

### SPECIES INFORMATION SHEET

### Alderia modesta

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English name:	Scientific name: Alderia modesta		
– Taxonomical group:	Species authority:		
Class: Gastropoda	Lovén, 1844		
Order: Sacoglossa	200011, 1044		
Family: Stiligeridae			
Subspecies, Variations, Synonyms: –	Generation length: 1-2 ye	Generation length: 1-2 years	
Past and current threats (Habitats Directive	Future threats (Habitats Directive article 17		
article 17 codes): Construction (J02.04.02,	codes): Construction (J02	codes): Construction (J02.04.02, J02.12.01)	
J02.12.01)			
IUCN Criteria:	HELCOM Red List	NT	
B2a	Category:	Near Threatened	
Global / European IUCN Red List Category	Habitats Directive:		
NE / NE	-		
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.



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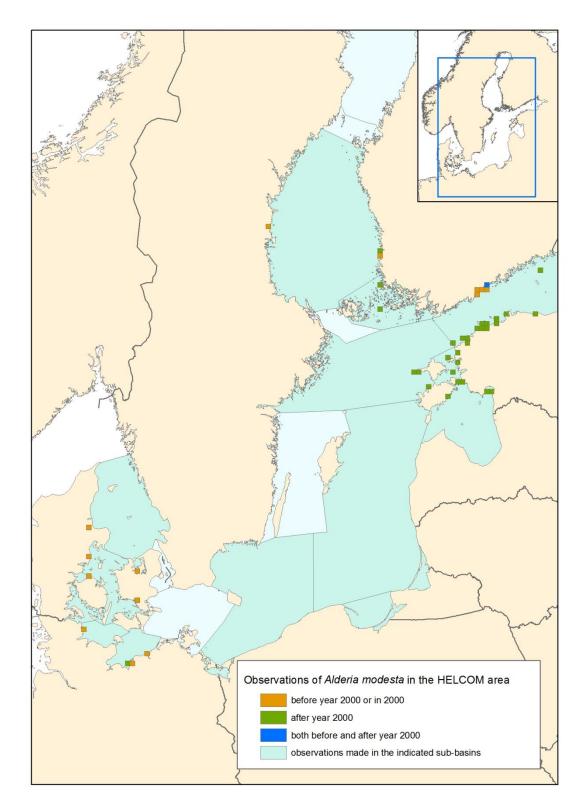
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### **Distribution map**

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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).

VU





RE

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### 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.

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### **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<sup>2</sup> 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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### References

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

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Helsinki City, observational data (Gulf of Finland, Helsinki) received in January 2010.

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- Muus, B. J. 1967. The fauna of Danish estuaries and lagoons: Distribution and ecology of dominating species in the shallow reaches of the mesohaline zone. Bianco Lunos Bogtrykkeri, Copenhagen.
- 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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http://www.marinespecies.org/aphia.php?p=taxdetails&id=141555.



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