

Oceanographic Services Lars Edler



ALGAL SITUATION IN SWEDISH MARINE WATERS

No 2, 9–26 February 2005

Sammanfattning

I **Skagerrak** började vårblomningen märkas, framför allt i kustområdet. I **Kattegatt** märktes en start på vårblomningen i början, och en ordentlig ökning till senare delen av februari. Diatoméer dominerade.

I Östersjön var planktonfloran mycket fattig, och endast enstaka celler påträffades.

Summary

In the **Skagerrak** the spring bloom was starting, mainly in the coastal areas. In the **Kattegat** the spring bloom had slowly started in the beginning of February and was on its way two weeks later. Diatoms dominated.

In the Baltic the plankton flora was very poor, and only single cells were present.



Moderate amounts

Small amounts

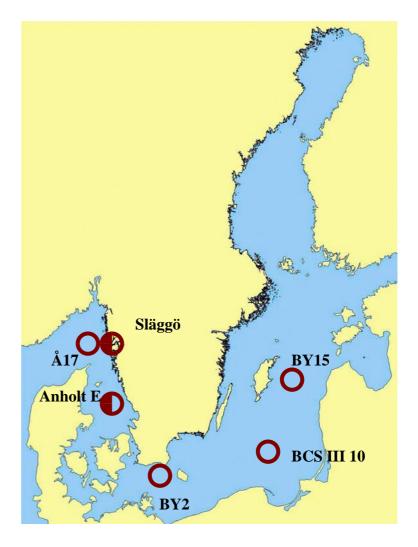
Fish killing species

Alexandrium spp., PSP

D Dinophysis spp., DSP

Pseudo-nitzschia spp. ASP

Toxic cyanobacteria





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

SKAGERRAK

Å17 21 February

Several species of diatoms indicated a first step into the spring bloom. *Skeletonema costatum* was the most common species. *Pseudo-nitzschia delicatissima-group** was present with about 5000 cells per litre, whereas *Dinophysis norvegica** was only present in the net sample. The chlorophyll concentration was about 1 µg/L.

Släggö 21 February

A rich flora with many species of *Chaetoceros, Thalassiosira, Rhizosolenia* and other diatoms was present. *Skeletonema costatum* dominated with more than half a million cells per litre. *Pseudonitzschia delicatissima-group** was present with about 17000 cells per litre. The chlorophyll concentration was about 2.4 µg/L.

KATTEGAT

Anholt E 9 and 22 February

The rich spring flora of more than 20 species of diatoms developed during February. *Chaetoceros* species were common and only outnumbered by *Skeletonema costatum* with more than 1.5 million cells per litre at the second sampling. *Pseudo-nitzschia delicatissima-group** was present with about 5000-7000 cells per litre, and *Dinophysis norvegica** was present with very few cells. The chlorophyll concentration increased from 1.5 to 4.7 µg/L.

		Å17	Släggö	Anholt E	Anholt E
	Recommended	2005-02-21	2005-02-21	2005-02-09	2005-02-22
	limit	cells/L	cells/L	cells/L	cells/L
Chaetoceros curvisetus		in net sample	4 000	20 000	65 000
Chaetoceros socialis f. socialis		15 000	10 000	14 000	65 000
Pseudo-nitzschia delicatissima-group	1 million cells/liter	5 000	17 000	5 000	7 000
Skeletonema costatum		200 000	575 000	135 000	1 500 000
Thalassiosira nordenskioeldii			30 000		
Dinophysis norvegica	900 cells/liter	in net sample		100	in net sample
Protoperidinium curtipes					in net sample



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BALTIC SEA

Arkona basin BY2 23 February

There was very little phytoplankton at this station and the chlorophyll concentration was about $0.7 \, \mu g/L$.

South East Baltic BCS III 10 26 February

The plankton flora showed more species, with early indications of the spring by *Skeletonema costatum* and *Peridiniella catenata*. The chlorophyll concentration was about 0.7 µg/L.

Eastern Gotland basin BY15 25 February

Also this station was relatively rich in species, but the only sign of the spring was a few cells of *Peridiniella catenata*. A few cells of *Dinophysis norvegica** were present in the net sample. The chlorophyll concentration was about $0.4 \,\mu g/L$.

	BY2	BCS III 10	BY15
	2005-02-23	2005-02-26	2005-02-25
Actinocyclus octonarius			present
Chaetoceros danicus		present	present
Chaetoceros impressus		present	
Coscinodiscus granii		present	present
Skeletonema costatum		present	
Thalassiosira spp.	present	present	present
Dinophysis norvegica*			present
Gyrodinium spirale		present	present
Peridiniella catenata		present	present
Aphanizomenon sp	present	present	present