

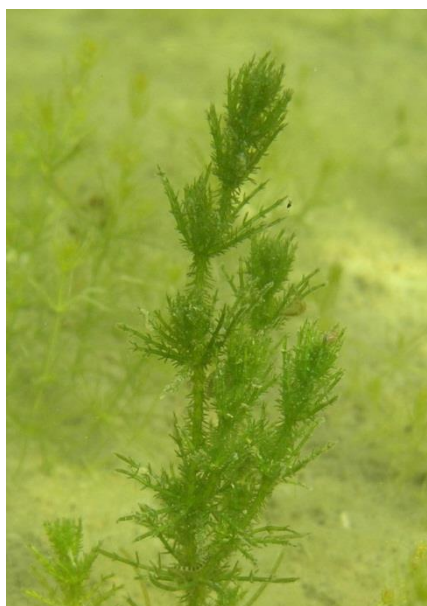
SPECIES INFORMATION SHEET

Chara horrida

English name: –	Scientific name: <i>Chara horrida</i>	
Taxonomical group: Class: Charophyceae Order: Charales Family: Characeae	Species authority: Wahlst 1862	
Subspecies, Variations, Synonyms: –	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (H01.05), Construction (D01, D03, E01, J02.02.02), Water traffic (G01.01.01)	Future threats (Habitats Directive article 17 codes): Eutrophication (H01.05), Construction (D01, D03, E01, J02.02.02), Water traffic (G01.01.01)	
IUCN Criteria: B2b(ii,iii,iv,v)	HELCOM Red List Category:	NT Near Threatened
Global / European IUCN Red List Category NE / NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/EN, Germany –/1 (Critically endangered), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/NT		

Distribution and status in the Baltic Sea region

The current distribution of *Chara horrida* in the Baltic Sea is concentrated along the east coast of Sweden, the Öregrund archipelago being the northernmost limit. In Finland, the species has been found from several locations in the Åland archipelago in the 2000s. Older records exist also from the southern coast of the Finnish mainland. There are no former records from Estonia but a few recent findings exist from the outer Estonian archipelago after the year 2006. *Chara horrida* seemed already to be extinct from German coastal areas but in 2005 the species was found in Schmidt Büten. In Denmark, *C. horrida* has disappeared from its former locations. The species was included in the previous HELCOM list of threatened and/or declining species (HELCOM 2007).



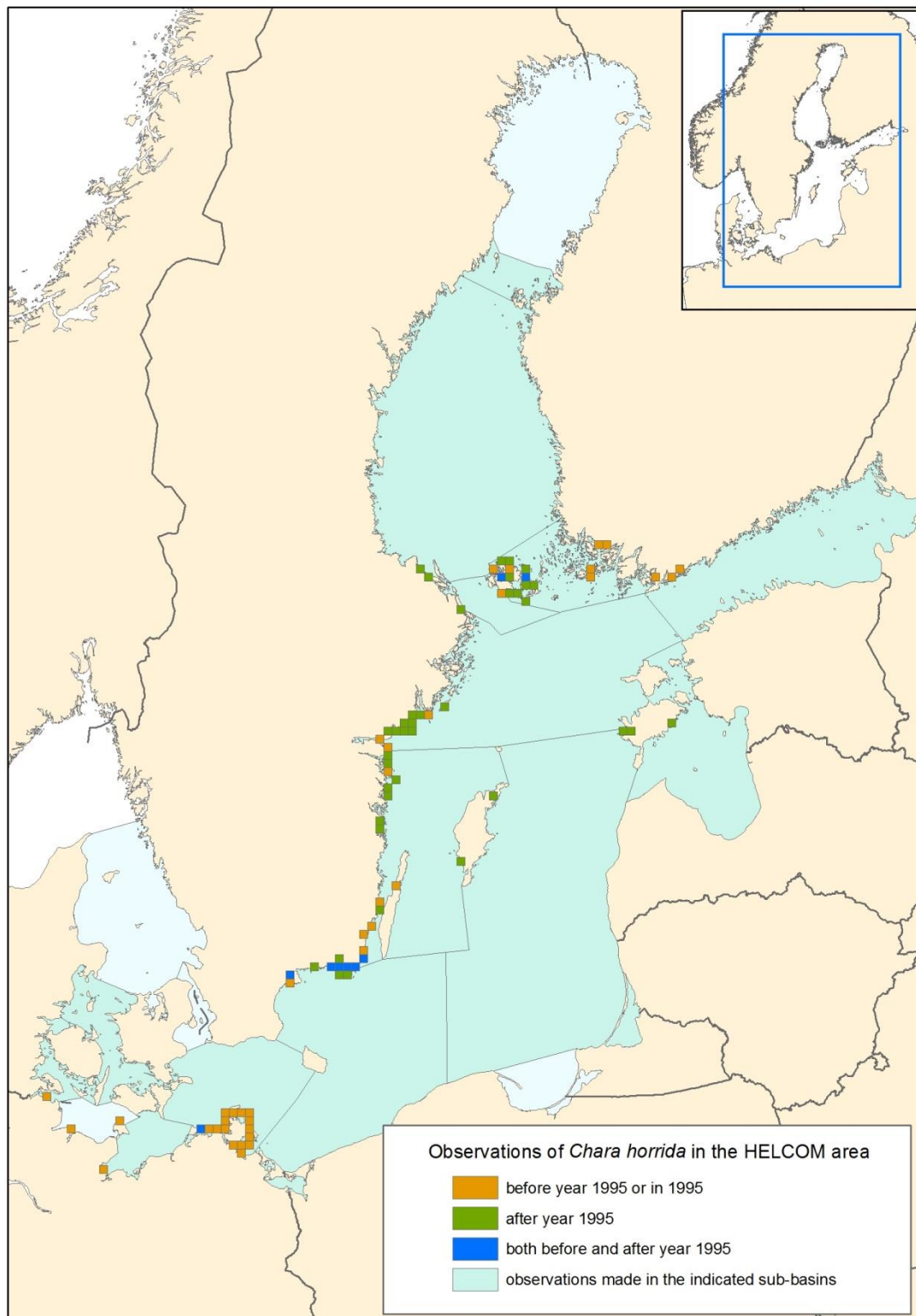
Chara horrida. Photo by Gustav Johansson, Hydrophyta ekologikonsult.

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Distribution Map

The records of the species compiled from the Swedish Species Gateway (www.artportalen.se), Schubert & Blindow (2003), Finnish Museum of Natural History (Botanical Museum), the Finnish database for threatened species (Hertta), the database of Estonian Marine Institute (EMI), the German database for macrophyte occurrences (MARIDATA), and literature.



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Habitat and Ecology

C. horrida is mainly found from sheltered areas, in most cases on soft bottom and rarely on muddy or sandy substrates. Depth ranges reach from about 0.5 m down to about 3 m. The species is found from relatively narrow salinity range in the Baltic Sea: between 4.5 and 9 psu (Blümel 2003).

Description of major threats

Eutrophication and coastal engineering are regarded as the most important factors for the population decline of *C. horrida*. In the Finnish growing sites, eutrophication has favored colonization by other macrophytes, as well as mass occurrences of filamentous algae. In Germany, the underlying causes of decline and disappearance are related to damming of shallow bays and increased turbidity in the charophyte habitats. In Sweden the population decline is probably related to dredging and other similar activities, as well as to the effects of eutrophication (Blümel 2003).

Assessment justification

The geographic range of *C. horrida* is considered restricted and continuingly declining, mainly due to eutrophication and coastal engineering (Blindow et al. 2003; Blümel 2003, Gärdenfors 2009). The occurrences are concentrated on the east coast of Sweden, where the number of locations has been estimated to 35 and the area of occupancy (AOO) c. 300 km². For the whole Baltic Sea the corresponding figures are probably 60–70 localities and the AOO c. 300–400 km². The restricted geographic range together with continuing decline of the area of occupancy (AOO), habitat quality, number of locations and number of individuals qualifies for the category Near threatened (NT) according to B2b(ii,iii,iv,v).

Recommendations for actions to conserve the species

Mitigation of eutrophication by controlling local sources of nutrient run-off. Conservation measures such as restrictions on coastal constructions and dredging in shallow coastal lagoons and archipelago areas.

Common names

Denmark: –, Estonia: liht-mändvetikas, Finland: piikkinäkinparta, Germany: –, Latvia: –, Lithuania: –, Poland: –, Russia: Хара оцетиненная, Sweden: raggsträfsse.

References

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