



# Partners Newsletter

## Keeping you informed

*Autumn 2019*



### Get your anti-fouling application right

Thorough surface preparation is the secret to the success. Well applied coatings will protect your boat from marine growth, and protect your hull from the harsh salt water environment. Poor preparation and workmanship result in poor performance, coating failures and expensive repairs. Cutting corners will also lead to an increased risk of severe biofouling.

Vessels are hauled out on hard stands and work done by commercial firms or vessel owners. Typically vessel owners will follow these steps:

**Step 1:** Waterblast surfaces to be painted to remove salts, slime, marine growth and failed coatings. The higher the water pressure the better as this will reduce your overall workload. Ideally pressure should be 3,500 - 4,000 psi.

**Step 2:** Thoroughly wet sand all anti-fouled surfaces with 80 grit wet and dry paper using a pole sander to remove any remaining, hydrolysed (spent) anti-fouling and residual slime.

**Step 3:** Spot prime and full repaint with the anti-foul system.

Commercial firms will often use sandblasting. All areas of damage are spot blasted and primed. The remaining anti-foul may be sweep blasted to remove any remaining, hydrolysed (spent) anti-fouling. Typically repainted with 2-5 year systems. Mainly applied by airless spray methods.

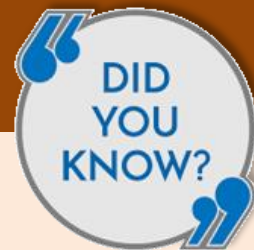


Heavily fouled vessel.



Airless spray in a commercial application.

# Common anti-fouling mistakes



The following are ways that anti-fouling efforts can be wasted

## Missing the overcoat window when applying anti-fouling over epoxy primer barrier coat

If applying the anti-fouling over new primer barrier coat system or spot repairs, you must apply the anti-fouling paint when the primer is in the "thumbprint tacky" stage. Otherwise flaking may occur, either now or next time the vessel is slipped.

## Exceeding the recommended launch window of the anti-fouling

If left too long in the sun the film may start to oxidize and lose its effectiveness once immersed in the water or air contaminants like dust block up the anti-fouling film.

## Low salinity in the water

Low salt levels can be due to the influx of fresh water, either from a freshwater source, such as a river, or from heavy rainfall. Even a temporary drop in saline levels can inhibit anti-fouling paint's ability to leach biocide. When this happens, marine fouling organisms can get a toehold. Once the fouling starts, it can worsen until the anti-fouling becomes completely ineffective.

## Contaminants

Contaminants such as silt, chemicals, boat lies in the mud and other pollutants affect the pH balance of the water. High alkaline levels can prevent the antifouling from ablating or polishing making antifouling coating ineffective.

## Water temperature

In general terms, there is more fouling in warmer waters. Using your boat more often will help the anti-fouling coating to be more effective as it helps to expose fresh biocide as the boat moves through the water.

## Improper grounding or stray electric current

Electric current in the water underneath and surrounding your boat can neutralize the anti-fouling paint, causing biofouling to occur.

## Premature launching

Don't take the risk of launching early, before the paint has cured completely. Painting between tides also not advised.

## Improper surface preparation

Adhesion failure, flaking, peeling, and delamination problems occur due to improper surface preparation.

## Non-approved additives

Urban myths about adding chilli powder, weed killer etc.

## Not the specified antifouling thickness

Follow the manufacturer's recommendations for film thickness and recommended number of coats. Don't thin it to spread it out further, as while you save a few dollars now, it will cost you dearly due to the reduced effectiveness of the anti-fouling. If you do not apply the recommended number of coats, you risk affecting the longevity of the paint.

## Problem areas

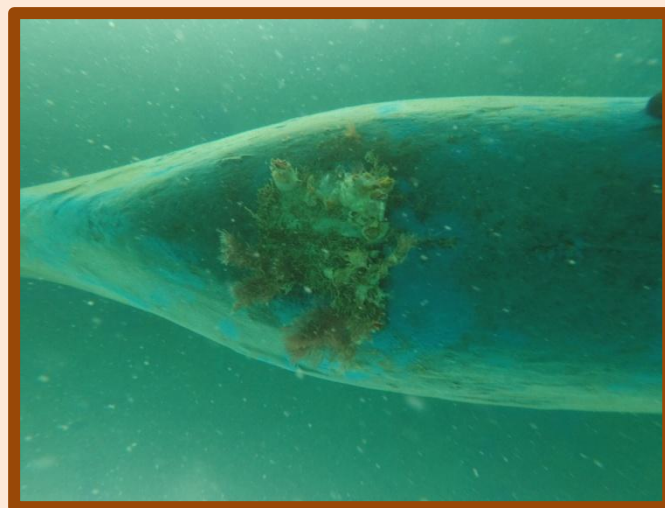
**Sea Chests, water intakes and outlets, bow thrusters:** All areas which need careful attention to preparation and anti-fouling.

**Boot-tops and wind and weather lines:** Often boot tops are too low in the water. Commercial vessels, when fully loaded, may grow a biofouling layer up beyond the waterline.

**Slipping blocks:** Need to be moved each docking.



Slipping blocks need to be moved each docking.



Keel block fouling.



# Seaweed 2019



The TOS Marine Biosecurity Team was there in support of Seaweed – Kaupapa Moana 2019. Seaweed opened on 2 March 2019 with the theme “*Tiakina o Tātou Mōana – Care for our Seas*”

The Tasman Bay Guardians took the lead in creating a day of opportunity for young people to understand and experience the sea. The centre piece was guided snorkelling at Cable Bay. It was a beautiful day with hundreds of children and their parents participating. TOS Marine Biosecurity was one of several groups invited to provide displays and experiences.

Charmayne King and her family hosted our displays and provided biosecurity information to interested participants. Most interest was shown in the live samples from the marina where pests such as the clubbed tunicate *Styela* were included. Many thanks to Stew Robertson and the Tasman Bay Guardians for including us in this opportunity.



Laycee King studies the live samples taken out of Nelson Marina that morning.



# TOSMBP Committee member profile

## Jono Underwood

Jono Underwood is the Biosecurity Manager at Marlborough District Council, overseeing the delivery of the Council's biosecurity programmes. Since 2012, this has included being on the TOSMBP Committee, being part of marine pest responses and overseeing ongoing surveillance implemented by Marlborough District Council.

After completing an Honours degree in Science majoring in Conservation and Ecology at Lincoln University, Jono managed numerous operational contracts while working at a private firm in Australia controlling vertebrate pests such as foxes, feral pigs and wild dogs.

After returning to New Zealand in 2009, he learnt the local government ropes at Marlborough District Council, initially overseeing the feral rabbit programme before moving to manage the wider team. The wider biosecurity programme now includes programmes for over 30 invasive plant and animal species with the marine pest Mediterranean fanworm being one of them. He works closely with the likes of the Council Harbours Office and Port Marlborough - being critical players for marine biosecurity management in Marlborough. He also maintains a relationship with Biosecurity New Zealand through both the TOSMBP, ongoing work in relation to Mediterranean fanworm and other national initiatives seeking the broader management of domestic pathways.

With a rural background, Jono enjoys the wide open spaces in Marlborough, and working on his small block of land near Seddon in the Awatere Valley.



## How to keep your hull clean – free training

### Learn from the experts how to get the best value from your anti-fouling

Nelson Marina hardstand, Saturday 25 May 2019 1.00pm to 4.00pm

Waikawa Marina hardstand, Sunday 26 May 2019 1.00pm to 4.00pm



This is a drop-in session. Arrive any time from 1.00pm to 3.30pm and we will include you.

Carboline New Zealand, a leading manufacturer of marine paints, is teaming up with the TOS Marine Biosecurity Partnership, Port Marlborough, Nelmac and Nelson City Council to bring you this opportunity to understand the whys, do's, and don'ts of antifouling.

Good hull maintenance ensures you use less fuel, get to your destination faster, and do not spread marine pests. New rules in Marlborough ban highly fouled vessels from moving in and out of the region. This training will help you understand best practice to get good performance from your anti-fouling, how to prepare surfaces and apply paint. We will also cover what you need to know about the new rules and how to recognise pests.

Any queries ring or email Peter Lawless, Marine Biosecurity coordinator, at 021 894 363 or [tosmarinebio@gmail.com](mailto:tosmarinebio@gmail.com)



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



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**Te Tau Ihu o te Waka a Maui**



**tasman**  
district council