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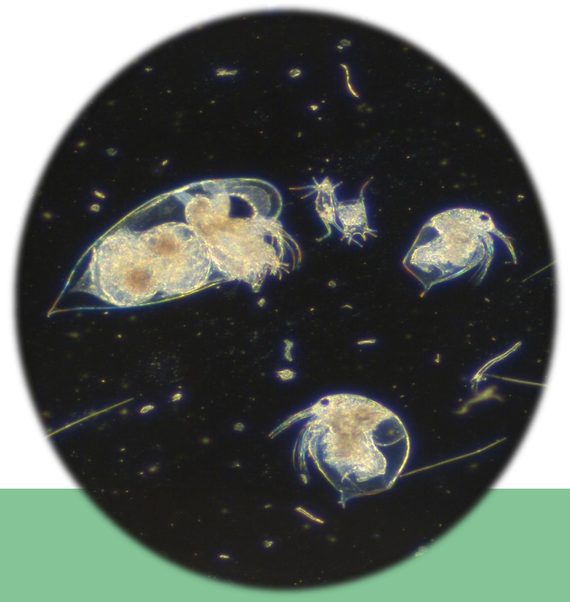
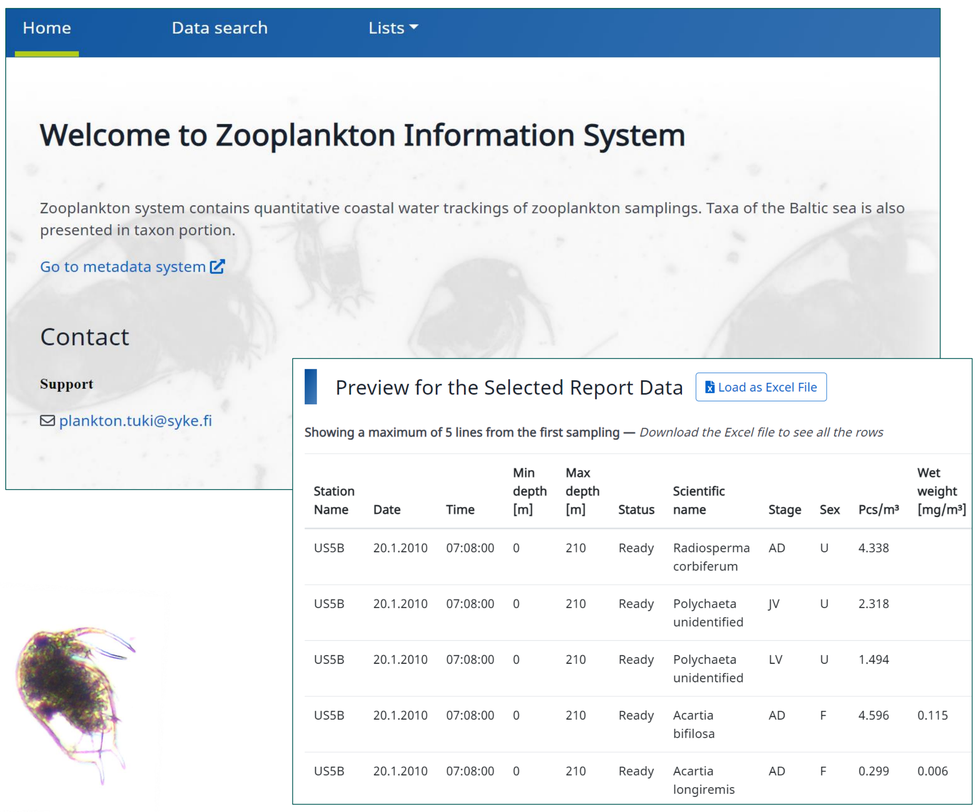
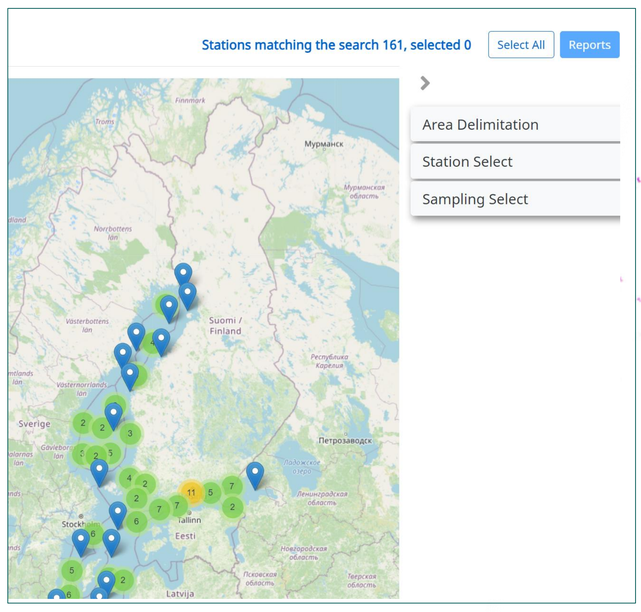


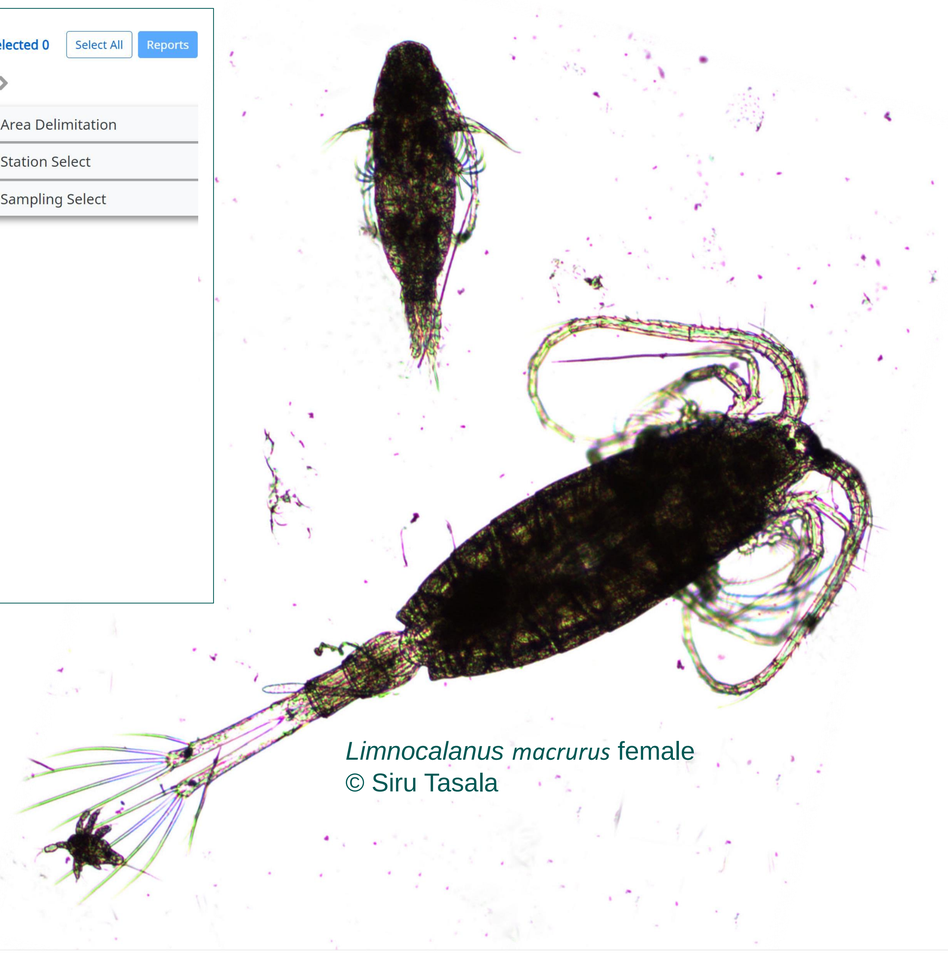
Zooplankton Information System - ZPLANK

The zooplankton information system ZPLANK contains quantitative mesozooplankton data mainly from the Finnish Environment Institute's and regional administrations' environmental monitoring of the open sea and coastal waters of the Baltic Sea. In addition, parts of data sets collected by the University field stations are included.

The data contains temporal and spatial data on the abundance of zooplankton, the interrelations of taxonomic groups and the species composition from the Finnish coastal waters and open sea observation sites, as well as long-term trends from the monitoring stations of zooplankton abundance and composition. The oldest monitoring data are from the 1960s. Taxonomy is based on the Finnish Museum of Natural History Laji.fi information system.





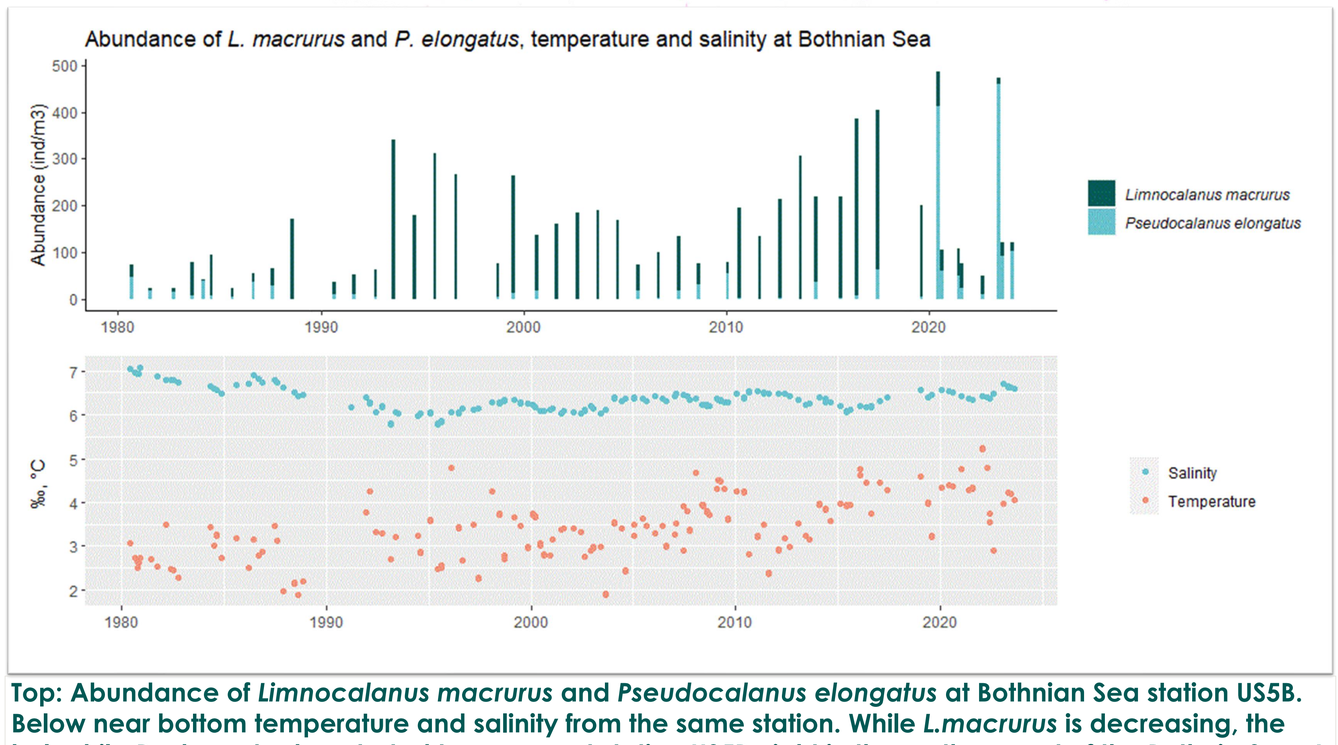


Limnocalanus macrurus female
© Siru Tasala

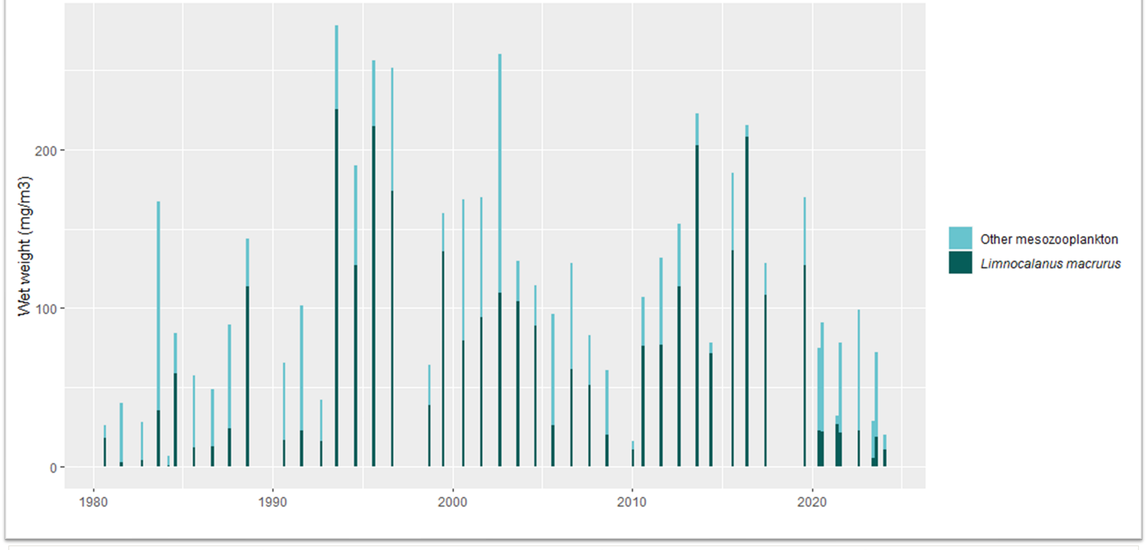
Case study: Bothnian Sea

The Bothnian Sea is one of the cleanest sea areas in the Baltic Sea, but major changes are taking place also there. That is seen in altered zooplankton communities. In recent years, our largest copepod glacial relict *Limnocalanus macrurus* has shown strong signs of decline in the Bothnian Sea, where the species has previously been the most abundant and dominant zooplankton species in terms of biomass. The cause is not known, but with monitoring data we are able to examine the situation further.

Limnocalanus macrurus is a cold-water species inhabiting oxygen rich waters and is thus most abundant in deeper water layers below the thermocline.



Top: Abundance of *Limnocalanus macrurus* and *Pseudocalanus elongatus* at Bothnian Sea station US5B. Below near bottom temperature and salinity from the same station. While *L.macrurus* is decreasing, the halophile *P. elongatus* has started to appear at station US5B, right in the northern part of the Bothnia Sea. A slight increase in salinity can also be seen.



Total zooplankton biomass at Bothnian Sea station US5B. The share of *Limnocalanus macrurus* in total biomass is shown in dark green.

Pseudocalanus elongatus
©Siru Tasala

Zplank webpage:

https://wwwp2.ymparisto.fi/zplank