#### **SPECIES INFORMATION SHEET**

# Deshayesorchestia deshayesii

English name:	Scientific name:  Deshayesorchestia deshayesii		
Taxonomical group:	Species authority:	Species authority:	
Class: Malacostraca	(Audouin, 1826)		
Order: Amphipoda			
Family: Talitridae			
Subspecies, Variations, Synonyms:	Generation length:	Generation length:	
Orchestia deshayesii Audouin, 1826	_		
Talorchestia deshayesi (Audouin, 1826)			
Talorchestia deshayesii (Audouin, 1826)			
Past and current threats (Habitats Directive	Future threats (Habitats Directive article 17		
article 17 codes):	codes):		
Potentially tourism (G05.01, G05.05) and	Potentially tourism (G05.01, G05.05) and		
construction (e.g. J02.12.01)	construction (e.g. J02.12.01)		
IUCN Criteria:	HELCOM Red List	VU	
B2ab(iii)	Category:	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			

## Distribution and status in the Baltic Sea region

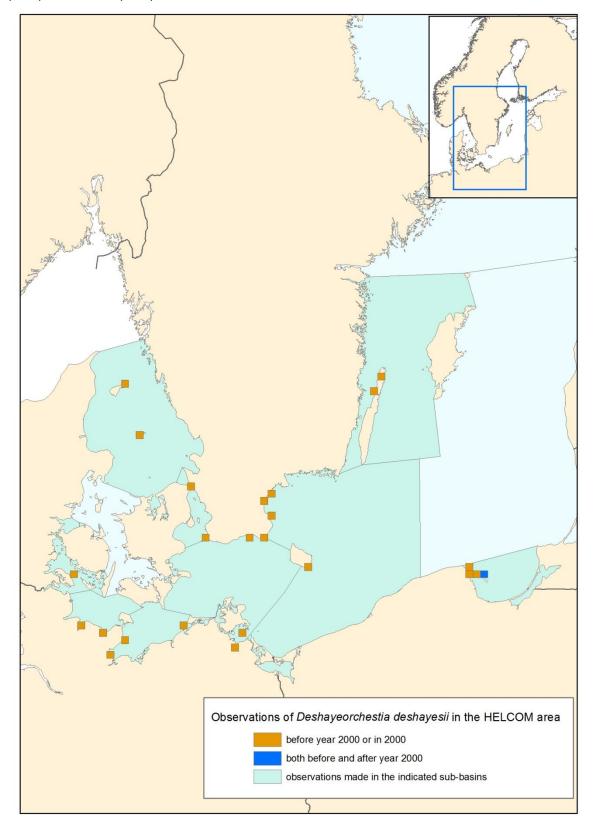
Sea), Latvia -/-, Lithuania -/-, Poland -/-, Russia -/-, Sweden -/-

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.



## **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).





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## **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 km². 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: –

#### References

Dahl, E. 1946. Undersökningar over Öresund XXIX. The Amphipoda of the Sound. Part I. Terrestrial Amphipoda. Lund Universitets Arsskrift N.F. Avd. 2, Vol. 42(6): 1-53.

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Forsman, B. 1956. Notes on the invertebrate fauna of the Baltic. Arkiv för Zoologi (2), Kungliga Svenska Vetenskapsakademien 9: 389-419.

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- Schellenberg, A. 1942. Krebstiere oder Crustacea IV: Flohkrebse oder Amphipoda. In: Dahl, F. (Ed.) Die Tierwelt Deutschlands und der angrenzenden Meeresteile nach ihren Merkmalen und nach ihrer Lebensweise. Gustav Fischer Verlag, Jena: 252 pp.
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