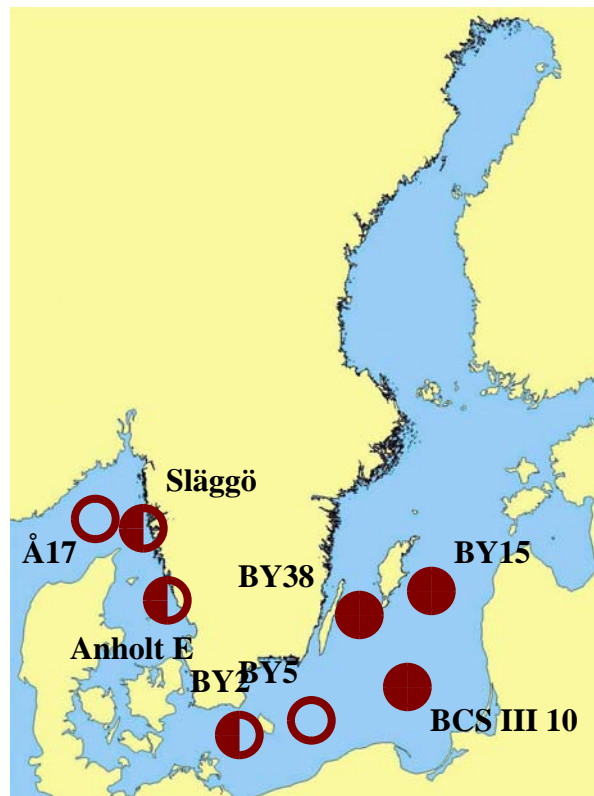
Summary

In the coastal area of **Skagerrak** summer diatoms dominated, whereas the plankton flora was poor in the open Skagerrak.

In the **Kattegat** small flagellates were abundant. The diatoms *Proboscia alata* and *Dactyliosolen fragilissimus* were also common.

In the **Baltic** small flagellates dominated. *Pyramimonas* spp. had a bloom in the Arkona- and Bornholm basins and *Chrysochromulina* spp.* were also common. *Nodularia** was declining in the whole area, but *Aphanizomenon* sp. and *Cyanodictyon balticum* bloomed east and west of Gotland.,

- 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 * POTENTIALLY HARMFUL SPECIES

SKAGERRAK

Å17 21 August

The plankton flora was rather poor. *Proboscia alata* and *Heterocapsa rotundata* had the highest cell densities. A few diatoms remained of the summer flora and among autumn dinoflagellates *Prorocentrum minimum** was present with a small population.

Släggö 21 August

At this coastal sampling site diatoms, belonging to the summer flora, were common, e.g. *Cerataulina pelagica*, *Dactyliosolen fragilissimus*, *Leptocylindrus danicus* and *Proboscia alata*. *Pseudo-nitzschia* sp.* were present in small amounts. *Heterocapsa rotundata* and *Prorocentrum micans* were the most common dinoflagellates.

KATTEGAT

Anholt E 22 and 26 August

There was little difference between the two samplings 4 days apart. A number of *Chaetoceros* species in low concentrations were found. *Proboscia alata* and *Dactyliosolen fragilissimus* dominated the diatoms and *Heterocapsa rotundata* was the most common dinoflagellate. Monads and small flagellates were very abundant. The cyanobacterium *Nodularia spumigena**, actually belonging to the Baltic, was present with 4.7 meter/L.

	Å17 2004-08-21 cells/L	Släggö 2004-08-20 cells/L	Anholt E 2004-08-22 cells/L	Anholt E 2004-08-26 cells/L
<i>Attheya septentrionalis</i>		common	common	
<i>Cerataulina pelagica</i>		common		
<i>Dactyliosolen fragilissimus</i>	present	common	common	common
<i>Guinardia flaccida</i>		common	common	common
<i>Leptocylindrus danicus</i>	present	45000	present	present
<i>Proboscia alata</i>	70000	50000	60000	30000
<i>Pseudo-nitzschia seriata</i> -group*		20000		
<i>Skeletonema costatum</i>		common		
<i>Dinophysis norvegica</i> *		present		present
<i>Heterocapsa rotundata</i>	common	common	common	
<i>Karenia mikimotoi</i> *		present		
<i>Prorocentrum micans</i>	common	common	common	common
<i>Prorocentrum minimum</i> *	common			
<i>Protoperidinium curtipes</i> *		present		
<i>Nodularia spumigena</i> *	present			present



BALTIC SEA

Arkona basin BY2 23 August

Chaetoceros impressus dominated among large species, but the small prasinophyceans *Pyramimonas* spp. reached the highest densities. There were some remains of the cyanobacteria *Aphanizomenon* sp and *Nodularia spumigena** and small amounts of the diatom *Nitzschia paleacea*, which is a common epiphyte on decaying *Nodularia*.

Bornholm basin BY5 23 August

The flora was poor at this station. Small flagellates, e.g. *Pyramimonas*, *Hemiselmis*, *Plagioselmis* and *Chrysochromulina* spp.* made up most of the phytoplankton. Some diatoms were also found. Only some few threads of *Aphanizomenon* sp. were present.

South East Baltic BCS III 10 23 August

This station showed a rich plankton flora. There was a bloom of *Chaetoceros danicus* and *Chaetoceros impressus*. The small flagellates *Pyramimonas* spp. and *Chrysochromulina* spp.* were also present in bloom concentrations. A few threads of *Nodularia spumigena** were present. *Dinophysis norvegica** was common with 2500 cells/L. Between this station and BY15 a *Dinophysis norvegica** bloom was observed at 30 meters depth.

Eastern Gotland basin BY15 24 August

Cyanobacteria dominated at this sampling site. *Cyanodictyon balticum* was the most common with about 250000 colonies/L. *Aphanizomenon* sp. and *Pseudoanabaena* sp. were also very common, whereas only a few threads of *Nodularia spumigena** were found. The small flagellates were common. North of this station remains of a bluegreen bloom, dominated by *Aphanizomenon* sp. and *Nodularia spumigena** were found at 12 meters depth.

Western Gotland basin BY38 25 August

The situation west of Gotland was very similar to the east side. The main difference was higher cell densities of *Chrysochromulina* spp.* and the 10000 cells/L of the ciliate *Helicostomella subulata*

	BY2 2004-08-23 cells/L	BY5 2004-08-23 cells/L	BCS III 10 2004-08-24 cells/L	BY15 2004-08-24 cells/L	BY38 2004-08-25 cells/L
<i>Chaetoceros danicus</i>	present	common	20 000		common
<i>Chaetoceros impressus</i>	15 000	3 000	40 000	common	common
<i>Nitzschia paleacea</i>	present	present	present		present
<i>Dinophysis norvegica</i> *			2 500	present	present
<i>Gymnodinium</i> spp.	common	present	present	present	present
<i>Hemiselmis virescens</i>	present	common	common	present	present
<i>Plagioselmis prolunga</i>	common	common	common	present	present
<i>Pyramimonas</i> spp	300 000	common	350 000	present	present
<i>Chrysochromulina</i> spp*	present	common	160 000	18 000	90 000
<i>Anabaena</i> spp*	present			common	common
<i>Aphanizomenon</i> sp	0.4 m/L	present		15 m/L	12 m/L
<i>Cyanodictyon balticum</i> (colonies)				250 000	175 000
<i>Nodularia spumigena</i> *	0.2 m/L		present	present	4.5 m/L
<i>Pseudoanabaena</i> spp cf.				9 m/L	4 m/L