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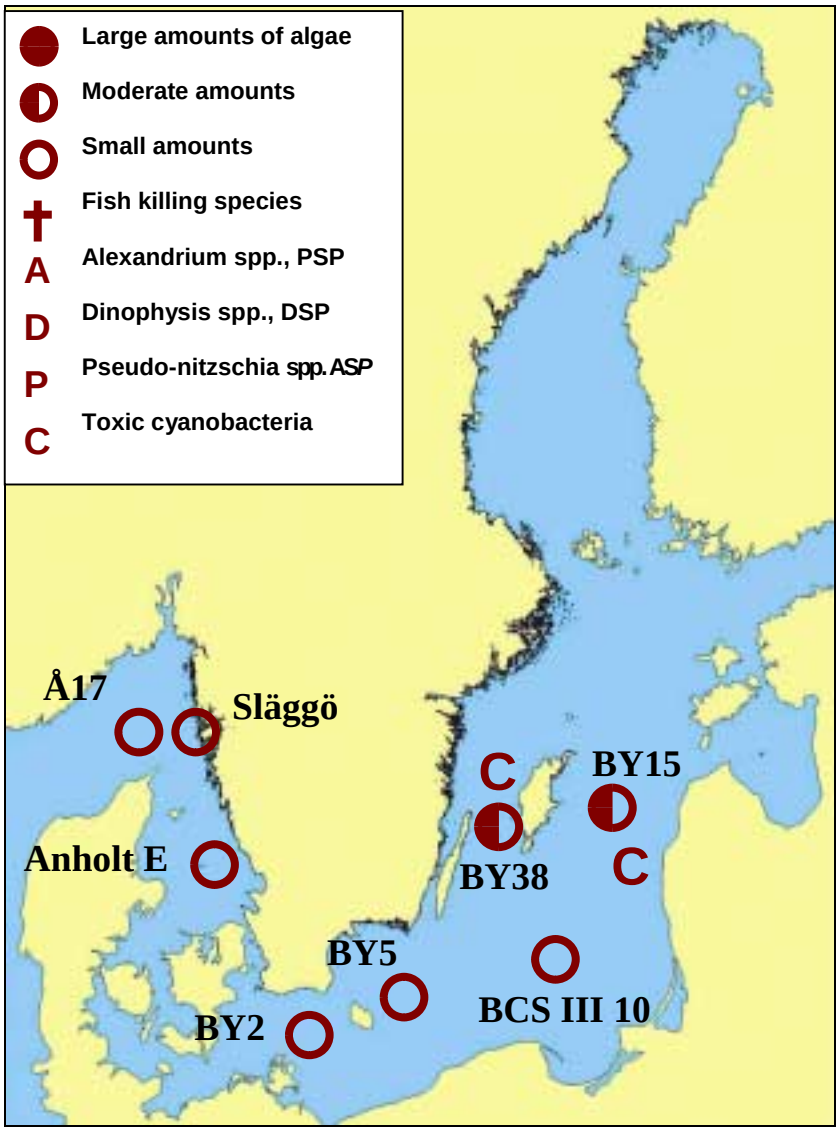
ALGAL SITUATION IN SWEDISH MARINE WATERS

No 7, 2003, 7 - 11 July

OVERVIEW

In the Skagerrak diatoms and dinoflagellates were scarce, except for *Heterocapsa rotundata*. In the Kattegat a diatom bloom of *Guinardia flaccida* and *Proboscia alata* decreased between the two samplings. Small amounts of Baltic species indicated outflow of low saline water. Toxic species were not abundant.

In the Baltic blue-green algae were abundant around Gotland, but further south present in low abundance. In most parts *Chrysochromulina* spp.* were very abundant.



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DETAILS

* POTENTIALLY HARMFUL SPECIES

SKAGERRAK

Station Å17, 7 July

A poor plankton flora with hardly any diatoms was found at this station. A few cells of *Pseudo-nitzschia delicatissima*-group* were present. Also dinoflagellates were few and only *Heterocapsa rotundata* reached densities of more than 4 000 cells/l. *Dinophysis acuta** and *D. norvegica** were present with single cells. Small unidentified non-flagellated cells dominated with about 400 000 cells/l.

Station Släggö, 7 July

Also at this coastal station the diatoms were few. Only *Guinardia flaccida* and *Proboscia alata* with 1 000 - 1 500 cells/l were present. *Heterocapsa rotundata* was the dominant dinoflagellat with more than 50 000 cells/l and *Dinophysis acuta** and *D. norvegica** were present with single cells only. Small flagellates, such as *Pyramimonas* spp., *Plagioselmis prolonga* and *Teleaulax acuta* were common. *Chrysochromulina* spp.* were present with 70 000 cells/l near the coast. Small unidentified non-flagellated cells dominated with about 750 000 cells/l.

KATTEGAT

Station Anholt E, 8 July

The plankton flora was much richer in this area. *Guinardia flaccida* reached about 50 000 cells/l, which is a high density for this species. *Proboscia alata* was also common with about 20 000 cells/l. *Dinophysis acuta** and *D. norvegica** were present with 150 and 400 cells/l respectively. A few *Ceratium* species were present in low numbers. *Heterocapsa rotundata* was common, but less abundant than in the Skagerrak. Small flagellates, such as *Pyramimonas* spp., *Plagioselmis prolonga*, *Teleaulax acuta* and *Chrysochromulina* spp.* were present with less than 10 000 cells/l of each species. Small unidentified non-flagellated cells dominated with about 1.8 million cells/l.

Station Anholt E, 11 July

During the three days between the samplings at this station the plankton flora had changed considerably. The cell densities of *Guinardia flaccida* and *Proboscia alata* had dropped to less than 5 000 cells/l. At the same time *Heterocapsa rotundata* had increased to more than 60 000 cells/l. The small flagellates and unidentified non-flagellated cells had also decreased in numbers. The presence of *Planctonema lauterbornii* and *Anabaena* cf. *baltica* indicates outflow of low saline Baltic water.

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	2003-07-07	2003-07-07	2003-07-08	2003-07-11
	Å17	Släggö	Anholt E	Anholt E
	0-10 m	0-10 m	0-10 m	0-10 m
Guinardia flaccida		1 500	45 000	4 000
Proboscia alata	present	1 000	18 000	5 000
Pseudo-nitzschia delicatissima-group	present			
Ceratium furca	present	present	300	500
Ceratium fusus	present	300	500	150
Ceratium tripos	present	1 000	1 000	600
Dinophysis norvegica	present	100	400	
Heterocapsa rotundata	5 000	57 000	14 000	64 000
Prorocentrum minimum			5 000	
Chrysochromulina sp.		70 000	14 000	5 000
Planctonema lauterbornii				2 000
Anabaena cf. baltica				14 000
Unid. non-flagellated cells <6µm	450 000	725 000	1 700 000	1 300 000

BALTIC SEA

Arkona basin. Station BY2, 8 July

The plankton flora was very poor and dominated by small flagellates. *Chrysochromulina* spp.* were the most common species, followed by numerous colonies of the blue-green *Aphanocapsa* sp.. Single cells of *Dinophysis norvegica** were present.

Bornholm basin. Station BY5, 9 July

A similar situation was found at this station, but with much more *Aphanizomenon* sp.. *Anabaena* cf. *baltica* was also present and *Chrysochromulina* spp.* were very common and dominated together with *Aphanizomenon* sp. Small amounts of *Nodularia spumigena** were present.

Southeast Baltic. Station BCS III 10, 9 July

The only difference compared to BY5 was the lack of *Nodularia spumigena** and *Anabaena* cf. *baltica*.

Eastern Gotland basin, Station BY15, 10 July

Aphanizomenon sp. and *Nodularia spumigena** were much more abundant in this area. The obvious bloom of *Chrysochromulina* spp.*, covering large parts of the Baltic, reached cell densities of more than 5 million cells/l. Small amounts of *Dinophysis norvegica** were also present.

Western Gotland basin, Station BY38, 10 July

The plankton flora here showed the same pattern as east of Gotland. The abundance of *Chrysochromulina* spp.* was, although high, lower than at BY15.

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	2003-07-08	2003-07-09	2003-07-09	2003-07-10	2003-07-10
	BY2	BY5	BCS III 10	BY15	BY38
	0-10 m	0-10 m	0-10 m	0-10 m	0-10 m
Chaetoceros danicus		Present			Present
Chaetoceros impressus		Present	Present	Present	
Chaetoceros wighamii				Present	Present
Dinophysis acuminata					Present
Dinophysis norvegica	Present			Sparse	Sparse
Heterocapsa rotundata	Common	Common	Common	Common	Common
Plagioselmis prolonga	Sparse	Sparse	Sparse	Present	Sparse
Teleaulax spp.	Sparse	Sparse	Sparse	Present	Sparse
Telonema sp.	Sparse	Sparse	Common	Common	Common
Pyramimonas spp.	Common	Very common	Common	Sparse	Common
Chrysochromulina spp.	Very common	Dominant	Dominant	5.5 million	Common
Planctonema lauterbornii		Common	Sparse		
Anabaena cf. baltica		Common		Common	Common
Aphanizomenon sp.	Sparse	Dominant	Common	Dominant	Dominant
Aphanocapsa sp.	Very common	Common	Common		
Nodularia spumigena		Sparse		Common	Very common