

SPECIES INFORMATION SHEET

Cliona celata

English name: Yellow Boring Sponge	Scientific name: <i>Cliona celata</i>	
Taxonomical group: Class: Demospongiae Order: Hadromerida Family: Clionidae	Species authority: Grant, 1826	
Subspecies, Variations, Synonyms: <i>Rhaphyrus griffithsii</i> Bowerbank, 1866	Generation length:	
Past and current threats (Habitats Directive article 17 codes): Sedimentation caused by eutrophication (H01.05) and bottom trawling (F02.02.01)	Future threats (Habitats Directive article 17 codes): Sedimentation caused by eutrophication (H01.05) and bottom trawling (F02.02.01), Construction (windmills, C03.03)	
IUCN Criteria: D2	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 –/–, Germany –/2 (Endangered, North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

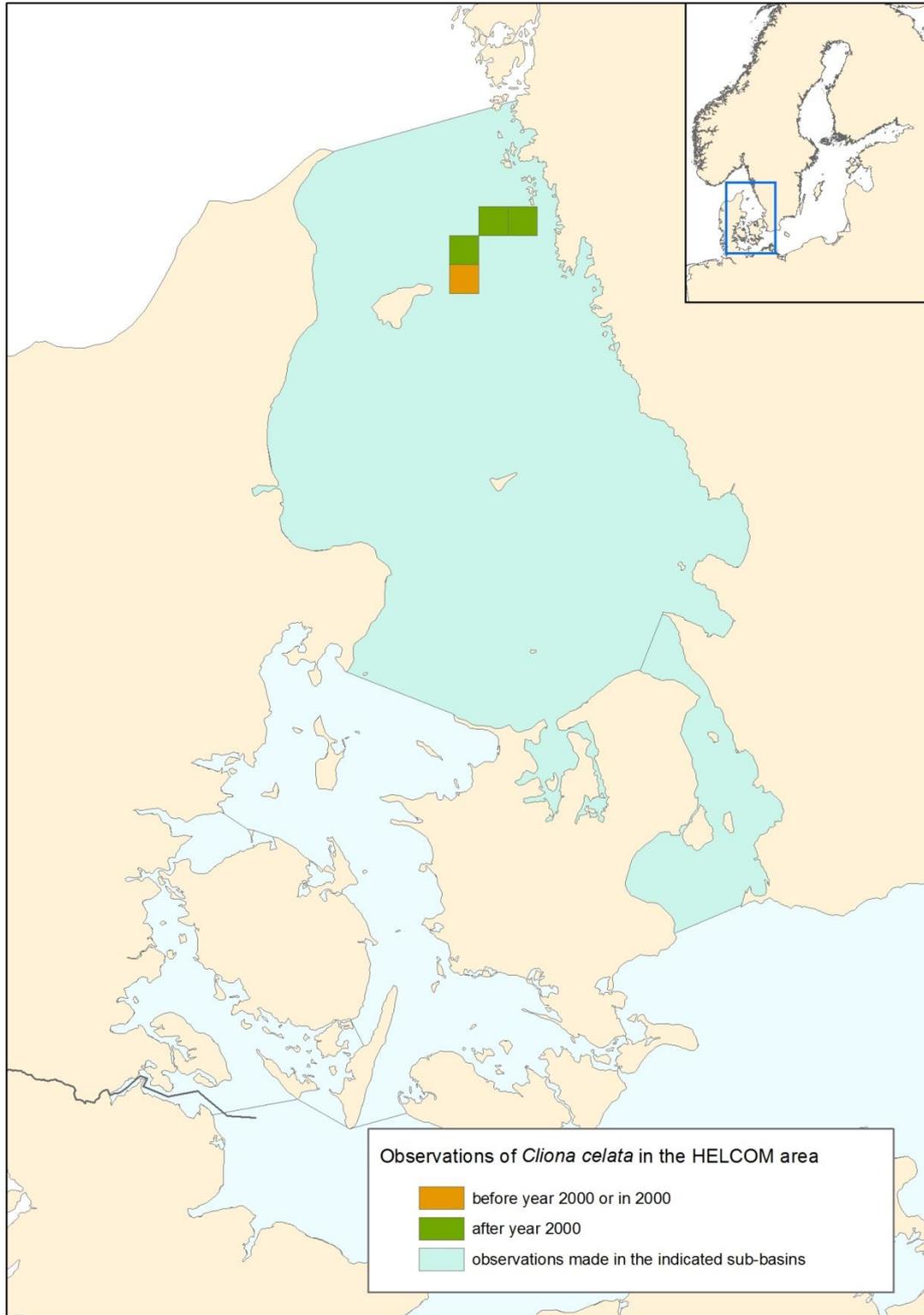
Distribution and status in the Baltic Sea region

Within the HELCOM area *C. celata* is reported from two offshore banks in the Kattegat, and from Öresund. Outside the area the species occurs in Norway but is absent from the North Sea. It is widely distributed along the Western European coastlines. The massive form is very common in parts of south-western Britain and along the coasts of Brittany, sometimes dominating the underwater 'scenery'. However, this form is apparently not found on either side of the North Sea (MSIP). The species seems to be very rare in the Kattegat and Öresund, but we have no indications of decline. However, the offshore banks are unique and vulnerable habitats within the area.

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*Cliona celata***Distribution map**

The records of species obtained from the species database of the Swedish Species Information Centre (Artportalen).



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Habitat and ecology

Cliona celata is a yellow boring sponge that creates round holes up to 5 cm in diameter in limestone and in the shells of molluscs, especially oyster shells. The species occurs in two distinct forms. One is the boring form, recognizable as yellow papillae sticking out of limestone (calcareous rocks, shells, etc.); the other is a large massive, wall-shaped sponge covered with characteristic flattened papillae that forms on rock. This species is the only excavating sponge in the north-western Europe developing the massive form. It is also the only *Cliona* without microscleres (microscopic examination necessary). *Cliona celata* is found under a wide variety of physical conditions but is most abundant on exposed lower circalittoral bedrock.

The species is a suspension feeder, and the food consists of minute planktonic particles, detritus and possibly even nutrients in solution. The species is probably quite tolerant to sedimentation.

Description of major threats

At present it is not known whether the species is under a specific threat or not. However, the offshore banks where the species is found within the HELCOM area are vulnerable to sedimentation caused by e.g. eutrophication and trawling. As offshore banks are of interest for the windmill industry, exploitation will probably also be an issue in the near future.

Assessment justification

Only limited data is available, but the species seems to be very rare in the HELCOM area. The number of locations is estimated to be 3 (2–5). The limited number of localities qualifies for the category Vulnerable (VU) according to D2.

Recommendations for actions to conserve the species

In general the negative effects of eutrophication on marine biotopes need to be reduced. More information on the species distribution and status within the HELCOM area is needed.

Common names

Denmark: –, Estonia: –, Finland: –, Germany: –, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: –

References

- Hansson, H.G. 1998. Sydsandinaviska marina flercelliga evertebrater. Utgåva 2
- Hayward, P. J & Ryland, J. S. (eds). 2002. Handbook of the Marine Fauna of North-West Europe.
- Marine Species Identification Portal. Available at http://species-identification.org/species.php?species_group=sponges&id=184
- National Museums of Northern Ireland. *Cliona celata* Grant, 1826. Website <http://www.habitas.org.uk/marinelife/species.asp?item=C3020>.
- Rachor, E., Bönsch, R., Boos, K., Gosselck, F., Grotjahn, M., Günther, C.-P., Gusky, M., Gutow, L., Heiber, W., Jantschik, P., Krieg, H.-J., Krone, R., Nehmer, P., Reichert, K., Reiss, H., Schröder, A., Witt, J. & Zettler, M. L. 2012. Rote Liste und Artenliste der bodenlebenden wirbellosen Meerestiere. Vierte Fassung, Stand Dezember 2007, einzelne Aktualisierungen bis 2012. Naturschutz und Biologische Vielfalt 70(2). Bundesamt für Naturschutz.
- Swedish Species Gateway. Swedish Species Information Centre and Swedish Environmental Protection Agency. Available at www.artportalen.se.
- World Register of Marine Species WoRMS. Available at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=134121>