

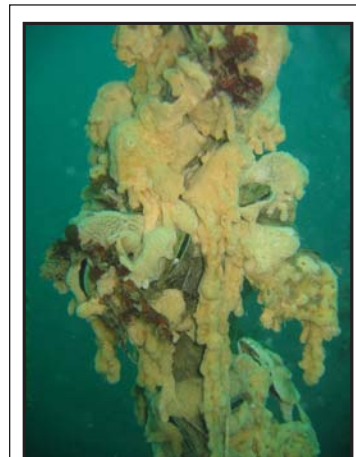
# BIOSECURITY INFORMATION FOR AQUACULTURE INDUSTRIES

New Zealand's unique and valuable marine environment is under increasing threat from the impact of introduced marine pests.

Global trade and ocean transport is increasing, as are the numbers of recreational vessels entering New Zealand. While MAF Biosecurity New Zealand (MAFBNZ) has a number of work projects underway to minimise the risk of exotic (from overseas) marine organisms arriving here, the chance remains that pests will enter through hull fouling or in ballast water.

Once marine creatures establish in an area outside of their native range, they can pose major problems – both environmental and economic. The recent establishment of the sea squirt *Styela clava* and the work being done to control another squirt *Didemnum vexillum* in Marlborough and Nelson are good examples of how marine pests can threaten your industry.

There are, however, some measures you can take to minimise the risk of marine pests spreading and threatening your livelihood.



*Didemnum vexillum* sea squirt on Marlborough mussels



*Styela clava* sea squirt on mussel line at Waiheke Island

## Boats and service vessels

- regularly clean your boat bottom to minimise fouling growth;
- dispose of any debris removed when cleaning safely to bins going to landfill;
- keep anti-foul coatings in good condition and re-apply as required;
- ensure your hull is clean before moving to a new location.

## Equipment

Where possible avoid moving equipment (e.g. ropes, buoys, lobster pots) between regions – keep it local.

If this is not possible, before moving, clean and sterilise equipment by one of the methods below:

- Remove the item/s from the water and thoroughly air dry. The item/s should be left out of the water for a month. Care is needed to ensure ropes and equipment are not laid out in a manner that prevents the surfaces from drying out.

- Soak the item/s as below:
  - a. Soak in freshwater for 72 hours. If soaking ropes, freshwater should be replaced after 12 hours to ensure the water does not remain brackish.
  - b. Soak the item in a 2% bleach/freshwater solution for a 30 minute period. (2 % solution = 200 mls of bleach or detergent into 10 litres of freshwater).
  - c. Soak the item in a 2 % Decon 90 detergent/freshwater solution for a 30 minute period.
  - d. Soak the item in a 4% acetic acid/freshwater solution for a 10 minute period. Rinsing afterwards is optional. (4 % solution = 400 mls of acetic acid into 10 litres of freshwater).

If your industry has a Code of Practice, please refer to its section on biosecurity.

Consider how you can minimise biosecurity risks when moving stock e.g. spat collection, capture of broodstock and transfer of stock between locations.

## Disease

New Zealand is lucky in that its geographic isolation means it is relatively free from disease. You should, however, keep an eye out for anything that may be an exotic disease. While MAFBNZ has stringent measures at the border to minimise the risk of exotic diseases entering New Zealand, industry is encouraged to develop an emergency response plan in case of disease outbreak.

**BE OUR EYES OUT THERE** As someone who is around the sea regularly, you are well placed to notice anything out of the ordinary. If you see any suspicious organisms:

- Take careful note of the location
- Take a sample if you can
- Immediately phone MAF Biosecurity New Zealand on the freephone: 0800 80 99 66



For more information on pests and their impacts, visit:  
[www.biosecurity.govt.nz](http://www.biosecurity.govt.nz)

October 2007