

# MANAGING BONAMIA OSTREAE – a flat oyster parasite

#### BACKGROUND

The parasite *Bonamia ostreae* was detected for the first time in New Zealand in early 2015. Overseas, infection with this parasite has been lethal for some flat oyster species.

It is not yet known how *Bonamia ostreae* would affect New Zealand's flat oyster (the Bluff or dredge oyster – *Tiostrea chilensis*) but it is thought that it would be similar to infection with *Bonamia exitiosa* – a closely related parasite that has been in New Zealand since the 1960s and which has impacted the Bluff oyster fishery in Southland.

To date, *Bonamia ostreae* is present in two farming operations and the wild in the Marlborough Sounds, including in scattered lowdensity populations in Queen Charlotte and Pelorus Sounds, and an aquaculture facility at the top of the South Island. MPI monitoring has not found it anywhere else, including New Zealand's key areas of flat oyster farming and harvest – Foveaux Strait, Otago,the Chatham Islands, and North Island. It is not known how it entered New Zealand.

Other bivalves, in particular Pacific oysters, green-lipped (Greenshell) mussels and geoduck are not susceptible to disease caused by *Bonamia ostreae*, but they may be able to carry the parasite and transmit it to flat oysters.

There is no human health impact from consuming oysters that may contain the parasite. The discovery of *Bonamia ostreae* in New Zealand does not raise any food safety concern. MPI's advice, to consumers here and internationally, is that fresh, good quality New Zealand oysters are safe to eat.

#### LOOKING OUT FOR BONAMIA OSTREAE

*Bonamia ostreae* is very difficult to recognise in wild or farmed oysters. Typically the only sign of infection is the occurrence of mass oyster deaths.

In general, signs of disease caused by this parasite, which can go undetected, are:

- » poor condition;
- » gills appear eroded;
- » yellow discolouration of the gills and mantle.

Farmers and harvesters observing these signs in flat oysters, or a mass mortality event, should report the situation immediately to MPI on the 24/7 Pests and Diseases Hotline: **0800 80 99 66**.

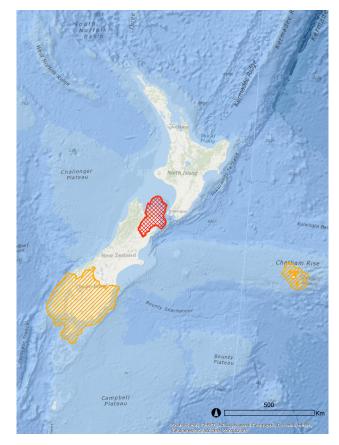
### www.mpi.govt.nz

#### PROTECTING NEW ZEALAND'S FLAT OYSTERS WITH MOVEMENT CONTROLS ON SHELLFISH STOCK

MPI has introduced measures to protect the wild flat oysters in Foveaux Strait, Otago and in the Chatham Islands from the introduction of *Bonamia ostreae*.

A Controlled Area Notice has been issued that legally restricts the movement of some shellfish species including their spat from the higher risk area of Marlborough/Nelson to Foveaux Strait and Stewart Island, Otago and the Chathams.

The notice also sets out a Contained Zone that takes in the region of Marlborough and the area within the boundaries of Nelson City and extends out to 12 nautical miles offshore. It also creates a Protected Zone that takes in two areas – the Southland/Otago regions and the Chatham Islands and out to 12 nautical miles from their coasts.



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#### THE CONTROLS

Land-based aquaculture facilities and marine farms within the Contained Area (Marlborough/Nelson) are subject to the controls outlined in the Notice. Marine farms and aquaculture facilities elsewhere in New Zealand may require permits to carry out some activities. The most stringent controls are on the movement of flat oysters.

The controls apply to the movement of certain bivalve species and spat to the waters of different regions.

The restrictions are set out in the matrix table below.

#### Shellfish from the Contained Zone (for human consumption):

- » Flat oysters (adults and spat, either farmed or fished) from within the Contained Zone are **not allowed to be transferred** anywhere else in New Zealand.
- » Flat oysters from the Contained Zone can only be transferred within the Contained Zone.
- » Pacific oysters, green-lipped mussels and geoduck (adults and spat) from the Contained Zone can only be transferred to the Protected Zone with a permit from MPI.
- » Pacific oysters, green-lipped mussels and geoduck require a permit from MPI, if they have not been fully processed for human consumption prior to leaving the Contained Zone.
- » Pacific oysters, green-lipped mussels and geoduck can be freely transferred within the Contained Zone.

## Movement of shellfish from areas of New Zealand outside of the Controlled Areas (not for human consumption):

» Flat oysters from areas of New Zealand outside of the Contained Zone cannot be transferred to the Protected Zone unless they have been fully processed for human consumption prior to arriving in the Protected Zone.

- » Flat oysters from the Protected Zone can be freely transferred to all other parts of New Zealand.
- » Pacific oysters, green-lipped mussels and geoduck can only be moved into the Protected Zone under permit from MPI (as below).Pacific oysters, green-lipped mussels and geoduck can be freely moved to other areas of New Zealand outside of the Protected Zone.

#### Shellfish from the Protected Zones (not for processing):

» Flat oysters, Pacific oysters, green-lipped mussels and geoduck (adults and spat) can be freely moved within Zones and anywhere else in New Zealand.

#### **OBTAINING PERMITS TO MOVE STOCK**

Permits are required to move Pacific oysters, green-lipped mussels and geoduck from inside the Contained Zone to anywhere else in New Zealand. Permits are also required to move the same species from anywhere in New Zealand into the Protected Zone.

Permits for these stock transfers can be obtained through the MPI website (as below), and are free of charge.

The permitting process is designed to be simple to use and provide a fast turnaround.

Full information about *Bonamia ostreae*, the Controlled Area Notice and permitting is at: www.biosecurity.govt.nz/pests/bonamia, and by contacting: bonamiapermit@mpi.govt.nz

Flat Oyster (Adult and spat)		Transfer TO		
Transfer FROM		Contained Zone (CZ)	Protected Zone (PZ)	Places outside both zones
	Contained Zone (CZ)	$\checkmark$	Unless processed for human consumption*	Unless processed for human consumption*
	Protected Zone (PZ)	$\checkmark$	$\checkmark$	$\checkmark$
	Places outside both zones	$\checkmark$	Unless processed for human consumption*	$\checkmark$
Pacific Oyster Green-lipped mussel Geoduck (Adult and spat)				
Transfer FROM	Contained Zone (CZ)	$\checkmark$	Permit application required unless processed for human consumption*	Permit application required unless processed for human consumption*
	Protected Zone (PZ)	$\checkmark$	$\checkmark$	$\checkmark$
	Places outside both zones	$\checkmark$	Permit application required unless processed for human consumption*	$\checkmark$

MATRIX SHOWING CONTROLS ON SHELLFISH TRANSFERS

\* Processed for human consumption means that the shellfish must have been fully processed for human consumption in the contained zone prior to leaving.

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