Partners Newsletter

Keeping you informed

December 2014

Voyager P

On 14 October the fishing vessel Voyager P was wrapped in plastic in Port Nelson to remove the biosecurity risks associated with its highly fouled hull. The Voyager P departed Port Lincoln, Australia, and arrived in NZ waters in late May 2014. The vessel did not declare any biofouling concerns on its advanced notice of arrival declaration form – therefore the hull of the Voyager P was not inspected. The vessel was heavily fouled, with mussels, seaweeds, hydroids and crustaceans.

On 19 September, the TOS coordination team was informed that the Voyager P might have significant hull fouling and that some of that might derive from overseas. When we investigated on 22 September where the ship was berthed in Nelson, the information provided by the master suggested there might be a biosecurity risk and we informed the Ministry for Primary Industries (MPI). On 25 September, MPI provided direction on how to proceed and the TOS Partnership arranged an inspection by Diving Services NZ Ltd on 1 October. They found the vessel to be highly fouled and forwarded video footage to the Nelson City Council and the Ministry for Primary Industries. This triggered a full scale biosecurity response from the Ministry with the support of the TOS Partnership.

The Ministry for Primary Industries initiated a biosecurity response to mitigate the risk of biofouling on the vessel. The new Craft Risk Management Standard (CRMS) requires vessels coming into New Zealand to have clean hulls. The CRMS has a four year lead in period with voluntary compliance until 2018. The Ministry treated this as a learning exercise and will review and incorporate the findings into the implementation strategy of the CRMS. The effectiveness of the TOS Partnership was demonstrated in that the risk was identified through its industry network, and local partners Port Nelson, Nelson City Council and Diving Services NZ Ltd provided valuable support to MPI.

Photo below: Voyager P one week after wrapping was completed by Diving Services NZ Ltd. Photo: Kathy Walls, MPI

Envirolink Project

Tools, costs and existing infrastructure for managing biosecurity risk from vessel pathways in the Top of the South Island

Cawthron Institute is assisting the TOS Marine Biosecurity Partnership with their evaluation of the practicalities of a Regional Pathways Management Plan, through a project funded via the Envirolink scheme. The project focuses on vessel pathways into and within the TOS region, and considers management issues, options and costs.

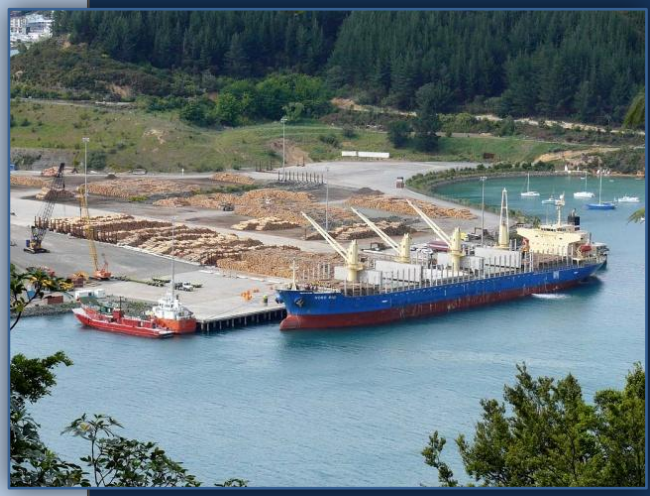
The 2012 amendments to the Biosecurity Act (1993) enable regional governments to develop Pathway Management Plans (PMPs) to address the domestic spread of marine non-indigenous species. The principal risk pathways known to operate around the TOS region are vessel movements (merchant, commercial, fishing, tourism, ferries, recreational) and aquaculture activities (e.g. transfers of seed-stock and equipment).

As a first step, the project will describe the variety and movement patterns of vessel types that enter or operate within the TOS, and the coastal locations connected by their movements. This will be accompanied by a review of globally available treatment tools for vessels, including both in-water and land-based technologies. Next, an inventory of regionally available treatment infrastructure will be developed, including assessments of capacity and price for a range of vessel types and sizes. Finally, the environmental risks associated with different treatment tools will be outlined, as well as current permitting requirements, which could lead to critical bottlenecks in high-risk situations demanding rapid intervention.

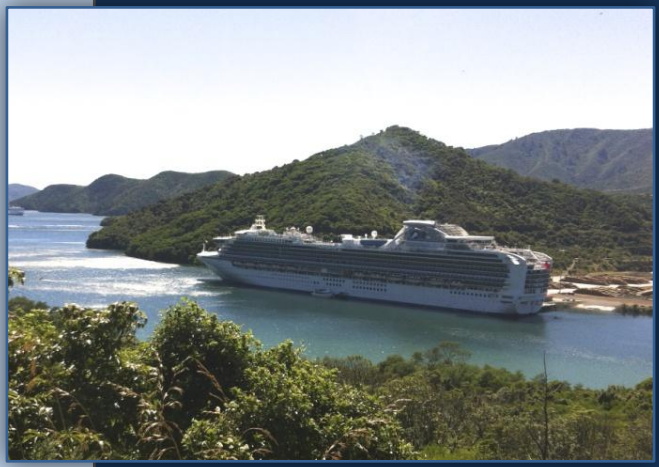
The effective management of regional risk pathways is critical to achieving the aims of the TOS Marine Biosecurity Partnership. It is anticipated that this Envirolink project will provide critical information and guidance for a joint TOS Pathway Management Plan.

For more information contact Dr Oliver Floerl (oliver.floerl@cawthron.org.nz ; 03 548 2319 ext. 407).

Some of the different types of vessels that visit TOS.



A heavily fouled local yacht in Nelson marina. Photo: Cawthron.



Pete's Ponderings

Pathways Planning

Pathways planning is still top of mind for the coordination team. We are using recreational vessels as a case example to work out whether the new provisions of the Biosecurity Act to manage spread of harmful organisms can be effective for our region. Why recreational vessels you ask? Well…

Recreational vessels can have significant fouling as they are often parked for long periods and some vessels like yachts travel at slow speeds, meaning that fouling pests can easily be transported among locations.

Recreational vessels arrive in the TOS from many parts of the country, and occasionally from overseas. Picton is amongst the busiest ports in NZ for recreational vessels, having more than 1200 long distance arrivals and departures each year, with Nelson about half that number. Recreational vessel fouling has been implicated in incursions of two 'unwanted organisms' in the TOS, *Sabella* (a fanworm) and *Styela* (a sea squirt). As the TOS is highly connected to other regions of NZ by recreational vessel movements, it is likely that new species will continue to be introduced unless effective management systems are put in place.

Recreational vessels are also a primary pathway for the ongoing spread of hull fouling organisms within the TOS due to their large number (> 1000 marina berths and > 2000 swing moorings) and high levels of fouling. Of hundreds of recreational vessels surveyed in the TOS between 2010 and 2014, 15% to 35% were categorised as 'heavily fouled' (> 15% fouling cover), depending on location. Included in this fouling were a number of other species recognised as harmful marine organisms. The significance of fouled recreational vessel movements in the TOS region arises from the range of their activities and locations that they frequent, including highly valued coastal areas (e.g. marine reserves, remote locations, aquaculture areas) to which organisms may not easily spread by their own dispersal mechanisms.

Although hull fouling is generally regarded as the most important risk from recreational vessels, infected bilge water and gear may also be important.

Email: tosmarinebio@gmail.com

Feature Marine Pest

Asian paddle crab, *Charybdis japonica*

Status in New Zealand: Established

Why is this a threat?

Aggressive crab that can out-compete native crabs for space and food. A threat to aquaculture as it preys on shellfish. Can carry White Spot Syndrome virus which can infect native and farmed prawns, crabs and lobsters.

Key features:

- Six spikes on each side of shell.
- Five spines on upper surface of front claw.
- Flattened swimming paddles on back legs.
- Adult shell width up to 12cm.
- Shell colour ranges from off-white and pale green, through olive green to a deep chestnut brown with purplish markings.
- Aggressive behaviour when threatened.

Where are they found?

- Firm sand or muddy fine sand bottoms.
- Estuarine and marine areas.
- 0-15 metres 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.

Guest Spot – Environment Southland

Fiordland Marine Pathway Management Plan update

In 2012 the Government implemented its marine biosecurity pathway policy by introducing Pathway Management Plans as an amendment to the Biosecurity Act 1993.

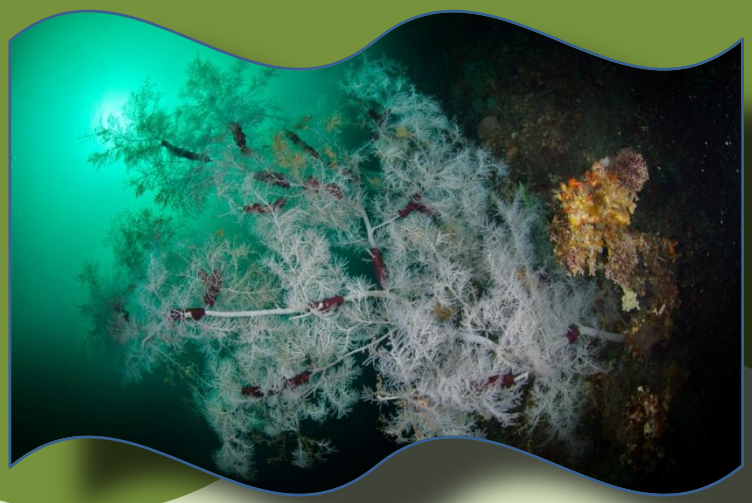
These plans are based on first identifying the pathways (means) whereby pests are transported into an area. Then the task is to develop ways of ensuring that pests can no longer use those pathways.

Environment Southland is in the process of developing a Fiordland Marine Pathways Management Plan jointly with the Ministry for Primary Industries, Department of Conservation and the Fiordland Marine Guardians (Guardians). This was prompted by the discovery and attempted elimination of *Undaria pinnatifida* from Breaksea Sound in Fiordland. Elimination or control is a costly way of dealing with a marine incursion compared to preventing its establishment in the first place.

The primary objective of the Fiordland plan is to stop the movement of marine pests into the area via vessel hulls, niche areas, gear and seawater. All vessel types present some level of risk when entering the Fiordland Marine Area. The plan aims to protect Fiordland by minimising this risk and making people aware of their responsibilities prior to arriving in its pristine marine environment.

The plan is still under development and we welcome any feedback on information in our updates, especially from boaties that are planning to visit Fiordland or who visit regularly. Updates are available from both the Guardians' website http://www.fmg.org.nz and Environment Southland's website http://www.es.govt.nz/environment/pests/marine/marine-pest-pathways/

Feedback can be provided to a steering group contact. The current contact is Laurel Teirney lteirney@ihug.co.nz



Black coral snake stars.
Photo: Jonathan Davies

www.marinebiosecurity.co.nz

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