



# 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.

## Ramsey Bay MNR

Ramsey Bay MNR covers an area of around 97km<sup>2</sup>, half of which is highly protected. Designated in 2011 as the island's first marine nature reserve, it is divided into 5 zones, four are highly protected for important habitats, such as horse mussel reef and eelgrass meadow. The fifth is a Fisheries Management Zone, where a very efficient, lower-impact scallop fishery occurs annually. Working together since 2013; Government, fishermen and scientists have established a sustainable fishery that provides the highest quality product and a guaranteed value under an innovative world-class management system.



## Ramsey Bay Marine Nature Reserve

Ramsey Bay MNR was designated in 2011 and extends east from the Point of Ayre, following the three nautical mile boundary, then down to Maughold Head. Grey seals are commonly seen hauled out on the rocks and various seabirds, such as guillemots, nest on the high cliffs at Maughold. Puffins are also seen in the bay over the summer, and pods of bottlenose dolphin are frequent winter visitors.

## Important habitats within Ramsey Bay MNR

**Maerl beds • Eelgrass meadow • Kelp forest • Rocky reef**

**Horse mussel reef • Sea bass nursery**



Common sunstar on maerl © Jim Self

### Eelgrass meadow

Eelgrass (or seagrass) is a marine flowering plant, growing between 5-12 m water depth and forming meadows that provide habitat for crabs, lobster and various fish and molluscs. Eelgrass meadows provide us with a range of benefits including reducing coastal erosion by stabilising sediment, reducing the impact of wave action and acting as a carbon store. Eelgrass (*Zostera marina*) is protected within the Eelgrass Zone and since MNR designation, has spread north and east, from Queen's pier to Stack Moor.



Lobster in Ramsey Bay eelgrass

© Tony Glen

### Horse mussel reefs

Horse mussels, up to 15 cm long, attach to the seabed, or a neighbour, with strong hair-like threads called byssus. Over time, as mussel numbers increase, the live animals and empty shells build-up and create biogenic reefs. The reef structure has multiple crevices providing hiding places for many species, and the shell surfaces are colonised by sponges, soft corals, tube worms and barnacles. Ramsey Bay MNR has an extensive mussel reef off the Point of Ayre, which is heavily protected due to its importance for marine life.



Point of Ayre mussel reef

© Rohan Holt

### Rocky shore and reefs

Rock surfaces provide attachment sites for various marine animals and algae. The rocky intertidal zone is routinely covered and uncovered by the tides and species that live here have special adaptations to allow them to cope with constantly changing conditions. Much of the Ramsey Bay seabed is sand and gravel, and the rocky shore zone, which includes Maughold Head, is an important, less common habitat in the bay.



Rocky reef © Chris Wood

# MNR General Restrictions

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

## Important species within Ramsey Bay MNR

**Horse mussel • Eelgrass • Maerl • Kelp • Bottlenose dolphin**

**Arctic tern • European eel • Sea bass • Iceland clam**

## Zones for Conservation and Activities

Ramsey Bay MNR is unique in having zones for particular purposes, summarised below:

Zone	Permitted	Not permitted
Conservation Zone	Potting, angling and bait collection.	Trawling, dredging, all extraction methods for king and queen scallops.
Horse Mussel Zone	Angling and bait collection.	Potting, trawling, dredging and removal of king and queen scallops.
Eelgrass Zone	Taking razorsHELLS and lugworms from 1st October to 31st March in the intertidal area.  'Keep pots' are permitted.	Potting, trawling, dredging, angling, or other extraction of living resources. Extraction of lugworms and razorsHELLS prohibited from 1st April to 30th September.
Rocky Shore Zone	Potting, angling and bait collection.	Trawling, dredging, all extraction methods for king and queen scallops.
Fisheries Management Zone	Trawling, dredging and diving for king and queen scallops under a specific licence issued by DEFA.	Trawling, dredging and diving for king and queen scallops, unless otherwise licensed

## 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.



Juvenile bass, Ramsey Bay MNR

© DEFA

## Fisheries Management Zone (FMZ)

Co-managed by the Manx Fish Producers' Organisation and DEFA. The FMZ is scientifically surveyed annually and a sustainable quota for king and queen scallops is agreed. A majority of the zone is left unfished, protecting habitats and species as part of the MNR. Careful management produces valuable, high-quality seafood and supports the maintenance and sustainability of adjacent fisheries, as well as environmental protection in the rest of the MNR.



King scallop, Ramsey Bay MNR © DEFA