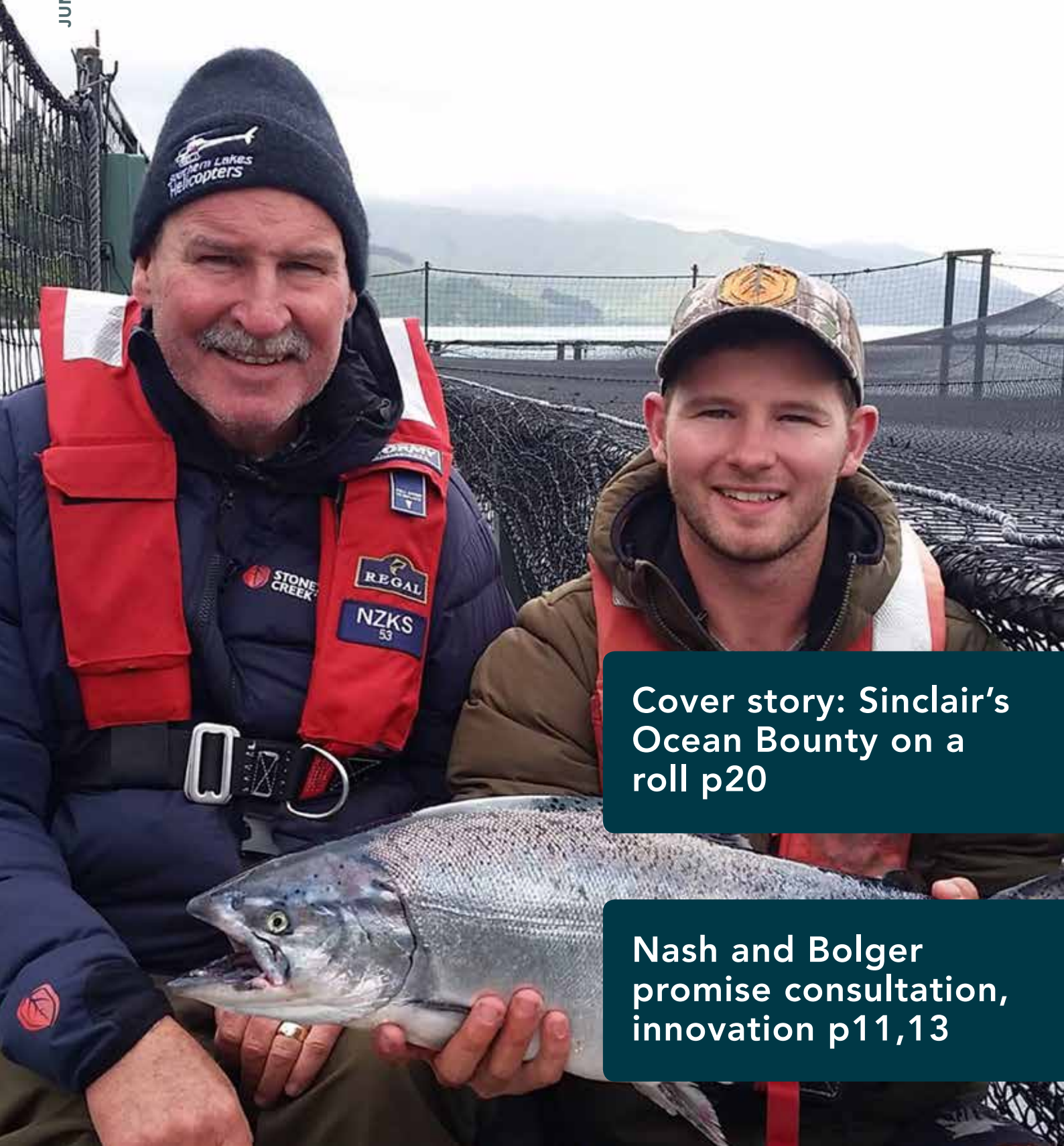


Seafood

NEW ZEALAND



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Ocean Bounty on a
roll p20**

**Nash and Bolger
promise consultation,
innovation p11,13**

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EDITORIALS

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In this issue

It might not have made much of a mark in the mainstream media but the launch of Fisheries New Zealand last month was a significant moment in the history of the seafood industry. The Government's decision to return fisheries to a stand-alone portfolio - albeit with its business unit staying under the MPI umbrella - has created the opportunity to give our industry the attention and support it deserves as a vital part of this country's economy and a major employer.

The day after the platitudinous parliamentary function, Fisheries Minister Stuart Nash and Fisheries NZ head Dan Bolger separately sat down with Seafood NZ editor Bill Moore to set out their views on what they hope to achieve, and to answer questions on some specific issues that are front of mind for us. Both say they are committed to a much more open, consultative and innovative approach. While the proof is yet to come, it's a good start.

Our cover story features the indefatigable Graeme Sinclair talking about series two of Ocean Bounty, the informative and often revealing show he and his small, family-oriented team are making with industry support. As in the popular first series, Sinclair is opening windows on fishing and aquaculture that are usually closed to the public. He is right to suggest that those who criticise this departure from his long and successful Gone Fishin' career ought to watch Ocean Bounty before knocking it.

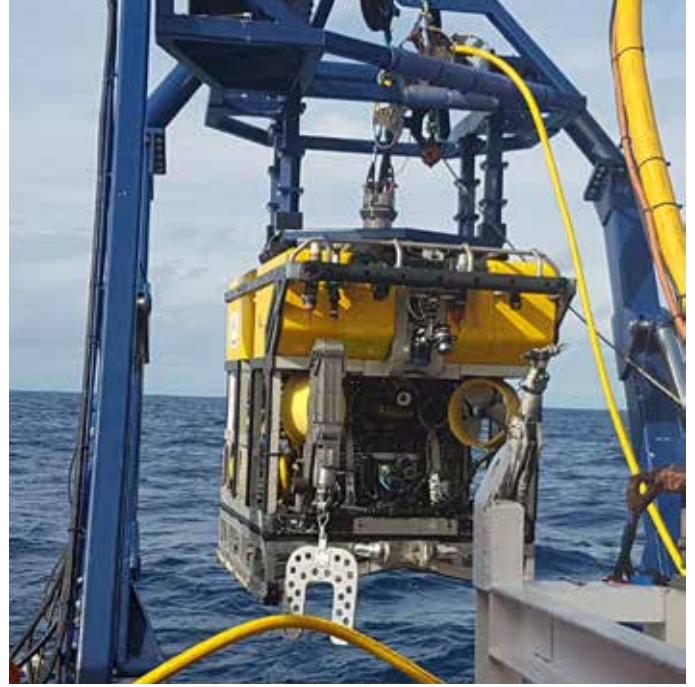
We also have an in-depth explanation of New Zealand set-netting by Fisheries Inshore New Zealand policy analyst Tom Clark, the story of an Australian crab fisherman pioneering the use of diesel-electric engines on a new boat, and a strong opinion piece from Paua Industry Council chairman Storm Stanley, who reckons the Government should have stepped in to properly regulate the cage-diving game long ago.

There's a lot more in this issue and the highlight for many readers will be Chris Carey's feature on the life and times of Ron Threadwell, who got his start fishing 70 years ago and is still involved in the industry. Ron is another of those great characters whose stories make fascinating reading.

Tim Pankhurst
Chief Executive



A close-up view of an HVDC cable on the Cook Strait seabed. Cables are sheathed in thick insulation as well as layers of protection against water ingress, water pressure, shipworms, and coiling. The outer layer is a mix of polypropylene yarn and asphalt.



The newest Remote Operated Vehicle for inspecting and carrying out mitigation work on the Cook Strait submarine cables.

Power cable damage an infrastructure risk

A recent prosecution over fishing activity in the Cook Strait Cable Protection Zone (CPZ) highlighted the importance of protecting the High Voltage Direct Current (HVDC) Cook Strait cables, Transpower said.

The CPZ protects the critical submarine electricity and telecommunications cables that link the North and South Islands. Fishing and anchoring are prohibited in the CPZ to ensure the cables are not accidentally disturbed or damaged. These activities – which include fishing using nets, pots, lines and diving – present risks to the inter-island flow of power and data that forms part of New Zealand's infrastructure backbone.

Penalties for breaching the Submarine Cables and Pipelines Protection Act 1996 include fines of up to \$250,000 and forfeiture of the vessel responsible.

"The CPZ is in place to ensure that this important piece of national infrastructure is kept safe," said Ricky Smith, HVDC & power electronics

manager at Transpower. "We encourage people to familiarise themselves with the location and restrictions of the CPZ before fishing in Cook Strait, and to also ensure that their navigational tools onboard are sufficient," he said.

This reminder comes following a recent case in the Nelson District Court where the judge considered the master of a fishing vessel had been seriously careless in allowing fishing equipment to be dragged into the CPZ by tides. While no damage was detected to the cables, this was considered serious offending and a fine was imposed.

Smith said that there had been previous incidents where trawling equipment, other fishing gear and

anchors had caught on the undersea cables and caused damage.

"Repairing these cables can cost millions of dollars and cause significant disruption to power and communications systems for New Zealand. We are lucky no damage occurred in this incident, and we caution those using the Cook Strait for recreation or for commercial fishing to be aware of the CPZ boundaries," he said.

Transpower is keen to help educate those fishing or boating in Cook Strait to ensure

the cables are protected, and provides information in a number of ways.

Contact information, and a summary of information for mariners, fishers, divers and the public can be found at <https://www.transpower.co.nz/cook-strait-cpz-cable-protection-zone>.

"We encourage people to familiarise themselves with the location and restrictions of the CPZ before fishing in Cook Strait, and to also ensure that their navigational tools onboard are sufficient."



Inshore fleet moves forward with new mitigation programme

Fisheries Inshore New Zealand Limited (FINZ) is implementing a fleet-wide programme to reduce the sector's impact on protected species.

The programme will set up vessel-specific operational procedures to lessen risk for protected marine life.

Created in conjunction with the Ministry for Primary Industries and Department of Conservation, the plan will also help change perceptions the sector isn't doing enough to help marine life.

The programme is already underway in the inshore trawl and setnet fleets along the Canterbury, Otago and Southland coast.

FINZ chief executive Dr Jeremy Helson said the vast majority of the fleet already operated mitigation measures.

"We will on occasions unavoidably capture some animals and cause harmful injuries," Helson said.

"It's appropriate as users of the common space that we recognise our impacts and reduce them to the feasible minimum. It is also in our best interests to demonstrate to New Zealand and the world that we value those animals, seek to minimise our impact and are willing to be held accountable for our performance."

The plans will be written by operators with the assistance of liaison officers contracted to DOC and will be retained on vessels and used to train new crew,

and as a reminder of how the vessel will operate its measures during fishing activities.

"As the programme evolves we will use that experience and new technology to improve our mitigation measures to reduce further the risk to marine animals," Helson said.

Along with their legal reporting requirements, the programme will put in place additional processes if captures occur.

"If a vessel exceeds the capture incident triggers, the skipper will contact their liaison officer who would if circumstances warrant review aspects of the vessel specific plan with the operator and fisher with a view to helping to identify any improvements that could be made," he said.

"On an annual basis at least, industry, MPI and DOC would review the overall performance for the fleets. This would consider the triggers reported, the observed and estimated levels of captures and the outputs of risk assessments."

The programme will be rolled out through the entire fleet over the next two years.

"The implementation of the programme will not be simple with some 500 vessels to be worked with," Helson said. "But, this is an important step in continuing to reduce our risk to marine life."

The Programme

The programme is voluntary but FINZ expects all vessel owners to participate. The programme outlined parallels that already used successfully in the deepwater and surface long line sectors.

The programme will consist of:

- a set of operational procedures for the mitigation of risk to protected species, one for each fleet or subfleet as operators consider appropriate. These will be prepared in consultation with our operators and interested parties;
- a vessel-specific risk mitigation plan for every vessel, setting out how that vessel will mitigate risks through management of attractants – offal, waste, fish – and how it will mitigate the risk from our gear and fishing activity;
- a set of triggers or notifiable capture events to initiate a review of mitigation measures;
- an auditing of utilisation on the water by monitoring; and
- an auditing of performance by a joint committee of MPI, DOC and industry representatives.

For more information on the programme
www.inshore.co.nz

The ins and outs of set-netting in NZ

The death of five Hector's dolphins in a Canterbury set net earlier this year prompted calls for a total ban on this ancient fishing method. In this article Fisheries Inshore New Zealand policy analyst Tom Clark explains how it is used in this country, and invites readers to judge its worth for themselves.

Set-netting or gill-netting has been much criticised as a fishing method in the recent past. Ask any person in the street about gill netting and they will conjure up visions of kilometres of net floating in the ocean catching anything and everything in their path. Commentators often speak in negative terms, for example, Conservation Minister Eugenie Sage recently talked of "the indiscriminate nature of set nets as a fishing method", and said that a review of how to "best phase out these near invisible and deadly mono-filament gill nets is long overdue". The minister commented that other fishing methods could be used to catch the fish. Forest and Bird fisheries advocate Anton van Helden commented "set netting is an environmentally destructive and wasteful fishing method that's killing endangered animals". Van Helden talked of set-netting as being a South Island method.

But are the above perceptions and impressions correct? Is the New Zealand public properly informed as to the incidence and impacts of set-netting? We think not.

We believe the public need to be properly informed on set-netting in New Zealand and this article presents that information. We leave it to the reader to draw their own conclusions as to the credibility of recent claims and perceptions.

Gill-netting is the oldest known form of industrial fishing. Like all forms of fishing, it will catch both target fish which the fishers want and incidental by-catch they don't want. Nets have been found in archaeological digs in ancient civilisations.

While some refer to netting as gill-netting, the more common term is set-netting. We use the term set-netting in this article to refer to all forms of gill-netting.

Set-netting is a very diverse form of fishing in terms of where, how, why, and species fished. It is simply not possible to make general comments to describe set-netting. At one end of the spectrum small nets are used to target flounder and mullet in very shallow harbours, at the other end long nets are used to target shark in waters of up to 150 metres deep, and every step on the continuum between those two end points.

Set-netting is used by the commercial sector, the recreational sector and the customary sector to catch their fish. The recreational sector use set-nets primarily in harbours and quiet waters to catch flounder, kahawai and mullet. Customary sector use of set-nets is similar to the recreational sector. Since we don't have a lot of information on recreational or customary set-netting, the remainder of this article focuses on the commercial sector.

As a form of fishing, set-netting is a cost-effective and relatively inexpensive form of fishing. For a set-netter operating in a harbour, a hand-rowed or outboard-powered dinghy might be the entry point. The fish catch in a year will be equally small, probably less than 400 kilograms. That might provide a part-time living but won't push the sustainability of the fish stocks of New Zealand. At the other end of the spectrum, vessels could be more powerful, up to 20 metres with a crew of 5 or more staying



The 9 metre set net vessel *Lady Bridget*.



Rex Smith in his 4 metre tinny.

at sea for some days, icing their catch and catching upwards of 300 tonnes per year.

Commercial set-netting has a total reported catch of 8000 tonnes per year, making up 2 percent of the total commercial catch. For some species, it is the only way to target such fish, particularly if they won't take a hook, e.g. butterfish and mullet, and inhabit areas we can't fish with trawlers, e.g. in harbours or close to reefs or kelp beds.

The most common forms of netting are set-netting and ring-netting.

Set-nets are anchored at both ends, usually little more than a metre high and with a maximum regulated length of three kilometres. Fishers normally fish with significantly shorter nets and will break the length into smaller sections to better target the fish and adjust to the habitat. Set-nets may be set along a depth range or to straddle a depth measure.

In harbours, the nets will be set in shallow waters and if set in channels, must not reach more than a quarter of the channel width. When set offshore, the nets will be set deeper - up to 150m - but are probably only 1.5m high. All set-nets must be lifted and cleared of fish within 18 hours of being set. A minimum mesh size to prevent the capture of juvenile and small fish is prescribed in fisheries regulations.

Ring-nets are small lengths of net usually attached to a vessel. A school of fish, such as kahawai or mullet, will be identified. The nets are placed partly around or in front of a small school of fish and fish are chased into the net. The net is then retrieved and the fish extracted. Such nets are usually in the water for less than 10 minutes. The fisher will then seek to locate another school to repeat the process.

There are 260 fishers, for whom set-netting is the primary form of fishing, and possibly 150 other fishers who occasionally set-net. The number of set-netters has declined in recent years, following the wider 40 percent fall in vessel numbers over the past decade.

The majority of netters fish in the harbours or inland waters in the north of the North Island – Parengarenga,

Hokianga, Mangonui, Bay of Islands Kaipara, Manukau, Hauraki Gulf, Firth of Thames and Raglan. However, they can be found the length and breadth of New Zealand.

Depending on the target species, they will be found in close to kelp beds, or on more open harbour tidal flats, or on seas up to 150 metres deep. They will fish in slow water areas such as harbours and in faster currents such as Foveaux Strait.

The nets are set to selectively target particular fish species, the principal targets being mullet, flatfish, rig, school shark, trevally, elephantfish, tarakihi, spiny dogs, butterfish and moki.

Butterfish are only found at the edge of kelp beds, moki on sandy ground, tarakihi and warehou on sandy and gravelly ground, mullet where the salinity is low, flounder on sandy and muddy shallow ground. Set-netters target bottom-swimming fish and the nets are low in height to avoid catching fish they don't want.

Boats range from 5m to 18m. Those working harbours tend to be trailer boats or older launches, not unlike those owned by recreational boaties. On smaller vessels, the nets may be hauled by hand and catches will be in terms of tens of kilograms. Vessels offshore are larger with crews of five to six staying at sea for up to four days and having power haulers. Catches may be upwards of a tonne.

Most of the fish goes for local consumption, sold in markets, fish shops and supermarkets. A lot of the rig and school shark ends up in the staple takeaway of fish and chips.

School shark, rig and some flounder will be exported to Australia but, as lower-value fish, they're not exported too far from home.

Set-netters range from grandfathers to young guys. They have experience ranging from being second-generation fishers to being younger guys looking to get a foothold in fishing.

One thing they all have in common is a capacity to work and work hard. Those fishing for local sales will be up early and hard at it to get fish to the market and shops, while the rest of us are still in bed.

While set-netting is targeted to catch particular fish species, like all forms of fishing, it can catch fish and things it didn't want to. That can include seabirds such as penguins and shags foraging on the sea floor for prey, marine mammals such as fur seals and dolphins, and protected fish. Dolphins are more susceptible to being caught if they encounter a net since they aren't flexible and can't swim backwards.

A number of measures have been introduced to limit the risk to some aquatic species from set-netting. The most significant measures protect Maui and Hector's dolphins where set-netting has been banned from all known habitat of Maui dolphins and from areas of concentration of Hector's dolphins. In total, some 15,000 square kilometres have been closed to set-netting in order to protect Maui and Hector's dolphins. Other regulated closures protect threatened seabird colonies and marine environments. In addition to those regulated closures, industry has closed other areas where it considers



its activities might impact on areas of benthos that can be considered valuable for fisheries and biodiversity reasons.

The Ministry for Primary Industries scientifically assesses the risk to seabirds and marine mammals from commercial fishing.

They calculate the number of potential fatalities based on the number and distribution of protected species, the amount and distribution of fishing effort, the overlap between the two distributions and capture rates obtained from MPI observer records. The figures are adjusted to cover all fishing effort and an allowance made for potential but unseen fatalities. The risk assessment approach and any assumptions are conservative in that they are tasked to provide over-estimates of fatalities rather than underestimates.

Those potential fatalities are then compared to the number of animals that could be removed from the protected species population while still providing for 50 percent of the maximum growth rate of the population – the Population Sustainability Threshold. Those risk assessments take into account any restrictions and mitigation measures that have already been implemented.

The risk assessment estimates that annual potential seabird fatalities from set-netting total 98, with a 95 percent confidence interval of 55 to 166. On average, that is less than one bird a year per set-netter. Looking at yellow eyed penguins, the assessment estimates potential fatalities by set-netters total 18 birds. That compares favourably to the Population Sustainability Threshold of 121 for the mainland population of penguins based on a longer term population number or 64 based on lower current population estimates. Scientific commentators on the demise of yellow-eyed penguins

“Those fishing for local sales will be up early and hard at it to get fish to the market and shops while the rest of us are still in bed.”



The set-netter *Savannah* at sea.

point to the effects of changes in diets as a consequence of oceanic conditions and disease rather than fishing captures.

While the risk assessments may indicate that, with the current level of protection from existing measures, set-netting does not pose a material risk to the long-term viability of any of our protected species, the sector is determined to seek ways to lower even further its impact on the seabirds and mammals with which it shares the oceans.

Set-netters operating in Hector's dolphin habitat have a code of conduct that sets out good practice for fishing in such areas. All vessels attach acoustic pingers to their nets to warn dolphins of the presence of the nets. Other netters are following international research and are experimenting with different colour panes of nets to see if they make a difference.

The industry has recently committed to a comprehensive programme to implement a risk reduction plan on its vessels. The programme consists of setting outcomes for the various fleets and working with skippers to develop a vessel-specific risk mitigation plan consistent with the fleet plan. The vessel plan will set out the measures the vessel will take to reduce the risk it creates

to seabirds and marine mammals.

The performance of the measures will be audited and reviewed jointly by Fisheries New Zealand, the Department of Conservation and industry. Where the on-board risk mitigation measures are not achieving the desired outcomes, they will be enhanced.

The commercial industry is also funding research managed through the Department of Conservation into the interactions with seabirds and marine mammals and mitigation options to reduce the risk and the placement of observers on vessels to monitor interactions and captures.

So why the outcry?

We leave it to the reader to consider the above material and come to their own conclusions about set-netting. We can't answer why commentators find themselves forced to oppose set-netting in the strong language they chose to use. We would much rather they worked with us to reduce any risks posed by set-netting so our birds and marine mammals can flourish while also preserving our fishers and a Friday night Kiwi favourite.

"catch fish...not cables"

There are a number of international submarine cables which come ashore in the Auckland area. These cables supply international communications for both New Zealand and Australia to the rest of the world.

New Zealand is a very isolated nation and as such is extremely reliant upon global communication via submarine cables. Here in New Zealand over 97% of all international communication is carried via submarine fibre optic cables. These cables are a key component of New Zealand's infrastructure and play a significant role in our everyday lives, the general economy and future growth of New Zealand.

These cables are laid in three submarine cable corridors in the greater Auckland area where anchoring and fishing is prohibited under the Submarine Cables & Pipelines Protection Act.

These areas are:

- **Muriwai Beach** out to the 12 mile territorial limit where both anchoring and fishing is prohibited.
- **Scott Point to Island Bay** in the upper Waitemata Harbour where anchoring is prohibited.
- **Takapuna Beach** this runs from Takapuna Beach in the south to just north of the Hen & Chicken Island (opposite Taiharuru Head) where anchoring and fishing is prohibited.

Note: These protected areas are monitored by sea and air patrols.



Symbols Relating To Submarine Cables

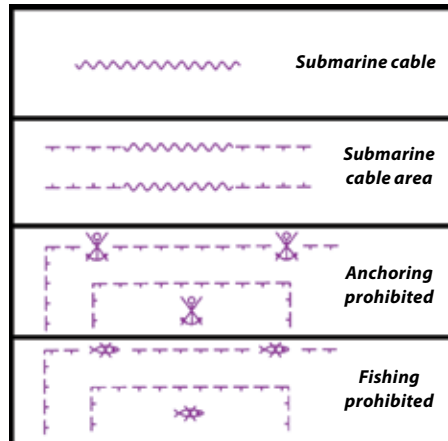


Figure 1.

These are some of the penalties

- A maximum fine of \$20,000 for a non-commercial vessel.
- A maximum fine of \$10,000
- A maximum fine of \$250,000 for damaging a submarine cable.

Additional to the fine for damage, the cable owners would inevitably pursue the recovery of costs associated with repairs, this could be up to \$750,000 plus a day; a typical repair can take up to two weeks (around \$10 million).

Be Aware

These International submarine cables carry up to 10,000 volts to power the system repeaters along the cable.

To download Spark Undersea Cable Awareness Charts visit:
boaties.co.nz/useful-info/cables-underwater.html

What should you do?

- If you are going into any of these areas, be sure to check your marine charts and/or GPS plotter so you know the exact locations of the prohibited zones. The relevant charts are NZ53, NZ5322, NZ532, NZ522, NZ52, NZ42 and NZ43. The symbols used to mark the zones are detailed in Figure 1.
- If you suspect you have snagged your anchor or fishing gear on a submarine cable in one of these areas, don't try to free it. Note your position, abandon your gear, then call 0800 782 627.

What happens outside the prohibited areas?

These cables are covered by the Submarine Cables and Pipelines Protection Act regardless of whether they are inside or outside a prohibited area. Beyond the confines of the "anchoring and fishing prohibited" areas, the cables are clearly marked on the appropriate marine charts.

Considering possible positioning inaccuracies and repaired cable section deviations, fishermen are advised to keep a minimum distance of one nautical mile from either side of charted cables.

Note this number:

For any queries regarding submarine cables call: **0800 782 627**

For more detail refer to appropriate marine charts.



Minister wants Fisheries NZ to engage and innovate

Bill Moore

The newly-launched MPI division Fisheries New Zealand is up and running and Fisheries Minister Stuart Nash maintains it will bring a fresh approach to managing our marine resources.

Interviewed the morning after Fisheries NZ was launched at a parliamentary function last month, Nash focused on two words – innovation and engagement.

He said he'd given the new business unit's head, Dan Bolger, a mandate to engage much more fully with all the key fisheries stakeholders – the commercial, recreational, eNGO and customary sectors – and to enable new approaches.

He had told Bolger: "Travel the world if you need to, to find out world best practice, so we can bring it back here and implement it, but let's change the way we do things in fisheries."

With his first six months as minister behind him, Nash said there were "fantastic people" who had worked for MPI and were now with Fisheries NZ. They just needed a slightly different direction. Instead of finding reasons why things couldn't be done, he wanted them to become enablers, finding solutions to issues and helping to implement them.

"It's sort of changing the focus a little bit from compliance, which is obviously a very important part of what we do, to enabling innovative men and women right across the sector from aquaculture to finfish, inshore, the whole industry. It's quite an exciting time."

He said all fisheries sectors had different roles and one was no more important than another.

"Let's be honest, we all want the same thing, from your inshore to your environmental. We want abundant fisheries and that's the aim. If we can achieve that, we'll be doing wonderfully."

He would not favour any one sector, citing the CRA 2 decision as an example, with commercial and recreational fishers each asking for more severe treatment of the other.

"We went hard across all sectors.

"I understand that the men and women who are out there making a living have to support their families, local industry and the local economy. It's very very important. But I also recognise the importance of someone going out there, throwing a line over a boat, feeding their family or their friends or just having a great time on a summer's day.

"My first message as the minister of Fisheries NZ, I don't want to be 'We're going to come down on you like a ton of bricks because we don't like what you're doing or don't understand what you're doing.' That is not the message I want to give in any way, shape or form, or the culture I want to develop at Fisheries NZ in any way, shape or form. It is about, let's sit down, let's find out what's going on here, if there's any way we can work together to get better information from us, or any way we can help you, let's see if we can come up with a solution."

On some specific current issues,



Nash said:

- A discussion document for cameras on boats had been drafted and would be released “reasonably soon”. There were some myths circulating that could easily be dispelled, but he fully understood fishers’ concerns around eNGO access to footage. “We’ve got to come up with solutions that don’t allow our brand to be destroyed but do allow us to collect the information that will mean that we can make meaningful decisions.”
- The promised overall review of fisheries management was “shaping up well” and he hoped to have the terms of reference released by August. This was an important exercise, with some things off the table, including the Quota Management System. “But I think we all know, from your very large guys right down to your small inshore [operators] that things need to change, and that requires fishermen and women to reassess the way that they’re perhaps doing their fishing. We will consult widely on this.”
- A review of the deemed value regime would form part of the cameras on boats consultation, rather than waiting for the overall review. “We all know that there’s dumping and discarding. Anyone who denies that has their head in the sand. But it’s how we deal with these issues that will be a real test of Fisheries NZ. There are perverse incentives out there to do the wrong thing, we need to change that, certainly if we’re going

“I think we all know, from your very large guys right down to your small inshore [operators] that things need to change.”

to put cameras on boats and require fishermen to basically report on everything they catch, then we need to ensure that we’re not going to send them to the wall through a regime that is perhaps unfair.”

- He hoped that the disparate recreational sector could work together, in which case he would love to have its representatives join in top-level consultation along with the commercial, customary and eNGOs. If recreational groups continued their infighting, their voice wouldn’t be properly heard.
- Charter boat operators could provide information on the recreational take in a way that “a bloke putting out a tinnie on a Saturday afternoon” could not. Fisheries NZ would be sitting down with them to work out how to tap into their knowledge. This was one way to address the commercial

sector’s concern that not enough is known about the recreational take. Other ways of finding out more about the recreational catch would also be explored.

The minister said he was encouraged by the efforts of those in the industry to mitigate bycatch and the capture of dolphins, penguins, sealions and birds, and by the work it was doing around the Promise campaign.

“But I think the industry themselves will have to admit that there are rogues.

I’m not going to let off dodgy buggers in any way, shape or form. Nor should we, and I don’t think the industry expects us to. But I think what the industry would like is to see us provide guidance and help to

those who are struggling to comply.

“We’re not going to stand over them with a big police baton and say, ‘If you don’t do that, we’re going to put you out of business.’ What we are going to do is say ‘Hey, if you need a hand to get there, we’re going to help you’.”

He hoped that by the end of the parliamentary term a programme for cameras on boats would be rolled out, electronic monitoring would be in place and there would be a new and improved perception of the way Fisheries NZ engaged with the industry.

However, he didn’t expect that recommendations from the coming fisheries review would be implemented over the next 2 ½ years.

“There is a lot of work to be done and when I talk about a culture change at Fisheries NZ, in some areas of the industry there’s also going to have to be a culture change.

“I would love us to be world-leading in what we do and again, Dan [Bolger] has that mandate to look at world-leading technologies and practices, bring them back to New Zealand and work with the industry to implement them.

“I’m not just talking about nets, I’m talking about the way we market our fish overseas, the way we use Brand New Zealand to get a premium – so right across that chain from the man and the woman who is catching the fish right through to the guys who are marketing our products into the high-end restaurants around the world.”

We'll listen, promises Fisheries NZ head

Bill Moore

Career civil servants aren't given to public displays of emotion but Dan Bolger openly declares he's excited by his new job as head of Fisheries New Zealand.

Formerly leading the office of the director-general at the Ministry for Primary Industries and before that in a series of roles with the various incarnations of MPI and MAF, Bolger officially became Fisheries NZ head last month.

He'd actually been in charge of the marine branch of MPI for the six months since the election as preparations for the new business unit were made, and said it was "wonderful" to have a really clear focus on fisheries.

"I put my hand up for this role pretty enthusiastically, partly because there's a lot to do and partly because of the passion that people have for fisheries," he said.

"We've got people in the team here who've devoted their life to it – real passionate experts – people all around the country who devote their life to fishing of one kind or another, or to the marine environment, with an amazing, deep knowledge, and who really care about things."

"I'm enjoying dealing with those people. It's an exciting time. There's lots of potential for some really good things to happen."

In the unit's first week Bolger was singing from the same hymn-sheet as Fisheries Minister Stuart Nash, with the engagement and innovation message prominent.

He said fisheries was a fascinating space with enthusiastic people in the industry, the eNGOs, recreational fishing and the Treaty partner representatives.

"We're going to have a real focus on how we engage right across the board with everyone, and make sure that we

really understand those perspectives and bring people together where we can.

"The second thing is innovation. It is a fresh start with a new entity and we will be looking to see what we can do differently. Who knows what that might be? But we'll be very open to innovation, actively looking for it, and looking to support where we can innovation going on in industry, as well as our own organisation."

Bolger said the world was increasingly data and analytics-driven and this would be reflected in the way the new business unit operated.

"We will have a new team in Fisheries NZ that will bring together our fisheries scientists with our observers, with our data people. We'll be looking see, in a changing world, what can we do differently with that space? Are there different ways to use our data to create more value?"

He said there had been "rich and varied" contact between the industry and MPI in recent years, and it couldn't be categorised as a single relationship.

The introduction of Fisheries NZ created a new beginning.

"We need to make sure that we've got really good relationships across the board. Our industry relationships are critical – so are our relationships with recreational fishers, environmental groups and of course the Treaty partner representatives."

The minister had made it clear that he wanted Fisheries NZ to take the time to make sure that the prospect



Dan Bolger

of cameras on boats was thoughtfully worked through to "make sure we get things right".

"In the big picture, there's a real onus on New Zealand to demonstrate that the way our fisheries are managed is

extremely robust, and that's going to require a lot of transparency," Bolger said.

"To get to that point is a change for the industry and for us. Whenever there's a change, there's concerns about that, and things to work through. I guess that's where we're at."

He said data and science were fundamental to how fisheries were managed, and

Fisheries NZ would be looking at how to make really accurate data more accessible to those who wanted it.

"Of the fish stocks we've got good information about, we know they're

"There's a real onus on New Zealand to demonstrate that the way our fisheries are managed is extremely robust, and that's going to require a lot of transparency."

mostly okay. There's a good platform there. There's also some fish stocks we don't know enough about yet, so that's something we need to keep working on.

"Overall, the decisions we make have got to be science-based, and to make science-based decisions you've got to have good data."

Generating \$1.7-\$1.8 billion in annual fisheries and aquaculture exports, the industry was important to New Zealand, and a lot of different communities benefited.

"I like to focus on the good side of things – there's a huge amount of good stuff going on and I'm sure the industry is going to keep building on that."

He liked the way the industry was following up on the Promise campaign by working with fishers around the ports on good practice.

"With any publicity campaign, ultimately it's what's really going on behind it that matters, not what's being said up front," he said.

"Right across the fisheries and our marine environment and across all the stakeholder groups, people at a high level roughly want a similar thing. They want healthy oceans, thriving oceans with lots of fish in them, plenty to go around, and for future generations. I've talked to a lot of people over the last few months from all sorts of different perspectives and you struggle to think of someone who didn't want that."

Early initiatives would be around

electronic reporting across the fishing fleet, and then cameras on boats.

The bigger picture direction was towards ecosystem-based management, which could "bring a richness" to decision-making.

What does that mean?

"To me an ecosystem-based approach brings in over time more consideration of the interrelationships of species and their environment, but also at the human side, the different values that people bring to something," Bolger said.

"Everyone's talking about it, and we need to keep working towards a bit more clarity around what in practice might make sense in New Zealand."

Ecosystem-based approaches seemed intuitively right.

"It's a complex ecosystem and the more we can make decisions on a greater richness of understanding, the better decisions we're going to get. The challenge is, what's a sensible workable series of steps to take in New Zealand for our fisheries management?"

His goal for Fisheries NZ was to be practical but also open and engaged.

"To me the right amount of consultation is when you've genuinely understood people's perspectives and they feel that you've been able to do that," Bolger said.

"I'd like people to know that we want to actively talk with them and in particular to listen to their thoughts and

ideas. We may or may not agree, but we'll certainly listen and seek to make sure that we've understood."

- Fisheries New Zealand, which has the te reo name Tini a Tangaroa (whole of the sea) was officially launched on May 1.
- It is one of four new dedicated business units within MPI, along with Forestry New Zealand, Biosecurity New Zealand and New Zealand Food Safety.
- It has 120 staff at eight sites from Whangarei to Dunedin, as well as about 100 fisheries observers.
- It combines fisheries science, aquaculture, management, planning and monitoring. Other MPI staff will provide legal, policy and other shared services.

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Mussel farmers were hard-hit when an algal bloom struck in 1992.

Twenty-five years since nationwide ban

Matt Atkinson

It has been 25 years since an algal bloom shut down New Zealand's coastline for three months.

Beginning in December 1992 and extending to March 1993, the toxic bloom forced a ban on shellfish processing and exporting, leaving scientists stumped as to the cause.

The Marlborough Sounds, home of New Zealand's mussel industry, was hit particularly hard.

Former fisheries minister and Marlborough MP Doug Kidd said stopping exports was inconvenient and "indeed painful for many people".

"But a short-term problem is better than a long-term insoluble one," he said.

Marine farmer Rob Pooley, who at the time was in the early stages of his new business, said there was a massive learning curve as they got the science up to speed.

"There was a lot of uncertainty and the humanitarian cost was real. Many of us had little to no income and the Marlborough community was relying on food parcels," Pooley said.

"We're resilient people and knew we would make it through, but there were certainly casualties within the marine farming association."

In the final month, the ban was extended to include harvesting.

Ministry of Health regulator Al Campbell said closure was a painful decision that cost the industry dearly, but brought about important innovation.

"At the time there was a user-pays model in science research, and that meant industry really owned the problem and became partners in the solution," Campbell said.

"Industry worked closely with scientists and regulators, so all new innovations were driven out of a desire to be collaborative, cost effective, and

scientifically robust. This established the teamwork that is a great strength of the research programmes we have today."

OPC managing director Jim Willisicroft described the bloom as a "disaster" for the people of Whitianga.

"Unlike earthquakes or floods there is no physical evidence of any problem, but it's a people disaster," he said.

Cawthron Research Scientist Dr Lincoln Mackenzie was heavily involved in the scientific response to the bloom and said there was a lot of pressure at the time.

"People's livelihoods were on the line and the media attention was huge - there was something people found very fascinating about this unknown thing from the ocean affecting their food supply," Mackenzie said.

"If this type of event happens tomorrow, we'll know quickly and there won't be any mystery about it."

Research leads to safer seafood

Cathy Webb

We all know how important food safety is, it simply goes without saying. As producers of high quality seafood product we work hard to ensure our products are safe. This effort pays off and has led to our industry earning a reputation of being suppliers of safe seafood across the many markets we supply. However, the hard work must continue as maintaining this reputation is critical.

Assisting the seafood industry in the food safety space is the Seafood Standards Council, providing guidance and advice and working with the regulator to develop appropriate standards, and the industry-driven seafood safety research being undertaken through a dedicated seafood food safety research programme called the Safe New Zealand Seafood Programme (Safe NZ Seafood).

Safe NZ Seafood was established in 2007 by a consortium of research providers. It is led by Cawthron Institute, along with input from ESR, Plant and Food Research, and AgResearch. The programme is funded by MBIE with contribution from the seafood industry and is focused on research in the areas relating to harmful algal bloom technologies, marine toxin chemistry and toxicology, virus monitoring and infectivity, and bacterial contamination.

The programme has had a number of successes over the years, including the development of rapid chemical test methods for biotoxins, molecular detection tools for norovirus, faster methods for detecting vibrio bacteria, and significant progress in understanding biofilm formation by

listeria monocytogenes, to name just a few.

Not surprisingly, the Australian seafood industry is also focused on food safety and I recently attended the Australian SafeFish partnership meeting as an independent observer. SafeFish is a partnership between the seafood industry, research providers and the Australian government and is funded by the Fisheries Research and Development Institute (FRDC) and industry stakeholders. SafeFish either undertakes research directly or uses its funding to leverage other research funding available in Australia.

The purpose of attending SafeFish is to strengthen the collaboration between New Zealand and Australia where there are common interests relating to food safety. Issues of interest to New Zealand on the SafeFish agenda include marine biotoxin research in rock lobster, standards relating to

methyl-mercury and histamine currently being progressed through Codex, ciguatera fish poisoning, the vibrio group of bacteria, harmonisation of retail producer schemes, food fraud and treatment of tuna with carbon monoxide.

The primary benefit of this collaboration is in utilising the expertise both countries have across the different science disciplines and working together in areas where there is shared interest. While the Australians may have access to a larger pool of funding for research, like New Zealand, it not an ever-expanding pool, and therefore avoiding duplication of effort in areas of seafood safety research is of mutual benefit to both countries. I look forward to reporting further in this space.

– *Cathy Webb is the seafood standards manager at Seafood NZ and the executive officer of the Seafood Standards Council.*





OUR PEOPLE,
OUR PROMISE

NEW ZEALAND SEAFOOD INDUSTRY CONFERENCE AND TECHNICAL DAY

August 1 & 2, 2018, Te Papa, Wellington

2018 CONFERENCE WILL FOCUS ON INDUSTRY'S PROMISE

The 2018 Seafood New Zealand Conference will celebrate the Promise industry has made to all New Zealanders.

Based on the continuing communications campaign, the theme is Our People, Our Promise.

A technical day will be held on August 1 followed by the conference on August 2, beginning at 9 am.

Seafood New Zealand (SNZ) chief executive Tim Pankhurst said in 2017 the seafood industry made a promise to be accountable for its actions and to be responsible guardians of the sea.

"We are determined to keep that promise and make sure New Zealand's fisheries are sustainable for generations to come," Pankhurst said.

"The theme Our People, Our Promise

embodies that ideal, as the conference will cover important topics such as responsible marine management and innovation."

Leading the charge in accountability is SNZ chair Craig Ellison, who will grade the industry on its performance since the 2017 conference.

"Craig's scorecard is an honest assessment of the entire sector; where we are moving forward and where we need to improve," Pankhurst said.

"Last year was the first time it was done and the evaluation showed we are doing good things but we can go further. I look forward to hearing the report card.

"There will be a great array of speakers, covering topics right across the board.

"Industry leaders will touch on what

sustainability means to them and how that translates into business practice. We will also feature our people, those out there every day gathering and processing healthy seafood.

"Collaboration with the seafood sector will be highlighted by Department of Conservation chief executive Lou Sanson, and we will also be updated on key research on ocean circulation and marine heatwaves.

"Celebrity chefs Nadia Lim and Martin Bosley will speak about the importance of seafood in a healthy diet and also promote the use of lesser-known species."

A conference app will allow delegates to connect and submit questions to speakers.

OUR PROMISE

*This is our promise to every New Zealander.
A promise about one of our most valued and treasured resources.
We are the men and women of the New Zealand seafood industry and we want you to be
proud of each and every one of us.
We promise to be guardians of our oceans and to continue finding new ways to lead the
world with sustainable practices – right now and for decades to come.
We may not always get it right, but we're committed to always exploring ways to do
things better.
We have nothing to hide and much to be proud of.
So come with us and share our stories at seafood.co.nz.*

OUR PROMISE IN PRACTICE

OUR CODE OF CONDUCT

We do not condone illegal behaviour.

We will always aim to do the right thing. The law surrounding fishing is both technical and complex and, at times, some people may make mistakes. When the law is breached, we will accept the consequences and make changes where needed.

We will work with Government and other interested parties to develop and implement principled and practical policies to ensure the use of fisheries resources is sustainable.

If we don't fish sustainably our industry has no future; it's the cornerstone of our business. We must ensure the economic gains we derive do not come at the cost of long-term sustainability. Working constructively with Government is vital to strike the best balance between current resource use and future opportunities for all New Zealanders. Striking this balance requires application of sound principles to develop evidence-based policy that uses robust information.

We will continue to actively minimise our impacts on the marine environment and encourage others to act similarly.

It is important to us we look after our marine environment. All New Zealanders derive benefits from our natural resources today, but we are also guardians for future generations. This responsibility requires that we take care when we harvest; that we are conscious of our impacts, and that we work hard to reduce them. All food production has an impact on the environment, but we will strive to get ours as close to zero impact as we can.

We will continue to invest in science and innovation to enhance fisheries' resources and add value.

Our fisheries are a treasured resource and, like all other countries, New Zealand uses these natural resources for food, recreation and commerce. We commit to harvest the commercial component of these resources responsibly. We commit to investments that add value to the resources we harvest to deliver optimum value to New Zealand.

We look after our people and treat them fairly.

We value our people. Whether they are working on land or on vessels at sea, we will work hard to keep them safe and to create an environment that fosters their passion for the seafood industry.

We will be accountable for delivering on Our Promise and will support increased transparency.

We will report annually on the progress we are making. We understand that much of what we do is over the horizon and out of sight, and we welcome the public becoming better acquainted with how we operate. Increased transparency is part of building that understanding and trust, but it must be affordable, practical and respect the privacy and dignity of our people.

We give our word



Packed fishing port in a 1984 storm

The 1984 West Coast albacore tuna fleet numbered 124 vessels. This aerial picture supplied by veteran fisherman Andy Smith was taken in Westport during a weather event that kept most of the fleet in port. A similar number or even more were tied up in Greymouth on the same day.

The picture was commissioned by Talley's and a few copies are held in various fishing companies around the country.

Smith, who fished albacore off the West Coast in the late '70s and early '80s and is currently operations manager at Talley's Nelson, said in the early days there were 300 to 400 vessel fishing in a good year.

Westport and Greymouth were the places to be. In the best year, with this many vessels fishing, the total catch was around 6700 tons.

For various reasons there are now only 70 to 120 vessels fishing and the catch varies from 2500 tonnes in a good year to 1200 tonnes.

"Do the numbers," Smith said. "Three hundred and fifty vessels catching 6700 tons is about 20 tonnes per vessel and 100 vessels catching say 2500 tons on average is 25 tonnes per vessel.

"Its simple maths and for inshore and coastal operators it can be a welcome break from trawling if it's a good season and you get the fish."

Albacore is a non-ITQ migratory species that arrives in New Zealand's EEZ around November and exits around April, with its open access providing a relief valve from other fisheries.

Albacore comprises over 93 percent of the catch, making it an extremely efficient and environmentally friendly target fishery. The two main bycatch species, Ray's bream and skipjack tuna, are 3.1 percent and 2.1 percent of the catch respectively. Smith said no endangered, threatened or protected species were impacted by this fishery, which is MSC approved.

Water temperatures have a marked effect on albacore movement and this year it was warmer by about 2 degrees.

The catch, mainly 3-5kg fish, is landed on ice into licensed fish receivers who export it whole frozen for processing into loins, canned and bottled product. The main markets are Thailand, Vietnam, the Philippines and France.

The average annual catch now of around 2500 tonnes is only a small fraction of the overall annual catch from the South Pacific albacore stock of around 85,000 tonnes, which is taken mainly by international longliners operating in the Western Pacific.

"Being a migratory fish we do have to be mindful of the impact of the fleet of mainly Chinese and Taiwanese tuna vessels to the west and north of New Zealand that fish in international waters regulated by the Western and Central Pacific Fisheries Commission,"

Smith said.

While most of the boats in the picture can't be accurately identified from that distance, here is the 1984 fleet list: Ake Ake, Alamo, Aloma, Amigo, Anna Marie, Annie, Aorere, Arawpawa II, Arethusa, Billie Jean, Blue Seas II, Cabina, Catchalott, Cascade, Cavalier, C-Dart, Centurion, Compass Rose, Conchita, Corsair, Cotopaxi, Da Vinci, Dawn, Debbie Jane, Desiree, Destiny G, Diana, Digger, Doris G, Dorothy May, Dove, Duncan, Erin K, Fellowship, Girl Isobel, Golden Bay, Grace, Harvester, Helen N, Hinemoa, Honeydew, Hope, Imp, Iona II, Iveagh Bay, Jay Debra, Jeanette, Joanne Marie, Job Star, Joy Marie, Kaianga, Karemoana, Kawatiri, Kelvin, Kereru, Koromiko, Kotahi, Kotuku, KT, Lady Dorothy, Lady Jane, Lady Waiana, Leander, Lotus, Louisa, Majestic, Marie Ann, Marina, Mariner II, Matai, Minerva, Miranda, Moata, Mouette, Natalie, Nimbus, Okarito, Okawa 4, Owenga VII, Owenga 8, Pamir, Pandora, Pearly Shells, Philia, Pioneer, Quo Vadis, Red Witch, Rita, Roma, Rongatea, Rongo Marie, Royal Salute, Sambeau, Sandra Fay, San Pietro, Sarabande II, Sea Bee, Sealord, Sea Shag, Seibel, Sharyn, Silver Foam, Sir Alan McNab, Southern Ocean, South Seas, Sovereign, Starlight, Sundance, Tainui, Takitumu, Talisman, Tamarix, Tawaki, Towai, Tradewind, Triona, Triton, Trojan, Trojan II, Unity, Victor Hugo, Waimarie II, Waipawa.



Sir Mark Solomon and Graeme Sinclair being filmed at Kaikoura for episode one of Ocean Bounty's series two.

Look before you leap, says Sinclair

Bill Moore

Graeme Sinclair has a simple message for those who criticise *Ocean Bounty*, his documentary series that centres on commercial fishing: "Why don't you have a bloody look at the programme?"

"Why don't you give it a chance? Why don't you think about what contribution you can make, instead of constantly detracting and delivering negative messages?"

The first season of *Ocean Bounty*, screened last year, was a departure for the presenter of New Zealand's longest-running and much-loved fishing show, *Gone Fishin'*. It drew flak from some recreational fishing quarters. He was accused of selling out – and with series two now screening, the criticism has begun anew.

It doesn't bother Sinclair. Talking the morning after the first episode screened, he said the way forward for fisheries management was about being inclusive, with commercial,

iwi, recreational and environmental groups all working together for what's best. That's what the second series emphasised. All those interests would be represented, along with content on science and Department of Conservation projects.

"There's just a whole lot of stuff that shows that when everyone interacts effectively, great things can be achieved."

Sinclair said the positive reaction to the programme outweighed the negative, which seemed to be mainly coming from one group.

Without industry funding *Ocean Bounty* wouldn't have been possible, he said, but he wouldn't have got involved without a clear understanding around his editorial freedom.

"I said to the commercial guys, 'Here's the deal, I'm really interested in producing a series but I've got to be able to tell my stories, my way. So if I see something I don't like, I'm going to say, I don't like it. If you're okay with that, then

I'm really interested.'

"The industry has just said, 'You shoot it your way, you tell your story.' That's fantastic. Some of the detractors would do well to learn lessons from that – be transparent, tell it the way it is, but keep your eyes and ears open and be prepared to listen to other people."

Thirty years ago the commercial and recreational sectors had "fired bullets at each other" but the time for that had passed, he said.

"We've moved on, so move with it. Let's stop mucking around and wallowing in mire. Let's work together, let's get this right, we've got a chance to do it."

He said there was one simple thing to understand about commercial fishing: "Unless you farm the resource, you have no business."

The industry commitment to sustainability was genuine and would protect fish stocks into the future.

"The other future consideration that I think is absolutely critically important



Graeme and Sandee Sinclair.

is our kids. It's how we pass the baton on – what do we hand to the next generation? Hopefully it's something better than what previously existed."

Impressed by Fisheries Minister Stuart Nash's performance so far, Sinclair said it would be fantastic if the minister achieved his stated vision, and he felt "greatly encouraged" about the future of New Zealand's fisheries.

"There are a number of initiatives underway. The Quota Management System has been successful, now it needs and update – a tweak here and there.

"I think Stuart Nash is really on the right track, and with the sectors starting to think more positively about working together, great things will happen. You can't just say fisheries any more, you've got to think the marine environment."

As in series one, there is a wide range of content in series two of *Ocean Bounty*. It kicked off with an update on the lingering effects of the Kaikoura earthquake and how the community organisation Te Korowai is helping to manage the marine environment.

That was followed by an episode on the work of SPATnz in Nelson – "what they are doing is just phenomenal", Sinclair said – and the mussel industry in Havelock.

Sealord's new trawler *Tokatu* and its voyage from Norway to Nelson is covered, along with a hoki trip on a Talley's trawler.

The iwi perspective on fisheries management is explored and Sinclair looks at industry innovations around protecting marine mammals.

"All I am is a facilitator," he said. "I feel totally privileged because I'm meeting these incredible people from all walks of life who just have a passionate vision and who are doing something about the delivery of their messages. That's just fantastic to be part of."

He said the series including plenty of "good yarns", with the success of season one persuading more people to tell their stories.

"Some of them are a little bit reluctant to front – but by the time we roll into series three of *Ocean Bounty*, I'll

get 'em!"

Series 3?

"Why not?," he said, adding that it was not yet planned and would depend on industry support.

Sinclair is certainly no stranger to television longevity, with 607 episodes of *Bostik Gone Fishin'* completed and series 25 underway – despite having been a wheelchair user since series six, when multiple sclerosis seriously affected his mobility.

With his son James taking a bigger role in front of the camera and his wife Sandee managing production, both shows are largely a family affair.

But Sinclair is still very much the front man. After all those appearances, he said he definitely did not want to be called a fishing guru.

"I'm just a guy who gets swept up in outdoor New Zealand, and loves it."

– *Ocean Bounty* series two debuted on May 14 and screens on Three at 5pm on Sundays.



Upcoming Ocean Bounty highlights

Sunday June 3: New Zealand King Salmon – the world's largest producer of this salmon species.

June 10: Danish seining – Tony Threadwell explains this fishing method.

June 17: Deepwater Group research – a look at the research the Deepwater Group is funding on the Campbell Islands to find ways to reduce sea lion pup mortality.

June 24: Local supply – how inshore fishermen earn their living supplying flounder, mullet and other fish to the home market.

July 1: On the *Independent* – Cameraman Mal Williams is winched aboard a Russian-built factory trawler.

July 8: Scampi – following catching and exporting this sought-

after species to the US market.

July 15: Te Ohu Kaimoana – the Maori perspective on effective fisheries management.

July 22: Sealord's *Tokatu* – following the innovative new vessel from its build in Norway to its first fishing trip.

July 29: Inshore innovation – not just changing trawl techniques, but meeting challenges such as seabird catch mitigation, and safety at sea.

August 5: The Greymouth catch – how Tony Roach supplies to Talley's through the West Coast port.

Kingfish deemed values a 'big problem'

Matt Atkinson

The Ministry for Primary Industries has collected nearly \$5 million in kingfish deemed values nationwide since 2004.

Fishers are now calling for an increase in the Total Allowable Commercial Catch (TACC) for kingfish across the country.

Gavin Campion set nets predominantly for rig off Kaikoura. When he began fishing in the region, he caught very few kingfish, but noticed more being caught five to six years ago.

This year, Campion had already matched his KIN3 quota by March, describing the current state of affairs as a "big problem".

"It seriously needs looking at, a good start would be 20-tonne TACC instead of one tonne," he said.

"I think if we could use Schedule Six and release and record, it would still be giving MPI a good indication of what is really out there."

Under Schedule Six of the Fisheries Act 1996 set netters are not able to return legal sized kingfish back to the water.

In KIN3, more than the annual quota was caught in this January alone. There has not been an increase in the

TACC for the area since the Quota Management System's implementation 30 years ago.

But in KIN7 (west coast South Island) and KIN8 (west coast North Island) fishers are getting stung the worst.

Since 2004, \$3.12 million from KIN8 and \$1.1 million from KIN7, was collected in deemed values.

Over the same time period, MPI, or its predecessor, has collected \$90,000 in fines for KIN3.

The total was \$4.6 million nationwide.

Campion said the number of kingies in the area had dwindled from its peak over the summer months.

He thought an increase in stock size and warmer sea temperatures were causing the increase in catch.

"There is no more effort being put into it [by me]. We have places where we traditionally fish for rig and we can't fish because there is too much kingfish there."

A statement from the Ministry for Primary Industries said it will continue to monitor and review deemed values each time the situation changes.

"Deemed values are set according to the rules outlined in the Fisheries Act, and taking account of the best available

information," the statement said.

"Kingfish is an important shared fishery in the North Island and to some extent top of the South Island.

"However, it is a small, but potentially growing fishery, in the southern part of the country."

The statement noted it was the Minister of Fisheries who set the TACC, based on advice from MPI.

Karitane set netter Allan Anderson said kingfish had become a common catch - and a problem.

There was a small amount of quota and this was causing some vessels to pay "tens of thousands per season in fines", he said.

The interim deemed value rate for KIN3 is \$8

For example, if you had 100 kg of Annual Catch Entitlement (ACE), but caught double that, you would need to pay \$1246, based on current deemed value rates.

Using the same equation for KIN7 and KIN8 you would pay \$1352.80.



Fisheries observer Rob Coy measures a ling.

A lot more than 'standing around, watching'

What's it like to work as a fisheries observer? A mix of many things, Rob Coy told Seafood NZ reporter Matt Atkinson.

What attracted you to observing?

It looked like it was a pretty good job, you could work, have some time off, do a bit of travelling. Everyone wanted to do their travelling when they're young. As it turned out, you could effectively be overseas on your last couple weeks of holiday, fax the office - this is how far back we're going - and say I'm going to be back on this week, can I arrange a trip?

I think at the end of the day you have to be interested in fishing. If you're not interested in fishing, if you don't like being on the sea you're not going to stick around that long. It's a bit tragic. You come back from fishing and go fishing.

Why is your job important?

Fishermen will report the catch in tonnage, but observers have more depth in their reports.

Observers look at the catch by number of fish and weight. You give it another level of detail and from that you move into year classes and you can see if you have recruitment into the fishery - which goes back into the sustainability.



Tuna time.

If you just look at the amount of fish you're catching then that is all you are ever going to know.

We've all seen it with hoki. When we've had a couple of bad years of recruitment we're going to have to take the pressure off the fishery to allow some new year classes to come through otherwise in two or three years' time we're going to be struggling.

It's that 'forewarned is forearmed'.

We might be a small country, but we have the world's fourth biggest EEZ. It's one of our oldest industries. There has been a big focus on keeping it sustainable.

That is one of the keys points within the industry. Maximise the harvest in a sustainable manner.

What is it like working on the foreign vessels?

You try find that one person who can speak a bit of English. At the end of the day you're not having a conversation with them, you're making sure the bookwork is done correctly and everyone's following the regulations.

The Taiwanese boat was the hardest. They had just come into New Zealand and they were like 'why do I record that, they're not worth anything?' No you're in New Zealand. We love a bit of paperwork.

[On the Russian vessels] nothing goes over the side. It either gets processed or mealed, and the meal is valuable product.

Do you have a favourite fishery?

I do like working the tuna fishery. It's smaller vessels, whether it is the skipjack purse-seine fishery or the surface line fishery. It's more fishing as we know it. You can see what is going on and you can get involved as well.

It's probably the hardest job to work for us because you are very disjointed. You do a lot of fishing at night.

In saying that there is not a fishery I dislike.

Is observer the right term to describe your job?

Observer is a bit of a funny term. It's a mixture of paperwork, physical work, and liaising and communications.

You don't stand around and watch too much. There is a lot of paperwork to be done, because it is very hard to remember how big that trawl that came up two days ago at 2am was - unless you have written it down, got your estimates and made a note of it, there is no way you can remember.

How has the industry changed?

Back then it was a lot of bulk harvesting, a lot of Russian boats, and a lot of foreign boats. With the rise of social media there's a lot more focus on the inshore fishery.

The days have been massively ramped up in the last few years.



Which I think is tied in with this social media phenomenon that everyone wants to know what is going on and everyone has an opinion.

What is the best part of being an observer?

It's not your nine to five. I've been working here in the office [at MPI in Wellington] and I'm constantly looking out the window going 'it's a nice day today, we should be doing something else'.

I've been to Raoul Island and down to the Ross Sea. I've been to a lot of places and seen a lot of things, in the course of doing the job that 99 out of 100 people don't get to see.

In February you can be off the Snares Shelf and Campbell Island, and in May you will be off the East Cape tuna fishing and in June you might be off the West Coast hoki fishing.

- There are approximately 100 observers nationwide
- The programme is mainly funded through levies on quota holders, some Crown funding and some direct charging of vessel operators.
- Observers are administered by a shore based team, who arrange the trips, assign observers to trips, brief observers and arrange their gear and equipment, liaise with observers at sea and debrief observers at the end of trips.
- Observers are employed on fixed term agreements, with each deployment being a new agreement. Periods of employment vary depending on an observer's availability and the coverage needed to be arranged.

Seventy years spent in fishing industry

Chris Carey



Ron Threadwell, still mending nets after nearly seven decades in the industry.

Born in 1933 in Timaru, Ron Threadwell grew up in Lyttelton and was fishing well before the days of industry regulation.

"You did what your father did - when you left school you went to sea or worked on the waterfront, that's just what you did."

One of his earliest memories was a trip with George Brassell on *Tawera*.

"I don't know if you know the story but it was George on the *Tawera* that rescued the crew of the *Astral* in the Wellington to Lyttelton yacht race in January of '51. Several boats and a lot of men were lost. Anyway, George and his crew were honoured for their bravery.

"I only did one trip on her. I can't remember if I was still at school, doesn't matter, I was just a kid. We were crayfishing off Motunau and after we'd set the pots they anchored up. George had a wee dory called the *Jimpy* and I'd row along the pots, pull them, re-bait them, fill the dory and row back to the boat where they'd tail them and freeze them down below. It was bloody hard work and I remember George was fixing a big pot of stew for tea. He told me to get my head down and he'd call me when it's ready. I woke up at 6am - so no tea for me then."

With school simply a place to eat your lunch Threadwell wasn't quite 15 when he went to sea.

"I joined the [Seamen's] union as soon as I could and signed on as a deck boy on the interisland ferry *Rangatira*. In those days of course there was no airfreight, everything was shipped around the world by sea. There were hundreds and hundreds of ships and they required hundreds and hundreds of crew."

Threadwell served his time rising through the ranks of Ordinary Seaman, Coastal AB to Able Bodied Seaman.

"I loved the sea. I thought being at sea was just the perfect life. With a deep water, foreign-going AB's ticket you could go anywhere around the world on any sort of a ship. I chopped and changed as everybody did; better skippers, better conditions, different places - absolutely fantastic!"

As if that wasn't enough, Threadwell went fishing between trips.

"In the three years it took to become an AB, I'd spent six to eight months fishing but fishing time only counted for 50 percent actual seetime. It worked for me though because I loved the fishing as much as I loved being at sea."

The 1951 waterfront dispute, lasting 151 days, was the biggest industrial confrontation in New Zealand's history with 22,000 "wharfies" and other unionists on strike.

"The '51 blitz! Sydney Holland was Prime Minister and the leader of the National Party and he vowed to break the unions. I was in the Far East at the time on a ship called the *Wairata* on a five-month voyage shovelling cargo backward and forwards. I actually had my sixteenth birthday in Calcutta. 'Course, when we came back to New Zealand we went out on strike, same as the others did."

If that was unionism Threadwell wanted no part of it. Instead he found work as third hand on *Te Rawene*. Built in Auckland by George Lynne, she was the first steel boat to come to Lyttelton and fitted out with all the "mod-cons", a vessel Threadwell describes as being well before her time.

"There wasn't an inch of her that was insulated, just 3/8 steel plate between your head and the sea with a screaming 6, 71-series GM! We were restricted to 100 fathom, the edge of the Continental Shelf because we didn't have the winches, the power or enough wire to go deeper."

With the owner called away to Auckland, Threadwell was asked to look after her for "a couple of weeks".

"I thought it was just a matter of watching the mooring lines, pumping the bilges, you know all the easy stuff, but no, he wanted me to take her out fishing. I hadn't the experience but he was quite confident I had what it took."

At that time, the fishing industry was unregulated. There were no surveys, no maritime qualifications and no catch records.

"There was a lot of fish around back then so the local market controlled us. Quite simple really: if it was flooded we didn't go fishing."

Elephant fish, marketed as "white fillet" was the only export product.

"We'd fish for elephants over the summer when there was lots of elephants and other inshore fish around and in the winter we'd target tarakihi. Sometimes we were restricted to two, three days a week, 15 cases of elephants a day and 10 cases of soles because there was soles everywhere. There was never a problem with tarakihi. Of course, there were times when we got only four or five cases a shot so it wasn't all beer and skittles."

The "two weeks in Auckland" stretched to five years.

"I must have been doing something right because George's first love was as a marine engineer and he'd gone back to sea."

There were around thirty "day boats" of various sizes working out of Lyttelton and while most were around 50 foot (15 metres) and quite capable of doing two or three days at sea, with no refrigeration and no ice they had to be home every night.

"Most were owner-operated and being side-winders, it was also long hours and physically demanding, all 'pulley-hauly'. We'd sail at three or four o'clock, get in two, maybe three tows and it would be eight or nine o'clock when you got back home, have a meal, back to bed and do it all over again."

But Threadwell wasn't popular with some of the "old hands".

"Most fishermen were in their 30s or 40s and here I was a 19-year-old

whippersnapper out-fishing them. No way was I a better fisherman - I just put more time in that's all. I made a habit of being on a patch at dawn and I'd often be hauling my first tow when they'd arrive. That made me very unpopular at first but over time that passed."

Threadwell worked from the Motunau Island patch, which he describes as being very lucrative during the autumn, to the south off the Rakaia River mouth.

"We also had to compete with fishermen from other ports. There were four 50-footers based out of Akaroa but when the Timaru guys put freezers on and came up 'The Beach' fishing for flats day and night, well that was sacrilege! It's been my contention that if you fish flats in the dark you won't catch them there in the day; you'd have to move somewhere else and who wants to do that? You can only go to the well so often."

Ship-to-ship communications were very basic. Using wooden battens off fish boxes and a type of semaphore, skippers could signal to others how many cases came up in the last tow.

"I remember when we got radios. The King Edward barracks was full of war surplus stuff and some bloke went and bought a swag of these, big old ZC1 walkie-talkies and then sold them to us. Of course it wasn't long before better radios came on the market, DSBs and SSBs, and it was about that time the fishermen's associations were getting their own stations."

Lyttelton was the first port to establish a fishermen's association with Timaru and Nelson following soon after.

"The shore stations were run predominantly by a fisherman's wife. We'd check in every night at six o'clock and tell them when we'd be in and how much fish we had on because they [Feron's] wanted to know how many trucks they'd need to cart the fish through to Christchurch over the Sumner hill."

"December, January, there'd be elephants coming out your ears; 100 cases for an hour tow, possibly two hour tows. They'd all be headed and gutted, washed, packed in boxes and nailed shut. 120lb boxes! We'd be alongside

the wharf before lunch."

A layer of empty case around the stack offered meagre protection from the elements.

"Hot sun, a nor'wester blowing, cats pissing on the crates, birds pecking at the fish between the battens, all of it stinking of ammonia. You'd hose it down hoping to Christ it would be alright in the morning because the truck arrived around 5am and the fish would be at the market by 6.30am. But it all got sold."

Te Rawene was the first boat in Lyttelton to fit an echo sounder.

"It was like a clock, the dial went from 1 to 100 fathom and the stylus went round and round and a flashing light would stop at what depth you were in. It wasn't long after that, getting into the deep '50's that Kelvin Hughes came out with paper sounders which actually showed the bottom."

"And then along came the '60s and with it radar. Prior to that everything was done off landmarks. If you couldn't see your marks, well you were fishing blind so radar changed all that overnight. It was fantastic. Now of course it's all GPS and computers."

Threadwell recalls hours at the wheel steering by hand, eyes glued to the compass.

"If you were out the back gutting, the wheel would be on a becket but someone was up every five or 10 minutes checking your course and changing the wheel to another becket; the boat zig-zagging along. When auto pilots came along, well that was magic."

Threadwell and *Te Rawene* parted company a decade or so later after which he found work on a number of local boats including Johnny Sinclair's *Helena*, the *Waimana*, *Gannet* and *Amuri* before the opportunity of a trip on the 35-foot (10.6m) *Ngaru* came up.

"There was quite a good crayfish fishery off here; three or four 25 to 35-footers made a good living during the season working round the Heads, Pigeon Bay and the Port Levy Rock then set-netting up the beach for elephants over the summer. Crayfish were everywhere and occasionally you'd get a bill from the market for the freight because they couldn't sell them. Anyway

I was out of a job and this bloke asked me if I'd go with him. I'd never been cray fishing so I thought I'd give it a go."

"We'd just cleared the heads when he gave me a course to steer, told me there's a few boxes of gurnards frames down below and I was to string them up in the pots, then he buggered off to bed! We used flax leaves threaded through the frames but he didn't tell me they were frozen. I had to break them up with a hammer. I called him when we got to Motunau about 4 ½ hours later.

"Where there was kelp that's where the rocks came up and that's where the spiders lived. We'd shoot a string of 20 snatch or ring pots and steam back and pick them up. Well I did, he stayed at the wheel. The first pot I picked up was just out of the water but he's still steaming ahead and I'm yelling to him to pull her out of gear. He said I can't do that. Why the hell not? Because the buggers will get out. What a load of bullshit."

Every pot was "chokka" and after re-baiting, they were set again.

"We'd get three lifts a day. At night we'd anchor up behind the island. There was no hydraulics of course and it was my job in the morning to pull the anchor up. Well, I couldn't open me hands after hauling on those manila ropes all day. Why not give us a hand, I asked? He says you just pull that bloody anchor up, after that your hands will be right. I hauled in all that chain and you know, he was right, my hands were working again."

Two more "lifts" and the *Ngaru* was heading home.

"We'd not gone far when he went to bed with orders to call him we got to the Heads. Well that was it; I paid off her. I wasn't going back with that son of a b...!"

Threadwell became president of the local fishermen's association.

"At first the association was made up of owners but a resolution was passed where crews could become members and while they had less voting power, it meant they could still go to a meeting and have a voice."

With delegates from Lyttelton promoting the idea, the South Island ports soon formed their own associations.

"It was then that we formed the Federation, which initially just covered the South Island but as North Island ports formed associations, the

Federation grew to encompass the whole country."

Representing the fishermen of Lyttelton, Ron was eventually voted onto the Federation executive. In 1964, he became vice-president and in 1967, he became president of the Federation of Commercial Fishermen.

"In those days you only kept that role for two years and while you could've been

doing a great job you got dumped. Now they've changed that, for the better I might add. Now you have continuity. After that, I became Father Confessor; immediate past president for two years."

In 1964 Threadwell bought *Theseus*, a 48 foot (14.6m) kauri vessel built by Miller and Tonnage of Port Chalmers with a 5LW Gardner. In 1967, he took her to the Chatham Islands.

"I met a mate in a Lyttelton pub and he told me about how much money he'd made catching crays in the five months he'd been there. Red Gold he called it. Besides there were no restrictions on what you caught, where you caught it or how you sold it."

Threadwell likened it to a bonanza.

"The Marine Department would only let us 'go over' in convoys -seven boats, no more. The convoys had a foreign-going navigator in the lead boat

and one following up behind and extra engineers just in case. The boats had to be over 40 foot, under survey but it was up to the skippers and the vessel owners to make sure they were seaworthy with all their safety gear and everything they needed on board. It cost me £6000 (\$12,000) to get the *Theseus* ready - a bloody fortune back then."

Crews had to sign articles at the local Marine Department office prior to departure and again on arrival at Waitangi.

"The shipping master at Waitangi had a caravan for an office and you weren't allowed to go fishing until you had signed-off. Well, that's what was supposed to happen but I think the rules got bent here and there to get boats over."

"We always sailed at six o'clock because it was six o'clock closing. We sailed with seven boats and at dawn we had nine. As we were going past the Heads two boats must have come out of Port Levy and tagged on the end. They had no foreign-going survey - one didn't have a survey at all.

"I was a trawlerman, I didn't know much about crayfish and I couldn't believe the conditions we worked in. You had to fish; what else could you do? You can't sit on your arse in a cave and hide away from the weather. Never saw the sun at all during winter. We put up with it and as I said it was quite lucrative."

Threadwell spent two years at the Chathams.

"We'd do five-month trips over winter then come home for six weeks when the spiders went soft shell and they wouldn't pot. Then it was back for a four-month trip over summer and another six weeks at home. Nine months away each year."

The crayfish bonanza lasted five years during which time around 21 men were lost at sea, some due to the weather at the Chathams but most lost while in convoy to and from the island.

"It looked to me like the writing was on the wall. There were times where we had 'run fish'; clean females no berries all the same size. We'd be pulling pots out of the water with crayfish sitting on top because they couldn't get in. But

"He says you just pull that bloody anchor up, after that your hands will be right. I hauled in all that chain and you know, he was right, my hands were working again."

overall catches were going down and so in 1970, I decided to bring the boat home."

In 1976 Threadwell sold the *Theseus* to Akaroa Fisheries who wanted a boat to catch gurnard as bait for their crayfish operation around Banks Peninsula.

"It turned in to a bit of a fiasco so they sold it. Anyway, she was eventually lost off the Waimak on her way home when a big bag of red cod shifted and she rolled over. If the skipper had only secured it. She was the best boat I sailed in and now she was a goner.

"I'd always wanted to give prawn trawling a go so in '81 when the Springbok tour was on, we rented my house and off we went. I was going to give it a year but I was back home after a few months so I went and saw Kypros Kotzikas at United Fisheries and I said "What's cooking in your fleet? I haven't had enough of this fishing just yet'."

Threadwell ran a number of boats for United Fisheries before finally swallowing the anchor in 1983.

"Kypros called me into his office and said how about coming ashore as my fleet manager. In those days 50 was considered to be about right to pull the pin because unlike today, it was a very physical job."

"They had eight boats being operated from the office which you can't do - you had to be hands-on especially as the skippers on them were fleecing him left, right and centre. They also had the wrong gear on them, the motors were tired, they were a mess."

In his first year as vessel manager, Threadwell sacked all the crew, long overdue repairs and maintenance were done and the boats fitted with net rollers.

"The fleet started making money but there was a lot of paperwork involved and I really needed someone to help me so Brent my youngest boy got the charter vessels to look after."

"I had a great time there and I loved the job but then Kypros retired. The business passed to his four sons, and they decided in their infinite wisdom they didn't want to be fish catchers so they sold their inshore fleet which left me out in the cold. I had no choice so in

2000, after about 15 years, I bowed out."

Retirement wasn't an option and with a demand for competent net menders in Lyttelton, Threadwell at 67, took up the needle.

"I started doing repairs for everyone. Starks were building their 'red boats' but their skippers were all foreigners from Nelson who didn't know the local areas and were trashing nets left, right and centre. I finally packed that in two years ago, I'd just had too much and I decided I was just going to look after my son's boats."

Threadwell has seen numerous changes over a lifetime fishing: the birth of the fishermen's associations and the Federation which finally gave the industry a voice; advances in vessel design, fishing gear and electronics; The certification of seafarers and the introduction of vessel surveys and improvements with firefighting and lifesaving appliances.

"We didn't have surveys in the early days. The Marine Department surveyors with their foreign-going tickets knew nothing about small boats and all you had to do to become a skipper was convince the owner you could do the job, pay your 10 shillings (\$1) at the shipping office for a crew's licence in perpetuity and away you went. Pay it once and it was good for life."

"The greatest change was the introduction of the Quota Management System which came in '86. It might be the best in the world but it's not the 100 percent answer - it's got anomalies all over the place. Everyone is different and it doesn't suit everyone and there'll always be people who oppose it, but I think overall it's working."

Threadwell says the biggest problem is that the QMS does not work well with our multi-species fisheries.

"We have a massive problem of bycatch, then the deemed values gets

you. It was supposed to be a deterrent but how can it be when you can't stop catching it because we've yet to develop a net that will catch a species of fish to the exclusion of all others.

"The pot of gold at the end of a rainbow for every fisherman was to be an owner-operator. Well that went up in smoke when the QMS came in and while a young fella might still be able to get a boat, he will never, ever have enough quota to sustain it so you're

forever beholden to the quota owner. If that happens to be a large company you have to settle for what they are willing to pay which is often just enough to keep you ticking over, to keep your head above water but never enough to get ahead."

Threadwell at 84 is still mending nets.

"It keeps me as busy as I want to be and it's my choice when I want to work.

"You know, in the early days of my career the financial return was better than the average wage but there was no real money in being a fisherman. Fishing was a way of life. You loved it or you didn't do it and I didn't give a damn what the weather was like. I just liked being out there."

"The pot of gold at the end of a rainbow for every fisherman was to be an owner-operator. Well that went up in smoke when the QMS came in."

Changes at Sanford

Sanford has appointed its chief financial officer Clement Chia as chief operating officer following the departure of Greg Johansson.

Johansson, who has served 27 years with Sanford in a variety of roles, will continue as a consultant to the company.

Chia has been with Sanford as CFO since 2014, and chief executive Volker Kuntzsch said in that time he had built remarkable respect internally and externally,

especially with shareholders and the investor community.

"Clement's diverse commercial background across primary industries and the FMCG sector will be an asset in continuing the transformation of Sanford's operations into a market-led organisation," Kuntzsch said.

He also paid tribute to Johansson, saying he was pleased that he had agreed to remain in a consulting capacity.

Group financial controller

Stuart Houlston has been made acting CFO while Sanford looks for Chia's replacement.



Lessons from Wahine

Lessons from the Wahine tragedy 50 years ago have made shipping safer today, according to Maritime New Zealand.

Acting director Stephanie Winson said there had been many changes since 1968 in how ships are designed and operated, crew training and how New Zealand was organised to respond to a maritime disaster.

Ship design and construction had changed to make vessels more stable, stronger and able to survive more damage.

Before a ship can sail, its

voyage planning must now include specific alternatives for what the ship will do if it cannot continue as expected, for emergencies and what steps to take if something unexpected happens.

New technologies provide crews with much more information about the ship, its cargo, other vessels, the weather and other data, much faster.

"We cannot create a 'zero risk' maritime industry," Winson said.

"However, what we can do, and are doing, as part of our global maritime system is reduce risk by building better

ships, developing better ways of operating ships and managing crews, improving training, and having well-coordinated response when there is an emergency."

The Wahine disaster in Wellington harbour cost 53 lives.



Four stars for NZKS

The Global Aquaculture Alliance awarded New Zealand King Salmon a fourth star for responsible aquaculture production.

It is the world's first king salmon producer and the first salmon producer in Australasia to achieve four-star status, given NZKS following an audit of its major feed supplier, Skretting.

This means that NZKS will now offer four-star Best Aquaculture Practices (BAP) salmon.

"Put into restaurant terms,

this is the equivalent of earning a Michelin star" said NZKS chief executive and managing director Grant Rosewarne.

Four-star is the highest designation in the BAP third-party certification programme, indicating that a product originates from a BAP-certified feed mill, hatchery, sea farm and processing plant.

"We're absolutely thrilled with this certification, because it further recognises more than 30 years of hard work and investment in growing the

world's best salmon," Rosewarne said.

"The aquaculture industry is a competitive one, but we've always been confident we are amongst the best and this is clear proof."

He said sales were up around 30 percent year on year, and NZKS was working hard to supply increased demand from New Zealand and offshore customers.

BOP seaweed could boost athletes

Athletes could soon be turning to Bay of Plenty seaweed for a protein boost, thanks to work being carried out in Tauranga.

A team from the University of Waikato Adams High Performance Centre in Tauranga is creating the supplement, designed to maximise muscle protein synthesis in sport supplements.

The team spent summer researching native seaweed species off the Bay of Plenty coast looking for algae that has the same amino acid composition as whey.

Bay of Connections portfolio

manager Cheryl Lewis (pictured) said the research sat well with the Regional Growth Strategy and the area's burgeoning aquaculture industry.

She said a task for the Regional Aquatic Organisation (RAO) when it was established was to investigate bio-opportunities in the region, including nutraceuticals.

"This is a really significant step for aquaculture in the Bay of Plenty and it shows the industry has more than just amazing seafood to offer."

Environmental exercise physiologist and nutrition scientist Dr Stacy Sims said

the seaweed supplement was attractive to individuals who are vegans, lactose intolerant or allergic to dairy products.

Research and product development should be completed by the end of the year when human performance trials will take place.



Survey doubles dolphin population

A comprehensive Hector's dolphin survey, funded by the Ministry for Primary Industries, has doubled the population estimate to 15,000 in the three main South Island population areas.

The figures were released as the ministry looks into the accidental capture and death of five Hector's dolphins in a commercial set net off Banks Peninsula in February.

Set netting is permitted in the area where the incident occurred and the event was reported to MPI by the fisher.

The population survey was undertaken between 2012 and 2015.

Fisheries Minister Stuart Nash has asked officials to prioritise a review of the Hector's and Maui dolphin Threat Management Plan. The industry supports a science-based review.

Nash has said it's important

to take an evidence-based approach and to weigh up the economic and social costs of a wider set net ban on the 300 fishers who use nets.

Under the existing plan, 15,000 square kilometres around the North and South Island is closed to set netting.

Research and product development should be completed by the end of the year when human performance trials will take place.

Floating dock to fight invaders

Vessels up to 20 metres can be treated for harmful marine organisms on their hulls by a portable floating dock that will be available around the top of the south.

Bought by the Nelson, Marlborough and Tasman District Councils along with the Ministry for Primary Industries, the floating Fabdock weighs

only 300kg and can be taken to wherever a problem vessel shows up. Once it is sealed, chlorine bleach is used to kill the pest organisms, then neutralised before it is open to the sea again.

Marine Biosecurity Partnership co-ordinator Peter Lawless said hull fouling accounted for 90 per cent of the risk in the spread of invasive marine organisms

around New Zealand.

The Fabdock was not a magic bullet, he said, but a valuable addition to the toolkit.



Lack of lookout caused grounding

The skipper of the fishing boat Lady Sarah has been fined \$2000 after it ran aground on Kaitorete Spit near the entrance to Lake Ellesmere because no one was keeping proper look-out and no one was in the wheelhouse.

The vessel's insurers subsequently declared the vessel a total loss.

Maritime New Zealand prosecuted Christopher Jarman, who was the skipper of the Lady Sarah and is a director of Inshore

Fisheries Limited, which owned the vessel. Jarman pleaded guilty to the charge under the Maritime Transport Act.

Maritime NZ southern regional manager, Mike Vredenburg, said the skipper must ensure a vessel has a proper look-out at all times by all available means in the conditions – in this case that was at night.

Lady Sarah grounded between 1am and 2am on 15 December 15, 2016.

Fortunately, no one was injured during the grounding

and subsequent rescue.

Jarman was prosecuted under the Maritime Transport Act, which prohibits "unnecessary danger caused by the holder of a maritime document" and also makes it mandatory to comply with Maritime Rules (sections 65 and 66 of the Act). The maritime document held by Jarman was his qualification that allowed him to be the master on fishing vessels. The relevant Maritime Rule is "22.5 Look-out".

Collaboration has worked well, says outgoing Moana head



Carl Carrington

After seven years helming Moana New Zealand, outgoing chief executive Carl Carrington tells Seafood NZ reporter Matt Atkinson that he's satisfied to have completed some big projects. But he also sounds a warning about one of the industry's often unacknowledged problems.

More needs to be done to stop inshore environmental degradation from further harming seafood stocks. This is one of the big threats to the industry, Carl Carrington warns.

"Inshore fishing companies are like the canaries in the cage, a lot of our products like paua and lobster are essentially docile species and we've seen the impact of sedimentation in particular on those fisheries," he said.

"If you look at the Marlborough Sounds I think it's an unmitigated bloody disaster what's happening with sedimentation run off."

Carrington started as Moana NZ chief executive in 2012, after two decades in the beer business.

He was attracted to the position by the opportunity to work in the primary sector for an iwi-owned business.

With a background in channel marketing, he immediately saw the need to orchestrate a significant programme to develop their supply chain capability.

"You start with the premise that you can't sell what you can't consistently catch or harvest and you have to do it at the right quality and at the right price

before you start getting all flash trying to get value through a 'premiumisation' strategy.

"I have often said I think one of the unintended consequences of the Quota Management System when it came in 1986, it's a generalisation, but I think since that time most New Zealand fishing companies

have been preoccupied with investing in quota, for quite understandable reasons.

"But, the consequence of that is systemic under-investment in infrastructure and marketing, or market development.

"There are certainly some exceptions to that, companies like Talley's have a good keen focus on making sure their productive capability is modernised all the time and of course Sealord has done quite a bit of work in marketing."

The next challenge for Carrington was renewing Moana's ageing infrastructure assets.

With widespread support ("boards are pretty comfortable investing in that stuff and management teams are comfortable with it because you can touch it, feel it") he spent \$55 million in

his first four years at the helm.

This included significant rebuilds and extensions at Moana's Bream Bay paua farm, building a new plant for rock lobster in Auckland and a new fish factory on the Chathams – a major investment for the isolated island community.

By the time he left, the iwi-owned company had renewed every infrastructure asset it had.

Carrington pointed to projects where industry players have combined as other points of pride.

The Seafood New Zealand Promise campaign was a massive

reputational management challenge for the industry, he said.

"I thought it was significant in many ways, notably because it was the first time industry was actually pro-actively working together to tell the public its side of the sustainability story and putting out some really positive messaging.

"I'm proud of the fact that ourselves and Sanford managed to get ourselves organised and put together the Maui dolphin protection plan.

The plan was "highly cautionary",

"If you look at the Marlborough Sounds I think it's an unmitigated bloody disaster what's happening with sedimentation run-off."

Carrington said, recognising that if the industry talked about being guardians of the sea, it had to act when the best available science said that a few Maui deaths would pose a serious extinction threat.

"To have a proactive plan about how we transition from traditional techniques and develop more dolphin-safe techniques, that's a big step because it's a ballsy step from the companies."

Maori collaboration has also played a major role in Carrington's time as chief executive.

He oversaw Moana NZ combining forces with Port Nicholson Fisheries, the country's second-largest exporter of live rock lobster, and continued their partnership with the Iwi Collective Partnership, whose 1000 tonnes of inshore ACE is now caught by his Moana vessels.

But he would like to see it go further. "A big opportunity for my mind is Maori telling their story in global markets."

By springboarding off the New Zealand Story, the successful international marketing campaign, Maori businesses could use their unique position to reach consumers, he said.

"You have to do it in a way that's relevant and certain markets it will resonate in more strongly than other markets. We know the response in markets like China has been hugely positive."

With his time at Moana NZ having officially concluded on April 1, Carrington said he was taking time away from the boardroom to use a newly-purchased ski pass and learn about the hop growing (he recently invested in a business in Tasman).

Carrington offered a final insight into a Marlborough Sounds eco-system service review Moana NZ completed three years ago.

"We were horrified to have found that so much of the kelp had been smothered by sediment and the knock-on effect that had to juvenile breeding grounds for paua.

"Cutting the TACC, of course you have to do that when the biomass isn't there, but it's addressing the symptom, it's not getting to the root cause.

"We see it right around the country, whether it be the snapper breeding grounds in the Kaipara Harbour or Marlborough Sounds for paua.

"I don't think the public, or the Government for that matter, is grasping the rate of which our coastal environment is degrading."

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Action on cage-diving long overdue

Storm Stanley

The Shark Cage Diving (Permitting and Safety) Bill is the title of a piece of proposed legislation which professional paua divers have long hoped for. A better title for us would have been "Shark Cage Diving (Banning of in New Zealand Waters) Bill", but we are grateful for anything we can get after a nine-year fight.

National's conservation spokesperson, Sarah Dowie, has lodged this Private Member's Bill in response to demands from her electorate that the uncontrolled and dangerous great white shark caging adventure tourism activities of two operators be stopped or bought to heel.

The bill is closely aligned with the 1978 Marine Mammals Protection Act, and shares many of its concepts. Importantly, though, Dowie's bill also has included clauses which require the director-general of conservation to take into account the safety of the rest of us

who might want to work or play in the waters to the north of Stewart Island.

Last year's controversial judgement from the High Court stating that DOC did not have the authority to authorise any activity to do with protected species under the 1953 Wildlife Act, let alone shark caging, hasn't helped. PauaMAC5 divers await the Appeal Court ruling on this one with anticipation.

In the interim, and in the absence of any permitting or regulation, the cagers have been carrying out their business in an even more irresponsible way than before. We all can see this on the GoPro footage that their clients continue to post.

For example, reward feeding sharks by at least one of the operators, allowing sharks to take baits, continuous berleying, shark collisions and biting of cages with divers inside and visible injuries on sharks consistent with hitting metalwork on cages are recorded and posted for all to see.

The Stewart Island community continues to report increased aggression in the local great white population and has been steadily lobbying the minister to do something. To be fair to DOC, it has spent considerable effort and resources in trying to manage caging, but the Wildlife Act has not proved up to the task, given the intransigence of the cagers. Stronger regulatory powers are needed to either get rid of, or to properly control caging. Endangered and protected species require protection from being harassed for a few quick tourist bucks – and public safety has to come first before cheap, risk-free, thrills for a bunch of tourists who should know better.

We urge the conservation minister to support her National counterpart's effort to sort this mess out with the cage-diving bill.

– *Storm Stanley is chairman of the Paua Industry Council.*



Dennis Holder's *Silver Spectre* will soon have an electric sister ship. Picture: Evan Collis

Voyage to an electric future

Brad Collis

Dennis Holder is a career fisher, a 31-year veteran of fishing for blue swimmer crab off the South Australian coast. In that time he has owned 11 boats, two of which he built and project managed, progressively modernising and innovating to keep in step with changing environmental, regulatory and consumer influences.

But with each progression there has remained a seemingly unresolvable issue: the high cost of running diesel motors, and also more recently his awareness of their hefty carbon footprint. The issue came to a head in 2010 when he built his latest boat, *Silver Spectre*, a state-of-the-art 24-metre vessel able to harvest about 250 tonnes of blue swimmer crab a year.

"We'd built this fantastic boat, incorporating all the experience-based improvements we had made through the succession of boats we have operated, but were still handicapped

by the motors. We agonised for months on what motors to install and even after this deliberation, the two engines we eventually selected were still going to cost us \$10 an hour just in repairs and maintenance," Holder said.

"Because of the long periods of idling when pulling crab pots we knew we would be burning out injectors about every 1500 hours ... so we came to the inevitable question: what else can propel a boat?"

That simple musing launched Holder on to an extraordinary journey of discovery that has brought him to the point he is at today: building Australia's first

commercial diesel-electric fishing vessel. It has also caused him to reflect deeply on the industry's standing in society and the role that technology could play in reviving its reputation and morale.

His initial search for alternative engines was on the Internet, where he found numerous pleasure boats running on electric motors and then finally a diesel-electric trawler built in Holland as part of a European Union investigation into "greening" fishing fleets.

The reviews on the test trawler were outstanding – a 75 per cent reduction in diesel fuel consumption and a 70 to 80 per cent

"The reviews on the test trawler were outstanding – a 75 per cent reduction in diesel fuel consumption and a 70 to 80 per cent reduction in repairs and maintenance. "



Dennis Holder is switching from big diesels to a state-of-the-art electric system. Picture: Brad Collis

reduction in repairs and maintenance. It was clearly worth investigating further and his wife Karen encouraged him to apply for a Nuffield Scholarship to do so.

"I applied in 2015, not thinking I would be successful because at 52 I was over the age cut, but I was accepted as a Fisheries Research and Development Corporation scholar. It started a journey of inquiry into diesel-electric fishing vessels, but it has brought me to a far broader industry awareness."

Holder travelled to Florida, the Netherlands, Norway, Iceland, Ireland and the UK, studying work being done on batteries, electric motors and power propulsion electrics. In his examination of the data he came across an unexpected, significant side benefit – a reduction in human fatigue.

"Take away the constant noise and vibration and the whole working environment is changed," he said.

"I spent six hours on an electric-powered fishing boat in Norway (the first diesel-electric battery commercial fishing vessel in the world) and the operator said the reduced fatigue was allowing them to spend 20 per cent more time fishing. Their cod season is three months with no catch limits so this extra fishing time during that fixed period considerably increases his

catch."

But this was only one aspect of Holder's journey.

"My Nuffield project was titled 'Old men, older boats, electric drive power storage, and power generation in commercial fishing vessels'.

And it was the first part of this description that began to worry me more and more – the age of fishers and the age of their boats ... translating to a lack of innovation and 'get up and go'.

"I felt it was clearly connected to the overt negativity towards the industry from the community and governments over the past 30 years and the increasingly tough regulatory environment in the name of sustainability.

"In other words for the past 30 or so years our industry, in Australia and internationally, has constantly been hammered by people telling us how bad we are. So it's no surprise that we are not attracting young people or the new investment needed to stop the ageing

process.

"It was actually heartbreaking to drill down through what started as a technical exploration and come to this realisation about a much more fundamental status affecting industry investment and innovation. Yes, there have been advances in equipment and fishing practices, but when it comes to our prime piece of equipment we, as an industry, are continuing to pour money into old boats."

So for Holder, modernising boats gradually became a much bigger objective than electric motors. It was about embracing technologies that would once more make the industry respected and valued – particularly when considering the world's population still relies on it for 30 to 40 per cent of its food protein needs.

He describes his Nuffield journey as opening his eyes to this wider challenge, and also to opportunities. He became president of the peak industry group in

South Australia, Wildcatch Fisheries SA, and joined the newly established national peak body Seafood Industry Australia as a director, where he says he has found like-minded visionaries.

In the

meantime, he continued to pursue alternatives to diesel motors and became involved with FRDC's entrepreneurial program, Fish-X: "That really clarified the way we needed to proceed. We interviewed a lot of fishers, looking at barriers to people changing or upgrading their vessels with technology such as hybrid propulsion and the common feedback was, 'sounds good, but I can't risk being the first to try'.

"It became apparent that we needed a boat in the water proving, for all to see, what was possible and what could be achieved.

"This was the main lesson to come

"It became apparent that we needed a boat in the water proving, for all to see, what was possible and what could be achieved."

out of Fish-X ... that we needed to show, not tell."

Holder started working with Oceantech Design in Adelaide to begin building a sister ship to *Silver Spectre*, but with one clear difference. It will be diesel-electric. The plan is to have two similarly equipped working boats so that anyone in Australia will be able to look at the costs of the conventional diesel boat and the costs of the diesel-electric and judge accordingly.

In his own business, based on what he has already observed, he is anticipating the diesel-electric will eliminate 80 per cent of his diesel consumption and about 80 per cent of repair and maintenance costs – a substantial amount of money.

For the sister ship to match the *Silver Spectre's* 880 kilowatts of power in the propeller he is looking at a 360-kilowatt

diesel-electric set-up plus 600 kilowatt-hours of battery storage. The batteries would provide enough power for 10 operating hours pulling crab pots.

"Basically you head out in the morning, charging the batteries. Once you are on your fishing gear the diesel generator will be shut down and you'll be operating on batteries only, although we plan to supplement this with solar generation on the boat's roof.

"Our initial calculations suggest we can generate about 15 per cent of power needs on the boat, and the rest to come from the batteries, however the final battery and generating set-up will be determined once we've calculated all of the power requirements for machinery, refrigeration, lights, and the boat's electronics."

The budget for the prototype vessel is \$3.5 million, for which Holder

will seek funding from his bank, NAB Agribusiness, through its Greening Fund. He says the bank has been quite open in its enthusiasm to finance the first such commercial fishing vessel in Australia.

The diesel-electric sister ship will cost about 30 per cent more to build than a conventional diesel-powered boat, but Holder said he was working with an electrical design engineer on ways to reduce this differential because overlaying all of this is his burning ambition to showcase a modern, sophisticated industry that is embracing new technology, including technologies that reduce its environmental footprint.

He said he was optimistic because he sensed the industry had already turned a corner. "There is a building optimism, partially driven by the television food culture which has driven home the message about knowing where your food comes from, and partially by an awareness that the recreational fishing sector must be accountable for its effort and catch rather than only having leisure activity as a benefit.

"When these two influences are combined, more and more commercial fishers can see a light at the end of the tunnel and are now worrying less and less that it's an oncoming train.

"I think we are on the way back to again being a respected group as fishers in society, doing what we love to do – providing a high-quality protein to consumers – which remains a service the world will always need."

– Reprinted with the permission of *FISH* magazine, a publication of Australia's Fisheries Research and Development Corporation (FRDC).



Dennis Holder is a 31-year veteran of blue crab fishing off the South Australia coast. Picture: Brad Collis

Letters to the editor

Act on your rights

My letter on 28n rights (Seafood New Zealand, February 2018), was also sent to the Minister of Fisheries. One of many, it got the usual polite, "get stuffed" generic reply.

There is a long list of still existing 28n tonnages covering 36 stock codes and

ranging from under 50kg (PAU3) to 932,400kg (SNA8) and from one owner to 40 owners (SNA1).

Many of these, because of the low amounts, could be finally satisfied with next to no impact on the fisheries involved, and clean up the dribs and drabs of minimal quota holders clogging up the system.

Many 28n holders, because of the length of time and the apathy of the powers-that-be to address this issue, have forgotten the rights still exist.

I would urge all quota holders to check their eligibility to these 28n

tonnages and recover the due rights so long owing to them.

This is a moral issue now and is the closest to absolute theft you could get. It would do a lot for fishery ministry relations to make some effort to recognise the people that handed New Zealand a fishery management system copied world-wide now, only to repress and ignore the people who gave the support and knowledge the ministry is taking the credit for.

**Bob Beggs
Christchurch**



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Coromandel Seafood Fest makes its mark

It was a breakthrough year for the Coromandel Seafood Festival.

Great weather and delicious seafood had attendees flocking from throughout the upper North Island to get their hands on the best seafood the Coromandel has to offer.

Organiser Rob Fort said more than 3000 people showed up to enjoy the festivities.

"You couldn't have asked for a better day," Fort said.

"The fish filleting had huge crowds of people around it. It shows you there is a genuine interest out there in New Zealand to learn how to prepare and take care of seafood."

Some punters who came along later in the day were disappointed to have missed out on trying the seafood, Fort said.

"Some of them ran out at 1pm. A lot of them got cleaned out, which just shows you people really wanted to try out the seafood.

"Even the oyster company Moana ran out. I think everyone underestimated the demand they were going to see."

It was big effort from organisers to get the festival over the line, with only \$300 in the bank when they started planning in February.

"We're glad to have got it done and now we are going to look forward to creating an even better event," Fort said.

Chef Derek Robertson, who spent 11 years cooking up a storm for *Gone Fishin'*, said the day was "absolutely awesome".

"It certainly put itself onto the calendar as must-do. It was good to see that a lot of people from Auckland travelled over."

- *Correction: Talley's won the best mussel dish category at the 2018 Havelock Mussel and Seafood Festival. This result was incorrectly reported in the April issue.*





RECIPE



Derek Robertson during a hard day's festival graft

Coromandel chargrilled oysters, Cocavo chilli lime, garlic and parmesan cheese sauce

Prep time: 15 minutes
Cook time: 10 minutes

Total time: 25 minutes
Servings: 4

Ingredients

24x oysters on the half shell
2x tbsp. Cocavo chilli & lime
250 grams butter, room temperature or melted
3 cloves garlic, crushed and chopped or
1x tsp crushed garlic (Lee Kum Kee)
4 x tbsp lemon juice
2 x tsp Worcestershire sauce (Wild West
Hot Chilli)
2 x tbsp parsley, fresh chopped
1x cup parmesan grated
1-2 tbsp chilli flakes to taste (Mrs
Rogers)
Salt, & pepper to taste
¼ cup chives or parsley, chopped extra
for garnish

Method

1. Mix the Cocavo butter, garlic, lemon juice, Worcestershire sauce, cheese, salt, pepper, cayenne and parsley and set aside.
2. Place the oysters on a preheated BBQ or 180°C grill, let cook until the juice starts to bubble
3. Spoon in 1 x tbsp. of the butter mixture onto each oyster, sprinkle on the cheese and cook until the cheese is golden brown.

To serve:

Sprinkle on the parsley and serve immediately with extra butter mixture, lemon wedges, hot sauce and bread.

- Chef's note: If you want a smoky char-grilled flavour, add a few drops of liquid smoke to the butter mixture.



Anne Gabriel speaking at the Wellington event to mark Sustainable Seafood Day.

Urgent need to balance ocean equation

Anne Gabriel

Humanity and wellbeing on Earth are intrinsically linked to the health of our oceans. Our oceans provide oxygen for every second breath and absorb a quarter of the carbon emitted into Earth's atmosphere. Over three billion people rely on seafood as their main source of protein in the world, with fishery exports from developing countries valued at over US\$80 billion, more than all other food commodities combined (including meat, rice and sugar). Many nations and communities around the world depend on fishing as their primary source of living and sustenance.

Clearly, there is an interdependent dynamic at play here which demands the urgent conservation of our oceans in parallel with humanity's reliance on it. This is exactly what the Marine Stewardship Council (MSC) as an NGO has been conceived for – to objectively balance this delicate equation. Research shows that since 2009, global fish stocks are hovering around 30 percent overfished, and that poorly-managed fisheries have contributed to the degradation of marine ecosystems

around the world.

There have been significant achievements from developed countries to improve sustainability, for instance here in New Zealand where over 70 percent of deepwater fisheries have met the MSC standard for sustainability. But with over 73 percent of the world's seafood caught in developing countries, there is still a great need to focus efforts on eradicating overfishing. The United Nations Sustainable Development Goals are a universal call to action to eradicate poverty and create a positive change for both people and planet. Goal 14 (Life Under Water) aims to end overfishing, pollution and ocean acidification.

Leadership from the New Zealand Government, industry, academia and environmental groups has placed the country as one of the best-performing nations for fisheries management in the world. Measured against the MSC stakeholder-driven certification standard, these constituents are woven with a common thread of shared mission: to ensure healthy oceans for future generations. Without collaboration and constructive



discourse, any progress on the water will be hampered, procrastinating the urgency to this imperative mission to the detriment of the world we live in.

We know that New Zealanders care about their seafood and protecting the environment it comes from. Mechanisms like the MSC address consumer need for trust and assurance through its transparent framework and certification process. Organisations with formidable leadership and foresight such as Sealord, Talley's and Sanford are continuously staying ahead of changing and demanding landscapes. Other entities will be further motivated to get on the bandwagon.

On New Zealand's first Sustainable Seafood Day on May 14 we aimed to ignite the urgency and importance of collaboration to continue to improve and sustain ocean health here in New Zealand and abroad. There is much hope for our oceans but we must find a way to come together.

– *Anne Gabriel is the Marine Stewardship Council's Oceania programme director.*

NZ leads the way on biofouling rules

New Zealand has become the first country in the world to roll out nationwide biofouling rules to stop dirty vessels from contaminating its seas.

Announcing this last month, Biosecurity Minister Damien O'Connor said all international operators should make sure they knew the rules before their vessels arrived in New Zealand.

"About 90 per cent of non-indigenous marine species in New Zealand, such as Mediterranean fanworm, Japanese kelp and Australian droplet tunicate, arrived on international vessels. These incursions harm our aquaculture industries, fisheries and native marine ecosystems," O'Connor said.

Under the new biofouling rules, which took effect on May 15, operators must prove they've taken appropriate steps to ensure international vessels arrive with a clean hull.

This would better protect New Zealand's unique marine environment and other vital industries from biosecurity risk, O'Connor said.



Damien O'Connor

"Biosecurity New Zealand officers will take a hard line on vessels that can't provide evidence they meet the rules. Divers will carry out inspections of hulls.

"Officers will also have the power to direct vessels for cleaning and order the vessel to leave New Zealand if the fouling is severe."

Vessel operators will be required to meet the costs of any compliance order.

O'Connor said the shipping industry had had four years to prepare for the changes and ignorance of the new requirements would not be accepted.

"The definition of a clean hull will depend on vessel type



and its itinerary.

"For example, the rules are stricter for vessels that are staying in New Zealand for a long time with the intention of visiting a range of ports."

MPI advice notes say operators should be aware of the biofouling state of the hull, including appendages and niches, by undertaking frequent inspections using divers or underwater cameras.

The advice says that for most vessels "clean" means no biofouling apart from a slime layer, but for fast turnaround vessels that only visit the official ports of arrival "allowance is given for a slight amount of biofouling".



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Calling all seafood industry stars



Excellence and innovation in the seafood industry are again being rewarded with the Seafood Stars Awards that will be presented at the New Zealand Seafood Industry Conference this year, chief executive Tim Pankhurst says.

"The awards are a great way to reward innovation and excellence within our industry and tell stories about our seafood, our people and our ongoing commitment to sustainability," Pankhurst said.

"This year we are adding a new award to recognise those entities that are committed to their people by implementing health and safety initiatives or improving the skills of their workforce for the long term benefit of the industry. This ties in well with the theme of the 2018 seafood industry conference – 'Our People, Our Promise'.

"We are seeking nominations now and urge you to select your star achievers and tell us why you think they are the best choice."

Seafood Star Awards will run across all facets of the industry and will be presented to those who have made a

significant contribution to the seafood industry:

Our People Award - presented to the entity that has developed a programme or initiative that does one or more of the following;

- improves the health and safety of its workers
- improves the skills of its workers for the long-term benefit of the industry
- promotes careers in the seafood industry

Future Development Innovation Award - presented to the entity that has developed a new technology that does one of the following;

- reduces waste by adding value to by-products or waste, or
- reduces adverse impacts on the marine environment of fishing or farming seafood, or
- reduces adverse impacts of fishing or farming seafood on protected species, or
- increases the efficiency of production of seafood, or
- makes a significant contribution to health or science

Young Achiever Award - presented to a person, 35 years of age or under, who has demonstrated that he or she has made a positive difference to the seafood industry, and has the potential to continue to develop as an effective and respected seafood industry leader or role model.

Longstanding Service Award - presented to a person who has demonstrated that he or she has made a substantial positive difference to the seafood industry over many years, and who has been a highly effective and respected seafood industry leader.

The awards will be presented at the 2018 New Zealand Seafood Industry Conference on Thursday, August 2 at Te Papa, Wellington.

Nomination forms can be downloaded at www.seafoodnewzealand.org.nz/industry/seafoodstars or request from Karen.olver@seafood.org.nz. Nominations close on June 29.

**OUR PEOPLE,
OUR PROMISE**

SAVE THE DATE

The 2018 New Zealand Seafood Industry Technical Day and Conference will be held at Te Papa, Wellington.

August 1 to August 2, 2018

Economic review

of the seafood industry to December 2017



Welcome to the latest update on the economic performance of New Zealand seafood. This edition provides final data for the year ending December 2017.

KEY RESULTS FOR THE PERIOD:

- Seafood exports for the full year reached NZ\$1,791m
- Exports to Canada were up by 58 percent by value at \$30m bringing it into the top 10 export countries for the first time.
- Exports to South Korea also increased by 19 percent by value, while exports to China fell by six percent compared with 2016.
- Salmon exports have grown by 30 percent and are showing consistent growth over successive years.
- Exports of rock lobster and squid were down 15 percent and 31 percent respectively on 2016.
- Mussels were the top species by export value in 2017 at \$308m.

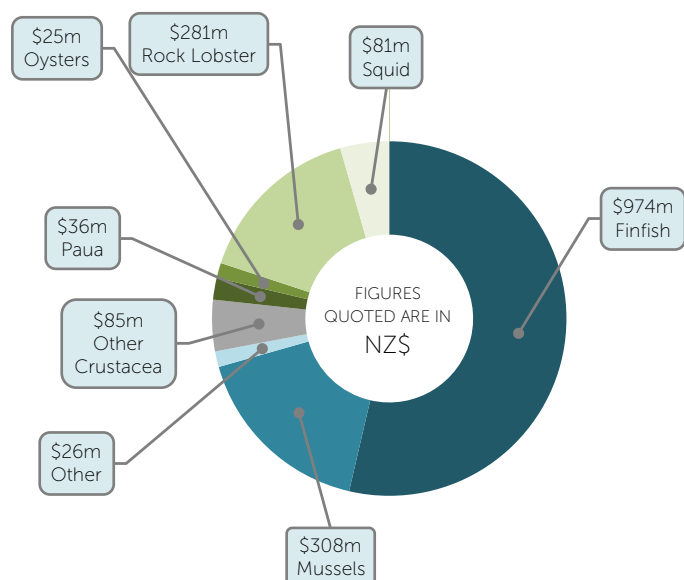
EXPORT STATISTICS

EXPORT NZ\$FOB*

All figures in this section are based on export data provided by Statistics New Zealand and analysed by Seafood New Zealand for the full year to December 2017.

Seafood exports to the end of December 2017 totalled NZ\$1,791m with more than 296,362 tonnes exported.

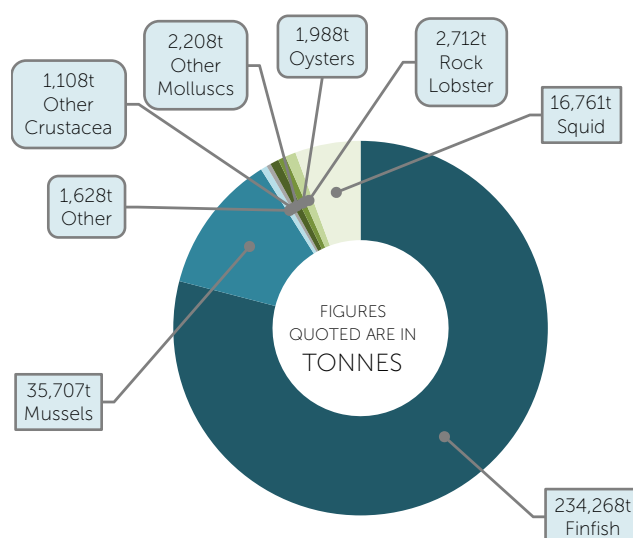
Export value (Full year to December 2017) = NZ\$1,791m



EXPORT TONNES

Finfish species accounted for 80% exports by volume with an increase of 11% when compared with 2016 levels. Shellfish makes up approximately 19% of the total volume exported. Rock lobster and other crustacea make up a small proportion of export volume but contribute a significant percentage of the total export value.

Export volume (Full year to December 2017) = 296,362 tonnes



EXPORTS BY COUNTRY

China, Australia and the United States continue to maintain the top three positions as our key seafood export partners.

The graph to the right shows diversity in the mix of products for the top five export countries. Rock Lobster continues to be the main product by value exported to China.











Top 10 Export Countries by Value (YTD to December 2017)

	Country	2017	2016	% Change
1	China, Peoples Republic Of	\$541m	\$578m	▼ -6
2	Australia	\$243m	\$251m	▼ -3
3	United States	\$230m	\$231m	0
4	Japan	\$114m	\$113m	▲ 1
5	Hong Kong	\$56m	\$59m	▼ -5
6	Spain	\$51m	\$54m	▼ -6
7	South Korea	\$51m	\$43m	▲ 19
8	Poland	\$35m	\$35m	0
9	Germany	\$32m	\$35m	▼ -9
10	Canada	\$30m	\$19m	▲ 58

EXPORTS BY SPECIES

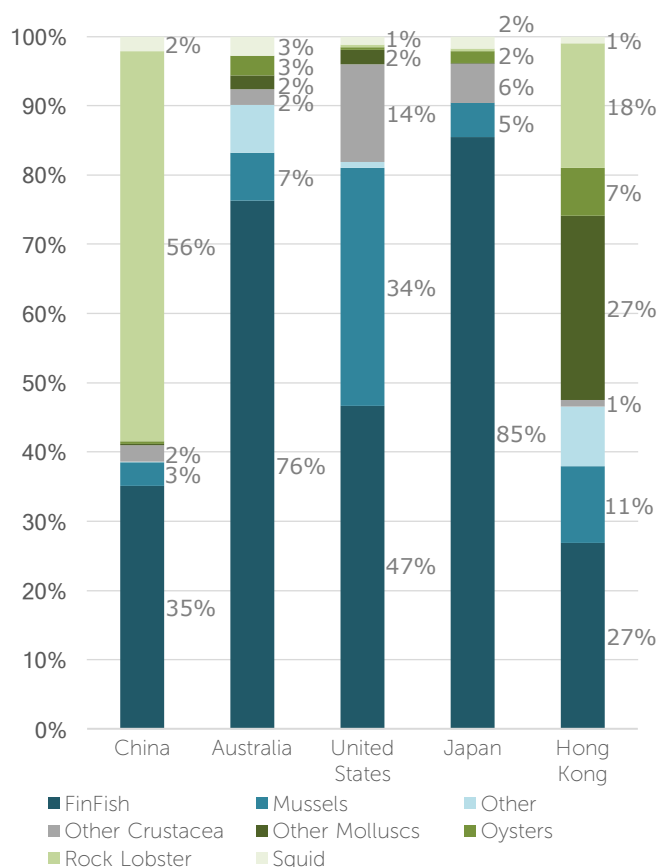
There have been significant increases in the export value of a number of species in 2017 including barracouta (43%), salmon (30%), jack mackerel (24%) and ling (22%).

TOP 10 EXPORT VALUES (NZ\$)

	Species Name	2017	2016	% Change
	Mussels	\$308m	\$311m	▼ -1
	Rock Lobster	\$281m	\$330m	▼ -15
	Hoki	\$229m	\$213m	▲ 8
	Squid	\$81m	\$117m	▼ -31
	Salmon, Pacific	\$74m	\$57m	▲ 30
	Ling	\$67m	\$55m	▲ 22
	Mackerel, Jack	\$61m	\$49m	▲ 24
	Orange Roughy	\$54m	\$62m	▼ -13
	Barracouta	\$40m	\$28m	▲ 43
	Paua	\$36m	\$37m	▼ -3

Source: Export data, Statistics NZ.








Composition of Exports to Top 5 Trading Partners (YTD to December 2017)



EXPORTS OF MAIN COMMODITIES

Exports of main commodities for the full year to December 2017 saw fish, crustaceans and molluscs decrease by 10% on the same period for 2016.

Overall there was a one percent increase in the export earnings of all New Zealand's main commodities for year ending December 2017.

	NZ EXPORTS OF MAIN COMMODITIES (NZ\$)	2017	2016	% Change
	Milk powder, butter, and cheese	12,712m	11,195m	▲ 14
	Meat and edible offal	6,121m	5,927m	▲ 3
	Logs, wood, and wood articles	4,258m	4,114m	▲ 4
	Fruit	2,370m	2,732m	▼ -13
	Wine	1,557m	1,570m	▼ -1
	Fish, crustaceans, and molluscs	1,496m	1,659m	▼ -10
	Mechanical machinery and equipment	1,487m	1,621m	▼ -8
	Total Exports	49,006m	48,432m	▲ 1

Source: Overseas merchandise trade, Statistics NZ.



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027 406 0419 OR (03) 383 7282
quotabroker@xtra.co.nz



DOMINIC PREECE
Managing Director

PHONE (03) 383 7282 | MOBILE 027 406 0419 | quotabroker@xtra.co.nz | www.aotearoaquota.com
HEAD OFFICE | PO Box 6420, Dunedin North, Dunedin 9059



#5001 BOTTOM & SURFACE LONG LINER TUNA TROLLER IN VERY GOOD CONDITION
Aluminium, built Canada 1975
LOA 17.6m x B5.6m x D2.5m
Caterpillar 3406 main rebuilt Dec 2015
Isuzu 4GBT 110hp drives 50kVA alternator
5 berths 2 cabins. Good galley. Shower & toilet
Ice maker, water maker, 25-30 tonnes hold
Long line gear. Tuna poles. Good electronics
Very well set up. A big bulky 17m vessel

SOLE AGENCY \$650,000

#4997 INSHORE TRAWLER & TUNA TROLLER

Kauri carvel planked on hardwood frames
LOA 10.2m x B3.5m x D1.2m
Detroit 471 130hp. Twin Disc 3:1 gearbox
Fuel 1100 litres 3 tanks. Water 120 litres
3 berths forward. Galley, table & seating
2-2.4t ice hold EU certified
Double drum hydraulic winch
Hydraulic net roller, tuna poles
Inshore survey valid to 20 July 2022

\$65,000



#4976 SELF PROPELLED MUSSEL HARVESTER

Built 1992 Steel, New Zealand
LOA 17.6m x B 4.8m x D 1.1m
John-Deere 165hp
5 x hydraulic lifting davits
Stainless-Steel Mussel harvesting & seeding machinery
Hiab 122/CLX deck crane.
3.7T max lift
24t carrying capacity

Sole Agency NZ\$350,000



#4992 LUFF HAULER (LARGE SIZE), 700mm diameter
Refurbished March 2017
Net bin. Cutting tray.
Set nets. Bale new mesh.
Floats. Anchors. Float ropes.
Lead core rope.
Cutting table
Net making gear.
Setting rail. Hauler spares.

\$30,000



#4991 FRESH FISH STERN TRAWLER L 25.6 x B 5.93
Scania 400hp main.
Twin Disc 4.5:1 G/box
Ford aux. 12 berths
Ice hold 50 tonnes bulk/
1,000 cases.
Good electronics some new
Offshore survey expires
30 November 2022

PRICED TO SELL \$590,000

All prices indicated are plus GST unless otherwise stated.

150 VESSELS AT

WWW.MARITIME.CO.NZ

DISCOVER THE MANY BENEFITS
OF SELLING YOUR CATCH AT

SYDNEY FISH MARKET



WE'RE AUSTRALIA'S HOME OF SEAFOOD. We're the southern hemisphere's largest seafood market and Australia's premier destination for chilled seafood.

350 BUYERS... AND COUNTING! 14,000 tonnes of seafood is traded through our wholesale auction and direct sales facilities annually. Our large buyer base consists of wholesalers, retailers and restaurants attracted by the variety and quality of product on offer.

WE'RE COMMITTED TO SUSTAINABLE SEAFOOD.

We support and encourage responsible fishing practices, environmentally responsible farming practices and responsible fisheries management based on rigorous and sound science.

WE'RE COMMITTED TO A VIABLE SEAFOOD INDUSTRY.

We actively support the industry with initiatives which inject value back into fishing communities. We pride ourselves on the transparency

of our mechanisms of sale and activity, including our dutch auction which ensures fair market prices. We back this up with guaranteed weekly payments to our suppliers.

WE DO MORE THAN JUST SELL SEAFOOD. We develop and maintain best practice seafood handling and quality systems. These systems ensure our suppliers and our buyers are able to maximise their returns from their catch or seafood purchases.

☎ Call +61 2 9004 1105 to discuss opportunities with our Supply Department
✉ supplydept@sydneyfishmarket.com.au 🌐 www.sydneyfishmarket.com.au

