

# Habitat: Horse Mussel Beds

OSPAR Recommendation 2013/03:

Contracting Parties are required to report progress with implementation of recommendations every six years, with initial more frequent reporting until 2019.

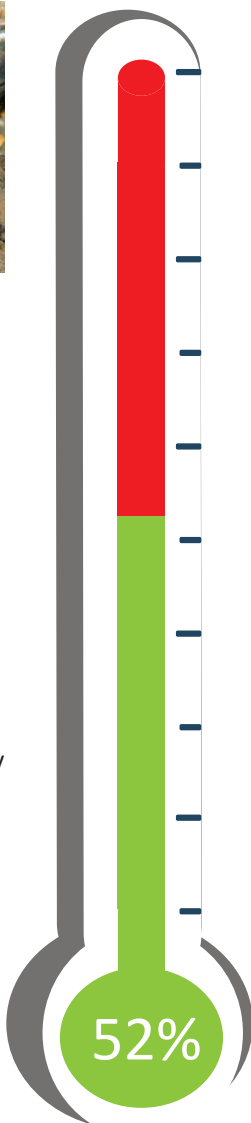
Measures taken by Contracting Parties to protect *Modiolus Modiolus* beds include national legislation, designation of MPAs and national fisheries measures



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## Description

The horse mussel (*Modiolus modiolus*) forms dense beds, at depths up to 70 m (but may extend onto the lower shore), mostly in fully saline conditions and often in tide-swept areas. Although *M.modiolus* is a widespread and common species, horse mussel beds (with typically 30% cover or more) are more limited in their distribution. *M.modiolus* beds are found on a range of substrata, from cobbles through to muddy gravels and sands, where they tend to have a stabilising effect, due to the production of byssal threads. Communities associated with *M.modiolus* beds are diverse, with a wide range of epibiota and infauna being recorded, including hydroids, red seaweeds, solitary ascidians and bivalves. As *M.modiolus* is an Arctic-Boreal species, its distribution ranges from the seas around Scandinavia (including Skagerrak & Kattegat) and Iceland south to the Bay of Biscay.



## Action Highlights

Each Recommendation requires Contracting Parties to report on the methods used to implement the measures. The methods are Legislation, Administrative action and Negotiated agreement, or any combination of these. Recent examples include:

1. Listed in the Swedish Environmental Code, and is protected by legislation in the UK;
2. Denmark, Sweden, and the UK have designated MPAs;
3. France, Sweden, and the UK undertake surveillance and monitoring as required by the Habitats Directive;
4. The UK pools sensitivity information through the Marine Life Information Network and also public observations through Sea Search;
5. Sweden and the UK have awareness raising programmes;
6. The UK and Sweden have implemented fisheries measures. Denmark also intends to do so.

## Engagement

The engagement index (left) measures how well Contracting Parties have engaged with the national measures in the Recommendation. The higher the score the greater the number of actions that Contracting Parties, which have reported, have taken to implement the measures in the Recommendation. Click here for more information on the index.

References:  
Background Document for *Modiolus Modiolus* beds (OSPAR Publication 425)  
OSPAR Recommendation 2013/03  
OSPAR List of Threatened and/or Declining Species and Habitats (Agreement 2008-06)

## Condition

Only a few *M.modiolus* beds are known have been surveyed over long enough time spans for evidence of change to be apparent. In the Celtic Seas several beds have shown serve decline or been almost completely lost due to scallop dredging. However other beds in the North Sea have shown signs of recovery after disturbance and the potential to spread on artificial substrate. Owing to the long life-span of these molluscs and the apparent persistence of established beds there will be a considerable time-lag between climate shift and observable habitat changes. At present it is not possible to confidently discriminate climate change declines against a background of fishing impacts.



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