



Document title	Inclusion of the zebra mussel (<i>Dreissena polymorpha</i>) as a species for the data extraction table, and preparation of the future use of quagga mussel (<i>Dreissena bugensis</i>) data.
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Background

In certain parts of the Baltic Sea, e.g. the Eastern part of the German Baltic Sea coast where salinity drops below 5, the only mussel in sufficient abundance to be used in monitoring is the zebra mussel (*Dreissena polymorpha*). It has been part of the German biota monitoring for years and enables a better, more complete coverage of the coastal waters. Results of the analysis of contaminants in zebra mussels are available through the ICES database for the years 2014 and 2017 ([Zebra mussels in the Baltic Sea](#), 1580 data points in 2014, 680 data points in 2017).

The blue mussel (*Mytilus edulis*) does not occur in the same locations as the zebra mussel, thus no direct comparison of contamination loads is possible. However, in the low salinity environments with zebra mussels, they represent the available food to predators and are thus the relevant biota to monitor. Trend analysis only is possible, as long as the same species is considered throughout the time series.

A new observation is the progressive replacement of the zebra mussel (*Dreissena polymorpha*) at certain locations by the quagga mussel (*Dreissena bugensis*). While care is being taken to only sample one species at a monitoring location, some monitoring locations might have to switch to the quagga mussel in the medium term. For the monitoring of environmental standards, this represents a minor problem, as the main food item for predators changes alongside the changes in mussel population. However, for trend monitoring only time series of one species should be considered.

Action requested

The Meeting is invited to

- a) Include the zebra mussel (*Dreissena polymorpha*) alongside the blue mussel (*Mytilus edulis*) and the Baltic macoma (*Macoma balthica* aka *Limecola balthica*) in future data extractions.
- b) Prepare for the inclusion of the quagga mussel (*Dreissena bugensis*) in future data collections and extractions.