Hard-hit rock lobster fishery looks for relief

A request by the New Zealand Rock Lobster Industry Council for approval to carry over uncaught quota into the next fishing year is being considered by Government.

The sudden emergence of the highly contagious coronavirus in China could not have occurred at a worse time – the eve of Chinese New Year when demand and prices can be at a premium.

There is provision in the Fisheries Act for up to 10 percent carry over of uncaught Annual Catch Entitlement (ACE) into the next fishing year but this does not apply to lobster stocks.

Fisheries Minister Stuart Nash won praise last week in being quick to agree to allow some of the 150 to 180 tonnes of live rock lobster held in pots and tanks on sea and on land to be returned to the wild before they deteriorate in quality and value.

However, there is little point in returning lobsters to the sea without the opportunity to catch and land them for sale at a future date.

The alternative is to sell them for whatever market return is achievable.

“Carry forward does not cause any sustainability issues,” NZ Rock Lobster Industry Council chief executive Mark Edwards submitted.

“The stock assessments tell us the commercial catch that can be harvested to meet the management targets and there is no issue created by taking the uncaught entitlement in the next fishing year.”

An early decision is hoped for to remove uncertainty.

The New Zealand rock lobster fishery is divided into nine management areas, with a loss of catching rights affecting 144 ACE holders.

There were about 470 tonnes still to be caught by the end of the cray fishing year on March 31 as at January 1.

Rock lobster, more commonly called crayfish in this country, are the centre of seafood attention but the much smaller live pāua trade to China has also stalled.

The wider economy is being hit by a sharp downturn in log and meat exports, in tourism and education and all sorts of goods and products, from cherries to reusable nappies.

Even so, the Reserve Bank under Governor Adrian Orr remains positive in its economic projections.

While the virus is undoubtedly serious, and is still spreading, there is a hysterical edge to the media coverage and public reaction.

There needs to be some perspective here.

An average 88,100 Chinese died annually from influenza-related illness in the five years to 2015, according to an analysis of Chinese Center for Disease Control and Prevention figures.

That is not a misprint – that is eighty eight thousand mortalities.

In the current flu season in the United States, 19 million have been sickened and 10,000 have died, according to the Centers for Disease Control and Prevention.

In this country, about 800 people die every year from influenza and pneumonia.

It is difficult to assess the true picture in authoritarian China but reports are the disease contraction has stabilised, with the number of deaths at around 1300.

America's National Fisheries Institute has reassured the public the virus is not related to seafood and does not come from seafood.

Halted seafood sales to China are unrelated to public health.

Neither is there any evidence that the coronavirus has been associated with goods imported from China.

Meanwhile the Aussies have a novel approach to boosting sales in the wake of summer bushfires and coronavirus.

Seafood Industry Australia is urging consumers on Valentine's Day today to "say it with seafood" to improve their love life.

"A recent study has shown couples are 39 percent more likely to be intimate on days when they have both eaten seafood," SIA chief executive Jane Lovell claimed.

"A dozen oysters or a posy of pippies would make the perfect present, and who wouldn't want a leatherjacket?"

She might have added you would be cray-zee not to take advantage of more product on the domestic market.

A rock lobster special at Hawke's Bay's Takitimu Seafoods.

Seaweed-mussel combo eyes up health market

Developing a New Zealand Greenshell mussel (GSM) health product using the invasive species wakame, will be the focus of new research.

The High Value Nutrition National Science Challenge has granted $803,000 to AUT University professor Jun Lu, to extract fucoidan, a compound found in seaweed and combine it with the bioactive properties of GSMs.

Lu will be looking to use the extract to supplement the purported anti-inflammatory and metabolic health benefits of Greenshell mussels, then trialling the product's efficacy on Chinese subjects with joint pain and diabetes.

Researchers will also explore whether the mussel-fucoidan combination has benefits for immune stimulation and glycaemic control.

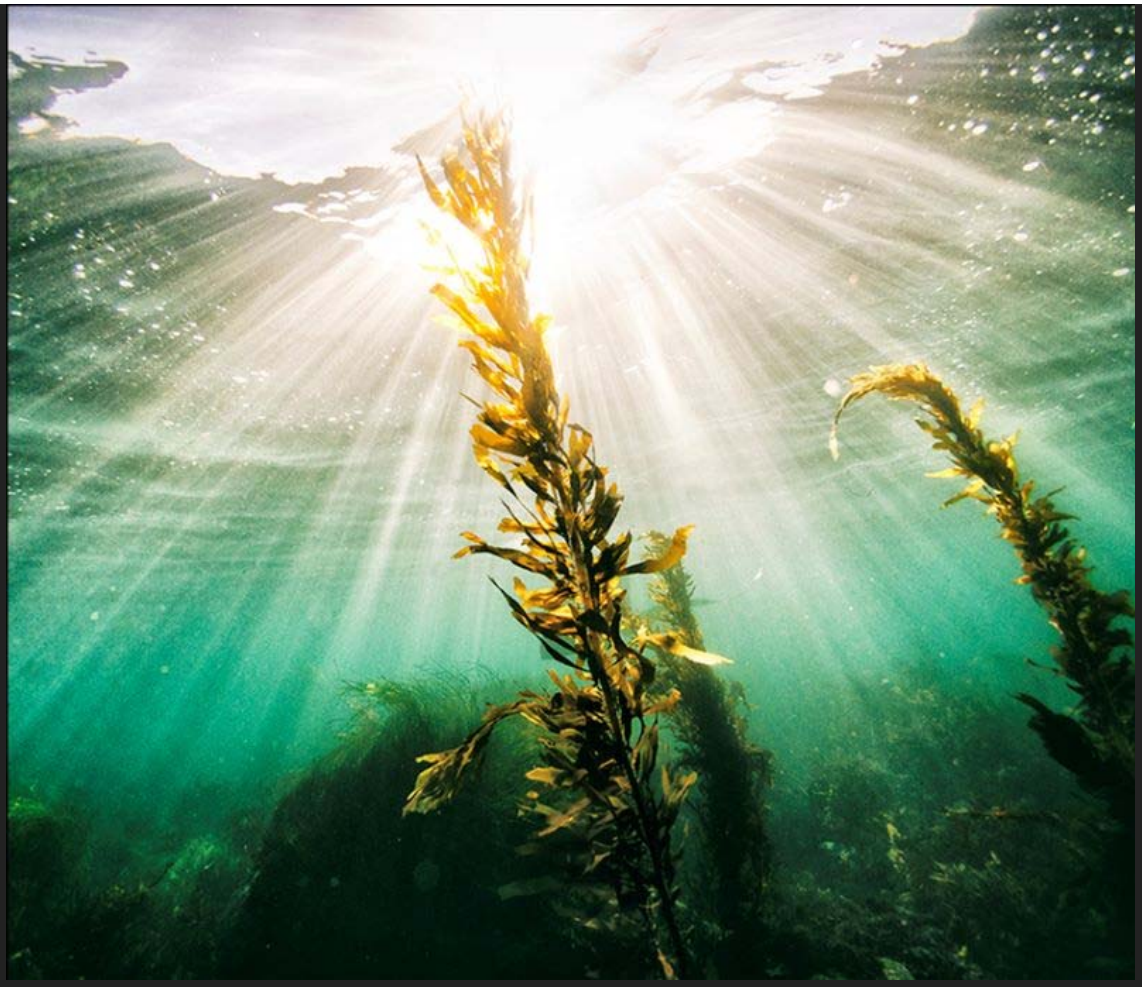
"The planned clinical trial will put us in the forefront of the science of mussel-fucoidan combinations in creating high-value foods for health, and to provide validated health claims for the product and the industry," Lu said.

Wakame is currently classed as an unwanted organism under the Biosecurity Act 1993, however its compounds have the potential to fulfil the growing demand for food products with combined active ingredients, especially in markets like China.

"Successful development of a mussel-fucoidan product will not only add value to mussel export but also add value to seafood exports with the addition of fucoidan to the industry."

HVNN director Joanna Todd expects the research to particularly benefit awareness and demand of New Zealand products in export markets.

"This HVN project will create an opportunity for Asian consumers to know and accept New Zealand Greenshell mussel plus fucoidan as a high-value food," Todd said.



Policing fish farm compliance with DNA

Policing the environmental compliance of salmon farms could become cheaper and faster thanks to Cawthron's new test using bacterial DNA, *Stuff* reported.

Analysing seabed samples from beneath fish farms by their bacterial DNA and not by hand, will cut the cost of environmental monitoring in half and shorten processing times from five months to four weeks.

Monitoring results will help determine if farms in the Marlborough Sounds are sticking to best management practice guidelines laid down by the Government and Marlborough District Council.

Cawthron marine phylogeneticist Xavier Pochon told the council last week that bacterial testing could be a promising alternative, or complementary method to traditional testing, and one that could be immediately integrated.

Current salmon farm monitoring involves taking samples from several points beneath a farm in the late spring, then identifying and counting invertebrates. Results were reported back in early autumn, several months later, as identifying invertebrates caused a "major bottleneck".

Pochon said tested environments could have changed during the "time lag", making it difficult for the council to be sure if steps to remedy problems were still necessary or appropriate.

Cawthron's new testing method screens the environment by extracting the DNA of fish farm samples and comparing them to a database of micro-organisms, allowing researchers to see what they have found.

Bacteria had the strongest relationship with seabed enrichment, Pochon said.

"The simple fact that we can analyse hundreds of samples in the same round is quite fascinating, because you can really reduce the cost [and] reduce the turnaround time, effectively."

The study was done alongside traditional methods for comparison. Researchers found DNA testing was "very effective" in capturing environment changes.

Results were presented to the Marlborough District Council in 2017 and to the Benthic Standards Working Group in 2018. The group recommended a study on seven years' worth of samples from nine salmon farms be run to ensure the new method was "robust". This included samples from two Queen Charlotte Sound farms, two Tory Channel farms and two Pelorus Sound farms.

The method was found to be affordable and versatile, but still had to be accepted by the working group.

If approved, it is suggested the council adopt a transition period where both the traditional monitoring method and new bacterial DNA method could be analysed in parallel.

News

The 2020 South Pacific Regional Fisheries Management Organisation meeting is being held in Vanuatu from February 14-18, where key rules relevant to the New Zealand bottom trawling industry and the protection of deep sea life will be decided. A full briefing of the issues under discussion can be viewed here.

Fisheries New Zealand has launched an online portal of maps of New Zealand fisheries, including commercial fishing, customary fisheries and marine protected areas. The portal allows public access to data relating to the commercial fishing regulations. Updated data sets include coordinates for fisheries management areas, general statistical areas, and quota management areas. The portal also has regulation information on current:

- Commercial fishing regulations (including closed seamount areas and PSH 71A approvals)
- Benthic protection areas
- Fishery notices (including temporary closures that are not S186 closures)
- Marine reserves Type 1

- Marine mammal sanctuary (one area closed for set netting)
- Ministerial decisions
- Submarine cables and pipeline protection zones.

Data sets can be downloaded in several formats, such as Shapefile, KML, CSV and others. All data sets include full metadata.

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