

# NEW ZEALAND MARINE SCIENCES SOCIETY

TE HUNGA MĀTAI MOANA O AOTEAROA



14 February 2013.

## Submission on the Subantarctic Islands Marine Reserves Bill

To the Local Government and Environment Committee

This submission is from the New Zealand Marine Sciences Society (NZMSS). NZMSS wishes to appear before the committee to speak to our submission.

This submission is made in good faith in my role as President of NZMSS on behalf of the membership and in accordance with the Code of Ethics and Rules of the Royal Society of New Zealand.

Please contact me for any further information regarding this submission.

Handwritten signature of Mary Livingston.

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# **NZMSS Submission on Subantarctic Islands Marine Reserves Bill**

## **1. The New Zealand Marine Sciences Society**

### *Professional Science Body*

The New Zealand Marine Sciences Society, known as “NZMSS”, was formed in 1960 as a constituent the Royal Society of New Zealand, to encourage and assist marine science and related research across a wide range of disciplines in New Zealand and to foster communication among those with an interest in marine science.

NZMSS is a non-profit organization that provides access to and within the marine science community and identifies emerging issues through annual conferences, annual reviews, a listserv and this website. NZMSS membership covers all aspects of scientific interest in the marine environment and extends to the uptake of science in marine policy, resource management, conservation and the marine business sector. We speak for members of the society on matters of interest on marine research in New Zealand and we engage with other scientific societies as appropriate.

Our submission is consistent with the Royal Society of New Zealand Code of Ethics and Rules, in particular principals 2.1 Integrity and professionalism, 4.1 Compliance with the law and relevant standards, and 10.1 Protection of the environment ([www.royalsociety.org.nz/organisation/about/code](http://www.royalsociety.org.nz/organisation/about/code) ). Further details about NZMSS, including the Society’s objectives, can be found our website: [www.nzmss.org](http://www.nzmss.org)

### *General Position on Marine Reserves*

NZMSS generally supports the establishment of marine reserves because they provide excellent opportunities for science and education.

The benefits that could be expected to accrue as a result of marine reserves being established at the Subantarctic Islands include:

- as scientific reference sites where the natural functional linkages between species can be investigated
- as a focus for research on a range of marine science topics by universities and other research institutions; and,
- achieving conservation goals, as stated in the New Zealand Biodiversity Strategy and the MPA Policy and Implementation Plan.

Historically, NZMSS has supported the establishment of marine reserves and has presented scientific advice on reserve proposals and made submissions on a range of policy and marine protection initiatives. For example, the Society supported the first marine reserve proposed by the University of Auckland, at Leigh and the Kermadec Islands Marine Reserve. More recently, the NZMSS has been active in writing submissions supporting specific marine reserve proposals (e.g. Akaroa and the West Coast); regional MPA initiatives (e.g. Kaikoura) and coastal plans (e.g. the Kermadec and Subantarctic island groups).

## **2. Background to the NZMSS submission on the Bill**

The NZMSS lodged a submission to the Subantarctic Marine Protection Planning Forum consultation document in 2009<sup>1</sup>. We submitted that the marine environment to 12 nautical

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<sup>1</sup> Subantarctic Marine Protection Planning Forum. (2009). Implementation of the Marine Protected Areas Policy in the Territorial Seas of the Subantarctic Biogeographic Region of New Zealand. Consultation Document.

miles (i.e. the entire Territorial Sea) around the Antipodes, Bounty and Campbell islands be fully protected as marine reserves. We stated that the marine ecosystems of each of the island/s were unique, contained high levels of endemism and rare or threatened species, and that it was desirable to protect these ecosystems in their entirety. NZMSS was disappointed at the Ministers of Conservation and Fisheries announcement in 2011 that the Bounty and Campbell islands would only be protected in marine reserves covering 58% and 39% of their territorial seas, respectively. We released a statement to the media at that time, expressing our concerns (refer to Appendix 1).

With regards to this Bill, NZMSS is of the view that while the three proposed marine reserves go some way towards recognising that the marine environments around the Subantarctic islands are unique and nationally important, a great deal more needs to be done to protect these globally valuable ecosystems. We have particular concerns about the size of the proposed reserves for the Bounty and Campbell islands and retain our original recommendation that their territorial seas be given full protection.

### **3. General comments on the Bill**

The New Zealand Biodiversity Strategy reflects the government's commitment, in ratifying the international Convention on Biological Diversity, to stem the loss of biodiversity<sup>2</sup>. One of the objectives of the New Zealand Biodiversity Strategy is to protect a full range of natural marine habitats and ecosystems to effectively conserve marine biodiversity, using a range of appropriate mechanisms including legal protection. The instrument the government chose for this was the Marine Protected Areas (MPA) Policy, which seeks "to protect marine biodiversity by establishing a network of marine protected areas that is comprehensive and representative of New Zealand's habitats and ecosystems".<sup>3</sup> An MPA is "an area of the marine environment especially dedicated to, or achieving through adequate protection, the maintenance and or recovery of biological diversity at the habitat or ecosystem level in a healthy functioning state."

In 1998, the Subantarctic Islands were formally recognised by UNESCO as a World Heritage Site. The World Heritage status applies not only to the islands themselves, but also – in recognition of the powerful land-sea interdependence - *their respective territorial seas*. The Convention Concerning the Protection of the World Cultural and Natural Heritage imparts a duty on the respective state to 'identify', 'protect' and 'conserve' heritage areas for future generations. States are obliged to 'do all to the utmost of their resources' to achieve this. States must be seen to be taking 'active and effective measures'.<sup>4</sup>

NZMSS considers that the Bill, in its current form, misses the opportunity to establish a full suite of ecologically functioning marine reserves for the Subantarctic Islands, and does not adequately recognise their special values accorded through World Heritage status.

There were 65 public submissions on the Subantarctic Marine Protection Planning Forum Consultation Document (2009) and almost all (including the NZMSS submission) were in favour of full protection around these three island groups (52 for full protection, eight in favour of partial, one in support of no protection and the remainder unclear). The only submissions received in favour of partial protection were from commercial fishers and other

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<sup>2</sup> Department of Conservation and Ministry for the Environment (2000). The New Zealand Biodiversity Strategy.

<sup>3</sup> Department of Conservation and Ministry of Fisheries (2005). Marine protected areas: policy and implementation plan.

<sup>4</sup> Mulcahy, K; Peart, R.; Bull, A. (2012). Safeguarding our oceans: strengthening marine protection in New Zealand. Environmental Defence Society.

extractive users.<sup>5</sup> The Bill's proposal to only partially protect the territorial seas of the Bounty and Campbell Islands does not reflect the strong support expressed by the public of New Zealand.

While NZMSS recognises the proposed marine reserves represent an improvement on the current situation by affording some protection around all of the islands in the Subantarctic Islands Biogeographic Region<sup>6</sup>, we consider that it falls well short of meeting the goals of the NZBS, the MPA Policy and international guidelines on protecting marine biodiversity (e.g. Secretariat of the CBD, 2004)<sup>7</sup>.

However, if all three proposed marine reserves incorporated the entire territorial sea around their respective islands, this greatly increased area of protection would be viewed as a more meaningful outcome in terms of biodiversity protection and a much greater step towards achieving the goals of the NZBS, the MPA Policy and recognising the world heritage status of the islands. Furthermore, complete protection of a UNESCO World Heritage Site would send a clear message globally of the New Zealand Government's commitment to protecting marine biodiversity.

In summary, NZMSS submits that the entire territorial seas of the Antipodes, Bounty and Campbell Islands should be established as marine reserves.

#### **4. Comments by clause**

##### Clause 1:

The title of the Bill is the "Subantarctic Islands Marine Reserves Bill". However, NZMSS considers this title is misleading for two reasons. Firstly, not all the Subantarctic islands of the Subantarctic Islands Biogeographic Region are included in the Bill. The Auckland Islands/Motu Maha Marine Reserve, established in 2003, is not included. Secondly, the Bill proposes that only one marine reserve will encompass the entire territorial sea around the Antipodes Islands. For the Bounty Islands, only 58% of the territorial sea is proposed as a marine reserve, with the remaining area being subject to prohibition on Danish seining<sup>8</sup>. In the situation of Campbell Island, only 39% of the territorial sea is proposed as a marine reserve, leaving the majority of the territorial sea subject to prohibition on Danish seining and providing for a five-year window to allow for a potential deep-water crab fishery to be explored. In effect, there will be significant areas around the Bounty and Campbell islands that will not have marine reserve status.

The Bill is silent on the protection status of the remaining areas of territorial sea at the Bounty Islands and Campbell Island that will not be marine reserves. However, under the MPA Policy, these areas meet the definition of MPAs: "Fisheries Act tools will be used under the MPA Policy to contribute to the MPA network ..... The Fisheries Act contains tools to manage the actual and potential adverse effects of fishing on the marine environment. These tools include regulatory powers to: (a) prohibit all fishing in particular areas; and (b) prohibit particular fishing methods." NZMSS understands this to mean that the proposed

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<sup>5</sup> Beverley, P. (2010). Subantarctic Marine Protection Planning Forum – Final Report and Recommendations. Letter to ministers.

<sup>6</sup> Department of Conservation and Ministry of Fisheries (2008). Marine protected areas: classification, protection standard and implementation guidelines.

<sup>7</sup> Secretariat of the Convention on Biological Diversity. (2004). Technical advice on the establishment and management of a national system of marine and coastal protected areas. CBD Technical Series no. 13.

<sup>8</sup> Source: a media statement released by the Ministers of Conservation and Fisheries and Aquaculture, dated 29 January 2011.

fisheries regulations for the Bounty and Campbell islands are in effect, tools that contribute to the MPA planning process.

Given the range of MPAs proposed for the islands, (i.e. marine reserves and other MPAs using Fisheries Act tools), NZMSS is of the view that the title would more appropriately be the “Subantarctic islands Marine Protected Areas Bill”.

Clause 2:

No comment.

Clause 3:

Interpretation – “area”.

NZMSS submits that the definition of “area” is too narrow, being restricted to the Territorial Sea or 12 nautical miles, as defined in the Marine Reserves Act 1971. There is no provision for the use of other types of MPAs, using Fisheries Act tools.

Clause 4:

No comment.

Clause 5:

NZMSS supports the proposed Antipodes Island Marine Reserve, as the reserve encompasses the entire territorial sea around the island. Full protection of the marine ecosystems around the Antipodes will ensure that the following criteria, as identified in the MPA Policy and the Subantarctic Marine Protection Planning Forum’s Consultation Document (page 23), are met:

- all nearshore habitats and ecosystems within the territorial sea, including shallow and deep water, seabed and water column, are protected
- outstanding, rare, distinctive, internationally and nationally important marine communities or ecosystems are protected; and,
- land and sea relationships across the entire territorial sea are safeguarded.

Clause 5 (1). The Bill refers to the area shown as “A” on SO442748, however, the SO Plan refers to the corresponding area as Section 1. There should be consistency to ensure compliance with the marine reserve’s rules.

Clause 5(2) NZMSS submits that the name of the proposed marine reserve be amended to reflect the title on the SO Plan to which the Bill refers (i.e. Antipodes Islands/Moutere Mahue Marine Reserve). We further submit that the name be consistent with the approach used for naming the marine reserve at the Auckland Islands (i.e. Auckland Islands/Motu Maha).

Clause 6:

NZMSS gives qualified support for the proposed marine reserve around the Bounty Islands and submits that the entire area of the territorial sea around the islands should be afforded marine reserve status.

The proposal to protect only 58% of the territorial sea around the Bounty Islands will mean that a significant proportion of the remaining territorial sea will continue to be available for

long-lining. The amount of long-lining activity is relatively small (an average of fewer than 20 fishing events each year for the period 2003-08, yielding less than 1.2% of the total LIN 6 catch (Dr. John Booth, *pers. comm*)). NZMSS submits that, by allowing long-line catches of ling (and some associated black cod and rough skate catch) within this area of the territorial sea, the greater worth of an intact ecosystem within a World Heritage Site has not been recognised. Further, the ecological connections at a range of scales are poorly understood in this area. Extractive activities that target one trophic level may have deleterious effects on other trophic levels. NZMSS is of that view that the precautionary principle, (Principle 8 in the MPA Policy) should be given effect in this situation.

Clause 6 (1). The Bill refers to the area shown as “A” on SO442748, however, the SO Plan refers to the corresponding area as Section 1. There should be consistency to ensure compliance with the marine reserve’s rules.

Clause 6(2). NZMSS submits that the name of the proposed marine reserve be amended to reflect the title on the SO Plan to which the Bill refers (i.e. Bounty Islands/Moutere Hauriri Marine Reserve). We further submit that the name be consistent with the approach used for naming the marine reserve at the Auckland Islands (i.e. Auckland Islands/Motu Maha).

#### Clause 7:

NZMSS gives qualified support for the proposed marine reserve around Campbell Island and submits that the entire area of territorial sea should be afforded marine reserve status, without the requirement for a 5-year review, as proposed in Clause 8.

NZMSS considers that the precautionary principle (in the MPA Policy) was ignored when the decision was made to allow for potential crab potting over a significant area (the greater proportion) of the territorial sea of Campbell Island. The proposed Campbell Island Marine Reserve is for just 39% of the territorial sea, with the much larger part being open to potters. Yet, Planning Principle 8 of the MPA Policy is clear that decision-making on management actions should be guided by a precautionary approach. Advice given to the Subantarctic Islands Marine Protection Planning Forum (Booth, 2008<sup>9</sup>) specified that there was considerable risk to the marine biodiversity of the territorial seas – currently largely unmodified by fishing – if crab potting was to take place. Potting of the giant spider crab *Jacquiniotia edwardsii* (GSC) would remove a large keystone predator, potentially with significant ecosystem-altering flow-on effects (see footnote 9). There is currently no crab fishery around Campbell Island and there never has been. Significantly, the extent of the GSC population as well as its ecological importance is unknown. It follows that, if crab stocks are small, then little fishing opportunity is foregone through a ban on potting; if significant, then it can be argued that it is essential to ban fishing because the crabs will be shaping community structure to a large extent. Campbell Island’s territorial sea comprises <5% of the potential GSC grounds of the NZ Subantarctic. Importantly, GSC are key to the diet of the New Zealand sea lion<sup>6</sup> – the most endangered sea lion in the world.

That more than two thirds of the territorial sea of a designated World Heritage Site could be excluded from protection to allow for the development of an unrealised crab fishery is of concern to NZMSS and we contend that this apparent trade-off requires a more rigorous consideration and use of scientific evidence.

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<sup>9</sup> Booth, J. (2008). Should crab potting take place within Campbell I. territorial seas? Sub-Antarctic Forum Document 28.

Clause 7(1). The Bill refers to the area shown as “A” on SO442749, however, the SO Plan refers to the corresponding area as Section 1. There should be consistency to ensure compliance with the marine reserve’s rules.

Clause 7 (2). NZMSS submits that the name of the proposed marine reserve be amended to reflect the title on the SO Plan to which the Bill refers (i.e. Campbell Islands/Moutere Ihupuku Marine Reserve). We further submit that the name be consistent with the approach used for naming the marine reserve at the Auckland Islands (i.e. Auckland Islands/Motu Maha).

Clause 8:

Clause 8(6). The Bill refers to the area shown as “B” on SO442749, however, the SO Plan refers to the corresponding area as Section 2. This should be consistent to ensure compliance of the marine reserve’s rules.

Clause 9:

No comment.

Clause 10:

NZMSS submits that the proposed names of the marine reserves be amended as outlined in our comments above in clauses 5(2); 6(2) and 7(2).

Clause 11:

No comment.

**5. Additional comment on the Bill**

The Bill is silent on the establishment of a managing body or committee for the marine reserves. NZMSS submits that marine reserve committees are a vital mechanism for encouraging participation and ownership of marine reserves amongst stakeholders, particularly at the outset of newly established reserves.

## APPENDIX 1: NZMSS Media statement dated 3 February 2011.



HUNGA MATAI MOANA

February 3 2011

## MEDIA STATEMENT

### New Zealand Marine Sciences Society response to the proposed Subantarctic Island Marine Reserves

The New Zealand[sic] Marine Sciences Society (NZMSS) welcomes the recent decision by the Ministers of Conservation and Fisheries to create marine reserves around New Zealand's Subantarctic Islands. However, the Society is disappointed that the Ministers did not go far enough to ensure that the unique marine biodiversity at each of the island groups is comprehensively protected from harvesting by having the marine reserves cover the entire Territorial sea to the 12 nautical mile limit.

The Society lodged a submission to the Subantarctic Marine Protection Forum's consultation document in 2009, calling for protection of the marine environment around the Antipodes, Bounty and Campbell Islands, out to 12 nautical miles. In their submission, the Society noted that each island group had its own unique assemblages of seaweeds, invertebrates and fish. "We consider that the benefits of protecting these unique marine ecosystems far outweigh any benefits from fishing there" the Society's President, Professor McLay said.

"Protection of these oceanic islands and marine ecosystems in their natural state is of immense value to science and conservation because they are some of the least human-modified environments anywhere in the world" he said.

Only the Antipodes will be completely protected, while the Bounty Islands will have just a little over half of the territorial sea around them protected, and the Campbell Islands even less at just 39%. "Waiting for five years or more to decide whether a potential crab fishery can be established in the remaining 61% of the area around Campbell Island just doesn't stack up against the long term benefits of protecting this unique marine area" Professor McLay said. "We should be taking a precautionary approach to the Subantarctics because we know so little about the area's biodiversity and ecosystem functioning".

The Society would also like to see areas of sea beyond 12 nautical miles given marine reserve status, in recognition that the entire Subantarctic marine ecosystem is linked. It depends almost entirely on plankton production. The plankton comprises a cool water assemblage unique to New Zealand waters where primary production is limited by the amount of iron in the water. The system is dominated by the microbial loop, low seafloor sedimentation, highly efficient energy transfers and a long food web supporting high-level predators.



“There is a vast expanse of ocean and seafloor beyond the territorial sea around each of the island groups. Connecting the islands’ ecosystems will provide protection for migratory species of marine mammals and fishes” Professor McLay said.

The islands themselves have been recognised for their rich array of landforms, flora and wildlife, and the vulnerability of those ecosystems, by giving them the highest form of protection available in New Zealand law - the status of National Nature Reserves under the Reserves Act 1977. The Society considers that the same recognition should be accorded to the seas around these islands.

The important point about marine reserves is that they provide a form of benchmark for studying the marine environment by removing direct human impacts such as fishing and seabed mining. Marine reserves provide scientists with opportunities to study marine life in its natural and undisturbed state.

The NZMSS supports the Government’s commitment to a comprehensive network of MPAs that are representative of all the marine biogeographic regions of New Zealand. For this reason, the Society has written to the Minister of Conservation, Hon. Kate Wilkinson, urging her to reconsider her decision to decline the marine reserve proposal at Dan Rogers in the Akaroa Harbour, on the South Island’s east coast. McLay says that we need a representative network of fully protected marine reserves around the country, in areas that are both remote, such as at the Subantarctics, and in areas that are accessible to people, such as at Akaroa. “Many mainland marine areas are in desperate need of protection because they are close to population centres and cannot sustain current impact levels.”

Ends

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Find out more about the NZMSS at [www.nzmss.org](http://www.nzmss.org)