



Partners Newsletter

Keeping you informed

Summer 2020



Summer Survey progress

Three vessels from outside the region were found infested with Mediterranean fanworm (*Sabella spallanzanii*) in the course of the 2019/2020 summer survey by the TOS Partnership contractor. All vessels had originated from the Auckland/Northland area and had been subject to a form of inspection before coming south. However, these were all made some time before making the trip, rather than immediately prior. This resulted in very small fanworm either being missed or others recruiting after the inspection.

The good thing is the trained divers doing inspection work in the Top of the South picked up the fanworm easily, including very small specimens.

By the end of January the team had completed 797 inspections of vessels and structures from Abel Tasman to Queen Charlotte Sound. By the end of February at least 900 inspections will have been done.

The general conclusions are that fanworm remains contained in Picton, Waikawa, Nelson and Tairāhema with no fanworm being found on vessels from within the region. The clubbed tunicate *Styela clava* was found on three vessels from Nelson, one resident in Marlborough and one from Lyttelton. All of the 34 structures with clubbed tunicate were in Pelorus Sound but this will change when the survey in Nelson Haven is done. The Japanese edible seaweed *Undaria* was found on 53 vessels and 100 structures. Comparisons with previous seasons will be possible when the survey is completed.

The survey included 286 active vessels and 48 of these were from outside the region. Wellington was the commonest port of origin for visiting vessels.

The remaining inspections will complete coverage of Queen Charlotte and Pelorus Sounds and include further inspections of active vessels in the Abel Tasman and resident vessels in Nelson.



Fanworm recovered by Diving Services NZ Ltd from a risk vessel identified in the course of the summer survey.

Marine Biosecurity Workshops

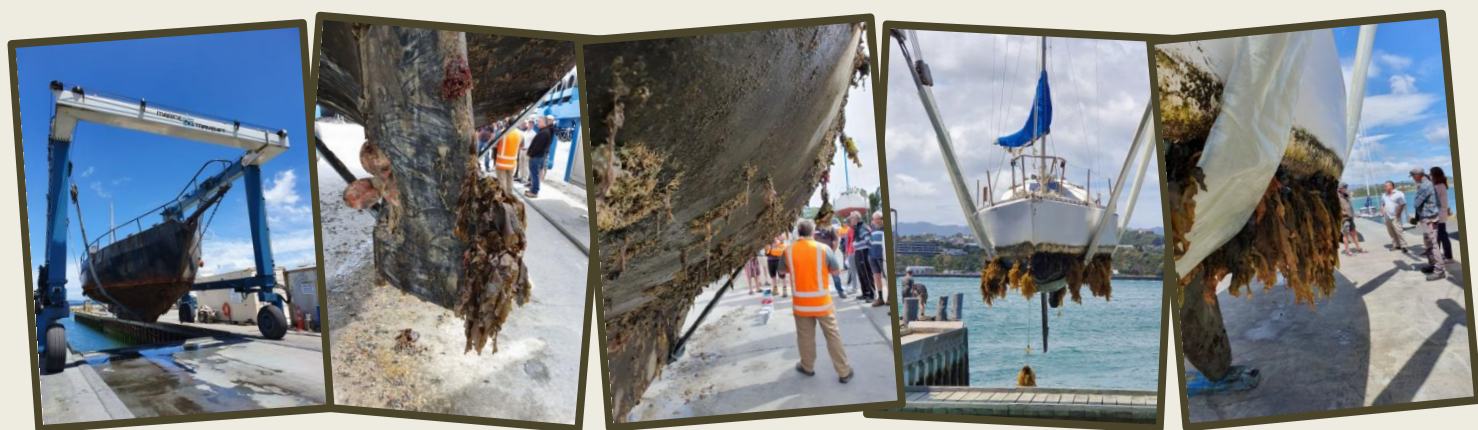
Over 100 people participated in marine biosecurity and hull care workshops in Wellington in December. These workshops will also be provided in Nelson on 28^h March and Picton on 29th March 2020 (more information on our website: <http://www.marinebiosecurity.co.nz/news>).

In Wellington the TOS Marine Biosecurity Partnership teamed up with Altex paints. A fouled vessel was hauled out at each site and TOS staff helped people understand what they were seeing. The species composition was very different at Mana, Seaview, and Evans Bay.

Marcus Gardiner of Altex Paints provided comprehensive information on how to get good results from anti-fouling products. Boaties were particularly interested in how to get longer service from each treatment. Altex provided paint for a sweepstake which was won by Duncan McKee, congratulations Duncan!

After the workshops we surveyed participants about their connections with the TOS. This survey is still open. The highest response rate was from Mana and preliminary results are most characteristic of visitors from this area. Responses suggested:

- Active boaties may visit the TOS several times a year;
- Vessels may visit at any time of the year but visitation rates in summer are 10 times that in winter;
- Vessels remain in the TOS on average for 2 weeks on each trip;
- More than half will visit a port or marina on each trip;
- One third clean their vessel before coming across, half are antifouled within 6 months, and half check for pests before they leave (there are overlaps between these categories)



Tasman Bio Strategy

A comprehensive Bio Strategy with implications for marine biosecurity is being prepared for the Tasman District.

Tasman is taking the initiative to unify and align the efforts of everyone caring for biodiversity and ensuring biosecurity in the region. Project manager Paul Sheldon said "These are big issues for the Tasman region and the Council needs to take a collaborative approach that engages the energies and resources across the whole community. The idea is to align and unify efforts of everyone in the district to restore and sustain biodiversity and ensure regional biosecurity. Biodiversity is all around us and we depend on its wellbeing for our very survival. This life giving capacity of the environment is in our hands and the actions of each person are important. The Tasman Bio Strategy will deal more strategically and holistically with biosecurity than was possible in forming the Tasman-Nelson Regional Pest Management Plan. There are many organisms currently in the Tasman-Nelson region, or which could potentially establish in the region, that are considered undesirable or a nuisance. However, it is only where a subject is capable of causing an adverse effect in the region, where a coordinated approach would be more effective than voluntary and unplanned management, and where the benefits of a regional plan approach outweigh the costs of that plan, that regional intervention is warranted. The Tasman Bio Strategy will look at the full suite of potentially harmful organisms including those that were out of scope for the Regional Pest Management Plan. Options for dealing with these will be integrated with action for restoring biodiversity and optimising the efforts of all parties in achieving regional biosecurity goals."

The Council has established shared governance with local iwi and a working group that includes diverse interests. Public workshops will be held in the first half of the year and it is hoped to complete the Strategy early in 2021.

In September 2019 the Cawthron Institute announced that its marine biosecurity research programmes will receive \$10.5M in government funding over the next five years to develop a marine biosecurity 'toolbox' to effectively transform the way marine pests are managed in New Zealand.

Cawthron Institute Programme co-lead Oliver Floerl says that he is delighted by the funding announcement and by the flow-on impact the research will have, in terms of the benefits it will provide to New Zealand. "This research project received crucial and enthusiastic support from key organisations, such as regional councils, MPI and DOC and iwi/hapū. Without that support we would not have been successful in securing funding. With that groundswell of support underpinning our work we are now poised to use high-quality science to solve real and wide-ranging issues that are having a significant impact throughout New Zealand.

"The arrival and spread of marine non-indigenous species around New Zealand is causing irreversible changes to our native ecosystems, threatens cultural and spiritual values, and is a costly nuisance for kaitiaki, the general public, government agencies and industries to manage," says Julianne Chetham of Patuharakeke Te Iwi Trust which is based in Whangarei.

"Despite significant operational marine biosecurity expenditure the domestic spread of marine pests and pathogens is ongoing," says Floerl. "There is a need for radical, new, effective and integrated technologies to limit the spread of non-indigenous species around New Zealand's coastal environments and industries.

"We are inspired by the tremendous end-user support for this programme and look forward to working in close collaboration with those end users, such as Councils, to ensure that the outputs we deliver meet their needs and expectations and that we are establishing robust pathways for them to implement our findings."

"This will include ways to make high-risk surfaces and environments in our marinas, ports and harbours unwelcoming for marine pests. This will proactively disrupt the invasion process and help restore native species in these environments. We'll also be harnessing the power of molecular technologies to revolutionise our ability to detect invasive species early, and to develop a domestic pathway model that will allow scenario modelling and the development of optimised mitigation strategies."

For more information see: <https://www.cawthron.org.nz/biosecurity/news/2019/cawthron-institute-lead-vital-collaborative-research-goal-futureproofing-new-zealands-marine-biosecu/>

TOS Committee member profile

Fred Te Miha represents Te Tau Ihu iwi on the Management Committee of the TOS Marine Biosecurity Partnership.



Fred describes his role as being a watchdog there to keep an eye on things and make things happen on behalf of iwi and all of the people in the region. He wants to ensure that no foreign organisms get into the Top of the South (Te Tau Ihu o te waka a Maui) marine ecosystems. He monitors and enables action and "reports back straight away to iwi any major catastrophes.

Fred says he has been deeply involved in marine issues since 1991 when he represented Ngati Tama in the fisheries settlement process and establishment of Sealords in 1992. This led on to the claim for the foreshore and seabed and establishment of the Maori Party.

Fred says "I was a one man band at that stage. We had no money and had to do things by feel. It's been a long hard row and the local Treaty settlements alone took eight years. I feel we have achieved a lot and now have standing with governments and councils."

Fred sees the priorities for the TOS and the country are to get more effective in dealing with marine biosecurity risks. He says we need new technologies and getting greater commercial involvement in product development will be a key to this. He sees a role for paint manufacturers in developing more effective products for dealing with hulls.

Fanworm eradication attempted at Opua

More than 1000 unwanted Mediterranean fanworm (*Sabella spallanzanii*) have been pulled from the water in and around Opua Marina in the latest search and removal operation by specialist divers.

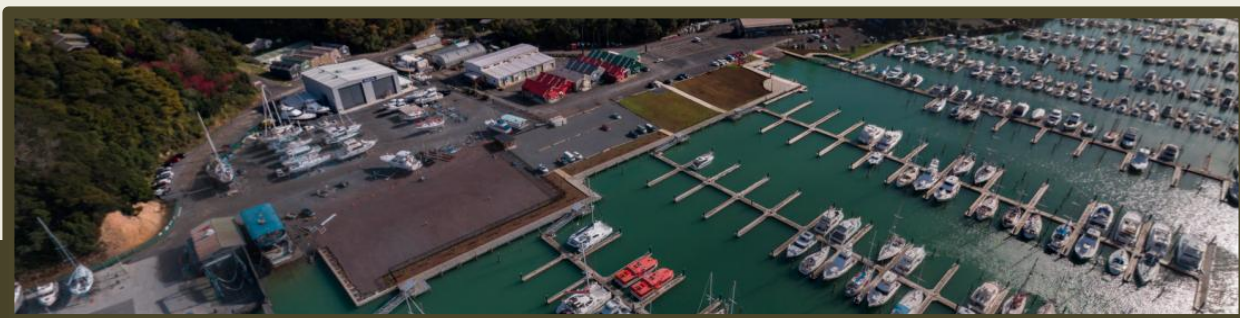
Northland Regional Council Biosecurity Manager Don McKenzie says favourable conditions meant a several-strong contract diver team had been able to carry out 20 straight days of search and removal operations over winter.

“Visibility was favourable and remained within the minimum requirement of 500 millimetres in and around the marina throughout the jointly-funded regional council and Biosecurity New Zealand dive effort.”

Mr McKenzie says divers have been targeting the fanworm since contractors discovered a single specimen of the marine pest while working in the Opua area in winter last year.

The first stepped response had been completed in late April, yielding 267 fanworm, with the second step - which traversed a more targeted area - resulting in 1013 individual worms removed in the 20 days to 27 August. Of those removed in August, 90 percent (913 individuals) were from artificial structures, eight percent (85 individuals) from the seafloor and of the remaining handful recovered, a dozen individuals had been removed from moorings and three from reefs.

Mr McKenzie says the recovered worms typically ranged from just 30mm to more than 400mm but with an average of about 120mm. Northland Regional Council is considering its next steps.



Opua Marina,
Bay of Islands.



A close-up of one of the Opua fanworm recovered early last year. The image shows the fan-like crown of feeding tentacles that extend out of its tube, giving the fanworm its name.
Photo: Northland Regional Council



www.marinebiosecurity.co.nz



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