

SPECIES INFORMATION SHEET

Parvicardium hauniense

English name: Copenhagen cockle	Scientific name: <i>Parvicardium hauniense</i>	
Taxonomical group: Class: Bivalvia Order: Euheterodonta incertae sedis Family: Cardiidae	Species authority: Høpner Petersen & Russell, 1971	
Subspecies, Variations, Synonyms: <i>Cardium hauniense</i> Høpner Petersen & Russell, 1971; <i>Cerastobyssum hauniense</i> Høpner Petersen & Russell, 1971	Generation length: 1–1.5 years	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (decline of macrophyte meadows; H01.05, J03.01), Construction (J02.01.02, J02.02.02)	Future threats (Habitats Directive article 17 codes): Eutrophication (decline of macrophyte meadows; H01.05, J03.01), Construction (J02.01.02, J02.02.02)	
IUCN Criteria: B2ab(ii,iii)	HELCOM Red List Category:	VU Vulnerable
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/LC, Germany –/R (Extremely rare), Latvia –/–, Lithuania –/–, Poland –/VU, Russia –/–, Sweden –/VU		

Distribution and status in the Baltic Sea region

Parvicardium hauniense is a rare brackish water bivalve that has, until recently, been regarded endemic to the Baltic Sea. However, it has been found also in the Mediterranean (Wolowicz 1992). In the HELCOM area, it occurs e.g. in Danish and German inlets of the Belt Sea, Pomeranian Bodden, Puck Bay and Curonian Lagoon, and in the southern Finnish coast. Declines have been observed both in the population of the species and in its habitats.

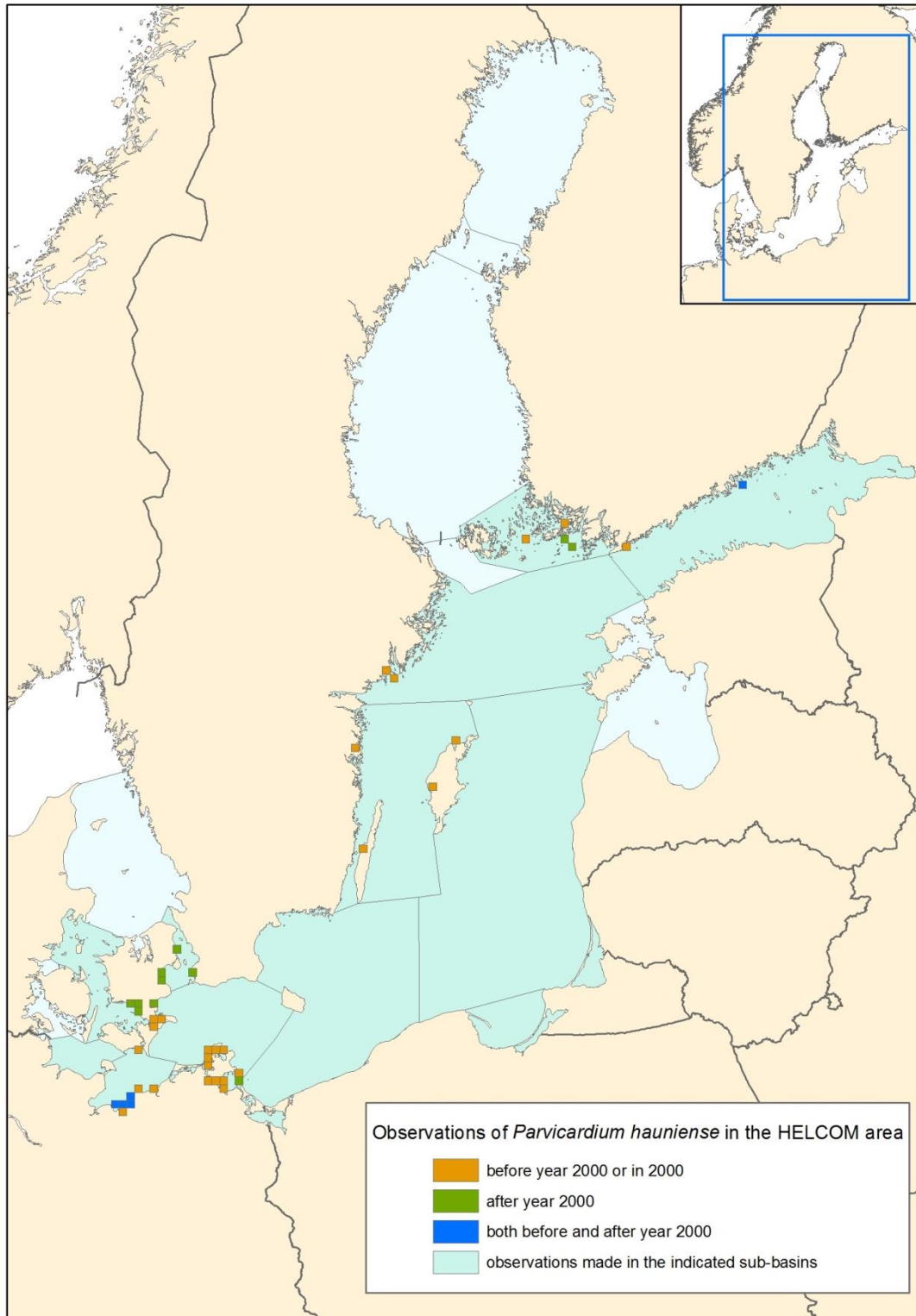


Parvicardium hauniense. Photo by Michael Zettler. Leibniz Institute for Baltic Sea Research Warnemünde (IOW).

SPECIES INFORMATION SHEET

*Parvicardium hauniense***Distribution map**

The georeferenced records of species compiled from the databases of the Leibniz Institute for Baltic Sea Research (IOW) and Swedish Species Information Centre (Artportalen), Finnish monitoring data, and Väinölä (1993).



SPECIES INFORMATION SHEET

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Habitat and ecology

The Copenhagen cockle lives on vascular plants and algae in shallow, macrophyte-rich, sheltered inlets like lagoons and large bays. It climbs on the plants using its foot and byssus threads. Preference to certain plant species is not known. In the wintertime it can also be found on the bottom.

The species appears to tolerate salinities between ca. 5 and 16 psu. The tolerance of temperature variability lies between 0°C and 25°C. The length is up to 10 mm (in Danish lagoons), in Germany only up to 8 mm. Lifespan 1 to 1½ years. Reproduction takes place from April/May to June/July.

Description of major threats

Reasons for threat are habitat loss (eelgrass meadows and other submerged vascular plants), reclaiming of shallow areas, change of salinity and exposition due to coastal construction, and eutrophication.

Assessment justification

P. hauniense is considered rare and its habitats continually declining. In Poland, the species is assumed to have been decreasing for two decades (Polish data exists from Puck bay / Wolowicz). It has disappeared from some of its former locations also in Denmark (Hopner-Petersen). On the other hand, it has been shown to persist for long times in suitable places (has been stable in a German location). In Sweden old records indicate that it has been present along the eastern coast up to Askö area but recent data is not available. The geographic distribution is regarded restricted in the form of the area of occupancy, and the AOO is estimated to be between 500–2000 km². The number of locations is not known and the degree of fragmentation is assumed to be at least rather severe as many of the locations are far away from each other. Furthermore, mainly due to the negative development in the southern Baltic Sea, the area of occupancy and the quantity/quality of the habitat is considered continually declining. It is categorized as Vulnerable (VU) according to B2ab(ii,iii).

Recommendations for actions to conserve the species

Protection of the submerged macrophyte meadows in shallow bays and nearshore areas from eutrophication and coastal construction would probably improve the situation of Copenhagen cockle.

Common names

Denmark: tyndskallet hjertemusling, Estonia: –, Finland: pikkusydänsimpukka, Germany: Kopenhagener Herzmuschel, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: –

References

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SPECIES INFORMATION SHEET

Parvicardium hauniense

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