Mediterranean fanworm in Nelson

Mediterranean fanworm Sabella spallanzanii has been found in Nelson Harbour for the second time this year.

The latest incursion is in the marina area, and is likely to be a separate event from the population found on the Manini in May. The latest specimens, 12 in all so far, are up to 230mm which is outside the size range that could come from known growth rates of fan worm in New Zealand in the time since May. However, fanworm in New Zealand has not behaved like fanworm elsewhere in the world. As is common with pest species on both land and water, critters behave differently here than at home.

This latest incident comes shortly after three fanworm were found in Tauranga Harbour, and shows that New Zealand is still at risk of marine pests spreading within the country after they arrive from overseas. The Ministry for Primary Industries is leading the development of a domestic marine pathways strategy. This is intended to provide a framework for setting out both the short term and longer term actions that can be taken nationally and regionally to improve pathways management.

The Nelson City Council has taken the lead in the response, and is supported in this by the Ministry for Primary Industries and the other members of the Top of South Marine Biosecurity partnership. Together they have funded a delimitation survey to understand the extent of the incursion, and are working together to develop an effective response. The good news is that the infestation is confined to the marina basin and the number of individuals is small. All fanworm found have been carefully removed by Bruce Lines and his team and the samples sent for analysis of age and reproductive condition. The bad news is that even the most careful search can only achieve about 90% success in finding every individual. Little ones are inevitably missed amongst the other fouling organisms.

Fanworm would be the third of the unwanted pests on the national list to establish here if it did get away. It would be a quite a nuisance in the harbour as it grows faster in New Zealand than anywhere else in the world and forms big masses. The biggest threat though is its effects on natural environments like the Abel Tasman coast and other special environments in the region. The Top of the South is very vulnerable to these threats and we are fortunate that Tasman, Marlborough and Nelson have the only partnership and dedicated cooperative marine biosecurity programme in New Zealand.

The next steps are to decide on a longer term strategy for slowing spread to the rest of the region. While other sources, such as the Waitemata Harbour, remain uncontrolled efforts need to focus on preventing further introductions throughout the region as well as dealing with the current incursion.

Photos supplied by Diving Services New Zealand Ltd
It’s this easy to keep hitchhiking pests off your boat!

1. Clean it
   - Haul out and remove all large fouling matter by hand. Dispose of in a bin going to landfill. It’s important this material does not get back into the sea where it could reproduce.
   - Hose and brush or waterblast to remove all fouling. Try to haul your boat out at a facility where the wash-off is contained and treated before going back into the sea.
   - Pay special attention to underwater gear and fitting parts that stick out or retain water such as the keel, intakes and outlets, propellers and shafts, rudders and casings. These are prime locations for harbouring pests.
   - Do this at least annually, and anytime there is a build up of fouling. Never let fouling build up beyond a light slime layer.

2. Antifoul it
   - Renew paint at the interval recommended by the manufacturer or retailer, if the paint has been scraped or damaged, or if persistent fouling is occurring. Paints generally last between one and two years.
   - Apply paint to a clean and dry hull. Prime first if the hull surface is exposed.
   - Apply a good coat and don’t miss those underwater fittings.
   - Antifouling works best with several coats applied.
   - Allow each coat to dry between applications and ideally allow final coat to cure for 24 hours before re-launching.

3. Extra steps
   - Check your boat is clean before you move location. If not, clean it.
   - Regularly treat internal seawater systems – flush with freshwater or an approved treatment.
   - Dispose of sewage and bilge water at an approved pump-out facility.
   - For trailers, boats, jetskis, canoes, dive gear and fishing gear – wash with freshwater after use and allow to thoroughly air dry before using in a new location. Remove any debris or bycatch material as you clean, rather than throwing over the side when you get to a new location.

(From ‘Clean Boats – Living Seas’ brochure produced by Ministry of Primary Industries. For more information visit: www.biosecurity.govt.nz and www.cleanboating.org.nz)
Raroa visit a step up for biosecurity

The oil production support vessel the Raroa set all sorts of records when it arrived in Nelson for servicing, and it only just fitted in the harbour. The lead in to this major operation included careful consultation by Port Nelson with the TOS Coordination team on biosecurity risks. At our request MPI assessed the maintenance history of the Raroa and concluded it posed a low biosecurity threat for the region. Its hull had been cleaned in February, and MPI could review the video footage of that operation. The awareness of Port management of the need to include biosecurity considerations, and their proactive approach to us, were a step up for the way we are working together. It reflects the high level of commitment of Port Nelson to operate to high environmental standards. This is also the positive attitude we are now experiencing with the oil industry generally.

The process also highlighted the work we have yet to complete. When asked, we could not point to enforceable biosecurity rules for domestic vessels. There is no agreed inspection standard for such vessels. This left me wondering about nooks and crannies on the Raroa that might have been missed in the February cleaning. As coordinators we have put a lot of thinking into how to improve these systems for our region, and are ready to progress this with the three councils. The situation is far from simple, however, as overlapping roles and responsibilities remain a feature of the sector. The other thing we are ready for is to improve those industry networks that delivered a positive process for the Raroa and ensure they are applied more generally.

Feature Marine Pest

Aquarium caulerpa, Caulerpa taxifolia

Status in New Zealand: Not presently detected

Note: This species has been found and removed from marine aquariums in New Zealand, but has never been reported in the environment.

Why is this a threat?
Aggressive weed that can quickly spread and smother other algae, seagrasses and invertebrate communities. Outcompetes native species for food and light and produces toxic compounds. Vast beds can destroy native species diversity and fish habitat.

Key features:
- Bright green seaweed.
- Horizontal runners reach up to nine metres.
- Runners give rise to many upright fronds.
- Fronds are flattened with a smooth and distinct mid-rib.
- Fronds up to 1cm wide and up to 15cm long (up to 60cm in deep water).
- Pinnules (or individual leaves) attach to mid-rib directly opposite one another.

Where are they found?
- Up to 100m depth, but usually between 3-35m.
- Rock, sand, mud and seagrass beds.
- Exposed and sheltered estuaries, coastal lagoons and bays.
- Tolerates a wide range of water temperatures.
- A common aquarium weed overseas.
- It is an offence to import, grow or spread this weed.

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.

Note:
This species has been found and removed from marine aquariums in New Zealand, but has never been reported in the environment.
Styela clava in Picton

Key stakeholders met in mid-October 2013 to discuss the future of the Styela clava incursion in Picton. Through a great deal of discussion both in and out of the formal meeting environment, it was agreed that an objective of Containment and Spread Reduction was the favoured option. In effect, attempt to maintain a low density in Picton Marina to minimise the risk of spread. This would mean an end to the Response and the development of a Long Term Management Plan. A minimum of two comprehensive dive surveys was agreed as the minimum to achieve this with any additional wider in-kind or community based contributions welcomed.

There remains the ever present risk of re-infection from other populations located nationally e.g. Nelson or Porirua Harbour or even other unknown infestations already present in the Marlborough Sounds. All stakeholders recognised this and the need to develop and maintain a dynamic management plan with regular review points. At the time of writing, the Long Term Management Plan is being developed with commitments still being finalised.

Good news story

In August, the Kan Tan IV entered New Zealand waters on its way to the Maari field in the Taranaki Basin which is operated by OMV New Zealand. Built in 1983 and capable of operating in water depths of up to 457 metres, the rig has been used all over the world. Biofouling can be of particular concern for rigs like the Kan Tan IV that have been stationary in the coastal waters of other countries, says MPI Senior Advisor Liz Jones. “Once introduced, marine pests such as the Mediterranean fanworm and the sea squirt Styela clava are difficult to contain. That’s why MPI has worked to develop a new standard under the Biosecurity Act to mitigate and manage biosecurity risks.” While the standard is still in draft form, Frigstad Offshore, which operates the Kan Tan IV, and OMV New Zealand were keen to have the rig meet the standard when it entered New Zealand waters. Frigstad Offshore retained the services of the Cawthron Institute to develop a plan that would meet the standard and minimise any biosecurity risks. “It was a real collaborative effort between the owners and operators of the vessel, MPI, and Cawthron to develop the plan,” says Cawthron Biosecurity Team Leader Grant Hopkins.

When finalised, the plan was assessed and approved by MPI under a new section of the Biosecurity Act created to manage the risks posed by craft. The plan included a thorough cleaning of the Kan Tan IV while it was in Singapore undergoing maintenance prior to departing for New Zealand. That meant removing biofouling and sediments from areas of the rig that were submerged during prior drilling operations. “Part of the work required hiring a specialised dive team working nearly around the clock over a two-week period,” says Grant. When work was completed, the rig was loaded onto a heavy-lift vessel (HLV) for the journey to New Zealand. “The three-week trip on the HLV meant that any remaining marine pests and diseases would be desiccated,” says Grant.

The HLV and the rig’s support vessels were also defouled in preparation for arrival into New Zealand waters. Liz says MPI gave pre-arrival clearance to the Kan Tan IV for biofouling based on Cawthron’s reports, including photographic evidence. “Once arriving in New Zealand in August, the Kan Tan IV, the HLV, and support vessels were checked and given the ‘all clear’ by MPI inspectors.” The Kan Tan IV is expected to be active in New Zealand waters for about a year. It’s currently being used to drill the Manaia-2 appraisal well, located south-west of the main Maari field.

www.marinebiosecurity.co.nz

Coastal News, Issue 54, Oct 2013
Oil Rigs and the Biosecurity Standard by Shelly Biswell, Editor