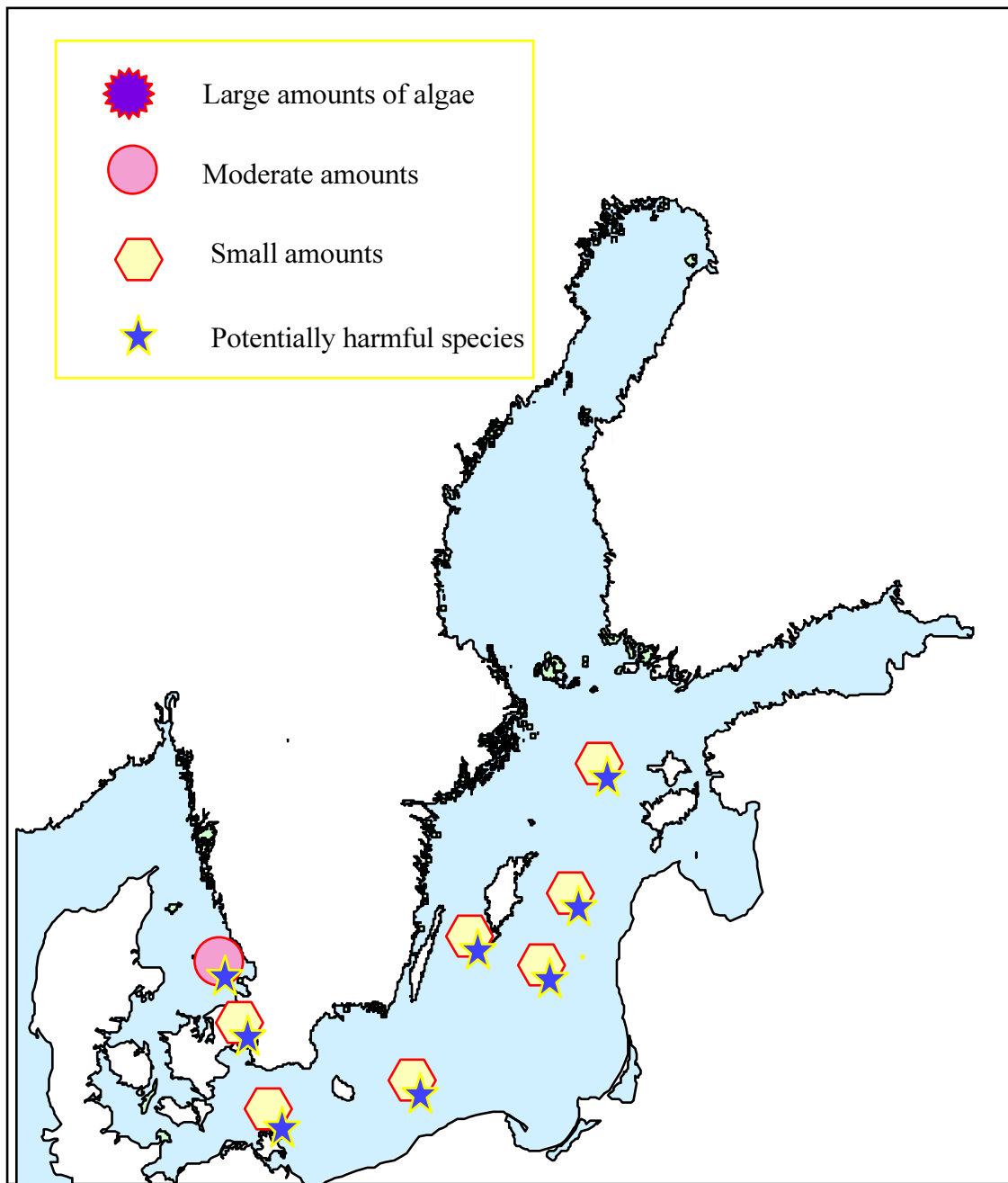


ALGAL SITUATION IN SWEDISH MARINE WATERS No 10, 2-7 June, 1998



ALGAL SITUATION IN SWEDISH MARINE WATERS

No 10, 1998, 2-7 JUNE

DETAILS

* POTENTIALLY HARMFUL SPECIES

Sampling in the Kattegat, the Öresund and the Baltic

KATTEGAT

Station **Anholt E, 2 and 7 June**

Relatively high diversity with moderate amounts of phytoplankton. Chlorophyll concentrations in the upper 10 m 1-2 $\mu\text{g.L}^{-1}$ and between 10 and 35 m depth 3-10 $\mu\text{g.L}^{-1}$.

Among diatoms Chaetoceros curvisetus dominated, followed by Proboscia alata, Guinardia flaccida and Dactyliosolen fragilissimus. Chaetoceros curvisetus peaked at 17 m depth with 16 000 cells. L^{-1} .

Dinoflagellates were dominated by Ceratium longipes (peaked at 17 m depth with 29 000 cells. L^{-1}) and small Gymnodinium spp. (> 100 000 cells. L^{-1}). Small numbers of Dinophysis* species and Alexandrium tamarense* were also present.

The potential toxic genus Chrysochromulina* was present in < 200 000 cells. L^{-1} . Small monads and flagellates were abundant (> 10 million cells. L^{-1}).

ÖRESUND

Very little phytoplankton. Cryptophyceans dominated. The potential toxic genus Chrysochromulina* was present in small amounts.

BALTIC SEA

Arkona basin, 3 June, Station BY2

Small amounts of phytoplankton. Chlorophyll concentrations in the upper 20 m 1-3 $\mu\text{g.L}^{-1}$.

Few diatoms. Among dinoflagellates Ceratium longipes, C. tripos, Dinophysis acuminata* and D. norvegica* were present in small amounts. Aphanizomenon sp. (flos-aquae) was present.

Bornholm basin, 3 June, Station BY5

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

Single cells of the diatom Chaetoceros sp. A (danicus). The dinoflagellate Dinophysis norvegica* relatively common, whereas D. acuminata* was present in small amounts. Aphanizomenon sp. (flos-aquae) and Nodularia spumigena* were present in small amounts.

Southeast Baltic, 4 June, Station BY 10

Very similar to BY5, but with more Aphanizomenon sp. (flos-aquae). The dinoflagellate Scrippsiella hangoei also observed. Chlorophyll concentration 1-2 $\mu\text{g.L}^{-1}$ in the upper 20 m.

Eastern Gotland basin, 4 June, Station BY15

Chlorophyll concentration of 1-3 $\mu\text{g.L}^{-1}$ in the upper 30 m.

Dinophysis norvegica*, D. acuminata* and Peridiniella catenata relatively common. Amylax triacantha and Gonyaulax verior also present. No diatoms observed. Aphanizomenon sp. (flos-aquae) relatively common, whereas Nodularia spumigena* was present in small amounts.

Northern Baltic, 5 June, Station BY29

Similar to BY15, with the addition of Dinobryon balticum. Chlorophyll concentration 1-4 $\mu\text{g.L}^{-1}$ in the upper 30 m.

Western Gotland basin, 5 June, Station BY38.

The dinoflagellates Dinophysis norvegica*, D. acuminata* not uncommon. Peridiniella catenata, Amylax triacantha and Gonyaulax verior also present. Aphanizomenon sp. (flos-aquae) relatively common, whereas Nodularia spumigena* was present in small amounts. Chlorophyll concentration about 1-3 $\mu\text{g.L}^{-1}$ in the upper 25 m.

This report is based on quantitative samples in the Kattegat and Öresund and net samples from the upper 20 m in the Baltic. Chlorophyll values are rough estimates based on profiles of fluorescens.

FORECAST

A beginning summer situation is at hand. If the weather will be sunny and calm the populations of bluegreen algae in the Baltic may develop into blooms.