

NEW ZEALAND MARINE SCIENCES SOCIETY

TE HUNGA MĀTAI MOANA O AOTEAROA



24th May 2019

www.bionet.nz/control/marine-pests/marinepests/

Re – Better ways to stop marine pests?

The New Zealand Marine Sciences Society (NZMSS) is a professional society affiliated to the Royal Society of New Zealand with a membership of approximately 200 New Zealand's marine scientists. We are a non-profit organisation that provides access to, and within, the marine science community, and we identify emerging issues through annual conferences, annual reviews, a listserv and a website www.nzmsp.org.nz. 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 and we engage with other scientific societies as appropriate.

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

Coastal ecosystems are highly valued by New Zealanders and as marine scientists we feel it is important to develop an integrated system to control pests in the marine environment. NZMSS generally supports the initiative to develop better ways of stopping marine pests in New Zealand waters. It is important to understand how to minimise the spread of marine pests and encourage development of new ways to inhibit the attachment of marine pests on to vessels and hard structures.

Our response to the two questions in the online survey are given below.

Please contact me at the email address provided below for any further information regarding this submission.

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Which is your preferred option for managing marine pests?

- Option 3: Go further and develop rules for other pathways too

Why do you prefer that option?

NZMSS does not support maintaining the status quo given the potential impact of marine pests and the expansion in recent years of significant pests such as Mediterranean fan worm (*Sabella spallanzanii*), clubbed tunicate (*Styela clava*), droplet tunicate (*Eudistoma elongatum*), Asian paddle crab (*Charybdis japonicus*) and Asian kelp (*Undaria pinnatifida*).

We do not believe Option 2 will be effective as it does not consider all pathways (e.g. aquaculture). In the management of marine pests it is important to consider all of the ways in which pests can enter and be spread within New Zealand. Pathway management should not just concentrate on vessel hulls. The transport of invasive species in ship ballast water and through movement of aquaculture infrastructure (vessels, buoys, harvesting and processing equipment) has been widely demonstrated. Furthermore, structures within harbours, ports and marinas, such as buoys, pontoons, moorings, platforms, walls and boat traffic, are known to harbour and spread a range of marine pests. These aspects therefore all need to be included in pathway management.

Therefore, NZMSS supports Option 3, which addresses all the main risk pathways for marine invaders. We also recognise that many marine pests are restricted to certain regions within New Zealand and a coordinated approach is needed among regions to prevent further spread. The proposed inter-regional pathways management plan for Northland, Auckland, Waikato and Bay of Plenty provides a good framework for such management. Such regional management plans should be developed in other parts of the country and ultimately integrated into a national programme.

If hull-fouling rules were developed, which option do you think is best?

- Option 1: A clean hull required at all times

Why do you prefer that option?

Option 1 is clearly the best option in terms of clarity, compliance, enforcement and minimising the spread of invasive marine species. The other options will be less effective as they are considerably more difficult from a compliance and enforcement perspective. From a practical perspective Option 1 could be implemented by issuing boats that are fouled with a notice that means they cannot be used or moved until they have been cleaned. This will mean that boats are not being used do not incur a fine, but prevent movement of that boat until it is cleaned. This will be more effective than Option 2 as it means boats can be inspected within ports and marinas.

Option 3, which only requires clean hulls in high value areas, is highly problematic and not a practical solution due to the highly dispersive nature of marine species and high connectivity in the marine environment.

NZMSS believes it is important to clarify the rules regarding a standard for a 'clean' hull'. It appears that these have changed recently and we encourage the development of a standard

that is fit for purpose. It should therefore include specific information on all of the types of organisms likely to foul boats. Slime is a very vague term and a more precise definition is needed. Furthermore, we are concerned that “barnacles” are generally incorporated in the allowable clean hull standard as (a) there are numerous species and (b) they provide a complex surface for other biofouling species to be associated with them, providing increased opportunity for marine pests to settle.

NZMSS believes a comprehensive ‘clean’ hull standard needs to be developed that is easy to use and allows regulators to assess the level of biofouling on a vessel.

The efficacy of implementing an inter-regional pathway management plan is currently unknown so monitoring will be essential to evaluating the uptake of the rules and assessing the effectiveness of the plan in preventing the introduction and spread of marine pests.