#### **SPECIES INFORMATION SHEET**

## Macroplea pubipennis

English name:	Scientific name:	
-	Macroplea pubipennis	
Taxonomical group:	Species authority:	
Class: Insecta	Reuter, 1875	
Order: Coleoptera		
Family: Chrysomelidae		
Subspecies, Variations, Synonyms: –	Generation length: –	
Past and current threats (Habitats Directive	Future threats (Habitats Directive article 17	
article 17 codes):	codes):	
Eutrophication (H01.05), Construction (e.g.	Eutrophication (H01.05), Construction (e.g.	
J02.02.01)	J02.02.01)	
IUCN Criteria:	HELCOM Red List	DD
-	Category:	Data Deficient
Global / European IUCN Red List Category:	Habitats Directive:	
NE/NE	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.

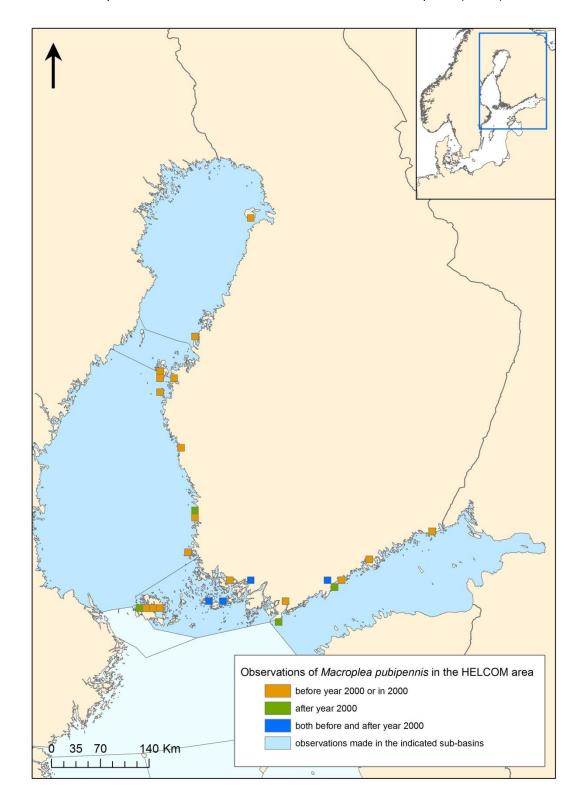
*M. pubipennis* is classified as Vulnerable in Finland and listed as a species under strict protection in the Nature Conservation Degree.



## **SPECIES INFORMATION SHEET**

# **Distribution map**

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





## **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

Biström O. 1995. Kartering av stor natebock, bladbaggen *Macroplea pubipennis* (Coleoptera: Chrysomelidae) i Esboviken, Finland. (Mapping of the leaf beetle species *Macroplea pubipennis* in the Esbo Bay, Finland) – Sahlbergia Vol. 2:113–116. (in Swedish)

Biström, O. & Saari, S. 2006. Meriuposkuoriaisen Macroplea pubipennis, esiintyminen Varsinais-Suomen Paimionlahdella (Coleoptera, Chrysomelidae), Sahlbergia, 11: 11–13. (in Finnish)

Hertta database. Observations of threatened species in Finland. Finnish Enviroment Institute. Downloaded 10 April 2013.

Hyvärinen, E., Mannerkoski, I., Clayhills, T., Helve, E. Karjalainen, S., Laurinharju, E., Martikainen, P., Mattila, J., Muona, J., Pentinsaari, M, Rassi, P., Rutanen, I., Salokannel, J., Siitonen, J. & Silfverberg, H. 2010. Kovakuoriaiset, Beetles, Coleoptera. In: Rassi, P., Hyvärinen, E., Juslén, A., Mannerkoski, I. (eds.). Suomen lajien uhanalaisuus – Punainen kirja 2010, The Red List of Finnish Species. Ministry of the Environment & Finnish Environment Institute. P. 545–582.

Ilmonen J., Ryttäri T. & Alanen A. (eds.) 2001. Finnish plants and invertebrate animals in the EU Habitats Directive. A scientific evaluation of the Finnish Natura 2000 –proposal. – The Finnish Environment 510: 1–177. (in Finnish)

Saari, S. 2006. Meriuposkuoriaisen (Macroplea pubipennis) esiintyminen Espoonlahden alueella., Espoon kaupunkisuunnittelukeskuksen tutkimuksia ja selvityksiä, B 79:2006.

