

SPECIES INFORMATION SHEET

Nucula nucleus

English name: Common nut clam	Scientific name: <i>Nucula nucleus</i>	
Taxonomical group: Class: Bivalvia Order: Nuculoida Family: Nuculidae	Species authority: (Linnaeus, 1758)	
Subspecies, Variations, Synonyms: <i>Arca nucleus</i> Linnaeus, 1758	Generation length: 5–7 years	
Past and current threats (Habitats Directive article 17 codes): Unknown (U)	Future threats (Habitats Directive article 17 codes): Unknown (U)	
IUCN Criteria: A2c	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 –/1 (Critically endangered, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/LC		

Distribution and status in the Baltic Sea region

Nucula nucleus is a marine bivalve that occurs in the western Baltic Sea. It appears to have declined especially in its southern range but the reasons for this development are not known.

Outside the HELCOM area, the species has been found off all British coasts, to about 150 m depth. It is distributed from Norway south to the Mediterranean, West Africa, and the coasts of South Africa.

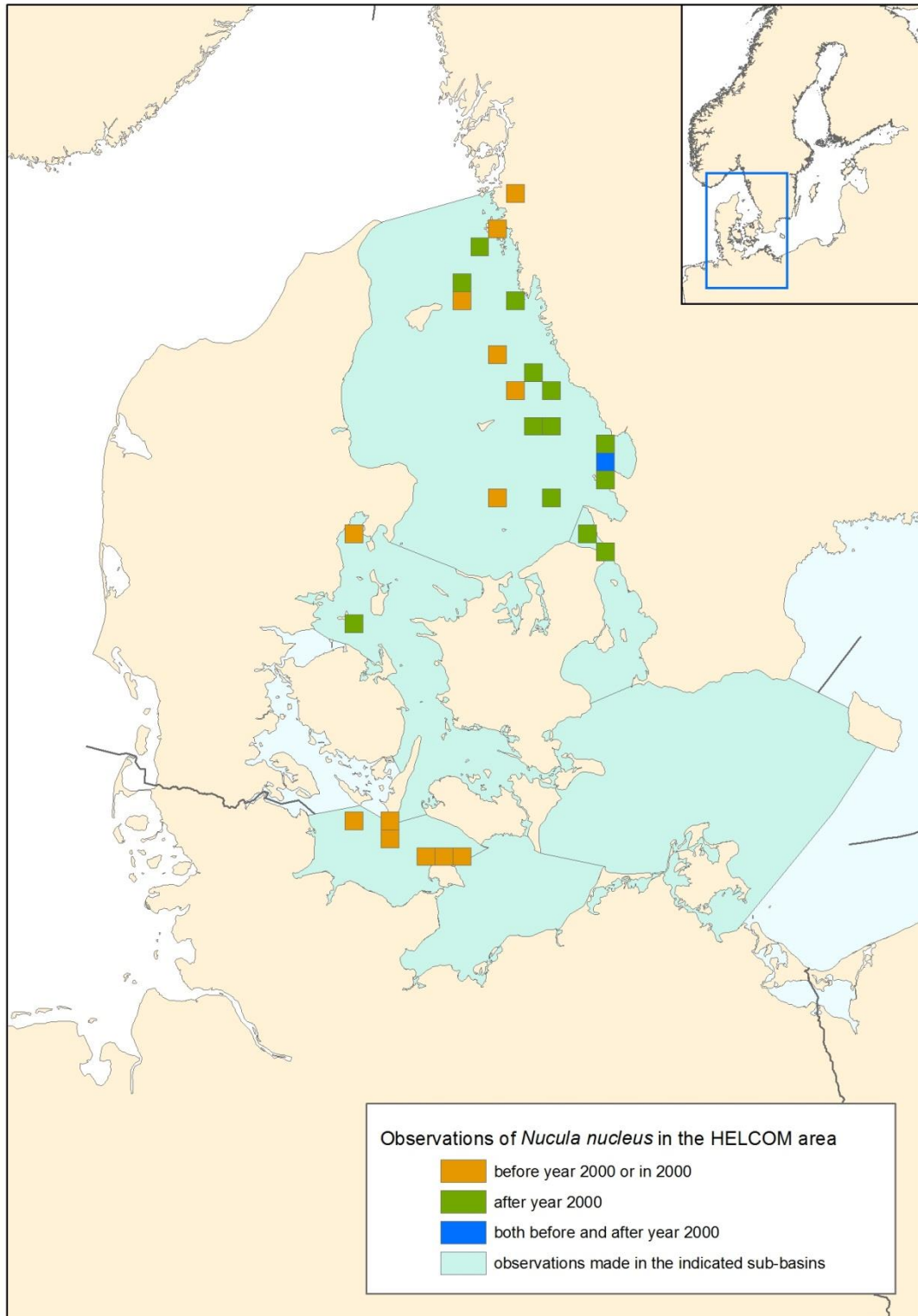


Nucula nucleus. Photo by Michael Zettler. Leibniz Institute for Baltic Sea Research Warnemünde (IOW).

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*Nucula nucleus***Distribution map**

The georeferenced records of species compiled from the Danish national database for marine data (MADS) and from the databases of the Swedish Species Information Centre (Artportalen), Swedish Meteorological and Hydrological Institute and the Leibniz Institute for Baltic Sea Research (IOW).



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Habitat and ecology

The species is a marine bivalve that lives on soft bottoms of the western HELCOM area (Hansson 1998). It prefers muddy or silty sands. It co-occurs very often with other species of *Nucula* (e.g. *tenuis* or *nitidosa*).

Description of major threats

Not known.

Assessment justification

The generation time of *N. nucleus* is estimated to be ca. 5–7 years. It appears that the species has declined at least in its southern range within the HELCOM area. The species has declined also in the North Sea (Rachor et al. 2013) but in Norway and in Sweden it was considered LC in the 2010 Red Lists. The decline in the HELCOM area can be observed e.g. in the extent of occurrences (EOO): the whole German distribution area has disappeared within the timeframe of three generations. The decline in the population size has been estimated to ca. 30–45% over three generations (comparing occurrences before and after 2000) although some of the data used is older than three generations. The species is categorized as Vulnerable (VU) according to A2c criterion. The reasons for the decline are not known.

Recommendations for actions to conserve the species

It is necessary to improve the knowledge of the biology of the species and of the pressures that have affected the population before any specific recommendations can be given.

Common names

Denmark: grøn nøddemusling, Estonia: –, Finland: –, Germany: Große Nussmuschel, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: –

References

- 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 der bodenlebenden wirbellosen Meerestiere. Naturschutz und Biologische Vielfalt 70(2) (in press).
- IOW database. Observational data from the database of the Leibniz Institute for Baltic Sea Research.
- MADS, The Danish national database for marine data. NERI: University of Aarhus; National Environmental Research Institute. Downloaded in June 2011.
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- SMHI database. Observational data for zoobenthos from the database of the Swedish Meteorological and Hydrological Institute, all observations 1971–2010. Downloaded in 9 April 2011.
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- World Register of Marine Species WoRMS. Available at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=140590>