

## SPECIES INFORMATION SHEET

*Cryptonatica affinis*

English name: <b>Arctic moonshell</b>	Scientific name: <i>Cryptonatica affinis</i>	
Taxonomical group: Class: Gastropoda Order: Hypsogastropoda Family: Naticidae	Species authority: Gmelin 1791	
Subspecies, Variations, Synonyms: <i>Cryptonatica clausa</i> <i>Cryptonatica septentrionalis</i> <i>Natica clausa</i> 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: –	<b>HELCOM Red List Category:</b>	<b>DD Data Deficient</b>
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**

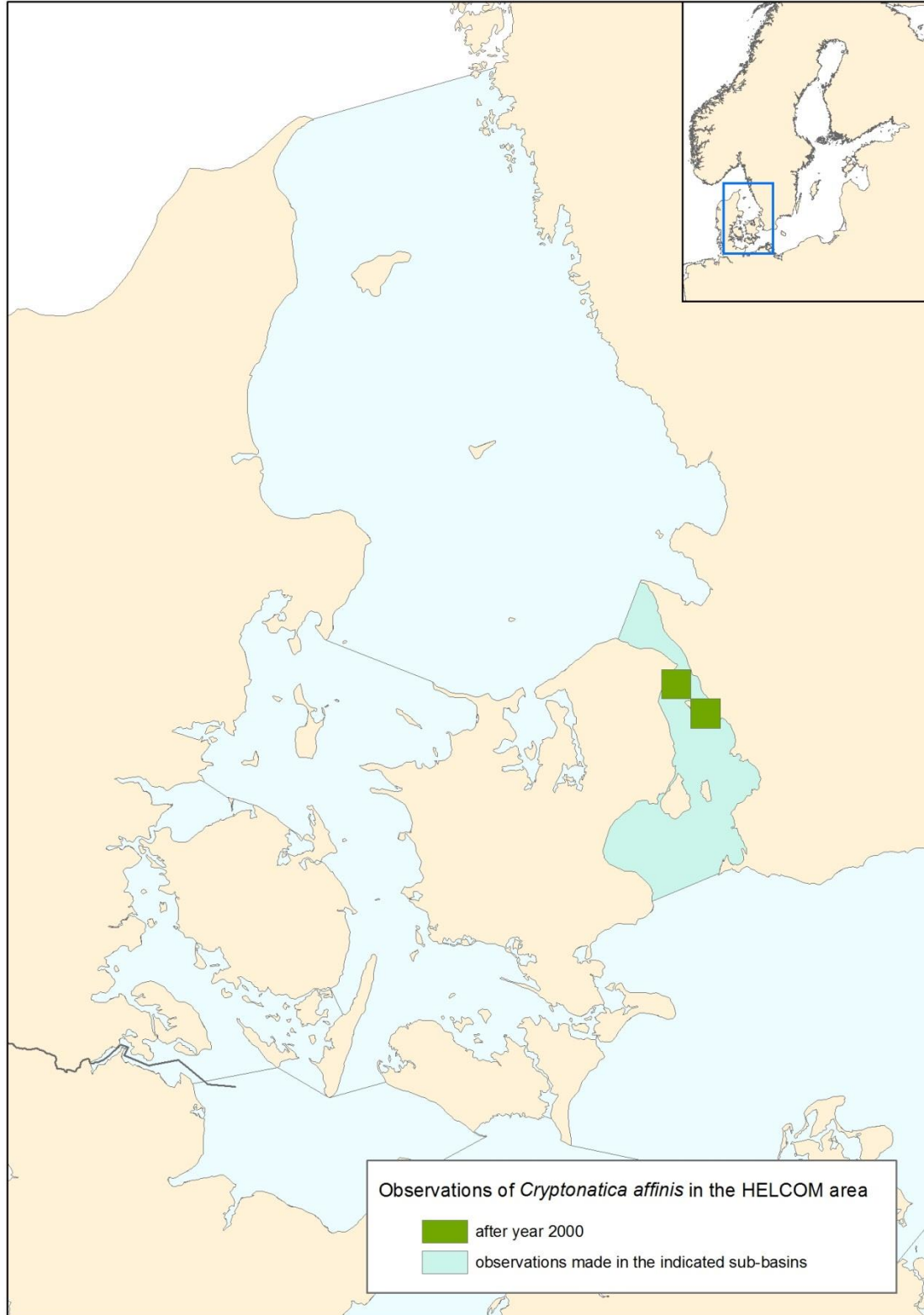
*Cryptonatica affinis* occurs all around the arctic area down to the Northern Atlantic. In the HELCOM area the species has only been found on one locality in the Sound. Outside the HELCOM area the species has been reported from the Skagerrak, and it occurs along the Norwegian coast. In Swedish investigations (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.

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### Distribution map

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



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### Habitat and Ecology

*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: –

### References

Arctic Ocean Diversity. Available at

[http://www.arcodiv.org/seabottom/gastropods/Cryptonatica\\_affinis.html](http://www.arcodiv.org/seabottom/gastropods/Cryptonatica_affinis.html)

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. Sydskanadinaviska 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](http://www.artfakta.se/Artfaktablad/Cryptonatica_Affinis_217991.pdf)

Swedish Species Gateway. Swedish Species Information Centre and Swedish Environmental Protection Agency. Available at [www.artportalen.se](http://www.artportalen.se).

World Register of Marine Species WoRMS. Available at

<http://www.marinespecies.org/aphia.php?p=taxdetails&id=140525>