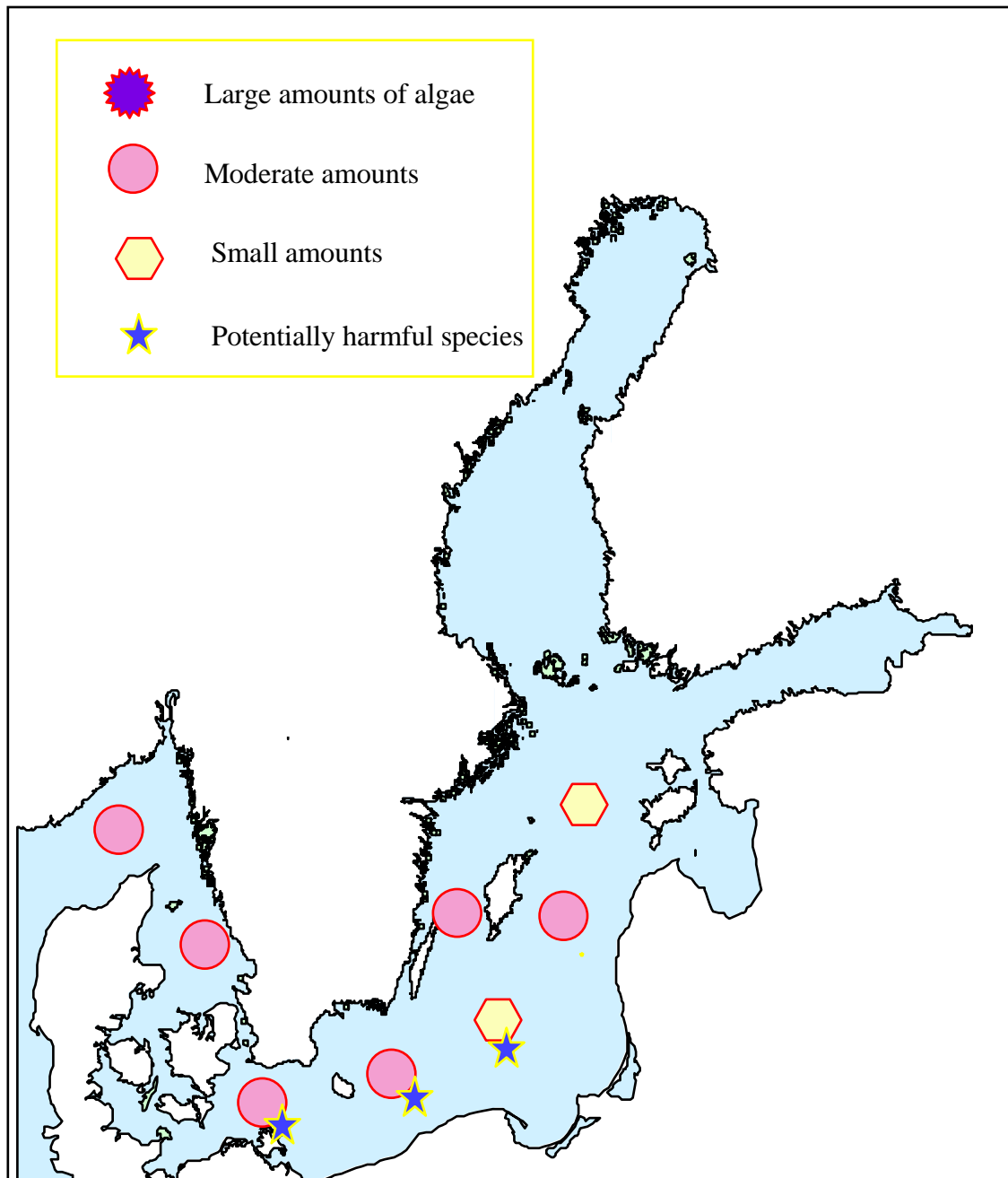


ALGAL SITUATION IN SWEDISH MARINE WATERS No 14 21-25 September, 1998

OVERVIEW

Sampling in the Skagerrak, the Kattegat and the Baltic Sea



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DETAILS

***** POTENTIALLY HARMFUL SPECIES

Sampling in the Skagerrak, Kattegat and the Baltic Sea

SKAGERRAK

Station M6, 21 September

Chlorophyll concentrations in the upper 20 m 1-2 $\mu\text{g.L}^{-1}$.

Rich plankton flora. Several species of dinoflagellates present in small amounts. Several Ceratium species. Dinophysis acuminata* and acuta * present in small amounts. Prorocentrum micans common. Gyrodinium aureolum* in small amounts. Several species of diatoms present in small amounts, eg. Chaetoceros curvisetus, C. radians and C. affinis, Pseudo-nitzschia pungens, Cerataulina pelagica and Dactyliosolen fragilissimus.

KATTEGAT

Station Anholt E, 22 September

Chlorophyll concentrations in the upper 20 m about 1 $\mu\text{g.L}^{-1}$.

Small amounts of phytoplankton, but high diversity. Prorocentrum micans, Ceratium species and Dinophysis* species dominated the dinoflagellates. Several species of Protoperidinium (eg. P. divergens) present.

Among diatoms, Guinardia flaccida, Proboscia alata and Leptocylindrus danicus dominated. Several other species belonging to the genus Chaetoceros, Rhizosolenia and Thalassiosira were also found in small amounts as well as Licmophora sp.

BALTIC SEA

Arkona basin. Station BY2, 23 September

Chlorophyll concentrations down to 25 m 1-2 $\mu\text{g.L}^{-1}$.

The bluegreen algae Aphanizomenon sp. dominated. Anabaena sp. and Woronichinia sp. also present. The dinoflagellate Prorocentrum minimum* very common and the diatom Chaetoceros sp. A (cf. danicus) also present.

Bornholm basin. Station BY5, 23 September

Chlorophyll concentrations between the surface and 10 m 2-4 $\mu\text{g.L}^{-1}$.

Phytoplankton composition similar to BY2, but the amount smaller, except for Prorocentrum minimum*.

Southeast Baltic, Station BCS III 10, 24 August

Chlorophyll concentrations down to 25 m about 1 $\mu\text{g.L}^{-1}$.

The diatom Coscinodiscus granii and the dinoflagellate Prorocentrum minimum* common. Otherwise poor flora.

Eastern Gotland basin, Station BY15, 24 September

Chlorophyll concentrations down to 20 m 1-2 $\mu\text{g.L}^{-1}$.

The bluegreen algae Aphanizomenon sp. dominated. Dinophysis norvegica* present. Small amounts of the dinoflagellate Gonyaulax verior and the diatoms Actinocyclus octonarius, Chaetoceros danicus and Ch. Sp.A (cf. danicus).

Northern Baltic, Station BY29, 24 September

Chlorophyll concentrations down to 20 m about 1 $\mu\text{g.L}^{-1}$.

Very similar to BY15.

Western Gotland basin, Station BY38, 25 September

Chlorophyll concentrations down to 25 m about 1 $\mu\text{g.L}^{-1}$.

Rich flora. The bluegreen algae Aphanizomenon sp. dominated. Nodularia spumigena*, Woronichinia sp. and Anabaena sp. also present. Dinophysis norvegica* relatively common. Single cells of cf. Alexandrium sp. Few diatoms.

This report is based on an overview of qualitative samples from the upper 20 m. Chlorophyll values are rough estimates based on profiles of fluorescens.

FORECAST

In the Skagerrak and Kattegat dinoflagellates will continue to be important, but an increase in the diversity of diatoms will continue.

In the Baltic the bluegreen algae decrease. The dinoflagellate Prorocentrum minimum* is likely to continue to bloom in the south part of the Baltic. A shift to larger diatoms will probably continue in most parts.