Gathering ban could thwart giant kelp opportunities

Giant kelp (Macrocystis pyrifera) is the fastest growing and most prolific of all plant species found on Earth.

That is according to prominent international biologists David Schiel and Michael Foster.

In addition to a fast growth rate, up to 50cm per day, and an adult size of up to 60 metres, giant kelp produces millions of spores that are capable of colonising rocky substrate in a range of conditions, becoming reproductive in less than a year.

It is a wonder plant, also known as bladder kelp, that was introduced to New Zealand's Quota Management System (QMS) in 2010.

Since that time, Roger Beattie's NZ Kelp has harvested 400 tonnes, largely in Akaroa harbour.

Only the canopy section is taken, cut to a maximum depth of 1.2 metres, with no decline in the health of the kelp forests.

Harvesting of giant kelp along the Californian coastline has been sustainable since the early 1900s. It reached a peak in World War I when 400,000 tonnes were taken to produce potash for gunpowder.

In this country it is prized by organic food producers selling dried vegetable products, as a stock feed supplement and as a crop spray that raises brix (sugar) levels and inhibits insects and disease.

Beattie believes a proposed South East Marine Protection Forum from Timaru to Waipapa Point in Southland and a smaller 20-km taiapure centred on Waikouaiti north of Dunedin

that would ban kelp gathering are tantamount to theft of quota and is gearing up for legal action.

He is critical of a lack of consultation and a lack of understanding of the properties of seaweed.

Giant kelp is a giant opportunity, he says.

He has invested heavily, doubling his staff to four, buying a new cutter, importing a new dryer and buying a new vessel.

He expects to double production next year, provided he retains access, and double it again in 2021.

Most harvesting occurs in spring before the usual summer die back.

“We’re having no problem selling,” he says.

“We also sell to dog food manufacturers and that market is going flat out.

“They want the human grade product, despite it being twice as expensive as the animal grade.

“People are willing to spend a lot of money on their pets.”

The premium grade Valere product sells for between $40 and $74 a kilo.

Giant kelp has the highest iodine content of any plant, a mineral deficient in New Zealand soils.

It is also high in alginates, a group of chemical compounds used as thickeners and gels, found in toothpastes, ice cream and pharmaceuticals.

Beattie, who farms Pitt Island wild sheep on two Banks Peninsula properties, was a giant kelp pioneer, co-funding with the Foundation for Research and Technology the country’s largest kelp harvesting research project, which led to the current commercial production.

“Applying kelp to soils improves its health, increases the production per hectare and improves the resilience,” he says.

Tests with a variety of crops, including brassicas, carrots, barley, onions and beet, have shown sharp increases in yield.

“Global demand for seaweed is rising and with New Zealand’s isolated geography, relatively clean waters and world class QMS, we are in the prime position to capitalise on this opportunity,” Beattie says.

“The number of products is expanding and sales are increasing, providing sustainable eco-friendly products to a multitude of end users, whilst also providing valuable employment and income for New Zealanders.

“An unthinking banning of giant kelp harvesting will put a stop to that.”

MBIE project sets sights on zero-carbon aquaculture

Applying data science to aquaculture with the goal of producing a zero-carbon protein is one of the latest projects to receive Ministry of Business, Innovation and Employment funding.

The $13 million project is a collaboration between Victoria University of Wellington, Cawthron, Plant & Food Research and University of Otago.

Artificial intelligence, machine learning techniques and data science tools will be developed for the aquaculture industry, with the aim of enabling more efficient, large-scale growth of high quality, low carbon protein.

Optimising the farming and capacity of Greenshell mussel and finfish farms will be the initial focus.

“Collecting and incorporating various types of data through this project will unlock significant advantages for the aquaculture industry,” said project leader professor Mengjie Zhang.

“Farm managers can use these data to drive decision-making when responding to climate challenges, managing disease, improving production yields and farming sustainability at scale.”

Building Maori capacity in data science will also be a core focus of the project.

“Maori own significant aquaculture assets but are under-represented in the field of data science,” Zhang said. “Our intention is to help produce the next generation of Maori graduates capable of leading the technology development needed to scale up the industry.”

Long-term, the project is hoped to increase the capacity of data science in New Zealand aquaculture.

Ullapool fishers celebrate Christmas with creel tree

A village on the shores of a west Highlands sea loch in Scotland is celebrating Christmas with a 9-metre "tree" built entirely from fishing gear.

The tree, made from creels used for catching shellfish, has become a tradition in Ullapool since it was first constructed in 2016.

This year's harbour-side decoration is comprised of 340 creels.

The creel tree has become a tradition since its inception in 2016. Photo; Jane Barlow, PA Wire.

News

Forest & Bird is seeking a judicial review of current catch limits on tarakihi, *Radio NZ* reported. The group believe Fisheries Minister Stuart Nash was wrongly advised when setting the current commercial fishing limits for the species. The issue arose when Nash cut the commercial catch limit for tarakihi by 10 percent in September, following a 20 percent cut earlier in the year - a decision he said was supported by scientific evidence that the number of such fish off the East Coast was low. "Tarakihi is an important fishery to a lot of communities and we need to allow it to rebuild," he said. "Further reductions may be introduced if industry are not able to deliver on commitments." Forest & Bird want to challenge Nash's decision in court, saying tarakihi had been fished to only 15 percent of its natural prevalence and that its commercial catch limit does not meet the legal requirement under the Fisheries Act.

Fisheries New Zealand has begun consultation on proposed changes to catch settings for rock lobster and scallops for the new fishing year, beginning 1 April 2020. As part of the April 2020 sustainability round, feedback is sought on the following proposals:

- In Northland (CRA 1) and Gisborne (CRA 3) rock lobster fisheries, it is proposed that catch limits are decreased, while in Hawke's Bay/Wellington (CRA 4), Otago (CRA 7) and Southland (CRA 8) it is proposed that catch limits increase
- For scallops in Northland (SCA 1) it is proposed that the catch limit is decreased
- Deemed value rate reviews for a number of stocks
- Annual catch entitlements for the following stocks; rubyfish in Southland and the Sub-Antarctic (RBY 5, RBY 6), trumpeter in the North West of the North Island and

the Sub-Antarctic (TRU 6, TRU 9), white warehou in the North West of the North Island (WWA 9), and yellow-eyed mullet in Southland (YEM 5)

For more information on the proposal visit Fisheries New Zealand's website.

Submissions close 5pm, 5 February 2020.

Merry Fishmas

Wishing you a very fishy Christmas and a happy and prosperous new year, from the team at Seafood New Zealand.

Update will take a break and resume in late January.

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