RE

SPECIES INFORMATION SHEET

Abra prismatica

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English name: –	Scientific name: <i>Abra prismatica</i>		
Taxonomical group:	Species authority:	Species authority:	
Class: Bivalvia	Montagu, 1808	Montagu, 1808	
Order: Euheterodonta incertae sedis			
Family: Semelidae			
Subspecies, Variations, Synonyms:	Generation length:	Generation length:	
Abra fragilis Risso, 1826	-		
Ligula prismatica Montagu, 1808			
Past and current threats (Habitats Directive	Future threats (Habitats Directive article 17		
article 17 codes):	codes):	codes):	
Sedimentation caused by eutrophication	Sedimentation caused by eutrophication (H01.05)		
(H01.05) and fishing (bottom trawling;	and fishing (bottom trawl	and fishing (bottom trawling; F02.02.01),	
F02.02.01)	Construction (windmills;	Construction (windmills; C03.03)	
IUCN Criteria:	HELCOM Red List	VU	
B1ab(iii)+2ab(iii)	Category:	Vulnerable	
Global / European IUCN Red List Category	Habitats Directive:		
NE/NE	-		
Protection and Red List status in HELCOM count	tries:		
Denmark –/–, Estonia –/–, Finland –/–, German	y –/ D (Data deficient, incl. No	rth Sea), Latvia –/–,	
Lithuania –/–, Poland –/–, Russia –/–, Sweden –	-/NT		

Distribution and status in the Baltic Sea region

The main distribution of *Abra prismatica* within the HELCOM area is in the Kattegat. Most observations are from the Swedish part of the Kattegat, both along the coast and the shallow offshore banks. Outside the HELCOM area the species occurs in the Skagerrak, the North Sea and along the Norwegian coast down to the Mediterranean and the North-west coast of Africa. A comparison between historical and present Swedish data indicates a decline in distribution, in both the Skagerrak and Kattegat. The species seems to have declined primarily in its coastal distribution, and most present observations are from the shallow offshore banks in the Kattegat.



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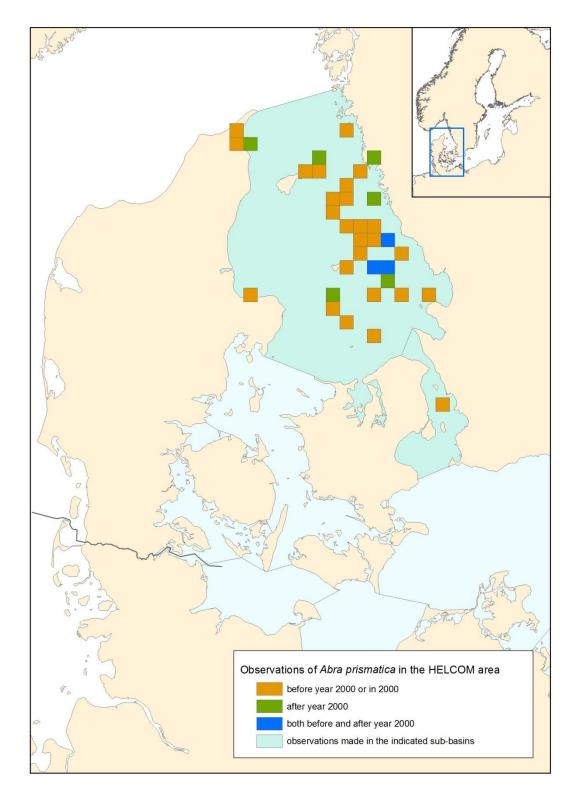
Distribution map

The georeferenced records of species compiled from the Danish national database for marine data (MADS), and from the databases of the International Council for the Exploration of the Sea (ICES), Swedish Meteorological and Hydrological Institute, and the species database of the Swedish Species Information Centre (Artportalen).

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Habitat and ecology

Abra prismatica is a relatively large (up to 13 mm long) mussel that is easy to identify. In the HELCOM area the species is found in relatively coarse and well oxygenated sandy bottoms. The species may also live in finer sand. In the HELCOM area the depth distribution is approximately 10–100 meters, but the preferred habitat of the species is probably found within 10–50 meters depth. *A. prismatica* is eaten by e.g. haddock and different species of flatfish. Otherwise little is known about the species ecology.

Description of major threats

Shallow sand bottoms with coarse material are within the HELCOM area today primarily found on the offshore banks in the Kattegat, and are thus quite rare and patchy. The major threats to the species' habitat are sedimentation, 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, primarily from the Swedish part of the Kattegat. These indicate a decrease in distribution in recent decades, particularly in coastal areas. Present extent of occurrence is estimated to 10 000 (7000–13000) km². The habitat is probably quite rare in the Kattegat and the area of occupancy is assumed to be limited. Furthermore, habitat quality is expected to continue to decline in quality, due to the severe sedimentation caused by eutrophication, trawling and other activities. Number of present locations is estimated to be less than 10. The estimated values are below the threshold for Vulnerable. In combination with few locations and continuing decline the B-criterion is thus fulfilled (B1ab(iii)).

Recommendations for actions to conserve the species

In general the negative effects of eutrophication and trawling on marine biotopes need to be reduced. Specifically shallow bottoms with sand and gravel need to be mapped, and when possible protected.

Common names

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

References

Bjelke, U., Gärdenfors, U., Karlsson, A., Agrenius, S., Berggren, M., Cedhagen, T., Hansson, H. G., Kautsky, H., Lundberg, S., Lundin, K., Lundälv, T., von Proschwitz, T., Schander, C. & Smith, S. 2010. Blötdjur – Molluscs. Mollusca. In Gärdenfors, U. (ed.) Rödlistade arter i Sverige 2010 – The 2010 Red List of Swedish Species. ArtDatabanken, SLU, Uppsala. P. 495–505. Red List categories available also at http://www.artfakta.se/GetSpecies.aspx?SearchType=Advanced

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International Council for the Exploration of the Sea ICES data portal. Available at <u>http://ecosystemdata.ices.dk/inventory/index.aspx</u>.

MADS, The Danish national database for marine data. NERI: University of Aarhus; National Environmental Research Institute. Downloaded in June 2011.

Marine Species Identification Portal. Available at <u>http://species-</u> identification.org/species.php?species_group=mollusca&id=516

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.



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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.

Swedish Species Gateway. Swedish Species Information Centre and Swedish Environmental Protection Agency. Available at <u>www.artportalen.se</u>.

