



# The Bluff oyster fishery

The Bluff oyster fishery is one of New Zealand's oldest and most iconic fisheries. Oysters were first harvested from Foveaux Strait in the 1870s.

The fishery is managed by the Foveaux Strait Oyster Fisheries Management Group which represents Bluff oyster skippers, the Bluff Oyster Management Company (quota owners, fishing companies and processors), customary fishers, recreational fishers and the Ministry for Primary Industries (MPI). The management group receives science support from the National Institute of Water and Atmospheric Research (NIWA).

The management group work together to make decisions based on information from NIWA and industry research. The Bluff oyster fishery operates under a Fisheries Management Plan, which is informed by a supporting research plan (see links below for more information). Research results are reviewed annually by a panel of independent experts.

NIWA and the oyster industry undertake annual surveys to provide up-to-date information on the status of the oyster population and the effects caused by the oyster disease bonamia.

Bonamia is a recurrent problem in the fishery, but little is known about what causes the large disease events or when these events are likely to occur.

Bonamia is not harmful to people or animals, but it kills up to 500 million legal-sized oysters each year during disease events and up to 100 million during times of low disease infection.

NIWA and a molecular diagnostic company called *dnature* have developed a test to detect small amounts of bonamia in oysters. This test makes it cheaper to test large numbers of oysters to monitor the disease. The test allows bonamia to be detected in a bed before it's properly established and severely affects oysters.

This new research will provide the oyster industry with an opportunity to target areas vulnerable to disease earlier and leave unaffected areas to grow. Predicting large disease events early will help the oyster industry minimise the loss of oysters, reducing potential economic losses. This strategy would also mean that there would be fewer infected oysters releasing the disease into the water, which could then affect healthy beds.



Most of the skippers of the 11 oyster fishing boats in Foveaux Strait are from fishing families that have fished for oysters for many generations. The skippers' knowledge, together with the information from research, helps protect the oyster population for future generations.

The oyster population is rebuilding from a low point in 2005. Numbers of legal-sized oysters have increased from 408 million in 2005, to 720 million in 2009, to 918 million in 2012.

Up to 12 million oysters are harvested each year (the oyster season begins 1 March and closes 31 August), which represents just over one per cent of the legal-sized population. In contrast, bonamia kills around 10 per cent each year.

The oyster industry review pre-season survey information and research before each oyster season to establish an initial harvest level. Skippers meet early in the season to discuss whether their catch observations match the survey results – and they consistently do. Any changes to harvest limits are discussed by the wider management group.

Because there is a long history of research on Bluff oysters, providing a good time series of information, NIWA has been able to reliably predict future trends in the oyster population.

NIWA, the oyster industry and MPI undertake a number of other programmes including to:

- develop tools to better detect disease in oysters, and understand bonamia and its interaction with the oyster population
- monitor the abundance of newly settled, small oysters to help predict future trends in the commercial fishery
- record extensive and detailed information from the fishery in a fishers' logbook programme
- investigate what drives oyster production in different regions of the fishery
- develop methods to enhance the oyster population, if required, during disease events
- improve dredge performance and fishing procedures, because oysters can only be harvested by dredging.

## For more information

<http://fs.fish.govt.nz/Doc/21818/Foveaux%20Strait%20Dredge%20Oyster%20Fisheries%20Plan%20-%20May%202009.pdf.ashx>

[http://fs.fish.govt.nz/Doc/22297/10\\_20\\_FAR.pdf.ashx](http://fs.fish.govt.nz/Doc/22297/10_20_FAR.pdf.ashx)

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