

MMO Information sheet

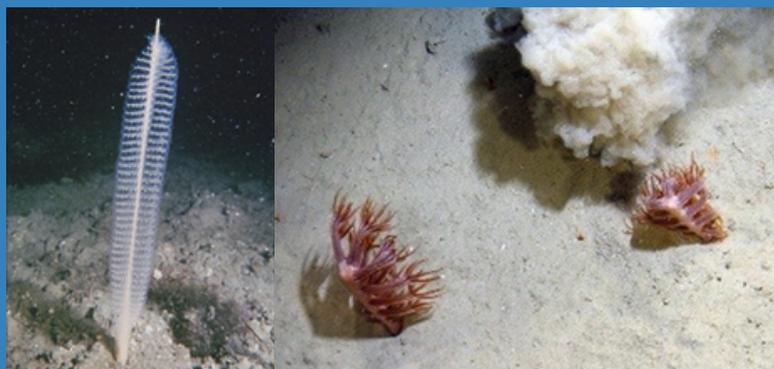
Sea-pen and burrowing megafauna communities

Summary

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. The species covered include sea-pen and burrowing megafauna communities which can be found within the following Stage 3 MPAs: East of Haig Fras, Farnes East, Greater Haig Fras, North West of Jones Bank, and West of Walney.

What are sea-pen and burrowing megafauna communities?

Sea-pen and burrowing megafauna communities are found in soft, muddy sediment and form burrows and mounds. A sea-pen is not a singular animal but rather a collection of many smaller animals called polyps. Types of sea-pen found in English waters include the slender sea-pen and the phosphorescent sea-pen. Burrowing megafauna include crustaceans like the Norway lobster (also known as Dublin Bay prawn, scampi or Nephrops norvegicus) and burrowing anemones. Burrowing megafauna found in fine mud also includes other animals such as worms, burrowing sea urchins, sea cucumbers, bivalves, brittlestars, crabs and starfish. These communities are found across a range of mud habitats, both in sheltered waters and in deeper offshore waters.



Sea-pens (left) are delicate communities of organisms, some species such as the tall sea-pen can grow up to 2 m tall in deep and still waters. Burrowing megafauna (right) increases the oxygen in sediments and supports a range of other organisms. © Natural England/ F Dipper, 1979 © 2007 Defra, JNCC, Marine Institute, BGS and UoP

Impacts from fishing activity

Fishing activity can cause physical damage to the seafloor and associated habitats and species, including sea-pen and burrowing megafauna communities. Being fragile and easily damaged, sea-pen are particularly vulnerable to impacts from fishing gears that contact the seabed, such as trawling. The long lifespans and slow growth rates of sea-pen also mean that if part of a population is removed, recovery can take many years. For burrowing megafauna recovery rates vary in relation to the scale of impact and the ability of individuals to survive exposure to the impact. The removal of large numbers of animals is likely to result in long recovery times.

For more information on sea-pen and burrowing megafauna communities please see MarLIN or JNCC websites.



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