



# Marine Nature Reserves (MNRs)

## What is a Marine Nature Reserve?

Marine Nature Reserves (MNRs) are a type of marine protected area, usually established to conserve particular species and habitats, or enable their recovery, and where the most damaging activities and impacts are excluded. Marine Protected Areas are a well-established method for achieving these objectives and have been successfully used worldwide.

## Manx Marine Nature Reserves

There are 10 MNRs around the Isle of Man, forming a network that has been developing since 1989. Some areas, such as the first protected site, at Port Erin, and Ramsey Bay Marine Nature Reserve, have been well-studied and are examples of how conservation can benefit the marine environment and commercial and recreational fisheries. Manx MNRs now cover 430km<sup>2</sup>, around 52% of the 0-3 nautical mile area, or 11% of the whole territorial sea.

## West Coast MNR

The West Coast MNR is the largest of the nature reserves at around 185km<sup>2</sup>, which equates to 43% of the protected area network. Strong tidal currents to the north and around the Point of Ayre provide ample food for the shore-nesting sea birds, such as Arctic terns, and many larger species such as seals, cetaceans and basking sharks.



# West Coast Marine Nature Reserve

- No mobile fishing gear (dredge or trawl)
- No seabed extraction or deposit of materials
- No damage to protected habitats or species

## Important habitats within West Coast MNR

### Kelp forest • Rocky reef • Intertidal blue mussel • Soft sediments



Kelp reef © Chris Wood

### Rocky reefs

Rocky reefs provide an attachment site for various marine animals and algae and, over time, wave action creates crevices that increase the available habitat. The rocky intertidal zone is routinely covered and uncovered by the tides and species that live here have special adaptions to cope with a constantly changing environment. Rocks that occur below the waterline host a wide range of different species providing protection and a good feeding location.



Rocky reef © Chris Wood

### Intertidal blue mussel beds

This bivalve mollusc settles in large numbers as seed mussels but appears to be uncommon as adults, although there is a small colony near Peel Castle and at Niarbyl. They attach to the seabed or rocks using sticky threads called byssus. They are predated on by dog whelks, eider duck and oystercatchers.



Queen scallop © Lara Howe

### Kelp forests

Kelp seaweeds grow close to shore creating underwater forests. They have similar structures to terrestrial plants; the holdfast (like a root), stipe (like a stem) and blades (like leaves), and establish on hard rock surfaces which they anchor to with the holdfast. Kelp provide a 3D habitat for a diverse range of species; worms, molluscs and crustaceans hide in the holdfast and the blades host bryozoans, juvenile fish and other seaweeds that colonise the surface. Kelp also plays an important role in marine foodwebs, providing a food source for fish, urchins and the beautiful blue-rayed limpet.



Kelp forest © Lara Howe

# MNR General Restrictions

- No mobile fishing gear (dredge or trawl)
- No seabed extraction or deposit of materials
- No damage to protected habitats or species

## Important species within West Coast MNR

- Basking shark • Blue mussel • European eel • Seabirds • Harbour porpoise • Sand eel • Grey seal • Bass



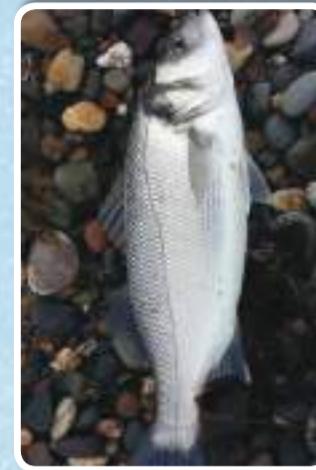
Burrowing anemone © Lara Howe

### Burrowing anemone

This burrowing sea anemone (*Edwardsia timida*) is found in soft sediments. Typically it is found in sheltered areas between the lower shore and just beyond the shore in the sublittoral zone. It has a worm-like body and several pale pink/white/brown stinging tentacles which it uses to catch prey, but only the tentacles can be seen.



Burrowing anemone © Anders Salesjo



A west-coast Bass © Brian Walmsley

### Bass

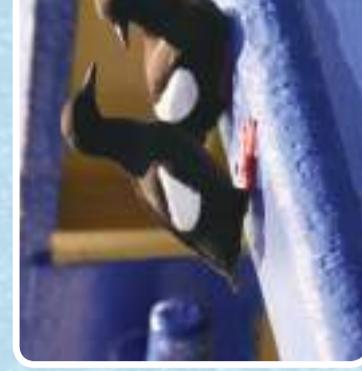
European bass (*Dicentrarchus labrax*), also called sea bass, are an important angling fish around the island, and strict conservation measures were introduced in 2016. Scientific surveys have shown that bass use the island as a nursery, with juveniles found close inshore, and in the intertidal river and harbour areas. The MNRs therefore provide important nursery habitat, helping to maintain offshore populations.



Black guillemots, Peel © Peter Duncan



Seabirds © Brian Walmsley



Basking shark feeding © Peter Duncan