

Oceanographic Services

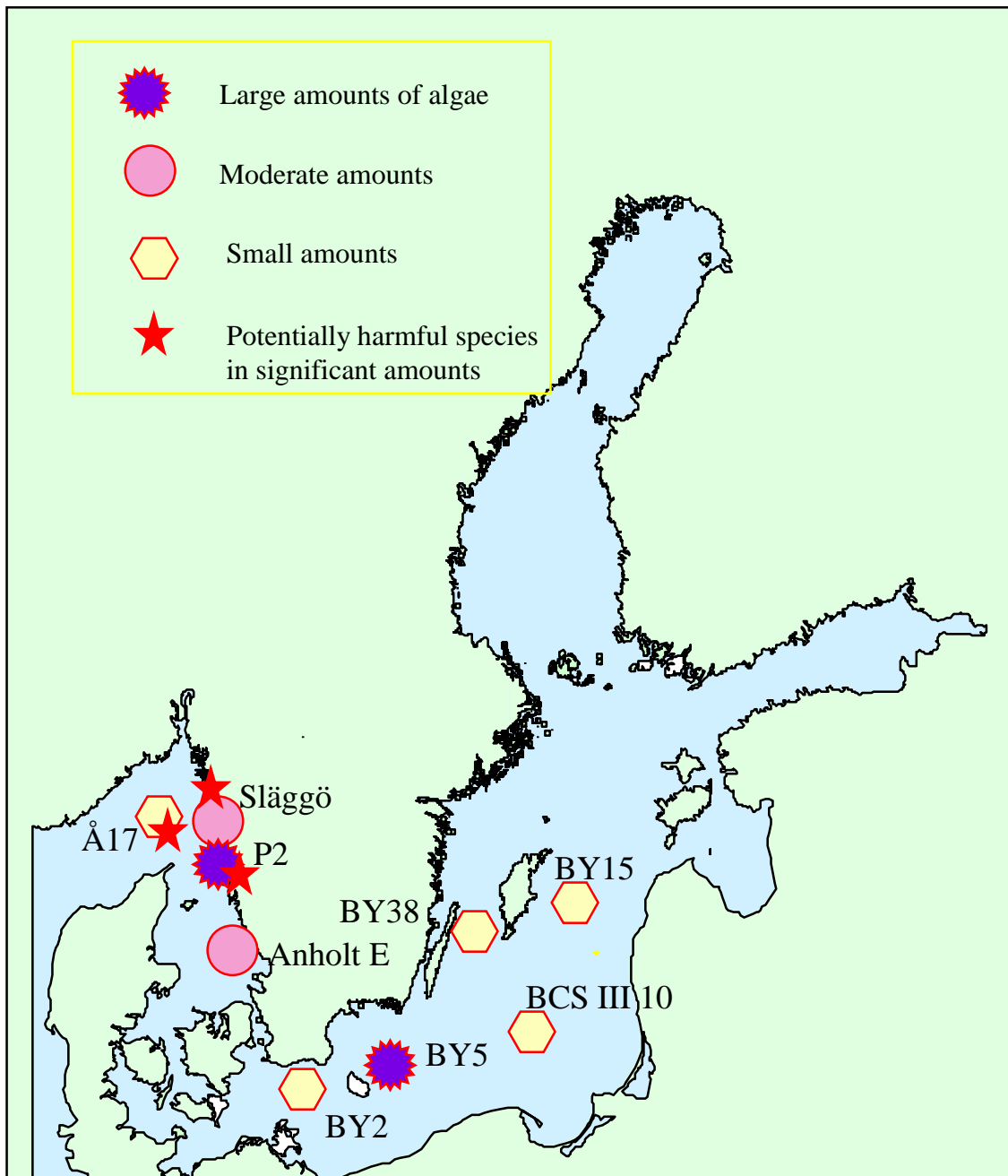
Lars Edler

ALGAL SITUATION IN SWEDISH MARINE WATERS

No 7, 2001, 27 August – 1 September

Quantitative samples were obtained within SMHI's regular monitoring programme, covering the Skagerrak, Kattegat, Sound and Baltic proper. The samples were scanned for toxic and dominating species of phytoplankton.

OVERVIEW



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**ALGAL SITUATION IN
SWEDISH MARINE WATERS****No 7, 2001, 27 August – 1 September****DETAILS**

* POTENTIALLY HARMFUL SPECIES

SKAGERRAK

A considerable bloom of *Karenia mikimotoi* *(synonym *Gyrodinium aureolum*) was observed in large parts of the Skagerrak. The main populations were located in relatively narrow layers at depths between 8 and 22 meters. The abundance in these layers ranged between 130 000 and 200 000 cells/l. The highest concentration was found at station P2 at 8 meters depth.

Station Å17, 1 September

Relatively poor plankton flora. *Ceratium furca* common together with several other small dinoflagellates and small *Monads and flagellates*. *Chrysochromulina* spp.* Common with about 150 000 cells/l. *Karenia mikimotoi* *(synonym *Gyrodinium aureolum*) less than 20 000 cells/l in the layer 0-10 m. Very few diatoms.

Station Släggö, 31 August

A clear dominance of dinoflagellates. Most common species were *Prorocentrum micans*, *Lingulodinium polyedra* and *Karenia mikimotoi* *(synonym *Gyrodinium aureolum*) with 6 000-14 000 cells/l. Small amounts of *Dinophysis* spp.*. Several other dinoflagellates also present, whereas only few diatoms were present.

KATTEGAT**Station Anholt E, 27 August**

High diversity of phytoplankton, especially dinoflagellates. *Ceratium furca* dominated with about 10 000 cells/l. Diatoms of the potentially toxic *Pseudo-nitzschia seriata** group were present also with about 10 000 cells/l. *Chrysochromulina* spp.* not uncommon.

Station Anholt E, 31 AUGUST

Similar to four days earlier with the only difference that *Ceratium furca* had increased to about 50 000 cells/l.

BALTIC SEA**Arkona basin. Station BY2, 28 August**

Blue-greens were now very scarce and the plankton flora was poor. Small flagellates, such as *Pyramimonas* spp. and *Gymnodinium* spp. dominated. Small amounts of *Chrysochromulina* spp.* and *Teleaulax* sp. were present. Single cells of *Chaetoceros danicus*, *Chaetoceros impressus* and *Coscinodiscus granii* were observed. Tintinnids were common.

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Bornholm basin. Station BY5, 28 August

A considerable bloom of the diatom *Dactyliosolen fragilissimus* was observed at this station. A concentration of about 300 000 cells/l were found. This bloom is remarkable, since this species usually occurs in higher salinity and is rare in salinities below 10 psu.

Chrysochromulina spp.*, *Teleaulax* spp., *Pseudopedinella* sp. were common. *Pyramimonas* spp. and *Gymnodinium* spp. were abundant.

Southeastern Baltic. Station BCS III 10, 28 August

Poor plankton flora and very few filaments of blue-greens. The most common species were the diatoms *Chaetoceros impressus* and *Chaetoceros danicus*. A few cells of *Coscinodiscus granii* and *Actinocyclus octonarius* were observed. Small flagellates of the genera *Plagioselmis*, *Pyramimonas*, *Teleaulax* and *Heterocapsa rotundata* were relatively common.

Eastern Gotland basin, Station BY15, 29 August

Small amounts of phytoplankton. Single filaments of *Aphanizomenon* sp. The potentially toxic dinoflagellate *Phalacroma rotundatum** was the most common species together with the small flagellates *Pyramimonas* spp., *Teleaulax* spp. and *Plagioselmis* sp. Low abundance of *Gymnodinium* spp. and *Heterocapsa rotundata*.

Western Gotland basin, Station BY38, 30 August

Ciliates dominated. Small amounts of the diatoms *Actinocyclus octonarius* and *Chaetoceros impressus*. Single filaments of the blue-greens *Aphanizomenon* sp. and *Nodularia spumigena**. The small flagellates *Pyramimonas* spp., *Heterocapsa rotundata* and *Chrysochromulina* spp.* were present in small amounts.