



# Partners Newsletter

## Keeping you informed

July 2013

### *Styela clava* - seasquirt

The discovery of the clubbed tunicate *Styela clava* in Picton during the MPI/NIWA High Risk Site Survey in June 2013 has tested our response capabilities and they have performed well. The incident has also been a wake-up call for us to move to the next level in dealing with the ways marine pests get into our region and pre-planning for a range of potential pests.

The Partnership showed its worth in the speed of the response with a thorough dive survey of the Picton Marina basin being immediately commissioned by Marlborough District Council with support from the response team. After having to wait the better part of a week for the water to clear, water conditions were eventually excellent for spotting *Styela* on 24 and 25 June when New Zealand Diving Services Ltd, DOC, MPI and the coordination team dived the marina.

The dive team discovered another 100 individuals within the inner Picton Marina basin and one immature individual outside the 'coat hanger' while still in the marina confines. There was only one instance where individuals were found on a vessel – a small number attached to a propeller. All *Styela* found were carefully removed and disposed of safely on land.

At this point it is not entirely clear how much of a threat *Styela* poses to the Top of the South marine environment and the local marine farming industry. The short term objective is to keep *Styela* at a low level, and get more information to support a longer term management decision. This will be done by:

- Repeating the delimitation survey mid-August and expanding the NIWA survey in November/ December at Waikawa Marina.
- Providing communications and management of the response under MDC lead with MPI and other local partners' support.
- Monitoring new vessels entering the marina and assessing ones found to be fouled.
- Completing a risk assessment/cost benefit analysis that allows long term options to be considered.
- Completing a cultural impact assessment on the impacts for tangata whenua.

The response partners meet again in September to decide on next steps.







## *Sabella spallanzanii* Mediterranean fanworm



Just two weeks before Don McKenzie from Northland Regional Council (NRC) delivered his keynote address to the annual TOS Partnership Forum on Mediterranean fanworm control in Northland a fanworm infestation was found on a vessel in the Nelson Haven. Don's address aroused a lot of interest amongst partners here as NRC have been battling the fanworm since 2012 in Whangarei Harbour. The other 14 harbours in Northland are believed to be fanworm-free. Incursion risks in the region are increasing as *Sabella* densities in Waitemata Harbour increase and Nelson is not immune from the same source. The vessel in Nelson that had fanworm on it was from Auckland.

In his address, Don said that 70.5cm is the record length of a fanworm found in Whangarei. These worms are found on the seabed (rocky surfaces and soft sediments), artificial structures (wharf piles) and vessel keels. Higher risk vessels are slower-moving vessels (barges and tugs that push barges) and vessels moored for long periods of time (derelict boats, fishing vessels, yachts). Large colonies of fanworm can be found on the bottom of vessels. There can be 250 fanworms per square metre on heavily fouled vessels. These heavily fouled vessels need to be slipped to be properly cleaned. There are high risks in removing fanworm off vessels while in the water as smaller worms can fall off to the sea floor and flourish.

Mediterranean fanworms don't generally survive if left exposed to air. The exception, however, are any fanworms trapped under the blocks of a heavily fouled vessel hull which has been slipped. It appears these do not degrade in the same way and it's possible some could survive, so it's also important to clean under these blocks.

Individual female fanworms can hold about 50,000 eggs. Eggs are released when there is a drop in water temperature (autumn). Risk analysis indicates that the highest risk vessels are those from Waitemata Harbour that are slow moving and stay in a new location for longer than a month. Fast moving vessels that don't stay for long are a lower risk.

Don said that *Sabella* impacts include: ecosystem changes, competition, economic costs, potential eutrophication (lack of oxygen caused by excess nutrients in the system), and damage to a region's image. He said that spread can be prevented by regular hull cleaning and anti-fouling and by targeting vessels from harbours where fanworms are present. The key message NRC gives to visiting vessels is that "You can come to Northland but if you have biofouling you need to have a plan to manage it!"

In Nelson the infected vessel from Auckland was successfully slipped and cleaned and a follow up survey found no fanworm in the immediate environment. We were lucky this time, but we need to build on our knowledge of this organism to increase surveillance of risk vessels.



## Pete's Ponderings

Dealing with marine biosecurity threats in New Zealand depends on good border management as well as being effective in reducing risk on domestic pathways (ways in which pests spread). New Zealand has a very large coastline and relies heavily on sea trade. Organisms can hitch a ride in ballast water, sea chests or attached to the hull itself. International conventions have been slow to develop for the marine environment and lag behind controls for terrestrial pests.

For New Zealand MPI Quarantine Inspectors are the front line of defence. All vessels arriving in NZ from overseas must complete arrival declarations which include details on ballast water exchange (required for all ballast water before it is discharged in NZ) and hull fouling. Hull fouling questions on the declaration are currently voluntary and will be reworded and made compulsory once the Craft Risk Management Standard is released for Biofouling on Arriving Vessels. High risk vessels such as barges and oil rigs are already subject to assessment for biofouling risk upon arrival. Until the biofouling standard is released it is MPI policy that action may be taken directly under the Biosecurity Act where severe risk of biofouling is suspected. Inspection of vessels depends on the risk profile of the arriving vessel. In general, most commercial international vessel hulls are kept reasonably clean to keep running costs down. Pleasure craft are all visited and inspected. Vessel arrival requirements are currently available at [www.biosecurity.govt.nz/enter/ships](http://www.biosecurity.govt.nz/enter/ships).

Any vessel or craft suspected as carrying an unwanted organism or risk organisms on its hull can be directed to be cleaned. MPI is currently working on a standard for vessel antifouling where arriving vessels must have a clean hull or show the vessel is of low risk by an equivalent method. In addition to this formal system the Top of the South is working with the port companies, scientists, slipways and marinas on an informal system of notification and risk assessment. So the border is becoming more secure, but slowly.

The IMO hull fouling guidelines released in 2012 are likely to remain voluntary for some years to come. The IMO ballast water convention that will require vessels to move from ballast exchange to more effective ballast water treatment is still not in force. IMO secretary-general Koji Sekimizu said in February 2012 that he had a "serious concern that, more than eight years after its adoption, the conditions for entry into force have not yet been met". In the meantime partners in the Top of the South will look to reduce risk on domestic pathways and do all we can to support border biosecurity effectiveness.

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## Feature Marine Pest

### Clubbed tunicate/leathery sea squirt, *Styela clava*

Status in New Zealand: Established.

#### Why is this a threat?

Fast growing nuisance fouler of vessels, marine farms and fishing equipment. Competes with native species for food and space.

#### Key features:

- Tubular, club-shaped body that tapers to a stalk.
- Leathery, bumpy, often wrinkled outer skin.
- Brown-coloured.
- Two short siphons or holes on end.
- Up to 16 cm long.
- Often thickly covered with other marine fouling growth.
- Grows as single individuals.

#### Where are they found?

- Attaches to hard surfaces in sheltered areas away from wave action.
- Found on rocks, oyster and mussel shells and seaweed.
- Commonly attaches to man-made structures such as boat hulls, wharves and mussel lines.
- Low intertidal zone (area between high and low tides) to 25m depth.



#### 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.



## Sign of the times

As part of our ongoing work to raise the public awareness of marine biosecurity issues, we are creating a database of all the old Biosecurity New Zealand signage in the area. MPI is in the process of improving and updating these.

If you are aware of a sign beside a little known slipway please let us know of its location and condition - a digital photo would be great. If you use a slipway that does NOT have a sign but which you think should, let us know as well.

Please e-mail any relevant information to [tosmarinebio@gmail.com](mailto:tosmarinebio@gmail.com) or contact us through our web page at [www.marinebiosecurity.co.nz](http://www.marinebiosecurity.co.nz).



## Waikawa Marina Cleanup

Boating Marlborough called on all divers and the public to help clean up Waikawa Marina on Earth Day, 22 April. Volunteers from the Nelson Dive Club, Woodbourne Base and Marlborough locals all pitched in to clean about a third of the marina. The Top of the South Partnership were there in support, checking the debris removed from the murky depths for unwanted organisms. This included a wide range of material including substantial items from vessels that had burnt at their moorings, excellent attachment surfaces for fouling organisms. None of the material checked had pest species. This was very helpful information as the Waikawa Marina is outside the area covered by the NIWA port surveys. It was also an opportunity to make contact with local divers, raise awareness and provide information. We hope to do more work with the dive clubs in the future developing our surveillance network.

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



Te Tau Ihu o te Waka a Maui

