

# Fisheries and marine ecology of the Celtic Sea

The western English Channel, Bristol Channel and Celtic Sea (ICES Divisions VIIe-j) contain many important fisheries. Important shellfish resources include various crustaceans (Norway lobster in the Celtic Deep, and edible crab, lobster, spider crab and spiny lobster on coarser grounds), and molluscs (scallop, whelk, cockles, cuttlefish). Important demersal fish resources include gadoids (e.g. cod, haddock, whiting, ling), flatfish (sole, megrim, plaice, turbot, brill), anglerfish, and various skates and rays.

The northern Bristol Channel contains important inshore sandy grounds (e.g. Carmarthen Bay), where plaice, sole and whelks are caught. Much of the southern Bristol Channel and western English Channel is comprised of coarser sediments, and a high diversity of fish and shellfish are caught on these grounds. The Celtic Sea is generally 100-200m deep, comprised of sand and gravel sediments, with many extensive sandbanks. The major demersal fisheries operating here target hake, megrim, anglerfish, and various gadoids.

'Mud habitats in deep water' are Biodiversity Action Plan habitats that occur off the western coasts of Scotland and Ireland. Such habitats are characterised by the sea-pen *Funiculina quadrangularis*, here seen with the starfish *Tethyaster* and the sea cucumber *Stichopus*. The brittlestar *Asteronyx loveni* (far right) often associates with this sea-pen.



Vagrant fish species, such as pilot fish *Naucrates doctus*, are often reported from south-western waters



Important fisheries for whelk *Buccinum undatum* operate in Carmarthen Bay.

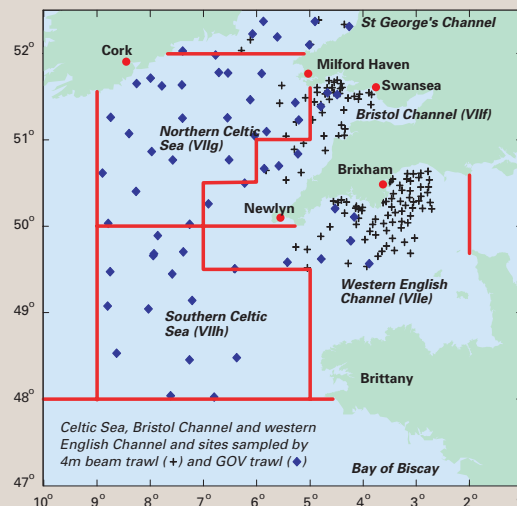


The Burry Inlet supports a major fishery for cockles *Cerastoderma edule*.

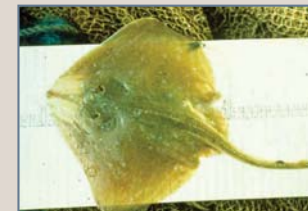
The major exploited fish species in the Celtic Sea include hake *Merluccius merluccius* (far right), megrim *Lepidorhombus* spp. (right) and anglerfish *Lophius* spp.



The invertebrate fauna of the deeper waters of the Celtic Sea is dominated by sand-star *Astropecten irregularis*, the brittlestar *Ophiothrix lutkeni* and the anemone *Actinauge richardi* (seen with the sea spider *Pycnogonum*).



Scallop *Pecten maximus* is an important shellfish species in the western English Channel and Celtic Sea.



Small-eyed ray *Raja microocellata* is locally abundant in the Bristol Channel.



Angel shark *Squatina squatina* was formerly common in south-western waters, but is now rarely seen.

Porbeagle *Lamna nasus* is sometimes targeted in long-line fisheries.



Fan mussel *Atrina fragilis* (left) and sea fan *Eunicella verrucosa* (right) are protected under the Wildlife and Countryside Act. Fan mussel is also a Biodiversity Action Plan species, and this long-lived mollusc is very vulnerable to damage from towed fishing gears.



Spider crab *Maja squinado* is abundant in the English Channel and Bristol Channel, and, as with many shellfish, is exported to the continent.