

DEVELOPING A MARINE NATURE RESERVE FOR BIODIVERSITY CONSERVATION AND SUSTAINABLE FISHERIES IN THE ISLE OF MAN, BRITISH ISLES

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THE PROCESS FOR ESTABLISHING THE ISLE OF MAN'S FIRST MARINE NATURE RESERVE



The Isle of Man is a self-governing Crown Dependency of the UK in the Irish Sea, British Isles. The Island has a diverse coastline and a Territorial Sea which extends out to 12 nautical miles from shore. Marine biodiversity highlights of the Isle of Man include basking sharks, Risso's dolphins and rich and varied subtidal and intertidal habitats. In October 2008 the Wildlife and Conservation Division of the Department of Environment, Food and Agriculture started a process to identify the Isle of Man's first Marine Nature Reserve (MNR).

The process was designed to be inclusive and collaborative, involving key marine stakeholders and the general public in the identification of a suitable site. Throughout the process, meetings were held around the Isle of Man to inform people of the project and to gather views on the requirements for Marine Protected Areas (MPAs) and to collate local knowledge of the marine environment.



The OSPAR Guidelines for the Identification and Selection of Marine Protected Areas in the OSPAR Maritime Area were used to assess marine sites around the Isle of Man. A list of 22 candidate sites was drawn up using the guidelines, highlighting the number and diversity of Manx marine sites suitable for protection as Marine Protected Areas. These sites ranged from diverse rocky reef sites to areas important for basking sharks.



A PARTNERSHIP WITH THE FISHING INDUSTRY

In 2010 the Manx Fish Producers' Organisation (MFPO) which represents most commercial scallop fishermen in the Isle of Man put forward a proposal for establishing the Marine Nature Reserve in Ramsey Bay. Ramsey Bay was one of the sites identified as a candidate Marine Nature Reserve on the basis of the presence of priority habitats such as maerl beds and eelgrass meadows. The Bay had been closed to scallop fishing in 2009 as a temporary emergency measure at the request of the fishing industry.



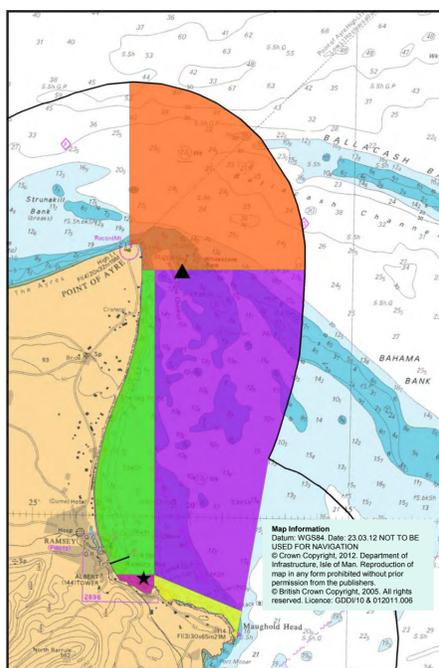
The proposal from the MFPO to permanently close part of Ramsey Bay was investigated further and the decision was taken to pursue the site for designation as the Isle of Man's first Marine Nature Reserve. Additional data gathering and public consultation followed this proposal. The site was extended to include another candidate site, the horse mussel reef and associated habitats of the Ballacash Channel. Additional surveys carried out in the area during summer 2011 produced the baseline for future monitoring.

These included dive surveys by volunteer Seasearch divers, boat-based habitat characterisation to enable EUNIS biotope categorisation and detailed analysis of grab samples. In October 2011 the Ramsey Marine Nature Reserve was designated with the support of the Manx Fish Producers' Organisation and the wider community. The MNR came into immediate effect and the byelaws received final approval by Tynwald, the Parliament of the Isle of Man in January 2012.



RAMSEY MARINE NATURE RESERVE ZONING PLAN

Ramsey Marine Nature Reserve covers a total area of 94.4km² to the north west of the Isle of Man. Much of the inner area of Ramsey Bay is shallow, with depths of less than 20 metres. The deepest areas of up to 40 metres are found in the Ballacash Channel. The whole area of the MNR is protected from aggregate extraction, dumping of dredged material, gill-netting, long-lining and littering. Within the boundaries of the Marine Nature Reserve there are five management zone, each with different regulations. These regulations were developed with stakeholder input and negotiations with users:



Name of Zone	Location	Area (km ²)	% of Manx waters	Permitted	Not Permitted
All Coloured Zones	Ramsey Bay and the Ballacash Channel	94.4	2.36	Boating, diving, swimming, snorkelling, kayaking, rock-pooling and a wide range of other activities.	Gill-netting, long-lining, aggregate extraction, dumping of dredged material, littering, construction (unless licensed by DEFA)
Conservation Zone	Inner Ramsey Bay	13.9	0.35	Potting, Angling	Trawling, Dredging, Other extraction of scallops and queenies
Horse Mussel Zone	Point of Ayre to Ballacash Channel	31	0.78	Angling	Potting, Trawling, Dredging, other extraction of scallops and queenies
Fisheries Zone	Outer Ramsey Bay	47.4	1.18	Potting and Angling, Restricted Trawling, Dredging and scallop diving under MFPO and DEFA control	Trawling and dredging not authorised by MFPO and DEFA
Eelgrass Zone	Southern corner of Ramsey Bay (Port Lewalque to Ballure)	0.5	0.01	Taking of razorshells and lugworms is permitted, October to 31 March in the intertidal only, keep pots.	Potting, Trawling, Dredging, Angling, any other extraction of living resources.
Rocky Coast Zone	Narrow Strip from Gob ny Rona to Maughold Head	1.6	0.04	Potting, Angling	Trawling, Dredging, Other extraction of scallops and queenies

PROTECTING SEABED HABITATS

Horse mussel reefs are diverse, structurally complex habitats which can take hundreds of years to establish. They are home to hundreds of species of other animals and plants. Numbers of horse mussels within the reefs are high and they filter feed, playing an important role in maintaining water quality and nutrient cycling. The horse mussel reefs in Ramsey Marine Nature Reserve are associated with high densities of soft corals and other colonial animals. They form distinct ridges on the seabed of up to 2m in height.



Eelgrass is a rare habitat in Manx waters. It occurs between 5-12m depth in sheltered bays. Eelgrass is recognised as an importance nursery habitat for many species. It also plays an important role in stabilising sediment. Some eelgrass meadows in Ramsey Bay are protected within the highly protected Eelgrass Zone. Others are protected within the voluntary Rocky Shore Zone where fishermen have agreed not to use mobile gear.

Maerl beds are structurally complex algal habitats which are associated with high levels of biodiversity. They are also known to be important nursery grounds for fish and shellfish. Part of Ramsey Bay's maerl beds are permanently protected within the Conservation Zone and the rest are within the Fisheries Management Zone. The fishermen will manage the FMZ to maintain the integrity of key habitats like maerl. Dive survey sites have been established in the maerl beds to monitor the impact of the Marine Nature Reserve.



CONCLUSIONS

- Support from the fishing industry was essential in establishing a large Marine Protected Area for biodiversity conservation and fisheries management
- The fishermen's support for Closed Areas as a fisheries management tool has built over many years, supported by the benefits observed from Port Erin Closed Area
- An extensive stakeholder consultation process involving user groups and the wider public has built local support and allowed local knowledge to inform decisions about management
- Community involvement in research and monitoring has improved local understanding of the function of Marine Protected Areas and the importance of protecting ecosystems.