Marine reserves of Fiordland

Southland

Like national parks on land, which provide a safe haven for native flora and fauna, marine reserves provide a secure environment where marine creatures can live and breed with little human disturbance. Fiordland's ten marine reserves are found from Milford Sound in the north to Preservation Inlet in the south. They range in size from 93 to 3,672 hectares, and in total include over 10,000 hectares of underwater fiord habitat. The reserves adjoin Fiordland National Park and together they protect connected terrestrial and marine ecosystems from high glaciated peaks to deep fiords.

The Fiordland marine reserves include a huge variety of habitats and species like sponges, lampshells, brittlestars and a wide range of fish. They also contain one of the world's largest populations of black coral trees (about seven million colonies), which can live for over 300 years.

Two of the ten marine reserves, Te Awaatu Channel (The Gut, Doubtful Sound) and Piopiotahi (Milford Sound), were proposed by the New Zealand Federation of Commercial Fishermen and were formally established in 1993. The other eight reserves were established in 2005 as part of an innovative integrated management plan developed by a group of local stakeholders known as the 'Guardians of Fiordland'.

A fragile ecosystem

The environment below water in Fiordland is as unique as its acclaimed landscape above, with species diversity of the rock wall communities that are amongst the most rich in the world. Runoff from heavy rainfall on the mountains creates a permanent freshwater layer on the surface of the saltwater. The freshwater layer varies in depth from five centimetres to up to ten metres. Tannins, washed out of the vegetation on land, stain the freshwater the colour of weakly brewed tea and filter out the amount of light entering the seawater below. These unique environmental conditions restrict most of the marine life such as sponges and corals to a band along the top 40 metres of the fiord that is calm, clear and relatively warm.

Wet Jacket Arm S. Apse



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Department of Conservation Te Papa Atawbai



Snake star S. Wing



Dwarf scorpionfish S. Wing

What are marine reserves?

A marine reserve is the government's most comprehensive tool in the provision of area-based biodiversity protection in the marine environment. However, it is important to remember that marine reserves are not a panacea for all threats to the marine environment. Integrated land and sea management is essential.

Within a marine reserve, all marine life is protected and fishing and the removal or disturbance of any living or non-living marine resource is prohibited, except as necessary for permitted monitoring or research. This includes dredging, dumping or discharging any matter, or building structures.

The public is welcome and encouraged to enjoy marine reserves. In all marine reserves you may: dive, snorkel, take photos, swim, kayak, anchor with care (except in some small areas in certain marine reserves where anchoring is not allowed due to the particularly fragile species found there), boat, and enjoy our natural heritage in the knowledge that it is protected for the benefit of future generations.

Using marine resources

The Fiordland marine environment faces an escalation in human activity. These activities include cruise ships, fishing, tourism, diving, electricity generation and boating, and make Fiordland an important economic asset to the country. The landscapes of the fiords are



iconic and as a result over 450,000 tourists visit Milford Sound annually. The marine environment harbours important fishery stocks, most notably rock lobster, paua and a range of finfish species such as blue cod and grouper.

These activities bring a wide variety of risks to the sensitive marine environment of the fiords, including oil spills, bio-invasion, over fishing, and anchoring damage to sensitive sessile invertebrates (e.g. corals). Maintaining healthy fisheries, marine habitats and well-protected iconic local attractions will continue to guarantee that Fiordland remains a pristine natural area, as well as protecting its social and economic values.

Managing marine resources

Increased human access has had implications for the special values of Fiordland, the sustainability of fish populations and potential invasion by marine pests. Present marine management in Fiordland was implemented by government agencies in response to a package developed and proposed by the Guardians of Fiordland, a group of local stakeholders – including recreational and commercial fishermen, local iwi, charter boat operators, scientists, community members and environmentalists – who came together in response to the changes they saw occurring in the fiords.

The Guardians worked for eight years to develop a management strategy for Fiordland, called the Fiordland Marine Conservation Strategy. This strategy led to the passing of a new law in April 2005 called the Fiordland (Te Moana o Atawhenua) Marine Management Act, to changes to commercial and recreational fisheries regulations, and to the approval of government funding of \$3.4 million to be spent over four years to implement the Fiordland initiative.

The 2005 Act created a formal advisory body for the marine environment known as the Fiordland Marine Guardians. This group of knowledgeable locals is responsible for providing advice to management agencies and ministers to facilitate and promote integrated management of the Fiordland Marine Area.

The Fiordland legislation and associated regulatory changes are completely novel, because the process leading to their passage was instigated and managed from within the community without control from any government agency. The Guardians of Fiordland are therefore being studied carefully by other groups around the country who are trying to resolve environmental issues that involve a number of diverse stakeholders.

Further information

To learn more about Fiordland's marine reserves, please contact the Department of Conservation Te Anau Area Office ph: 03 249 7921, email: <u>fiordlandvc@doc.govt.nz</u>, or visit www.doc.govt.nz. For information on the Fiordland Marine Guardians please contact the committee through the Chairperson, Private Bag 90116, Invercargill, email: <u>fmg@es.govt.nz</u>