



# Partners Newsletter

## Keeping you informed

March 2017

### Mediterranean fanworm

The Mediterranean fanworm, *Sabella spallanzanii*, is here but so far successfully suppressed.

This fanworm is currently the biggest threat to marine farms and natural ecosystems in our region. Now rampant in Auckland, the fanworm has been arriving in the Top of the South on fouled vessels since at least 2013.

- 6 May 2013 a vessel going up on the Calwell Slipway was found to be heavily infested with fanworm. The vessel was cleaned and we seemed to escape being infested.
- 5 November 2013 NIWA found one fanworm on a pontoon in the Nelson marina in their 6-monthly port survey. Further diving turned up 11 more. Twice yearly removal commenced.
- 21 February 2014 the TOS team found fanworm on a vessel in Waikawa. Again, we seemed to be lucky, and the vessel was cleaned.
- November 2014 fanworm found in Picton marina while searching for clubbed tunicates. May next year and further fanworms were found and suppression diving commenced.
- July 2016 fanworm found in Tarakohe while surveying and removing clubbed tunicates.

Now, the three Top of the South Councils with the support of the Ministry for Primary Industries are working on developing more formal and integrated programmes to stop fanworm spreading further in the region. The key things are to keep suppressing the known populations and to increase awareness and action to stop new introductions on fouled vessels.

Proposals for what are legally known as Small Scale Management Programmes under the Biosecurity Act have been developed and each of the three councils will be considering adopting these later this year. Formal small scale programmes would give the councils greater ability to effectively manage the risks posed by biofouling on vessels and structures. Marinas are also improving their berth agreements and already Nelson marina has rules requiring vessels to be kept pest free. Next steps will see these rules being enforced and other marinas adopting similar standards.



**UPDATE**

# Pete's Pondering

## Vessels are the target for new Pathways Plans for Northland and Southland

Using new provisions under the Biosecurity Act, the Environment Southland Marine Regional Pathway Management Plan comes into force from early April 2017. Northland has taken another tack and its proposed Regional Pest Management Plan includes provision to make a Pathways Plan. More on Northland in our next newsletter.

Shaun Cunningham of the Southland Regional Council says "With its breath-taking scenery and pristine waters, Fiordland is one of New Zealand's most unique and nationally significant areas - ecologically and economically. It is vital we protect it. Because Fiordland is so remote and difficult to operate in, it is far more cost-effective to prevent a pest from arriving in the first place rather than respond once they become established. Fouling organisms are transported internationally and domestically on vessels, and the best way to remove this biosecurity risk is for vessels to have a clean hull, gear, and on-board water that are free of marine pests prior to entering Fiordland".

The Fiordland Marine Regional Pathway Management Plan is the first of its kind in New Zealand and is a huge step forward towards protecting and securing the future of this precious area.

Vessel operators must now hold a current Clean Vessel Pass to come within one nautical mile of the landward boundary of the Fiordland Marine Area. You can apply for a Clean Vessel Pass at no cost. This can be completed online or by filling out an application form for Environment Southland. The pass requires you to declare you understand the risk marine pests pose to Fiordland, and your vessel will meet the clean vessel standards on entry to Fiordland.

The standards are:

- **Clean hull standard:** The hull and niche areas have no more than a slime layer and goose barnacles
- **Clean gear standard:** All marine gear and equipment on the vessel (including any equipment to establish new moorings) is visibly clean, free of fouling, free of sediment and preferably dry.
- **Residual seawater standard:** All on-board residual seawater has been treated or is visibly clean and free of sediment.

Vessel owners and operators are required to keep records of the actions taken to meet the clean hull, clean gear and clean residual seawater standards.

If you are going to Fiordland visit the Environment Southland [www.es.govt.nz](http://www.es.govt.nz) website for more information. If you have any questions contact Environment Southland biosecurity officer Shaun Cunningham on 03 211 5115 or [shaun.cunningham@es.govt.nz](mailto:shaun.cunningham@es.govt.nz)

Photo: Breaksea Sound. S Cunningham.

**IMPORTANT**

*Boaties from the Top of the South need to be aware that the biosecurity rules are changing if you are visiting other regions.*

*To visit a marina in Northland, boat owners need to provide evidence of complying with a 'six or one' requirement: either an antifoul within the previous six months, or a lift-and-wash within one month of leaving an area infected with marine pests.*

*Receipts are the best form of evidence; however, some marinas may also accept date-stamped photos of a clean hull.*

*This approach is spreading and now Seaview Marina in Wellington is operating a similar scheme. From April you will need a clean vessel pass to go to Fiordland. This means that you need to check the rules before you go, or you may not be able to berth or risk infringing the law.*

## Marina open day

Marine biosecurity in the top of the south was promoted at the Marlborough Marinas Open Day in Picton in October 2016. It was a fantastic day attended by hundreds of people and it was an excellent opportunity to raise awareness, specifically for those interested in boating and the marine environment in general. The public were genuinely interested in protecting our marine environment.

Others there included NIWA, DOC, Coastguard, Harbour Master, Fire, Ambulance and Marlborough Marinas. Pest identification posters and guides were provided to the public, along with examples of actual marine pests.



# Barrie's Bilge

## Summer Vessel Survey

Vessels out of Nelson are carrying pests to the Abel Tasman Park is the main conclusion of this summer's survey of boat hulls. Six Nelson yachts anchored at Adele Island had *Styela clava*, the clubbed tunicate.

Marlborough boats were more likely to be fouled with the seaweed *Undaria* and the colonial *Didemnum*, but none had *Styela*. Level of Fouling patterns of TOS boats were comparable to previous surveys, and were similar across the different TOS hubs.

Over 6 days we surveyed 187 boats, targeting the known haunts of boats from outside the region. The windy summer made action on the water fairly diabolical. One field day was largely a write-off as we spent it helping the Tasman Harbour Master rescue boaters and jet skiers in distress. The regional breakdown in terms of boater numbers is: Abel Tasman 74, Pelorus 33, Queen Charlotte 80.

The good news is that no new marine pests were found, and no *Sabella* the Mediterranean fanworm.

Thirty of the boats surveyed came from outside the region. Twenty-one were from Wellington; mainly Mana Marina and some from Seaview. With one exception, these boats were recently cleaned and/or antifouled. Enquiries confirmed that the Mana marina manager has been promoting to boaters the need to make sure they have clean hulls before leaving to visit us.

What we concluded was that pest populations that are uncontrolled in hubs invariably end up being transported far and wide on vessels. Conversely, where population control in hubs achieves suppression of target pests to very low levels, you tend not to find those pests on boats from those hubs. *Styela* is a classic example. A Nelson vessel that heads out for a trip to, say, Adele Island in the Abel Tasman, doesn't have a strong efficiency or safety incentive to have clean hull).

As per previous surveys, we identified boat (especially yacht) keels as the most problematic niche area, because they often don't get antifouled; if they have been antifouled they are usually clean. We will work with boaters, marinas and lift operators to develop a feasible solution to ensure keel bottoms are effectively antifouled.



## Reflections on marine biosecurity in NZ

*Rose Bird has been the Ministry for Primary Industries' representative on the Top of the South Marine Biosecurity Partnership for the past four years. Rose is soon moving on from MPI, and provides some reflections about her time in marine biosecurity.*

Over the last couple of years I've had the privilege of working across New Zealand on local marine pest management issues, seen the challenges and opportunities that are facing us at a national level and been able to engage with overseas counterparts who are facing the overwhelming task of starting from scratch.

At a national level, there have been huge developments with minimising the amount of risk that is coming into our waters. The first was the introduction of the Craft Risk Management Standard (CRMS), developed to manage risks associated with marine biofouling on internationally arriving vessels. While voluntary now, it will become mandatory and enforced come May 2018. As a result, we have already seen recent cases of vessels with severe fouling being turned away. And only earlier this year, New Zealand formally joined an international agreement on the management of ships' ballast water - the International Maritime Organisation Ballast Water Management Convention. This will come into force in September this year and will replace New Zealand's existing ballast water requirements. It will ultimately require all vessels to have a ballast water management system on board to treat their ballast before discharging it - a huge step forward.

At a regional level - after an early focus on developing surveillance protocols and programmes and response tools and systems, we now have more tools to be able to act in a more preventative manner and manage the pathways of spread for marine pests. This will require a focus on getting boat owners to ensure they keep their hulls clean, and a more regulatory approach in some situations. With Environment Southland publically notifying its recent decision to adopt the Fiordland Marine Regional Pathway Management Plan (the first of its kind in New Zealand), we have a template to work from for improving pathways management elsewhere.

Alongside these key milestones are the less tangible developments that have taken place - the passion and belief that we can make a difference, the increased capability throughout the country and collaboration across the board. Working with so many passionate, practical and hardworking people, in a field dedicated to protecting our incredible marine environment has been a real privilege. I've enjoyed the role immensely, and as I move on to new challenges, I feel confident that New Zealand is well placed and able to lead the marine biosecurity charge and keep our coastal environments pest free.



# Biofouling in internal pipework of recreational vessels

## Is there a risk and how do you manage it?

Vessel biofouling (i.e. organism growth on submerged surfaces) is a recognised pathway for marine pests, and a potential pathway for diseases, to enter New Zealand.

Each year more than 600 recreational vessels enter our country. Many of these vessels carry biofouling organisms, and this may include species that pose risks to New Zealand's marine resources.

The Ministry for Primary Industries (MPI) has issued new requirements that vessels arrive here with a 'clean hull'. The rules are set out in the Craft Risk Management Standard for Biofouling on Vessels Arriving to New Zealand. The Standard is currently voluntary but will become mandatory in May 2018.

Preventing biofouling through regular vessel maintenance is the best way to manage biofouling risk but it's sometimes necessary to treat fouled vessels on arrival. Vessel niche areas, including internal pipework, are recognised as biofouling hotspots, but little knowledge exists about treating the internal pipework of recreational vessels.

MPI has commissioned researchers from Cawthron Institute, NIWA and Biofouling Solutions Pty Ltd to identify and validate a treatment for biofouling in the pipework of recreational vessels, and to develop a step-by-step protocol for its application.

The project team has reviewed the literature and interviewed industry experts regarding pipework configurations, biofouling risks, and treatment options. They identified heat as the best treatment option because heat is known to be rapidly effective against a wide range of biofouling organisms, while posing few risks to operators, vessels or the environment.

The project team is currently designing a heating system to effectively treat all portions of a pipework system. The team will test a protocol for this system in the laboratory before validating it on vessels in the Top of the South region.

Note

Vessel owners who would like to take part in this programme should contact Dr Patrick Cahill, Cawthron Institute ([Patrick.Cahill@cawthron.org.nz](mailto:Patrick.Cahill@cawthron.org.nz)).



Photo 1: Fouling assemblage around a seawater intake fitting – but what lies within the pipework?



Photo 2: Bladder weed (*Colpomenia* spp.) fouling the engine exhaust of a recreational vessel.



Photo 3: A fouled intake grate on a recreational vessel. The light-bulb sea squirt (*Clavelina lepadiformis*) and spaghetti bryozoan (*Zoobotryon verticillatum*) are conspicuous members of this fouling assemblage.



[www.marinebiosecurity.co.nz](http://www.marinebiosecurity.co.nz)



Te Tau Ihu o te Waka a Maui

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