## **MMO** information sheet Fan mussel (Atrina fragilis)

## <u>Summary</u>

The Marine Management Organisation (MMO) is gathering evidence on the impacts of fishing on habitats and species found within marine protected areas (MPAs). Evidence gathered so far has been presented in three impacts evidence documents each focused on certain fishing gear. One of the species included is the fan mussel, Atrina fragilis, which can be found within the following Stage 3 MPAs: East of Haig Fras, South of Isles of Scilly and South West Deeps (West).

## What is a fan mussel?

Fan mussels are one of Britain's largest and most threatened bivalve molluscs. They can reach up to 48 cm in length live for 10 to 12 years, some estimate life spans of up to 100 years. Their thin and brittle triangular shells range in colour from light golden to dark-brown. Fan mussels are found in underwater mud and gravel with the pointed end of their shell buried in the seabed, attached to small stones or shells by fine threads. The part of the shell above the surface can be covered in animals such as crustaceans, anemones, barnacles and sponges. Fan mussels can grow individually but sometimes grow together in small beds. They are found all around the UK, from shallow waters to deep waters down to 600 m.



Fan mussel (Atrina fragilis). © Keith Hiscock, Natural England.

## Impacts of fishing activity

Fishing activity can cause physical damage to the seafloor and the species living there, including fan mussels. Fan mussels are particularly vulnerable because of their long lifespans and their slow growth and reproduction rates. Fan mussels were once said to be so abundant that their shells would litter fishing boat decks. However, the number of fan mussels around the UK has declined over the past 100 years, especially in inshore waters, which are now fished using bottom towed gears. This suggests fan mussels are slow to recover from disturbance. Where populations are sparsely distributed, such as in UK waters, their long life spans and limited reproductive cycle means population recovery is estimated to take up to 25 years.

For more information on fan mussels please see MarLIN's website.



Marine Management Organisation