

RED ROCK LOBSTER FISHERIES:

Managing an uncertain future



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INTRODUCTION

Lobster is synonymous with up market eateries and lavish celebrations. In restaurants around the world, New Zealand's spiny red rock lobster can set you back \$US100 or more. This end of line cost—it's our third biggest seafood export earner—indicates the importance of rock lobster fisheries to our economy.

But fine dining and economics is not the whole red rock lobster story. Koura, kēkēwai or kēwai (rock lobster), is taonga to many hapū who have fished, feasted, gifted, traded and protected this treasured species since arriving and settling in Aotearoa, New Zealand.

Widely considered a delicacy by New Zealanders, the brightly coloured rock lobster is also highly sought after by those that fish recreationally for food and for fun.

THE CHALLENGE

Being so prized comes with its own set of problems. One of the key problems in managing rock lobster fisheries is trying to meet the expectations of all stakeholders.

"New Zealanders are passionate about their rock lobsters," says Alicia McKinnon a Fisheries Analyst at MFish, who works closely with fishing groups such as the National Rock Lobster Management Group and the CRA 3 (Gisborne) Rock Lobster Multi-Stakeholder Forum. "Sometimes passion creates conflict but at other times it can create a shared commitment to building a healthy fishery," she says.

Key to this challenge is recognising that rock lobster populations fluctuate with changes in their environment. "What that means in simple terms is you can set a catch limit one year that is sustainable, but it may not be sustainable the following year because changing environmental conditions may have reduced the survival rates of juvenile lobsters or affected lobster growth," says Alicia.

Water temperature, currents, extreme weather events and sedimentation are all considered significant environmental factors, but how these factors impact on rock lobster fisheries is still largely unknown. What is clear to stakeholders is that monitoring rock lobster fisheries and responding to observed changes quickly is essential.

Today, rock lobster fisheries are monitored using a variety of tools including: catch and effort landing forms submitted by commercial fishers; industry logbooks and observer catch sampling programmes; rock lobster tagging programmes; and lobster larval settlement programmes. Specific research on stocks is also conducted at times.

CRA 8: WHEN IT WORKS

The country's largest rock lobster fishery, CRA 8, is in Southland. Like many other rock lobster fisheries, CRA 8 has seen its highs and lows. In the 1950's annual commercial catches peaked at

Early application of the management procedure led to decreases in commercial catch limits, with commercial catches reaching a low of 568 tonnes in 2001. These cuts worked and the fishery began to rebuild. As a result, catch limits were able to be increased, as guided by the management procedure, in 2004, 2006, and 2008.

Many fishers believe the rebuild of CRA 8 has been assisted by nature, in the form of good conditions for juvenile settlement and survival. If good conditions don't last, the current CRA 8 management procedure is designed to respond quickly so that a robust fishery can be maintained for all stakeholders.



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around 3,500 tonnes but this could not be sustained and by the late 1980's the fishery was depleted.

In 1990, a Quota Management System was applied to rock lobster and an annual commercial catch limit of 1,152 tonnes was set. The fishery continued to decline and the commercial catch limit was reduced further in the subsequent three years in an effort to halt the decline.

In 1996, the National Rock Lobster Management Group (a multi-sector group including customary, recreational and commercial fishers as well as representatives from MFish and environmental interests) proposed using a management procedure to focus efforts on rebuilding CRA 8 and the neighbouring CRA 7 (Otago) fishery. Management procedures monitor agreed fishery indicators and stipulate what action will be taken when the indicators change.

"The great thing about management procedures is that they make everyone take a long term view," says Alicia.

"They are easily understood so everyone can be involved in setting the target and they give certainty about what is going to happen."

A SPREADING STORY

Further north in Gisborne, a much smaller fishery, CRA 3, has also seen its highs and lows. The CRA 3 Forum, assisted by MFish, has been looking at tools to develop a healthier, more robust fishery that can meet the reasonable needs of its stakeholders. Recognising they have little ability to control the environment, but still the need to respond quickly when environmental changes impact their fishery, the Forum sees management procedures as having a vital role in future management of the fishery.

In other rock lobster fisheries, management procedures have been adopted by industry to guide voluntary catch reductions. Catch rates are a significant component of industry profitability. Management procedures adopted by industry therefore frequently focus on maintaining rock lobster abundance at levels that deliver high catch rates and greater profitability. These kinds of management procedures are currently being used by industry in CRA 4 (Wairarapa/Hawkes Bay) and CRA 5 (Canterbury/Marlborough).

