**Parvicardium hauniense**

**English name:** Copenhagen cockle  
**Scientific name:** *Parvicardium hauniense*

**Taxonomical group:**  
Class: Bivalvia  
Order: Euheterodonta incertae sedis  
Family: Cardiidae

**Species authority:** 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

**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.

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).
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 continuingly 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 continuingly 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

References
SPECIES INFORMATION SHEET  

Parvicardium hauniense

Swedish Species Gateway. Swedish Species Information Centre and Swedish Environmental Protection Agency. Available at www.artportalen.se.
