

### Sammanfattning

I öppna **Skagerrak** dominerade små flagellater, men det förekom också en hel del diatoméer och dinoflagellater. I kustområdet dominerade *Pseudo-nitzschia delicatissima*-gruppen\*.

I **Kattegatt** blomnade *Pseudo-nitzschia* spp\* , men också andra diatoméer var vanliga, liksom dinoflagellater.

I **Östersjön** dominerade stora diatoméer tillsammans med små flagellater, huvudsakligen *Teleaulax* spp. I Arkonahavet fanns fortfarande förhållandevis mycket *Aphanizomenon* sp.

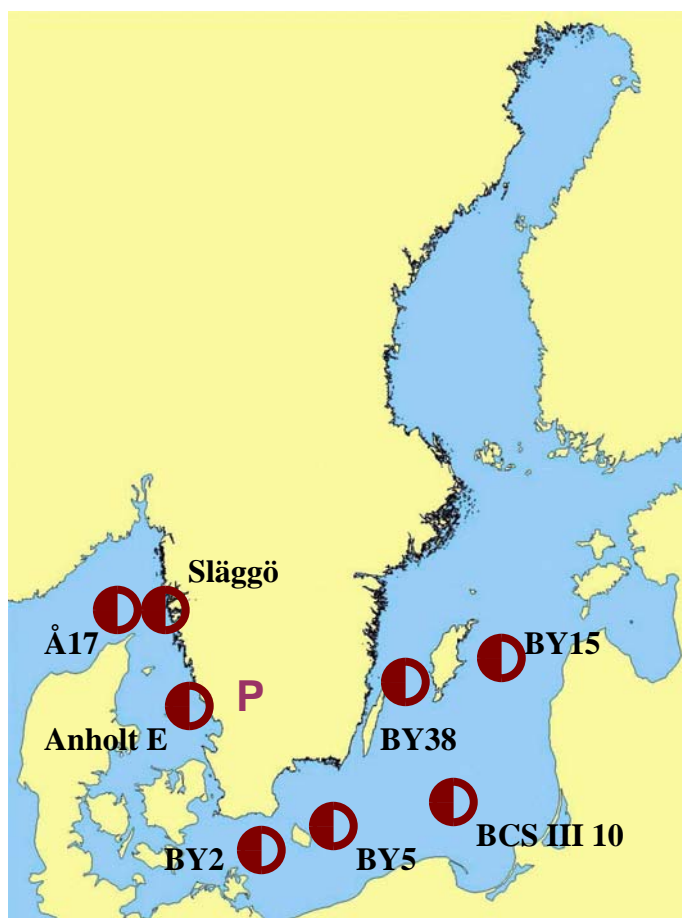
### Summary

In the open **Skagerrak** small flagellates dominated, but there was also a lot of diatoms and dinoflagellates. In the coastal area *Pseudo-nitzschia delicatissima*-group\* dominated.

In the **Kattegat** *Pseudo-nitzschia* spp\* bloomed, but other diatoms, as well as dinoflagellates were common.

In **Baltic** large diatoms, together with small flagellates, e.g. *Teleaulax* spp. dominated. In the Arkona basin there was still quite a lot of *Aphanizomenon* sp.

- 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 24 October** A relatively poor flora with a few diatom species, such as *Pseudo-nitzschia delicatissima*-group\*, *Guinardia delicatula*, *Cerataulina pelagica*, *Dactyliosolen fragilissimus* and *Proboscia alata* in low numbers. Less than 100 cells/l of *Ceratium fusus*, *C. lineatum*, *C. longipes* and *C. macroceros*. Small flagellates were abundant. Chlorophyll was about 2.4 µg/l.

**Släggö 24 October** A relatively poor flora dominated by diatoms with *Pseudo-nitzschia delicatissima*-group\* as the most common. Some *Rhizosolenia styliformis*, *Guinardia delicatula* and *Proboscia alata* were present. Among dinoflagellates small *Gymnodinium* spp. were most abundant. *Ceratium* species were present in small amounts. Chlorophyll was about 1.7 µg/l.

## KATTEGAT

**Anholt E 25 and 29 October** The two sampling occasions showed a similar rich plankton flora with lots of diatom species. *Pseudo-nitzschia delicatissima*-group\* and *Pseudo-nitzschia seriata*-group\* bloomed with 325 000-420 000 and 50 000-170 000 cells/l respectively. Other diatoms of importance were *Thalassiosira punctigera*, *Cerataulina pelagica*, *Dactyliosolen fragilissimus* and *Skeletonema costatum*. *Ceratium* species were also abundant with all together 4000-5000 cells/l. *Dinophysis norvegica*\* reached 200-500 cells/l, whereas the other *Dinophysis* species were fewer. Chlorophyll at the first sampling was about 3.4 µg/l.

Selection of observed species	Recommended limit	Å17	Släggö	Anholt E	Anholt E
		2005-10-24 cells/L	2005-10-24 cells/L	2005-10-25 cells/L	2005-10-29 cells/L
Chlorophyll a µg/l, mean 0-10m		2.4	1.7	3.4	
<i>Cerataulina pelagica</i>		present		present	common
<i>Chaetoceros socialis</i> f. <i>radians</i>		present		common	common
<i>Coscinodiscus wailesii</i>				present	
<i>Ditylum brightwellii</i>				present	present
<i>Guinardia delicatula</i>		present	present	present	present
<i>Guinardia flaccida</i>				common	common
<i>Dactyliosolen fragilissimus</i>		present		common	very common
<i>Proboscia alata</i>		present	present		common
<i>Pseudo-nitzschia delicatissima</i> -group	1 million cells/liter	common	present	325 000	420 000
<i>Pseudo-nitzschia seriata</i> -group	1 million cells/liter	present		50 000	170 000
<i>Skeletonema costatum</i>					very common
<i>Thalassionema nitzschioides</i>		present	present	common	common
<i>Thalassiosira punctigera</i>		present		present	present
<i>Ceratium fusus</i>		present	present	3 500	1 200
<i>Ceratium lineatum</i>		present		present	2 500
<i>Ceratium macroceros</i>		present	present		
<i>Ceratium tripos</i>		net	present	1 000	1 000
<i>Dinophysis acuminata</i>	900 cells/liter			300	100
<i>Dinophysis acuta</i>	300 cells/liter	present		net	150
<i>Dinophysis dens</i>	900 cells/liter			net	200
<i>Dinophysis norvegica</i>	2000 cells/liter	present	present	present	present
<i>Prorocentrum micans</i>		present	net	present	present
<i>Prorocentrum minimum</i>		net			
<i>Dictyocha speculum</i>		present	net	common	common
<i>Pyramimonas</i> sp.		common			
<i>Nodularia spumigena</i>					present

## BALTIC SEA

**Arkona basin BY2 26 October** The cyanobacterium *Aphanizomenon* sp. dominated with about 1 meter per litre. Some remains of *Nodularia spumigena* were seen. Dinoflagellates were few and only seen in the net samples. *Chaetoceros impressus* and *Coscinodiscus granii* were present together with *Ebria tripartita* and *Teleaulax acuta*. Chlorophyll was about 2.7 µg/l.

**Bornholm basin BY5 26 October** *Chaetoceros impressus*, *Actinocyclus octonarius* and a few *Coscinodiscus granii* were present. *Aphanizomenon* sp. occurred in small amounts and Chlorophyll was about 3.3µg/l.

**South East Baltic BCS III 10 26 October** The diatom *Dactyliosolen fragilissimus* was present with about 1500 cells/l, which is very uncommon so far east in the Baltic. *Actinocyclus octonarius* and *Coscinodiscus granii* were present in low amounts and the plankton flora was dominated by small flagellates, with *Teleaulax* spp. as the most common. Chlorophyll was about 3.4µg/l.

**Eastern Gotland basin BY15 27 October** *Actinocyclus octonarius*, *Coscinodiscus granii* and *Cyclotella choctawhatcheana* were present in low amounts. Some colonies of the cyanobacteria *Snowella* and *Woronichinia* were seen, but the plankton flora was dominated by small flagellates, with *Teleaulax* spp. and *Plagioselmis* sp. as the most common. Chlorophyll was about 2.8 µg/l.

**Western Gotland basin BY38 28 October** *Aphanizomenon* sp. occurred with about 0.5 m/l. Otherwise the situation was very similar to station BY15.

Selection of observed species	BY2 2005-10-26 cells/L	BY5 2005-10-26 cells/L	BCS III 10 2005-10-26 cells/L	BY15 2005-10-27 cells/L	BY38 2005-10-28 cells/L
Chlorophyll a µg/l, mean 0-10m	2.7	3.3	3.4	2.8	
<i>Actinocyclus octonarius</i>		common	present	present	common
<i>Chaetoceros danicus</i>		net		net	net
<i>Chaetoceros impressus</i>	common	common	present	net	present
<i>Coscinodiscus granii</i>	present	present	present	1 300	present
<i>Dactyliosolen fragilissimus</i>			common		
<i>Ceratium tripos</i>		net			
<i>Dinophysis norvegica</i>	present			present	present
<i>Dissodinium pseudolunula</i>		net			
<i>Heterocapsa triquetra</i>	present	net			
<i>Ebria tripartita</i>	common	common		present	net
<i>Teleaulax</i> spp.	common	common	common	present	very common
<i>Planktonema lauterbornii</i>				present	
<i>Oocystis</i> sp.				net	net
<i>Aphanizomenon</i> sp.	1 meter/l	net		net	very common
<i>Nodularia spumigena</i>	net	net		net	net
<i>Snowella</i> spp.				present	net
<i>Woronichinia</i> spp.				present	present