



# THE UPDATE

Captain's Blog



## Seafood industry committed to seabird protection

New Zealand waters are seabird central.

Of an estimated 346 seabird species, almost half live at some time in our 200-mile Exclusive Economic Zone, the world's fourth largest.

More than a quarter of all those seabird species breed in New Zealand and over one third of those breed nowhere else.

That represents millions of birds.

Many of those species' foraging and breeding overlap with commercial fishing activities.

The challenge is to keep the seabirds safe whilst sustainably harvesting the oceans' bounty.

That is what the joint Fisheries New Zealand/Department of Conservation National Plan of Action – Seabirds 2020 aims to do.

The proposed plan, the third iteration since the inaugural plan in 2004, is open for consultation.

The 2020 seabirds vision is that New Zealand strives for no fishing-related seabird captures, a goal that is fully supported by the seafood industry.

The plan will be in place for five years and will be reviewed annually.

It has four aims:

- Avoiding bycatch – effective bycatch mitigation practices are implemented in New Zealand fisheries
- Healthy seabird populations – direct effects of New Zealand fishing don't threaten seabird populations
- Research and information – information to effectively manage fisheries' impacts on seabirds is continuously improved
- International engagement – New Zealand actively engages internationally to promote the use of measures that reduce impacts on New Zealand seabirds

A life on the wing at sea is hard.

There are many threats in addition to interactions with fisheries.

The plan lists these as including predators, disease, fire, weeds, loss of nesting habitat, competition for nest sites, coastal development, human disturbance, commercial and cultural harvesting, volcanic eruptions, pollution, plastic and marine debris, oil spills and exploration, heavy metals or chemical contaminants and global sea and air temperature changes.

Reducing fishing's impact on the marine environment and its creatures remains a strong focus. Seabirds have been to the fore, with vessels routinely using tori lines to scare birds away from longline hooks, setting at night when seabirds are less active and using weighted hooks and lines that sink faster than the birds can target the bait.

An innovation now being trialled is a collaboration between the industry and the Department of Conservation. It is a 'wet tag' which is attached to fishing gear and electronically records, and reports in real time the sink rate and depth of the fishing gear in the water. It is hoped this information will reduce seabird interactions by maximising depth and speed of the deployment of the lines and hooks.

Young skippers around the country are also being trained to be 'seabird smart' with workshops and visits to petrel and albatross colonies to learn about the seabird chicks in their own environment and help the scientists. They are coming back much more aware of seabirds on the water and much more engaged in keeping them safe.

Some of that innovative work was recognised at the Seabird Smart Awards presented by Conservation Minister Eugenie Sage and Fisheries Minister Stuart Nash at Te Papa in October.

The awards are initiated by the Southern Seabirds Solutions Trust, of which the seafood industry is a partner and strong supporter.

The trust continues to work with the industry on solutions to address the disappearance of some of our endemic birds, albatrosses in particular, in international waters as they migrate out of our EEZ by liaising with foreign fishing fleets and governments.

The industry is committed to a pathway to zero harm and seabird captures have been steadily falling, a fact acknowledged in this year's Ministry for the Environment/Statistics NZ Aotearoa environmental stocktake.

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## New mussel harvester set to arrive in Nelson

A 30-metre mussel harvester will soon hit Nelson waters after a 12-month long build.

Custom-made for Greenshell mussel farm and nutraceutical company MacLab, *Vanguard* will be used to seed and check the lines on mussel farms as they grow, then harvest and bag the mussels, bringing them back to port for processing.

Whanganui based boat building company Q-West were tasked with the build, a project that managing director Myles Fothergill says was important to get right for both their business and the region's economy.

“The marine industry is a \$1.8 billion industry and the two largest sectors of that are commercial workboats, which we do,” Fothergill said.

“They’re both significant growth sectors, so Whanganui is poised to benefit hugely out of what we’re doing.”

Construction began earlier this year, with Q-west opting to build the hull upside down for easier welding, framing and installation of plating. It took four cranes to flip the hull once assembly finished in June.

Now complete, *Vanguard* boasts state-of-the-art harvesting equipment, a 12,000 litre fuel capacity and is capable of harvesting up to 70 tonnes of mussels per day. The vessel's design is also well suited to handling the challenging open-water conditions in Golden and Tasman Bays.

MacLab and Q-West will be completing a number of sea and operational trials in Whanganui Port this week before the harvester travels to its new home, at MacLab's headquarters in Nelson.



MacLab's new 30-metre mussel harvester, *Vanguard*. Photo; Q-West.

## Demystifying what happens at sea

Hawke's Bay commercial fisherman Karl Warr wants the public to see the job for what it is.

He's installed a camera on board his boat to [live stream](#) his fishing activities to the world.

Even his bycatch, the species he doesn't intend to take, will be seen.

It's a risk he is willing to take, he says.

"Personally it's about, you know, showing the provenance of the product to our customers so rather than me tell them how it is, it's right there on film to have a look yourself.

"There has to be some discomfort at being asked to see things differently or explore different aspects."

Government-funded cameras are still being rolled out to fishing boats in Maui dolphin habitats, but the World Wide Fund (WWF) are calling for them to be installed on all commercial fishing vessels.

"We believe you need to have a certain amount of monitoring on board to ensure everyone is engaged in sustainable practices and ethical practices and that there's a level playing field for fishermen," said WWF senior fisheries programme officer Bubba Cook.

Fisheries Inshore chief executive Jeremy Helson said cameras are currently too costly, but isn't shutting down the idea completely.

"It's a new technology, it will get cheaper but I think we need to be a bit more measured to where we apply them in the first instance," he said.

"I think it demystifies what happens at sea, I think it's pretty misunderstood what goes on over the horizon."

Warr wants more fishermen to take up his approach.

"I'd just like it to get some air and an opportunity to explore what it could be as an asset for our nation and our brand overseas."



Karl Warr of Better Fishing has decided to live stream his fishing, citing transparency as the future of his operation. Photo; Dan Henry

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## **Ocean Bounty season three - Oysters**

This week on Ocean Bounty, host Graeme Sinclair looks at Waiheke's Te Matuku farmed oysters, following their journey from Cawthron Institute in Nelson, to the table. They are the product of science and superb husbandry, and are a truly succulent delicacy. Sir Rob Fenwick encapsulates the oyster story and explains why aquaculture is so important in New Zealand.

Tune in this Sunday, 5pm on TV Three, for the final episode of the season.





## News

Fisheries New Zealand has announced new regulations that will ban pāua fishing on a stretch of beaches north of Dunedin, *Otago Daily Times* reported. The [new regulations](#) will close all recreational and commercial pāua fishing within the East Otago Taiāpure. From December 12, it will be an offence to take or possess pāua within the taiāpure, with the use of set-nets, cutting attached kelp, and the filleting of fish at sea, also prohibited in this area. Ministry for Primary Industries manager of inshore fisheries Andrew Bell said the changes were recommended by the East Otago Taiāpure management committee to improve fisheries within the taiāpure. "This is a popular fishing area for the community and public feedback supports these changes. We are pleased to be able to support the efforts of the committee to ensure a sustainable fishery for future generations," Bell said. Along with the regulations, control of invasive marine pests and the pāua re-seeding programmes would also continue, with the end goal being to re-open the fishery once the population has recovered.

Artificial Intelligence, solar power and turning greenshell mussels into a "premium product" were some of the potential initiatives that were touted for boosting Marlborough aquaculture at the annual Smart + Connected aquaculture forum last week, *Stuff* reported. iGenerate regional sales manager Ryan Pigou said aquaculture companies had huge areas of roof space which could be used to generate solar power, lowering costs and reducing emissions. "The sun is not going to raise its prices," he told about 60 scientists, industry members, community members and Marlborough District Council staff at the forum. He said there were already 22 solar-powered workplaces in Marlborough. At the forum, Wakatū research and business development manager Andy Elliot said the Government's new target of \$3b by 2035 could be accomplished by "re-positioning" greenshell mussels as a premium product. A working group would look at ways to triple greenshell mussel returns to become a \$1b industry and a strategy would be presented to next year's Aquaculture NZ conference. Nelson Artificial Intelligence Institute director Brian

Russell led a workshop at the forum about using AI to monitor the retention of retain mussel spat (juvenile mussels). Many spat were lost before they could fully grow. AI could help farmers get a better understanding of the ocean's climate, environmental conditions, food supply and the effects of climate change which could all affect spat, he said. NIWA's principal scientist for ecosystem modelling Dr Niall Broekhuizen emphasised that climate warming and the associated ocean acidification and rising sea levels would present challenges for aquaculture. NIWA was putting a project together to measure the threats and problems so the industry could develop well-informed adaptation strategies, he said. Smart + Connected Aquaculture was also creating a video to promote careers and recruitment across the aquaculture industry, including a workshop that could educate marine farmers to reduce their use of plastic. The group's value and innovation working group chairman, Zane Charman, said there would be another meeting next week to discuss the issue further.

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