HELCOM MINISTERIAL MEETING COPENHAGEN 3 OCTOBER 2013

HELCOM Red List Species Information Sheets (SIS)
Benthic invertebrates

This document was a background document for the
2013 HELCOM Ministerial Meeting

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Baltic Marine Environment Protection Commission

SPECIES INFORMATION SHEET *Haploops tenuis*

English name: –	Scientific name: ***Haploops tenuis***	
Taxonomical group: Class: Malacostraca Order: Amphipoda Family: Ampeliscidae	Species authority: Kanneworff, 1966	
Subspecies, Variations, Synonyms: –	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Unknown (U)	Future threats (Habitats Directive article 17 codes): Unknown (U)	
IUCN Criteria: **B1ab(i,iii)+2ab(ii,iii)**	**HELCOM Red List Category:**	**EN Endangered**
Global / European IUCN Red List Category: NE / NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

Distribution and status in the Baltic Sea region

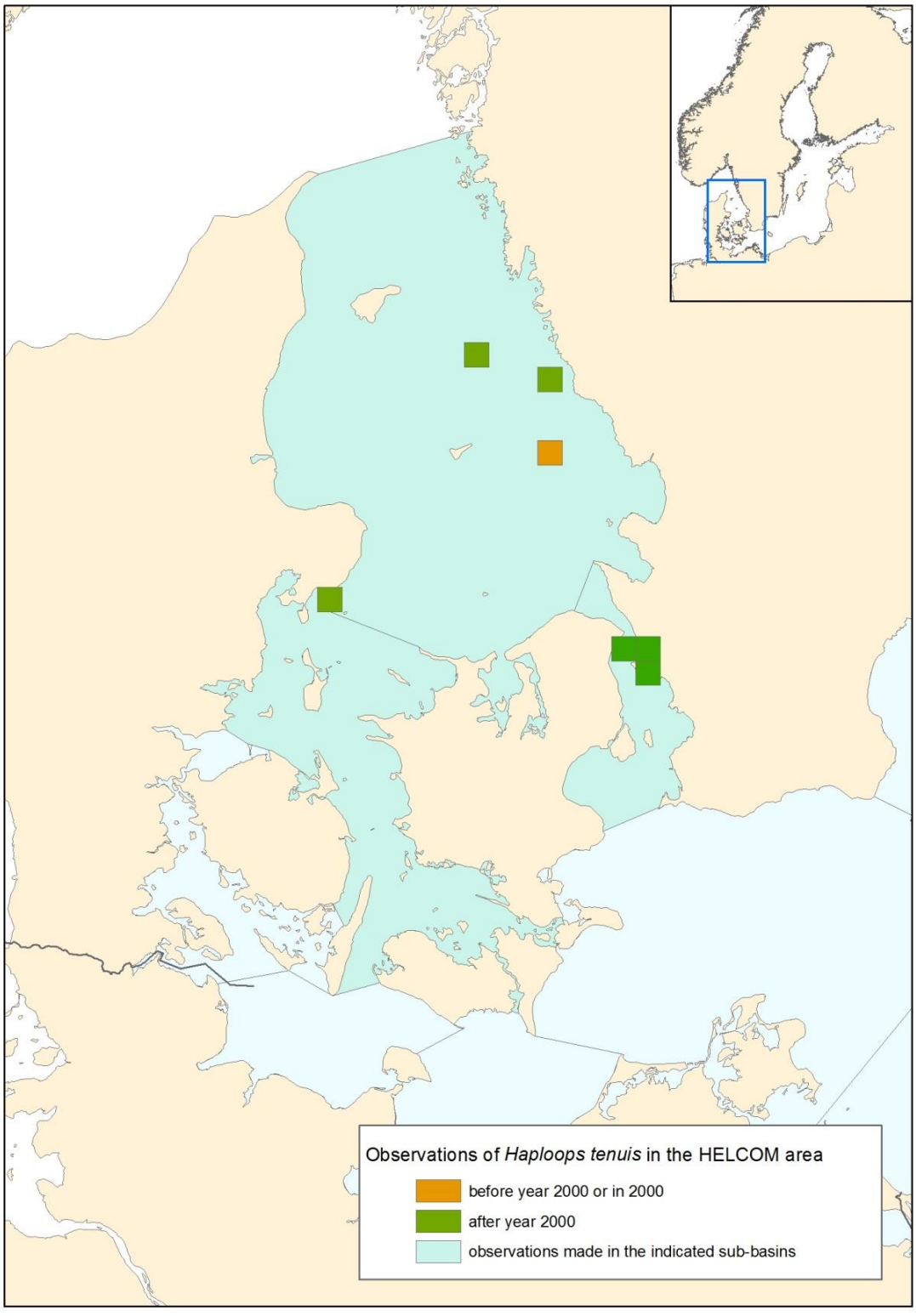
The main distribution of *H. tenuis* within the HELCOM area is in the Kattegat and Öresund. Outside the HELCOM area the species is reported from the Skagerrak, the North Sea and the coasts of Western and Northern Norway. Regular monitoring performed by Helsingborg municipality in the Swedish part of the Sound shows a continuous decline of the *Haploops* community since more than ten years. In 2012 barely any animals have been found at all. There is also a decline in the Skagerrak. The reason for the decline is, however, still unknown. Perhaps eutrophication in combination with increased water temperature plays a role but this is yet to be proven.

Haploops tenuis. Photo by Peter Göransson, Environmental Office, Helsingborg Municipality.

SPECIES INFORMATION SHEET *Haploops tenuis*

Distribution Map

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



SPECIES INFORMATION SHEET *Haploops tenuis*

Habitat and ecology

H. tenuis lives in what is called *Haploops* communities where they build tiny tubes made of clay and mud. The animals hide inside the tube with the tentacles peeking out. *Haploops* use these tentacles to filter the water. In this way they find tiny particles and plankton for food. The *Haploops* communities are very important for many other species and the community forms an important feeding ground for fish like the halibut (*Pleuronectes platessa, Reinharditus hippoglossiodes)*. An assumed depth range in the HELCOM area is 25–130 m.

Description of major threats

The reason for the observed decline of *Haploops tenuis* is not known. Bottom trawling may play a negative role, as this fishing method changes the structure of the sea floor. However, it is difficult to assign the decline in the Sound specifically to bottom trawling as this has been forbidden in the area for a long time. Eutrophication and/or climate change may also be key factors behind the species decline.

Assessment justification

The geographic range of *H. tenuis* is very restricted, and the estimated EOO and AOO fall below the threshold for Endangered (EN). Monitoring in the Sound shows a continuous decline of the *Haploops* community for the last decade, and other areas show similar patterns. The number of locations is estimated to be less than 5. Thus, the B-criterion for Endangered (EN) is fulfilled (B1ab(i,iii)+2ab(ii,iii)).

Recommendations for actions to conserve the species

It is difficult to suggest specific measures since the reason for the decline is not known. In general the negative effects of eutrophication and bottom trawling on marine biotopes need to be reduced.

Common names

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

References

Hansson, H.G. 1998. Sydskandinaviska marina flercelliga evertebrater. Utgåva 2.

Ifremer, Institut français de recherche pour l'exploitation de la mer. Available at wwz.ifremer.fr.

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The Sound Water Cooperation, website www.oresundsvand.dk.

World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=101957.

SPECIES INFORMATION SHEET *Abra prismatica*

English name: –	Scientific name: ***Abra prismatica***	
Taxonomical group: Class: Bivalvia Order: Euheterodonta incertae sedis Family: Semelidae	Species authority: Montagu, 1808	
Subspecies, Variations, Synonyms: *Abra fragilis* Risso, 1826 *Ligula prismatica* Montagu, 1808	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Sedimentation caused by eutrophication (H01.05) and fishing (bottom trawling; F02.02.01)	Future threats (Habitats Directive article 17 codes): Sedimentation caused by eutrophication (H01.05) and fishing (bottom trawling; F02.02.01), Construction (windmills; C03.03)	
IUCN Criteria: **B1ab(iii)+2ab(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 –/–, Germany –/**D** (Data deficient, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**NT**		

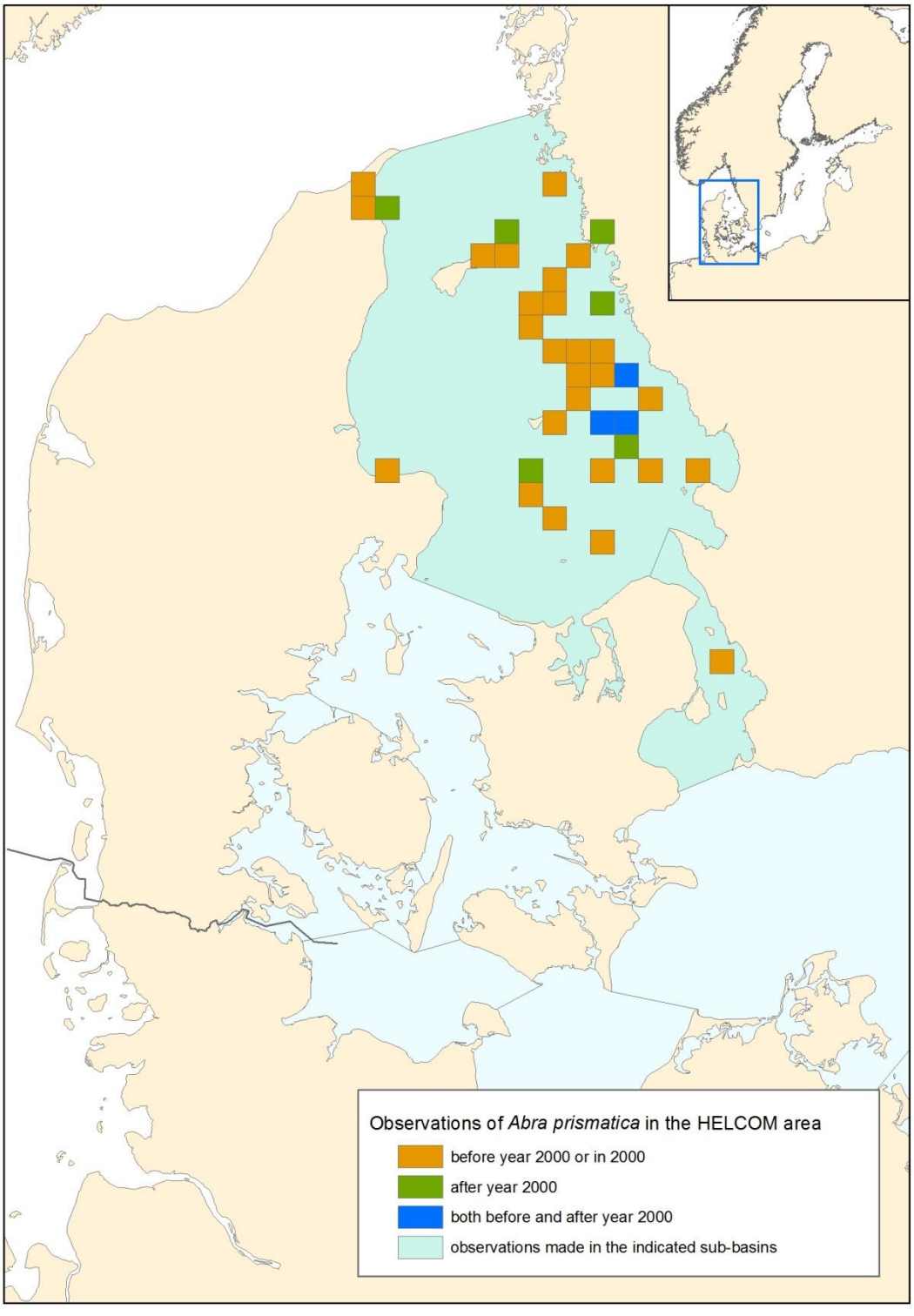
Distribution and status in the Baltic Sea region

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.

SPECIES INFORMATION SHEET *Abra prismatica*

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).



SPECIES INFORMATION SHEET *Abra prismatica*

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) km^2. 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)+2ab(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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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.

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 www.artportalen.se.

SPECIES INFORMATION SHEET *Atelecyclus rotundatus*

English name: **Circular crab/Old mans face crab**	Scientific name: ***Atelecyclus rotundatus***	
Taxonomical group: Class: Malacostraca Order: Decapoda Family: Atelecyclidae	Species authority: Olivi, 1792	
Subspecies, Variations, Synonyms: *Atelecyclus heterodon* Leach, 1815 *Atelecyclus septemdatus* Bouvier, 1940 *Cancer (Hippa) septemdatus* Montagu, 1813 *Cancer (Hippa) septemdentatus* Montagu *Cancer rotundatus* Olivi, 1792	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Sedimentation caused by eutrophication (H01.05) and bottom trawling (F02.0.2.01)	Future threats (Habitats Directive article 17 codes): Sedimentation caused by eutrophication (H01.05) and bottom trawling (F02.0.2.01)	
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 –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**VU**		

Distribution and status in the Baltic Sea region

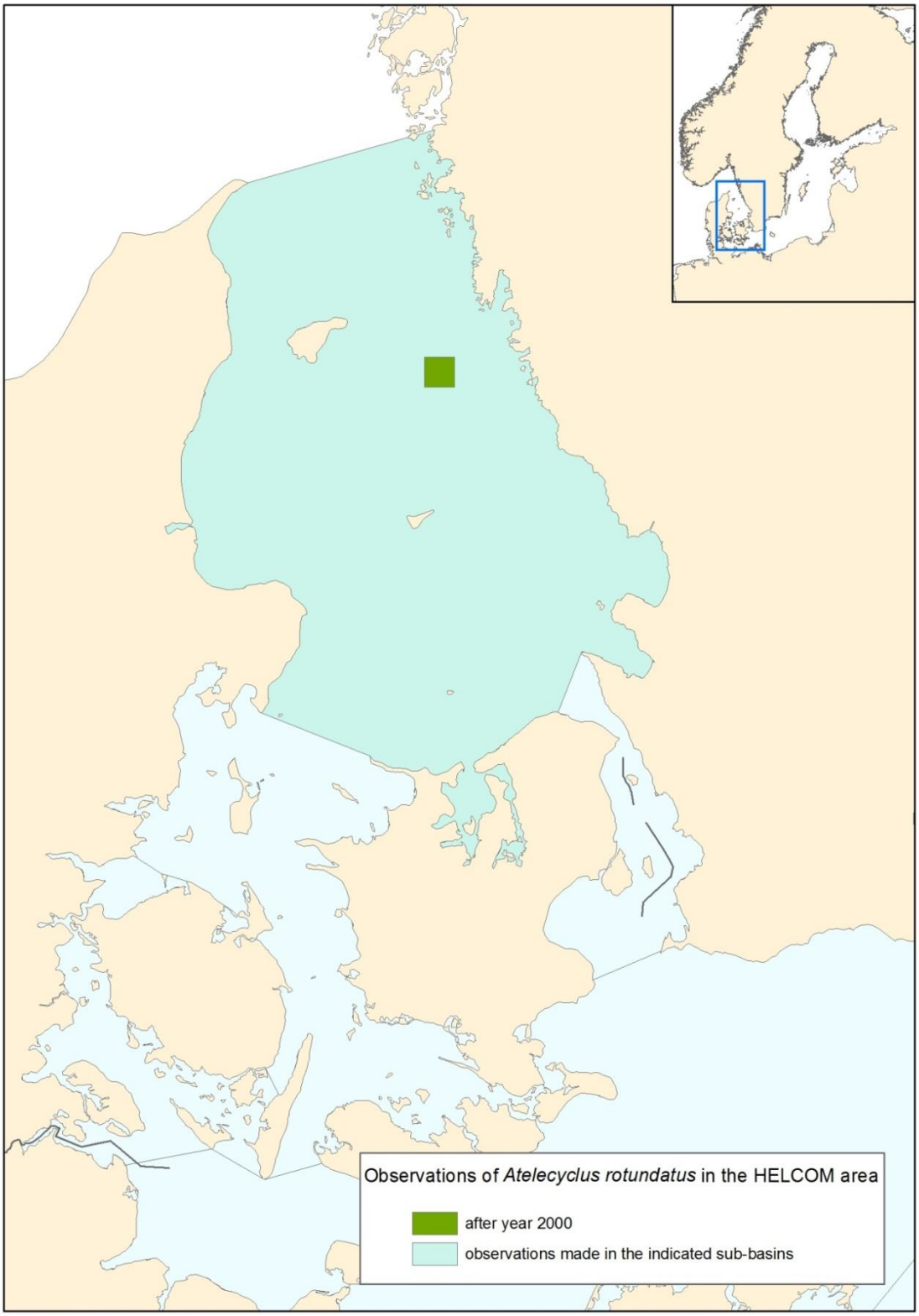
Within the HELCOM area *Atelecyclus rotundatus* is only reported from one locality on the offshore bank Fladen in the Kattegat. In the Skagerrak the species is reported from two localities within Swedish waters. No data from Denmark is available. Due to its habitat the species is naturally rare, and there are no indications of decline. However, the preferred habitat – gravel bottoms with sand – is sensitive to sedimentation caused by e.g. bottom trawling.

Atelecyclus rotundatus. Photo by Matz Berggren. University of Gothenburg, Biological and Environmental Sciences.

SPECIES INFORMATION SHEET *Atelecyclus rotundatus*

Distribution Map

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



SPECIES INFORMATION SHEET *Atelecyclus rotundatus*

Habitat and ecology

Atelecyclus rotundatus is a small crab with a characteristic appearance. Within the HELCOM area the species is extremely rare and has been found only from one offshore bank area. Therefore, not much is known about its ecology in the Baltic Sea region.

Outside the HELCOM region the species can be found from shallow sublittoral bottoms down to >300 m depth off-shore on sand or gravel substrates. *Atelecyclus rotundatus* bears eggs from February to September with planktonic larvae present from February to November. This species is eaten e.g. by *Gadus morhua* and *Raja* spp. *A. rotundatus* buries itself by digging backwards into the substrata, and reverses its respiratory water flow through its branchial chambers to prevent suffocation (Taylor, 1984). In order to maintain sufficient respiratory currents, this species holds its chelipeds close to its body creating a respiratory channel with the larger second antenna. When buried, its gill bailer (scaphognathite) beats in the opposite direction to normal, pumping water out at the base of the limbs instead of drawing water in (MarLIN).

Description of major threats

The habitat of the species, gravel bottoms with sand, is sensitive to sedimentation caused by e.g. trawling and eutrophication.

Assessment justification

The species appears to be reported only from one locality within the HELCOM area, but data is lacking from the Sound and Denmark. The preferred habitat is probably very rare within the HELCOM area, and the number of locations is therefore expected to be less than 5. The species is categorized as Vulnerable (VU) according to criteria D2.

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., Karlsson, A., Sandström, J., Agrenius, S., Berggren, H., Berggren, M., Cedhagen, T., Edsman, L., Hansson, H. G., Kautsky, H., Lingdell, P.-E., Lundin, K., Lundälv, K., Schander, C. & Smith, S. 2010. Kräftdjur – Crustaceans. Crustacea. In Gärdenfors, U. (ed.) Rödlistade arter i Sverige 2010 – The 2010 Red List of Swedish Species. ArtDatabanken, SLU, Uppsala. P. 487–493. Red List categories available also at http://www.artfakta.se/GetSpecies.aspx?SearchType=Advanced

Hansson, H.G. 1998. Sydskandinaviska marina flercelliga evertebrater. Utgåva 2.

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Rowley, S. 2007. *Atelecyclus rotundatus*. Circular crab. Marine Life Information Network: Biology and Sensitivity Key Information Sub-programme [on-line]. Plymouth: Marine Biological Association of the United Kingdom. [cited 07/08/2012]. Available at http://www.marlin.ac.uk/speciesinformation.php?speciesID=2674

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World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=107273

SPECIES INFORMATION SHEET *Clelandella miliaris*

English name: –	Scientific name: ***Clelandella miliaris***	
Taxonomical group: Class: Gastropoda Order: Vetigastropoda Family: Trochidae	Species authority: Brocchi, 1814	
Subspecies, Variations, Synonyms: *Jujubinus miliaris* Brocchi, 1814 *Trochus miliaris* Brocchi, 1814	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (H01.05)	Future threats (Habitats Directive article 17 codes): Eutrophication (H01.05)	
IUCN Criteria: **B1ab(i,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 –/–, Germany –/–, Latvia –/–, Lithuania –/–-, Poland –/–, Russia –/–, Sweden –/**VU**		

Distribution and status in the Baltic Sea region

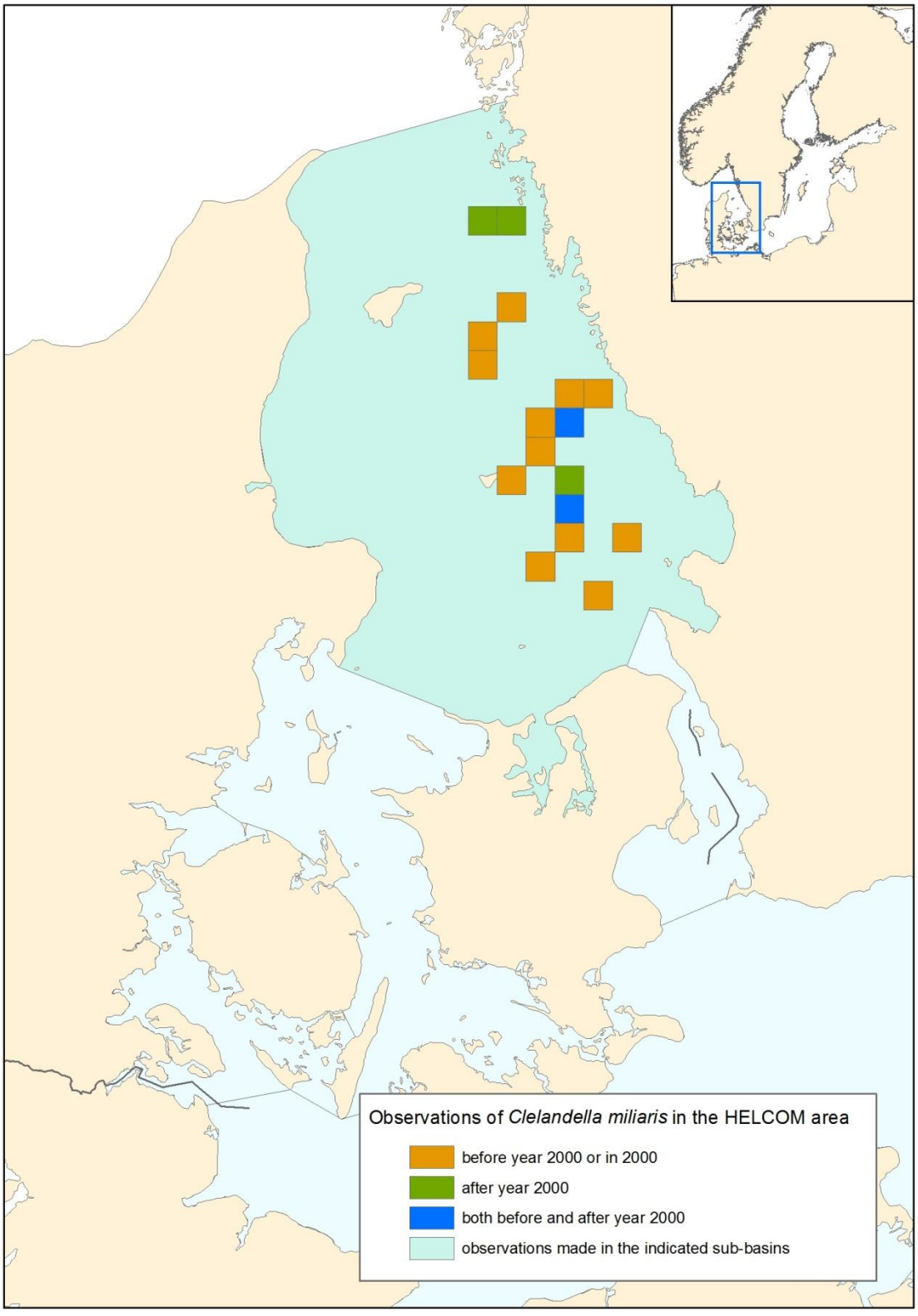
The known distribution of *C. miliaris* within the HELCOM area is along the Swedish coasts of the Kattegat and the shallow offshore banks in the Kattegat. It is unclear whether the species distribution includes the Danish belts. Outside the HELCOM area the species occurs in the Skagerrak and the northern North Sea. A comparison between historical and present Swedish data indicates a sharp decline in distribution, both in the Skagerrak and the coastal Kattegat. However, the offshore bank populations seem relatively stable.

Outside the HELCOM area, the species is distributed from the Mediterranean to north to Norway. It is more common in the northern part of its range, and it is absent from the eastern basin of the English Channel.

SPECIES INFORMATION SHEET *Clelandella miliaris*

Distribution Map

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



SPECIES INFORMATION SHEET *Clelandella miliaris*

Habitat and ecology

Clelandella miliaris reaches 12–18 mm in length. The shell is sharply pointed, forming a nearly regular cone. It lives on stone or gravel bottoms, and has been found in depths of 30–150 m. Little is known about the species ecology, but the larvae probably have direct development, which limits the species ability to disperse and recolonize.

Description of major threats

The habitat of *Clelandella miliaris* has probably decreased in quality, especially in coastal areas, due to the severe eutrophication in the Kattegat and surrounding areas.-

Assessment justification

Only limited data are available. These indicate a sharp decrease in distribution within the Kattegat, primarily in coastal areas. The decrease is probably caused by eutrophication, which reduces the quality of the coastal habitats. Number of locations is estimated to be less than 10. The species is thus redlisted as Vulnerable (VU) B1ab(i,iii).

Recommendations for actions to conserve the species

In general the negative effects of eutrophication on marine biotopes need to be reduced. As stone and gravel bottoms are sensitive to sedimentation, they need to be mapped and when possible protected. More information on the species distribution and ecology is needed.

Common names

Denmark: stor topsnegl, Estonia: –, Finland: –, Germany: –, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: granulerad toppsnäcka

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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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=141774

SPECIES INFORMATION SHEET *Cliona celata*

English name: **Yellow Boring Sponge**	Scientific name: ***Cliona celata***	
Taxonomical group: Class: Demospongiae Order: Hadromerida Family: Clionaidae	Species authority: Grant, 1826	
Subspecies, Variations, Synonyms: *Rhaphyrus griffithsii* 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

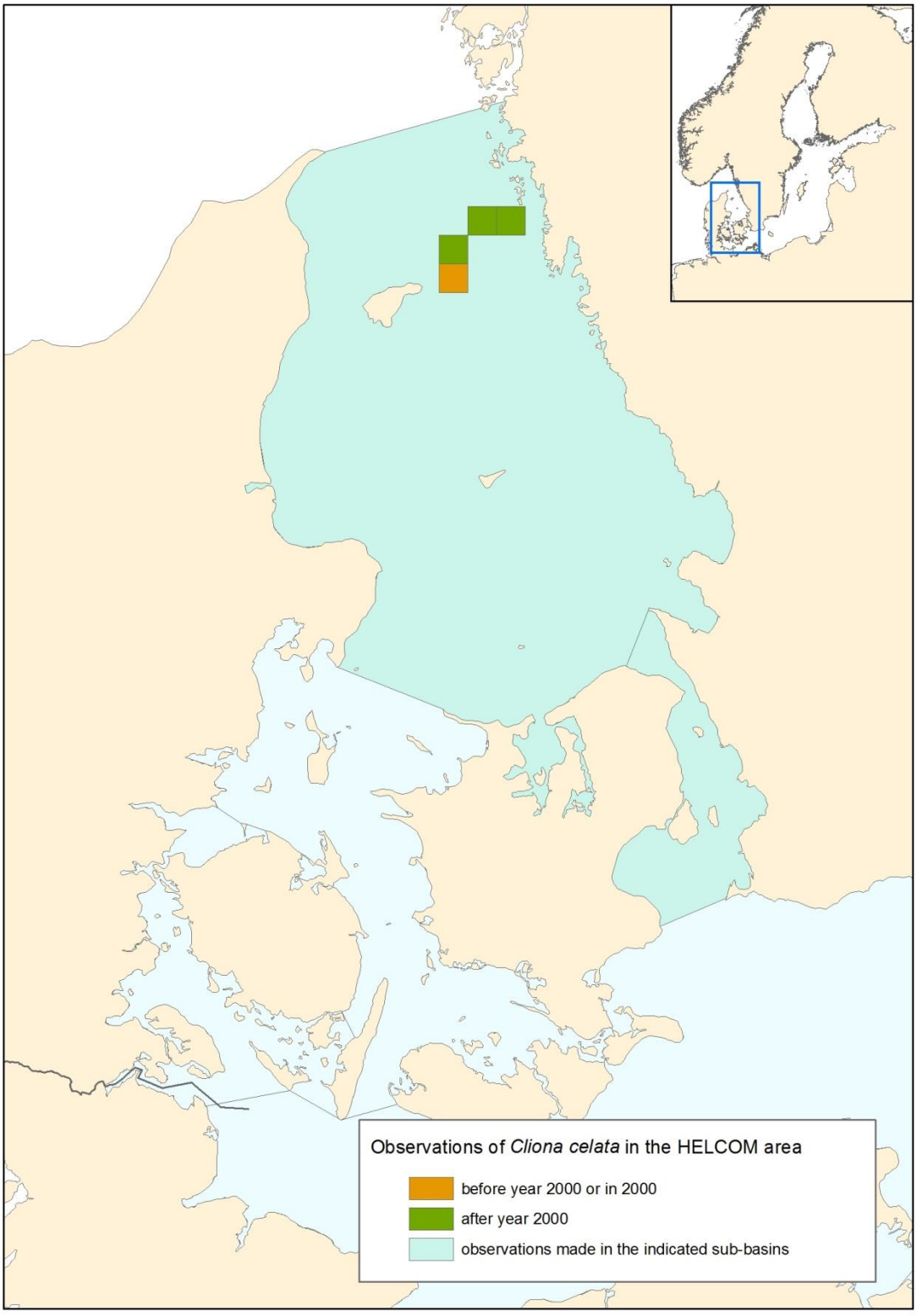
Within the HELCOM area *C. celata* is reported from two offshore banks in the Kattegat, and from Öresund. Outside the area the species occurs in Norway but is absent from the North Sea. It is widely distributed along the Western European coastlines. The massive form is very common in parts of south-western 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.

SPECIES INFORMATION SHEET

Cliona celata

Distribution map

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



SPECIES INFORMATION SHEET *Cliona celata*

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. Sydskandinaviska 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

SPECIES INFORMATION SHEET *Deshayesorchestia deshayesii*

English name: –	Scientific name: ***Deshayesorchestia deshayesii***	
Taxonomical group: Class: Malacostraca Order: Amphipoda Family: Talitridae	Species authority: (Audouin, 1826)	
Subspecies, Variations, Synonyms: *Orchestia deshayesii* Audouin, 1826 *Talorchestia deshayesi* (Audouin, 1826) *Talorchestia deshayesii* (Audouin, 1826)	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Potentially tourism (G05.01, G05.05) and construction (e.g. J02.12.01)	Future threats (Habitats Directive article 17 codes): Potentially tourism (G05.01, G05.05) and construction (e.g. J02.12.01)	
IUCN Criteria: **B2ab(iii)**	**HELCOM Red List Category:**	**VU Vulnerable**
Global / European IUCN Red List Category –	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**G** (endangered by unknown extent, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

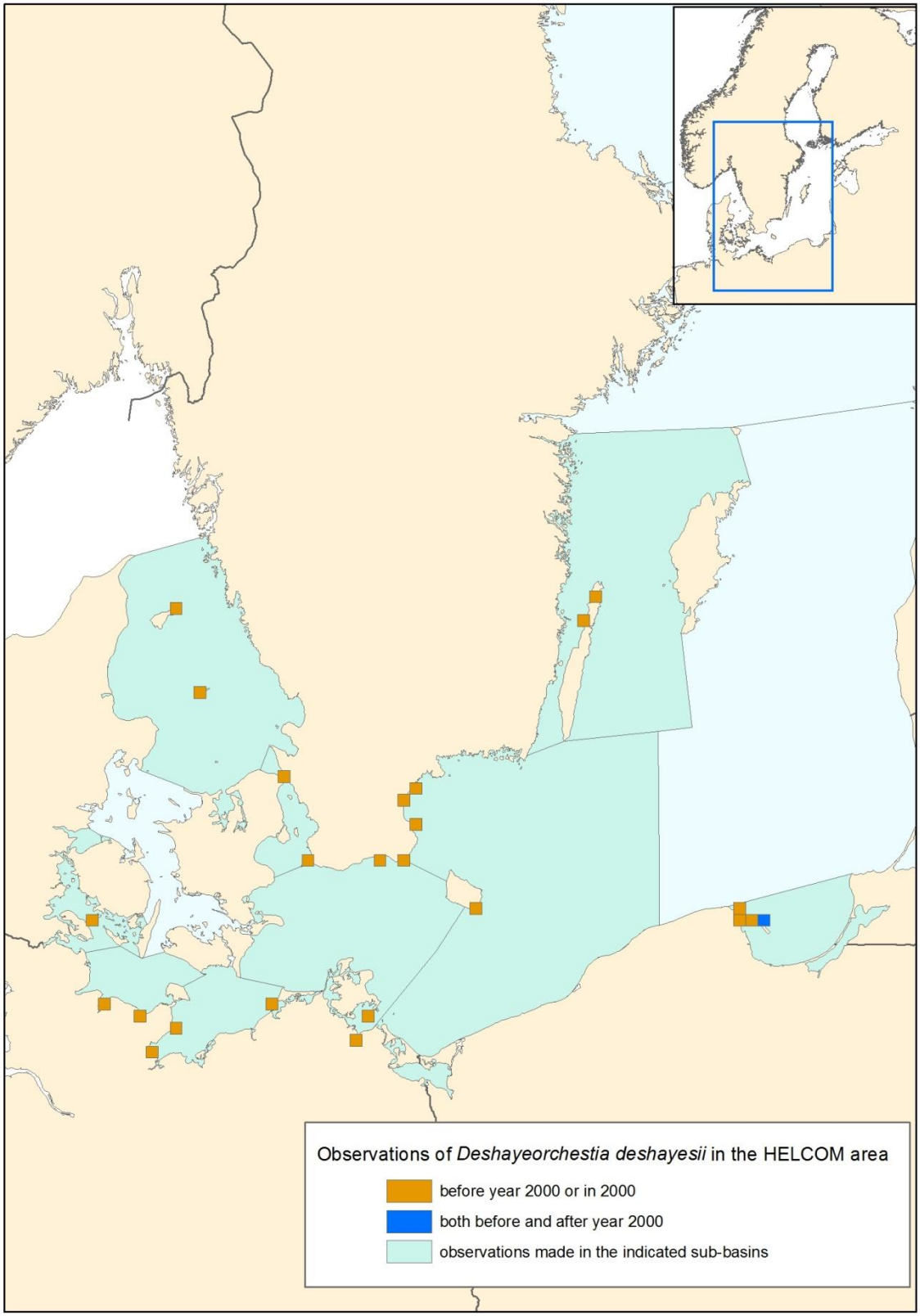
Distribution and status in the Baltic Sea region

The historical distribution of *Deshayesorchestia deshayesii* within the HELCOM area extends from the Kattegat, to the German Baltic coast, the islands of Bornholm, Öland and Gotska Sandön, and to the Gulf of Gdansk. Recent locations are restricted only to the northern shore of the Puck Bay (beaches along the Hel Peninsula) where relatively stable population can be found.

SPECIES INFORMATION SHEET *Deshayesorchestia deshayesii*

Distribution map

The georeferenced records of species obtained from the database of the Leibniz Institute for Baltic Sea Research (IOW), where also the Polish literature and monitoring data have been stored, and from Dahl (1946) and Forsman (1956).



SPECIES INFORMATION SHEET *Deshayesorchestia deshayesii*

Habitat and ecology

The species is a supralittoral amphipod usually found on sandy beaches beneath or amongst debris and decaying algae deposited at the high water mark or during the day it may be buried at depths between 10-30 cm in the substratum. It can co-occur with *Talitrus saltator*.

Description of major threats

The population has declined most likely due to effects of beach tourism, such as trampling and cleaning of beaches, coastal defence (concrete constructions replacing natural sandy beaches) and other activities/constructions altering natural beach structure.

Assessment justification

The known occurrences of *D. deshayesii* after 2000 are restricted to only one area - the northern shores of the Puck Bay. The next most recent finding is from Öland in 1998. Otherwise there are no recent records from Germany, Denmark and Sweden - only historical data from 1930s and 1940s. This may indicate a strong decline in both EOO and AOO but on the other hand the lack of recent data may also be caused by lack of sampling. However, in Germany there have been targeted inventories, in which *D. deshayesii* should have been found. The habitat of the species in itself, i.e. sandy beaches, is not rare within the HELCOM area but it is known how sensitive exactly the species is in regard to various human activities that affect the beaches. Using only recent data would indicate the highest threat categories for the species but as it is quite likely that it has not been properly searched for in most countries, it is believed that the most plausible range for the overall AOO would be 500–2000 km^2. Additionally it is assumed that the current population is severely fragmented and also continuingly declining. The continuing decline is assumed to concern at least the quality of habitat but it may concern also area of occupancy, number of locations, and extent of occurrences. The species is categorized as Vulnerable (VU) according to B2ab(iii).

Recommendations for actions to conserve the species

As the main threats are not well understood and even the status of the species is uncertain, it is difficult to give specific recommendations. The knowledge of the species distribution and status should be improved. The species might benefit also from restrictions of use of sandy beaches, as well as their protection from any construction activities.

Common names

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

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SPECIES INFORMATION SHEET *Epitonium clathrus*

English name: **Common wentletrap/European wentletrap**	Scientific name: ***Epitonium clathrus***	
Taxonomical group: Class: Gastropoda Order: Hypsogastropoda Family: Epitoniidae	Species authority: Linnaeus, 1758	
Subspecies, Variations, Synonyms: *Clathrus clathrus* (Linnaeus, 1758) *Scala clathrus* (Linnaeus, 1758) *Turbo clathrus* Linnaeus, 1758	Generation length: Linnaeus, 1758	
Past and current threats (Habitats Directive article 17 codes): Sedimentation caused by eutrophication (H01.05) and fishing (bottom trawling; F02.02.01)	Future threats (Habitats Directive article 17 codes): Sedimentation caused by eutrophication (H01.05) and fishing (bottom trawling; F02.02.01)	
IUCN Criteria: **B1ab(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 –/–, Germany –/**D** (Data deficient, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**LC**		

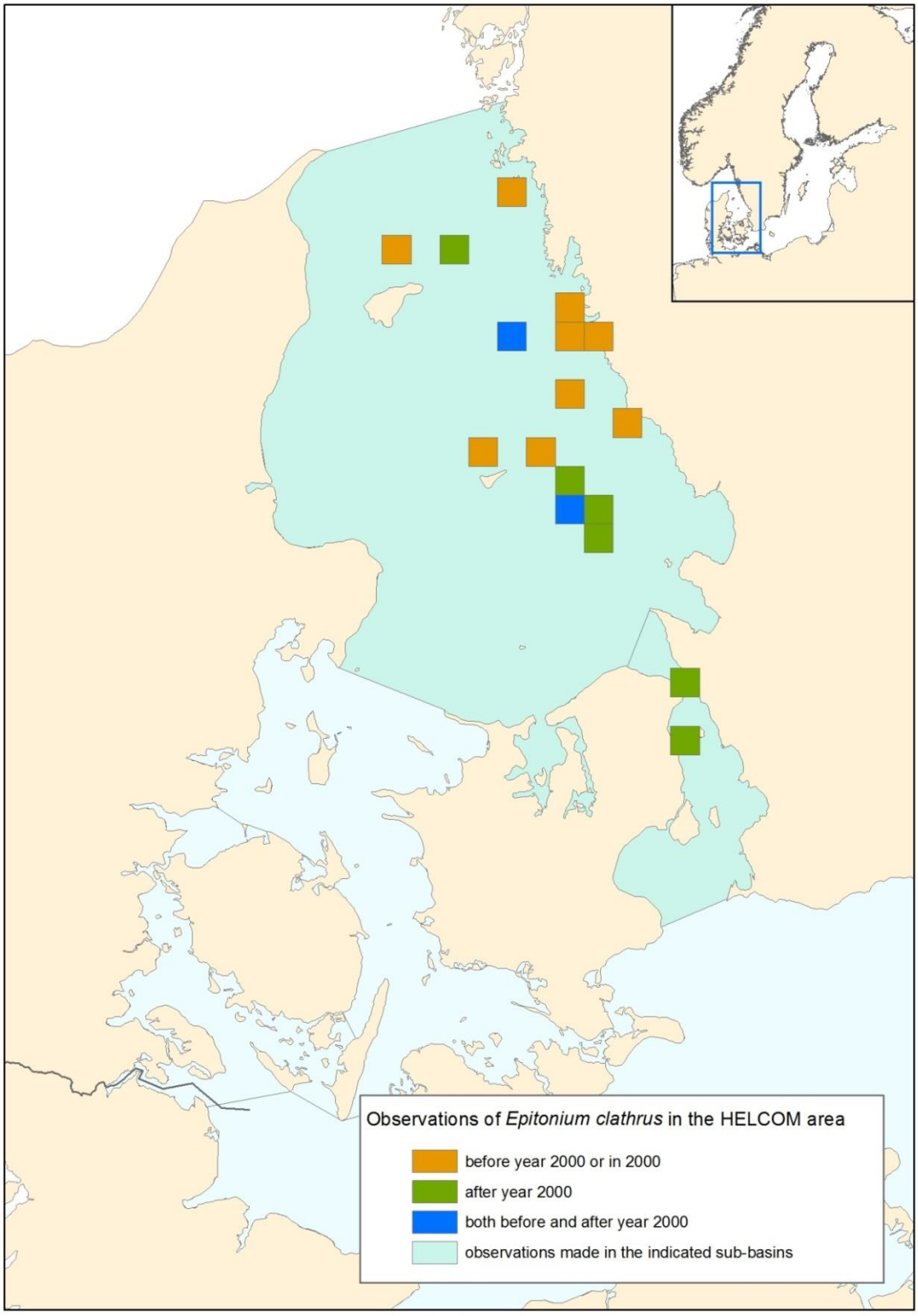
Distribution and status in the Baltic Sea region

Within the HELCOM area the main distribution area is in the Kattegat. The species is also sparsely reported from the Sound region. Outside the HELCOM area the species is reported from the Skagerrak and the North Sea and is distributed from the Mediterranean to Norway as well as around the British Isles and Helgoland. However, live specimens are only rarely found. A comparison between historical and present Swedish data indicates a decline in distribution both in the Skagerrak and the Kattegat.

SPECIES INFORMATION SHEET *Epitonium clathrus*

Distribution map

The georeferenced records of species compiled from the databases of the Swedish Species Information Centre (Artportalen) and Swedish Meteorological and Hydrological Institute.



SPECIES INFORMATION SHEET *Epitonium clathrus*

Habitat and ecology

Epitonium clathrus has a characteristic tall shell, with swollen whorls forming spiral keels. It may reach a height of up to 40 mm high. The species is found on sandy and muddy sediments down to 70 m. *E. clathrus* is a sublittoral species which migrates onto the lower shore during the spring and summer to spawn when it may be found at the lowest water line It feeds on sea anemones. The species is a consecutive hermaphrodite, changing sex each season. The egg capsules, which are attached to sand grains, hatch into veliger larvae.

Description of major threats

The quality of the habitat is decreasing, most probably through sedimentation caused by eutrophication and bottom trawling.

Assessment justification

The estimated extent of present occurrence in the Kattegat is less than 20 000 km^2, and the number of locations estimated to be less than 10. The restricted geographic range together with continuing decline in habitat quality and number of locations qualifies for the category Vulnerable (VU) according to 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. More information on the species present distribution and status within the HELCOM area is needed.

Common names

Denmark: almindelig vindeltrappesnegl, Estonia: –, Finland: –, Germany: gemeine Wendeltreppe / unechte Wendeltreppe, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: vindeltrappa

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SPECIES INFORMATION SHEET *Haploops tubicola*

English name: –	Scientific name: ***Haploops tubicola***	
Taxonomical group: Class: Malacostraca Order: Amphipoda Family: Ampeliscidae	Species authority: Liljeborg, 1855	
Subspecies, Variations, Synonyms: *Haploops carinata* Liljeborg, 1856 *Haploops spinosa* Shoemaker, 1931	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Unknown (U)	Future threats (Habitats Directive article 17 codes): Unknown (U)	
IUCN Criteria: **B1ab(i,iii)+2ab(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 –/–, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

Distribution and status in the Baltic Sea region

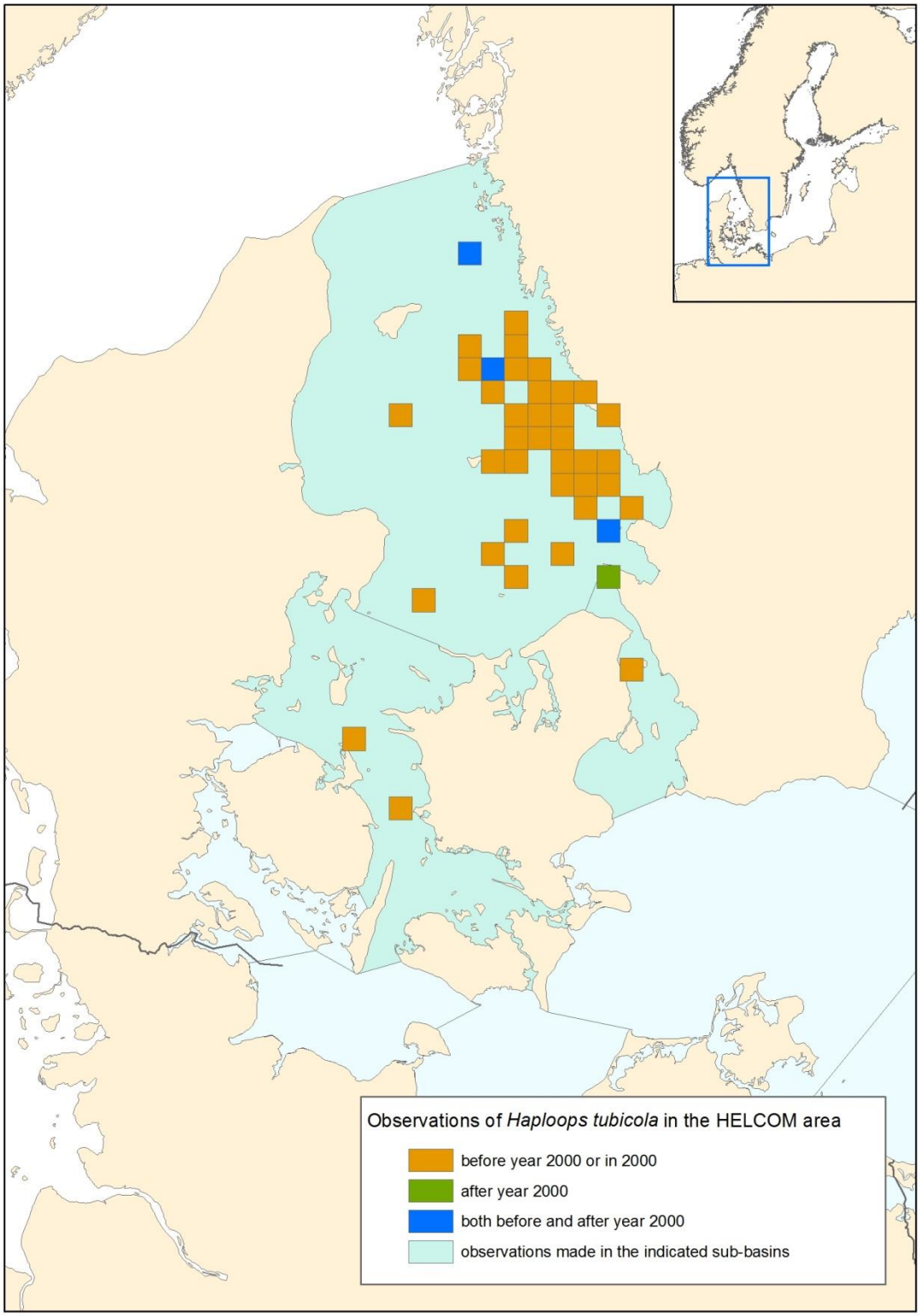
The main distribution of *H. tubicola* within the HELCOM area is in the Kattegat and Öresund, but there are also sites in the Great Belt. The species is reported also from the Skagerrak and the North Sea. Regular monitoring performed by Helsingborg municipality in the Swedish part of the Sound shows a continuous decline of the *Haploops* community since more than ten years. In 2012, almost no animals were found at all. There is also a decline in the Skagerrak. The reason for the decline is, however, still unknown. Perhaps eutrophication in combination with increased water temperature plays a role, but this is yet to be proven. Elsewhere the species is found in the Arctic Ocean where it is circumpolar, in the North Pacific, North Atlantic, as well as the Atlantic coast of Europe from Norway to Mediterranean and the Adriatic.

Haploops tubicola female. Photo by Peter Göransson, Environmental Office, Helsingborg Municipality.

SPECIES INFORMATION SHEET *Haploops tubicola*

Distribution Map

The records of species compiled from the databases of the Swedish Species Information Centre and the Leibniz Institute for Baltic Sea Research (IOW).



SPECIES INFORMATION SHEET *Haploops tubicola*

Habitat and ecology

H. tubicola lives in what is called *Haploops* communities where they build tiny tubes made of clay and mud. The animals hide inside the tube with the tentacles peeking out. *Haploops* use these tentacles to filter the water. In this way they find tiny particles and plankton for food. Depth range is from 10 to 1200 metres in other oceans, but in the HELCOM area the range is probably 20–130 m. The *Haploops* communities are very important for many other species and the community forms an important feeding ground for fish like the halibut (*Pleuronectes platessa, Reinharditus hippoglossiodes)*.

Description of major threats

The reason for the observed decline of *Haploops tubicola* is not known. Bottom trawling may play a negative role, as this fishing method changes the structure of the sea floor. However, it is difficult to assign the decline in the Sound specifically to bottom trawling as this has been forbidden in the area for a long time. Eutrophication and/or climate change may also be key factors behind the species decline.

Assessment justification

The geographic range of H. *tubicola* is very restricted, and the estimated EOO and AOO fall below the threshold for Vulnerable (VU). Monitoring in the Sound shows a continuous decline of the *Haploops* community for the last decade, and other areas show similar patterns. The number of locations is estimated to be less than 10. Thus, the B-criterion for Vulnerable (VU) is fulfilled (B1ab(i,iii)+2ab(ii,iii)).

Recommendations for actions to conserve the species

It is difficult to suggest specific measures since the reason for the decline is not known. In general the negative effects of eutrophication and bottom trawling on marine biotopes need to be reduced

Common names

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

References

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SPECIES INFORMATION SHEET *Hippasteria phrygiana*

English name: **Rigid cushion star**	Scientific name: ***Hippasteria phrygiana***	
Taxonomical group: Class: Asteroidea Order: Valvatida Family: Goniasteridae	Species authority: Parelius, 1768	
Subspecies, Variations, Synonyms: *Asterias equestris* Linnaeus, 1758 *Asterias phrygiana* Parelius, 1768	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), Climate change (M)	
IUCN Criteria: **B1ab(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 –/–, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**NT**		

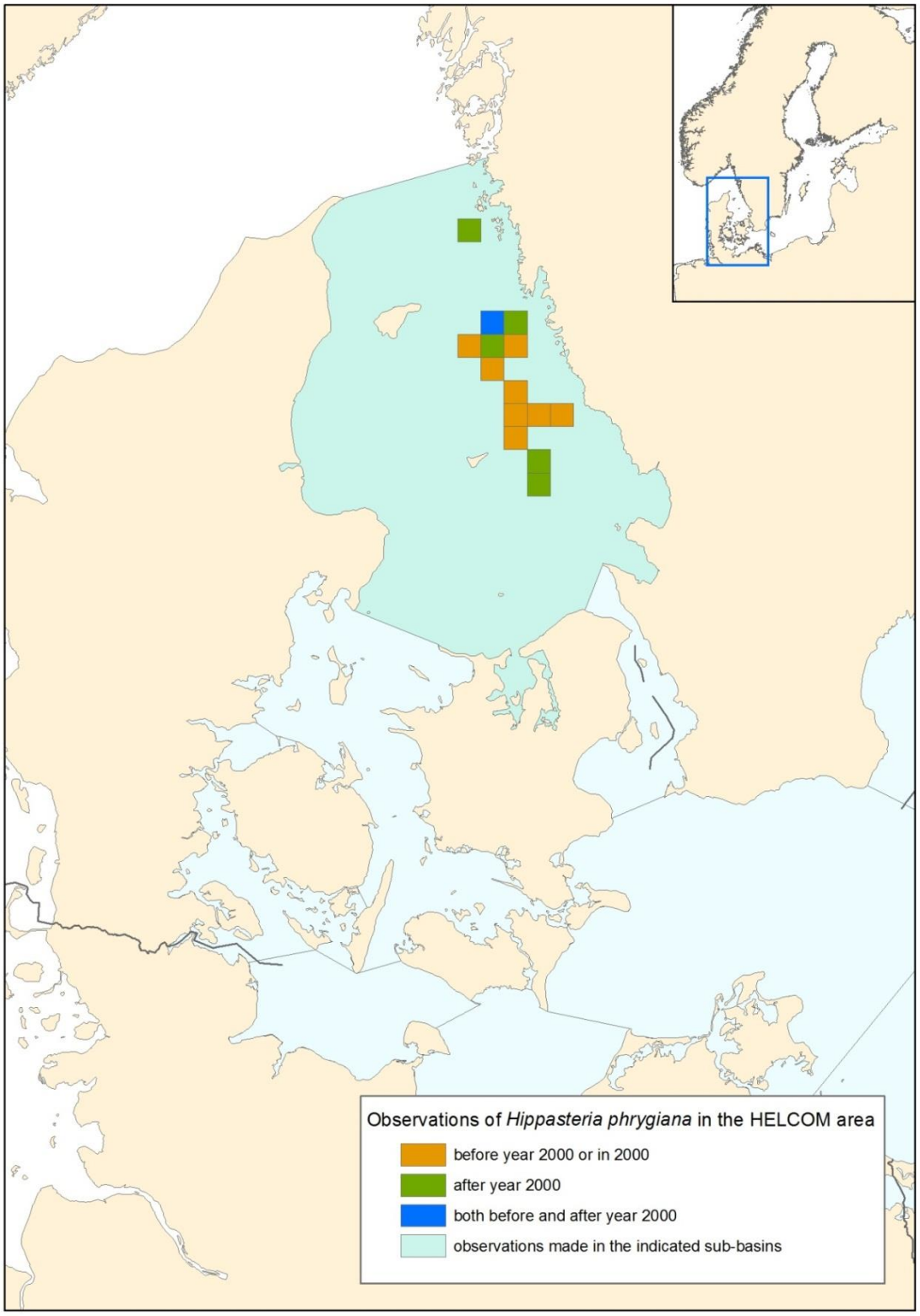
Distribution and status in the Baltic Sea region

The main distribution of H. *phrygiana* within the HELCOM area is in the Kattegat. The species has also been reported from the Öresund (Knähaken) during the 1960s, but has not been found in the area since. North of the Kattegat the species is reported from the Skagerrak and the North Sea. It also occurs along the Norwegian coast. The species requires cold water with a high salinity (33 psu), and is probably quite rare in the Kattegat. It has primarily been found on the shallow offshore banks in the Kattegat. In addition sporadic observations are reported from Swedish fisheries. In the North Sea, the species occurs from the Shetland Islands down to Northumberland on the British east coast. Elsewhere it is northerly distributed from Scotland to Greenland, Iceland and Finnmark in Norway.

SPECIES INFORMATION SHEET *Hippasteria phrygiana*

Distribution map

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



SPECIES INFORMATION SHEET *Hippasteria phrygiana*

Habitat and ecology

Hippasteria phrygiana is a large and conspicuous cushion-like starfish. It seems to be rather rare throughout its range, and its ecology is thus not that well known. *H. phrygiana* can occur on both hard or sandy/muddy bottoms, from 20 meters down to 400 meters depth in other oceans (down to 100 m in the HELCOM area). It requires a medium salinity of 33 psu, and primarily occurs in colder water. It probably feeds on other echinoderms and on bivalves. The larvae probably have direct development, which limits the species ability to disperse and recolonize.

Description of major threats

As the species requires cold water with high salinity, climate change is likely to affect it negatively within the HELCOM area. Furthermore, the species prime locations in the Kattegat (i.e. offshore banks) are sensitive to sedimentation caused by eutrophication and trawling.

Assessment justification

A comparison between Swedish historical and present data indicates a small decline in distribution. In addition, the species was previously present in Öresund, but is no longer found there. Estimated extent of occurence (EOO) in the Kattegat is 2 000 (1000–6000) km^2, and number of locations estimated to be 4 (3–5). The restricted geographic range together with continuing decline in habitat quality qualifies for the category Vulnerable (VU) according to B1ab(iii).

Recommendations for actions to conserve the species

It is difficult to suggest specific measures for *H. phrygiana* but its population in the HELCOM area would probably benefit from any actions that could slow down global warming. Since the species depend on cold water with high salinity the population in the Kattegat, it may go extinct when water temperature increases.

Common names

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

References

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SPECIES INFORMATION SHEET *Hippolyte varians*

English name: **Chamaeleon prawn**	Scientific name: ***Hippolyte varians***	
Taxonomical group: Class: Malacostraca Order: Decapoda Family: Hippolytidae	Species authority: Leach, 1814	
Subspecies, Variations, Synonyms: –	Generation length:	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (by deterioration of algal belts; H01.05)	Future threats (Habitats Directive article 17 codes): Eutrophication (by deterioration of algal belts; H01.05)	
IUCN Criteria: **B1ab(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 –/–, Germany –/**D** (Data deficient, Incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**VU**		

Distribution and status in the Baltic Sea region

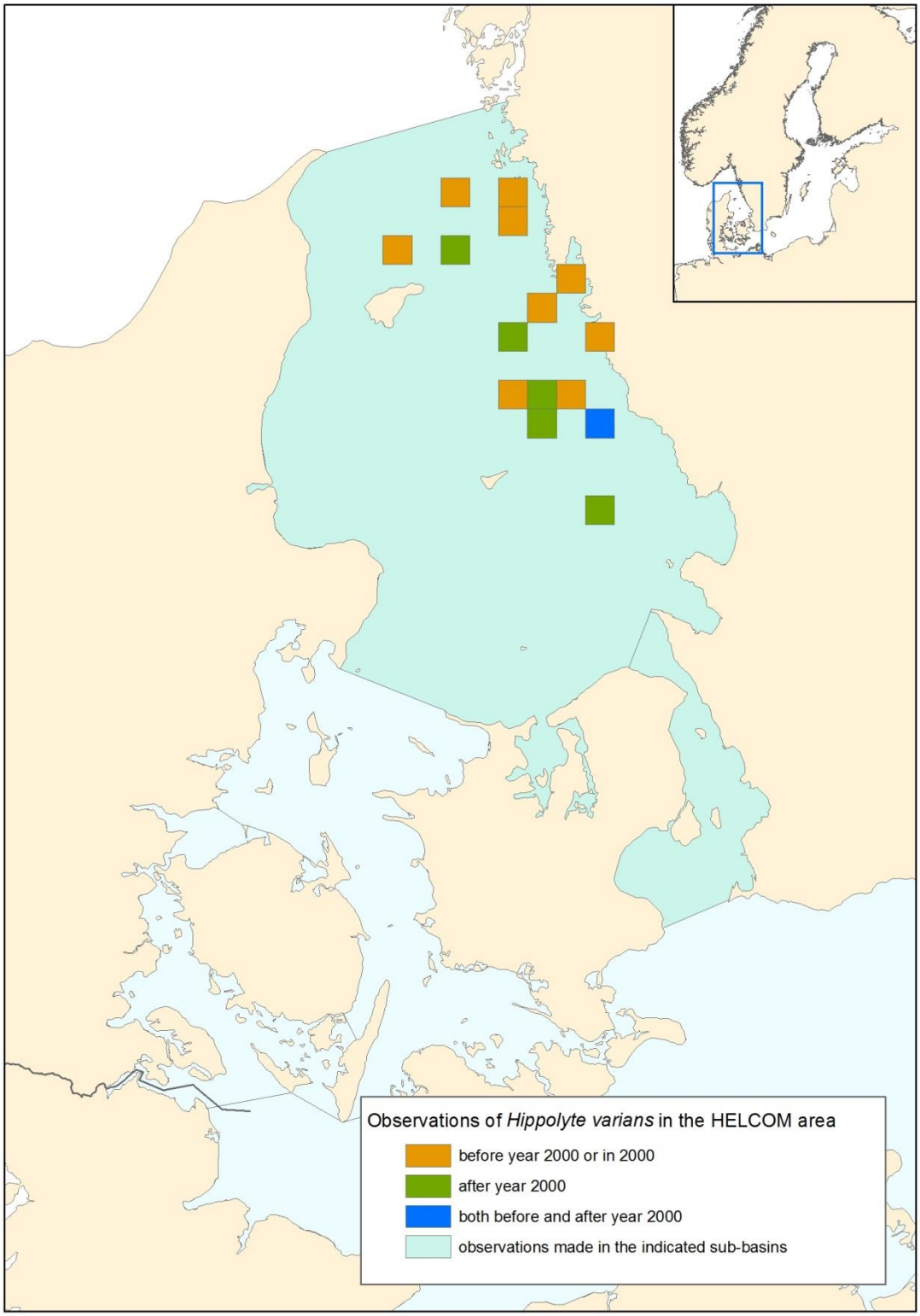
The main distribution area of *H. varians* within the HELCOM area is in the Kattegat, primarily the shallow offshore banks. The species is also reported from the Swedish part of Öresund but the data for these observations has not been available. Outside the HELCOM area the species occurs in the Skagerrak, and is reported from the Norwegian coast up to Västlandet. A comparison between historical and present Swedish data indicates a decline in distribution, both in the Skagerrak and the Kattegat, primarily in coastal areas.

Hippolyte varians. Photo by Matz Berggren. University of Gothenburg, Biological and Environmental Sciences.

SPECIES INFORMATION SHEET *Hippolyte varians*

Distribution map

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



SPECIES INFORMATION SHEET *Hippolyte varians*

Habitat and ecology

Hippolyte varians is a prawn belonging to the family Hippolytidae. It is very variable in colour, and may reach a size of 30 mm. The species is found amongst algae in the algal belt, most commonly on brown algae like *Halidrys siliquosa*. Deeper down it can also be found on red algae, and below the algal belt it has been found on both Dead men's fingers *Alcyonium digitatum* and the feather star *Antedon bifida*. *H. varians* may sometimes be parasitized by the isopod *Bopyrina ocellata.* Around the British Isles the species appears to breed practically throughout the year as egg-bearing females have been found in all months. The ecology in Scandinavian waters is less well known.

Description of major threats

The species is probably negatively affected by eutrophication, which causes deterioration of coastal algal belts.

Assessment justification

Only limited data has been available and all of that has been from Swedish sources. These indicate a decrease in distribution, primarily in coastal areas. The species' present distribution within the HELCOM area seems to be primarily on the shallow offshore banks in the Kattegat. The estimated extent of occurrence (EOO) in the Kattegat is 4 000 km^2 (2000–6000), and the number of locations is estimated to be 5 (3–7). The restricted geographic range together with continuing decline in habitat quality qualifies for the category Vulnerable (VU) according to B1ab(iii).

Recommendations for actions to conserve the species

The emission of eutrophicating substances to the marine environment need to be reduced.

Common names

Denmark: kamæleonreje, Estonia: –, Finland: –, Germany: farbwechselnde Garnele, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: kamouflageräka

References

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SPECIES INFORMATION SHEET *Lunatia pallida*

English name: **Pale moonsnail**	Scientific name: ***Lunatia pallida***	
Taxonomical group: Class: Gastropoda Order: Hypsocastropoda Family: Naticidae	Species authority: Broderip & G.B. Sowerby I, 1829	
Subspecies, Variations, Synonyms: *Euspira pallida* Broderip & Sowerby, 1829	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Sedimentation caused by eutrophication (H01.05) and fishing (bottom trawling; F02.02.01)	Future threats (Habitats Directive article 17 codes): Sedimentation caused by eutrophication (H01.05) and fishing (bottom trawling; F02.02.01)	
IUCN Criteria: **B1ab(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 –/–, Germany –/**D** (Data deficient, North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**VU**		

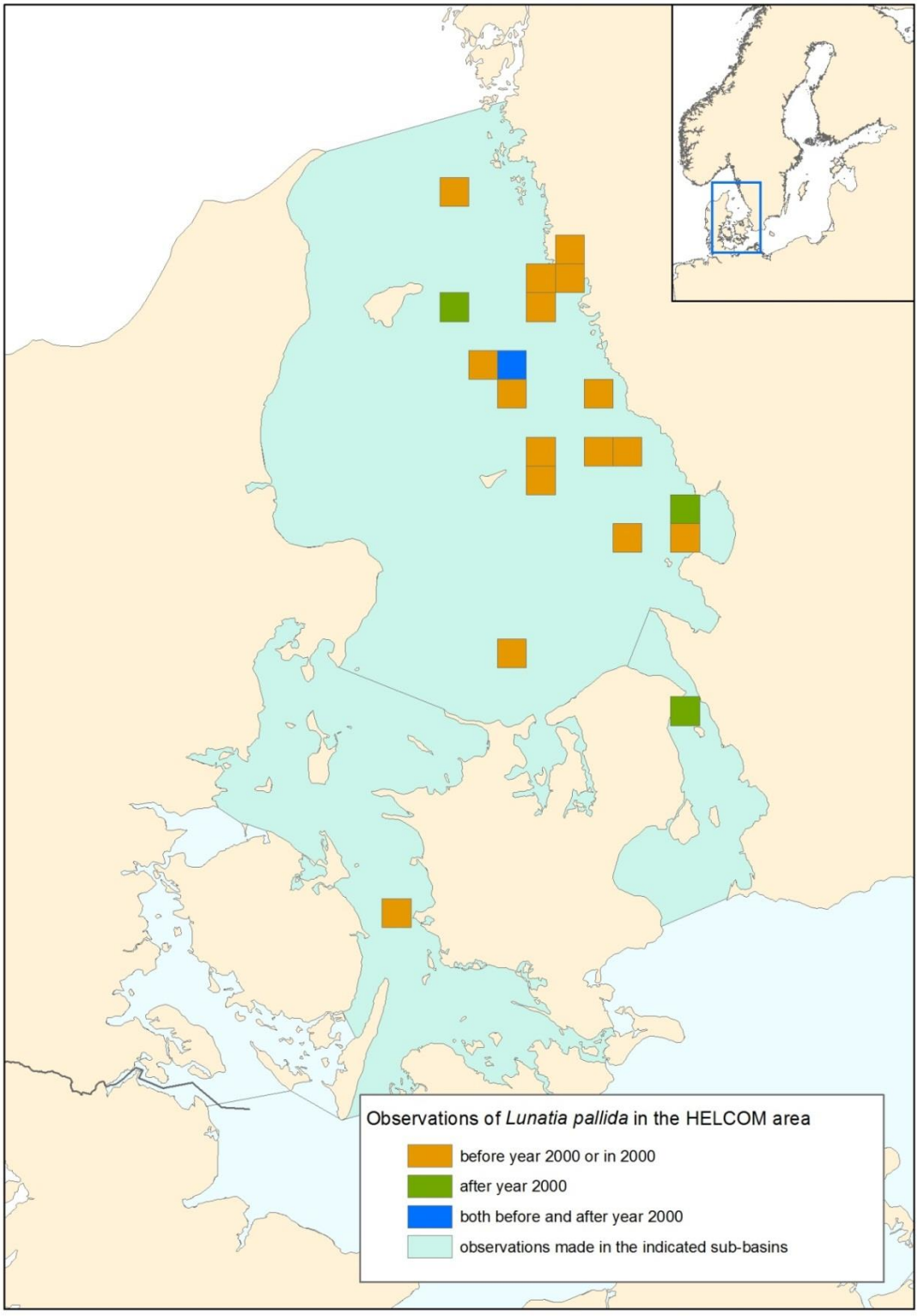
Distribution and status in the Baltic Sea region

Within the HELCOM area *Lunatia pallida* is known from the Kattegat, the Sound and the Great Belt. Outside the HELCOM area it occurs in the Skagerrak and the North Sea. The species has been regularly reported from the Landskrona deep, Sound middle and the Knähaken area since the late 1800's, but in the last decades it seems to have more or less disappeared from this area. Only one record from the Sound is reported in recent years (2003). There are also very few observations from the southern Kattegat in recent years, primarily from the shallow offshore bank Fladen. A comparison between historical and present Swedish data indicates a severe decline in the Kattegat, particularly in the south. However, the trend in Danish waters is largely unknown.

SPECIES INFORMATION SHEET *Lunatia pallida*

Distribution map

The georeferenced records of species compiled from the databases of the Swedish Species Information Centre (Artportalen), Swedish Meteorological and Hydrological Institute, and the International Council for the Exploration of the Sea.



SPECIES INFORMATION SHEET *Lunatia pallida*

Habitat and ecology

L. pallida is a small (up to 22 mm long) slender gastropod with a characteristic creamy white shell. It lives on soft and muddy bottoms. In Scandinavian waters the depth range is between 20 to 250 meters. It feeds on mussels. The larvae probably have direct development, and the species may therefore have limited possibilities to disperse and/or recolonize.

Description of major threats

The decline of the species is probably related to increased sedimentation caused by eutrophication and bottom trawling. In general gastropods are also sensitive to hazardous substances, especially to organic tin compounds which are known to disturb the reproduction in several species.

Assessment justification

Only limited data is available. These indicate a decrease in distribution in recent decades. Due to general deterioration of the marine environment the distribution is expected to decrease further due to a deterioration of habitat quality. The number of locations is estimated to be less than 10. Present distribution (EOO) is estimated to 12 000 (8000–16000) km^2. In combination with few locations and continuing decline the B-criterion is thus fulfilled, and the species is categorized as Vulnerable (VU) (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.

Common names

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

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SPECIES INFORMATION SHEET *Macoma calcarea*

English name: **Chalky macoma**	Scientific name: ***Macoma calcarea***	
Taxonomical group: Class: Bivalvia Order: Veneroida Family: Tellinidae	Species authority: Gmelin, 1791	
Subspecies, Variations, Synonyms: *Tellina calcarea* Gmelin, 1791 *Macoma tenera* Leach, 1819	Generation length: >10 years	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (anoxia; H01.05), Reduced water mass exchange (–)	Future threats (Habitats Directive article 17 codes): Eutrophication (anoxia; H01.05), Reduced water mass exchange (–)	
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), Latvia –/–, Lithuania –/–, Poland –/**VU**, Russia –/–, Sweden –/**DD**		

Distribution and status in the Baltic Sea region

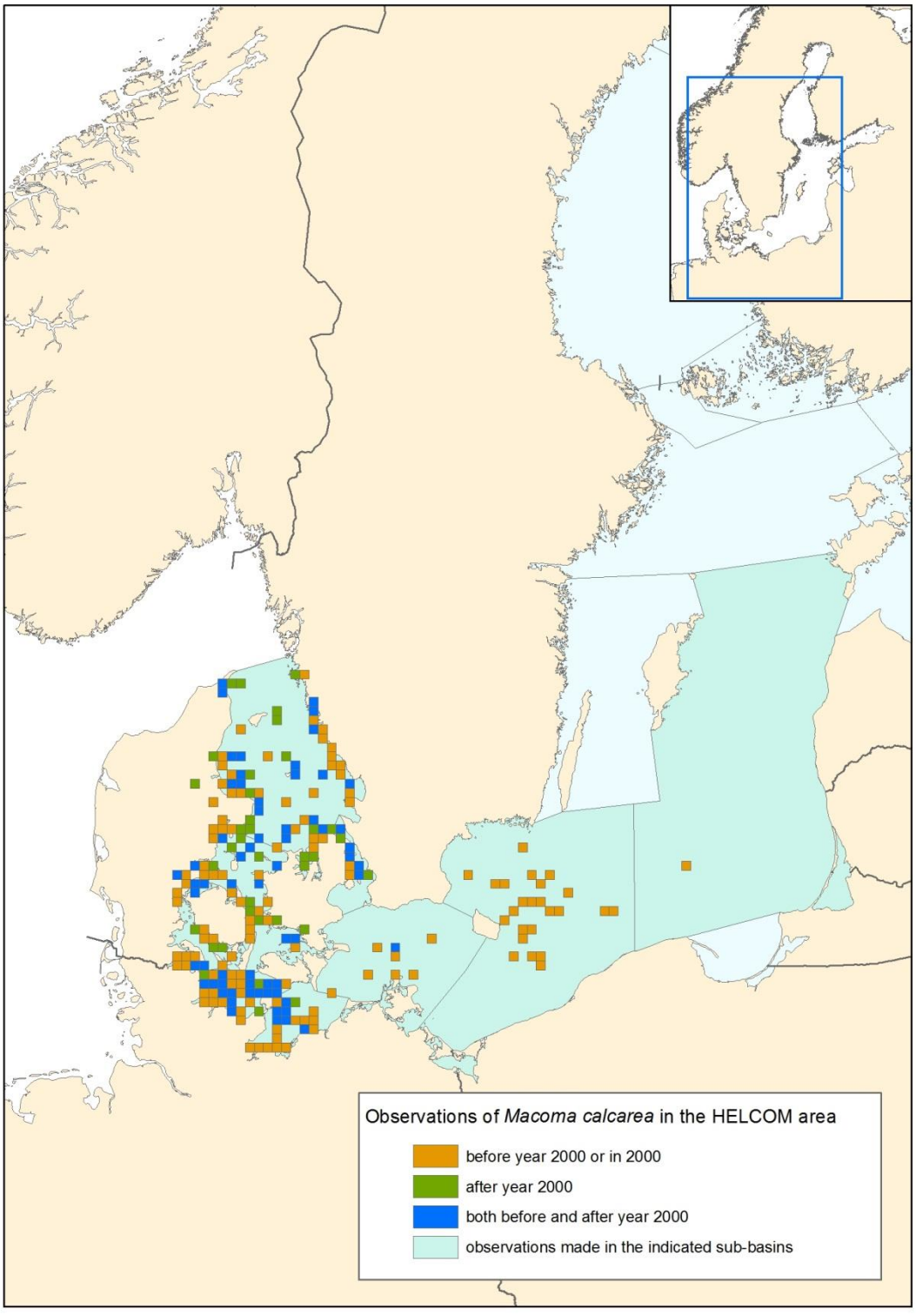
Macoma calcarea is currently restricted to the western parts of the HELCOM area. The species has occurred also in the Bornholm Basin and the Eastern Gotland Basin but due to oxygen depletion it has disappeared or severely declined in the eastern part of its former range. More generally, this is a northern Atlantic arctic species. In Europe there are records from Iceland and Norway and in the western Atlantic south to New York.

Macoma calcarea. Photo by Michael Zettler. Leibniz Institute for Baltic Sea Research Warnemünde (IOW).

SPECIES INFORMATION SHEET *Macoma calcarea*

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, International Council for the Exploration of the Sea (ICES), Finnish Environment Institute, and the Leibniz Institute for Baltic Sea Research (IOW).



SPECIES INFORMATION SHEET *Macoma calcarea*

Habitat and ecology

Macoma calcarea is an infaunal bivalve that lives on fine sand and mud bottoms, often with some gravel and stones. It is a deposit and filter feeder. In contrast to many other bivalves, *M. calcarea* has separate sexes. The larvae are pelagic. The typical depth range of recent records is between 15 and 30 m.

Description of major threats

Oxygen depletion related to eutrophication and on the other hand to reduced water mass exchange from the North Sea.

Assessment justification

M. calcarea has disappeared from many of its former locations during the last decades. This concerns especially the eastern locations and most probably relates to long lasting oxygen depletion in those areas. Recent locations exist only in the western Baltic Sea. The generation time of the species is assumed to be c. 15–20 years. Within three generations both the reduction in the extent of occurrences (EOO) as well as in the area of occupancy (AOO) is estimated to ca. 45 %. The species is categorized as Vulnerable (VU) applying criteria A2c.

Recommendations for actions to conserve the species

M. calcarea would probably benefit from any actions that could reduce eutrophication.

Common names

Denmark: stor østersømusling, Estonia: –, Finland: –, Germany: Kalk-Plattmuschel, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: stor östersjömussla

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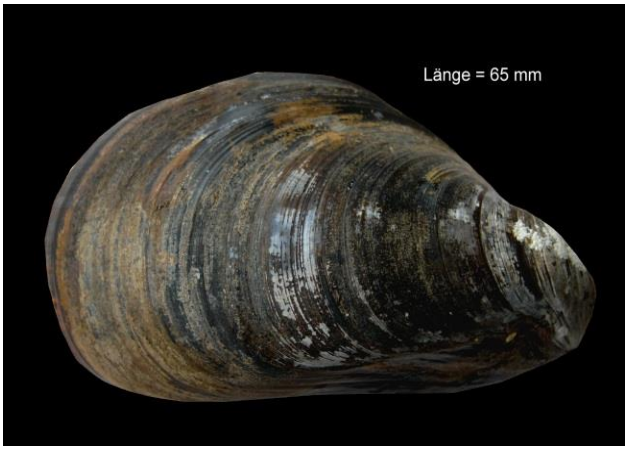
SPECIES INFORMATION SHEET *Modiolus modiolus*

English name: **Northern horsemussel**	Scientific name: ***Modiolus modiolus***	
Taxonomical group: Class: Bivalvia Order: Mytiloida Family: Mytilidae	Species authority: (Linnaeus, 1758)	
Subspecies, Variations, Synonyms: *Modiola modiolus* *Mytilus modiolus* Linnaeus, 1758	Generation length: 30–35 years	
Past and current threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01), Construction (stone fishing; J03.01), Eutrophication (H01.05)	Future threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01), Construction (C03.03), Eutrophication (H01.05), Climate change (M01)	
IUCN Criteria: **A2c**	**HELCOM Red List Category:**	**VU Vulnerable**
Global / European IUCN Red List Category NE/NE	Habitats Directive: *Modiolus*-reefs is a part of the Habitats Directive habitat 1170 (Reefs)	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**2** (Endangered, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**LC**		

Distribution and status in the Baltic Sea region

Modiolus modiolus is a long living and large bivalve that lives in the western Baltic Sea in hard bottom habitats. It has suffered from various human activities that have destroyed or deteriorated its habitats and the population has declined in the HELCOM area.

In general, *M. modiolus* is an arctic-boreal species, and its distribution ranges from the seas around Scandinavia (including Skagerrak & Kattegat) and Iceland south to the Bay of Biscay.

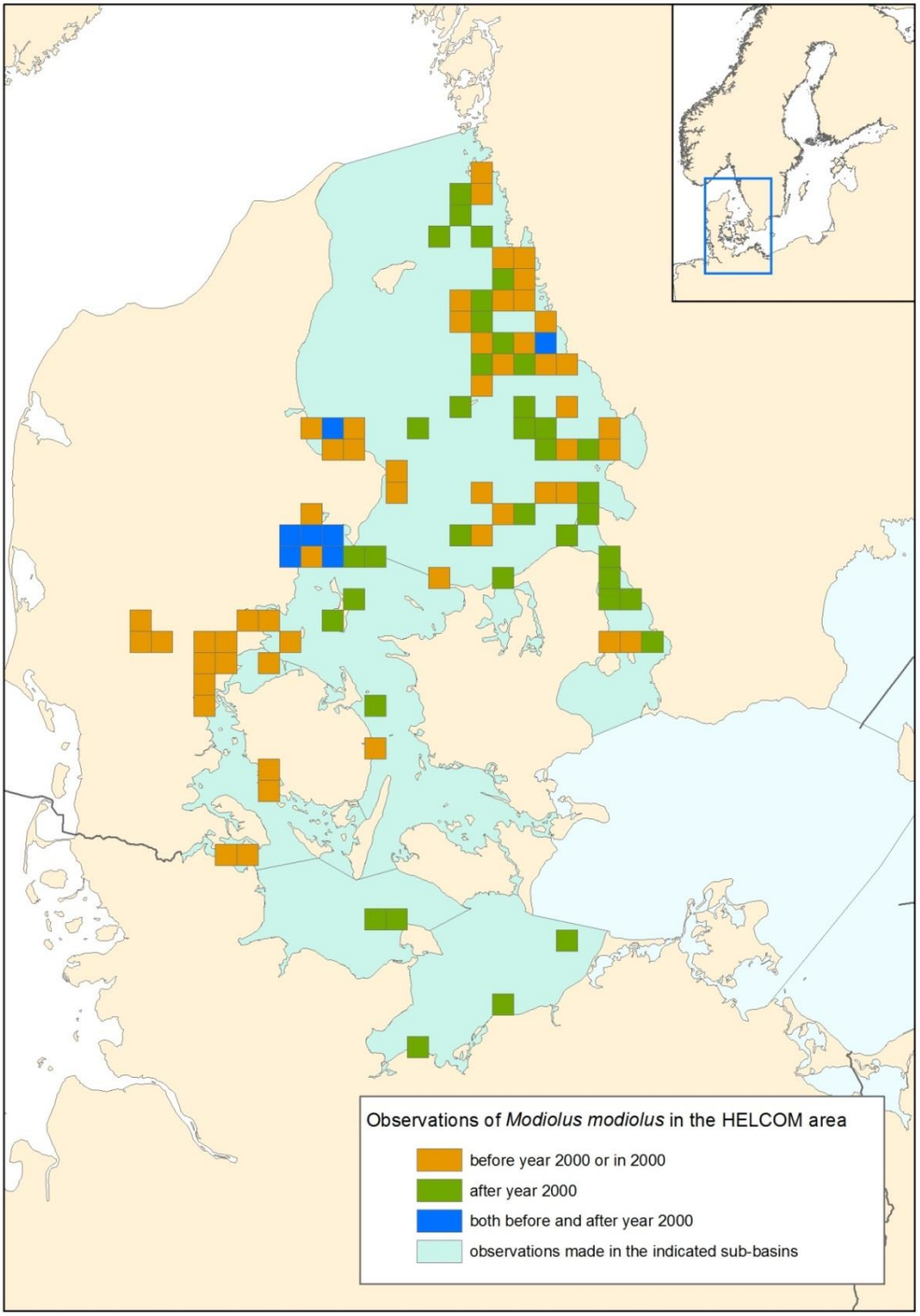


Modiolus modiolus. Photo by Michael Zettler. Leibniz Institute for Baltic Sea Research Warnemünde (IOW).

SPECIES INFORMATION SHEET *Modiolus modiolus*

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).



SPECIES INFORMATION SHEET *Modiolus modiolus*

Habitat and ecology

M. modiolus can be found part buried in soft sediments or coarse grounds or attached to hard substrata. It usually occurs as individuals but it can also form clumps or extensive beds or reefs. In the OSPAR area, *Modiolus* beds are habitats protected by OSPAR. The species itself is still fairly common in the western HELCOM area but *Modiolus* beds is rare and only two locations are known for it (Kattegat and Öresund).

M. modiolus forms dense beds, at depths up to 70 m (but may extend onto the lower shore), mostly in fully saline conditions and often in tide-swept areas (OSPAR 2010). The mussels attach to the substratum and to each other with byssal threads so that they aggregate into clumps. They can cover much of the underlying seabed to create a distinctive biogenic habitat. Although *M. modiolus* is a widespread and common species outside the HELCOM area, horse mussel beds (with typically 30% cover or more) are more limited in their distribution. *M. modiolus* beds are found on a range of substrata, from cobbles through to muddy gravels and sands, where they tend to have a stabilising effect, due to the production of byssal threads.

Description of major threats

M. modiolus is threatened by both direct and indirect effects of bottom trawling. Previously also stone fishing destroyed habitats of the species. Eutrophication affects the species negatively and in the future increasing temperatures, decreasing salinities and construction activities such as windmill farms may have an impact on the population.

Assessment justification

M. modiolus is a large bivalve that can live up to ca. 100 years and its generation time is estimated to 30–35 years (time period for decline estimation 90–100 years). In Germany the habitats of *Modiolus* are well-monitored and a large proportion of occurrences is known. In Sweden the species was considered Least Concern in the 2010 Red List, but it is not well covered by monitoring programs. In Denmark, many of the locations seem to lack recent records but this may be explained also by decreased monitoring effort. The status in Danish waters is not well known. The overall reduction in population size is assumed to range between 25–29% based on loss of suitable habitat (AOO/EOO). The species is restricted to hard bottom habitats and has probably suffered from various human activities, including bolder fishing, bottom trawling and effects of dredging. The species is categorized as Vulnerable (VU) under the A2c criterion.

Recommendations for actions to conserve the species

The species would benefit from restrictions to bottom trawling, more restoration of habitats and working against eutrophication and climate change.

Common names

Denmark: almindelig hestemusling, Estonia: –, Finland: –, Germany: Pferdemuschel, Große Miesmuschel, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: hästmussla

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SPECIES INFORMATION SHEET *Nucula nucleus*

English name: **Common nut clam**	Scientific name: ***Nucula nucleus***	
Taxonomical group: Class: Bivalvia Order: Nuculoida Family: Nuculidae	Species authority: (Linnaeus, 1758)	
Subspecies, Variations, Synonyms: *Arca nucleus* 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.

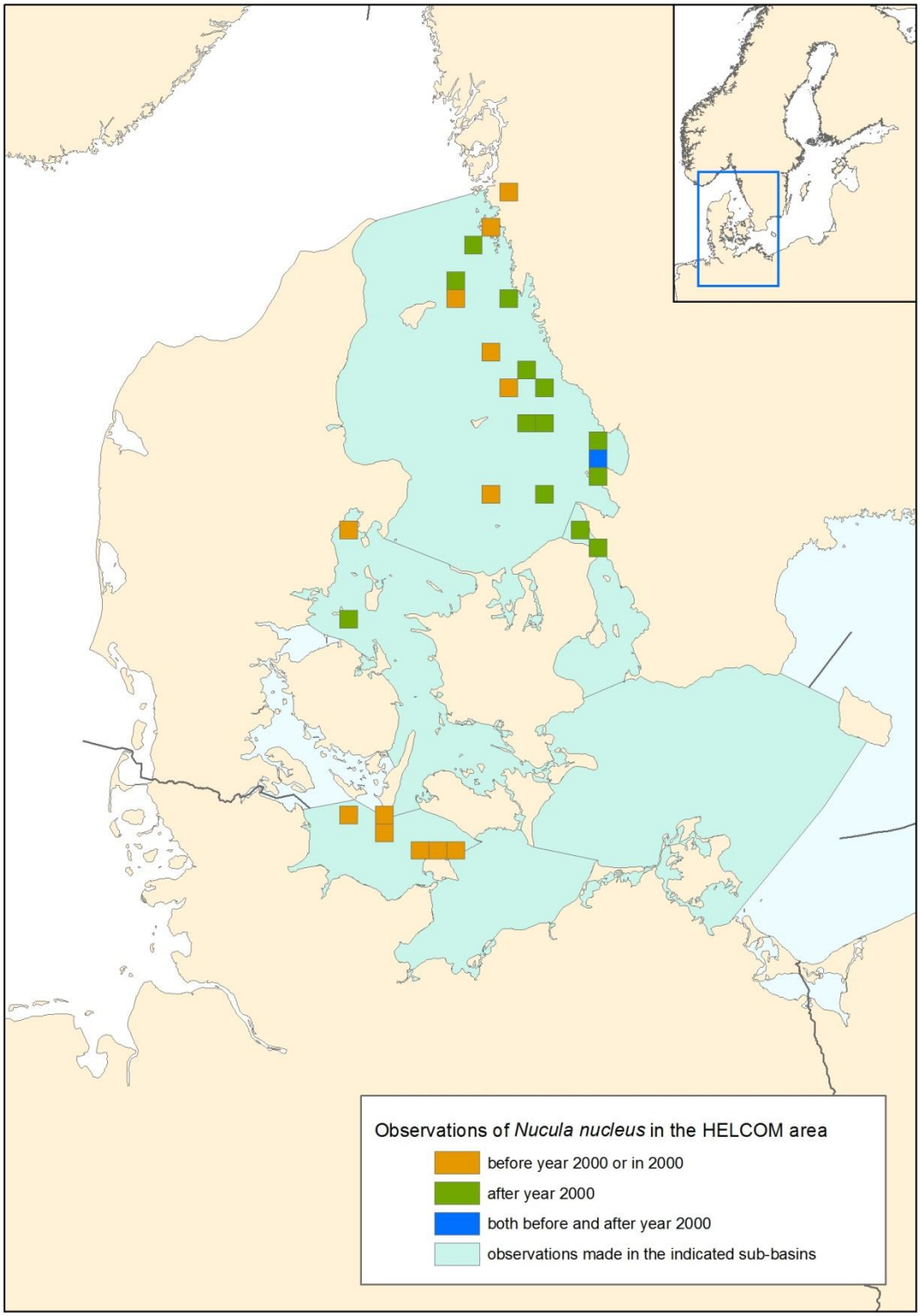
Outside the HELCOM area, the species has been found off all British coasts, to about 150 m depth. It is distributed from Norway south to the Mediterranean, West Africa, and the coasts of South Africa.

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

SPECIES INFORMATION SHEET *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).



SPECIES INFORMATION SHEET *Nucula nucleus*

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

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Marine Species Identification Portal. Available at http://species-identification.org/species.php?species_group=mollusca&id=834

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World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=140590

SPECIES INFORMATION SHEET *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	
Subspecies, Variations, Synonyms: *Cardium hauniense* Høpner Petersen & Russell, 1971; *Cerastobyssum hauniense* 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

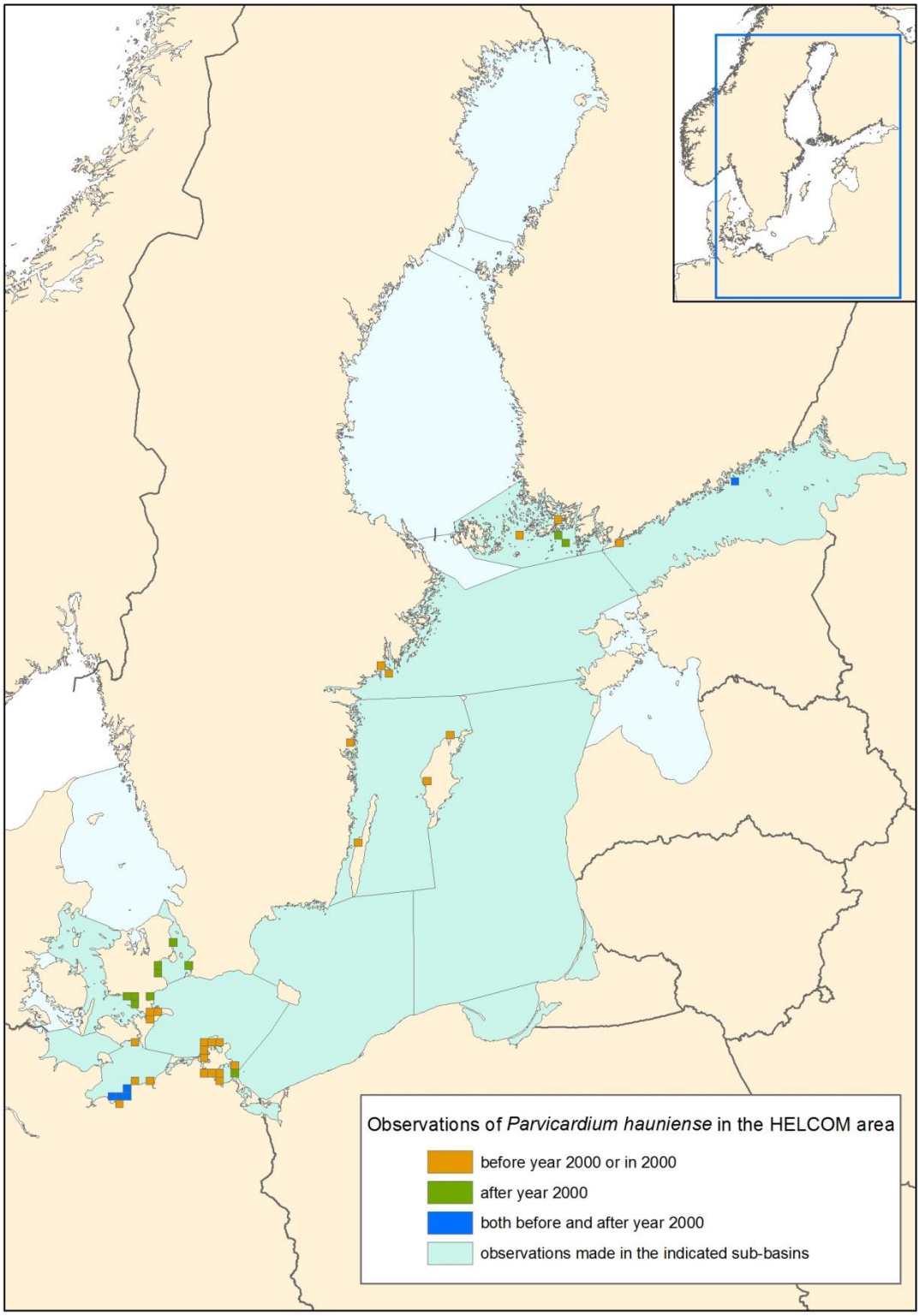
Parvicardium hauniense is a rare brackish water bivalve that has, until recently, been regarded endemic to the Baltic Sea. However, it has been found also in the Mediterranean (Wolowicz 1992). In the HELCOM area, it occurs e.g. in Danish and German inlets of the Belt Sea, Pomeranian Bodden, Puck Bay 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 *Parvicardium hauniense*

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 km^2. 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

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

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SPECIES INFORMATION SHEET *Pelonaia corrugata*

English name: –	Scientific name: ***Pelonaia corrugata***	
Taxonomical group: Class: Ascidiacea Order: Pleurogona Family: Styelidae	Species authority: Goodsir & Forbes, 1841	
Subspecies, Variations, Synonyms: *Pelonaia arenifera* Stimpson, 1851; *Pelonaia glabra* Forbes & Goodsir, 1841; *Pelonaia villosa* Sars, 1859;	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (sedimentation; H01.05), Fishing (sedimentation caused by bottom trawling; F02.02.01)	Future threats (Habitats Directive article 17 codes): Eutrophication (sedimentation; H01.05), Fishing (sedimentation caused by bottom trawling; F02.02.01)	
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 –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**VU**		

Distribution and status in the Baltic Sea region

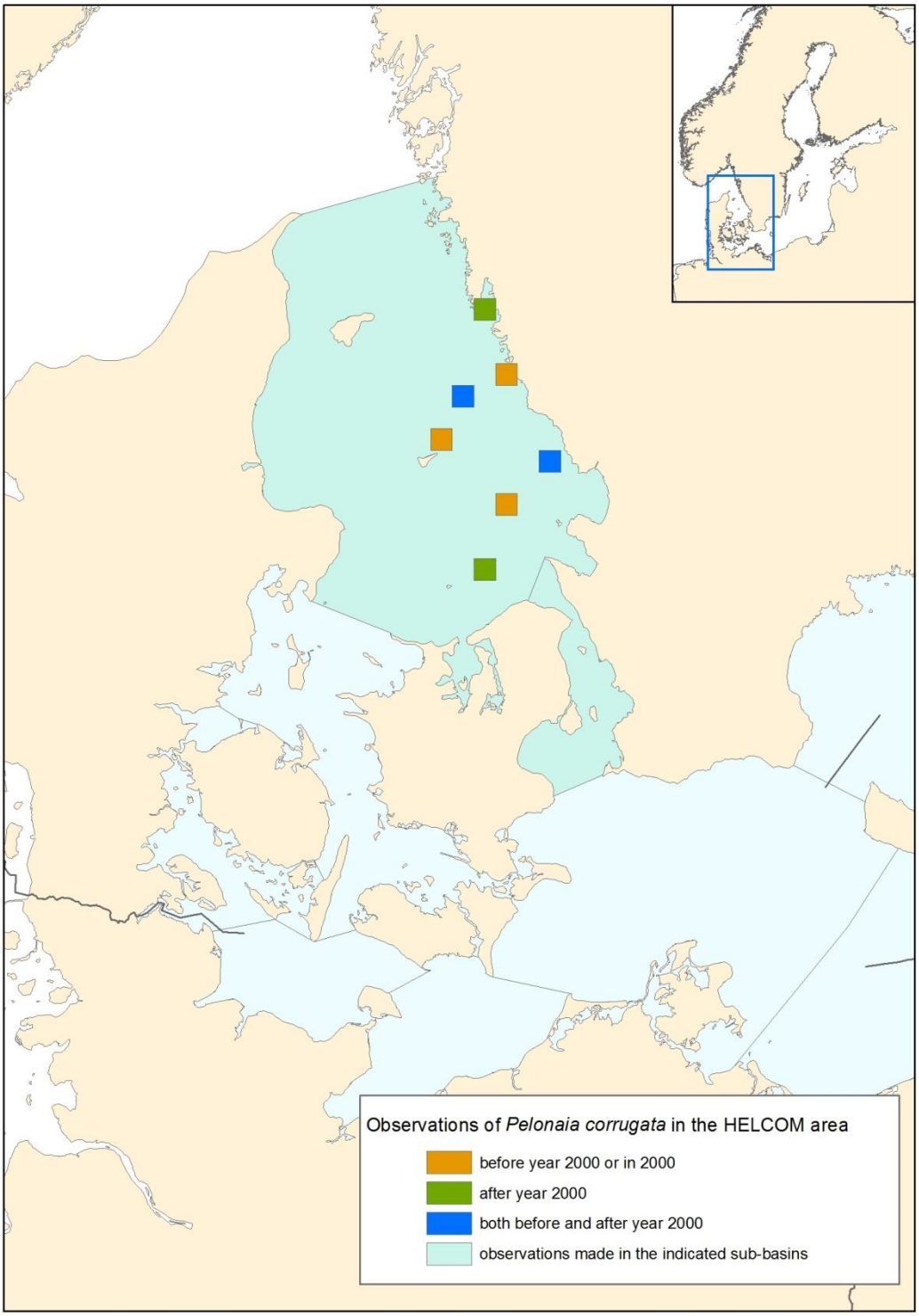
The main distribution of *Pelonaia corrugata* within the HELCOM area is in the Kattegat but the species has also been observed in the Sound. Most observations are from the Swedish part of the Kattegat, primarily from the shallow offshore banks. Outside the HELCOM area the species occurs in the Skagerrak and along the Norwegian coast. The habitat of the species - well oxygenated sand bottoms at 30–50 meters depth - are probably very rare in the HELCOM area.

Pelonaia corrugata. Photo by Anders Salesjö Photography, Undervattensbilder.se.

SPECIES INFORMATION SHEET *Pelonaia corrugata*

Distribution map

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



SPECIES INFORMATION SHEET *Pelonaia corrugata*

Habitat and ecology

Pelonaia corrugata is a slender wormlike ascidian (sea squirt). It reaches a length of 4–5 cm, but can in extreme cases become up to 12 cm long. The species lives unattached and partly imbedded in soft sediments, with only the siphons sticking up. It is usually found on depths between 30 and 50 meters on well oxygenated sand bottoms. Unlike most other ascidians the species lives for several years, at least 2–3 years, and becomes sexually mature only during its second year. The species is oviparous, and lays heavy eggs that sink to the sea bottom. Larval development is direct, lacking a tadpole-like stage.

Description of major threats

Well oxygenated sand bottoms represent a rare habitat in the HELCOM area. They are sensitive to sedimentation caused by eutrophication, trawling, or other human activities.

Assessment justification

The species lives in well oxygenated sand bottoms which is a rare habitat in the Kattegat. The number of locations is estimated to 2 (2–4). There are indications of populations decline, related to decreased quality of the habitat. The distribution is so restricted that the limit values for Vulnerable (VU) are fulfilled according to the D-criterion.

Recommendations for actions to conserve the species

In general the negative effects of eutrophication and trawling on marine biotopes need to be reduced. The habitat of the species needs to be mapped and given adequate protection.

Common names

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

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SPECIES INFORMATION SHEET *Scrobicularia plana*

English name: **Peppery furrow shell**	Scientific name: ***Scrobicularia plana***	
Taxonomical group: Class: Bivalvia Order: Euheterodonta incertae sedis Family: Scrobiculariidae	Species authority: (da Costa, 1778)	
Subspecies, Variations, Synonyms: *Mactra piperata* Poiret, 1786	Generation length: 5–10 (20) 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

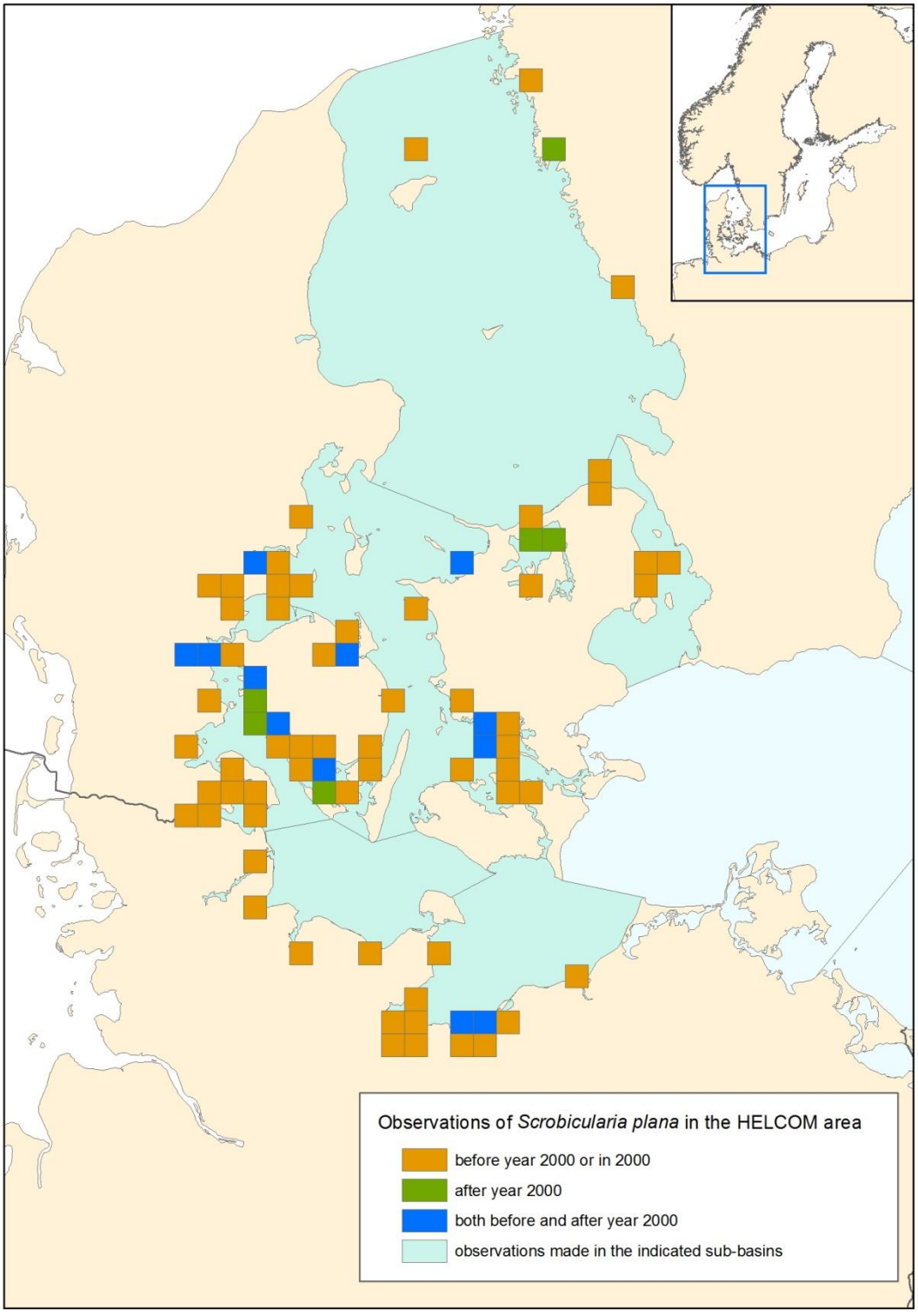
Scrobicularia plana is a large size bivalve that occurs in the western part of the HELCOM area from the Kattegat to the German bays, fjords and estuaries. It appears to have declined both in the Baltic Sea and in the North Sea. Outside the HELCOM area this species is widely distributed and ranges from Norway to the Mediterranean and West Africa.

Scrobicularia plana. Photo by Michael Zettler. Leibniz Institute for Baltic Sea Research Warnemünde (IOW).

SPECIES INFORMATION SHEET *Scrobicularia plana*

Distribution map

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



SPECIES INFORMATION SHEET *Scrobicularia plana*

Habitat and ecology

S. plana is a large size bivalve living in shallow water. It is found on muddy, organic enriched bottoms in sheltered areas. The peppery furrow shell is found in estuarine and intertidal conditions and is able to tolerate low salinities in thick mud or muddy sand. This bivalve burrows into the sediment to depths of around 20 cm. It can be identified when buried by the characteristic star-shaped markings made at the surface by its inhalant siphon. A current of water passes down the siphon and into the body of the bivalve, where particles are removed. The water is then expelled via a second tube (the 'exhalant siphon'). This species feeds on matter on the surface of the sediment, and it leaves star-shaped marks where it has been feeding. Crabs and fishes often feed on the inhalant siphon when it is extended, but the damaged tissue is replaced quickly, in around 5 days.

The sexes are separate, and breeding typically occurs in summer. The peppery furrow shell larvae are free-swimming (known as veliger larvae), undergoing metamorphosis into adults and settling after this planktonic stage, which lasts for 2 or 3 weeks.

Description of major threats

Not known.

Assessment justification

Scrobicularia plana is a large size bivalve that has declined according to German information both in the Baltic Sea and the North Sea. However, there is very little data available e.g. from Sweden and the species is considered LC both in Sweden and Norway. In Germany, there are only two recent findings, although the species has been looked for. Even on the known German localities this species is difficult to find, most probably due to strong population declines. The Danish data may show a decline as inferred simply from the numbers of old and recent records or the difference may reflect rediced sampling effort. The species lives ca. 20 years, and the generation time is assumed to be 7–10 years. Inferred mainly from the German situation, the overall decline over three generations is assumed to be more than 30 % for the whole HELCOM area. The species is categorized as Vulnerable (VU) according to criteria A2c.

Recommendations for actions to conserve the species

Without better understanding on the pressures it is impossible to give any specific recommendations for the species.

Common names

Denmark: flad pebermusling, Estonia: –, Finland: –, Germany: Große Pfeffermuschel, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: –

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SPECIES INFORMATION SHEET

Solaster endeca

English name: **Purple sun star**	Scientific name: ***Solaster endeca***	
Taxonomical group: Class: Asteroidea Order: Velatida Family: Solasteridae	Species authority: Linnaeus, 1771	
Subspecies, Variations, Synonyms: *Asterias endeca* Linnaeus, 1771	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), Climate change (M)	
IUCN Criteria: **B1ab(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 –/–, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**VU**		

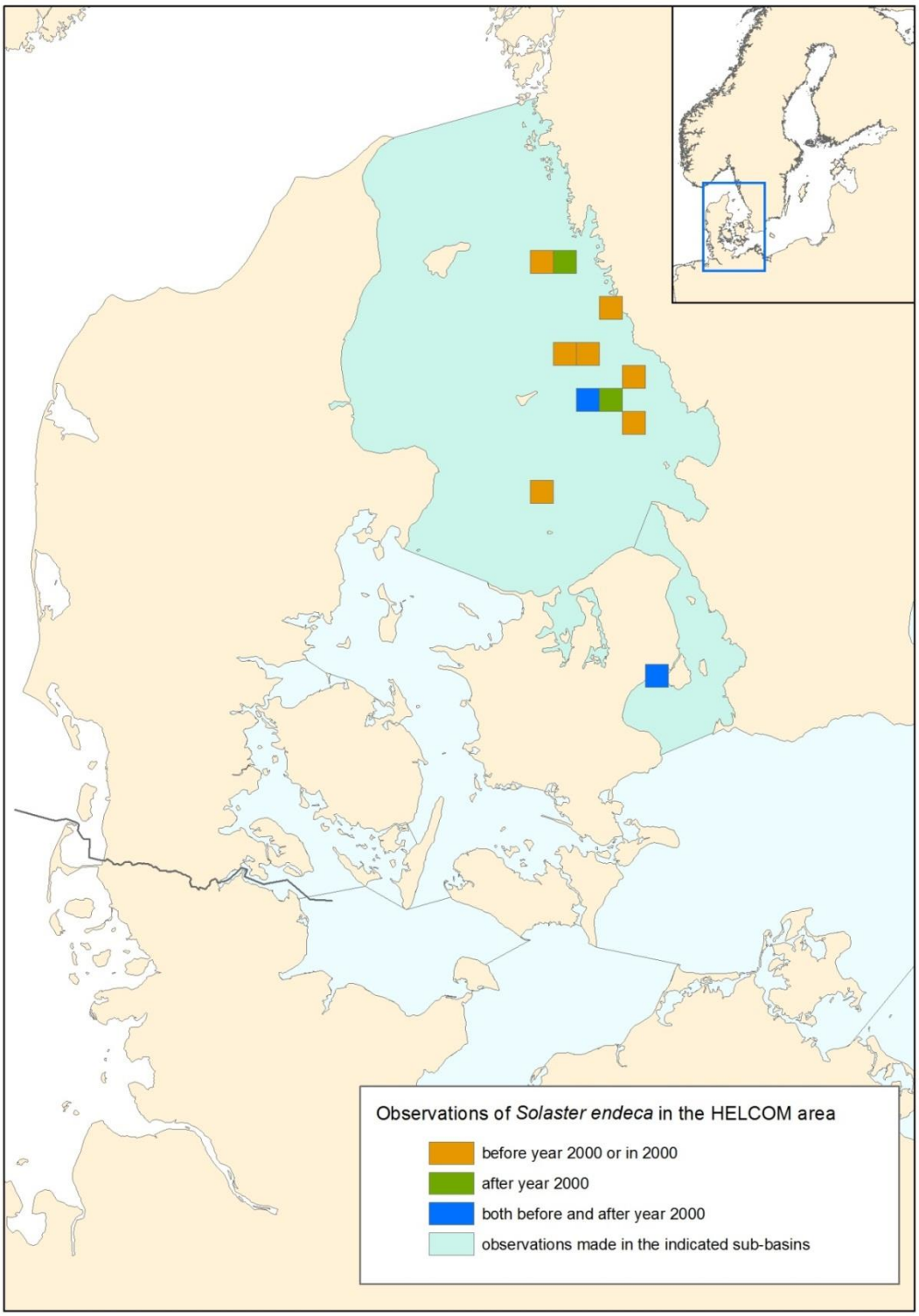
Distribution and status in the Baltic Sea region

The main distribution of *S. endeca* within the HELCOM area is in the Kattegat but is has also been found in the Sound. Outside the HELCOM area the species is reported from the Skagerrak and the North Sea. In Norway, the species primarily occurs from Trondheim and northwards. As the species requires cold water it is more common in the Kattegat than in Skagerrak, and it is likely that the distribution within the HELCOM area represents its border of southern occurrence. The climate change with future higher water temperature thus poses a plausible threat to the species.

SPECIES INFORMATION SHEET *Solaster endeca*

Distribution map

The records of species obtained from the databases of the Swedish Species Information Centre (Artportalen) and Swedish Meteorological and Hydrological Institute.



SPECIES INFORMATION SHEET *Solaster endeca*

Habitat and ecology

Solaster endeca is a multi-armed starfish with a characteristic appearance. It may reach up to 400 mm in diameter. It is normally found on muddy gravel with boulders, or on silty rock surfaces in sheltered or semi-exposed conditions. Depth range approximately 20–90 meters, but outside the HELCOM area it has been found on depths below 500 meters. The species seems to require a salinity of 30 ‰ minimum, and avoids areas where the mean temperature exceeds 14 °C *Solaster endeca* breeds during March-April with direct development and, therefore, has no pelagic stage. It is a voracious predator on other echinoderm species, often eating animals nearly as large as itself.

Description of major threats

As the species requires cold water with high salinity, climate change is likely to affect it negatively within the HELCOM area. Furthermore, the species prime locations in the Kattegat (i.e. offshore banks) are sensitive to sedimentation caused by eutrophication and trawling.

Assessment justification

The data on the species is limited. These indicate a decrease in distribution. The estimated extent of occurrence (EOO) is 6000 (3000–7000) km². Habitat quality is expected to continue to decline. The estimated values are below the threshold for Vulnerable (VU). In combination with few localities and continuing decline the B-criterion is thus fulfilled (B1ab(iii)).

Recommendations for actions to conserve the species

It is difficult to suggest specific measures for *Solaster endeca* but its population in the HELCOM area would benefit from any actions that could slow down global warming. Since the species depend on cold water with high salinity the population in the Kattegat, may go extinct when water temperature increases.

Common names

Denmark: –, Estonia: –, Finland: –, Germany: gelber Sonnenstern, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: gul solsjöstjärna

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SPECIES INFORMATION SHEET *Stomphia coccinea*

English name: **Spotted swimming anemone**	Scientific name: ***Stomphia coccinea***	
Taxonomical group: Class: Anthozoa Order: Actiniaria Family: Actinostolidae	Species authority: Müller, 1776	
Subspecies, Variations, Synonyms: *Actinia coccinea* O.F. Müller (synonym)	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Unknown (U)	Future threats (Habitats Directive article 17 codes): Climate change (M01.01)	
IUCN Criteria: **B1ab(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 –/–, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**VU**		

Distribution and status in the Baltic Sea region

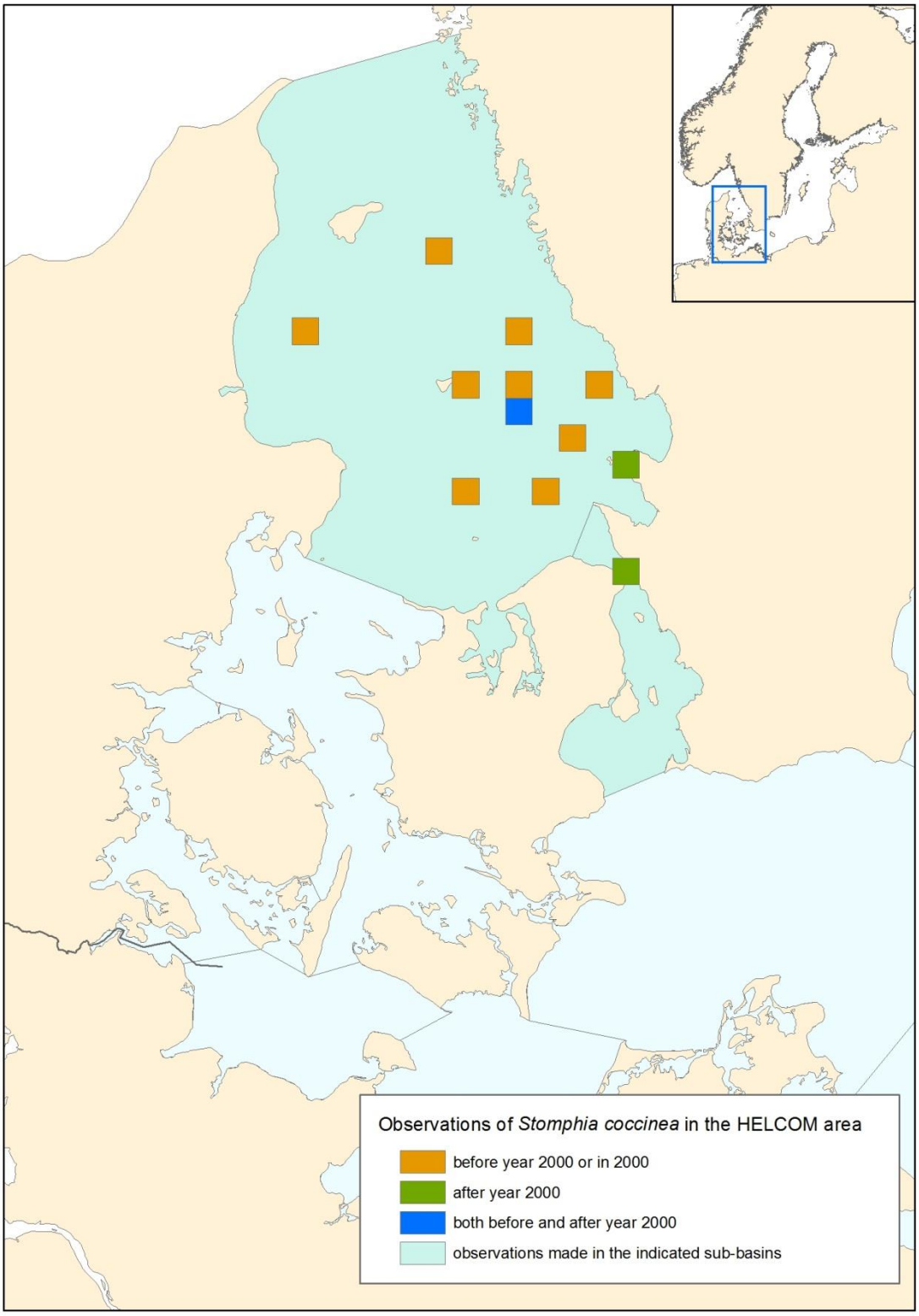
The main distribution of *S. coccinea* within the HELCOM area is in the Kattegat. It has also been found in the Sound. Outside the HELCOM area the species is reported from the Skagerrak and along the Norwegian coast. The species requires cold water, and it is therefore likely that it lives on the border of its southern occurrence within the HELCOM area. There are indications of decline in both the Skagerrak and Kattegat. The climate change with future higher water temperature poses a plausible threat to the species.

SPECIES INFORMATION SHEET

Stomphia coccinea

Distribution map

The records of species compiled from the species database of the Swedish Species Information Centre (Artportalen) and from the Danish national database for marine data (MADS).



SPECIES INFORMATION SHEET *Stomphia coccinea*

Habitat and ecology

Stomphia coccinea is a sea anemone with a smooth column and banded tentacles. It may reach a size of 70–80 mm in diameter. The species always lives on open surfaces of stones and rocks, never buried in sand. It typically occurs on the depths more than 10 meters. It may attach itself to hard parts or products of other organisms (shells) also, with a definite preference for the large mussel *Modiolus*. Generally, anthozoans are primarily carnivorous and prey on sea urchins, gastropods, bivalves, or crustaceans that crawl or swim into their grasp. *S. coccinea* reproduces asexually through longitudinal fission and sexually (it is a protandric hermaphrodite).

Description of major threats

The reasons for the indicated decline are not understood. As *Stomphia coccinea* probably lives on the border of its southern occurrence within the HELCOM area, the climate change with future higher water temperature is expected to have a negative effect on the species.

Assessment justification

Only limited data is available, indicating a decrease in distribution in recent decades. Due to climate change the distribution is expected to decrease further due to a decline in habitat quality. The number of locations is estimated to 3 (3–4). Present distribution (EOO) is estimated to 8 000 (6 000–10 000) km². The estimated values are below the limits for Vulnerable (VU). In combination with few locations and continuing decline the B-criterion is thus fulfilled. The distribution is also so restricted that the limit values for Vulnerable are fulfilled according to the D-criterion.

Recommendations for actions to conserve the species

It is difficult to suggest specific measures for *Stomphia coccinea*: since the species depends on cold water it may go extinct within the HELCOM area when water temperature increases.

Common names

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

References

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SPECIES INFORMATION SHEET *Alderia modesta*

English name: –	Scientific name: ***Alderia modesta***	
Taxonomical group: Class: Gastropoda Order: Sacoglossa Family: Stiligeridae	Species authority: Lovén, 1844	
Subspecies, Variations, Synonyms: –	Generation length: 1-2 years	
Past and current threats (Habitats Directive article 17 codes): Construction (J02.04.02, J02.12.01)	Future threats (Habitats Directive article 17 codes): Construction (J02.04.02, J02.12.01)	
IUCN Criteria: **B2a**	**HELCOM Red List Category:**	**NT Near Threatened**
Global / European IUCN Red List Category NE / NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/LC, Germany –/**2** (Endangered, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/**VU**, Russia –/–, Sweden –/–		

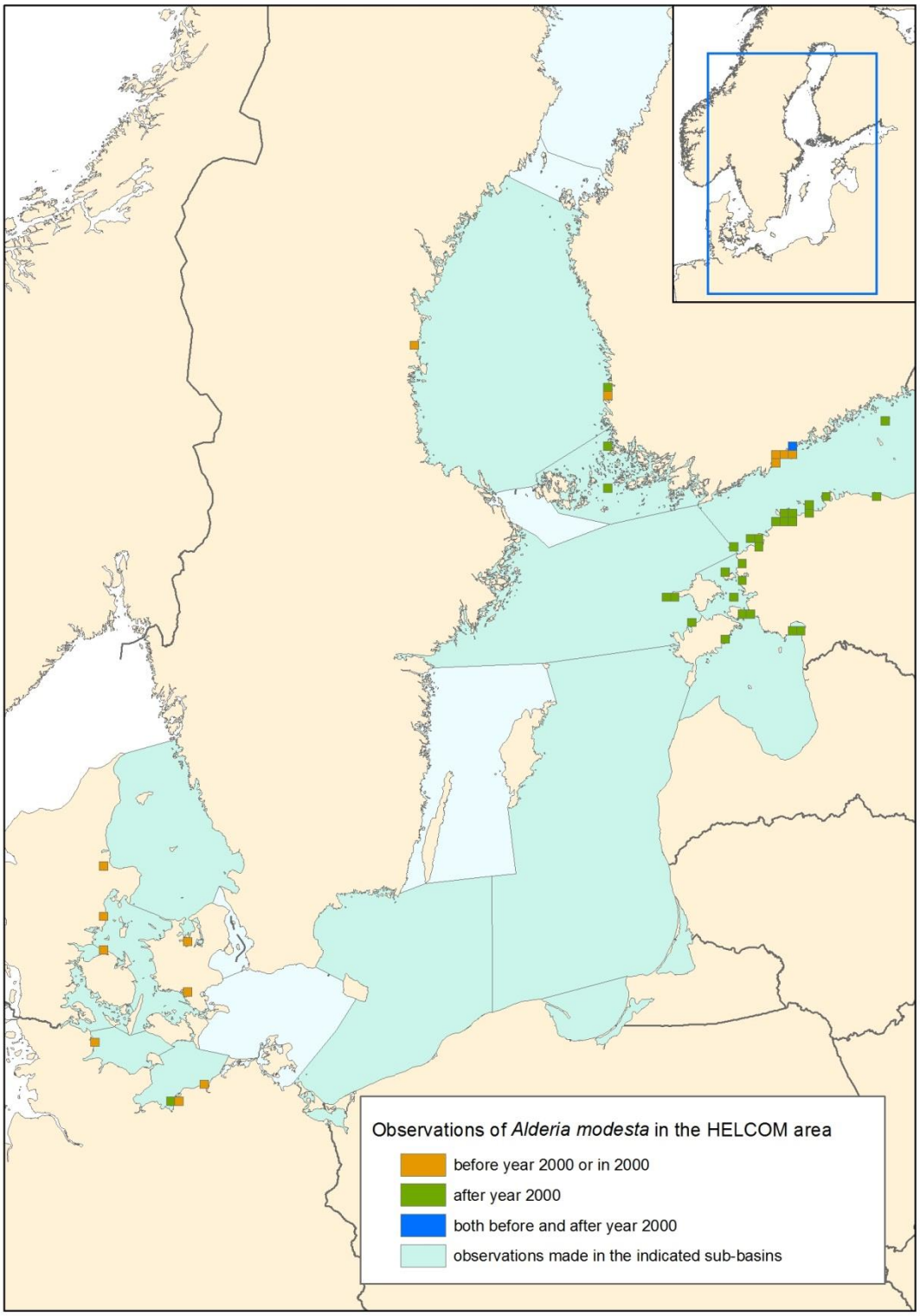
Distribution and status in the Baltic Sea region

In the Baltic Sea, *Alderia modesta* is a rare species with occurrences both in the south and in the north. The northernmost occurrences are from the Finnish coast of the Bothnian Sea. In the southern Baltic Sea, it has been found from Wismar Bay and Schlei Estuary. The species appears to live in rather different habitats in the north and in the south and its population trends may also differ between the Baltic Sea subbasins. According to Estonian information, the species appears to have become more abundant recently whereas in the south it is assumed to have declined. Elsewhere, it has a wide geographical distribution, from Norway to the Atlantic coast of France, and along the Pacific coast of North America.

SPECIES INFORMATION SHEET *Alderia modesta*

Distribution map

The georeferenced records of species compiled from the database of the Leibniz Institute for Baltic Sea Research (IOW), database of the International Council for the Exploration of the Sea (ICES), Finnish monitoring data, the database of the Estonian Marine Institute, Feliksiak (1936), Muus (1967) and Rasmussen (1973).



SPECIES INFORMATION SHEET *Alderia modesta*

Habitat and ecology

A. modesta appears to live in rather different habitats when comparing the southern and northern occurrences in the Baltic Sea. In the south it is at least currently a rare species that inhabits the flooding zone of saltmarshes and is always associated with Vaucheria in those habitats. In the north it lives in sublittoral macrophyte meadows and seems to have become more common in those habitats recently. It can tolerate a wide range of salinities from 5 to 36 psu. It is believed to feed on plankton or minute detrital food items through either suspension or deposit feeding.

Description of major threats

In the southern areas of the Baltic Sea the population has most probably declined mainly due to coastal engineering, e.g. coastal defence barriers and prevention of flooding as it lives in the flooding zone of saltmarshes. In the north the species is associated with deeper water macrophyte meadows, and the pressures are somewhat different and less well known.

Assessment justification

The species is rare in the Baltic Sea. In the southern Baltic Sea, this species occurs in the flooding zone on salt marshes. This habitat has declined considerably due to coastal engineering, particularly prevention of flooding. In Germany, there is only one location left out of a few historical occurrences. It is assumed to have declined ca 30% in Germany during the last 20 years but the decline may have ceased or slowed down in recent years. The species is short-lived and the time period for estimation of decline would be 10 years for criterion A. In the northern Baltic Sea, the species has more occurrences, at least in Estonia. The overall area of occupancy (AOO) is difficult to estimate as it is not known how large a proportion of northern occurrences are represented in the data. Calculating AOO on the basis of all reported occurrences gives 196 km^2 but the overall AOO may well be at least twice as large. It is not known why there are no observations on the eastern coast of Sweden, which increases the level of uncertainty even more. However, the geographic distribution of the species is assumed restricted and the quantity and quality of its habitats is continuingly declining, at least in the southern Baltic. In the northern Baltic Sea the population trend is poorly known but there is an assumption that the species may even have increased there in recent years. In the south the species appears to be also severely fragmented but that is probably not the case for the northern occurrences, which constitute the majority of the Baltic Sea population. Based on the overall situation the species is categorized as Near Threatened (NT) according to B2a.

Recommendations for actions to conserve the species

Restoration of flooding coastal meadows would improve the chances of species survival in the southern Baltic Sea.

Common names

Denmark: –, Estonia: –, Finland: ruskomerietana, Germany: Salzwiesen-Nacktschnecke, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: –

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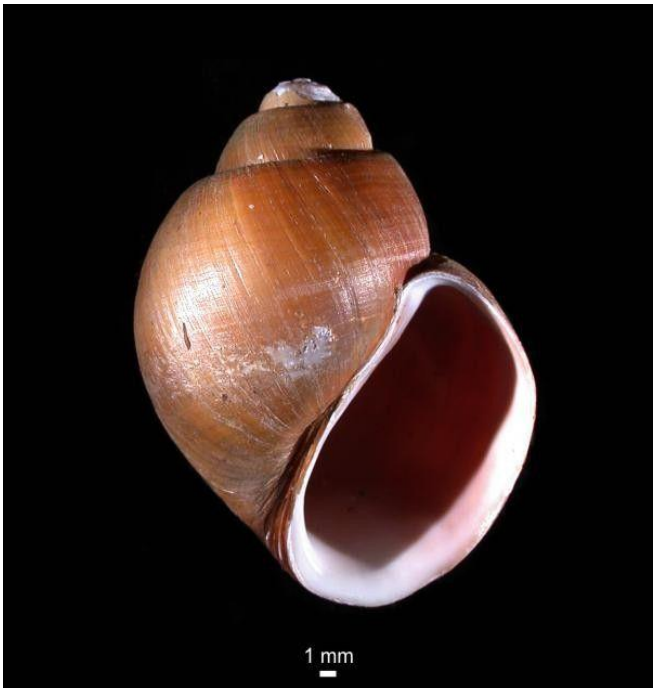
SPECIES INFORMATION SHEET *Amauropsis islandica*

English name: **Iceland moonsnail**	Scientific name: ***Amauropsis islandica***	
Taxonomical group: Class: Gastropoda Order: Hypsogastropoda Family: Naticidae	Species authority: Gmelin, 1791	
Subspecies, Variations, Synonyms: *Amauropsis islandicus* Gmelin, 1791	Generation length: 5–6 years	
Past and current threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01), Eutrophication (H01.05)	Future threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01), Eutrophication (H01.05), Climate change (M01.01)	
IUCN Criteria: **B2ab(ii,iii,iv)**	**HELCOM Red List Category:**	**NT Near Threatened**
Global / European IUCN Red List Category NE / NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**2** (Endangered), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**VU**		

Distribution and status in the Baltic Sea region

Amauropsis islandica is a marine sea snail demanding high salinities. In the HELCOM area it is rare and has been found only from the Arkona Basin to the Kattegat. Its habitats have suffered e.g. from bottom trawling.

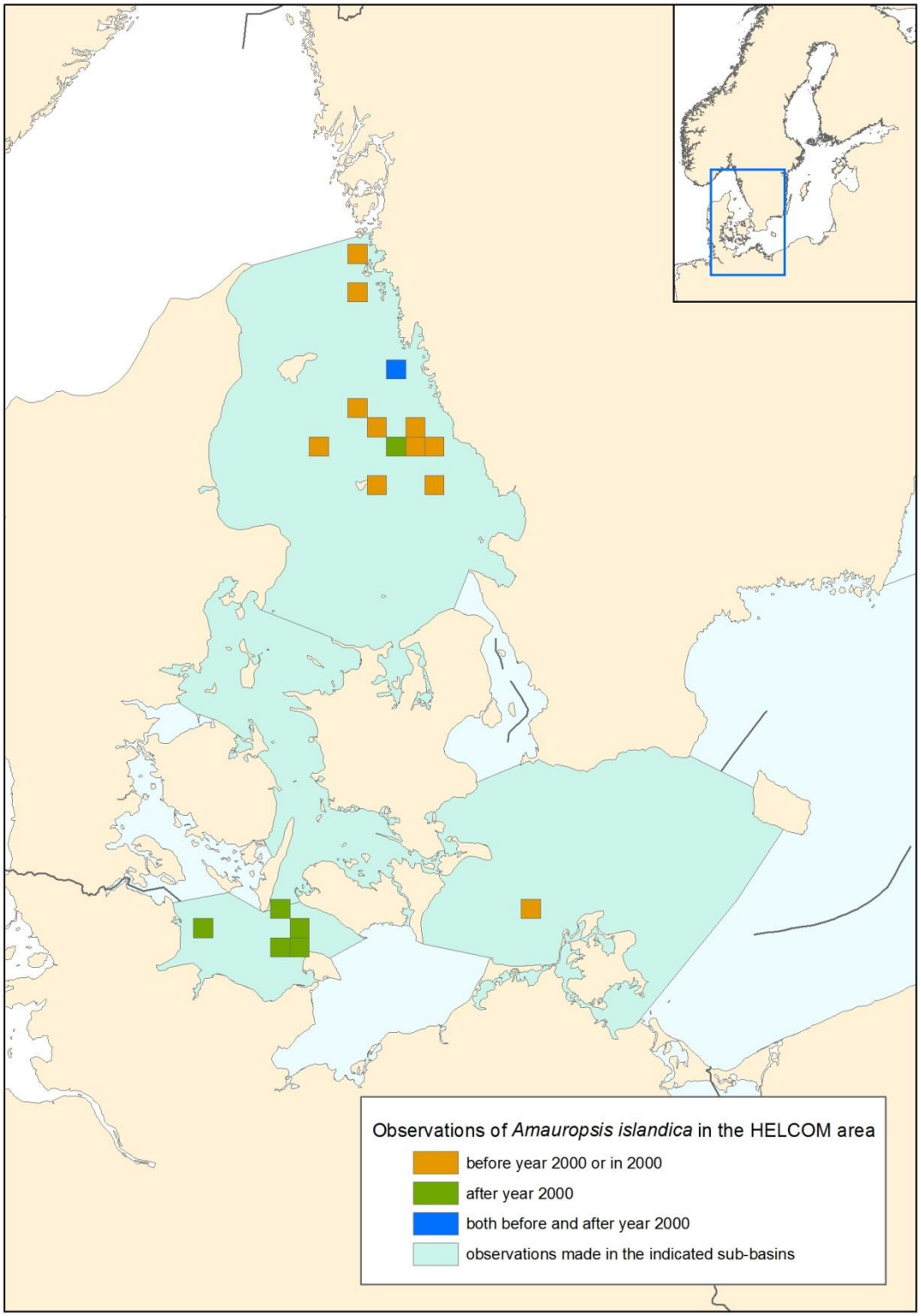


Amauropsis islandica. Photo by Maria Wlodarska-Kowalczuk
http://www.iopan.gda.pl/~maria/wwwmollusca/index.html

SPECIES INFORMATION SHEET *Amauropsis islandica*

Distribution map

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



SPECIES INFORMATION SHEET *Amauropsis islandica*

Habitat and ecology

A. islandica is a circumarctic marine sea snail that can be found on gravel or mixed sediments down to 20–30 m depth in the westernmost HELCOM area. It is a predator that feeds on planktonic and minute detrital food items through either suspension or deposit feeding and it plays a key role in the benthic community. It has a maximum size of 25 to 35 mm. The species does not have a pelagic stage for dispersal but it lays eggs directly on the bottom.

Within the HELCOM area, the habitat preferences of the species are known only in Germany, where the species has been found from locations where there are well developed *Laminaria* and *Delesseria* meadows.

Description of major threats

At least in Germany the species appears to prefer habitats where there are well developed *Laminaria* and *Delesseria* meadows. Such habitats are rare and very sensitive to physical damage such as bottom trawling. In addition to disturbance on the actual place of occurrences, bottom trawling also causes turbidity and sedimentation on larger areas. Eutrophication is another important pressure.

Assessment justification

The species is primarily marine and is restricted to the western part of the HELCOM area. Its ability to disperse and recolonize is considered limited as it has no pelagic stage for dispersal (lays eggs on the bottom). *A. islandica* is a long-living (5–6 years) gastropod species. Calculating the area of occupancy (AOO) on the basis of reported occurrences gives only 132 km^2. The overall AOO is not known but it is assumed to be less than 4000 km^2. Number of extant locations is estimated to 11–19. The geographic distribution of the species is regarded restricted, and the quantity and quality of habitats is likely to be continuingly declining due to direct and indirect effects of bottom trawling and eutrophication. The species meets the criteria B2ab(ii,iii,iv) under the category NT (Near Threatened).

Recommendations for actions to conserve the species

The pressure caused by bottom trawling to the habitats of the species should be decreased.

Common names

Denmark: højspiret boresnegl, Estonia: –, Finland: –, Germany: Isländische Bohrschnecke, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: –

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SPECIES INFORMATION SHEET — *Boreotrophon truncatus*

English name: **The bobtail trophon**	Scientific name: ***Boreotrophon truncatus***	
Taxonomical group: Class: Gastropoda Order: Hypsogastropoda Family: Muricidae	Species authority: Strøm, 1768	
Subspecies, Variations, Synonyms: *Trophonopsis truncata* Strøm, 1768 *Trophon truncatus* Strøm, 1768	Generation length: 2 years?	
Past and current threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01), Eutrophication (H01.05)	Future threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01), Eutrophication (H01.05)	
IUCN Criteria: **B2ab(ii,iii)**	**HELCOM Red List Category:**	**NT Near Threatened**
Global / European IUCN Red List Category NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**2** (Endangered), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**DD**		

Distribution and status in the Baltic Sea region

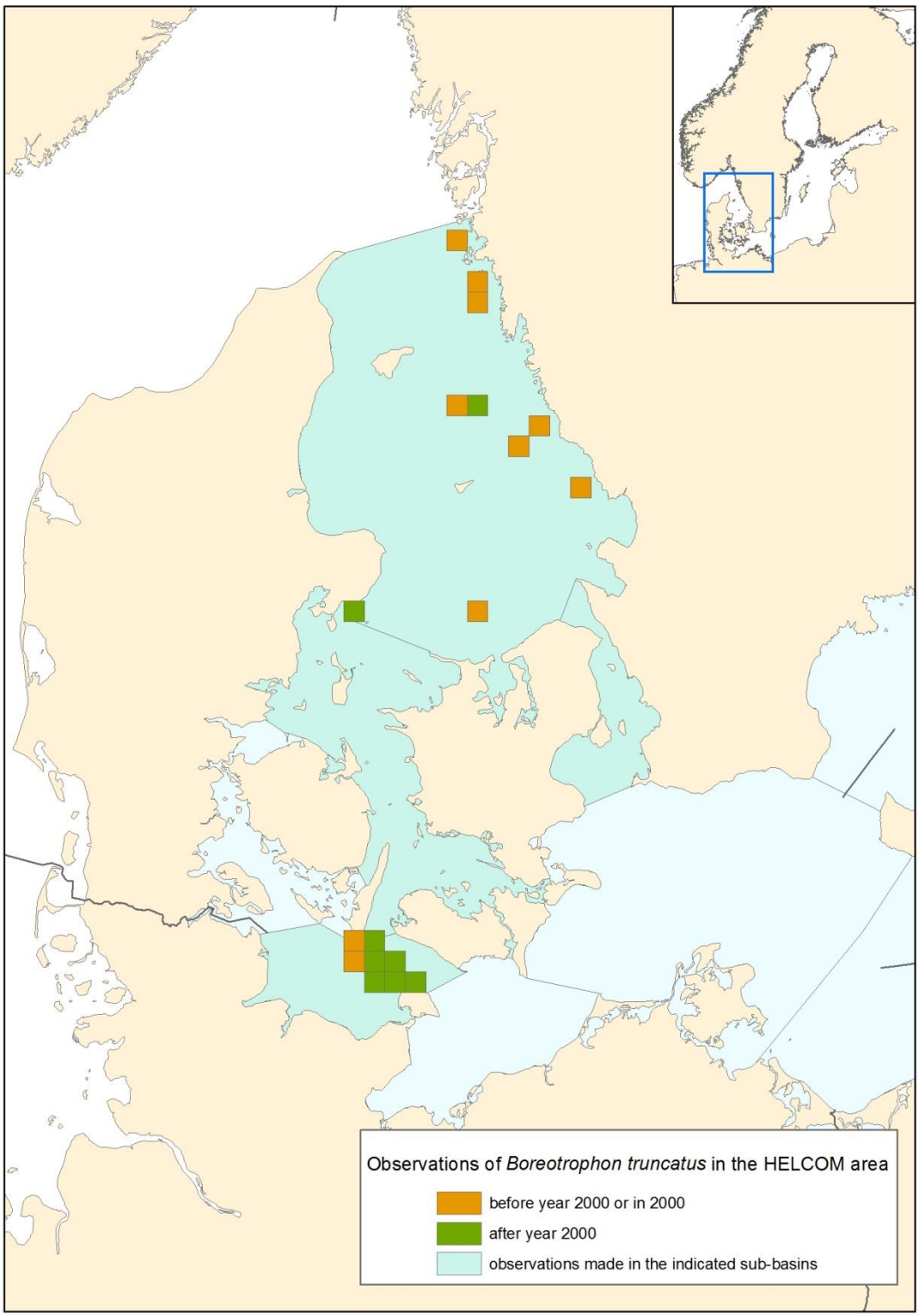
Boreotrophon truncatus is an arctic marine shell-bearing mollusc that occurs in the HELCOM area only in deep waters of the western Baltic Sea from the Kattegat to the entrance of the Baltic Proper. It appears to be rather rare and its habitat has deteriorated e.g. due to bottom trawling.

Boreotrophon truncatus. Photo by Maria Wlodarska-Kowalczuk
http://www.iopan.gda.pl/~maria/wwwmollusca/index.html

SPECIES INFORMATION SHEET *Boreotrophon truncatus*

Distribution map

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



Habitat and ecology

B. truncatus is an arctic species that requires cold water and high salinities. It occurs only in deep waters of the western Baltic Sea where it lives on muddy and coarse sediments on well oxygenated bottoms. However, the species is so rare that its habitat preferences are poorly known. The species feeds on planktonic and minute detrital food items through either suspension or deposit feeding (WoRMS).

The species´ ability to disperse and recolonize is regarded limited as its larvae are not pelagic (direct development).

Description of major threats

In the HELCOM area, the species is threatened by bottom trawling, eutrophication, and climate change. It is directly affected by bottom trawling, and indirectly by the turbidity and sedimentation caused by trawling on larger areas. Eutrophication has probably also had a negative effect on the population. As *B. truncatus* requires cold and well-oxygenated water, the species is also threatened by the global warming.

Assessment justification

In the HELCOM area, this arctic marine species occurs only in cold, deep, and well-oxygenated waters of the western Baltic Sea. The species is rare and the number of locations is assumed to be 11–19. The recolonization ability of the species is regarded limited as its larvae are not pelagic. It is sensitive to physical disturbance to bottom habitats (e.g. bottom trawling). The geographically restricted distribution in the Baltic Sea area together with continuing decline in the area of occupancy and the habitat quality qualifies for the category Near Threatened according to criteria B2ab(ii,iii).

Recommendations for actions to conserve the species

The habitat preferences and ecology of the species are not well enough known for giving very specific recommendations. However, it would probably benefit from restrictions to bottom trawling, as well as from any actions that could slow down global warming and decrease eutrophication.

Common names

Denmark: ribbet pigsnegl, Estonia: –, Finland: –, Germany: Abgestutzte Purpurschnecke, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: vindeltornsnäcka

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World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=146733.

SPECIES INFORMATION SHEET *Corophium multisetosum*

English name: –	Scientific name: ***Corophium multisetosum***	
Taxonomical group: Class: Malacostraca Order: Amphipoda Family: Corophiidae	Species authority: Stock, 1952	
Subspecies, Variations, Synonyms: *Trophonopsis truncata* Strøm, 1768 *Trophon truncatus* Strøm, 1768	Generation length: 2 years?	
Past and current threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01), Eutrophication (H01.05)	Future threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01), Eutrophication (H01.05)	
IUCN Criteria: **B2b**	**HELCOM Red List Category:**	**NT Near Threatened**
Global / European IUCN Red List Category –	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**G** (endangered by unknown extent), Latvia –/–, Lithuania –/–-, Poland –/–, Russia –/–, Sweden: –/–		

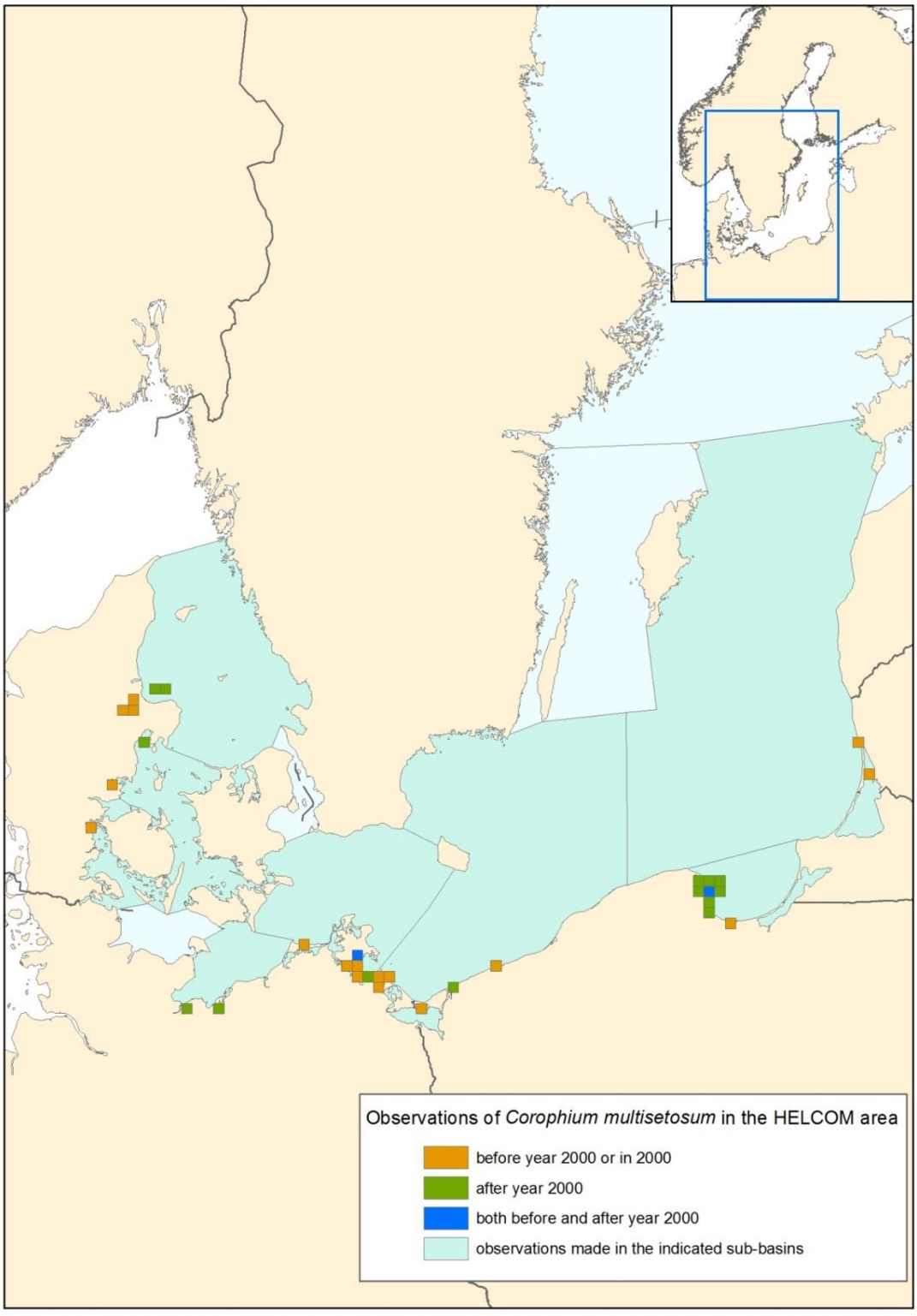
Distribution and status in the Baltic Sea region

C. multisetosum is reported mainly from coastal waters (bays) along southern shores of the Baltic Sea and those in the Danish straits, including adjacent fjords, canals, lagoons, e.g. the Curonian Lagoon, which is the easternmost area. However, there are also records from more open sea, and thus more saline areas such as the Hevring Bay, Arhus Bay, Arkona Basin by Darss-Zingst Peninsula, and the outer Puck Bay. Declining population trends are reported from the Szczecin Lagoon (Wawrzyniak-Wydrowska, pers. comm.).

SPECIES INFORMATION SHEET *Corophium multisetosum*

Distribution map

The georeferenced records of species compiled from the Danish national database for marine data (MADS), Russian monitoring data (Elena Ezhova, pers. comm), and the database of the Leibniz Institute for Baltic Sea Research (IOW), where also the Polish literature and monitoring data for the species are stored.



SPECIES INFORMATION SHEET *Corophium multisetosum*

Habitat and ecology

C. multisetosum is a stenohaline brackish water species that inhabits bottom substrates, preferably soft, in macrophyte rich areas where it builds its tubes (burrows) in clay, sand, mud or detritus. However, it is able to build tubes also on hard substrates. It has been mainly recorded from coastal waters (estuaries, lagoons, or bays) but also from more open, and thus more saline, sea areas.

Description of major threats

The potential threats affecting the population of *C. multisetosum* are not well known but it is likely that the decline and deterioration of macrophyte meadows, due to eutrophication and perhaps also coastal construction activities have had a negative effect on the species.

Assessment justification

The population of the species is regarded geographically restricted. The known occurrences are concentrated in a few, geographically separated areas of coastal waters in the Danish straits and the southern Baltic. The AOO estimated only from the known occurrences is c. 300 km^2 but as the habitat preferences of the species do not seem to be very specific, it is assumed that the overall AOO is considerably larger. The most plausible range for the AOO is assumed to be 2000–4000 km^2. It is not known whether the low number of recent findings in Denmark and Germany represent genuine decline or change in monitoring activity. There are signs of negative population trends in the Szczecin Lagoon but on the other hand the species appears to be doing well in the Puck Bay. The geographical restriction in combination with a suspected continuing decline, and taking the precautionary principle into account, results in the categorization Near Threatened (NT) according to B2b.

Recommendations for actions to conserve the species

As the potential threats are not well understood and even the status of the species is uncertain, it is difficult to give specific recommendations. The knowledge of the species distribution and status should be improved but it is likely that the species would benefit also from any general measures that could reduce eutrophication and the extent of other anthropogenic impacts on its potential habitats, sheltered and macrophyte-rich bays, lagoons, and estuaries.

Common names

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

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SPECIES INFORMATION SHEET *Corystes cassivelaunus*

English name: **Masked crab, Helmet crab, Sand crab**	Scientific name: ***Corystes cassivelaunus***	
Taxonomical group: Class: Malacostraca Order: Decapoda Family: Corystidae	Species authority: Pennant, 1777	
Subspecies, Variations, Synonyms: *Cancer cassivelaunus* Pennant, 1777 *Cancer personatus* Herbst, 1785 *Corystes dentatus* Latreille, 1801 *Hippa dentata* Fabricius, 1793	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:**	**NT Near Threatened**
Global / European IUCN Red List Category NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/* (Not threatened, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**NT**		

Distribution and status in the Baltic Sea region

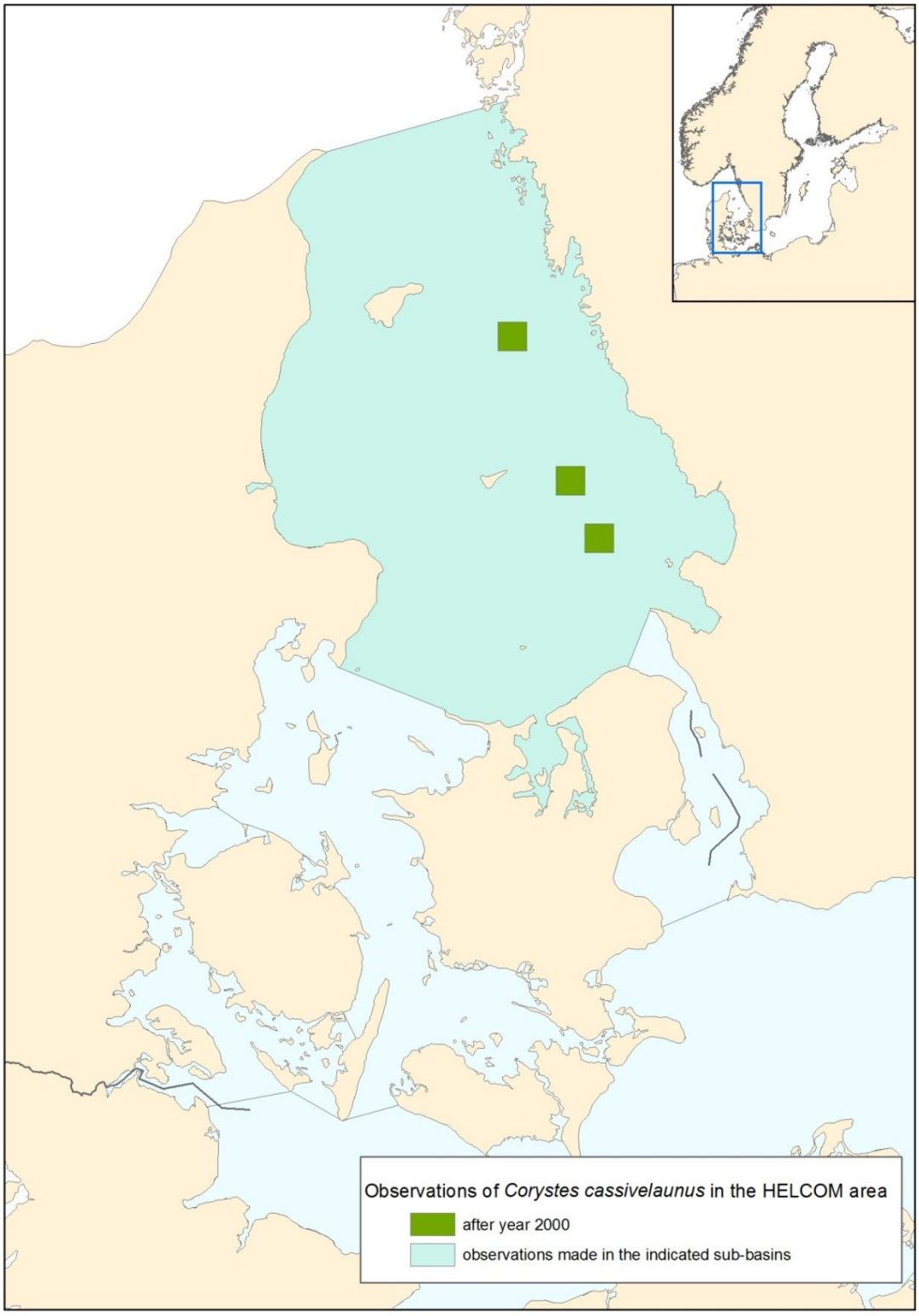
Within the HELCOM area the species has only been reported from the offshore banks Fladen, Röde bank and Stora Middelgrund in the Kattegat. Outside the area is known from the Skagerrak, south of Norway and the North Sea. It seems that the species is rare also in the Skagerrak and Norway. The habitat is probably quite rare within the HELCOM area, and may also be subject to sedimentation. As the species lives down in the bottom material, "digging" gear is required for sampling. Thus, the species is often difficult to detect with standard sampling.

Corystes cassivelanus. Photo by Anders Salesjö Photography, Undervattenbilder.se.

SPECIES INFORMATION SHEET *Corystes cassivelaunus*

Distribution map

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



Habitat and ecology

C. cassivelaunus is a small digging crab, with a characteristic appearance (a "mask" on the carapace). It is typically found in burrows in the sand from the lower shore and shallow sublittoral to about 100 m. (MarLIN). The masked crab burrows backwards into the sand. Once it is in the sand, the crab forms a tube by fusing the bristles of the second pair of antennae together; it then draws water down this tube for respiration. It feeds on burrowing invertebrates, such as polychaete worms and bivalve mollusks. In the British Isles females carry eggs for around 10 months, and can reproduce repeatedly for several years (Fish & Fish 1996).

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

The species is probably naturally rare due to its habitat choice, but as it is difficult to detect with standard sampling it may also be more common than suspected. The number of locations within the HELCOM area is estimated to be less than 10. The limited number of locations qualifies for the category Near Threatened (NT) according to D2.

Recommendations for actions to conserve the species

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

Common names

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

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SPECIES INFORMATION SHEET *Inachus dorsettensis*

English name: **Scorpion spider crab**	Scientific name: ***Inachus dorsettensis***	
Taxonomical group: Class: Malacostraca Order: Decapoda Family: Inachidae	Species authority: Pennant, 1777	
Subspecies, Variations, Synonyms: *Cancer dodecos* Linnaeus, 1767 *Cancer dorsettensis* Pennant, 1777 *Cancer scorpio* Fabricius, 1779 *Doclea fabriciana* Risso, 1827 *Inachus scorpio* Fabricius, 1798 *Macropus parvirostris* Risso, 1816	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (H01.05)	Future threats (Habitats Directive article 17 codes): Eutrophication (H01.05)	
IUCN Criteria: **B1ab(iii)**	**HELCOM Red List Category:**	**NT Near Threatened**
Global / European IUCN Red List Category NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/NT		

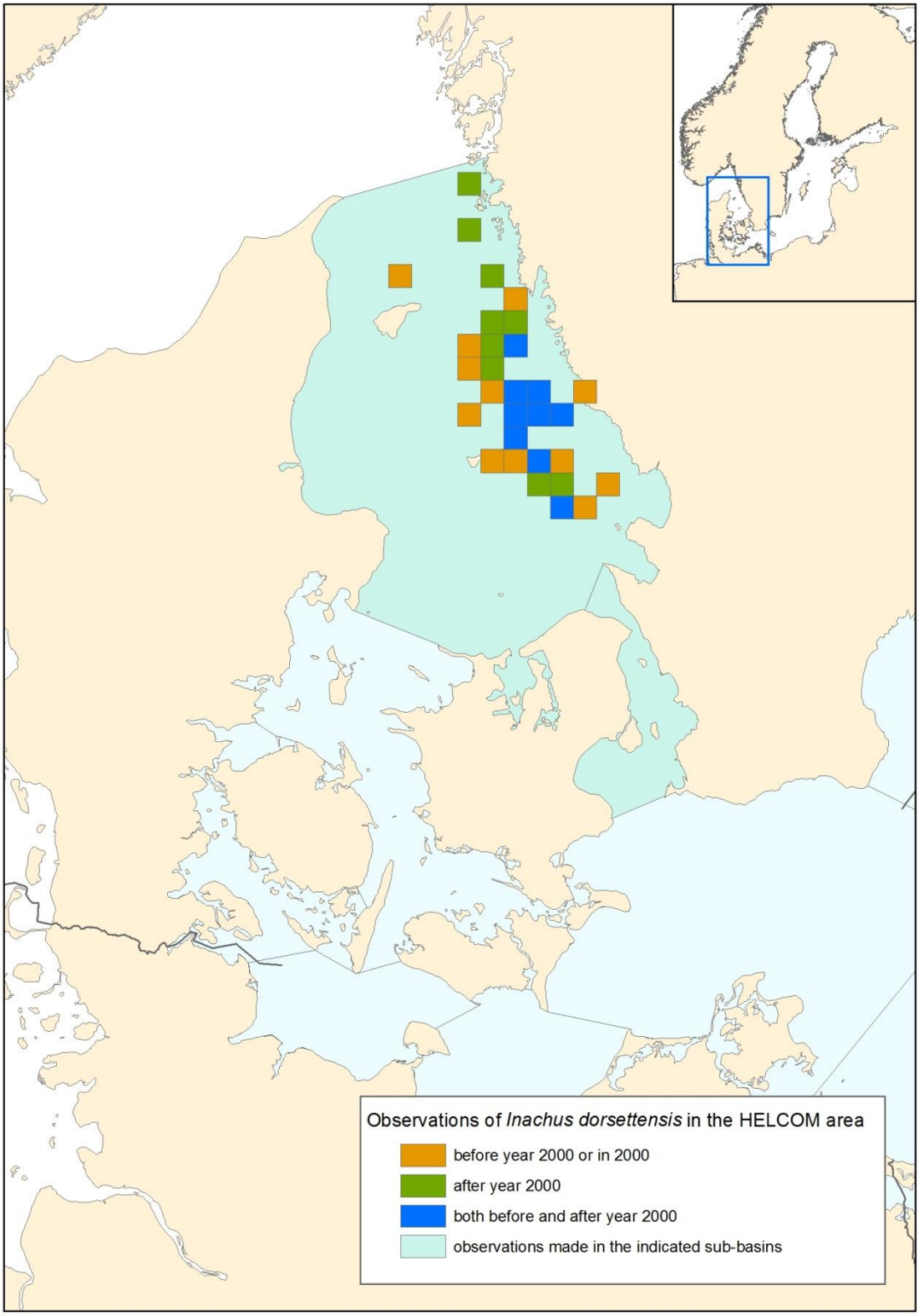
Distribution and status in the Baltic Sea region

The main distribution of *I. dorsettensis* within the HELCOM area is along the Swedish coast of the Kattegat, and Öresund. The present distribution seems to be primarily on the shallow offshore banks in the Kattegat. Outside the HELCOM area the species occurs in the Skagerrak, along the Norwegian west coast and in the North Sea. The species used to be common in the algal belt, but seems to have suffered a decline in later decades. A comparison between historical and present Swedish data indicates a decline in distribution, both in the Kattegat and the Skagerrak, primarily in coastal areas.

SPECIES INFORMATION SHEET *Inachus dorsettensis*

Distribution map

The records of species compiled from the species database of the Swedish Species Information Centre (Artportalen) and from the Danish national database for marine data (MADS).



SPECIES INFORMATION SHEET *Inachus dorsettensis*

Habitat and ecology

I. dorsettensis is a spider-like crab with long legs. It is normally found in the algal belt, but can also occur in many other habitats, e.g. soft and muddy bottoms. Depth distribution is wide, 4–300 meters (maximum depth of the Kattegat area is approximately 130 meters). The species covers itself in tiny pieces of sponge and sea weed to provide camouflage.

Description of major threats

Eutrophication which causes deterioration of coastal algal belts.

Assessment justification

Limited data, mainly from Sweden. These indicate a decrease in distribution, primarily in coastal areas. The species present distribution within the HELCOM area seems to be primarily on the shallow offshore banks in the Kattegat. The area of estimated extent of occurrence (EOO) in the Kattegat is 6 000 km^2 (3000–9000), and number of locations estimated to be 8 (6–12). The restricted geographic range together with continuing decline in habitat quality qualifies for the category Near Threatened (NT) according to B1ab(iii).

Recommendations for actions to conserve the species

The emission of eutrophicating substances to the marine environment needs to be reduced

Common names

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

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SPECIES INFORMATION SHEET *Mya truncata*

English name: **Blunt Soft-shell clam, Blunt gaper**	Scientific name: ***Mya truncata***	
Taxonomical group: Class: Bivalvia Order: Myoida Family: Myidae	Species authority: Linnaeus, 1758	
Subspecies, Variations, Synonyms: –	Generation length: 5–10 years	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (anoxia; H01.05), Reduced water mass exchange (–), Fishing (Bottom trawling; F02.02.01)	Future threats (Habitats Directive article 17 codes): Eutrophication (anoxia; H01.05), Reduced water mass exchange (–), Fishing (Bottom trawling; F02.02.01)	
IUCN Criteria: **A2c**	**HELCOM Red List Category:**	**NT Near Threatened**
Global / European IUCN Red List Category NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**2** (Endangered, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**NT**		

Distribution and status in the Baltic Sea region

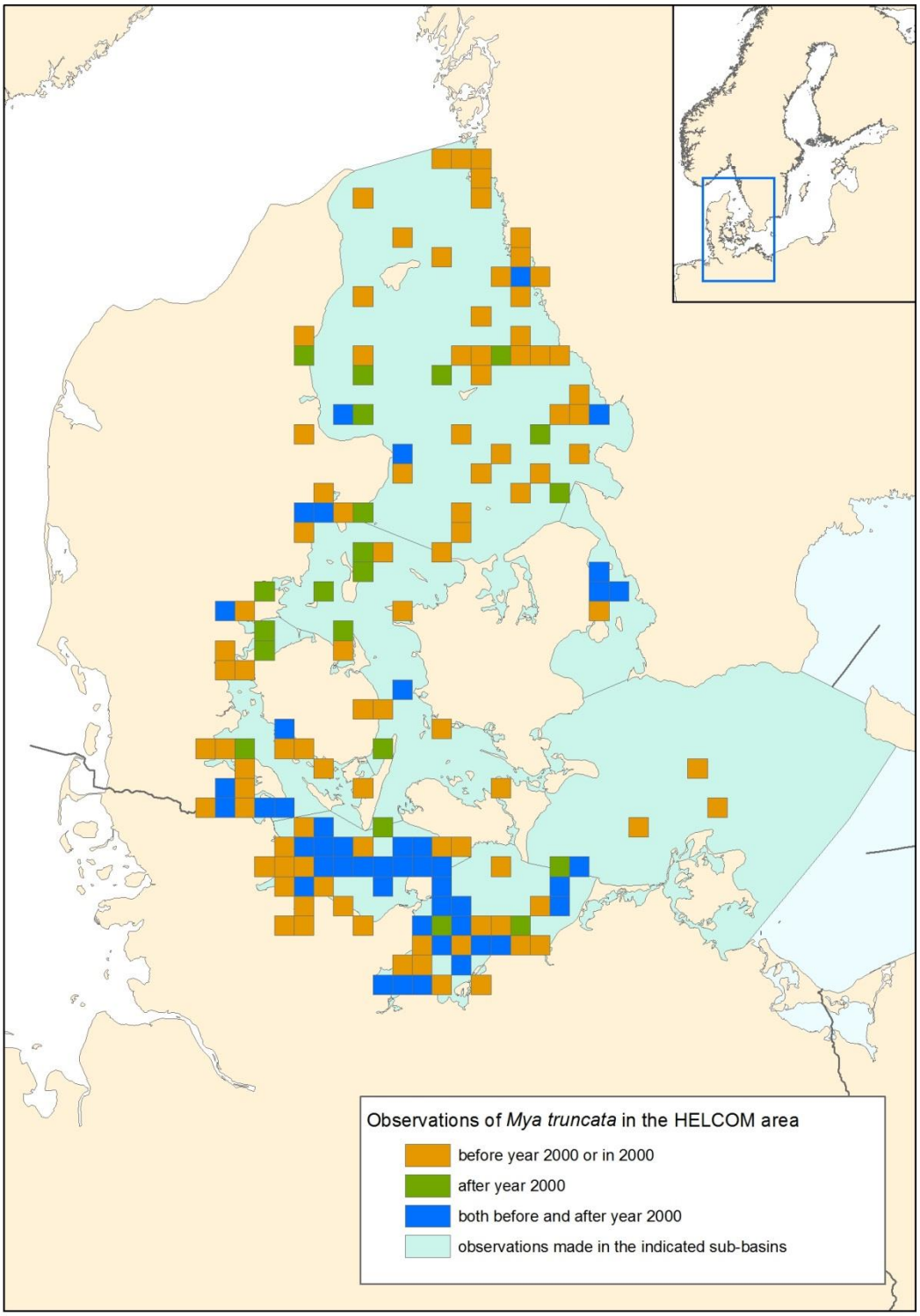
Mya truncata is an arctic species that lives in deep waters of the Danish straits and western Baltic Sea. It is suspected to have declined although the data on the species is scarce. The species is negatively affected by eutrophication and it may suffer also from bottom trawling as it does not bury very deep in the sediment.

Mya truncata. Photo by Michael Zettler. Leibniz Institute for Baltic Sea Research Warnemünde (IOW).

SPECIES INFORMATION SHEET *Mya truncata*

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, International Council for the Exploration of the Sea (ICES), Finnish Environment Institute, and the Leibniz Institute for Baltic Sea Research (IOW).



SPECIES INFORMATION SHEET *Mya truncata*

Habitat and ecology

Mya truncata is restricted to muddy and sandy mud substrata in deep (10–30 m) and cold basins in the Kattegat and the Belt Sea (HELCOM). *M. truncata* needs salinity above 20 psu. It is rare in the Belt Sea with maximum densities of 1–10 ind./m². Reproduction takes place from October to January, and the larvae are pelagic. The species tolerates temporary oxygen deficiency.

Description of major threats

Reasons for threat are oxygen deficiency often caused by eutrophication in combination with poor water exchange (HELCOM). Bottom trawling can also affect the species negatively as it does not bury very deep in the sediment.

Assessment justification

In the HELCOM area, the distribution of the species is restricted to the deep, cold waters of the Danish straits and western Baltic Sea. In Germany, the recent data is seemingly abundant but it can give a wrong idea, as the effort for sampling has also increased so much. Furthermore, in German locations there have been only one/two specimens per sample, and the species is not abundant anywhere. In Swedish inventories in the 1930s it was found from ca. 40 locations along the west coast. In a similar inventory conducted in the 2000s only three records were made, all in shallow offshore banks. However, only a few of the old locations were resampled, and consequently the numbers cannot be directly compared. The difference between EOOs based on recent and old data indicates, however, that the available habitat has decreased in the HELCOM area, resulting in an assumed population decline of ca. 15%. The species is therefore categorized as Near Threatened (NT) according to criteria A2c.

Recommendations for actions to conserve the species

The species would benefit from actions decreasing eutrophication and oxygen depletion. The species may also benefit from restrictions to bottom trawling. The species burrows into the bottom sediment but only perhaps less than 15 cm, which means that the trawling may have a direct physical impact on individuals in some places.

Common names

Denmark: afstumpet sandmusling, Estonia: –, Finland: –, Germany: Abgestutzte Klaffmuschel, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: –

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Environmental Research Institute. Downloaded in June 2011.

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SPECIES INFORMATION SHEET *Sabella pavonina*

English name: **Peacock worm**	Scientific name: ***Sabella pavonina***	
Taxonomical group: Class: Polychaeta Order: Sabellida Family: Sabellidae	Species authority: Savigny, 1822	
Subspecies, Variations, Synonyms: –	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Potentially eutrophication (H01.05), Fishing (bottom trawling; F02.02.1)	Future threats (Habitats Directive article 17 codes): Potentially eutrophication (H01.05), Fishing (bottom trawling; F02.02.1)	
IUCN Criteria: **B1ab(iii)**	**HELCOM Red List Category:**	**NT Near Threatened**
Global / European IUCN Red List Category NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

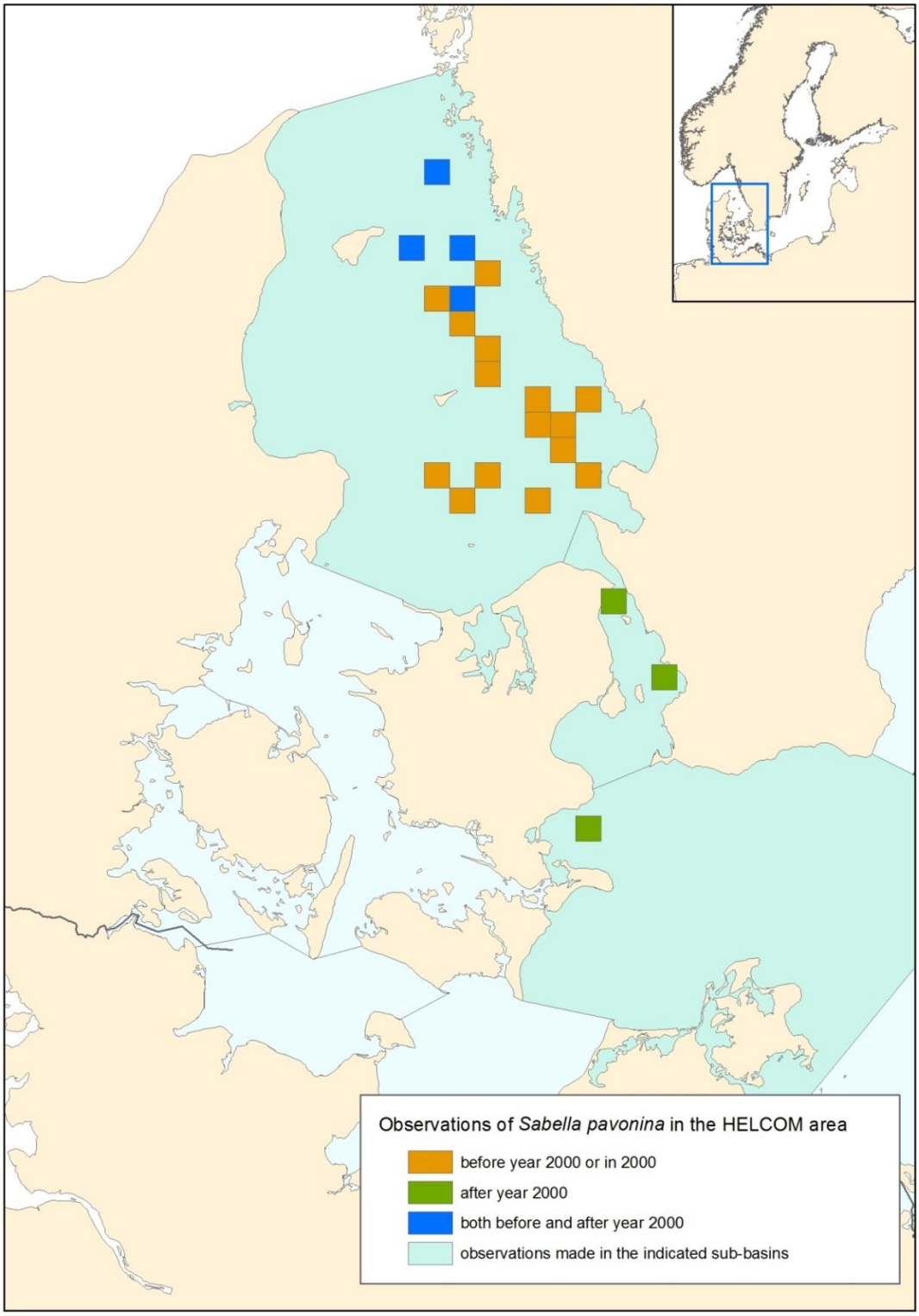
Distribution and status in the Baltic Sea region

The main distribution of *S. pavonina* within the HELCOM area is in the Kattegat and the Sound. Outside the HELCOM area the species occurs in the Skagerrak and in the North Sea. A comparison between historical and present Swedish data indicates a decline in distribution, particularly in the southern parts of the Kattegat. As the species lives on varied substrata, e.g. on stones in mud and sand, it is difficult to say what the cause of this decline might be other than a general deterioration of the marine environment due to e.g. eutrophication and bottom trawling.

SPECIES INFORMATION SHEET *Sabella pavonina*

Distribution map

The georeferenced records of species compiled from the databases of the Swedish Species Information Centre (Artportalen) and the Swedish Meteorological and Hydrological Institute.



SPECIES INFORMATION SHEET *Sabella pavonina*

Habitat and ecology

Sabella pavonina is a long and slender tube-building bristleworm that may reach a length of up to 300 mm. The clay-coloured tube is soft, thin and narrow. The tentacle crown is brightly coloured and banded. The species is a suspension feeder that can be found on a variety of bottom substrata. Depth range in the Scandinavian area is from 5 meters down to several hundred meters.

Description of major threats

It is difficult to say what the cause of the species´ decline might be other than a general deterioration of the marine environment due to e.g. eutrophication and bottom trawling.

Assessment justification

Only limited data are available. These indicate a decrease in distribution in recent decades. Due to general deterioration of the marine environment the distribution is expected to decrease further, as an effect of deterioration of the habitat quality. The number of locations is estimated to be less than 20. Present distribution (EOO) is estimated to 10 000 (8000–12000) km^2. In combination with few locations and continuing decline the B-criterion is thus fulfilled.

Recommendations for actions to conserve the species

It is difficult to suggest specific measures, as the reason behind the decline is not known. In general the negative effects of eutrophication and trawling on marine biotopes need to be reduced. Also more data on the species distribution within the HELCOM area is needed.

Common names

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

References

Hansson, H. G. 1998. Sydskandinaviska marina flercelliga evertebrater. Utgåva 2

Hayward, P. J & Ryland, J. S. (eds). 2002. Handbook of the Marine Fauna of North-West Europe.

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

SPECIES INFORMATION SHEET *Agrypnetes crassicornis*

English name: –	Scientific name: ***Agrypnetes crassicornis***	
Taxonomical group: Class: Insecta Order: Trichoptera Family: Phryganeidae	Species authority: McLachlan, 1876	
Subspecies, Variations, Synonyms: –	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Unknown (U), Eutrophication (H01.05)	Future threats (Habitats Directive article 17 codes): Unknown (U), Eutrophication (H01.05)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive:	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/**EN**, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

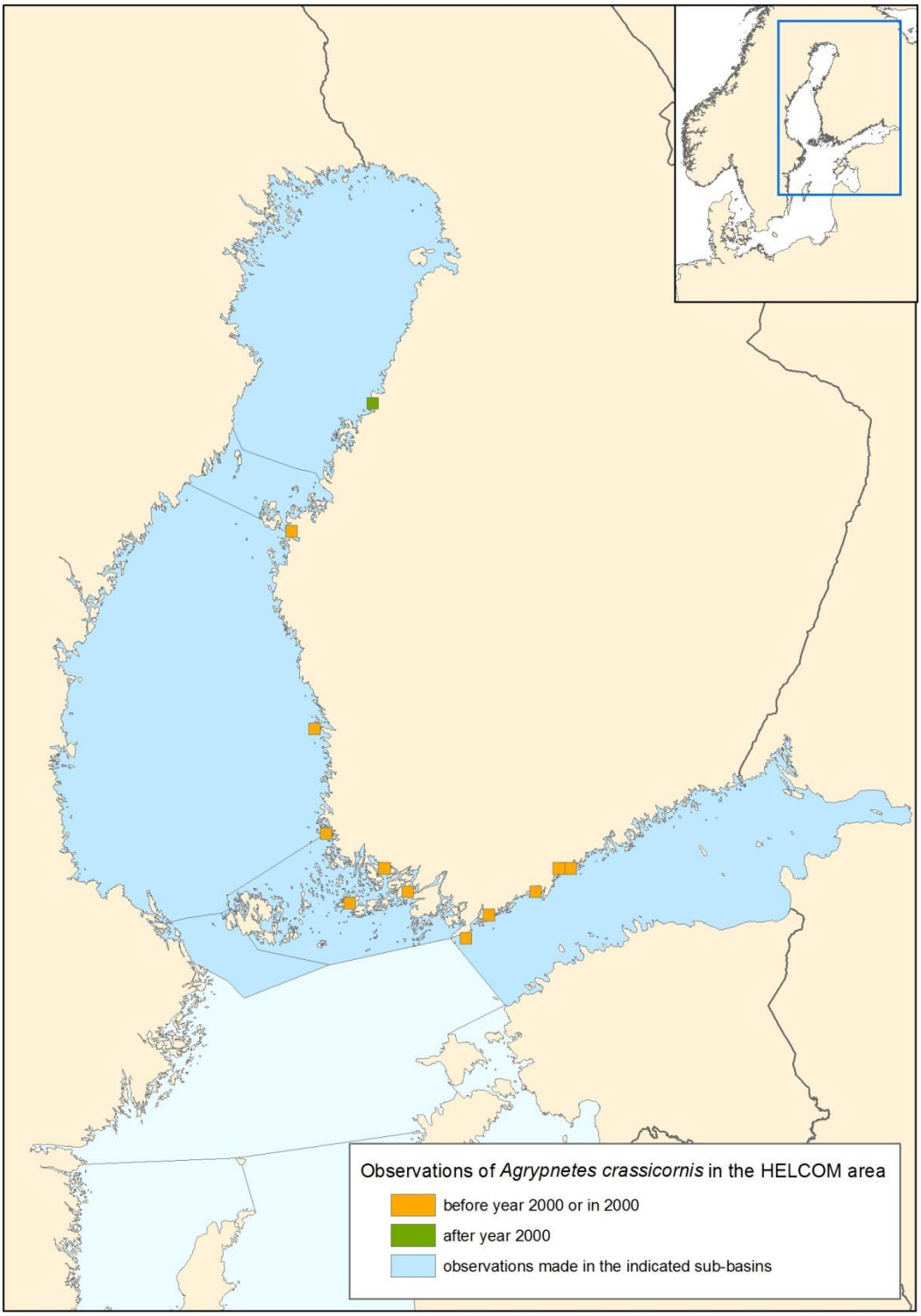
Distribution and status in the Baltic Sea region

A. crassicornis is a caddisfly species that lives along the coasts of the northern Baltic Sea. It is one of the few aquatic insects that appear to have the majority or at least a considerable part of its total distribution in coastal brackish waters. In Finland the species has been observed in more than a dozen localities along the coast, from the Gulf of Finland to the Bothnian Bay, and in Sweden one locality is known in the Bothnian Bay. Additionally, several river localities are known from northern Finland and Sweden. In Sweden the species has not been assessed and in Finland it was evaluated as Near Threatened in 2001 but raised to the category Endangered in 2010 (B2ab(iv)c(iv)).

SPECIES INFORMATION SHEET *Agrypnetes crassicornis*

Distribution map

The geo-referenced records of species obtained from the Finnish database of threatened species (Hertta) and from the Finnish insect database (Hyönteistietokanta). There is at least one observation also on the Swedish coast of the Bothnian Bay (personal communication, Ulf Bjelke) but the exact location is not known. Some locations are also known from northern rivers (not shown in the map). Also a location in the Åland Islands is not shown on the map.



SPECIES INFORMATION SHEET *Agrypnetes crassicornis*

Habitat and Ecology

Little is known about the biology of *A. crassicornis* but it obviously has two-parted habitat preferences and can live both in the brackish coastal waters of the northern Baltic Sea and in the northern rivers. According to Finnish information it also inhabits oligotrophic lakes but it has, as far as is known, not been observed in the lake district of southern and central Finland, nor from southern or central parts of Sweden.

Description of major threats

According to Finnish information, the main threats are unknown but in the coastal habitats of the Baltic Sea eutrophication has probably had a negative effect on the population. In inland waters construction of rivers has been regarded as the main threat in Finland. The small size of the population, or random factors related to this, were also regarded a significant threat in the future.

Assessment justification

A. crassicornis is a rare species that has been recorded in less than 20 localities in Sweden and Finland, the majority of them are found in the coastal habitats of the northern Baltic Sea. In Finland the species is categorized as Endangered and the population is regarded to be geographically restricted, continuingly declining, and threatened e.g. by the effects of eutrophication of the Baltic Sea. However, little is known about the actual population trend in the HELCOM areas and no information is available from other countries. The species is therefore categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

The knowledge of species distribution and ecology needs to be improved before any specific recommendations can be given.

Common names

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

References

Hertta database. Observations of threatened species in Finland. Finnish Environment Institute. Data dowdloaded 10 April 2013.

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SPECIES INFORMATION SHEET *Amphipholis squamata*

English name: **Brooding snake star**	Scientific name: ***Amphipholis squamata***	
Taxonomical group: Class: Ophiuroidea Order: Ophiurida Family: Amphiuridae	Species authority: Delle Chiaje, 1828	
Subspecies, Variations, Synonyms: *Amphipholis lineata* Ljungman, 1872 *Amphipholis tenera* (Lütken, 1856) *Amphiura tenuispina* Ljungman, 1865 *Ophiura elegans* Leach, 1815 *Ophiura neglecta* Johnston, 1835	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (anoxia; H01.05)	Future threats (Habitats Directive article 17 codes): Eutrophication (anoxia; H01.05)	
IUCN Criteria: **–**	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**V** (Near threatened, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**DD**		

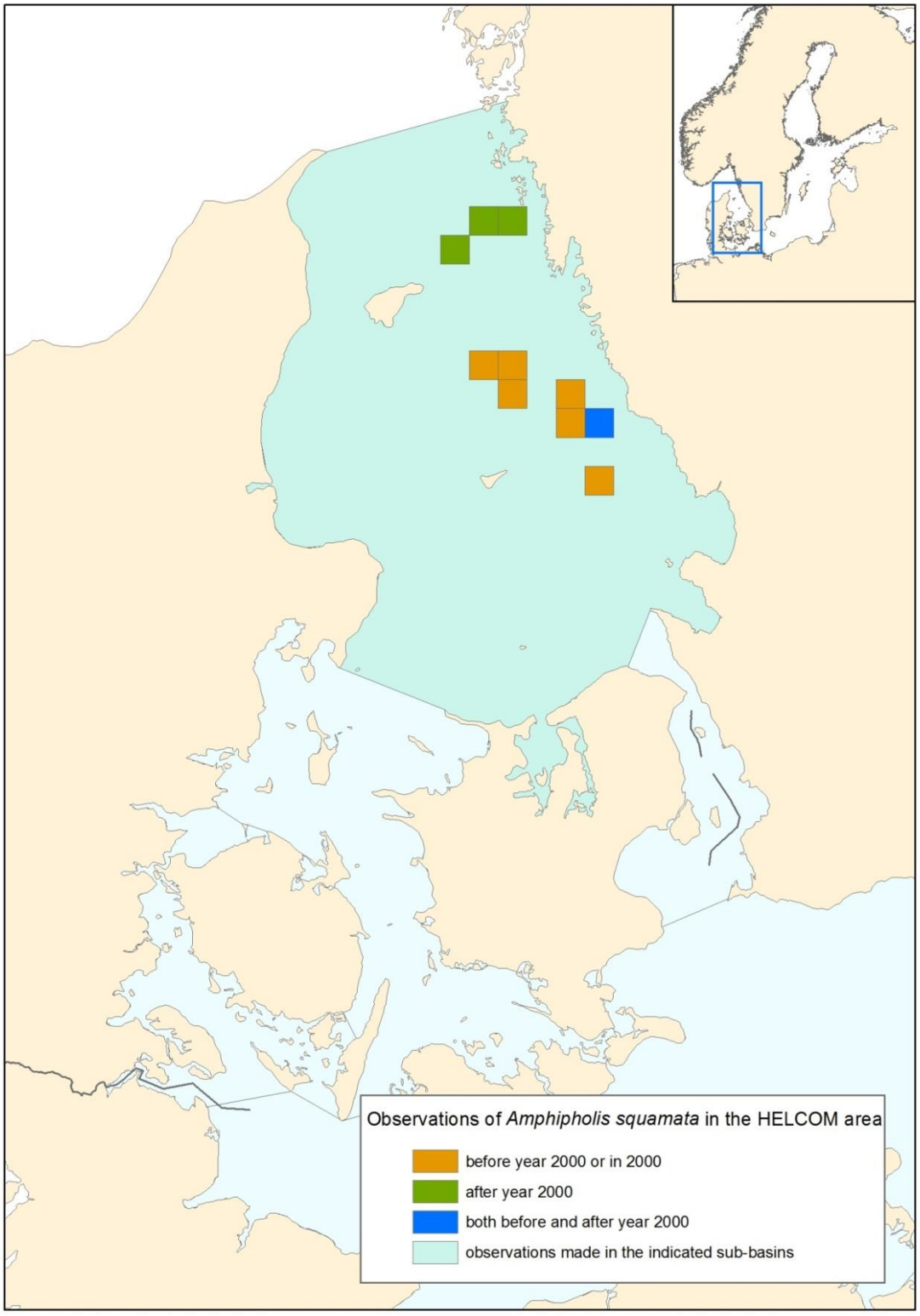
Distribution and status in the Baltic Sea region

The main distribution of *A. squamata* within the HELCOM area is along the Swedish coasts of Kattegat and the shallow offshore banks in the Kattegat. The species is also reported from the Sound region, but no data has been available from this area. Outside the HELCOM area the species is reported from the Skagerrak and the North Sea. A comparison between historical and present Swedish data indicates a decline in distribution, both in the Kattegat and the Skagerrak. However, as the species is difficult to detect, it is also possible that the species is more common than suspected.

SPECIES INFORMATION SHEET *Amphipholis squamata*

Distribution Map

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



SPECIES INFORMATION SHEET *Amphipholis squamata*

Habitat and Ecology

Amphipholis squamata is a small inconspicuous brittle star with a characteristic appearance. It is a cosmopolitan species that occurs in temperate and warm temperate seas. It can be found intertidally (down to more than 800 m depth) and in shallow water from about mid-tide level down. The species is often hidden under stones in gravel and occasionally on sandy bottoms, and can therefore be difficult to find and sample It can also be found amongst algal and bryozoan turfs and occasionally offshore among gravel and shells. *A. squamata* is luminescent with a greenish light. It is a deposit feeder collecting particles within its tube feet, and a suspension feeder via trapping detritus in mucus. It is hermaphroditic, possibly self-fertilising, and the eggs are brooded and hatched as juveniles possibly in May-September. The young are brooded in bursal slits near arm attachment sites (MarLIN, WoRMS). As the larvae have direct development the species ability to disperse and recolonize is limited.

Description of major threats

It is possible that the recurring events of anoxia in the Kattegat have had a negative effect on the species.

Assessment justification

Only limited data exist on the population of the species in the HELCOM area. These indicate a decrease in distribution but it is also possible that the species has been overlooked due to its small size and way of living. The information available is thus insufficient to determine which of the redlist categories would be most likely, and the species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

As the species status is not established and the threats are not well understood, it is difficult to suggest specific measures. In general, the emission of eutrophicating substances leading to e.g. anoxia need to be reduced.

Common names

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

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World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=125064

SPECIES INFORMATION SHEET *Cryptonatica affinis*

English name: **Arctic moonsnail**	Scientific name: ***Cryptonatica affinis***	
Taxonomical group: Class: Gastropoda Order: Hypsogastropoda Family: Naticidae	Species authority: Gmelin 1791	
Subspecies, Variations, Synonyms: *Cryptonatica clausa* *Cryptonatica septentrionalis* *Natica clausa* Broderip & Sowerby G.B. I, 1829	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Unknown (U)	Future threats (Habitats Directive article 17 codes): Climate change (M)	
IUCN Criteria: **–**	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: **–**	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**DD**		

Distribution and status in the Baltic Sea region

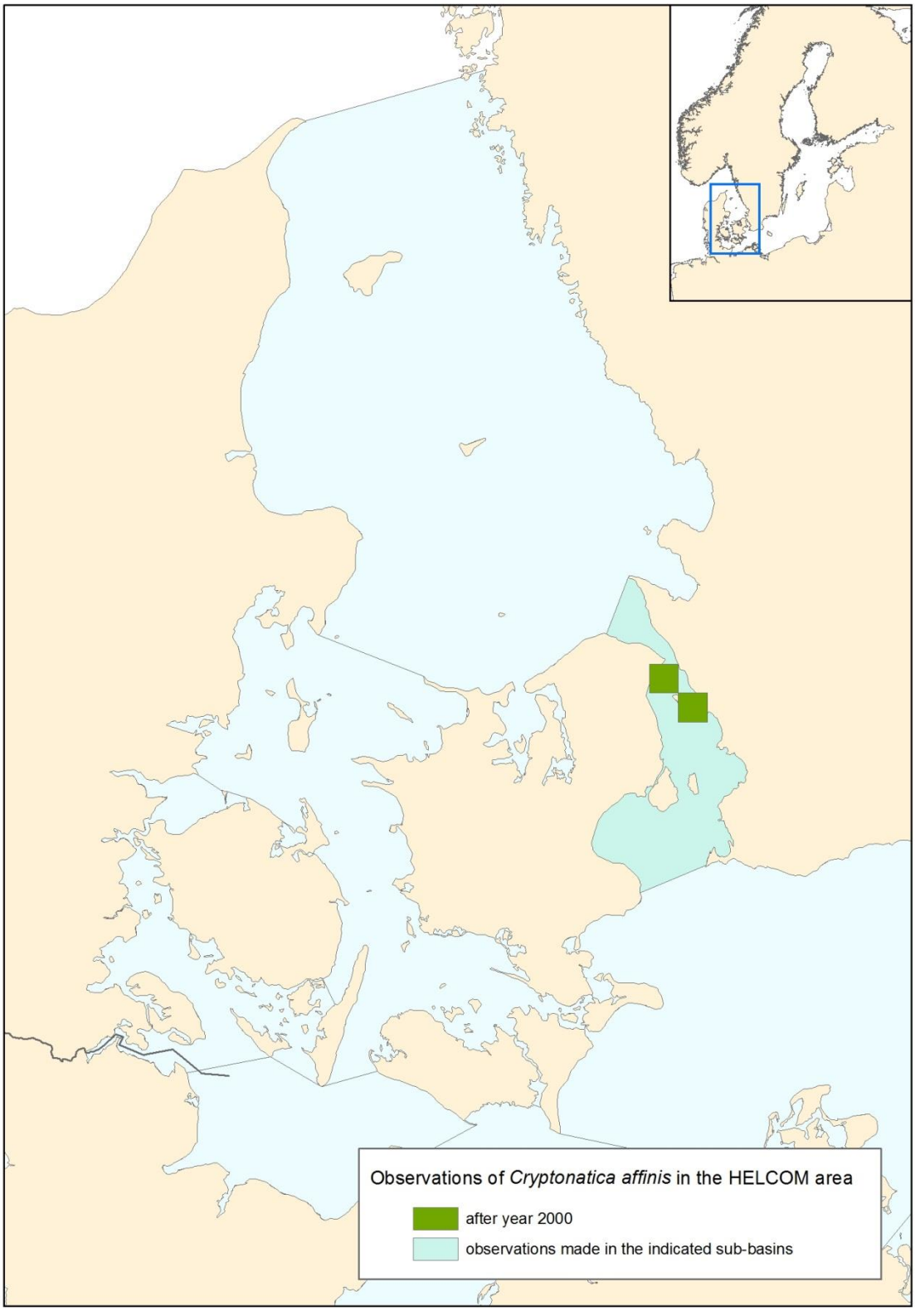
Cryptonatica affinis occurs all around the arctic area down to the Northern Atlantic. In the HELCOM area the species has only been found on one locality in the Sound. Outside the HELCOM area the species has been reported from the Skagerrak, and it occurs along the Norwegian coast. In Swedish investigations (Jägerskiöld 1921–1937) the species was found in close proximity to *Lophelia pertusa* reefs in northern Bohuslän. It is not known whether the species still occurs there. In later years it has only been reported from the deepest part of Öresund (Landskronadjupet). The latest finding is from 2007.

SPECIES INFORMATION SHEET

Cryptonatica affinis

Distribution map

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



SPECIES INFORMATION SHEET *Cryptonatica affinis*

Habitat and Ecology

C. affinis reaches about 20 mm in length, and has a relatively thick shell. It is a circumpolar, epibenthic (seabed surface) species. It is carnivorous and feeds mainly on bivalves. The species produces small eggs enclosed into egg capsules, in which the larvae develop. Direct larvae development probably decreases the species ability to disperse and recolonize. In the HELCOM area the species has only been found on a deep soft bottom in Öresund (Landskronadjupet). This locality is characterized by a mixture of soft sediments, with strong bottom currents, and functions as a southern outpost for many marine species.

Description of major threats

It is not known whether the species is subject to any specific threats or not. However, future climate change is likely to have a negative impact on the species distribution overall.

Assessment justification

Data exists from only one locality within the HELCOM area. The information available is insufficient to determine which of the red list categories is the most likely. The species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

Since the species is only known from one locality within the HELCOM area it is difficult to suggest any specific measures.

Common names

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

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Hansson, H.G. 1998. Sydskandinaviska marina flercelliga evertebrater. Utgåva 2

Schander, C. 2005. *Cryptonatica affinis*. Artfaktablad. Artdatabanken, SLU. 2010-01-19. Available at http://www.artfakta.se/Artfaktablad/Cryptonatica_Affinis_217991.pdf

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World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=140525

SPECIES INFORMATION SHEET *Ekmania barthii*

English name: –	Scientific name: ***Ekmania barthii***	
Taxonomical group: Class: Holothuroidea Order: Dendrochirotida Family: Phyllophoridae	Species authority: Troschel, 1846	
Subspecies, Variations, Synonyms: –	Generation length:	
Past and current threats (Habitats Directive article 17 codes): *Orcula barthii* Troschel, 1846 *Thyonidium pellucidum* Düben & Koren, 1846, non Vahl, 1808	Future threats (Habitats Directive article 17 codes): –	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**D** (Data deficient), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**DD**		

Distribution and status in the Baltic Sea region

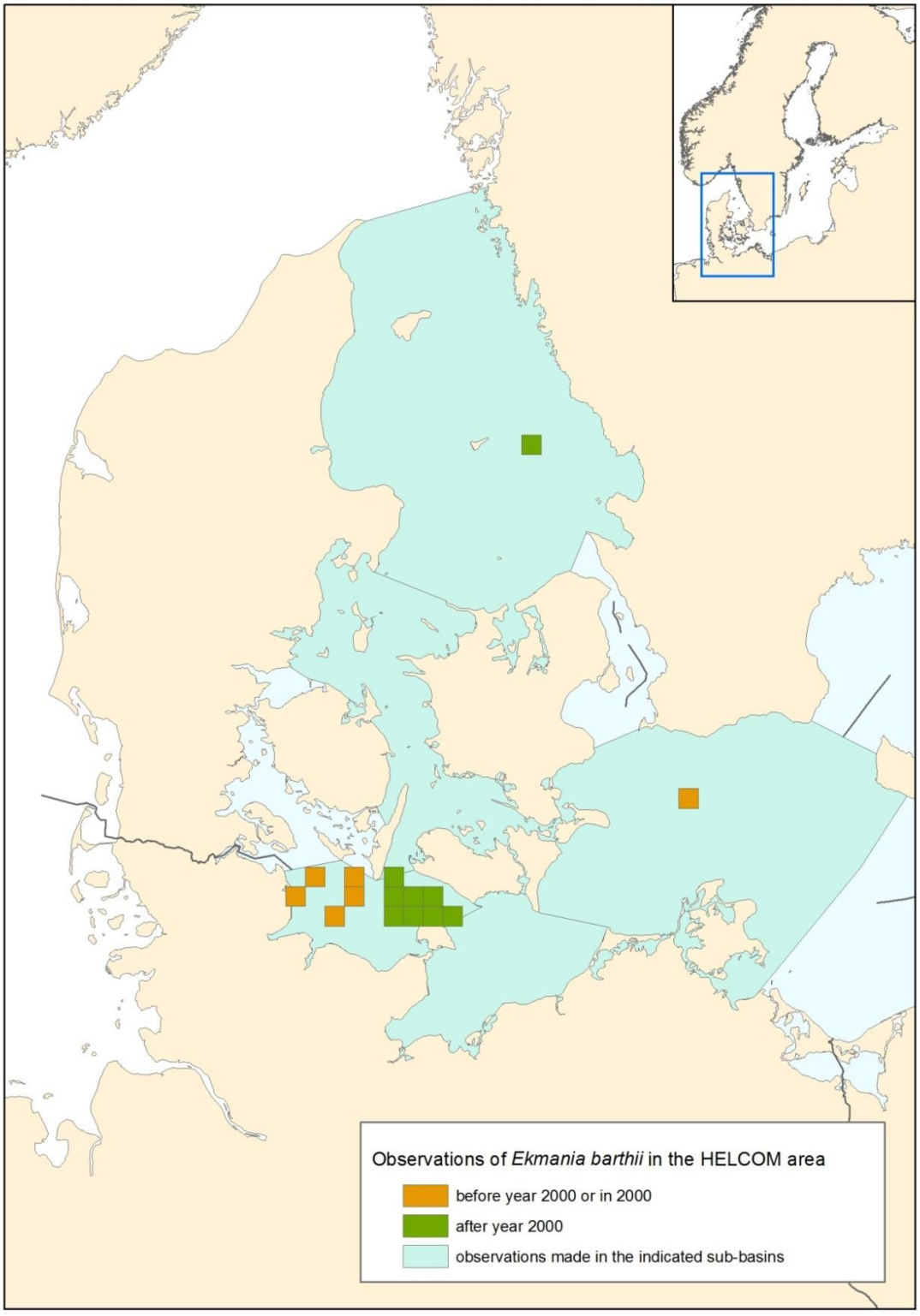
Ekmania barthii is a sea cucumber that has been found within the HELCOM area only in the western Baltic Sea. It is a rare species and there is not enough data to assess the status of the species in the Baltic Sea region. Elsewhere it is reported from Labrador and from eastern and western Greenland, Iceland, Svalbard, the Faroe Island, the Shetland Islands, and northern Norway (Hansson 2002).

Ekmania barthii. Photo by Claude Nozères.

SPECIES INFORMATION SHEET *Ekmania barthii*

Distribution map

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



SPECIES INFORMATION SHEET *Ekmania barthii*

Habitat and Ecology

The distribution in Swedish waters would indicate the normally arctic distribution since the temperatures in the areas where the species is found are lower than e.g. in the close by Skagerrak area. *E. barthii* is an epifaunal organism on gravel and stone bottoms although it has also been found on rocks and shells on soft bottoms. Otherwise its biology is largely unknown. However, it is known to have large eggs and it is likely that it exhibits direct development and lacks a pelagic larval phase, and thus its ability to recolonize and disperse is probably limited (Hansson 2002, WoRMS).

Description of major threats

This species probably suffers from bottom trawling and as it seems to require colder climates, it is likely that also climate change would impact the distribution of this species negatively.

Assessment justification

This marine cold water species is probably genuinely very rare in the Baltic Sea area. Its habitat is probably under pressure due to e.g. trawling. The low amount of data may partly be a result of a sampling bias towards the coastal, shallower areas in Swedish waters. There are a few findings from the 1950–60s, a couple of records from the 1980s, and some recent from the 2000s. It is not known why the species has not been found in other decades. All German findings are restricted to a rather small area in the Kiel Bight, where the species occurs on mixed sediment bottoms. As the data are scarce and there is no knowledge on potential trends, the species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

The knowledge of the distribution, abundance, habitat preferences and ecology should be improved. Restrictions to bottom trawling and working against climate change on an international level would most likely benefit the species in the long run.

Common names

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

References

Database of the Marine Research Centre, Finnish Environment Institute, all observations 1964–2007. Received in March 2011.

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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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SPECIES INFORMATION SHEET *Epitonium clathratulum*

English name: –	Scientific name: ***Epitonium clathratulum***	
Taxonomical group: Class: Gastropoda Order: Caenogastropoda incertae sedis Family: Epitoniidae	Species authority: Kanmacher, 1798	
Subspecies, Variations, Synonyms: *Hyaloscala clathratula* (Kanmacher, 1798)	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Unknown (U)	Future threats (Habitats Directive article 17 codes): Unknown (U)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD** **Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/* (Not threatened, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**DD**		

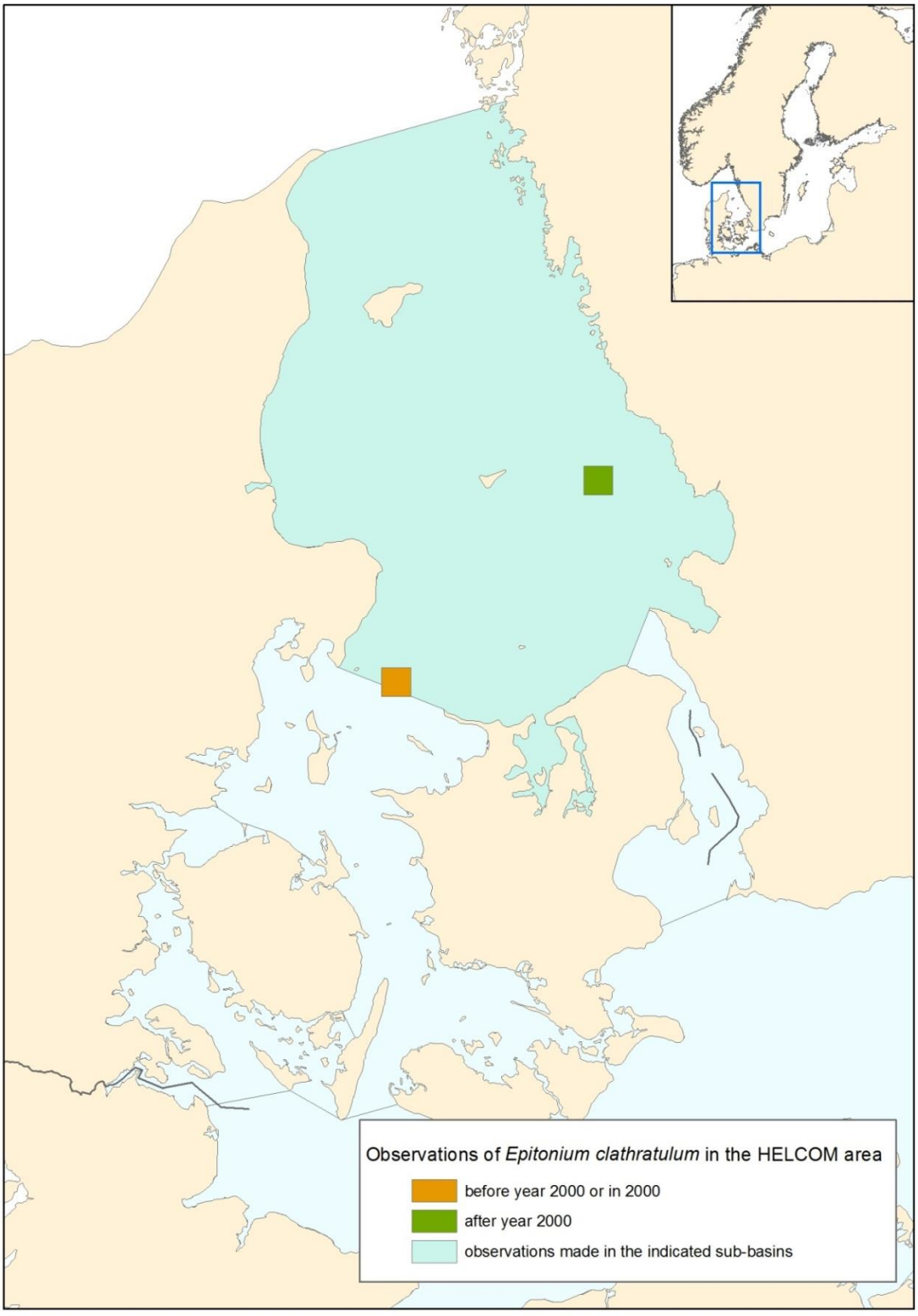
Distribution and status in the Baltic Sea region

The species is reported to occur sparsely in Scandinavian waters, along the Norwegian coast down to the Skagerrak, the Kattegat and the northern part of the Sound. Only two recent findings are known from the Kattegat in recent time, from 1995 and 2007. The latter of these records came from the shallow offshore bank Röde bank. From the Skagerrak one record from Väderöarna was reported in 2002. No other information is available. The species has probably always been rare, but may have become even rarer in later years. Outside the HELCOM area the species ranges from the western Mediterranean to Norway. The species is rare also in Norway, where it was listed as DD in the Norwegian Red List 2010. In the British Isles, it has been found mainly in the south west, but there are recent records from Galway Bay, Orkney and the southern North Sea.

SPECIES INFORMATION SHEET *Epitonium clathratulum*

Distribution map

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



SPECIES INFORMATION SHEET *Epitonium clathratulum*

Habitat and Ecology

E. clathratulum lives on soft bottoms between depths of 30 and 100 meters. It feeds on sea anemones. The species is a consecutive hermaphrodite, changing sex each season. The egg capsules, which are attached to sand grains, hatch into veliger larvae.

Description of major threats

It is not known whether the species is subject to any specific threats or not.

Assessment justification

Very limited data is available. The species has always been rare, but it is suspected that is has become even more rare in later years. The information available is insufficient to determine which of the redlist categories that is most likely, and the species is therefore categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

As there are only two recent findings for the species within the HELCOM area it is difficult to suggest specific measures. In general, shallow soft bottoms are subject to intense trawling and sedimentation caused by trawling and eutrophication

Common names

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

References

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Marine Species Identification Portal. Available at http://species-identification.org/species.php?species_group=mollusca&id=678

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=139718

SPECIES INFORMATION SHEET *Epitonium turtonis*

English name: –	Scientific name: ***Epitonium turtonis***	
Taxonomical group: Class: Gastropoda Order: Hypsogastropoda Family: Epitoniidae	Species authority: Turton, 1819	
Subspecies, Variations, Synonyms: *Epitonium tenuicosta* Michaud, 1829 *Epitonium tenuicosta transitans* Kobelt, 1908 *Epitonium turtonae* Turton, 1819 (misspelling?) *Epitonium turtonae karpathense* Nordsieck, 1969 *Fusicoscala planicosta*(Bivona, 1832 *Scalaria elegans* Risso, 1826 *Scalaria planicosta* Bivona, 1832 *Scalaria plicata* Scacchi, 1836 *Scalaria tenuicosta* Michaud, 1829 *Scalaria tenuicosta* var. *strigata* Pallary, 1938 *Scalaria turtonae* Locard, 1892 *Turbo turtonis* Turton, 1819 (basionym)	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: –	**HELCOM Red List Category:**	**DD** **Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

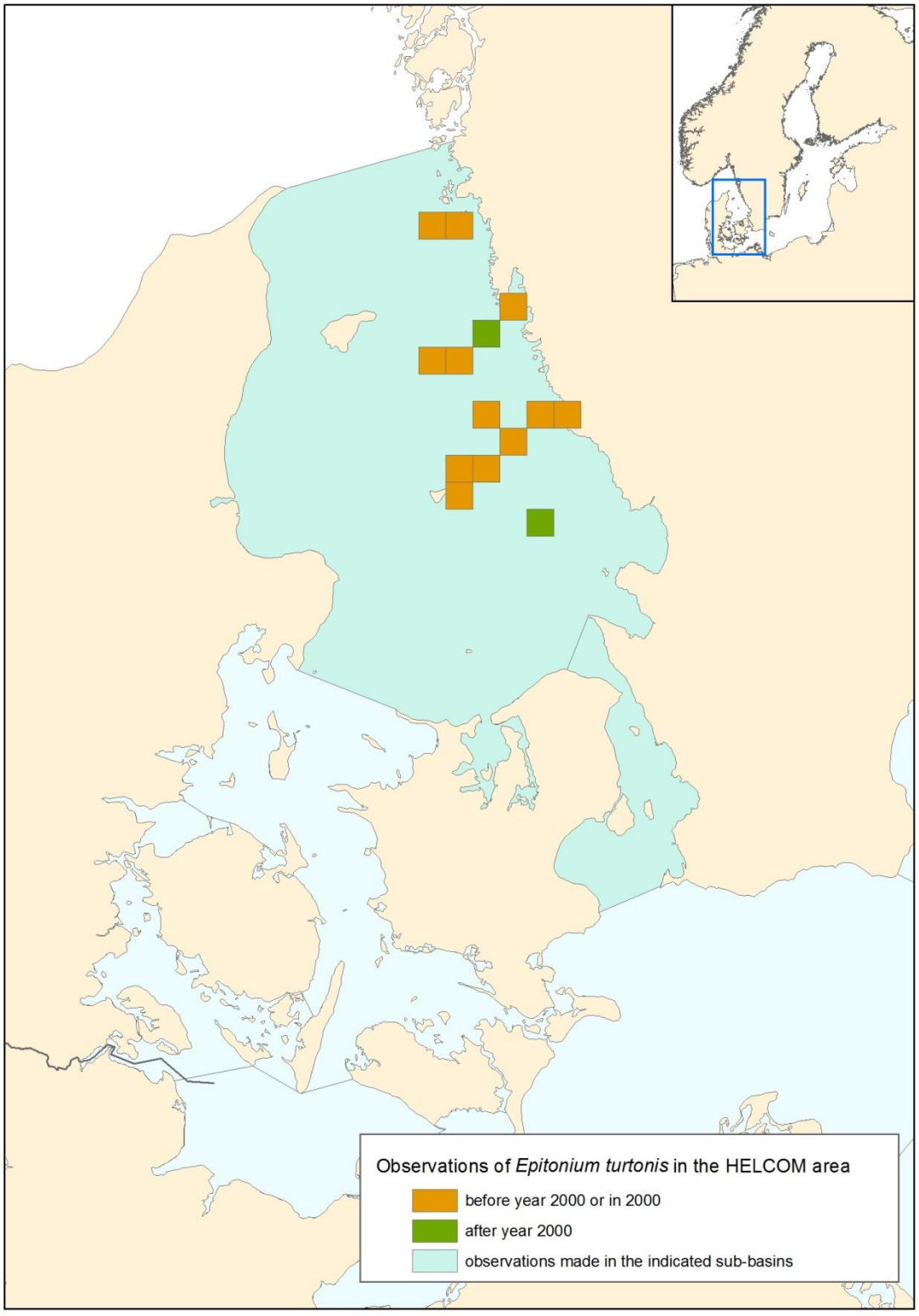
Distribution and status in the Baltic Sea region

The species occurs between the Mediterranean and Norway. Within the HELCOM area the main distribution area is in the Kattegat. The species is also reported from the Sound region, but we have no data from this area. Outside the HELCOM area the species is reported from the Skagerrak and the North Sea. Only two recent findings are known, from the shallow offshore banks Fladen and Stora Middelgrund. A comparison between historical and present Swedish data indicates a decline in distribution both in the Skagerrak and the Kattegat.

SPECIES INFORMATION SHEET *Epitonium turtonis*

Distribution map

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



SPECIES INFORMATION SHEET *Epitonium turtonis*

Habitat and Ecology

E. turtonis has a very characteristic tall conical shell, which can be up to 40 mm high. The species has been found on sandy bottoms on depths between 5 and 20 meters. Otherwise very little is known of the species ecology. The food is unknown, but is likely to be similar to that of other species within the family Epitonidae. Breeding is presumably also similar.

Description of major threats

It is not known what might have caused the indicated decline within the Helcom area. In general, shallow sandy bottoms are sensitive to sedimentation caused by 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

Very limited data from the present is available. The data available indicate a decrease in distribution but it is also possible that the species has been overlooked or erroneously identified. The information available is thus insufficient to determine which of the redlist categories is the most likely. The species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

It is difficult to suggest specific measures. In general, the negative effects of eutrophication and trawling on marine biotopes need to be reduced.

Common names

Denmark: plettet vindeltrappesnegl, Estonia: –, Finland: –, Germany: –, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: större vindeltrappa

References

Artsdatabanken 2010. Norwegian Red List 2010. Species information available at http://www.artsportalen.artsdatabanken.no/#/Rodliste2010/Vurdering/Epitonium+turtonis/24580

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Hansson, H.G. 1998. Sydskandinaviska marina flercelliga evertebrater. Utgåva 2

Marine Species Identification Portal. Available at http://species-identification.org/species.php?species_group=mollusca&id=681

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=139738

SPECIES INFORMATION SHEET *Eurydice pulchra*

English name: **Speckled sea louse**	Scientific name: ***Eurydice pulchra***	
Taxonomical group: Class: Malacostraca Order: Isopoda Family: Cirolanidae	Species authority: Leach, 1815	
Subspecies, Variations, Synonyms: –	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Potentially eutrophication (H01.05), contaminant pollution (H01), construction (D03.03)	Future threats (Habitats Directive article 17 codes): Potentially eutrophication (H01.05), contaminant pollution (H01), construction (D03.03)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD** **Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/* (Not threatened, incl. North Sea), Latvia –/–, Lithuania –/–-, Poland –/–, Russia –/–, Sweden –/–		

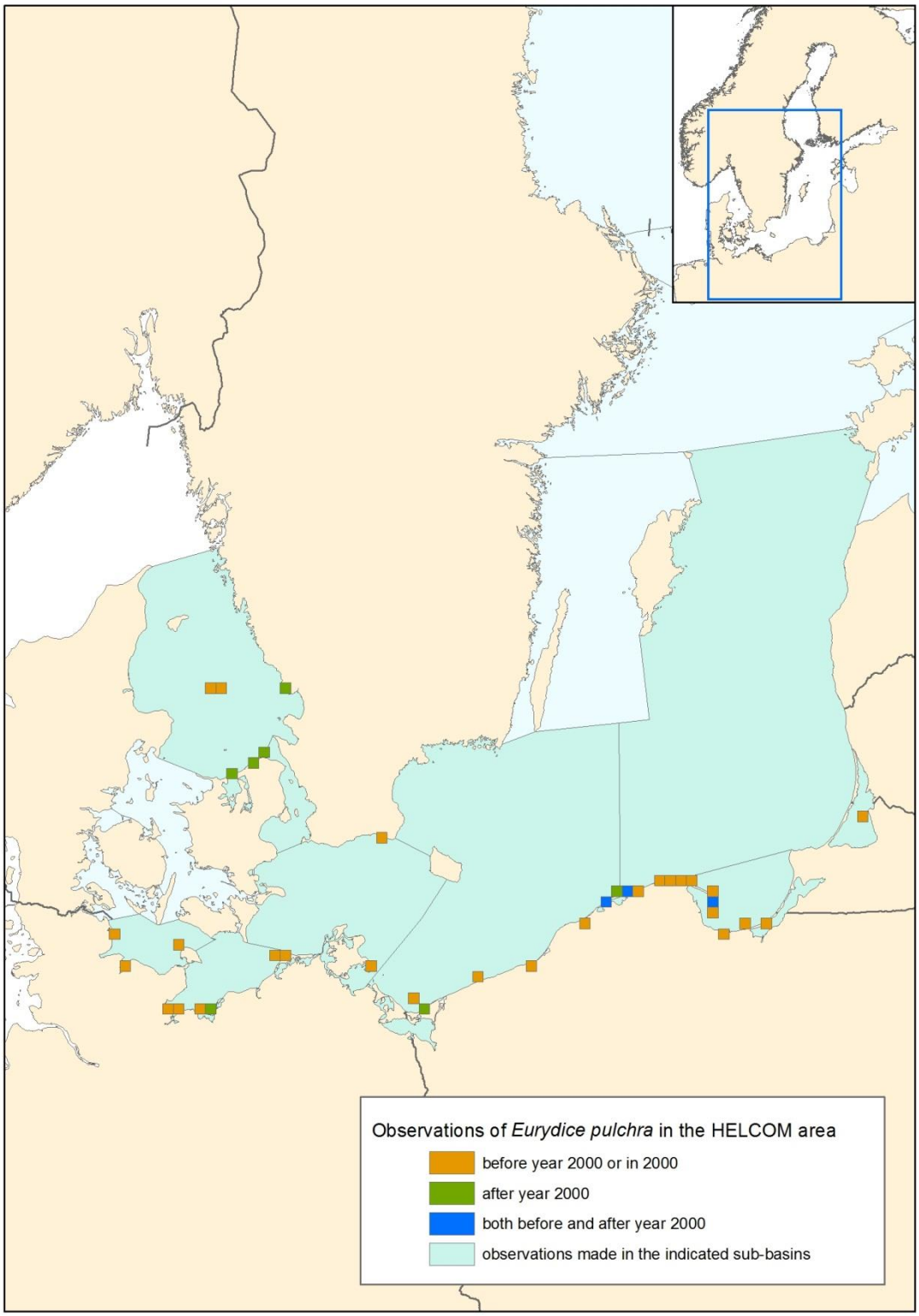
Distribution and status in the Baltic Sea region

Eurydice pulchra occurs in the Kattegat and along the southern coasts of the Baltic (from the Kiel Bay to the Curonian Lagoon). It is very rare in Germany but occurs more commonly along the Polish exposed coast. It is not known whether the difference between old and new observations indicates a genuine decline or just lack of sampling. Most of the recent records are from the Polish coast.

SPECIES INFORMATION SHEET *Eurydice pulchra*

Distribution map

The georeferenced records of the species compiled from the Danish national database for marine data (MADS), the database of the Leibniz Institute for Baltic Sea Research (IOW) (incl. also part of the Polish literature and monitoring data), and from literature: Demel (1936), Mańkowski (1954), Żmudziński (1982), Hague et al. (1996), and Masłowski (2006).



SPECIES INFORMATION SHEET *Eurydice pulchra*

Habitat and Ecology

This isopod species can be found in shallow water especially on the so called "moving sands" along the Polish middle coast. Its distribution is strongly correlated to exposed sandy shores. It also occurs rarely in deeper waters.

Description of major threats

It is assumed that eutrophication and other pollution of coastal waters, and the construction activities (e.g. coastal protection, harbours) on the shores have affected the species negatively.

Assessment justification

Most of the recent records of *E. pulchra* are from the Polish exposed coast. Almost half of the records predate the 1970s but it is not known how many more recent, targeted inventories there have been. The AOO estimated from known occurrences is quite small – less than 200 km^2, however it can be significantly underestimated, as the zone where the species lives is not well monitored in most regions. The extent of the population decline of *E. pulchra* is not known and the threats or pressures affecting its population are poorly known, and therefore the species is categorized as Data Deficient (DD) in the HELCOM area.

Recommendations for actions to conserve the species

As the main threats are not well understood and even the status of the species is uncertain, it is difficult to give specific recommendations. The knowledge of the species distribution and status should be improved. The species would probably benefit from any measures that could reduce the effects of eutrophication on its habitats, as well as from protection of shores and shallow waters habitats from construction activities or extraction of sediments.

Common names

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

References

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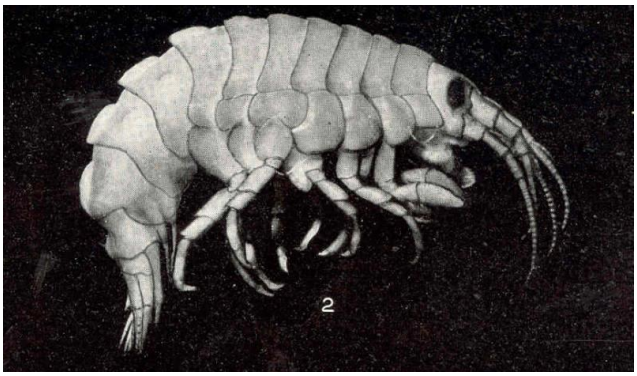
SPECIES INFORMATION SHEET *Gammarellus angulosus*

English name: –	Scientific name: ***Gammarellus angulosus***	
Taxonomical group: Class: Malacostraca Order: Amphipoda Family: Gammarellidae	Species authority: Rathke, 1843	
Subspecies, Variations, Synonyms: *Gammarus angulosus* Rathke, 1843	Generation length: 1 year	
Past and current threats (Habitats Directive article 17 codes): Unknown (U)	Future threats (Habitats Directive article 17 codes): Unknown (U)	
IUCN Criteria:	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**R** (Extremely rare, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

Distribution and status in the Baltic Sea region

Gammarellus angulosus is a littoral or sublittoral Atlantic amphipod that has been found in the HELCOM area only from the Kattegat and Little Belt. It is suspected that the species has declined.

Outside the Baltic area the species is found in the North Atlantic and Arctic Ocean; American and European coasts; Baltic and North Sea. European coasts from northern Norway to Mediterranean (MSIP).

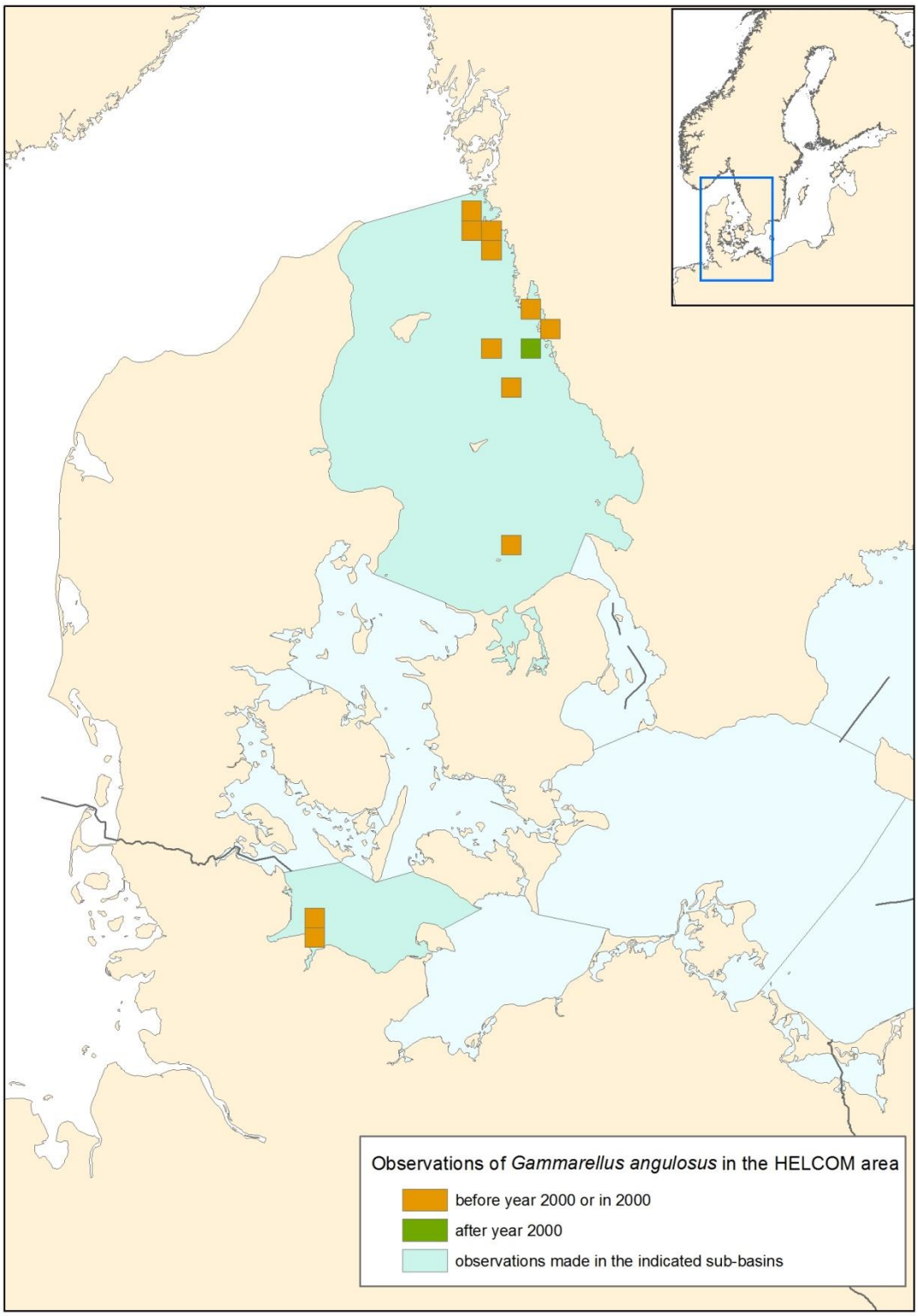


Gammarellus angulosus. Photo by Freshwater and Marine Image Bank.

SPECIES INFORMATION SHEET *Gammarellus angulosus*

Distribution map

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



SPECIES INFORMATION SHEET *Gammarellus angulosus*

Habitat and Ecology

G. angulosus is a marine amphipod that typically occurs in the intertidal or shallow subtidal zone on the Atlantic coasts (MSIP). It is often found clinging to algae of highly exposed rocky shores (Steele & Steele 1972).

Description of major threats

Not known.

Assessment justification

The population of *G. angulosus* is geographically restricted in the HELCOM area and it may have experienced a dramatic decline but this is not known for sure. There are only historical data available from Sweden. No findings were made during the extensive inventories conducted by the Swedish Taxonomy Initiative in 2006–2008. Most findings are from the 1920s–30s, and there is only one recent finding from Kattegat. The species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

The knowledge of the distribution and biology of the species should be improved before any other recommendations can be given.

Common names

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

References

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SPECIES INFORMATION SHEET *Gammarus inaequicauda*

English name: –	Scientific name: ***Gammarus inaequicauda***	
Taxonomical group: Class: Malacostraca Order: Amphipoda Family: Gammaridae	Species authority: Stock, 1966	
Subspecies, Variations, Synonyms: –	Generation length: 1,5 years	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (through decline of macrophyte meadows; H01.05), Construction (J02.01.02, J02.02.02)	Future threats (Habitats Directive article 17 codes): Eutrophication (through decline of macrophyte meadows; H01.05), Construction (J02.01.02, J02.02.02)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/RE, Finland –/–, Germany –/**G** (endangered by unknown extent, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/**NT**, Russia –/–, Sweden –/–		

Distribution and status in the Baltic Sea region

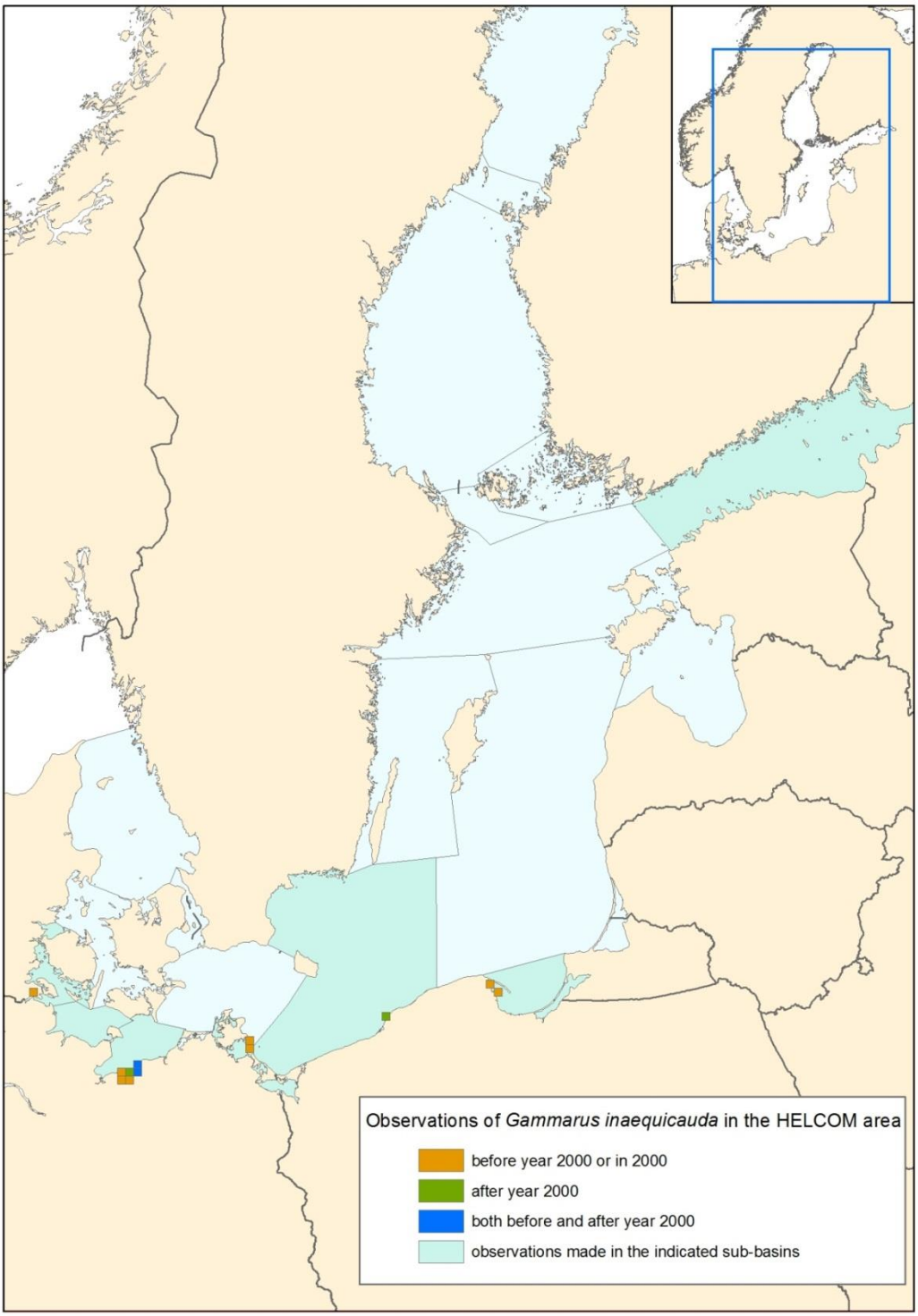
Gammarus inaequicauda is a rare amphipod that lives mainly in the southern Baltic Sea where it inhabits mostly sheltered areas, such as bays and lagoons with macrophyte meadows. Normally the limit of the distribution of this marine species is in the Polish waters where it has been found at the Hel peninsula. A record exists also from the Russian waters of the Gulf of Finland.

Gammarus inaequicauda. Photo by Michael Zettler, Leibniz Institute for Baltic Sea Research Warnemünde (IOW).

SPECIES INFORMATION SHEET *Gammarus inaequicauda*

Distribution map

The georeferenced records of species compiled from the Danish national database for marine data (MADS), database of the Leibniz Institute for Baltic Sea Research (IOW), and Jazdzewski (2005).



SPECIES INFORMATION SHEET *Gammarus inaequicauda*

Habitat and Ecology

G. inaequicauda is a gammarid that inhabits well-oxygenated waters mostly in sheltered areas, like bays and lagoons with macrophyte meadows.

Description of major threats

Since this species requires well-oxygenated waters it is sensitive to eutrophication and the consequent changes in water quality. Eutrophication has probably affected the species negatively, e.g. through decline in macrophyte meadows. Also other pressures that disturb or destroy the habitats of the species, such as coastal engineering, are regarded as major threats to the species.

Assessment justification

Gammarus inaequicauda is a rare species that lives mainly in the southern Baltic Sea in macrophyte-rich habitats. It is difficult to identify and hard to find. Part of the material may actually represent *G. locusta*. In Germany the species has been searched for specifically. Most German data are from the 1980s, and only three records are from the 2000s. A few old records exist from Polish waters. The species was described first time for the Baltic Sea from the Puck Bay in the 1970s but it has since probably disappeared from there (Jazdzewski personal information). The species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

The knowledge of the distribution and biology of the species should be improved before any other recommendations can be given.

Common names

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

Sweden: –

References

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World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=102279.

SPECIES INFORMATION SHEET *Geryon trispinosus*

English name: –	Scientific name: ***Geryon trispinosus***	
Taxonomical group: Class: Malacostraca Order: Decapoda Family: Geryonidae	Species authority: Herbst, 1803	
Subspecies, Variations, Synonyms: *Cancer trispinosus* Herbst, 1803 *Geryon tridens* Krøyer, 1837	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01)	Future threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**DD**		

Distribution and status in the Baltic Sea region

The known distribution of *G. trispinosus* within the HELCOM area is along the Swedish coasts of the Kattegat where it occurs but is not common. Outside the HELCOM area *G. trispinosus* is found in the Skagerrak, and the north-eastern Atlantic Ocean along the north and west coast of Denmark. Its range extends from Norway towards the Shetland – and Faroe Islands and Island in the north to the southern Irish coast and the Bay of Biscay in the south, and also includes the Canary Islands.

Up until the 1960's the species was often reported as bycatch from trawling. During later decades it seems to have become quite rare although still sporadically reported as bycatch (information from Swedish fisheries, SLU Aqua). It seems to have declined in the Swedish part of the Skagerrak, e.g. Koster and Gullmaren fjords, but little information is available from the Kattegat.

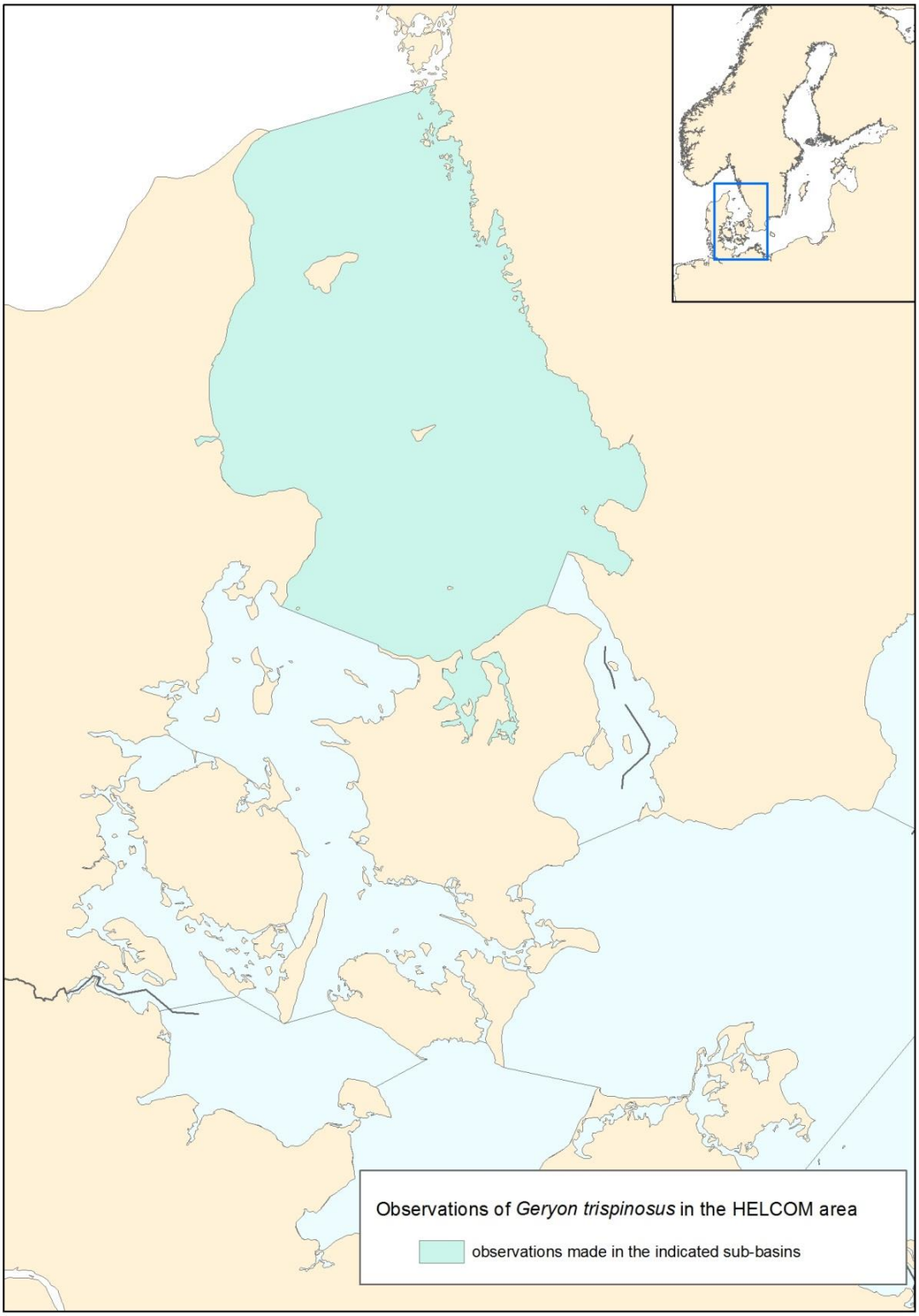
Geryon trispinosus. Photo by IMARES.

SPECIES INFORMATION SHEET

Geryon trispinosus

Distribution map

No exact coordinates have been received for the species' occurrences but it is known to occur in the Kattegat.



SPECIES INFORMATION SHEET *Geryon trispinosus*

Habitat and Ecology

G. trispinosus has a characteristic hexagonal shape, with a width exceeding the length. Males normally reach a length and width of 80 and 98 mm respectively, whereas the females are slightly smaller. The colour is usually red to brick red. *G. trispinosus* is a deep sea species, normally living between depths of 30 and 700 meters. In southern waters it has been found down to a depth of 1800 m. The species lives on soft bottoms where it burrows into the sediment.

Females reach sexual maturity at a carapace length of 12–15 mm, while males reach it at 35 mm. Eggs are laid in April and hatch in July (May of the SW coast of Ireland), and the eggs hatch into planktonic larvae.

Description of major threats

The species has probably been negatively affected by the intense trawling on deep soft bottoms for shrimps and prawns.

Assessment justification

Only very limited data is available. The species is only occasionally caught as bycatch in trawling. It is suspected that the species has suffered a decline, but the information available is insufficient to determine which of the redlist categories that is most likely. The species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

It is difficult to suggest specific measures. In general, the negative effects of bottom trawling 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: tretandskrabba

References

Bjelke, U., Karlsson, A., Sandström, J., Agrenius, S., Berggren, H., Berggren, M., Cedhagen, T., Edsman, L., Hansson, H. G., Kautsky, H., Lingdell, P.-E., Lundin, K., Lundälv, K., Schander, C. & Smith, S. 2010. Kräftdjur – Crustaceans. Crustacea. In Gärdenfors, U. (ed.) Rödlistade arter i Sverige 2010 – The 2010 Red List of Swedish Species. ArtDatabanken, SLU, Uppsala. P. 487–493. Red List categories available also at http://www.artfakta.se/GetSpecies.aspx?SearchType=Advanced

Hansson, H.G. 1998. Sydskandinaviska marina flercelliga evertebrater. Utgåva 2.

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Marine Species Identification Portal. Available at http://species-identification.org/species.php?species_group=crustacea&id=186.

Smith, S. 2010. *Geryon trispinosus* tretandskrabba. Artfaktablad. Artdatabanken, SLU. 2010-01-19. Available at http://www.artfakta.se/Artfaktablad/Geryon_Trispinosus_102845.pdf.

SPECIES INFORMATION SHEET *Inachus phalangium*

English name: **Leach's spider crab**	Scientific name: ***Inachus phalangium***	
Taxonomical group: Class: Malacostraca Order: Decapoda Family: Inachidae	Species authority: Fabricius, 1775	
Subspecies, Variations, Synonyms: *Cancer phalangium* Fabricius, 1775 (nomen protectum) *Cancer satuak* Herbst, 1782 *Cancer tribulus* Linnaeus, 1767 (suppressed, ICZN Opinion 708) *Inachus dorhynchus* Leach, 1814 (synonym) *Inachus dorynchus* Leach, 1814 *Macropus aracnides* Risso, 1816	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01), Eutrophication (H01.05)	Future threats (Habitats Directive article 17 codes): Fishing (bottom trawling; F02.02.01), Eutrophication (H01.05)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD** **Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**D** (Data deficient, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**DD**		

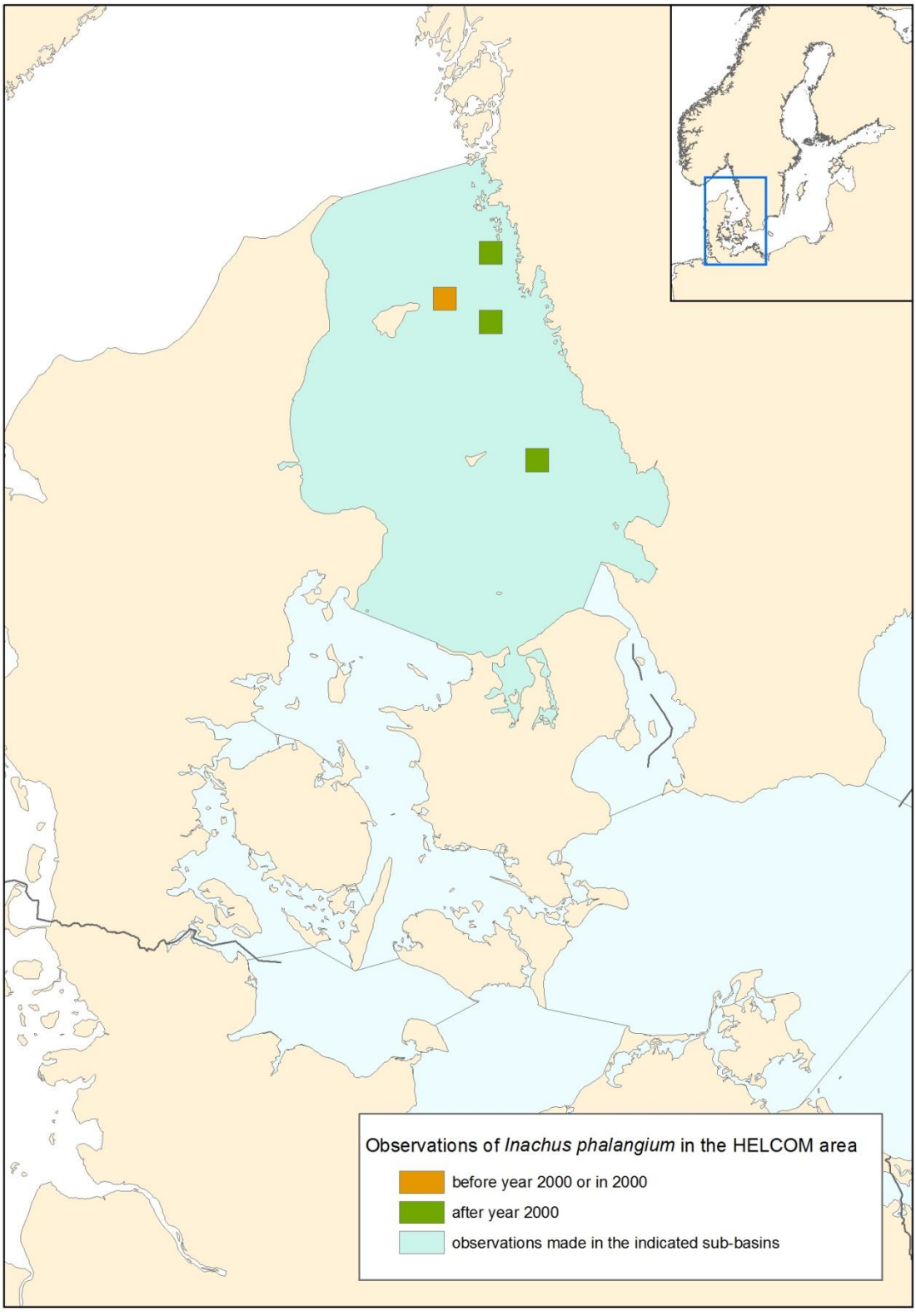
Distribution and status in the Baltic Sea region

Inachus phalangium is a rare species, and within the HELCOM area its main distribution seems to be on the shallow offshore banks of the Kattegat. However, data is very limited and Danish data is lacking altogether. Outside the HELCOM area the species is reported from a few localities in the Skagerrak and one on the western coast of Norway. The species is associated with sea anemones and can therefore be difficult to sample. Data from Sweden indicate a decline in the Skagerrak (Bohuslän), but the status in the Kattegat is unknown.

SPECIES INFORMATION SHEET *Inachus phalangium*

Distribution map

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



SPECIES INFORMATION SHEET *Inachus phalangium*

Habitat and Ecology

Inachus phalangium is a spider-like crab with long legs. It occurs sparsely on sandy bottoms with stones, rocks, gravel and shells. Depth distribution is between 10–16 meters approximately. The species is known to associate with different species of sea anemones, and can therefore be difficult to detect and sample. Ovigerous females and larvae have been detected in all months.

Description of major threats

The species is probably negatively affected by the intense bottom trawling, both directly by being caught as bycatch and indirectly by the sedimentation caused by trawling. It is probably also negatively affected by eutrophication that leads to increased sedimentation of the habitat.

Assessment justification

Only very limited data from the Kattegat is available. Data from the Skagerrak indicate a decline, but the trend in the Kattegat is unclear. The species is rare, and difficult to detect and sample due to its ecology. The information available is thus insufficient to determine which of the redlist categories that is most likely. The species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

It is difficult to suggest specific measures. In general the negative effects of eutrophication and trawling 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

Artsdatabanken 2010. Norwegian Red List 2010. Species information available at http://www.artsportalen.artsdatabanken.no/#/Rodliste2010/Vurdering/Inachus+phalangium/21722

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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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World Register of Marine Species WoRMS. Available at
http://www.marinespecies.org/aphia.php?p=taxdetails&id=107333

SPECIES INFORMATION SHEET *Lekanesphaera rugicauda*

English name: –	Scientific name: ***Lekanesphaera rugicauda***	
Taxonomical group: Class: Malacostraca Order: Isopoda Family: Sphaeromatidae	Species authority: Leach, 1814	
Subspecies, Variations, Synonyms: *Sphaeroma rugicauda* Leach, 1814	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Construction (e.g. beach feeding with sand; G05.05)	Future threats (Habitats Directive article 17 codes): Construction (e.g. beach feeding with sand; G05.05)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: –	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**3** (Vulnerable, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

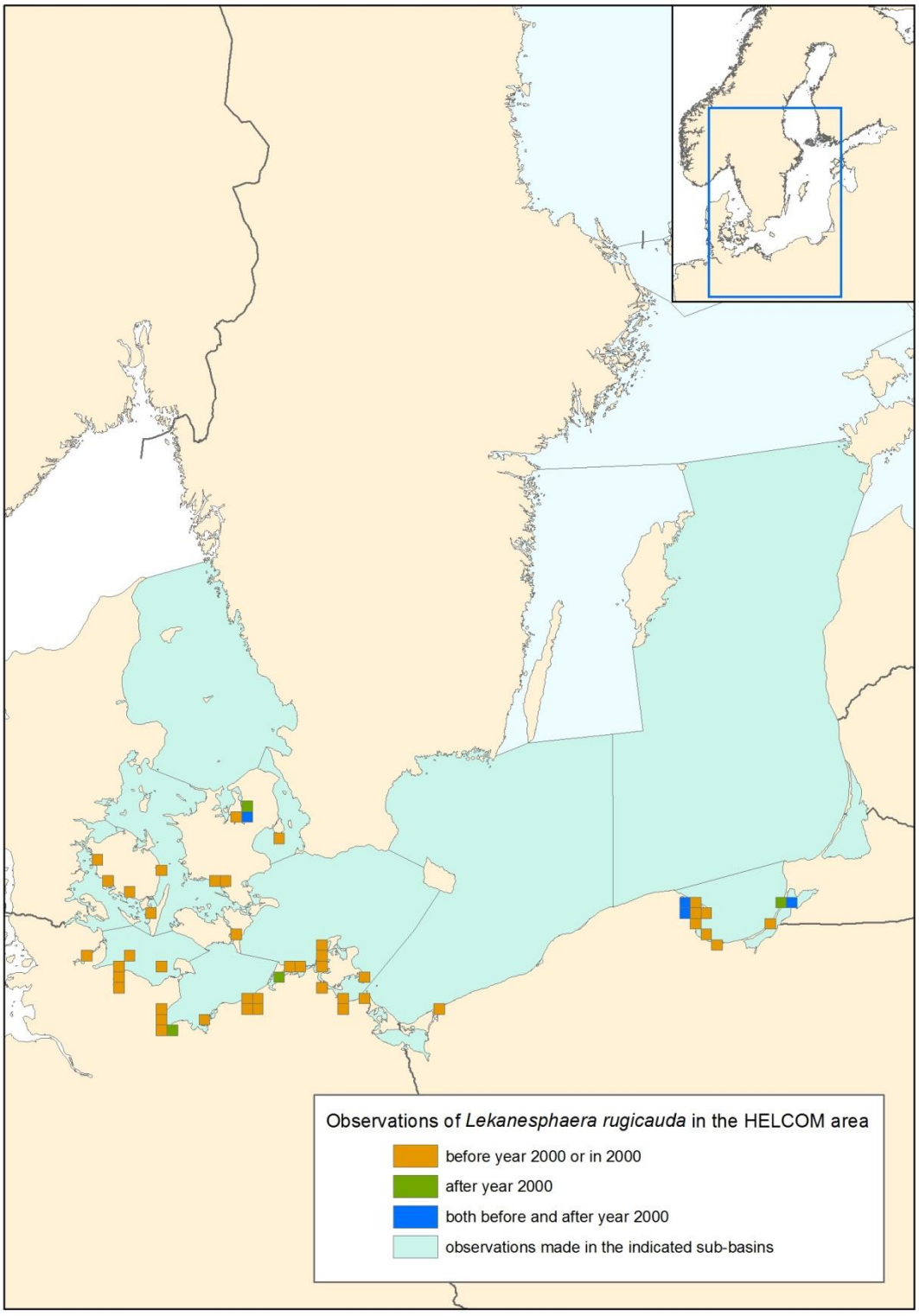
Distribution and status in the Baltic Sea region

The historical distribution of *Lekanesphaera rugicauda* appears to have covered western and southern HELCOM area from the southern Kattegat (the Roskilde Fjord) to the German coasts of the Baltic Sea, and also the Gulf of Gdansk and the Vistula Lagoon. Recent records, however, exist only from five locations, including Roskilde Fjord, estuaries by the Bay of Mecklenburg, Puck Bay and the Russian part of the Vistula Lagoon.

SPECIES INFORMATION SHEET *Lekanesphaera rugicauda*

Distribution map

The georeferenced records of species compiled from Danish national database for marine data (MADS), the database of the P.P. Shirshov Institute of Oceanology RAS, the database of the Leibniz Institute for Baltic Sea Research (IOW) (incl. also Polish literature and monitoring data), and from literature: Seligo (1926), Demel (1936), and Wenne & Wiktor (1978).



SPECIES INFORMATION SHEET *Lekanesphaera rugicauda*

Habitat and Ecology

L. rugicauda is an isopod species with broadly oval body form, and it reaches a length of around 1 cm. It lives among vegetation on soft bottom and stones where it finds shelter. The species has been detected to have also boring activity in wood.

Description of major threats

The reasons behind the potential decline of *L. rugicauda* are not known but it is likely that the species has suffered from destruction, e.g. by various construction activities, of natural inshore bottoms with vegetation and/or stones.

Assessment justification

L. rugicauda has occurred in dozens of locations in the southern and western HELCOM area. Recent observations have only been made in five areas which are geographically rather distant: the southern Kattegat, estuaries by the Bay of Mecklenburg, Puck Bay and the Vistula Lagoon. It is not certain that the difference between the number of old and recent records indicates a genuine decline but according to German and Polish information this may be the case. For example in Germany, the species has always been rare but it should have been found also in recent inventories. The information available is insufficient to determine which of the redlist categories that is most likely, and *L. rugicauda* is therefore categorized as Data Deficient (DD) in the HELCOM area.

Recommendations for actions to conserve the species

The species would probably benefit from any actions that could protect its coastal habitats against anthropogenic alternations of the bottom.

Common names

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

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SPECIES INFORMATION SHEET *Limnoria lignorum*

English name: **Gribble**	Scientific name: ***Limnoria lignorum***	
Taxonomical group: Class: Malacostraca Order: Isopoda Family: Limnoriidae	Species authority: Rathke, 1799	
Subspecies, Variations, Synonyms: *Cymothoa lignora* Rathke, 1799 *Cymothoa lignorum* Rathke, 1799	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Construction (J02.12.01, J03.01)	Future threats (Habitats Directive article 17 codes): Construction (J02.12.01, J03.01)	
IUCN Criteria: **–**	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**D** (Data deficient, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

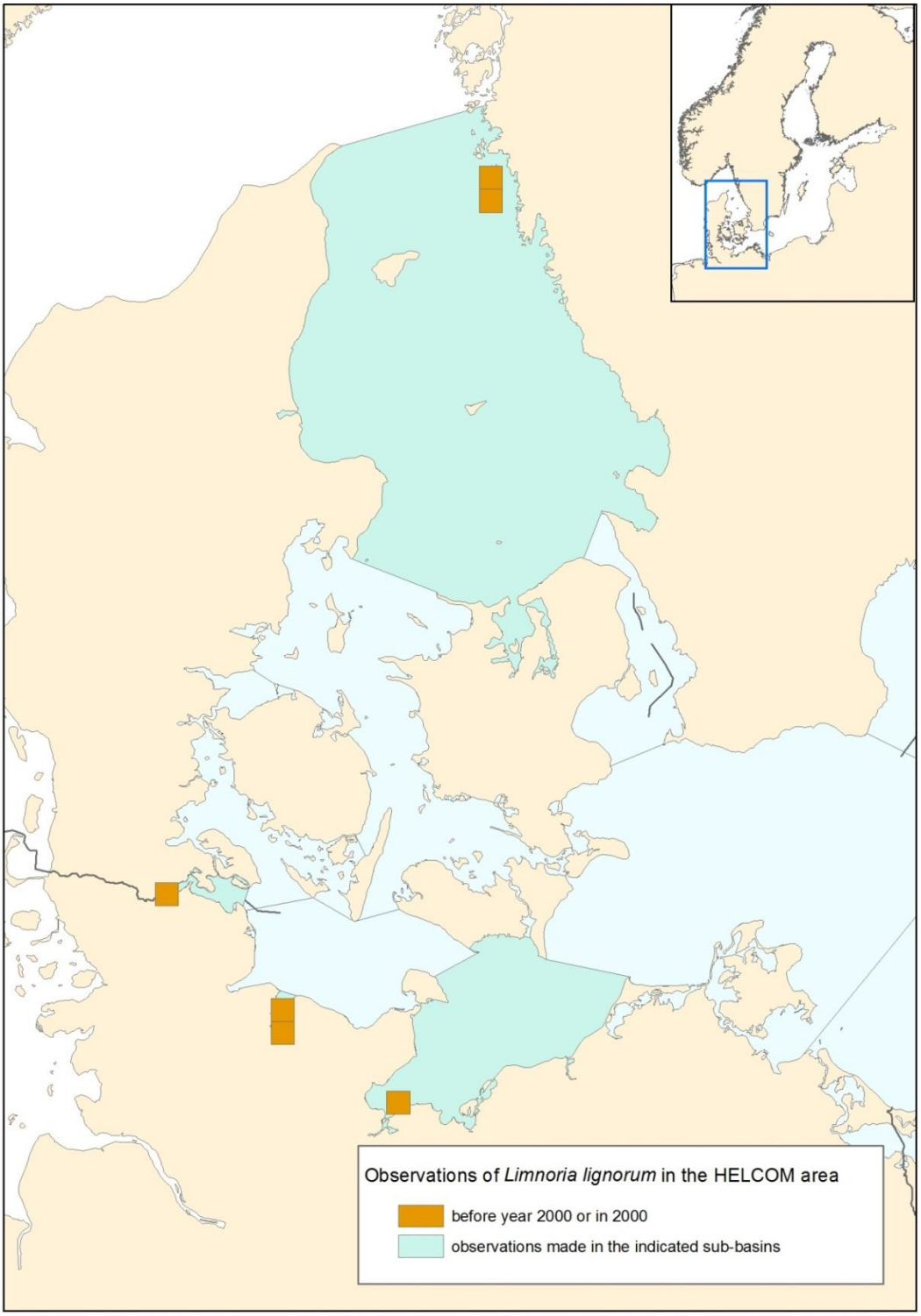
Distribution and status in the Baltic Sea region

Limnoria lignorum is a marine wood-boring species that can be found in the Kiel and Flensburg Fjords, Travemünde harbour, and in the Kattegat. It is likely that its population has declined together with its habitat (wood material in water). Outside the HELCOM area the species has been recorded on the east and west coasts of North America and in Europe from Norway southwards to a latitude probably little beyond southern Britain.

SPECIES INFORMATION SHEET *Limnoria lignorum*

Distribution map

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



SPECIES INFORMATION SHEET *Limnoria lignorum*

Habitat and Ecology

L. lignorum is a boreal wood-boring isopod species. It is marine but its salinity tolerance is not known in detail. The species within the family Limnoriidae are also called gribbles. Gribbles bore into wood and plant material for ingestion as food. The cellulose of wood is digested, most likely with the aid of cellulases produced by the gribbles themselves.Gribbles bore the surface layers of wood. Their burrows are 1–2 mm in diameter, and may be several centimeters long. The burrow's roof is punctured with a series of smaller ventilation holes. Attacked wood can become spongy and friable.

For defense, gribbles can jam themselves within their burrows, and block the tunnel with their rear disc-shaped segment.

Description of major threats

The species is dependent on wooden debris or wooden constructions in water, which both have declined considerably. For example, coastline protection from erosion decreases the amount of suitable habitat (trees fallen into the sea) for the species.

Assessment justification

The species is a habitat specialist that is dependent on wood material in shallow waters. In the HELCOM area, records exist only from the western part, from the Kattegat, some fjords adjacent to the Kiel Bight and Travemünde harbour in the Mecklenburg Bight. It is likely that its population has declined together with the amount of suitable habitat. Wooden constructions as well as wooden debris are much less common in coastal waters than in earlier times. The habitat of *Limnoria lignorum* is not covered by monitoring and the distribution and population trend of the species is poorly known. The species is thus categorized as Data Deficient (DD) in the HELCOM area.

Recommendations for actions to conserve the species

The knowledge of the distribution and biology of the species should be improved before any other recommendations can be given.

Common names

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

References

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SPECIES INFORMATION SHEET *Macroplea pubipennis*

English name: –	Scientific name: ***Macroplea pubipennis***	
Taxonomical group: Class: Insecta Order: Coleoptera Family: Chrysomelidae	Species authority: Reuter, 1875	
Subspecies, Variations, Synonyms: –	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (H01.05), Construction (e.g. J02.02.01)	Future threats (Habitats Directive article 17 codes): Eutrophication (H01.05), Construction (e.g. J02.02.01)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD** **Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: Annex II	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland Strictly protected in the Nature Conservation Degree/**VU**, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

Distribution and status in the Baltic Sea region

The coastal waters of the northern Baltic Sea is the only region in Europe, where *M. pubipennis* is known to live. Observations have been made along the coasts of Finland from the Gulf of Finland up to the Bothnian Bay – at the moment only a few populations are known plus some additional stray observations. Globally, the species is rare and known to have a very disjunct distribution. Observations have been recorded under another name, *M. piligera* Weise from Central Asia – but it is not known for sure whether the same taxon is in question.

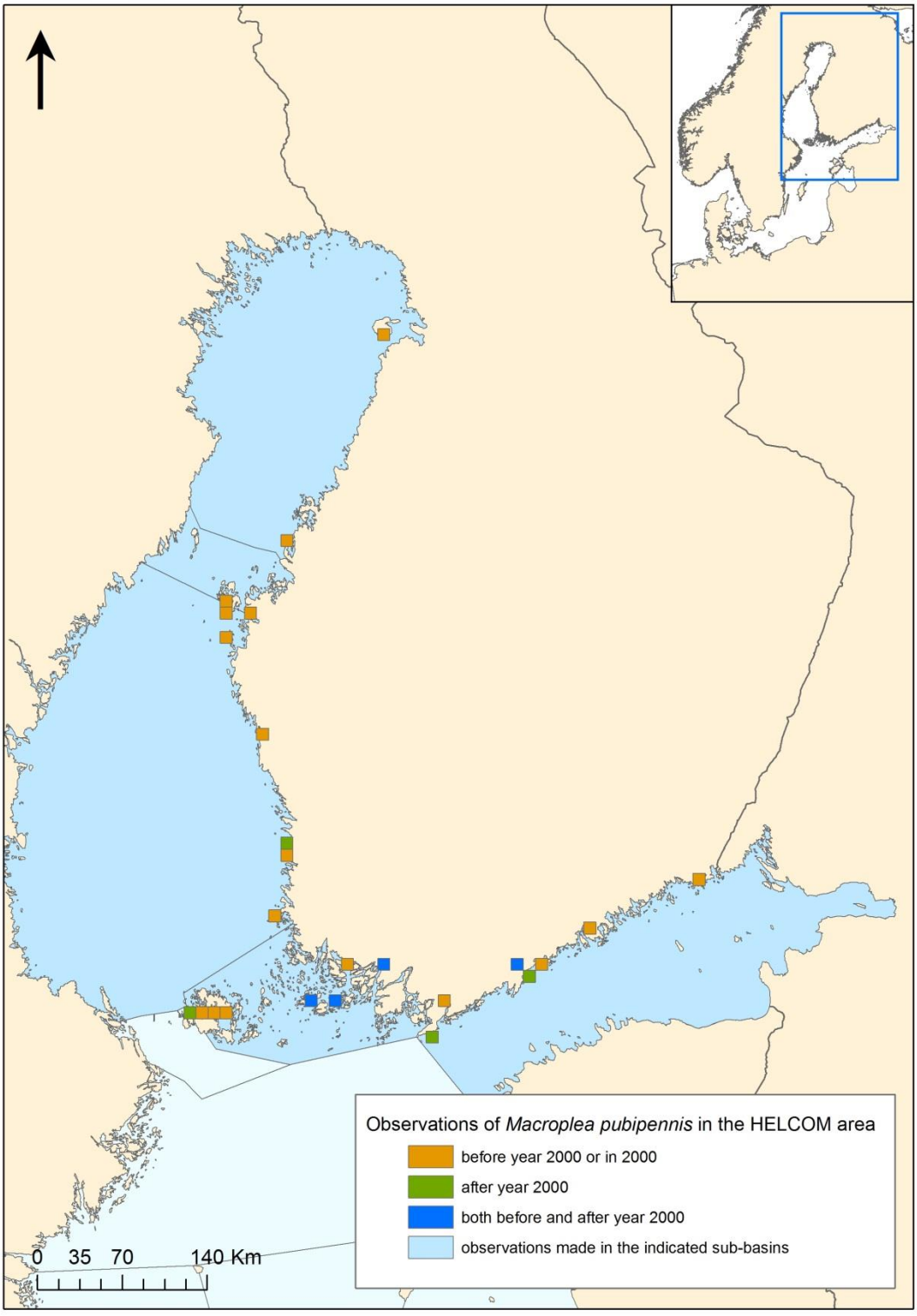
M. pubipennis is classified as Vulnerable in Finland and listed as a species under strict protection in the Nature Conservation Degree.

SPECIES INFORMATION SHEET

Macroplea pubipennis

Distribution map

The records of species obtained from the Finnish database of threatened species (Hertta).



SPECIES INFORMATION SHEET *Macroplea pubipennis*

Habitat and Ecology

M. pubipennis is an aquatic chrysomelid beetle that lives in shallow waters of the northern Baltic Sea, at a depth range of 25–50 cm, usually in sheltered bays. This herbivore beetle is known to feed on submerged aquatic plants, such as *Potamogeton*, *Myriophyllum* and *Zannichellia* species. It lives underwater throughout its life cycle, but the details of its biology, especially in larval stages, are poorly known. The adult beetles crawl together, the smaller male "riding" on females' back. *M. mutica* lives usually on same places.

Description of major threats

M. pubipennis is threatened by dredging and construction activities in its habitats. Disturbance caused by boat traffic, changes in water quality as well as changes in vegetation due to eutrophication (mainly expansion of reeds) are unfavourable to this species.

Assessment justification

The known occurrences of *M. pubipennis* within the HELCOM area, and at the same time within the whole Europe, are restricted to the Finnish coast of the Baltic Sea. It is not known why the species has not been found also along the other northern coasts. At least in Sweden and Estonia some searches of *M. pubipennis* have already been carried out but they have been unsuccessful so far. In Finland the species has been categorized as Vulnerable (B2ab(iii), D2), and its habitats are assumed to be under threat e.g. due to eutrophication and various construction activities. With the exception of Finland, almost nothing is known of the population trend and overall distribution within the HELCOM area, and *M. pubipennis* is therefore categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

Targeted inventories are needed to find out the actual distribution of *M. pubipennis* in the Baltic Sea. More research on the ecology of the species and on the threats/pressures that are affecting its population is also needed. The most important known populations are already partly protected but harmful human activities should be prohibited also in other known sites.

Common names

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

References

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SPECIES INFORMATION SHEET *Myosotella myosotis*

English name: **Mouse-eared snail**	Scientific name: ***Myosotella myosotis***	
Taxonomical group: Class: Gastropoda Order: Eupulmonata Family: Ellobiidae	Species authority: Draparnaud, 1801	
Subspecies, Variations, Synonyms: –	Generation length: 1–2 years	
Past and current threats (Habitats Directive article 17 codes): Construction (J02.04.02, J02.12.01)	Future threats (Habitats Directive article 17 codes): Construction (J02.04.02, J02.12.01)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD** **Data Deficient**
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 –/–		

Distribution and status in the Baltic Sea region

Myosotella myosotis is a small salt marsh snail. It is considered a terrestrial species but is directly dependent on the marine environment and was therefore included in the HELCOM Red List assessment.

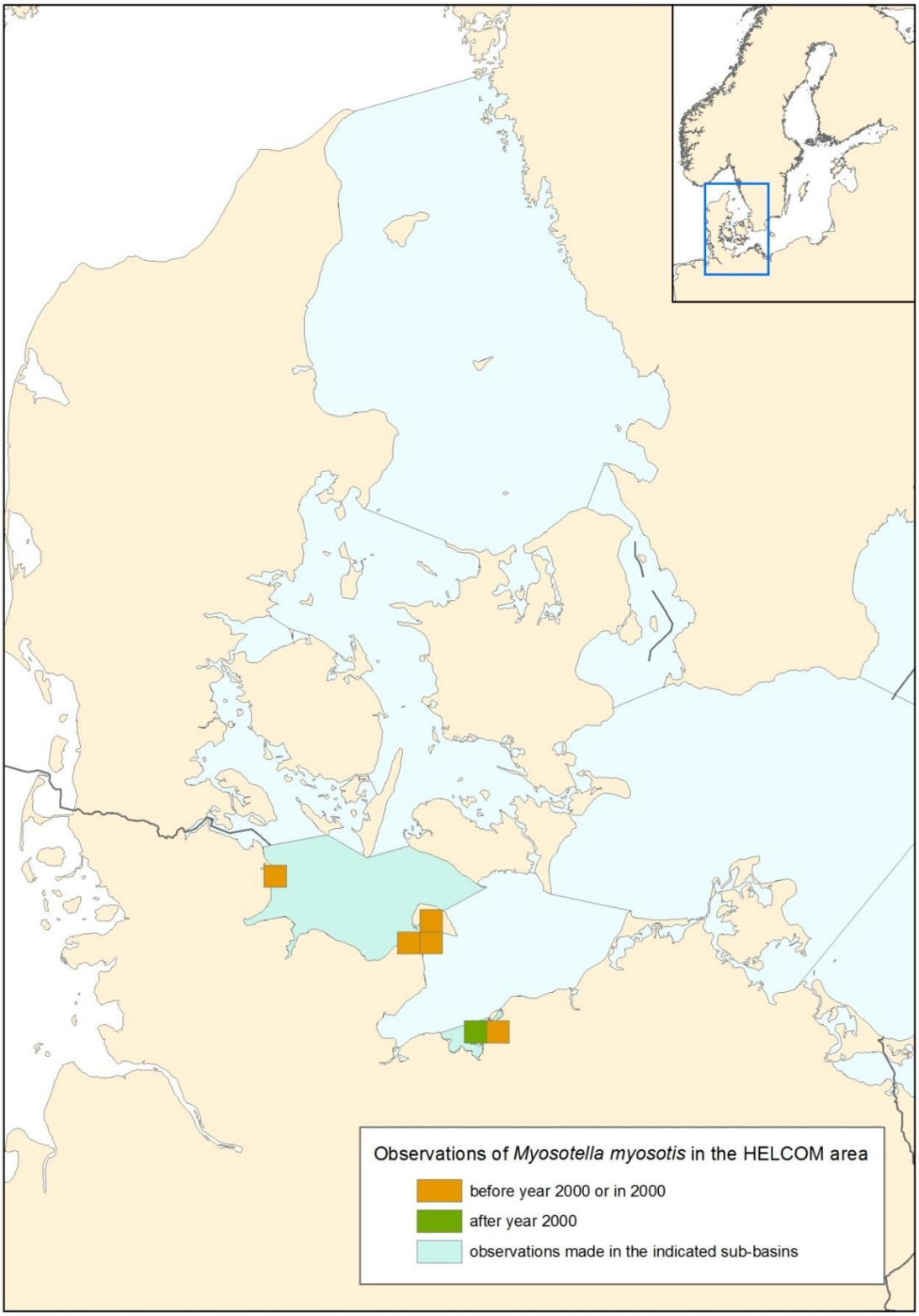
In the Baltic Sea area, it has so far only been found on the German coast but it probably also occurs elsewhere. On the basis of German data, it is known to be genuinely rare, and not just overlooked. It is likely that the population has declined and that there have been more locations along the coast of the southern Baltic Sea. The potential habitats have been strongly affected by coastal engineering, including prevention of flooding.

Myosotella myosotis. Photo by Haus der Natur – Cismar©.

SPECIES INFORMATION SHEET *Myosotella myosotis*

Distribution map

The georeferenced records of species received from the database of the Leibniz Institute for Baltic Sea Research (IOW).



SPECIES INFORMATION SHEET *Myosotella myosotis*

Habitat and Ecology

M. myosotis is a habitat specialist which lives in a very narrow zone on flooding saltmarshes in the southern Baltic Sea in salinities between 10–15 psu.

Description of major threats

The potential habitats of the species have been strongly affected by coastal engineering, including prevention of flooding.

Assessment justification

The salt marsh snail has been found only from the German coast but it probably occurs also elsewhere in the western Baltic Sea. However, no data is available from the Danish Straits. On the basis of German data it is known to be also genuinely rare, not just overlooked. It has been searched for on the German coast but only one recent location is known. It is likely that the population has declined. The potential habitats have been strongly affected by coastal engineering, including prevention of flooding. The species is categorized as Data Deficient (DD) in the HELCOM area.

Recommendations for actions to conserve the species

Even though the species is very poorly known, it is safe to say that restoration of flooding salt marshes would probably benefit the species in the long run. However, it is important also to improve the level of knowledge on the distribution of the species and targeted inventories would be needed e.g. in Sweden and Denmark. Flooding saltmarshes represent a habitat that is often overlooked in both marine and terrestrial monitoring.

Common names

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

References

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World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=139673.

SPECIES INFORMATION SHEET *Orchestia gammarellus*

English name: –	Scientific name: ***Orchestia gammarellus***	
Taxonomical group: Class: Malacostraca Order: Amphipoda Family: Talitridae	Species authority: Pallas, 1766	
Subspecies, Variations, Synonyms: *Orchestia gammarella* Pallas, 1766	Generation length: 1–2 years	
Past and current threats (Habitats Directive article 17 codes):	Future threats (Habitats Directive article 17 codes):	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: Tourism (cleaning of beaches; G05.05), Construction (J02.12.01)	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**V** (Near threatened, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

Distribution and status in the Baltic Sea region

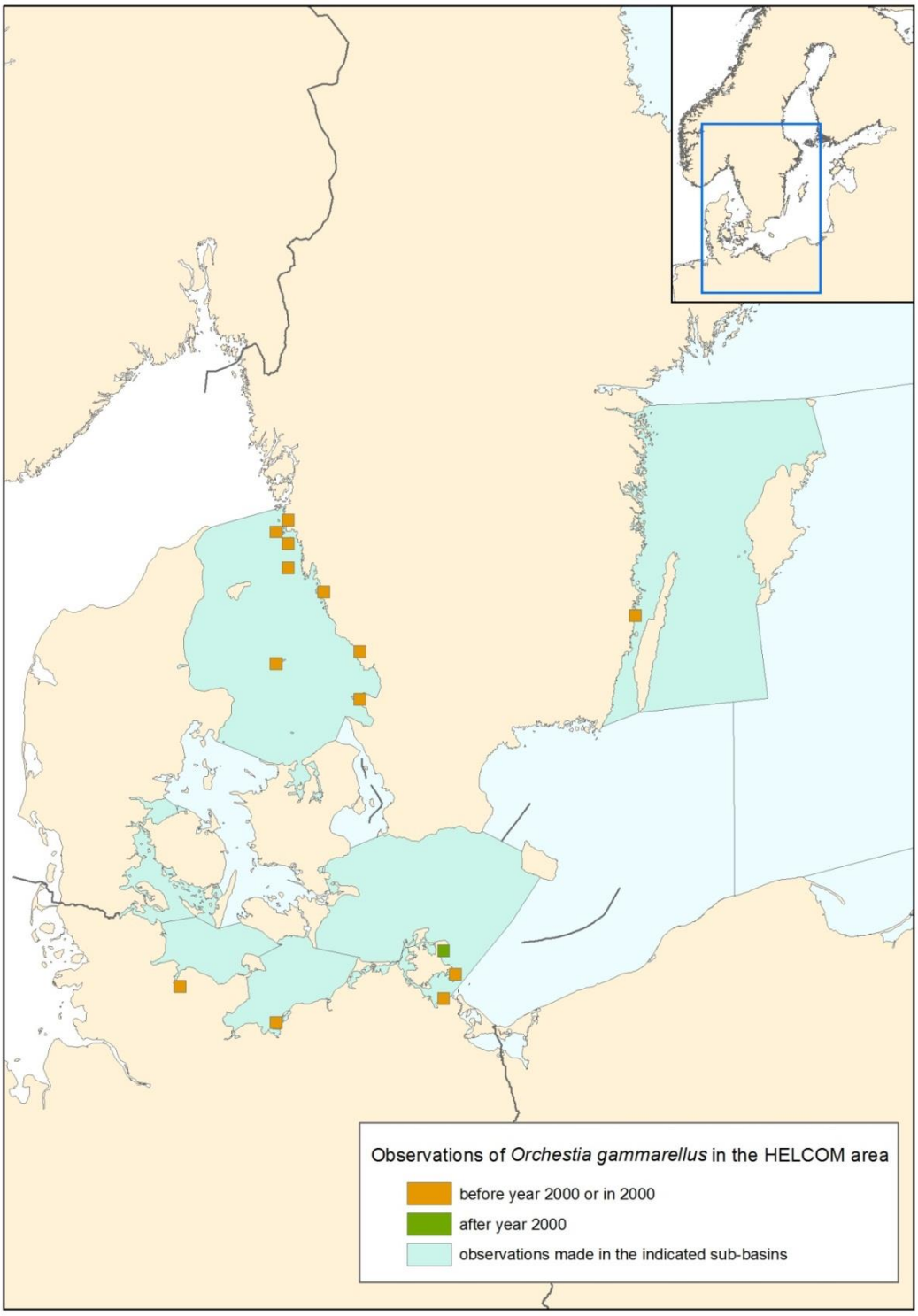
Orchestia gammarellus is a rare amphipod which lives in a potentially deteriorated habitat in the southern and western Baltic Sea. The only recent finding is from Germany. The Swedish data are entirely from the 1920s and 1930s but on the other hand the species has not necessarily been looked for more recently.

Outside the HELCOM area the species is transatlantic. The species is widespread and frequently recorded on European coasts from western Norway and Iceland to Mediterranean and Black Sea; also South-West Africa.

SPECIES INFORMATION SHEET *Orchestia gammarellus*

Distribution map

The georeferenced records of species compiled from Persson (1999) and from the databases of the Swedish Species Information Centre (Artportalen) and the Leibniz Institute for Baltic Sea Research (IOW).



SPECIES INFORMATION SHEET *Orchestia gammarellus*

Habitat and Ecology

The species has a wide habitat range from shallow water and intertidal marine and estuarine areas, to damp semi terrestrial habitats well away from water. It can most frequently be found beneath decaying debris around the high water mark on shingle shores. In the daytime it stays in holes/caves, and comes to feed on shoreline debris in night-time.

Description of major threats

The species may have suffered from various forms of coastal exploitation which have destroyed or deteriorated its habitats. As it is dependent on the decaying algae on shores, it suffers also from cleaning of beaches. The main habitat of the species, exposed shingle shores, are nowadays usually fenced by coastal constructions like spur dykes to avoid land damage.

Assessment justification

The only recent finding for the species is from Germany. The Swedish data is entirely from the 1920s and 1930s but on the other hand the species has not necessarily been looked for more recently. There is also no Swedish expert opinion available. The current distribution is not known and it is not possible to estimate the decline in the population size. The species lives in a potentially deteriorated habitat and population declines are suspected. The species is categorized as Data Deficient (DD) in the HELCOM area.

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: mørk sandhopper, Estonia: –, Finland: –, Germany: –, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: –

References

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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=103202.

SPECIES INFORMATION SHEET *Palaemonetes varians*

English name: **Atlantic ditch shrimp/Grass shrimp**	Scientific name: ***Palaemonetes varians***	
Taxonomical group: Class: Malacostraca Order: Decapoda Family: Palaemonidae	Species authority: Leach, 1814	
Subspecies, Variations, Synonyms: –	Generation length: 2 years	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (H01.05), Construction (J02.01.02, J02.02.02, J02.12.01)	Future threats (Habitats Directive article 17 codes): Eutrophication (H01.05), Construction (J02.01.02, J02.02.02, J02.12.01)	
IUCN Criteria: **–**	**HELCOM Red List Category:**	**DD** **Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**V** (Near threatened, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/**NT**, Russia –/–, Sweden –/**VU**		

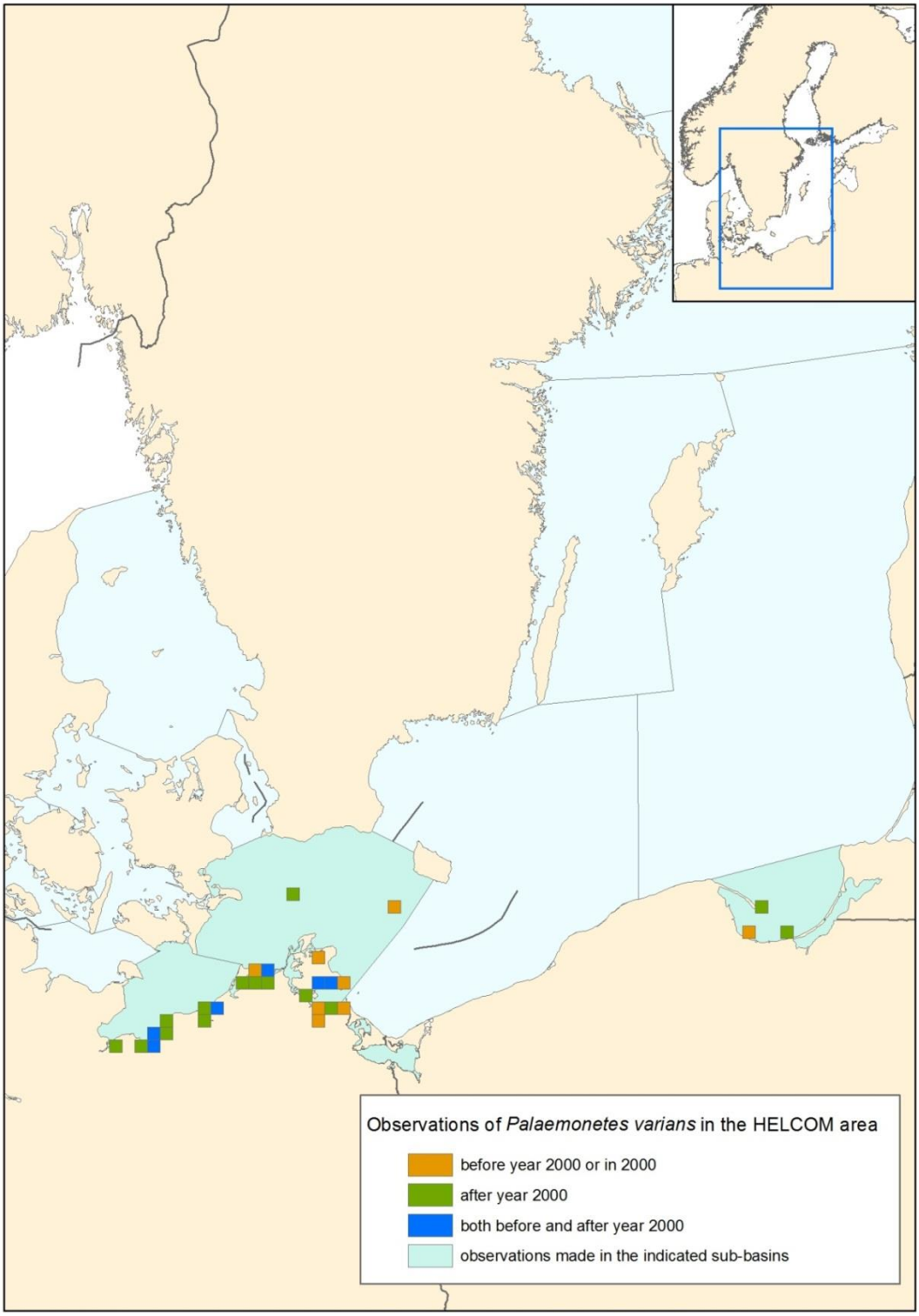
Distribution and status in the Baltic Sea region

Palaemonetes varians lives in the southern Baltic Sea, in habitats that have potentially deteriorated considerably. It is not known how rare the species is currently and how the population has changed. Outside the HELCOM area this species ranges from the North Sea and British Isles southwards to the western Mediterranean.

SPECIES INFORMATION SHEET *Palaemonetes varians*

Distribution map

The georeferenced records of species compiled from the database of the Leibniz Institute for Baltic Sea Research (IOW) and from Jazdzewski et al. (2005).



SPECIES INFORMATION SHEET *Palaemonetes varians*

Habitat and Ecology

P. varians is a brackish water shrimp that occurs in shallow waters, e.g. in sheltered and richly vegetated bays or in estuaries. It is often found together with the two *Palaemon* species. In the daytime it tends to stay in a shelter and it comes to feed on shoreline debris at night.

The species is omnivorous. It feeds on insect larva, plants or little animals in decomposition. The females carry eggs from May to September. The larvae are pelagic.

Description of major threats

Macrophyte meadows, which are the habitats of the species, have been negatively affected by eutrophication, turbidity and sedimentation-induced changes. Also shoreline constructions may have affected the species distribution negatively.

Assessment justification

The species is dependent on shallow water macrophyte-rich habitats that have potentially deteriorated considerably. The species probably also occurs along the Danish coasts but no data are available. Misidentification with other species is possible. It is not known how rare the species is currently and how the population has changed and therefore the species is categorized as Data Deficient (DD) in the HELCOM area.

Recommendations for actions to conserve the species

The knowledge of the distribution of the species should be increased by targeted inventories in near shore macrophyte-rich habitats.

Common names

Denmark: brakvandsreje, Estonia: –, Finland: –, Germany: Brackwasser-Felsgarnele, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: brackvattensräka

References

IOW database. Observational data from the database of the Leibniz Institute for Baltic Sea Research.

Jazdzewski, K., Konopacka, A., Grabowski, M. 2005. Native and alien malacostracan crustacean along the Polish Baltic Sea coast in the twentieth century. Oceanological and Hydrobiological Studies 34: 175-193.

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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.

World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=107624.

SPECIES INFORMATION SHEET *Pleurogonium rubicundum*

English name: –	Scientific name: ***Pleurogonium rubicundum***	
Taxonomical group: Class: Malacostraca Order: Isopoda Family: Paramunnidae	Species authority: G. O. Sars, 1866	
Subspecies, Variations, Synonyms: –	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Unknown (U)	Future threats (Habitats Directive article 17 codes): Unknown (U)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**R** (Extremely rare, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

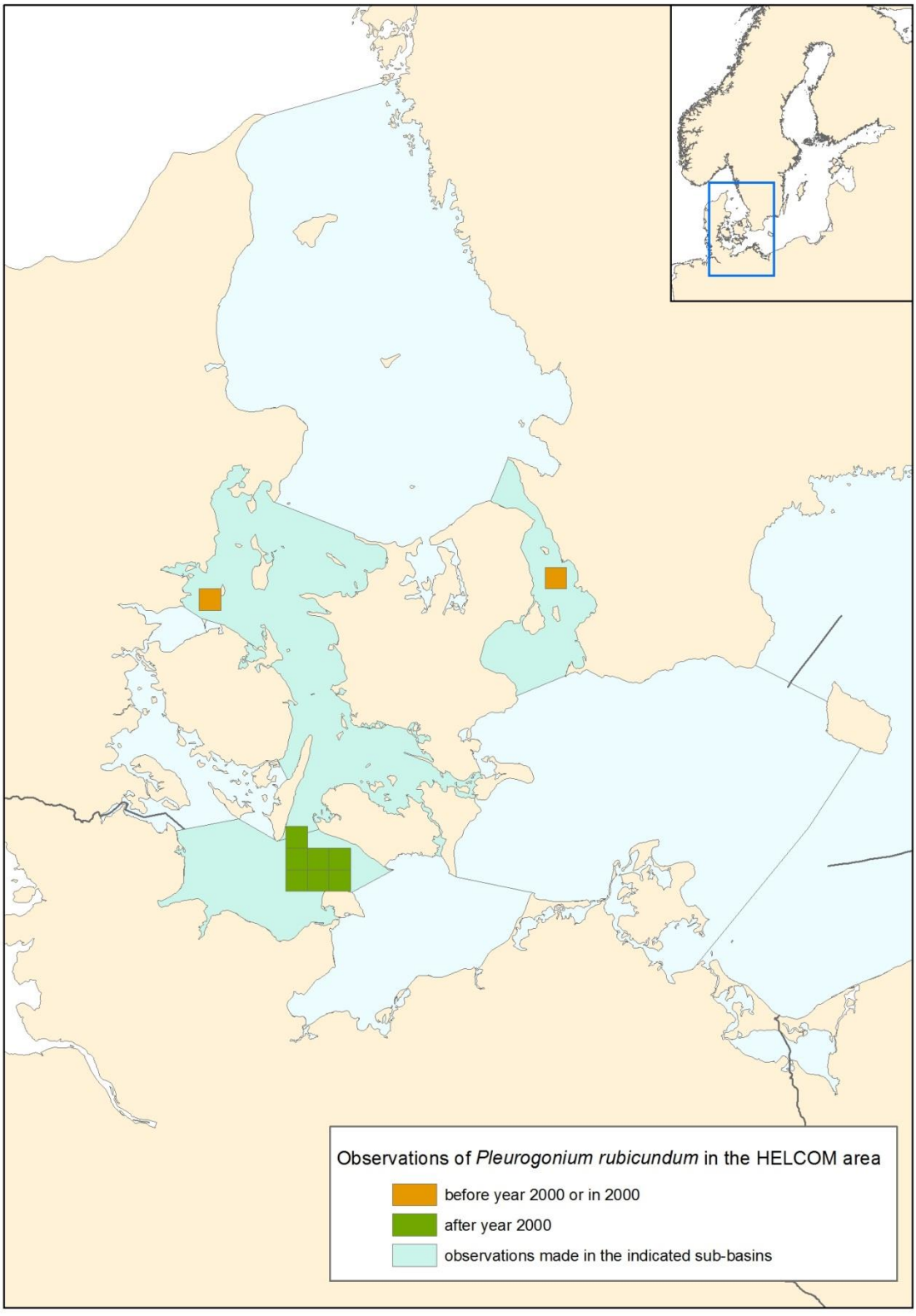
Distribution and status in the Baltic Sea region

Pleurogonium rubicundum is a habitat specialist living in macrophyte meadows on stony reefs in deeper waters in the western part of the HELCOM area. According to Hansson (1998), it lives all along the Swedish west coast but for some reason there are no recent findings of it.

SPECIES INFORMATION SHEET *Pleurogonium rubicundum*

Distribution map

The georeferenced records of species compiled from Danish national database for marine data (MADS) and from the database of the Leibniz Institute for Baltic Sea Research (IOW).



SPECIES INFORMATION SHEET *Pleurogonium rubicundum*

Habitat and Ecology

In Germany, the species lives mainly in photic zone but in rather deep waters. It needs macrophytes or e.g. hydrozoans or bryozoans to attach itself. It may occur also in aphotic zone if there is suitable substrate for it.

Description of major threats

The species has most probably been affected negatively by bottom trawling and eutrophication in the HELCOM area.

Assessment justification

There is very little data on the species available. It should occur in Danish and Swedish waters but there are no recent records. Most probably it has been overlooked in monitoring. It is assumed that it may be declining or have declined due to pressures (e.g. eutrophication, physical damage) deteriorating its habitats, e.g. red algae meadows. The species is categorized as Data Deficient (DD) in the HELCOM area.

Recommendations for actions to conserve the species

The knowledge of the distiribution and potential population trends of the species should be improved before any specific recommendations can be given.

Common names

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

References

Hansson, H.G. 1998. Sydskandinaviska marina flercelliga evertebrater. Utgåva 2

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.

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.

World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=118801.

SPECIES INFORMATION SHEET *Roxania utriculus*

English name: –	Scientific name: ***Roxania utriculus***	
Taxonomical group: Class: Gastropoda Order: Cephalaspidea Family: Cylichnidae	Species authority: Brocchi, 1814	
Subspecies, Variations, Synonyms: –	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Unknown (U)	Future threats (Habitats Directive article 17 codes): Climate change (M)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/***** (Not threatened, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**NT**		

Distribution and status in the Baltic Sea region

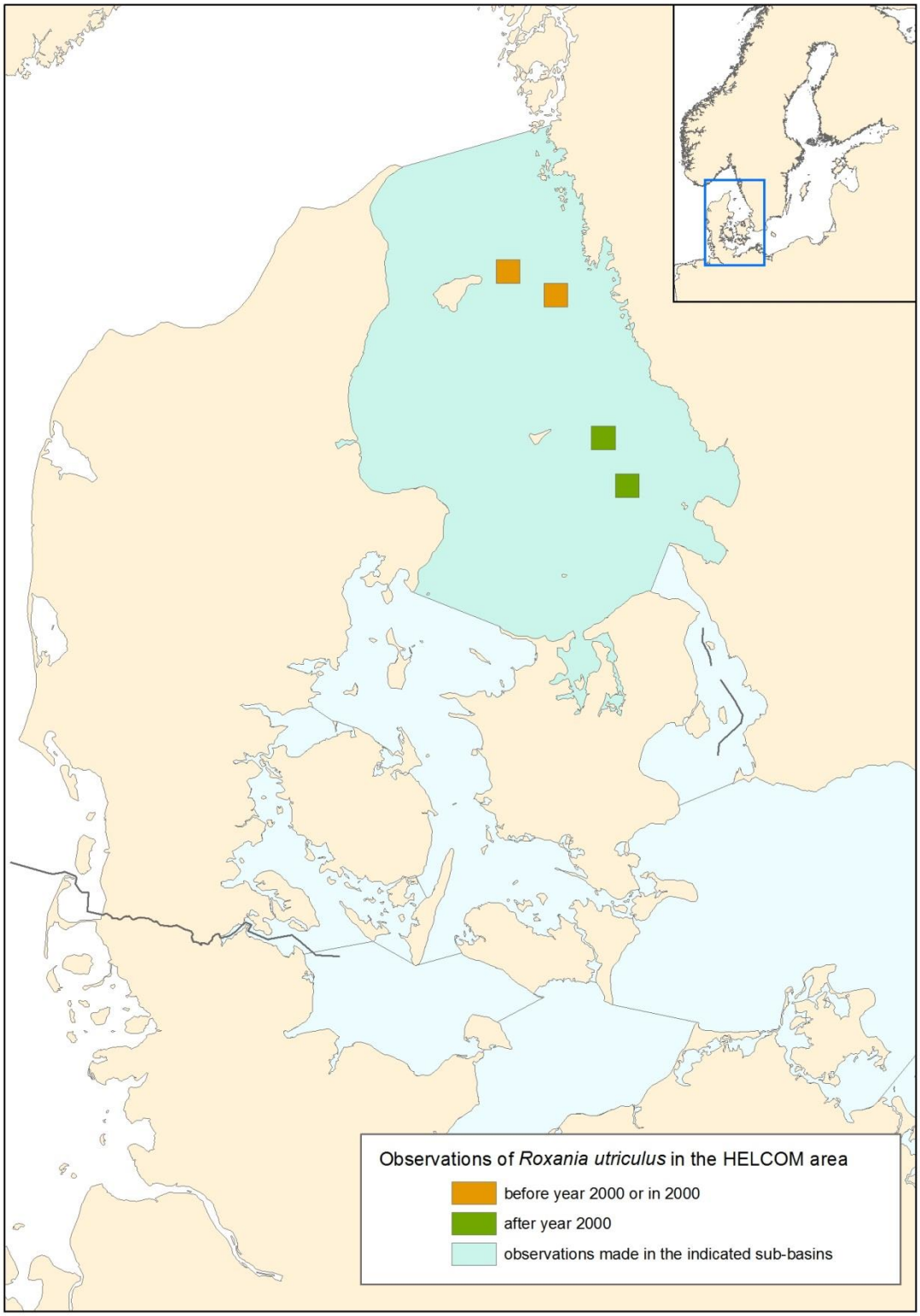
Within the HELCOM area the species is only recorded from the Kattegat. However, data is lacking from the Danish part of the Kattegat. Outside the HELCOM area the species is reported from the Skagerrak and the North Sea. In Swedish waters the species has primarily been reported from the Gullmarsfjord, where it seems to have been relatively common in the 1960s and 1970s. Very few examples have been found in this area in recent years. It is probably a naturally rare species in the Kattegat, although Danish experts suspect that the species may have become even rarer in recent years.

SPECIES INFORMATION SHEET

Roxania utriculus

Distribution map

The records of species compiled from the species database of the Swedish Species Information Centre (Artportalen) and from the Danish national database for marine data (MADS).



SPECIES INFORMATION SHEET *Roxania utriculus*

Habitat and Ecology

Roxania utriculus is a small white opisthobranch with a thick shell that may reach a length of 15 mm. It is found in muddy sand, generally in the sublittoral, and outside the HELCOM area it can be found down to a depth of 1500 m. The ecology of the species is more or less unknown.

Description of major threats

It is not known whether the species is subject to any specific threats or not. However, as the species reaches its northern limit of distribution in our waters future climate change is likely to have a negative impact.

Assessment justification

Very limited data is available, but experts suspect that the species has become more rare in the Kattegat in recent years. The information available is insufficient to determine which of the redlist categories that is most likely. The species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

It is difficult to suggest specific measures. In general the negative effects of eutrophication and trawling 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

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

Hansson, H.G. 1998. Sydskandinaviska marina flercelliga evertebrater. Utgåva 2.

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

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.

Schander, C. 2005. *Roxania utriculus*. Artfaktablad. Artdatabanken, SLU. 2010-01-19. Available a http://www.artfakta.se/Artfaktablad/Roxania_Utriculus_218100.pdf

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

Thompson, T. E. 1988. Molluscs: Benthic Opistobranchs. Linnean Society of London.

SPECIES INFORMATION SHEET *Skeneopsis planorbis*

English name: **Flat skenea/Planorb skenea**	Scientific name: ***Skeneopsis planorbis***	
Taxonomical group: Class: Gastropoda Order: Hypsogastropoda Family: Skeneopsidae	Species authority: Fabricius O., 1780	
Subspecies, Variations, Synonyms: –	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Unknown (U)	Future threats (Habitats Directive article 17 codes): Unknown (U)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**2** (Endangered, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**NT**		

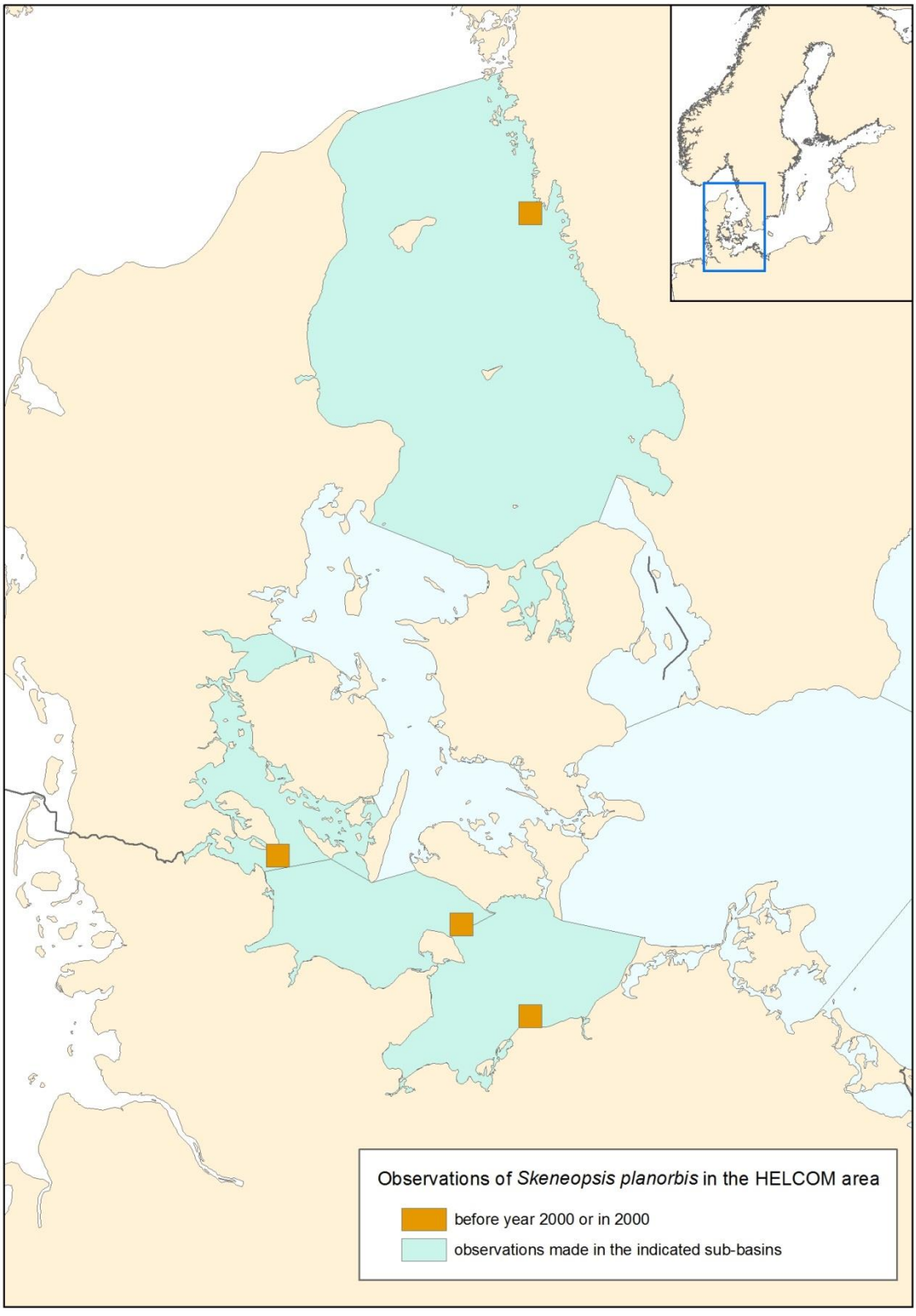
Distribution and status in the Baltic Sea region

The species is very rare in the HELCOM area. It has been found only from a few locations from the Bay of Mecklenburg to the Kattegat. Outside the HELCOM area this species is widely distributed, from Azores to Arctic. It is found on all suitable British shores but is absent from eastern shores of the North Sea.

SPECIES INFORMATION SHEET *Skeneopsis planorbis*

Distribution map

The georeferenced records of species compiled from the database of the Leibniz Institute for Baltic Sea Research (IOW).



SPECIES INFORMATION SHEET *Skeneopsis planorbis*

Habitat and ecology

Skeneopsis planorbis lives on weeds in the upper shoreline especially in rocky shores and it feeds on epiphytes. It could also occur in depths down to 70 m where the feeding behaviour is different.

Description of major threats

Unknown.

Assessment justification

The species is very small and the risk of overlooking is high in inventories. However, it appears also to be genuinely rare (found only in a few locations) and perhaps also declining according to German data. The species has occurred in Germany but has not been found in recent inventories despite targeted searching. *S. planorbis* is categorized as Data Deficient (DD) in the HELCOM area.

Recommendations for actions to conserve the species

Without better understanding on the pressures it is impossible to give any specific recommendations for the species.

Common names

Denmark: –, Estonia: –, Finland: –, Germany: Gemeine Zwergtellerschnecke, 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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Schander, C. 2005. *Roxania utriculus*. Artfaktablad. Artdatabanken, SLU. 2010-01-19. Available a http://www.artfakta.se/Artfaktablad/Skeneopsis_Planorbis_217922.pdf

World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=141539.

SPECIES INFORMATION SHEET *Talitrus saltator*

English name: **Sand hopper**	Scientific name: ***Talitrus saltator***	
Taxonomical group: Class: Malacostraca Order: Amphipoda Family: Talitridae	Species authority: Montagu, 1808	
Subspecies, Variations, Synonyms: *Talitrus locustra* Sars, 1890	Generation length: females 1,5 year males 21 months	
Past and current threats (Habitats Directive article 17 codes): Tourism (cleaning of beaches; G05.05)	Future threats (Habitats Directive article 17 codes): Tourism (cleaning of beaches; G05.05)	
IUCN Criteria: **–**	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**2** (Endangered, incl. North Sea, Latvia –/–, Lithuania –/–, Poland strictly protected by law/–, Russia –/–, Sweden –/–		

Distribution and status in the Baltic Sea region

The species inhabits supralittoral sandy beaches in the southern and western Baltic Sea (Trave Estuary, Greifswald Lagoon, Rugia Lagoons, Polish coast, Curonian Lagoon). As the habitat is under pressure by tourism and the species has been found sensitive to the side-effects of tourism, e.g. trampling and cleaning of algal belts from beaches, it is likely that the population has declined.

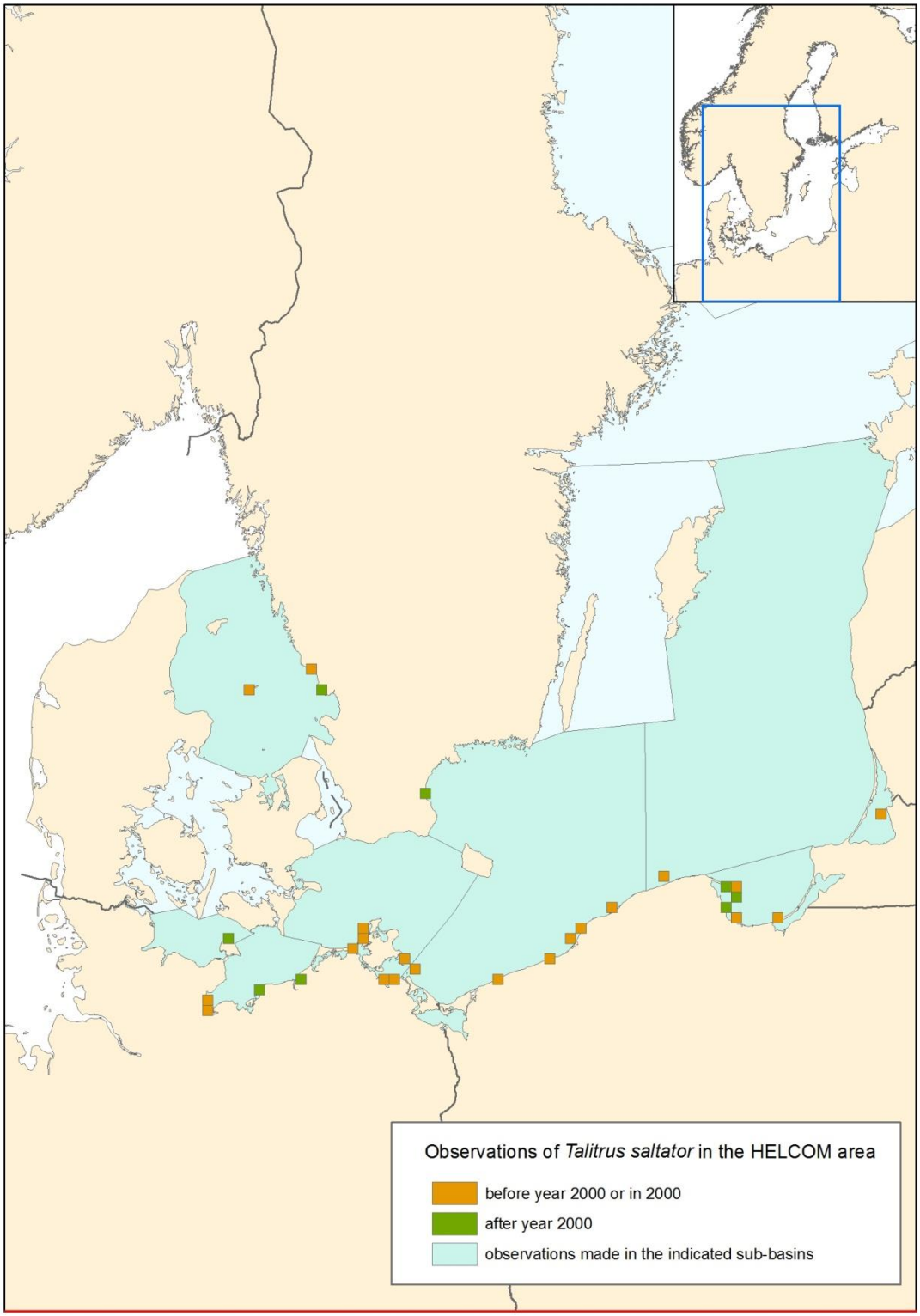
Outside the HELCOM area the species can be found in the north-eastern Atlantic and North Sea, as well as along European coasts from southern Norway to the western Mediterranean.

SPECIES INFORMATION SHEET

Talitrus saltator

Distribution map

The georeferenced records of species compiled from the databases of the Swedish Species Information Centre (Artportalen) and the Leibniz Institute for Baltic Sea Research (IOW), and from Zaddach (1844), Drzycimski & Nawodzinska (1965), and Weslawski et al. (2000).



SPECIES INFORMATION SHEET *Talitrus saltator*

Habitat and ecology

Talitrus saltator is a supralittoral amphipod that inhabits sandy beaches and can be found beneath or among debris and decaying algae that is deposited at the high water mark (MarLin). During the day, *T. saltator* is found buried 10–30 cm in the substratum, and at night it emerges to forage on algae.

Description of major threats

The species is sensitive to anthropogenic pressures, e.g. in the form of beach tourism, which causes trampling in its habitats. Tourism usually also means that the beach is kept clean, i.e. the decaying algae, which serve as the habitat for the species, are removed. It has also been indicated to be sensitive to both synthetic compound and hydrocarbon contamination.

Assessment justification

The occurrences are poorly known except in Poland where there has been a targeted inventory on the species. According to Polish studies (information from Jan Marcin Weslawski) *Talitrus saltator* is sensitive to increased antropogenic pressure in the form of tourism. It is not known how rare the species actually is. Suitable and abundant habitats should be available e.g. on Danish and German coast. However, in Germany where the species has been specifically looked for it has been found only in three locations, which implies that it may after all be rather rare. There is very little data on the distribution of the species in Sweden and Denmark and no information on possible trends. However, it is quite likely although not sure that the population of the species experiences similar pressure due to beach tourism also in other countries besides Poland. The species is protected by law in Poland. Due to the lack of data the species is categorized as Data Deficient (DD) in the HELCOM area.

Recommendations for actions to conserve the species

If beach tourism is an essential threat for the species, it would probably benefit from restrictions of use for parts of sandy beaches, and from zones where cleaning would be less efficient.

Common names

Denmark: lys sandhopper, Estonia: –, Finland: –, Germany: Strandfloh, Latvia: –, Lithuania: –, Poland: zmieraczek plażowy, Russia: –, Sweden: –

References

Budd, G. 2005. *Talitrus saltator*. A sand hopper. Marine Life Information Network: Biology and Sensitivity Key Information Sub-programme [on-line]. Plymouth: Marine Biological Association of the United Kingdom. [cited 07/08/2012]. Available at http://www.marlin.ac.uk/generalbiology.php?speciesID=4417

Drzycimski, I. & Nawodzińska, G. 1965. Amphipoda from beaches of Polish Baltic Sea. Przeg. Zool. 3: 267–273. [In Polish]

IOW database. Observational data from the database of the Leibniz Institute for Baltic Sea Research.

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

Węsławski, J. M., Stanek, A., Siewert, A. & Beer, N. 2000. The sandhopper (*Talitrus saltator,* Montagu 1808) on the Polish Baltic coast. Is it a victim of increased tourism? Oceanological Studies Vol XXIX, No. 1. Institute of Oceanography, University of Gdańsk & Institute of Marine Sciences, University of Szczecin. P. 77–87.

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Zaddach, E.G. 1844. Synopseos Crustaceorum prussicorum Prodromus. Dissertatio Zoologica. Regiomonti, Impressit E J. Dalkowski: VIII+39pp.

SPECIES INFORMATION SHEET *Thia scutellata*

English name: **Tumbnail crab/Polished crab**	Scientific name: ***Thia scutellata***	
Taxonomical group: Class: Malacostraca Order: Decapoda Family: Thiidae	Species authority: Fabricius, 1793	
Subspecies, Variations, Synonyms: *Cancer scutellata* Fabricius, 1793	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Potentially eutrophication (H01.05), Fishing (bottom trawling; F02.02.01)	Future threats (Habitats Directive article 17 codes): Potentially eutrophication (H01.05), Fishing (bottom trawling; F02.02.01), Construction (windmills; C03.03?)	
IUCN Criteria: **–**	**HELCOM Red List Category:**	**DD Data Deficient**
Global / European IUCN Red List Category NE/NE	Habitats Directive:	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**D** (Data deficient, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**VU** Redlisted as DD in the Norwegian Red List 2010.		

Distribution and status in the Baltic Sea region

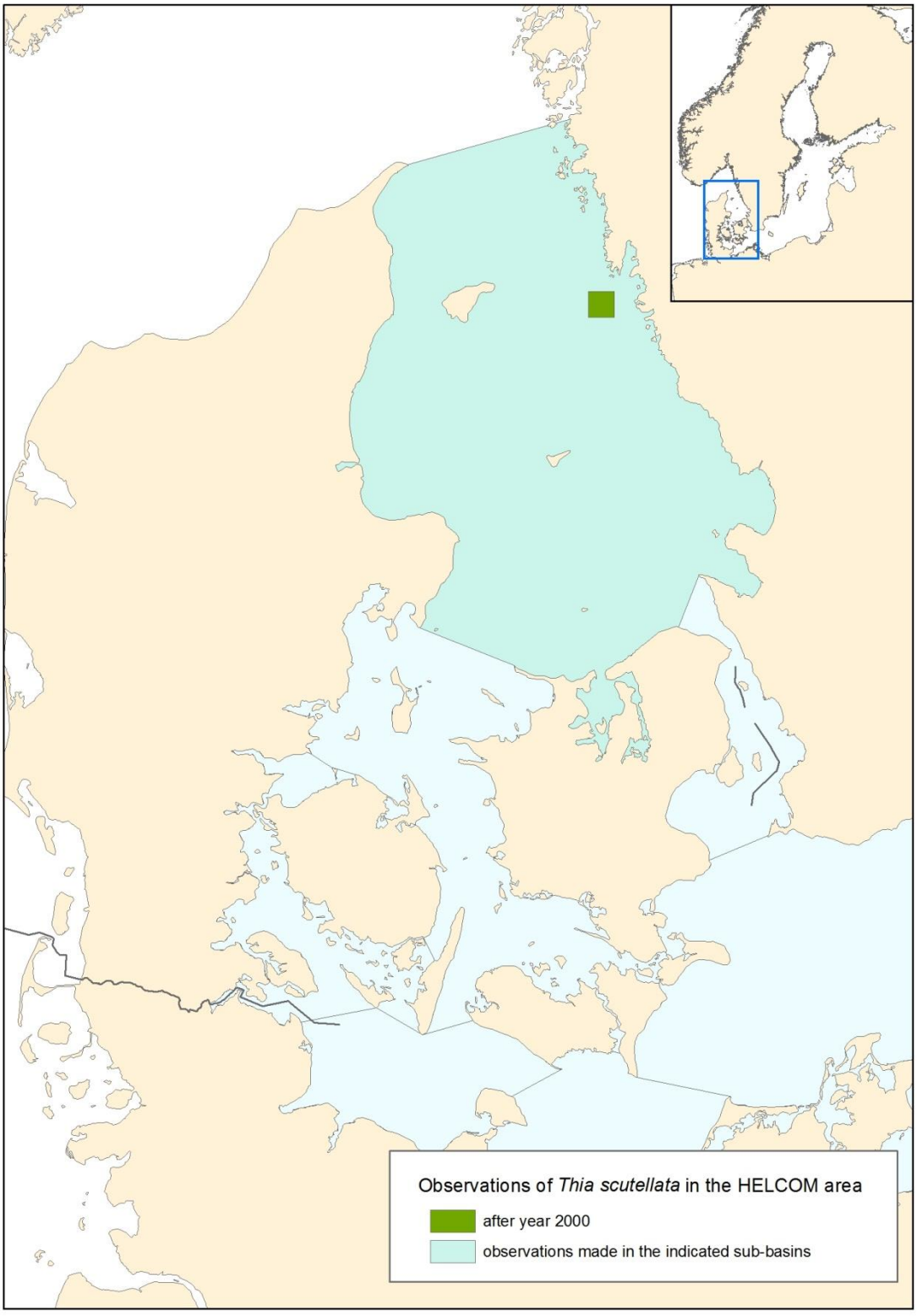
Within the HELCOM area the species has only been found on the shallow offshore bank Fladen. However, Danish data are lacking. Outside the HELCOM area the species is reported from the Skagerrak and the North Sea. In the Swedish part of the Skagerrak the species has only been recorded on a few localitites, in the Gullmaren and Koster fjords. The species is probably very rare due to its habitat choice.

Thia scutellata. Photo by Anders Salesjö Photography, Undervattenbilder.se.

SPECIES INFORMATION SHEET *Thia scutellata*

Distribution map

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



SPECIES INFORMATION SHEET *Thia scutellata*

Habitat and ecology

Thia scutellata is a small digging crab with a characteristic pink and heart-shaped carapace. It burrows in sand and mud from low water to about 45 m. *Thia scutellata* seems to prefer coarse-grained sediments with a low mud content, of the same bottom type where Lancet fish *Branchiostoma lanceolatum* can be found. Otherwise, the ecology of the species is poorly known.

Description of major threats

The species is probably naturally rare due to its habitat choice, but as it is difficult to detect with standard sampling it may also be more common than suspected. At present it is not known whether the species is under a specific threat or not. However, the offshore bank where the species is found within the HELCOM area is 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

Very limited data - the species has only been recorded on the shallow offshore bank Fladen in the Kattegat. However, Danish data is lacking. The habitat of the species is probably rare but the information available is insufficient to determine which of the redlist categories is the most likely. The species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

In general the negative effects of eutrophication and trawling 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: nagelkrabba

References

Artsdatabanken 2010. Norwegian Red List 2010. Species information available at http://www.artsportalen.artsdatabanken.no/#/Rodliste2010/Vurdering/Thia+scutellata/21778

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

SPECIES INFORMATION SHEET *Upogebia stellata*

English name: –	Scientific name: ***Upogebia stellata***	
Taxonomical group: Class: Malacostraca Order: Decapoda Family: Upogebiidae	Species authority: Montagu, 1808	
Subspecies, Variations, Synonyms: –	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Fishing (direct impact and sedimentation caused by bottom trawling; F02.02.01)	Future threats (Habitats Directive article 17 codes): Fishing (direct impact and sedimentation caused by bottom trawling; F02.02.01)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD** **Data Deficient**
Global / European IUCN Red List Category NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**2** (Endangered, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/**DD**		

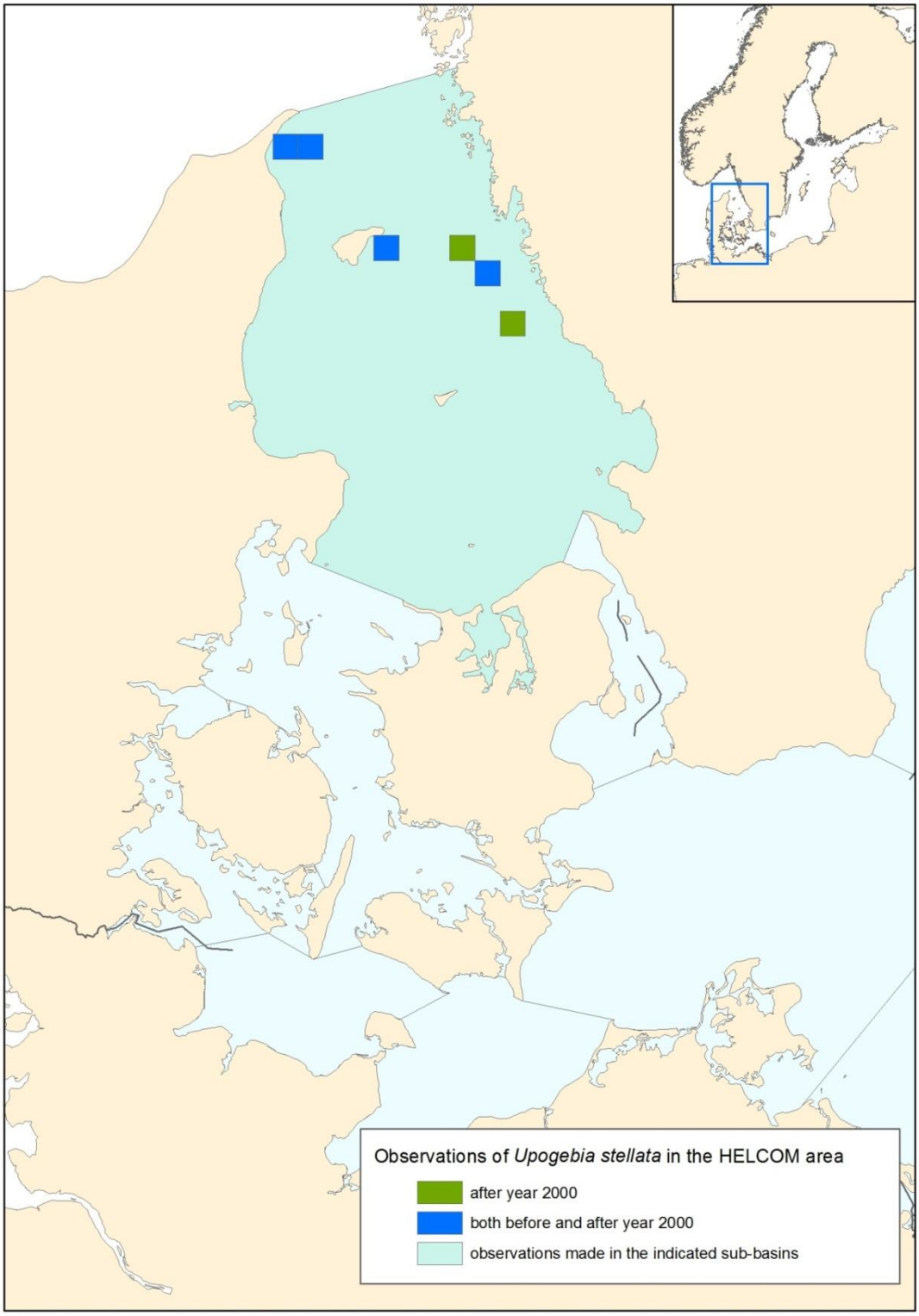
Distribution and status in the Baltic Sea region

As far as is known *U. stellata* has only been reported from the Kattegat within the HELCOM area. Outside the HELCOM area the species is reported from the Skagerrak and the North Sea. In Sweden the species is only known from a few coastal locations in the Kattegat and Skagerrak. Very little data, both from Sweden and Denmark, is available and it is thus difficult to say anything about the population trend and status of the species. However, the species may very well be sensitive to sedimentation caused by bottom trawling. It may also be directly affected by trawling as bycatch.

SPECIES INFORMATION SHEET *Upogebia stellata*

Distribution map

The records of species compiled from the databases of the Swedish Species Information Centre (Artportalen) and from the Danish national database for marine data (MADS).



SPECIES INFORMATION SHEET *Upogebia stellata*

Habitat and ecology

U. stellata is a rather inconspicuous shrimp that occasionally may reach a length of 50 mm. It lives in burrows in sandy soft bottoms, on depths between 20 and 40 meters. *U. stellata* is a filter feeder, i.e. it feeds by filtrating nutrients from the sea water.

Description of major threats

At present there are no indications of decline, but as the species is caught as bycatch in trawling the intense bottom trawling in the area is likely to have a negative effect. Furthermore, sedimentation may affect the habitat negatively.

Assessment justification

Only limited data from Sweden and Denmark is available. No indications of decrease in population size or distribution, but it may be that the species is negatively affected by bottom trawling, both indirectly through sedimentation and directly as bycatch. The information available is insufficient to determine which of the redlist categories is the most likely. The species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

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

Common names

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

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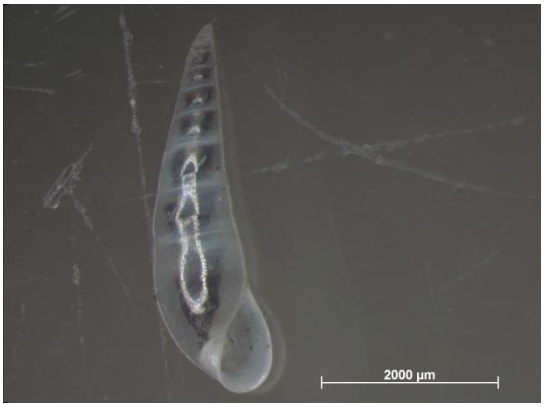
Swedish Species Gateway. Swedish Species Information Centre and Swedish Environmental Protection Agency. Available at www.artportalen.se.

SPECIES INFORMATION SHEET *Vitreolina philippi*

English name: –	Scientific name: ***Vitreolina philippi***	
Taxonomical group: Class: Gastropoda Order: Hypsogastropoda Family: Eulimidae	Species authority: de Rayneval & Ponzi, 1854	
Subspecies, Variations, Synonyms: *Eulima philippi* Ponzi, De Rayneval & Van den Hecke, 1854 *Eulima rhaphium* Watson, 1897 *Vitreolina philippii* Rayneval & Ponzi, 1854 (spelling variation)	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): Unknown (U)	Future threats (Habitats Directive article 17 codes): Unknown (U)	
IUCN Criteria: –	**HELCOM Red List Category:**	**DD** **Data Deficient**
Global / European IUCN Red List Category NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**R** (Extremely rare, incl. North Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

Distribution and status in the Baltic Sea region

The species is related to echinoderm hosts. In the HELCOM area it is rare and occurs only in the western parts. The abundance of the hosts is regarded very limited or declining which affects the species negatively. Outside the HELCOM area this species is distributed from Mediterranean to Norway but it is absent from the eastern Channel and the southern North Sea.

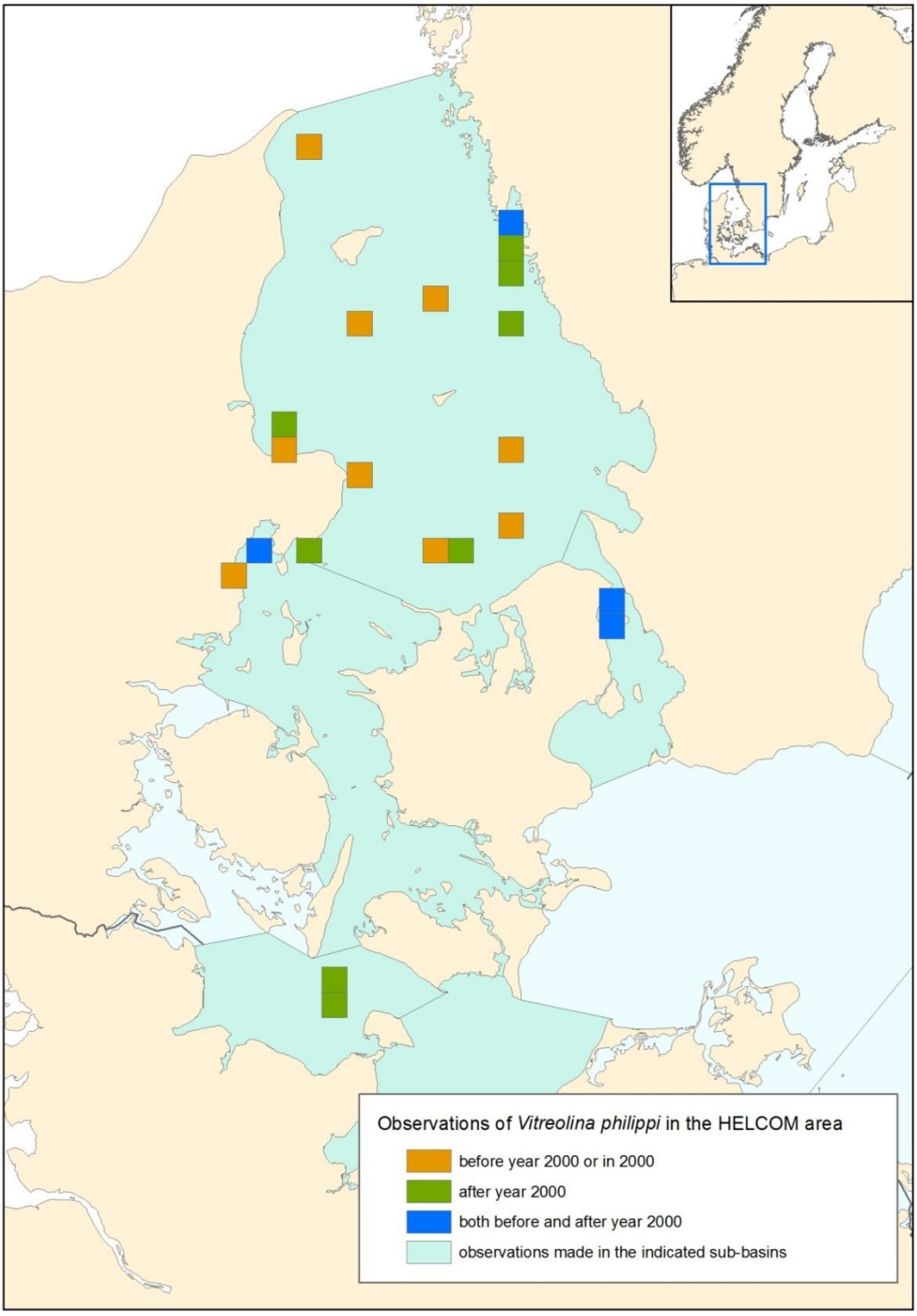


Vitreolina philippi. Photo: Michael Zettler, Leibniz Institute for Baltic Sea Research Warnemünde (IOW).

SPECIES INFORMATION SHEET *Vitreolina philippi*

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, International Council for the Exploration of the Sea (ICES), and the Leibniz Institute for Baltic Sea Research (IOW).



SPECIES INFORMATION SHEET *Vitreolina philippi*

Habitat and ecology

The habitat preferences are not well known. According to Hansson (1998) the species occurs on soft bottom habitats, whereas according to German information it is more related to reefs or coarse sand. Also the relationship to echinoderms is unclear but it was assumed that larger echinoderms are the main hosts of the species.

Description of major threats

Threats not known.

Assessment justification

V. philippi is rare in the HELCOM area and related to echinoderm hosts. Many of the hosts have declined but not all, and it is not known how much *V. philippi* may have declined. The species is categorized as Data Deficient (DD).

Recommendations for actions to conserve the species

The level of knowledge on the species and its distribution, abundance, habitats and ecology should be improved before any specific recommendations can be given.

Common names

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

References

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

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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World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=139903

SPECIES INFORMATION SHEET

Macroplea mutica

English name: **The aquatic leaf beetle**	Scientific name: ***Macroplea mutica***	
Taxonomical group: Class: Insecta Order: Coleoptera Family: Chrysomelidae	Species authority: Fabricius, 1792	
Subspecies, Variations, Synonyms: *Haemonia mutica*	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): –	Future threats (Habitats Directive article 17 codes): –	
IUCN Criteria: –	**HELCOM Red List Category:**	**LC Least Concern**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/**LC**, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/**CR**, Russia –/–, Sweden –/**LC**		

Distribution and status in the Baltic Sea region

This halophile aquatic beetle lives on the coasts of the Baltic Sea, Mediterranean, and Caspian Sea, and is known also from freshwater e.g. lake Balaton in Hungary. There are some freshwater records also from Finland and Sweden. On the Atlantic coast, it is associated with saline lagoons.

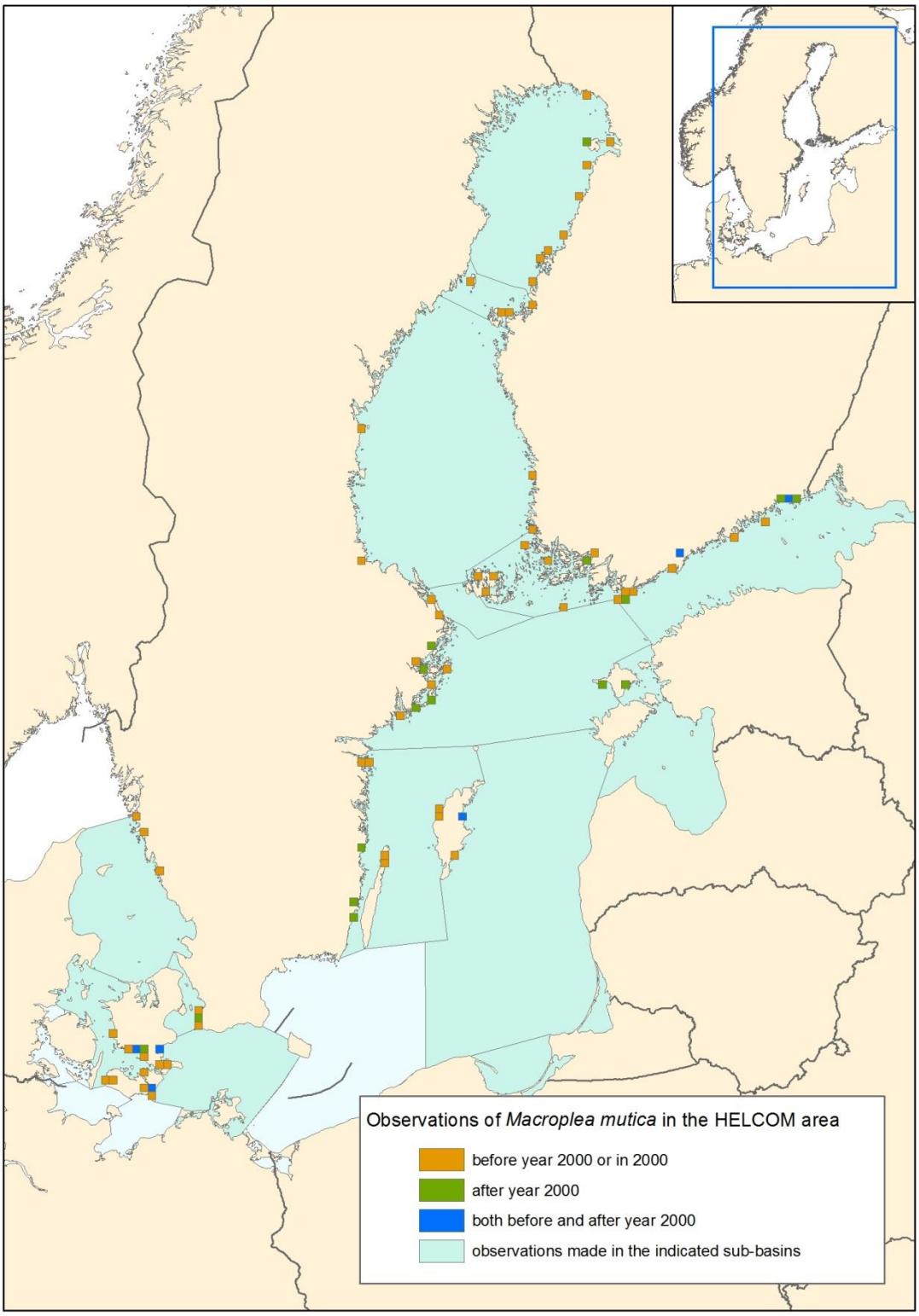
In the southern Baltic Sea, *M. mutica* lives in inlets (Bodden) of the Danish and Polish coast. Its formerly known localities in the Puck bay and in the environment of Gdańsk have not been confirmed for several decades. In the north it appears to be more common and there is no indication that the population has decreased there.

SPECIES INFORMATION SHEET

Macroplea mutica

Distribution map

The georeferenced records of species compiled from the Danish national database for marine data (MADS), the species database of Swedish Species Information Centre (Artportalen), Estonian eBiodiversity web interface, data of the Finnish coleopteran expert team and Silfverberg (1987). Data from Poland is missing from the map.



SPECIES INFORMATION SHEET *Macroplea mutica*

Habitat and ecology

The species is an aquatic chrysomelid beetle that lives in sheltered inlets in shallow waters, at a depth range of 25–100 cm. It lives in brackish water but is also known from freshwater localities. In the Baltic Sea, this herbivorous beetle is trophically associated with submerged plants of the Baltic coast e.g. *Ruppia* spp., *Potamogeton pectinatus*, *Zannichellia palustris*, *Zostera marina*, and *Myriophyllum spicatum*. It lives underwater throughout its life cycle, but details of its biology, especially in larval stages, are poorly known. The adult beetles crawl together, the smaller male "riding" on females' back.

Description of major threats

M. mutica is not considered threatened on the level of the whole Baltic Sea. However, in the southern part of its distribution area it has suffered from various activities destroying its habitat: increasing pollution of coastal waters, coastal constructions, harbours, and dredging. Also disturbance caused by boat traffic, changes in water quality as well as changes in vegetation due to eutrophication (mainly expansion of reeds) are unfavourable to this species (HELCOM).

Assessment justification

The majority of the Baltic Sea population of the species probably lives on the coasts of the northern Baltic Sea where the species is fairly common and there is no indication of significant population decline. In Finland and Sweden, the species has been considered Least Concern (LC) in the 2010 Red Lists. Although the species has suffered from various pressures in the southern Baltic Sea, it does not meet the A criterion in regard to the overall trend on the scale of the whole Baltic Sea. The assumed overall area of occupancy (AOO) also exceeds the limits for red listing and consequently the species is categorized as Least Concern (LC) in the HELCOM area.

Recommendations for actions to conserve the species

In the southern part of its range within the HELCOM area the species would benefit from all actions that could restrict the activities destroying its habitats.

Common names

Denmark: –, Estonia: ranna-sukelpoi, Finland: rantauposkuoriainen, Germany: –, Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: –

References

Estonian eBiodiversity. Observational data avaible at http://elurikkus.ut.ee/prmt.php?lang=eng.

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SPECIES INFORMATION SHEET *Monoporeia affinis*

English name: –	Scientific name: ***Monoporeia affinis***	
Taxonomical group: Class: Malacostraca Order: Amphipoda Family: Pontoporeiidae	Species authority: Lindström, 1855	
Subspecies, Variations, Synonyms: *Pontoporeia affinis* Lindström, 1855	Generation length: 1–3 years	
Past and current threats (Habitats Directive article 17 codes): –	Future threats (Habitats Directive article 17 codes): –	
IUCN Criteria: –	**HELCOM Red List Category:**	**LC Least Concern**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**3** (Vulnerable), Latvia –/–, Lithuania –/–, Poland –/**CR**, Russia –/–, Sweden –/–		

Distribution and status in the Baltic Sea region

Monoporeia affinis is distributed over most of the Baltic Sea, with its western distribution limit in the Arkona Basin and the Bay of Mecklenburg. The species forms the major part of the benthic fauna in the Gulf of Bothnia. In the Bothnian Sea, the abundance reaches the highest values of macrofauna in the open parts of the Baltic. In the western Baltic Sea (Arkona Basin, Bornholm Basin) its distribution is restricted to areas deeper than 10 m (needs colder water), whereas in the eastern and northern sea areas it is also found in the shallow water (Gosselck 2009).

Eutrophication and the loss of oxygen in the Baltic Sea have reduced the abundance of *M. affinis* – especially in the south-western Baltic Sea and on the bottoms of the Gulf of Finland (Gosselck 2009).

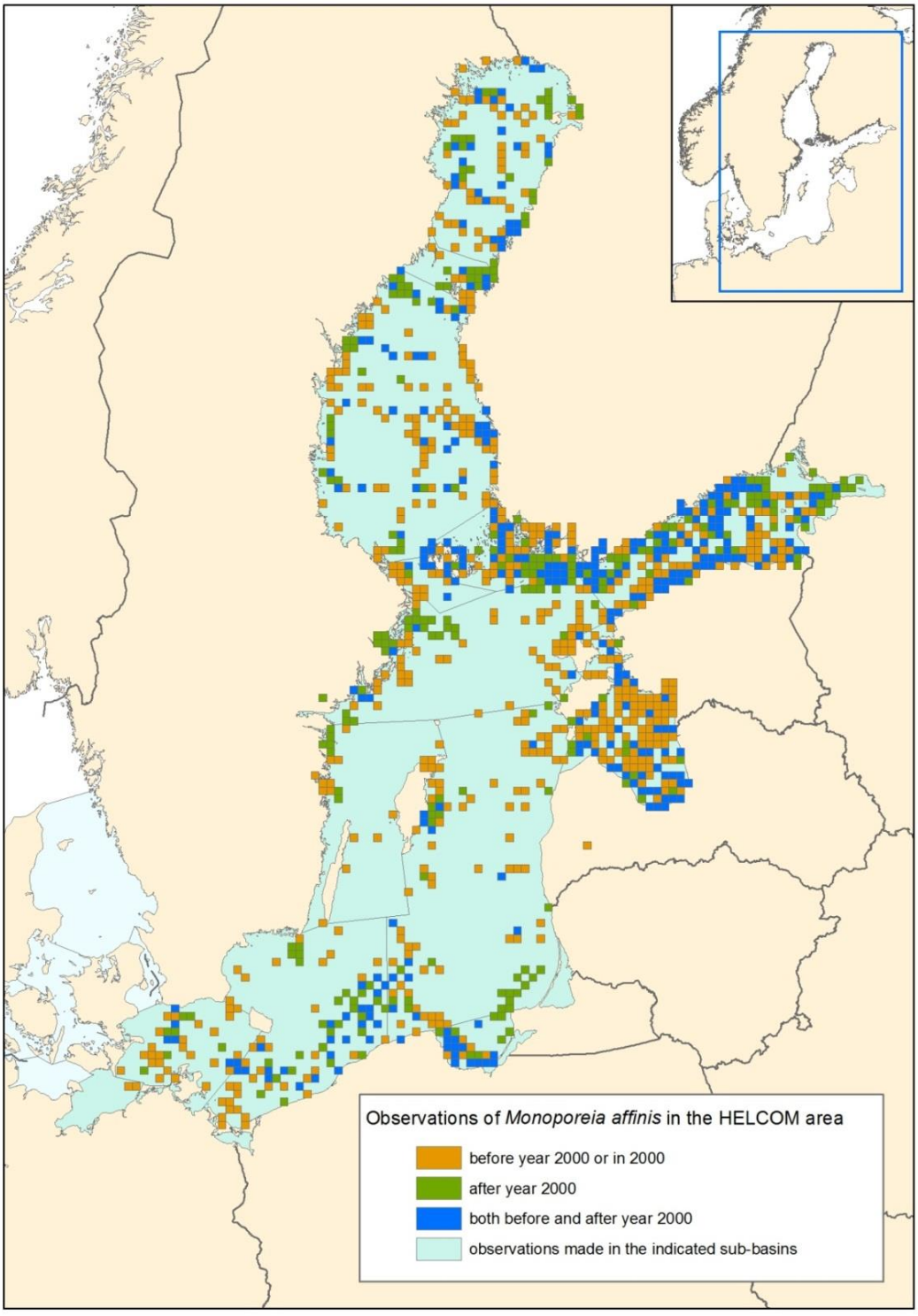
Photo by Metsähallitus NHS/Ari Laine.

SPECIES INFORMATION SHEET

Monoporeia affinis

Distribution map

The georeferenced records of species compiled from the Danish national database for marine data (MADS), from the databases of the International Council for the Exploration of the Sea (ICES), Finnish Environment Institute, Estonian Marine Institute, and the Leibniz Institute for Baltic Sea Research (IOW). Additional data was received from Finland, Latvia, Poland, Russia, and Sweden from other sources.



SPECIES INFORMATION SHEET *Monoporeia affinis*

Habitat and ecology

M. affinis is a glacial relict species left in the Baltic Sea area after the last glaciation. It lives on soft bottoms from the surface down to about 80 meters. The species has an important role in the benthic community as they mix and oxygenise the top layer of the sediment. The species *M. affinis* and *P. femorata* are the dominant deposit feeding invertebrates over wide areas of soft sediments in the Baltic Proper. Sometimes dense populations of 10 000–20 000 ind./m² are observed. *M. affinis* shows strong oscillations in the abundance with a cycle of 6–7 years.

The individuals have a lifespan of between 1 and 3 years and breed only once (Segerstråle 1937). Mating occurs in the fall and the female carries the developing young through winter. *M. affinis* feeds on plankton sinking to the bottom and other detritus. In summer, when food is abundant, the fat percentage of the individual can rise to half of the individual's total weight. In winter, partly due to ice cover, *M. affinis* uses this stored fat reserve as energy. Due to the high energy content *M. affinis* is a very important food source for many fish species.

Description of major threats

Eutrophication and the loss of oxygen in the Baltic Sea have reduced the abundance of *M. affinis* – especially in the south-western Baltic Sea and on the bottoms of the Gulf of Finland (Gosselck 2009). It has also been shown that the competition for food with the invasive *Marenzelleria viridis* is likely to affect the population of *M. affinis* in the northern Baltic (Kotta & Olafsson 2003).

Assessment justification

Monoporeia affinis is a widespread and common species in the Baltic Sea. It has declined clearly due to eutrophication and loss of oxygen, e.g. in the south-western Baltic Sea and in the Gulf of Finland. However, the species is short-lived and for the population decline estimation the minimum time period of 10 years is used. Within the period of the latest 10 years, there is no indication of overall decline that would meet the A criterion. Thus the species is categorized as Least Concern (LC).

Recommendations for actions to conserve the species

The species is considered not threatened in the HELCOM area. Long-term work against eutrophication would eventually benefit the species in areas where it has declined due to oxygen depletion.

Common names

Denmark: hvid ferskvandstangloppe/ hvide østersøtangloppe, Estonia: –, Finland: valkokatka, Germany: –, Latvia: –, Lithuania: –, Poland: pontoporeja czarnooka, Russia: –, Sweden: vitmärla

References

Database of the Marine Research Centre, Finnish Environment Institute, all observations 1964–2007. Received in March 2011.

EMI, observational data from the database of the Estonian Marine Institute.

Gosselck, F. 2009. *Monoporeia affinis* (Lindström 1855) (Crustacea). HELCOM fact sheet.

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IOW database. Observational data from the database of the Leibniz Institute for Baltic Sea Research.

Itämeriportaali, the Baltic Sea portal. Finnish Environment Institute, Finnish Meteorological Institute and the Ministry of the Environment. Available at http://www.itameriportaali.fi/fi/tietoa/sanakirja/fi_FI/valkokatkat/

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Segerstråle, S.G. 1937. Studien über die Bodentierwelt in südfinnländischen Küstengewässern III. Zur Morphologie und Biologie des Amphipoden *Pontoporeia affinis*, nebst einer Revision der *Pontoporeia*-Systematik. Societas Scientiarum Fennica 7(1): 1–181+19 plates.

World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=103077.

SPECIES INFORMATION SHEET *Pontoporeia femorata*

English name: –	Scientific name: ***Pontoporeia femorata***	
Taxonomical group: Class: Malacostraca Order: Amphipoda Family: Pontoporeiidae	Species authority: Krøyer, 1842	
Subspecies, Variations, Synonyms: *Pontoporeia ekmani* Bulycheva, 1936 *Pontoporeia furcigera* Bruzelius, 1859 *Pontoporeia sinuata* Ekman, 1913	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): –	Future threats (Habitats Directive article 17 codes): –	
IUCN Criteria: –	**HELCOM Red List Category:**	**LC Least Concern**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**V** (Near threatened) , Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

Distribution and status in the Baltic Sea region

Pontoporeia femorata is distributed throughout the Baltic Sea, but is more common in the southern and central parts than in the northern sub-basins. It has declined in the south-western Baltic Sea due to eutrophication but no recent declines are known from other parts of the Baltic Sea region.

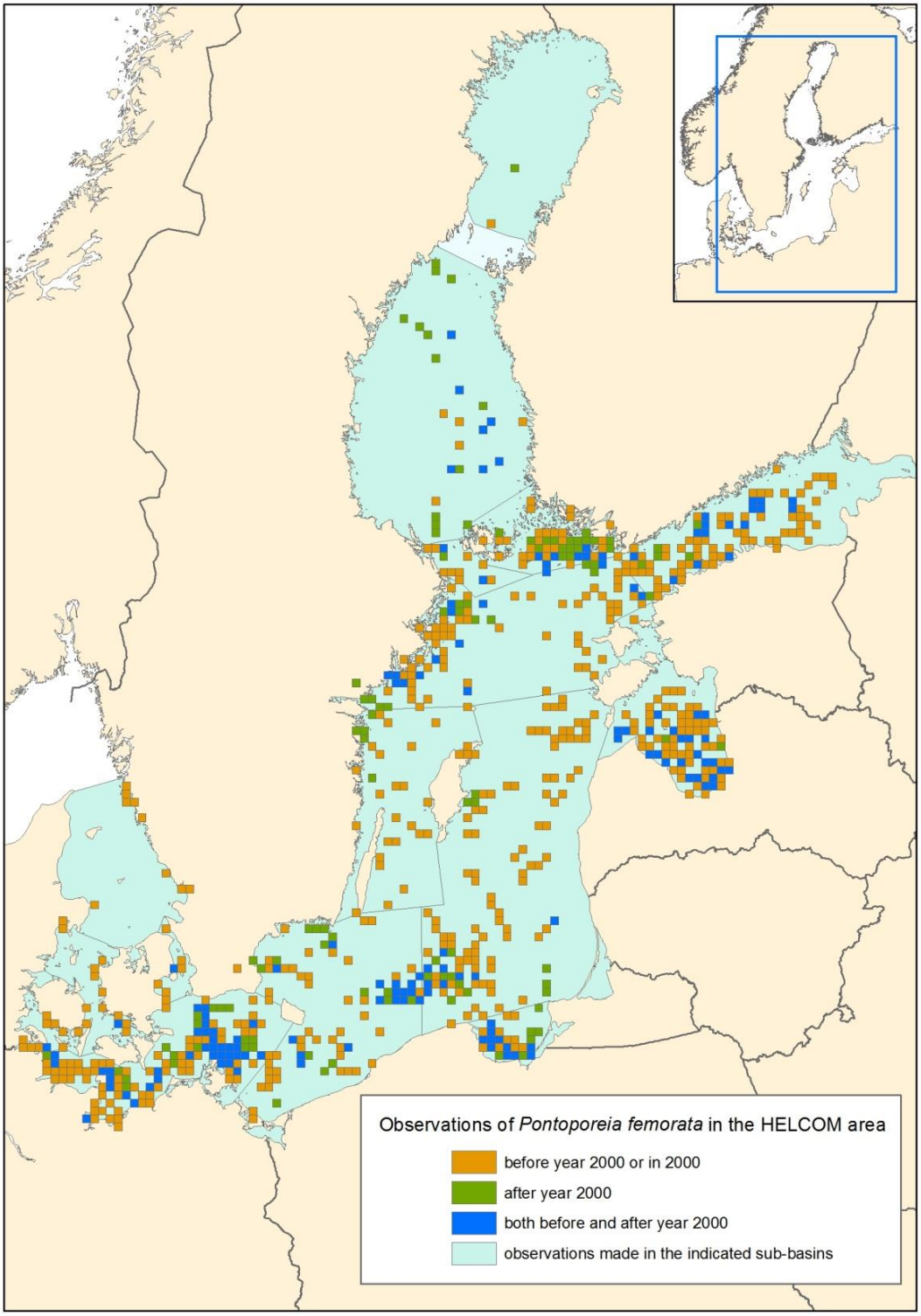
Its distribution ranges from Arctic waters of the North Atlantic to the boreal areas of the Norwegian deep in the Skagerrak, Kattegat and the whole Baltic Sea.

Pontoporeia femorata. Photo by Joanna Legeżyńska.

SPECIES INFORMATION SHEET *Pontoporeia femorata*

Distribution map

The georeferenced records of species compiled from the Danish national database for marine data (MADS), from the databases of the International Council for the Exploration of the Sea (ICES), Swedish Meteorological and Hydrological Institute, Finnish Environment Institute, Estonian Marine Institute, and the Leibniz Institute for Baltic Sea Research (IOW). Additional data was received from Estonia, Finland, Latvia, Poland, and Russia from other sources.



SPECIES INFORMATION SHEET *Pontoporeia femorata*

Habitat and ecology

P. femorata is an amphipod species of marine arctic origin. It is restricted to the deep (found in over 10 meter depths) cold water zones on silt bottoms in the Baltic Sea. The species tolerates reduced salinities down to 6 psu. *P. femorata* is a deposit feeder, which feeds mainly on settled phytoplankton and other detrital organic matter. The amphipod is found deeper in the sediment than *M. affinis*. It is an active bioturbator, thus influencing the sediment structure, nutrient fluxes and oxygen availability in the sediment. Dense populations are up to 2.000 ind./m² (Askö area).

Description of major threats

The loss of oxygen in the Baltic Sea bottoms has reduced the abundance of *P. femorata*.

Assessment justification

P. femorata is a common species in most of the Baltic Sea. It has declined in the south-western Baltic Sea due to eutrophication but no recent declines are known from other parts of the Baltic Sea region. The species does not meet any of the Red List criteria and is considered Least Concern (LC).

Recommendations for actions to conserve the species

Reduction of nutrient loading would eventually improve the situation of *P. femorata*.

Common names

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

References

Database of the Marine Research Centre, Finnish Environment Institute, all observations 1964–2007. Received in March 2011.

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IOW database. Observational data from the database of the Leibniz Institute for Baltic Sea Research.

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World Register of Marine Species WoRMS. Available at http://www.marinespecies.org/aphia.php?p=taxdetails&id=103079

SPECIES INFORMATION SHEET

Saduria entomon

English name: –	Scientific name: ***Saduria entomon***	
Taxonomical group: Class: Malacostraca Order: Isopoda Family: Chaetiliidae	Species authority: Linnaeus, 1758	
Subspecies, Variations, Synonyms: *Chiridothea entomon auctorum* *Mesidotea entomon auctorum* Oniscus entomon Linnaeus, 1758 *Saduria entomon entomon* (Linnaeus, 1758) (subspecies not recognised)	Generation length: –	
Past and current threats (Habitats Directive article 17 codes): –	Future threats (Habitats Directive article 17 codes): –	
IUCN Criteria: –	**HELCOM Red List Category:**	**LC Least Concern**
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/**G** (endangered by unknown extent), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/–		

Distribution and status in the Baltic Sea region

Saduria entomon is distributed over the Baltic Sea, but not in the Belt Sea. In the western Baltic Sea (Arkona Basin, Bornholm Basin) its distribution is restricted to areas deeper than 10 m (needs cold water), whereas in the eastern and northern sea areas it is found also in the surface waters. In the northern part it is found from the shallow coastal areas to the deepest parts (depending on the oxygen conditions). In the southern parts it is found mostly in the deeper parts depending on the temperature regime. The loss of oxygen in the Baltic Sea bottoms has caused some declines in the population.

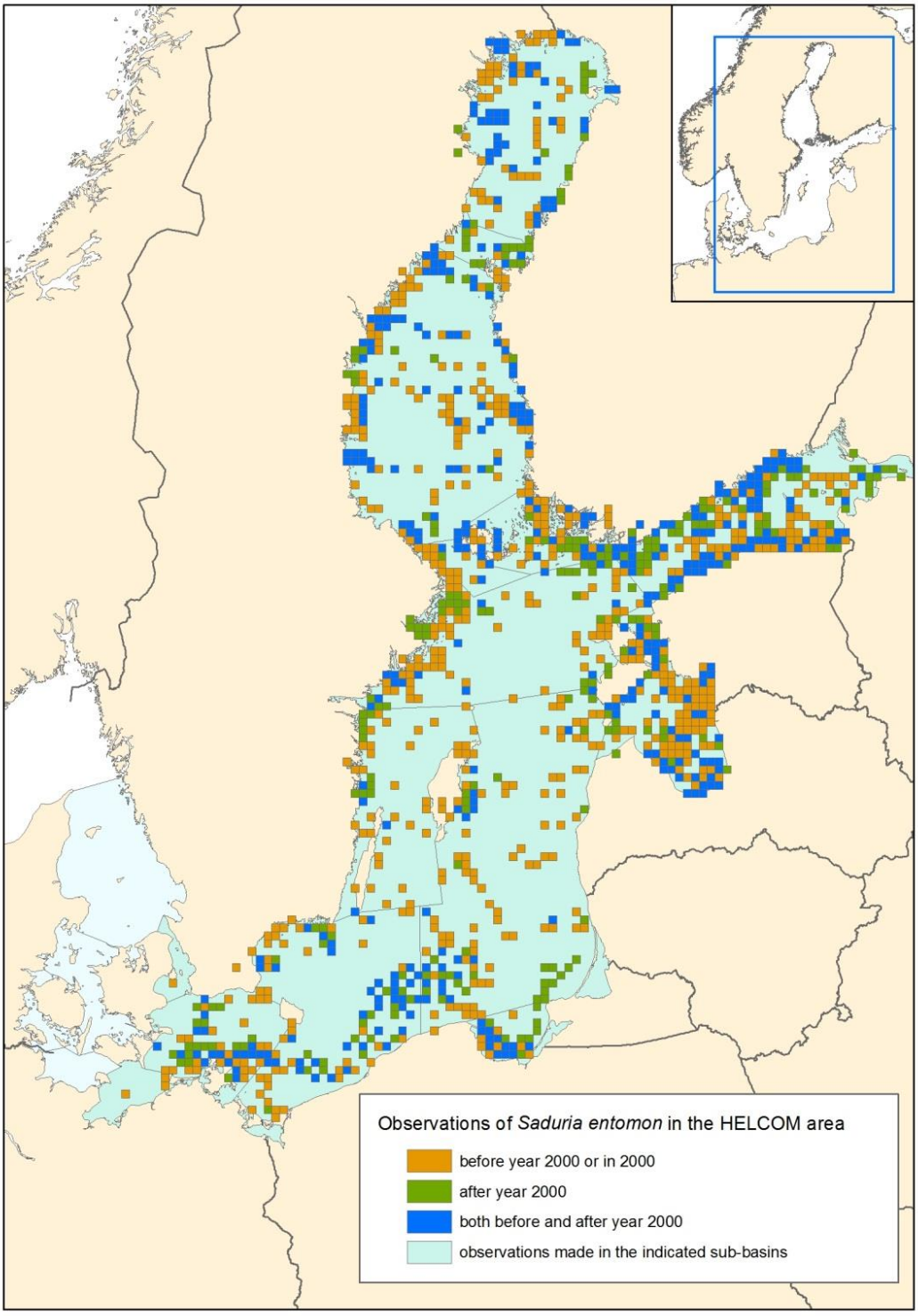
Saduria entomon. Photo by Metsähallitus NHS/Essi Keskinen.

SPECIES INFORMATION SHEET

Saduria entomon

Distribution map

The georeferenced records of species compiled from the Danish national database for marine data (MADS), from the databases of the International Council for the Exploration of the Sea (ICES), Swedish Meteorological and Hydrological Institute, Finnish Environment, Estonian Marine Institute, and the Leibniz Institute for Baltic Sea Research (IOW). Additional data was received from Estonia, Finland, Latvia, Poland, Russia, and Sweden from other sources. The species occurs also in a number of North European lakes, including Ladoga, Vänern and Vättern (occurrences not shown on the map).



SPECIES INFORMATION SHEET *Saduria entomon*

Habitat and ecology

This big isopod species (up to 84 mm in length) is one of the Baltic glacial relicts and it is restricted to deep cold water zones in the Baltic Sea and tolerates reduced salinities from 35 psu down to 0 psu. *S. entomon* lives on varying types of bottoms, e.g. sand, gravel and mud. It is a scavenger and predator, capable of swimming, that feeds on other benthic animals, such as *Monoporeia affinis, Macoma balthica* and chironomid larvae as well as carrion. The species itself is an important food source for cod. In general, older and larger individuals are found in deeper areas, whereas juveniles and young individuals keep to shallower areas. This is believed to be an effect of the cannibalistic behaviour of the adults on the young.

Description of major threats

The loss of oxygen in the Baltic Sea bottoms has caused decline of the *S. entomon* population in the past.

Assessment justification

Saduria entomon is a common species in most of the Baltic Sea. The loss of oxygen in the Baltic Sea bottoms has caused some declines in the *S. entomon* population but no recent declines have been observed or suspected. It does not meet any of the Red List criteria and is categorized as Least Concern (LC).

Recommendations for actions to conserve the species

The species is not threatened but it would benefit from reduction of nutrient loading in the Baltic Sea.

Common names

Denmark: østersøkrebs, Estonia: merikilk, Finland: kilkki, Germany: Riesenassel, Latvia: –, Lithuania: –, Poland: podwój wielki, Russia: –, Sweden: Ishavsgråsugga/skorv/spånakärring

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