

Oceanographic Services

Lars Edler

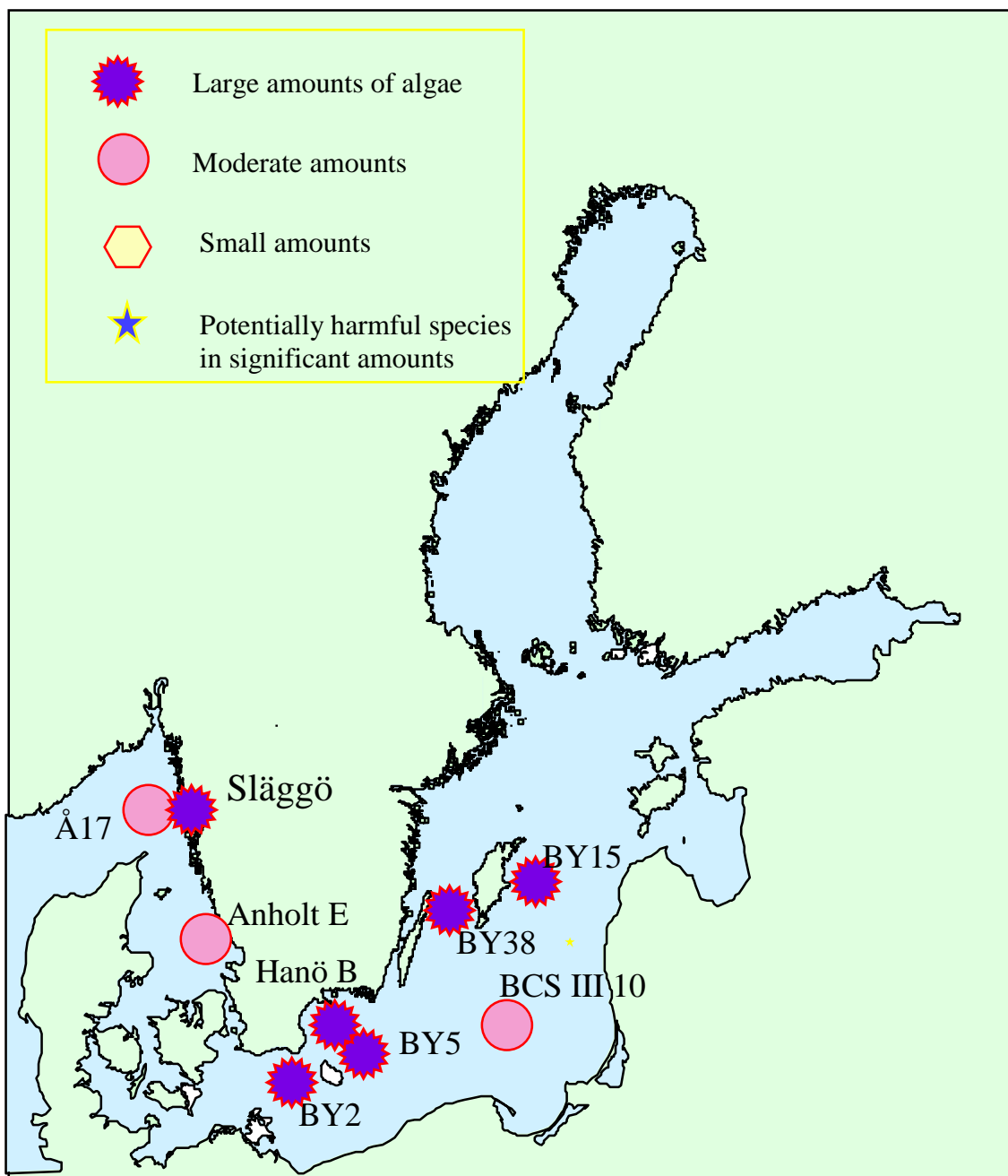
ALGAL SITUATION IN SWEDISH MARINE WATERS

No 5, 2002, 8 - 12 July

OVERVIEW

Considerable accumulations of blue-green algae, with a dominance of the potentially toxic *Nodularia spumigena*, are present in the Baltic Sea. Most algal mats around Gotland. Less, but still a lot in the Hanö Bight and in the south part of Öresund. With sunny and calm weather the blooms will continue.

Along Bohuslän on the west coast there are large accumulations of the harmless dinoflagellate *Noctiluca scintillans* in certain bays, coloring the water light red. All along the coast the potentially toxic dinoflagellates *Dinophysis*, which contain a diarrhoea toxin, is present in relatively low concentrations.



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**ALGAL SITUATION IN
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* POTENTIALLY HARMFUL SPECIES

Sampling in the Skagerrak, Kattegat and the Baltic Sea**SKAGERRAK****Station Å17, 8 JULY**

Restricted flora. Diatoms absent. Small *flagellates and coccoids* dominating with about 1 million cells/l. *Cryptophyceans* present with about 50 000 cells/l. *Dinophysis acuminata** and *D. acuta** present with about 300 cells/l each.

Station Släggö, 8 JULY

Relatively poor plankton flora with the exception of small *flagellates and coccoids* which made up about 1 million cells/l. *Ceratium furca* common with about 9 000 cells/l. *Dinophysis acuminata**, *D. acuta** and *D. norvegica** present with 3 000 cells/l all together. The diatom *Dactyliosolen fragilissimus* common with 17 000 cells/l.

KATTEGAT**Station Anholt E, 9 JULY**

Relatively poor plankton flora with the exception of small *flagellates and coccoids* which made up about 1 million cells/l. The Cryptophycean *Plagioselmis prolunga* present with about 30 000 cells/l. *Ceratium furca* common with about 16 000 cells/l. *Dinophysis acuminata** and *D. acuta** present with about 200 cells/l each and *D. norvegica** with 900 cells/l. The diatom *Leptocylindrus danicus* common with 14 000 cells/l.

BALTIC SEA**Arkona basin. Station BY2, 10 JULY**

At this time the blue-greens have started to be very abundant. There is a complete dominance of *Aphanizomenon* sp. with 15-20 m/l. *Nodularia spumigena** was present, but in much lower concentrations; about 3 m/l. The diatom *Dactyliosolen fragilissimus*, which is relatively rare in this area because of the low salinity in the Arkona basin, was present with about 15 000 cells/l and *Chaetoceros impressus* with about 1 000 cells/l. The greenalgae *Planctonema lauterbornii* was common.

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Bornholm basin, Station BY5, 10 JULY

Also here *Aphanizomenon* sp. dominated with about 12 m/l. *Nodularia spumigena** was present with about 6 m/l. The diatom *Dactyliosolen fragilissimus* had a much lower concentration here about 2 000 cells/l and *Chaetoceros impressus* with about 1 000 cells/l. The greenalgae *Planctonema lauterbornii* was common and the potentially toxic dinoflagellate *Dinophysis norvegica** was found with about 1 000 cells/l

Southeast Baltic, Station BCS III 10, 10 JULY

Here the amounts of *Aphanizomenon* sp. and *Nodularia spumigena** were much lower; 5 and 1.5 m/l respectively. *Chrysochromulina* spp.* and *Pyramimonas* spp. together with *Plagioselmis prolunga* and *Teleaulax* spp. were also found.

Eastern Gotland basin, Station BY15, 11 JULY

Again *Aphanizomenon* sp. was present in large amounts with about 14 m/l. *Nodularia spumigena** was present with about 3 m/l. There was also cf. *Aphanocapsa* sp. in relatively large amounts. *Chrysochromulina* spp.* and *Pyramimonas* spp. together with *Plagioselmis prolunga* and *Teleaulax* spp. were also found.

Western Gotland basin, Station BY38, 11 JULY

Aphanizomenon sp. dominated with about 16 m/l. *Nodularia spumigena** was present in lower amounts with about 1.5 m/l. cf. *Aphanocapsa* sp. was found in small amounts. *Pyramimonas* spp. together with *Plagioselmis prolunga* and *Teleaulax* spp. were also found. The greenalgae *Planctonema lauterbornii* was common.

Hanö Bight, 12 JULY

*Nodularia spumigena** dominated with about 12 m/l. *Aphanizomenon* sp. was present with about 5 m/l. In some places surface accumulations were seen.