



Bonamia Ostreae response

This document provides a short summary of what the Ministry for Primary Industries (MPI) is doing as part of the response to manage the spread of the oyster parasite *Bonamia ostreae*, which was recently discovered on two farms in Big Glory Bay, Stewart Island.

We also provide information on assistance and support that may be of benefit to you. As the response changes over time, our approach may change, but we have made a commitment to provide support to Stewart Island and Marlborough flat oyster farmers and others on the ground.

What is *Bonamia ostreae*?

Bonamia ostreae is a parasite that can be fatal for flat oysters. It has been in New Zealand since 2015 in the Marlborough Sounds and Nelson. In May 2017, MPI detected it in farmed flat oysters in Big Glory Bay. This was the first time it had been found in another area of New Zealand.

Impacts of the disease

Experience from overseas and Marlborough shows that farms and wild oysters infected with *Bonamia ostreae* could see losses of 80% to 90% or more of oyster stocks within two years. Overseas oyster fisheries infected with *Bonamia ostreae* have never recovered to pre-disease levels.

What is happening?

MPI made the decision to require farmers to remove all flat oyster stocks from Big Glory Bay and Marlborough to reduce the risk of *Bonamia ostreae* spreading to the iconic wild Bluff oyster fisheries.

MPI, in partnership with the local councils, iwi and affected farmers, has developed a plan for managing *Bonamia ostreae* by depopulating the farms and removing structures from Big Glory Bay.

Rationale

In making this decision, we've needed to consider scientific information as well as the interests of flat oyster farmers in Big Glory Bay and Marlborough and those from the wild oyster fishery in Foveaux Strait and the communities they support.

Bonamia ostreae spreads by people moving infected oysters or by distribution of infective particles in the water. A dying flat oyster releases about 500 million infective particles that can survive for 48 hours in seawater. These infective particles infect more flat oysters, so reducing the numbers of particles in the water is critical to control of the infection.

Mapping of water flows shows that most water does not exit Big Glory Bay rapidly due to the tidal cycle, but circulates in the Bay for around 7-13 days.

Bonamia ostreae particles released by oysters in the Bay would accumulate in the water and numbers could be expected to get very high. It is likely that the vast majority of flat oysters in the Bay may have been exposed to *Bonamia ostreae* although signs of infection do not appear in flat oysters for several months.

Legal basis of the response

Bonamia ostreae is classed as an unwanted organism within New Zealand. MPI has served Notices' of Direction under the Biosecurity Act to the oyster farmers in Stewart Island and the Marlborough Sounds directing them to plan the removal and disposal of farmed oysters in Big Glory Bay and Marlborough.

The directions are issued in order to destroy and prevent the spread of *Bonamia ostreae*, in accordance with section 122 of the Biosecurity Act 1993. These directions are considered necessary to prevent the spread of *Bonamia ostreae* due to the high risks of continued spread of disease posed by having diseased oysters present in the water.

Sampling and testing of oysters

Since March 2016 MPI has conducted 6-monthly sampling and testing of farmed and wild oysters for *Bonamia ostreae*. This surveillance programme is designed to detect early infections, so that measures can be implemented to control spread of disease.

Wild oysters collected from Foveaux Strait in September 2016 and February 2017 were all negative for *Bonamia ostreae*. Previous testing of Foveaux Strait as far back as 2013 has not found any *Bonamia ostreae*, this gives us further confidence it is not present there.

Routine sampling of the Foveaux Strait fisheries is planned for September 2017. In addition to this, planning is underway for a one-off round of sampling of the Foveaux Strait oysters to be carried out as soon as possible.

Why we test 6-monthly

There is a 3 month period between infection and when the parasite is detectable. Testing every 6 months means we are confident that we will detect the parasite if it is present. We also test at times of the year when we know we are more likely to detect the parasite.

Testing at intervals of less than 6 months would increase the likelihood of uncertain results.

The presence of positive oysters in the May 2017 samples from Big Glory Bay farms suggests that our surveillance programme has been successful in detecting the disease at an early stage.

Sampling size

Big Glory Bay is considered, in scientific terms, to be an 'Epidemiological unit'. This means it is a confined area where the entire population is being treated as diseased.

Scientists around the world use standardised statistical formulas to decide how many samples to take for testing. These calculations are based around the biology of the disease and the way we know it appears in the animal. An adequate sample size helps ensure that the testing will produce reliable information.

In our 6-monthly surveillance programme we test samples from 150 oysters from different parts of Foveaux Strait, based on epidemiological calculations.

In response to the discovery in Big Glory bay, we sampled 300 oysters to get a good geographic spread. This is twice as many as epidemiological calculations suggest that we need to do.

Compensation

MPI can provide financial compensation for losses caused by response activities carried out under the Biosecurity Act 1993. The types of loss that can be eligible for compensation include verifiable losses arising from:

- Healthy oysters that are destroyed under MPI's direction; and/or
- Financial or business losses arising from MPI's activities.

Each situation will be different, and every claim has to be assessed on a case-by-case basis. MPI has established a dedicated compensation team to assess claims under section 162A of the Biosecurity Act.

Refer to the MPI website for the application form and guidance on the process and guidance for accessing compensation: <http://www.mpi.govt.nz/law-and-policy/legal-overviews/biosecurity/biosecurity-act-compensation/>

Welfare

Your welfare is important to us and we understand that you may be worried about the activities and impacts associated with the *Bonamia ostreae* response. We know stress and anxiety affects people differently, so early action is important in maintaining physical and emotional wellbeing.

If you are affected by the *Bonamia* response, there are a number of sources of information on how and where to access support and assistance. Some of these are listed below.

- Rural Support Trust: 0800-787-254 (www.rural-support.org.nz/)
- Work and Income www.workandincome.govt.nz
- Healthline: 0800 611 116 (available 24/7)
- Lifeline: 0800 111 757 (available 24/7)
- Depression Helpline: 0800 611 116 (available 24/7)
- Alcohol Drug helpline: 0800 787 797 or text 8691 (available 24/7)
- www.depression.org.nz
- www.moh.govt.nz
- Southern DHB Alcohol and Drug Service: 0800 44 33 66
- Southern DHB Community Mental Health: Invercargill: 0800 443366
- Your GP or Practice Nurse

Contacts

We have made a commitment to ensure we minimise the impact of any removal works on the community. We have established a field headquarters in Invercargill to provide support to Stewart Island farmers and others on the ground. If you have any questions or need more advice from us, please contact the MPI *Bonamia* Response Liaison Team - bonamialiaison@mpi.govt.nz

Links

MPI *Bonamia* information page: Information on *Bonamia* and its management
www.mpi.govt.nz/bonamia-ostreae/

Compensation: Refer to the MPI website for the application form and some more guidance: www.mpi.govt.nz/law-and-policy/legal-overviews/biosecurity/biosecurity-act-compensation

Rural Support Trust: may be able to provide information on where to seek further assistance on 0800-787-254 (www.rural-support.org.nz)

www.mpi.govt.nz

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