

SPECIES INFORMATION SHEET

Macrolea mutica

English name: The aquatic leaf beetle	Scientific name: <i>Macrolea mutica</i>	
Taxonomical group: Class: Insecta Order: Coleoptera Family: Chrysomelidae	Species authority: Fabricius, 1792	
Subspecies, Variations, Synonyms: <i>Haemonia mutica</i>	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.

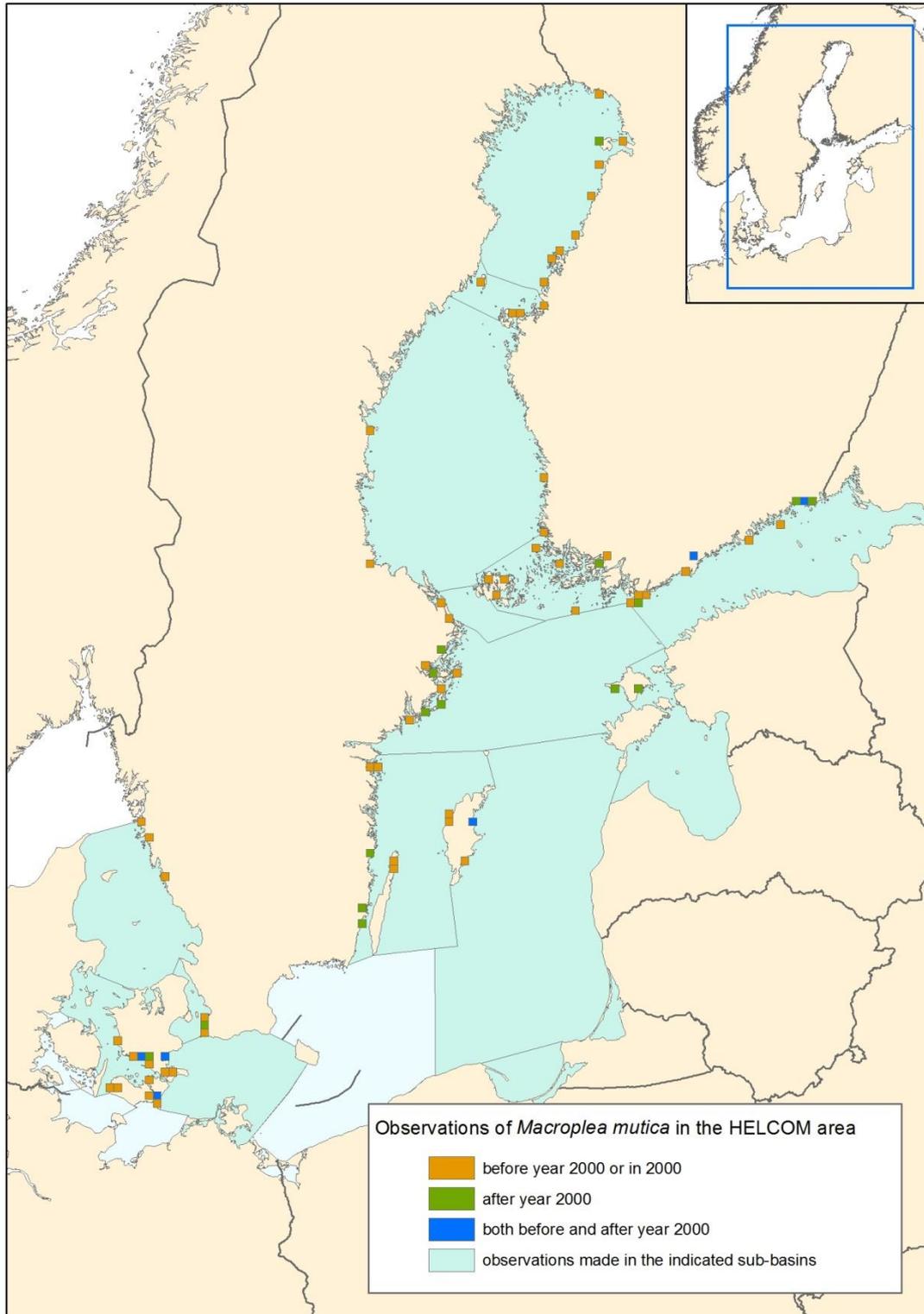
In the southern Baltic Sea, *M. mutica* lives in inlets (Bodden) of the Danish and Polish coast. Its formerly known localities in the Puck bay and in the environment of Gdańsk have not been confirmed for several decades. In the north it appears to be more common and there is no indication that the population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

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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.



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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 available at <http://elurikkus.ut.ee/prmt.php?lang=eng>.
- Finnish coleopteran expert team. Observations of *Macrolea mutica*, data received in November 2012.
- Głowaciński, Z. & Nowacki, J. 2004–2009. Polish Red Data Book of Animals, Invertebrates. Information about *Macrolea mutica* available at <http://www.iop.krakow.pl/pckz/opis.asp?id=169&je=en>.
- Gosselck, F. & Schmidt, J. 2009. *Macrolea mutica* (Fabricius 1792) (Insecta: Chrysomelidae). HELCOM Fact Sheet.
- MADS, The Danish national database for marine data. NERI: University of Aarhus; National Environmental Research Institute. Downloaded in June 2011.
- Silfverberg, H. 1987. Mapping the Finnish Chrysomelidae (Coleoptera. I. – Notulae Entomologicae 67:5–16.
- Swedish Species Gateway. Swedish Species Information Centre and Swedish Environmental Protection Agency. Available at www.artportalen.se.