



Partners Newsletter

Keeping you informed

October 2013

Managing pathways rather than pests is the way to go in the marine environment and the Ministry for Primary Industries (MPI) is working hard on how to do this.

MPI recently commissioned a report from NIWA and the Cawthron Institute. This report, available in November, sets out the practical policy options and operational tools available for reducing the spread of unwanted marine species along pathways within New Zealand.

During the development of the report, NIWA and Cawthron engaged with industry, government, tangata whenua, councils and other stakeholder groups. This report will give everyone a better understanding of the potential actions that can be taken to improve pathways management.

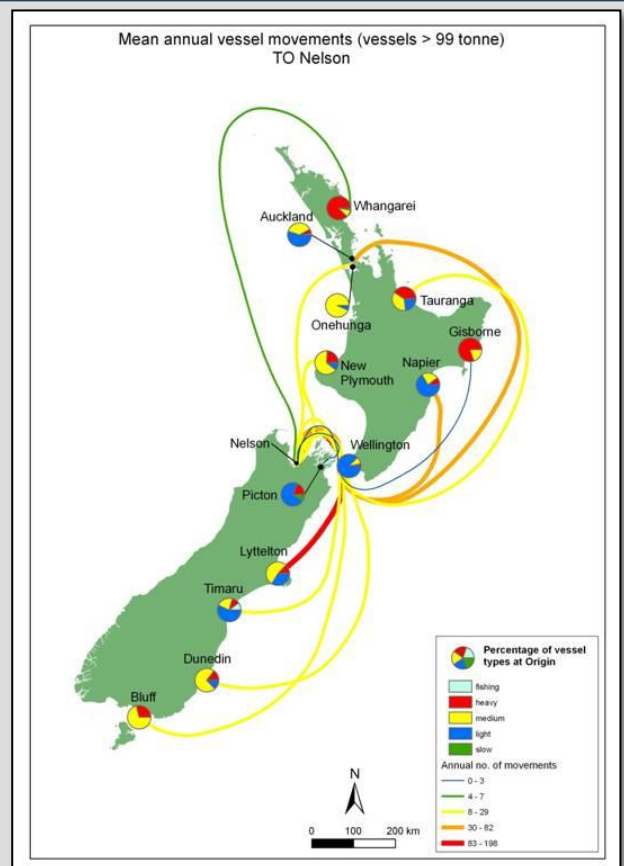
The report lays out many options for education and voluntary agreements that need to be considered. However, effective marine pathways management will require a range of complementary actions and there may be some situations where national or regional level regulation is required to address significant risks.

Examples of marine pathways include the marine transport and aquaculture sectors, or recreational boating. There are many different types of marine pests that can be transported within each of these pathways through a variety of vectors, including the movement of vessels where the key mechanism of transport is ballast water and hull fouling. Ascidians such as *Styela clava* and *Didemnum vexillum* can grow and accumulate as bio-fouling on surfaces exposed to or immersed in the sea.

Biosecurity management in New Zealand has traditionally taken a pest focussed approach. However it isn't always feasible or practical to manage or control pests once they have become established - sometimes we don't have effective tools for eradicating or managing a pest or the costs of control are simply too high.

In many cases it can be more feasible and cost effective to manage the pathways of spread, rather than trying to eradicate a pest after it has spread to a new location. Pathways management is a proactive approach that will limit the rate that both new and established pests spread around New Zealand.

The Top of the South Partnership will be reviewing the new information and discussing with MPI how to implement effective pathways management initiatives.



Vessel movements within New Zealand

MAF Biosecurity New Zealand Technical Paper No: 2005/...

Barrie's Bilge



It's not just hull fouling that spreads marine pests

In a recent newsletter I talked about the importance of keeping your boat hull clean, to reduce the spread of hitch-hiking marine pests. As well as hull fouling, there are a few other ways that marine pests can be quickly spread by people.

Sediments and seawater (even seawater that appears clean) can harbour potentially harmful species, especially those present in their microscopic life-stages. Some species can even re-grow or reproduce from fragments, such as various sea squirts that have caused fouling problems in aquaculture. So whether you use a kayak, trailered boat, or bigger vessel, if you have seawater (including bilge), sediments, or marine debris on board, you could be carrying a potential pest.

The same is true for any gear you carry – nets, pots, lines, dive gear, anchors, and so on. On a couple of occasions I've pulled up the Asian kelp (*Undaria pinnatifida*, aka 'Wakame'), with gear – one time on an anchor and the other time on a snagged fishing line.

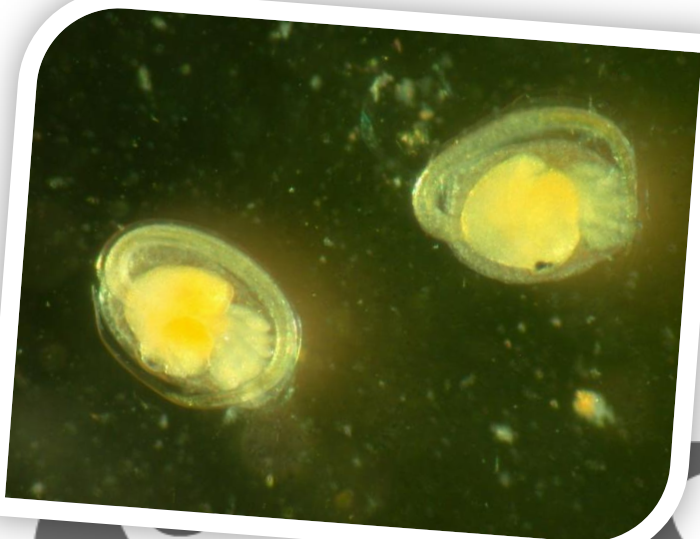
There are some simple things you can do to help out with this problem, such as make sure you've flushed any pooled seawater or retained sediments and debris from your deck (especially nooks 'n crannies) or gear before you move your boat any great distance – by that I mean like between Nelson and Golden Bay, between Pelorus and Queen Charlotte Sound, and so on. Ideally do this with freshwater, but if you have no choice then a flush with seawater is better than nothing. If you have gear that you can thoroughly dry before re-using it somewhere else, then even better.

Guidance on simple cleaning, and things like air drying of gear, and freshwater or disinfectant treatments (eg. for aquaculture or dive gear), is provided by the Ministry of Primary Industries on their website.

See: <http://www.biosecurity.govt.nz/biosec/camp-acts/marine/cleaning>



*The same pests that foul your boat (like the kelp *Undaria*, or sea squirt *Didemnum* in the photos) could also be spread in your bilge water or with gear you carry. Sometimes in their adult forms, sometimes as microscopic life-stages, and occasionally even as fragments.*



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Pete's Ponderings



The discovery today of fanworm in Tauranga Harbour is a blow, but an expected blow. At this moment there are no effective controls on pests spreading on marine pathways and the risk to our region is mounting day by day. Completion of the NIWA/Cawthron report on pathways management comes none too soon and is a very welcome development.

We have some of the important unwanted organisms already here and others are present at ports linked to us with strong flows of marine traffic elevating risks. The Top of the South is the most important area in New Zealand for aquaculture and one of the most important for fisheries and marine based tourism.

The Top of the South is the only part of New Zealand with a coordinated approach for marine biosecurity between regions and with central government. Regional organisations have signed up to the agreed Strategy. Key resources are in place with the website, Manual and public awareness material developed and in use. Regional coordination for preparation and responses is well developed. Work on prevention has commenced but requires policy decisions in key agencies. Regional experience has shown that incursions of harmful marine organisms are continuing. Mediterranean fan worm in Nelson and the clubbed tunicate in Picton are both new incursions in 2013.

The Ministry for Primary Industries manages risk at the border. Risks on domestic pathways are a shared responsibility of regional councils and the Ministry for Primary Industries. The Ministry is exploring domestic pathways management under new provisions of the Biosecurity Act. Responses of Councils as leaders in coordinating regional biosecurity are developing in this context and in different ways in different regions. Both the national and the inter-regional contexts are important factors in developing.

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Feature Marine Pest

Pyura, Pyura doppelganger

Status in New Zealand: Established.

Why is this a threat?

It forms dense populations or mats, and can survive in a wide geographical range. It could displace important native New Zealand species, including green shell mussels.

Key features:

- Hard sack-like body with brown or reddish-brown leathery skin.
- Sand and shell material or algae may be incorporated into outer skin.
- Flat upper surface surrounded by a ridge, and two siphons close together that project slightly above the flat surface.
- Adults 15cm or more in height (max 30cm) and approx 3-5cm diameter.
- Underwater, a distinctive "cross" may be visible in siphon openings.

Where are they found?

- Rocky intertidal, or rocky surfaces in the shallows.
- Forms a mat over rocks that is often clearly visible at low tide.



Report sightings:

- Note exact location.
- Take a photo or sample where possible.
- Seal in plastic bag with small amount of seawater and chill, or preserve in methylated spirits.
- DO NOT FREEZE
- Call MPI on 0800 80 99 66.

Styela clava Update

The second survey in Picton Harbour has found a further 15 of the clubbed tunicate *Styela clava*. With the 99 removed in June this brings the total to 114. The source of the infestation has not been able to be pinpointed, but genetic analyses have ruled out Lyttelton as a source but could not distinguish between northern sources, Porirua and Nelson which have a common origin. The response committee will be meeting in October to decide on next steps.

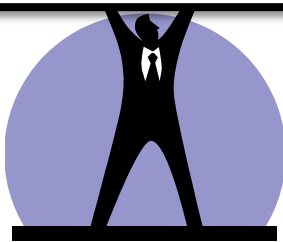


Top of the South Island
Marine Biosecurity Partnership



Operations Manual
Version 2.5

September 2013



Website

Our website is full of useful information and links. It gets updated every month. The updated manual has just been posted.

Look for links to breaking biosecurity news from around New Zealand, including the latest *Styela* records from Picton.



www.marinebiosecurity.co.nz



MARLBOROUGH
DISTRICT COUNCIL



Department of
Conservation
Te Papa Atawhai



Taihoro Nukurangi



Ministry for Primary Industries
Manatū Ahu Matua



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