

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 430km², around 52% of the 0-3 nautical mile area, or 11% of the whole territorial sea.

Calf of Man and Wart Bank MNR

The Calf of Man and Wart Bank MNR is 20.15km², or 2.4% of the 0-3nm inshore zone, and the Calf itself is one of 20 official Bird Observatories around the British Isles. The Calf is a familiar sight from the south of the Island, but access is difficult and with only 2 part-time wardens, it's perhaps the Island's wildest and most isolated area. As a result, the Calf is primarily for wildlife and the surrounding current-swept sea delivers a rich food supply which supports great biodiversity and some of the Island's best scuba diving. The MNR also includes the important Wart Bank, a submerged sandbank which is home to various fish species, including sandeels. The Calf of Man is owned by Manx National Heritage.



Calf of Man and Wart Bank

Marine Nature Reserve

The Calf of Man and Wart Bank MNR extends from the Calf Sound, around the Calf to a maximum of one nautical mile from the shore. An extension to the east of the Calf provides protection for Wart Bank, an important sand bank feature associated with sand eels which are vital food for fish, marine mammals and birds. Kitterland (an islet between the island and the Calf) is an important haul out for grey seals.

Important habitats within Calf of Man and Wart Bank MNR

Rocky reef • Sandbanks • Kelp forest • Sea caves

Rocky reefs

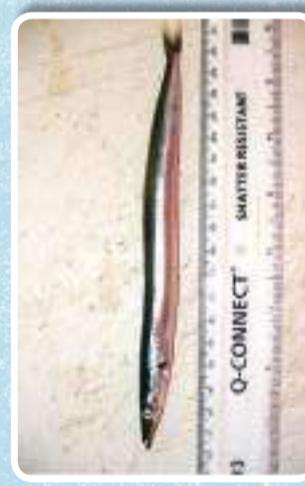
Rocky reefs provide an attachment site for various marine animals and algae and, over time, wave action creates crevices that increase the available habitat. The rocky intertidal zone is routinely covered and uncovered by the tides and species that live here have special adaptations to cope with a constant 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

Sandbanks

These are submerged, soft-sediment habitats that are moved by the tide and waves forming mounds and ripples on the sea floor. Limited species can cope with this mobile environment, however sand eels are one of the few that can tolerate these conditions and are an important food source for many seabird species, such as puffins and razorbills, and also whales and dolphins.



Sandeel © Peter Duncan

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

Manx shearwaters

Manx shearwaters are ground nesting seabirds that breed on the Calf. Records of Manx shearwaters date back to the Vikings and the birds were once present in large numbers. They have declined rapidly and almost became locally extinct due to the introduction of brown rats from a ship wreck. Since the establishment of a Bird Observatory in 1959, monitoring of their breeding has continued and in 2012 the Manx Shearwater Recovery Project was started to eradicate rats from the Calf of Man. As a result Manx Shearwater numbers have increased significantly.

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 Calf of Man and Wart Bank MNR

Common & grey seals • Risso's dolphins • Kelp • Crayfish • Sand eels

Atlantic grey seal

Grey seals are the most common species of seal in Manx waters, with a significant proportion of their population found around the Calf and Calf Sound. The Calf is also an important breeding site, with approximately 60 pups born each year. A photo ID catalogue of the seals has shown over 300 individuals and that Manx seals will travel as far as Cornwall to feed.



Female grey seal © Lara Howe



Female grey seal © Lara Howe

Basking sharks

The basking shark is the second-largest fish in the world, feeding on zooplankton (small crustaceans, larvae and fish eggs) that it filters from the water with its gills. As their Manx name, *Gobbag Vooar* (big mouth) suggests they can strain up to 2000 tonnes of water per hour. Basking sharks have a worldwide distribution and search out plankton blooms in Manx waters from mid-May to the beginning of September.



Basking shark feeding © Anders Salesjo

Calf of Man Bird Observatory

The Bird Observatory was established in 1959, as part of a wider Great British long-term monitoring of bird populations and migration. It is run by two Manx Wildlife Trust wardens and a host of volunteers from March to November. Since it started over 280 species of birds have been recorded with 60 species breeding there. In addition, it is home to a diverse variety of non-avian native wildlife.



Manx shearwater © Richard Cope

Calf Bird Observatory © Lara Howe