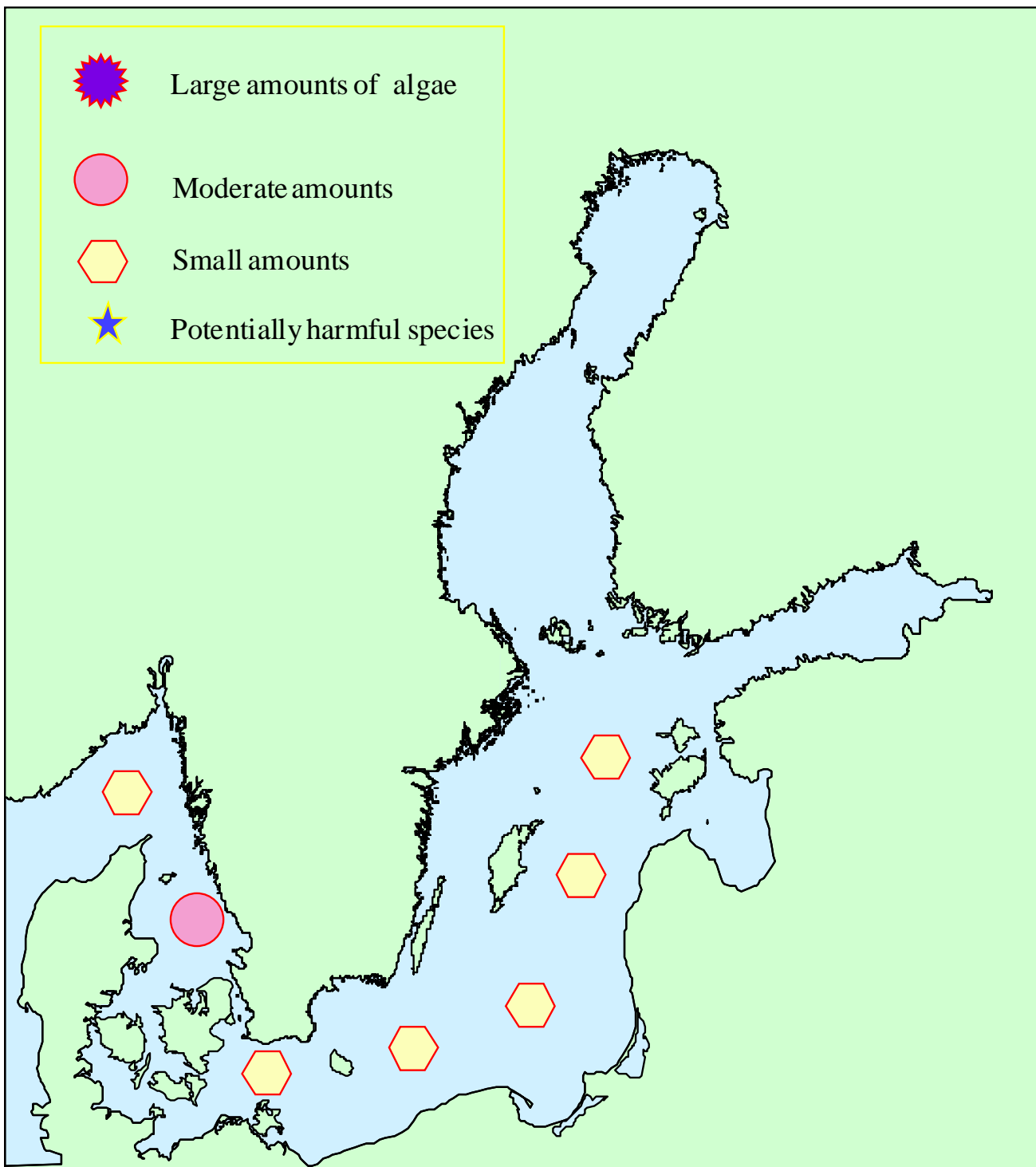


ALGAL SITUATION IN SWEDISH MARINE WATERS No 1
January 20-26, 1999**OVERVIEW****Sampling in the Skagerrak, the Kattegat and the Baltic Sea**

ALGAL SITUATION IN SWEDISH MARINE WATERS No 1

January 20-26, 1999

DETAILS

* POTENTIALLY HARMFUL SPECIES

Sampling in the Skagerrak, the Kattegat and the Baltic Sea

SKAGERRAK

Station M6, 26 January

Chlorophyll concentrations in the upper 20 m about 0.5 - 1 µg.L⁻¹.

High diversity of phytoplankton. Ceratium tripos common. Dinophysis acuminata* and D. norvegica* not uncommon. Several species of Ceratium and Protoperidinium also present. Among diatoms the genera Chaetoceros and Thalassiosira together with Skeletonema costatum, Thalassionema nitzschioides, Rhizosolenia hebetata and Proboscia alata were present.

KATTEGAT

Station Anholt E, 23 January

Chlorophyll concentrations in the upper 20 m 0.9 – 1.2 µg.L⁻¹.

High diversity of phytoplankton. Ceratium tripos common. Several species of Ceratium and Protoperidinium also present. Small amounts of Dinophysis* species. Rich diatom flora with a dominance of spring species, including Chaetoceros spp., Thalassiosira spp., Rhizosolenia spp., Proboscia alata and Pseudo-nitzschia seriata. As the previous two winters, there is a tendency of the new phenomenon; the “winter bloom”. This winter it is not at all as obvious, but still it can be seen from the high diversity and the cell densities.

BALTIC SEA

Arkona basin. Station BY2, 20 January

Chlorophyll concentrations down to 20 m 1-1.5 µg.L⁻¹.

The bluegreen algae Aphanizomenon sp. and Woronichinia/Snowella spp. were present in small amounts. The plankton flora was dominated by the large centric diatoms Coscinodiscus sp., Actinocyclus octonarius, Chaetoceros impressus and C. danicus. Dinoflagellates, such as Ceratium spp. and Peridiniella catenata were present in small amounts. indicated inflow of Kattegat water into the Arkona basin.

Bornholm basin. Station BY5, 20 January

Chlorophyll concentrations between the surface and 20 m 0.5 µg.L⁻¹.

Poor plankton flora. Similar to BY2 .

Southeast Baltic, Station BY9, 20 January

Chlorophyll concentrations down to 20 m 0.5 µg.L⁻¹.

Bluegreen algae, such as Aphanizomenon sp., Woronichinia/Snowella spp. and cf. Aphanocapsa sp. dominated the flora. The centric diatoms, Coscinodiscus granii, Actinocyclus octonarius and Thalassiosira hyperborea were present, as was the dinoflagellate Dinophysis acuminata*.

Eastern Gotland basin, Station BY15, 21 January

Chlorophyll concentrations down to 20 m 0.3 – 0.8 $\mu\text{g.L}^{-1}$.

Very similar to the southeast Baltic. A mixture of bluegreens, large centric diatoms and dinoflagellates.

Northern Baltic, Station BY29, 21 January

Chlorophyll concentrations down to 20 m about 0.2 $\mu\text{g.L}^{-1}$.

Poor plankton flora, but similar to Eastern Gotland basin. Few cells of the typical spring dinoflagellate Peridiniella catenata.

Western Baltic, Station BY38, 22 January

Chlorophyll concentrations down to 20 m about 0.3 $\mu\text{g.L}^{-1}$.

Poor plankton flora, similar to Northern Gotland.

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 Kattegat there are week signs of a winter bloom, as the previous two years. As nutrients are present in high concentrations, a spring bloom is to be expected later. In the Baltic, it is a clear winter situation and only few specimens signal an oncoming spring situation.