

SEAFOOD

NEW ZEALAND



April 2022 | Volume 30 | No. 02 | Issue 273

The growth of the Wairarapa's
artisanal Tora Collective

Hard living, great life: the rewards
for women working at sea



SUPPORTING YOU TO **STAY ON COURSE**

A strong, resilient, viable commercial seafood sector is in all our interests. It provides you with a living. It feeds New Zealanders. And it ensures that our coastal communities can thrive.

But being a member of our seafood community isn't always easy. We need to have each other's backs. FirstMate is an organisation to support our seafood whānau. We want you and everyone around you to have not only what they need to survive, but thrive.

FirstMate offers a friendly ear to talk about anything on your mind or causing you difficulty. Things like:

- › Building personal and business resilience
- › How to navigate regulations
- › Any issues you are having mentally and/or physically
- › How you can make all your hard work pay off financially.

For support or advice call

0800 ADRIFT

0800 237438

www.firstmate.org.nz



**first
mate**
SUPPORTING OUR
SEAFOOD WHĀNAU

16



Features

- 07 Feature: John Annala – a life well lived
- 11 Feature: The force behind “the Fishing Paper”
- 16 **Cover Feature:** The growth of the Wairarapa’s artisanal Tora Collective
- 22 Feature: Hard living, great life: the rewards for women working at sea

In this issue

- 04 From the Chief Executive
- 06 News: Scholarship winners pay homage to their heritage
- 10 News: NZ-farmed shellfish match tofu’s low carbon footprint
- 14 News: Calling seafood stars
- 27 Mythbusters: Catching fish not seabirds
- 28 Sustainable seas: Exploring what pāua fishery investors need to know
- 30 Navigators: the team helping with wellbeing
- 33 MPI: Iwi-led aquaculture



23



37

- 34 Chefs on seafood: TV chef’s road trip celebrates unsung seafood heroes
- 36 Recipe: Mussel fritters with sweet chilli mayo
- 37 Event: For the love of seabirds
- 39 News: Feed your microbe mates with New Zealand seafood
- 40 Event: Inzone hits the road
- 41 New digest: Introducing Caroline Read
- 42 Economic Review: December 2021

EDITORIALS

Published by Seafood New Zealand Ltd.

Postal Address:

PO Box 297
Wellington 6140
New Zealand

Physical Address:

Level 12, 7WQ
7 Waterloo Quay, Pipitea
Wellington 6011
Phone: +64 (0)4 385 4005
www.seafood.co.nz



Editorial enquiries:

Email: editor@seafood.org.nz

Advertising enquiries:

Karen Olver
Phone: +64 (0)4 802 1513
advertising@seafood.org.nz

Subscriptions:

Seafood New Zealand is published for the New Zealand seafood industry. It is also available on subscription in New Zealand and overseas. Subscription rates are available on request. Seafood New Zealand is produced bi-monthly (six issues per annum).

Your Say:

Contributions of a nature relevant to the seafood industry are welcomed and industry participants are encouraged to contribute. Letters to the Editor should be signed and carry the writers' full names and addresses.

General:

The reproduction of articles and materials published in Seafood New Zealand, in whole or in part, is permitted provided the source and author(s), as applicable, are acknowledged.

editor@seafood.org.nz

However, all photographic material is copyright and written permission is required to reproduce it in any shape or form. Articles and information printed in Seafood New Zealand do not necessarily reflect the opinions or formal position of Seafood New Zealand Ltd unless otherwise indicated.

All material published in Seafood New Zealand is done so with all due care as regards accuracy and factual content. The publishers and editorial staff, however, cannot accept responsibility for any inadvertent errors and omissions that may occur.

ISSN 1172-4633 (Print)

ISSN 2538-0834 (Online)



From the Chief Executive

Towards the end of last year, we put out a reader feedback survey for our Seafood New Zealand magazine. I'd like to thank everyone who took the time to let us know their views and tell us what we're getting right, where we're missing the mark, and suggestions for how we can do better.

As a result, we'll be pushing out some tweaks and changes over the next few months. In this edition, you'll notice the introduction of our Myth-busters column, where we push back on misinformation in the wider media through science, credible sources, and industry knowledge.

We're also working closely with the Primary Industry Capability Alliance (PICA). The focus of PICA is industry and government working together to attract a diverse range of talented people into the primary industries. We've joined the PICA Great Workplaces & Employers initiative, alongside the likes of Primary ITO and Dairy NZ, sharing stories about what we're all doing to create a positive work culture, while also changing people's perceptions about our sector.

As part of this, we set about celebrating International Women's Day (March 8) by talking to some noteworthy women in our industry. When we first started searching for women to profile for this issue, we didn't expect the response from the sector to be as large as it was!

Therefore, over the next few editions we'll be championing the incredible women, both on land and at sea, starting with a feature on former factory ship worker turned research vessel steward Jo Jackman.

We're also happy to announce that FirstMate, a trust that MPI and the industry has set up to support the health and wellbeing of hardworking people across the commercial seafood sector, will also be featuring in the magazine on a regular basis. FirstMate will be sharing updates on how it's going, the challenges the industry face, and the people behind the scenes and at the coalface that are ensuring it thrives.

Another focus point of the next few issues ties into The United Nations International Year of Artisanal Fisheries and Aquaculture, as we'll be seeking to highlight many more small scale and artisan fisheries. We kick this off with a look at Tora Collective in this issue.

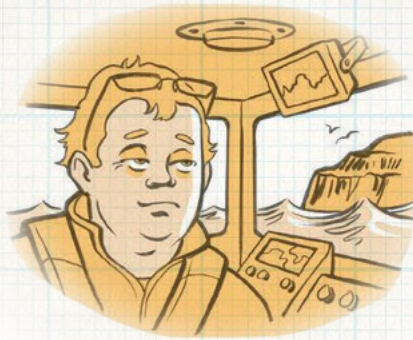
And finally, we're starting up a "Nostalgia Corner"; stories and photos of old boats, people, and places from way back when. We'd love to learn about your history and see your pics, so feel free to drop us a line at:

editor@seafood.org.nz

Dr Jeremy Helson
Chief Executive

Too tired to fish

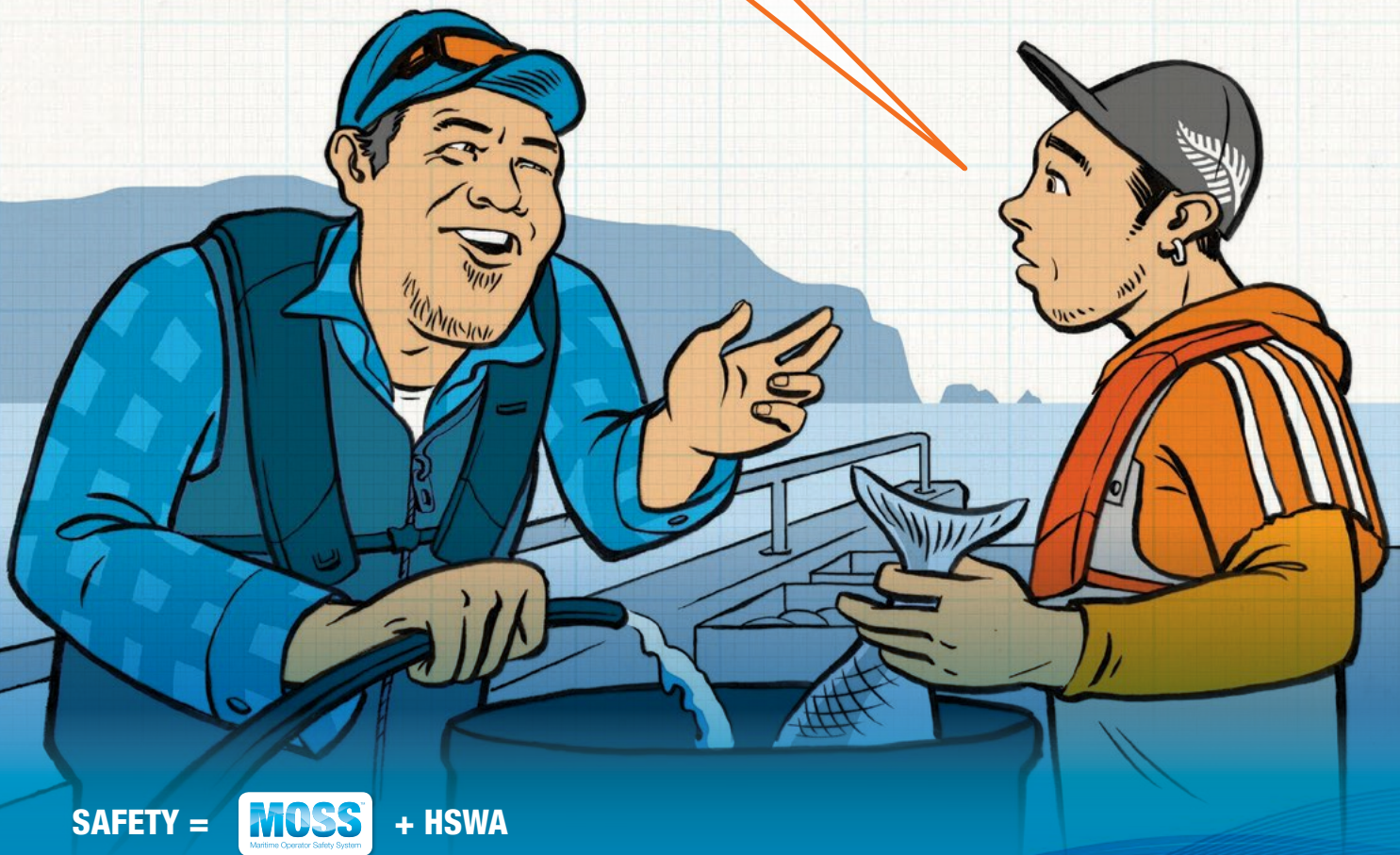
#1



JANGLE JIM ALWAYS MADE SURE THAT HIS CREW GOT SLEEP, BUT NO NOT HIM. AFTER ONE REALLY ROUGH TRIP, JANGLE SENT THE CREW TO GET SOME SLEEP AND KEPT WATCH.

BUT HE HAD AN AUTO PILOT, RIGHT?

THEY'RE NOT ALWAYS RELIABLE IN FLOOD TIDES. NEITHER ARE TIRED SKIPPERS. BUT ROCKS ARE. AND SO WAS THE AWFUL JANGLE SOUND WHEN HE SMASHED INTO THEM. THEY COULDN'T FISH FOR WEEKS.



SAFETY =  + HSWA

For tips on safe fishing go to
www.maritimenz.govt.nz/fatigue

Safe crews fish more

Nō te rere moana Aotearoa
 **MARITIME**
NEWZEALAND

Scholarship winners pay homage to their heritage

Sealord has announced two recipients of its annual scholarship award, both of whom have plans to pay homage to their heritage through their chosen career paths.

Neih Neih Hlawnceu, a former refugee from Myanmar who came to New Zealand with her family aged seven, was delighted to be chosen as a successful candidate. With support from Sealord to assist her financially, she will now become the first member of her family to attend university.

Having always had a passion for helping others who've followed the same path to a new life in Aotearoa, Hlawnceu will be studying two degrees at the University of Otago - a Bachelor of Law and a Bachelor of Arts, majoring in Philosophy. Through her five to six years of tertiary studies, she is planning to further a personal mission to build stronger connections between Kiwis and former refugees.

Hlawnceu's parents, father Hre UK Hlawnceu and mother Zizi Hla, who both work in a fish processing factory at Sealord, couldn't be more proud.

Every year the company opens applications to the families of staff, awarding up to \$10,000 annually to one or more recipients, for up to four years, for tertiary studies. The scholarships not only recognise the talent and commitment the recipients show, but also the good work they do in the community.

"I chose my course because for former refugees there are a lot of misconceptions and misunderstandings about New Zealand law and I want to help others – and help myself – get a better understanding," says Hlawnceu, now aged 18.

"I'd like to be able to educate more people and build a really strong connection between Kiwis and other former refugees so that New Zealand society can grow."

Hlawnceu has felt strongly about this for some years and at Nelson College for Girls received acknowledgments for her services to tutoring other refugees, including a top leadership Award.

Knowing that she has support from Sealord has come as a relief financially, and also helped boost her confidence and determination. "It takes a load off myself and my parents and I'm just so grateful for that," she says.

Sharing the scholarship this year with Hlawnceu is Maggie Goomes, who's about to embark on a Bachelor of Communication, majoring in Tauwhitinga Māori: Māori Communication Strategy and Practice at the University of Canterbury.

Of Moriori, Te Āti Awa, Ngāti Mutunga, Ngāti Toa, and Kāi Tahu descent, Goomes also received the top Māori award at Nayland College, which recognises a student who has demonstrated leadership qualities in culture, sport and the wider community.

Goomes' father, the skipper of Sealord vessel *Ocean Dawn*, hails from the Chatham Islands, and is proud of his daughter not only for gaining the scholarship, but for her passion for keeping Māori culture and language an integral part of New Zealand society.

Since Sealord is half iwi-owned, it's fitting that Goomes' passion aligns with the company's strong Māori heritage and tikanga.

"I chose the course because I've always had a real passion for Te Ao Māori and involving it as much as I can into everyday life, normalising it, and just helping other people to do that too," says Goomes.

"This course is really going to give me the skills I need and enable me to help others.

"When I found out I'd got the scholarship there was a sigh of relief knowing I've got that to help me and my whānau out – I'm so incredibly grateful. It's also encouraging that it's not just my loved ones who believe in me, and that's pretty motivating."

In addition to Hlawnceu and Goomes, another 23 family members of Sealord staff have extended their education with assistance from the Sealord Scholarship Scheme since it launched 11 years ago.



The scholarship winners with members of their family who work at Sealord, (L to R) Neih Neih Hlawnceu with proud parents Hre UK Hlawnceu and Zizi Hla and Maggie Goomes with proud dad Ted Goomes.

John Annala: a life well lived

For someone who was so instrumental in the science that formed the basis of the New Zealand fishing industry, it's somewhat surprising to find the deep spiritual beliefs underlying the fact-based world that he excelled in. Lesley Hamilton visits John Annala at the Lotus Eco Retreat on the Kapiti Coast.

Annala recently retired as a scientist from the Ministry for Primary Industries (MPI) and was instrumental in the genesis of New Zealand's Quota Management System (QMS) in 1986. Annala was born in the United States and did zoology at the University of New Hampshire.

"When I was finishing my PhD in the early seventies, I was looking for a job, and was offered a position in New Zealand working for the old Ministry of Agriculture and Forestry (MAF) working on rock lobsters.

"None of my other job offers were quite as appealing and MAF was willing to give me a contract, repay moving expenses for myself and my then American wife, so we thought we had nothing to lose. We had always wanted to travel, particularly to New Zealand and Australia.

"So, we both came out, but she decided to go back – and that's how I ended up with three Kiwi wives. I have been with my current wife Ros for almost 20 years.

"Apart from a few stints overseas, I have stayed here in New Zealand for almost 50 years. I was offered a position in 2004 to head up a brand new, not-for-profit research organisation in Portland, Maine. My parents were in their eighties and still living nearby, and I was familiar with the city from my pre-graduate days, so after a lot of consideration we decided to go to Maine."

Annala says that both professionally and personally it was one of the best decisions he ever made.

Annala, at this stage, had been chief fisheries scientist for MAF for 10 years.

"Maine was a great opportunity. The Gulf of Maine Research Institute was really about providing for sustainable fisheries, which has always been my passion, including right from the beginning in New Zealand. I have never been anti-fishing; I have been a conservationist through sustainable use of resources."

Annala says the system in the United States was pretty broken at that stage.



John Annala at the Lotus Retreat he now calls home.

"I saw it as an opportunity to practice what I had learned here in New Zealand and apply it to a system that wasn't working well.

"The US had introduced a form of property rights management called sector management where the industry had to self-form sectors and then to allocate property rights to fish, whether they were quotas or other forms of allocation."

Annala says, in some ways, New Zealand's fisheries management was more innovative than what was being done in the US. He says the genesis of New Zealand's QMS was primarily driven by the industry with support from some key people in the Ministry.

"I was on the research, science, and administrative side of that and, in some degree the policy side, but there were a few key people like Stan Crothers, who was chief compliance officer, Russell Burnard who developed a lot of the administrative systems, and Mark Edwards who now heads up the Rock Lobster Industry Council. But if anyone was really the driver, it was Peter Stevens. Stevens was before his time and coming from a non-academic and non-bureaucratic background, being a builder and a fisherman, he was very blunt. I liked him a lot. Without these four people and others, it would never have happened."

At the time of the creation of the QMS, there was little globally to draw on for inspiration.

FEATURE

"There were no real operational models. There was one being developed in Iceland, but the model we came up with is still sound but needs some work."

Annala says there is more flexibility needed in certain areas and that it "certainly needs to be tweaked."

MPI Stock Assessment Manager Nathan Walker says Annala is a highly respected scientist who was the driving force behind the creation of the Ministry for Fisheries (now Fisheries New Zealand) science team. The processes and systems he designed have stood the test of time and are still largely in use decades later, continuing to underpin their highly respected science system.

Walker says Annala's reputation and legacy extends beyond New Zealand with his work in the Pacific on tuna fisheries, U.S. fisheries and several international fisheries organisations, such as the Commission for the Conservation of Southern Bluefin Tuna and the Western and Central Pacific Fisheries Commission.

Annala has been a positive influence on many others in fisheries, he has guided and mentored many scientists and other fisheries experts throughout his career and the industry is grateful for the time he has devoted to his long and illustrious career in fisheries and the friendships and experiences along the way.

Walker says Annala's career has been impressive and unique. MPI thanks him for his huge contribution to building a sustainable fisheries science and management system.

Annala says one of the most important changes that should be made is the amount of money going into the research of our fish stocks.



The focus on educating children and the community about fishing drew Annala to the Gulf of Maine Research Institute.



The Lotus Eco Centre in Kapiti.

"Both inshore and deepwater need more money for research but if we can drag in the non-commercial holders into supporting research as well, that would be great.

"There is a need to bring recreational fishers around the table. Just getting them more involved in research and management."

Annala says there is definitely a place for recreational fishers to account for their catch.

"We went through the same thing in the States when I was there from 2004 to 2014. Recreational fishers there had just been letting us down, not paying any or little fees, and not even covering any costs for research and management."

Annala has worked with New Zealand's Scott Tindale of the Tindale Marine Research Charity Trust.

"Tindale is a bright and passionate guy and through the International Game Fish Association (IGFA) was putting in money for tagging and modelling to supplement government funding."

Annala believes there is an opportunity for government to partner with non-profit organisations.

"When I was chief science advisor back in the early 1970s, there was a different attitude. We had research projects that we funded jointly with the likes of the World Wildlife Fund (WWF) and other far-reaching environmental groups and that's just not happening now."

Annala has a good relationship in the Pacific with Bubba Cook from the WWF and Cook has been advocating for good fisheries science and management in the Pacific, so WWF play a particularly constructive role.

"Since my return to New Zealand in 2014, my focus has been mostly the Pacific, but I do try to keep up with New Zealand fishing issues.

I ask him if it is the end of the line for bottom trawling.

"No, I think bottom trawling can be very sustainable, providing the right techniques are used. There was a guy I hired when in Maine. He was Australian. He worked out various techniques for minimising impacts so as to keep the trawl off the bottom, increasing mesh size, and

improving fuel economy and fuel efficiency for the various techniques and it proved to be very successful.

"Modern trawling can be quite sustainable."

What about landings and discards? Should we land everything we catch?

"Hmmm. That's a very good question and would depend on how it is done. I think most of the fish that comes up in bottom trawls used commonly in New Zealand is going to die, so I would look very seriously at making all landings from bottom trawling compulsory. I did a tagging programme off Kaikoura and fish caught in set nets were all healthy. The net had only been in the water for 20-30 minutes. Long lining, same thing, landing all fish from short sets is probably not necessary."

We move on to marine reserves and whilst Annala will not comment directly on the global push for 30 percent of the world's oceans to be tied up in marine reserves by 2030, he does believe they have their place.

"Marine reserves are good for protecting and enhancing marine biodiversity, but they are not the be-all and end-all of protecting fish stocks.

"It really depends on whether you identify nursery areas, however in pelagic fisheries marine reserves are not very useful at all for fish stocks."

Annala has to think long and hard when trying to recount the highlights of his career.

"There are probably three phases to my career. Back in 1995 when the old Ministry of Fisheries was split off from MAF, I was involved with Stan Crothers, Jonathan Peacey, and this guy who was chief executive of Mitsubishi New Zealand. These were the people that formed the new Mfish. I was involved in trying to separate science from management in the new structure by having the managers contract science, which they felt was required for stability. So, when Mfish was established in 1994, I established the science team from scratch, which I expanded from just me to a team of 25 scientists in half a dozen years."

When Annala went to the Gulf of Maine Research Institute he did something similar, taking the science staff numbers from 3 to over 25 in 10 years.

Annala's Kiwi wife Ros is a teacher who also became involved in the Institute, which had a heavy focus on educating mostly middle school children, aged 11-13, in fisheries.

"It was really good for me working in education and with the community. We brought the students and the community to the Institute, and we have had 100,000 students through the teaching laboratory."

When the Annalas returned to New Zealand in 2014, he let colleagues know he was on his way and enquired about opportunities for any jobs in the Pacific. He landed a job immediately back with the Ministry and was off to Noumea in New Caledonia the month after he returned.

"It gave me the opportunity to work with Pacific scientists in their realm and while I can't take any credit

for what has happened in the seven years since, there has been a tremendous improvement."

Annala only now takes a mentoring role in the Pacific, but he and Ros have begun a new dream.

With both always interested in modern, New Age pursuits, they have built a home at the Lotus Eco Village in Paraparaumu.

A community of 25 houses are being built or already constructed on the large bush-clad site with another 8-10 houses underway to bring in families, particularly low-income families. The 25 original families, largely baby boomers, will be putting in seed money into the houses to be built in the next phase. A community centre sits amongst the grounds, where all can meet to socialise, practice yoga, or for meditation.

"We are trying to build of community of people who range from toddlers to retirees," says Annala.

It sounds like the perfect retirement for a life well-lived.

The New Zealand seafood industry would like to record its deepest thanks to John Annala for his long and significant contribution to the development and maintenance of the Quota Management System and the scientific processes that underpin fisheries resource management.



A young Annala.

NZ-farmed shellfish match tofu's low carbon footprint

A recent study by sustainability experts thinkstep-anz has found New Zealand-farmed shellfish have among the lowest carbon footprints of all animal proteins, similar to the footprint of the plant-based protein tofu.

The study, co-funded by the Ministry for Primary Industries and Aquaculture New Zealand, is an in-depth analysis of the life cycle of farmed Greenshell mussels (*Perna canaliculus*) and farmed Pacific oysters (*Crassostrea gigas*) in New Zealand.

The study found that the impact of farmed shellfish (from farming to domestic retail stage) is comparable to tofu and their carbon footprint is comparable to or lower than all other forms of animal protein considered by the referenced study, including overseas-produced beef, poultry, dairy, and eggs.

"The study uses a method called Life Cycle Assessment (LCA) to consider the full life cycle of farmed shellfish from

ocean to plate and beyond," Jeff Vickers, co-author and the Technical Director at thinkstep-anz, says.

"It covers everything from collecting spat (the juvenile shellfish), through the grow-out phase on the farm, harvesting, processing, packaging, shipping, and food preparation, to disposing of used shells and packaging. "We took the inputs from all of these stages, such as diesel used on boats, on-farm materials like floats and wood, electricity used in processing, fuel used for transport, and calculated the total environmental footprint and where the hotspots are."

"We then compared the environmental performance of New Zealand's farmed shellfish to other forms of protein around the world. They compared very favourably."

The study can be found in full at www.aquaculture.org.nz/news-article/nzshellfishlca

KAESER
M118

0800 447 820
nz.kaeser.com

IT'S IN OUR DNA.

From design to manufacture, from consultation and installation to ongoing service support - quality, efficiency and reliability are inherent qualities in everything we do at KAESER Compressors. That means when you choose KAESER to be your compressed air partner you can be assured that you'll be receiving a premium quality, ultra-efficient and extremely reliable portable compressed air solution that has been tailored to meet your precise compressed air requirements.

Quality. Efficiency. Reliability. At KAESER Compressors it's in our DNA!

KAESER
COMPRESSORS

Crimp: The force behind "the Fishing Paper"

Daryl Crimp is a teacher, cartoonist, chef, author, radio host, hunter, and fisher. In his sixties, and having achieved so much, he has made the shock decision to sell his 17-year-old publication *The Fishing Paper*. Lesley Hamilton chronicles just how he got here.

The *Fishing Paper* is free. Chances are, you won't have missed it – it sits in stands outside stores and businesses around the country every month and earns Daryl Crimp and his wife and business partner, Annette Bormolini a very good income from loyal advertisers. One bloke in Queensland, Australia, reckons he has a list of 36 people he must pass the paper on to every time it turns up. That is even though it is not distributed in Australia.

Crimp, or 'Crimpy' as he's known, is still a little perplexed he ended up with a teaching degree. Whilst growing up near Tapawera, his early career saw a quick transfer to the West Coast where he felt he may have been more suited, but it wasn't quite what he was looking for.

So, in the late 1980s he came back to Nelson and bought a restaurant.

"Could you cook", I asked?

Apparently, it is not necessary. Crimpy says the trick is to teach yourself around eight main meals, perfect them and never change the menu.

Crimpy's menu consisted of lamb medallions in a mint sauce, filo chicken, venison back strap, ribeye steak, fillet steak, fish (usually snapper), curry, and ceviche.

The Brown House became a legend in Nelson, not so much for the food but for the loyal customers who booked in to see what the 'mad chef' was up to each night. Tip: it usually involved alcohol and breaches of health and safety, noise control, and little book-keeping. Sometimes, it was the 'naked chef', stories best left for those who manage to outlive him.

"I remember this one night," Crimpy says, "I kept a watch on the tables and didn't call wait staff until it got a little bit past my ability to cook and serve alone.

"At 6pm there was no one there, so I rang Tania who was rostered on, and said she could take a night off. Then two people come in, that's all good, then another four, which I



was still going to cope with but then another table of eight come in and I started panicking and calling Tania.

"No answer. Grabbed one of the diners, gave him a menu and told him to get everyone seated, get them a glass of wine and calmed down. He wasn't saying much to his wife anyway.

"At the point I knew we needed a solution that didn't involve my usual wait staff."

"So, I grabbed another diner and said, 'mate, come out here, you're on the grill with me'.

"He told me he didn't know how to cook. I looked at him stone-faced and told him nor did I."

"Anyway, we ended up with three diners helping me out and had a full house. At the end of it, I look at the guy cooking the kebabs on the grill with peanut saté sauce and thank him. I tell him he can go and eat with his wife now. He says, 'hell no, I am having too good a time out here'.

"I finally got through the evening, got everyone fed, and walked through the restaurant to see a young couple gazing into each other's eyes and I see a bottle of red wine free on this table and say, 'hey sorry but I need this more than you' – and walked away with it.



"At the end of the night, I told them I was going to get pissed upstairs and as they left, they could just pay me what they thought they owed and let themselves out.

About this time, Crimp's ongoing tenure with the teaching profession ended. He makes no correlation.

Crimpy had always been a little bit of a cartoonist and had been keeping up with it while the shenanigans went on at the Brown House. Once he sold the restaurant, did a bit of an OE, and when he came back decided he was becoming a full-time cartoonist.

Crimpy started faxing cartoons every day to every newspaper in the country.

Three weeks later, the Sunday News editor rang Crimpy back saying he admired his tenacity, and while he still didn't have a full-time cartoonist's job for him, he would give him one cartoon a week to illustrate a story. Another few weeks later and Crimpy had a full-time cartoonists job with the Sunday News.

"Radio came at the same time as the push to serious cartooning in the mid-nineties. I enjoyed 'Cooking with Crimpy'. Which ended up lasting 21 years, then another radio show, then cookbooks followed. I just said 'yes!'"

"I guess *The Fishing Paper* was like the blossoming at the end of my career. It allowed me to reap rewards that came before. It's a great earner and also provides a very rich and very varied lifestyle.





Annette Bormolini.

"A short time after starting *The Fishing Paper*, I realised it gave me the opportunities I needed to do things like hosting game hunting trips to South Africa."

Crimpy admits that part of the success of the paper was because he is 'Crimpy'.

"But the paper is still an entity in itself. It would still benefit from the opportunities I got out of it and will open up opportunities for someone new that even I haven't got out of it."

He says whoever buys *The Fishing Paper* does not need to be a fisherman.

"*The Fishing Paper* is a vehicle to sell advertising. As long as you have good people skills and can spot a story, those are the greatest strengths. You don't need to be an expert fisherman to run the paper at all. There is such a network of support. You are just a mirror to the community of fishing in the region.

"Clearly, you need to be able to write and be able to engage people, and you need to have an Annette [Bormolini] to do the practical stuff and make sure it comes out every month."

Bormolini says she had already worked in a print house and had come from 'a family of hard grafters'.

And as that conveyor belt passes Crimpy once more, he talks about wanting to learn the guitar, or another language, or see if it is true that he cannot sing, continue volunteering for hospice, learn to paint abstracts, or host people on overseas trips.

"I think I got those credentials at the Brown House.," Crimpy says.

Crimpy and Bormolini say the advertisers are loyal and while they do have an online edition of the paper, people just like having that old fashioned feel of newsprint.

Crimpy says they are publishing the stuff that will not have made headline news anywhere else, but "everyone wants to be the hero in their own story," he says, "so a lot of the community is happy to supply stories, and happy to have it shared".

And there was a little bit of politics in there too, but only when it was necessary, and only if it was justified.

"Fifteen years ago, the recreational kingfish fishery opened up in D'urville," says Bormolini.

"So, Daryl wanted to implement a kingfish tagging and catch and release so we could start pulling data about where they go. We would sell advertisements into the paper from businesses to support that endeavour to fund the tagging and as part of our corporate responsibility."

Crimpy says blue cod was another one. "In Anderton's day [Jim Anderton, Minister of Fisheries], there was a lot of fuss about the collapse of the blue cod in the Marlborough Sounds and they were going to close all of the Sounds to all hook and line fishing, including blue cod.,"

"So, we set up a petition through *The Fishing Paper* and then put it online. We talked to Anderton, won, and he closed the Marlborough Sounds to blue cod only."

Bormolini says after 22 years of marriage and 17 years of *The Fishing Paper* it is high time for her and Daryl to see the marriage they have without that.

Crimpy and Bormolini are catching a conveyor out of here.



The Fishing Paper layouts are done the traditional way.

Calling seafood stars



Excellence and innovation in the seafood industry are again being rewarded with the Seafood Stars Awards.

"The awards are a great way to celebrate innovation and excellence within our industry and tell stories about our seafood, our people and our ongoing commitment to producing the best seafood in the world," says chief executive Jeremy Helson.

"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 Stars 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:

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.

Nominations close on June 30. Winners will be announced at the Seafood Conference in Nelson and in the Seafood magazine.

Nomination forms can be downloaded at www.seafood.nz/events or requested from Karen.olver@seafood.org.nz.



Seafood Stars 2021 Young Achiever Award winner Amy Moore.

SEA INTO THE FUTURE

SEAFOOD NZ CONFERENCE | 18-19 AUGUST 2022

RUTHERFORD HOTEL, 27 NILE STREET, NELSON

WE'RE TAKING BOOKINGS FOR 2022/23 RIGHT NOW!

Connie S



Seamount Enterprise



Columbia II



YOU'LL FIND THE BEST CREW AT VESSEL WORKS!

With a 350-tonne mobile vessel hoist, deep water access, and 6,300sqm of hardstand. **Vessel Works** is quickly becoming the destination of choice for working boat owners who want great service, reasonable rates, and the freedom of an open yard.

Our refit wharf is designed for alongside refit works for vessels up to 60m. This berth allows for crane, truck, and forklift access to vessels for a variety of in-water maintenance activities.

To book your space give us a call.

P: +64 7 577 7270

E: INFO@VESSELWORKS.CO.NZ

vesselworks.co.nz

TAURANGA,
BAY OF PLENTY

**VESSEL
WORKS**

The growth of the Wairarapa's artisanal Tora Collective

The United Nations has declared 2022 the year of the Artisanal Fishing and is concentrating on enabling all countries to be able to feed their people with sustainable food from the waters that surround them. However, the idea of artisanal fishing is also something consumer-driven. Lesley Hamilton reports.



Just a year ago, the Wairarapa's Tora Collective a two-person artisanal seafood company on the rough southern coast of the Wairarapa won the Outstanding NZ Food Producer Award in the Water category.

Tora Collective is run by Troy Bramley and Claire Edwards and winning the award was a total surprise to them. The pair have not stood still in the 12 months since winning the award and while the number of restaurants they supply keeps increasing, a number of other ventures for Tora Collective are in their infancy.

Tora Collective are catching and selling to some of the country's most high-end and discerning restaurants, including Saint Sebastian in Masterton. Bramley says owner Caleb Kloeg and head chef Johnny Monsour are creating masterpieces out of the favourites of the past generations.

As Edwards points out, a revival of traditional New Zealand foods is being mastered around the country.

"The kaimoana we supply is being used to create a fusion of what our ancestors used to eat and what is popular with our peoples today. We've never had much of an 'Aotearoa cuisine' before, but that is changing as we focus on using these and other local or endemic species, such as turning the classic creamed pāua on rēwena (traditional Māori potato bread) into new high-end dishes," says Edwards.

Although the crayfishing season ended for the Tora Collective at the end of February, generally they will send out a fishing plan at the end of each week to all their customers and ask them to put orders in by the end of the weekend, says Bramley.

"At the moment we are diving for pāua, and the same day we get it out of the ocean and pack it and get it on couriers to its customer the next day. That's the quality we wanted to do with live produce."

There are increasing recreational fishers plying the bountiful coast and the odd bach owner who picks Tora as their paradise of choice.

Bramley praises the local commercial pāua divers for voluntarily increasing the commercial pāua size from 125 to 128 so it leaves the recreational takers to take the 125mm length and lowers the number of commercial pāua harvested in the Wairarapa each year. He says Tora Collective has also decided to take no female crays this year to try to increase the abundance."

Tora Collective is a new company, operating since August 2019 but Bramley's family have been crayfishing on this coast for 30 years.

"For you, as a fisher, to have that connection to the people who are serving your fish or eating your fish is important. To know that is the fish you caught on that

plate, instead of it going into a big tank is special and, for a long time, we haven't been able to do what we do," says Bramley.

Edwards also says there is a perception that they are totally anti-export, but they are not. They still export a portion of their cray catch. The purpose of Tora Collective is having an international supply and better product to Aotearoa while harvesting and doing business in a responsible and sustainable way.

"We're not anti-export, we understand we need to export as a country, but we also need to also focus on supplying our people with the quality produce they deserve."

Bramley says the Quota Management System (QMS) has been good, but it has limited opportunities for fishers' ability to sell direct to the public and "there are only a handful of us out there who can, because we have independent quota or the ability to lease some, but there is not much out there".

Edwards says the QMS does not need to be abolished but it does need to be tweaked. "We think that if you own quota, it should be leased directly to fishers, and not subleased through distribution companies, giving fishers the ability to sell the fish they catch."

Bramley says it should be as easy as someone on the shore seeing a boat coming in with fish and asking to buy some fish off them, but currently the crew can't sell that fish because they don't own the quota or ACE. "It is also closing the door to people who do not have the ability to catch their own fish," says Bramley.



Measuring crayfish.

Both are supportive of some more stringent controls and reporting of recreational fish. Edwards says we need to be aware of everything we are taking out of the ocean. Tora Collective take crayfish in pots, dive for pāua, and take some kina live as well.

"Oh, and octopus is the only bycatch we take from some of the other fisherman we know around here."

Bramley says their packaging is now fully plastic-free as they have home compostable bags for their local octopus or "occies" as well.



Corporate hospitality has now come to Tora Collective.

COVER FEATURE

There has been quite a lot going on since last year as far as diversification, Bramley explains.

"We have trust and respect about what our brand is now, but we want to do more corporate events. We bring them out here, take them out on the boat, explain about the fishing and sustainability.

"These are people that often do not eat a lot of fish or who have little connection to the fishers themselves and we make it a fun corporate lunch and learning activity."

The couple say that the whole 'support local' initiative that encouraged people to buy fresh produce on-line during the first Covid lockdown was a great boon for them.

Edwards says the past two years they have sold direct to consumer online for Christmas.

"About six weeks beforehand we go live, and offer deliveries for the 22nd, 23rd, and 24th depending on weather.

"And lockdown was amazing. We were driving it around hand delivering it and people thought it was really cool. We thought we would get about four orders because the restaurants were closed as well, but it was really epic."

Bramley says the social media goes crazy with pics on Facebook and Instagram and the connection with customers is amazing.

There are some days they cannot fish. "Coming into



winter, pāua diving can be tricky. I have dived in some absolutely garbage conditions. Last year, we had about two swells that were about 12 metres."

They started the tourism initiative last May and did another four events over summer. We've had people come out fish, dive, have lunches and parties," says Edwards.

"We can cater to different-sized groups, and we do love a party."

Another new initiative is a charity the two have started to education children about the sea.

"Look at all these drownings we have had this summer. I





Edwards harvesting seaweed.

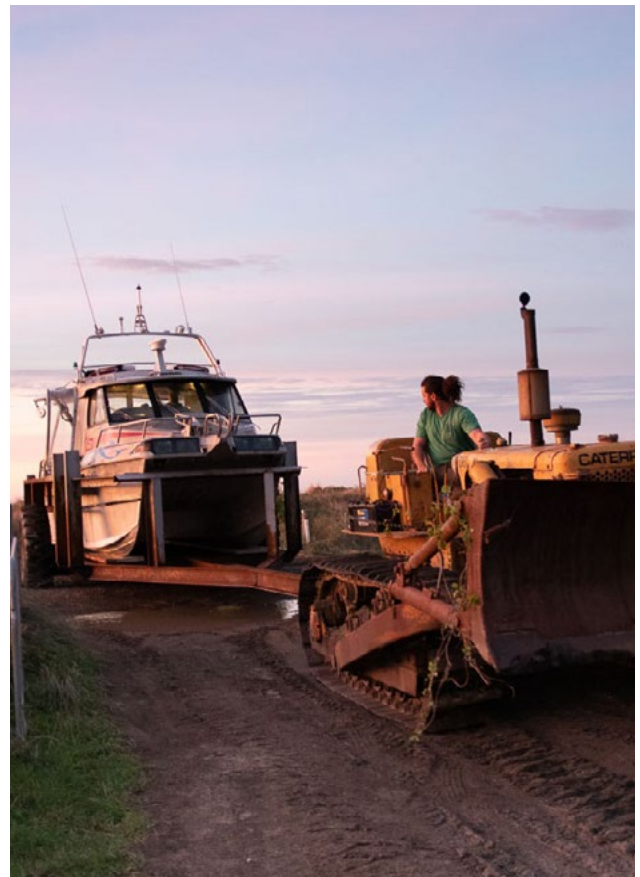
have seen stuff out here that recreational fishers are doing in the last couple of years that would just blow your mind. One flat day here at a point at the north end, this jet ski came out of Sandy Bay and dropped this girl off on the water. I drove up to her and she was trying to scramble up this rock and wanted to get on my boat.

"I asked her what she was doing here, and she told me it was her first time ever diving. But, yes, there needs to be more education about gathering seafood, but around tidal habits, what the moon does, why, if the sea is flat, why is there so much tidal movement still going on?"

Edwards says they hope to launch the trust in spring and teach a six-month programme where young people come out to Tora once a month and stay on to help younger children and be an ongoing part of the programme.

Bramley says our tamariki need to be educated not just to stay safe in our waters but so they can become better, and more sustainable fishers.

The Outstanding NZ Food Producer Awards has been celebrating the inspiring Kiwis who harvest, grow, and produce New Zealand's outstanding food and drink since 2017. Each year a team of specialist judges assess around 300 products and are currently judging the entries for 2022. The highlights will be featured in an upcoming issue of our *Seafood New Zealand Magazine*.



One vessel, two people and suitable weather - the recipe for happiness.

Hard living, great life: the rewards for women working at sea

To mark International Women's Day (March 8), and as part of the Primary Industry Capability Alliance (PICA) Great Workplaces initiative celebrating the culture of the primary industries, Janan Jedrzejewski has a yarn with an accomplished, unapologetically outspoken, and inspirational woman at sea.

"Fishing made me the man I am", Jo Jackman (61) says, giving a hearty, confident laugh. She's off to sea again the next morning to join *Tangaroa*, a 70-metre research vessel for the National Institute of Water and Atmospheric Research (NIWA), where she's worked the past year as a steward.

Her fishing career started aged 47 when she joined the industry in 2007, which, in a field known for being almost unforgivingly tough both mentally and physically, is impressive.

Jackman's life invites envy. *Tangaroa* goes to exotic, far-flung, and picturesque locations including Antarctica and Macquarie Island, where the crew of scientists on board does seismic surveys, underwater mapping, fishing surveys, and tsunami work.

"It's a pretty interesting job," Jackman says, "she's a great ship to work on and a great company to work for as well. There's a lot of woman scientists. Very strong, confident, intelligent woman, which I really enjoy being around.

"The furthest I've been out [from] New Zealand territory [is] down to Macquarie Island, 650 nautical miles south-southwest of New Zealand, which is a long way down. It's cold and snowy during summer, but it was a beautiful place to be some mornings, when you wake up hours with the moon coming up in the morning over the snow-covered mountains and thousands of penguins and orcas.

"It was pretty impressive down there.



Jackman by *Silver Spray*.

"I will be going to Antarctica in January [2023] for a seven-week trip that I'm rostered on. So, I'm looking forward to that. Although I have been once before, I'm looking forward to going on the research vessel because we go way down the Ross Sea, which I haven't been."

"We've just come back from a Chatham Rise, [doing a] fishing survey, a hoki survey, which sort of ties in with my previous fishing career.

"Feel like I still got a bit of a hand in when I go down to a little factory [ship] and have a look around and give smart comments to the deckhands about what they should be doing," she laughs.

Jackman's day-to-day duties as steward are vital to the operations. It's her that keeps everything running, from assisting the two cooks, to cleaning, to ensuring everything is as it should be, to helping the scientists on board – many of whom are from overseas.



Jackman loves racing yachts.



Atlantis.

Tangaroa, which means 'god of the sea', is a Norwegian built vessel which is the same spec as fishing and factory ships except, Jackman explains "it's adapted with a lot of scientific gear hanging off the bottom of it".

"Lots of different cranes, putting robots over the side for deepsea work. It's a very interesting boat to work on, with a great culture on board, too. Totally different to fishing."

So, how did she get here?

Jackman comes from a fishing family. Born in Port Chalmers, Dunedin, she grew up in Carey's Bay, overlooking the fishing fleet where her family had their boats. At the age of eight she moved to Napier, but would return to the bay, fishing with her uncles and grandfathers every holiday on inshore boats.

She remembers thinking, from the ages of 10 to 16, "god, you get paid to do this? It's fantastic."

After getting married at 19 and having three children, she indulged in her passion of surfing and started racing yachts in Napier, before deciding to get her own little Laser, a one-man sailing dinghy named *Perhaps*, which she still enjoys sailing in today.

However, it took a while for Jackman to truly follow and embrace her love of the sea as an adult. After a marriage breakup and some "disastrous boyfriends", Jackman realised that she "had to do something" about her life.

"It's a great test of how tough you can be, mentally and physically, and show some grit. You make fantastic friends, you earn money."

"Then, in my 40s, I went back to sea on factory ships. I sat there thinking I could earn 400 bucks a week, in those days, for the rest of my life or I could double, or triple, that and go back to what [was] a great yearning of mine to go back to sea.

"I'm very glad I did. It was a big move. Big change in your life in your forties, but I just sat there and thought,

'nah, I'm going to give it a go'. Lots of people said, 'don't do it, you'll hate it'. Some people said, 'do it, you'll love it'. I forced myself to go and I thought 'one year on a factory ship and then I'll decide'."

For a year Jackman worked as a factory hand for Talley's. She was on *Atlantis*, working six hours on, six off, 24 hours a day for 50 days. Then after two to three days off, she'd go back and do another 50 days. Excelling in her role, she went on to work as a galley hand for a further eight years, moving to another ship, *Columbia*, where she spent most of her time with Talley's - which she loved.

While Jackman took to her new career with gusto, she warns that it's not for the faint-hearted.

"It's very gruelling. You lose about five kilos on the first trip," she laughs, recalling her time on *Atlantis*.

"But it's a great test of how far you can go".

"I think that's what's lacking with a lot of people, younger people, they don't know how far they can push their bodies, and it's probably a lot easier now than it was when I started... for me it was even harder."

When it comes to getting younger people into the industry, Jackman is emphatic about the benefits to be had for those wanting to try – money, community, generous blocks of time off, career progression - *if* they can give up their addiction to their mobiles.

"I've tried to talk lots of young people into doing it, but they won't leave that comfort zone."



Jackman chilling out on the bridge.

"I think a lot of the youngsters aren't used to being away from their goddamn phones. You do have a bit of internet on fishing boats now. You can always email home and, if you need to, you can use the big satellite phone and ring home.

"They love to sit there all day flicking their phones... and they find that that distance [being far from home] a little bit tough.

"But, when that boat turns home it's like you're six years [old] and it's Christmas again, because you know you've got six to seven weeks off on full pay. It's a great holiday really.

"I'm pretty happy. I feel like I'm the cat that got the cream working on Tangaroa."

"To me that's a lot better than nine-to-five, like a rat in a cage... wasting my life.

"You do the hard yards. Hard living, but great life.

"It's a great test of how tough you can be, mentally and physically, and show some grit. You make fantastic friends, you earn money. There's a great pathway right up through to be skipper, even for woman now, on deck.

"The food's fantastic. You'll eat better on the ship than you would on land."

The financial rewards are even greater than at first glance, Jackman adds, workers don't have to spend any money while out to sea – providing a valuable opportunity to building up some savings.

For Jackman, a woman who very clearly (and by her own

admission) is full of swagger, being an older woman in a male-dominated field wasn't intimidating in the least – and quickly understood the importance of establishing supportive relationships within the crew.

"[Being a woman] in the fishing industry – is not as daunting for me, probably, as being older is probably better, because you're more life experienced as well.

"You're not too worried about 'how do I look today in my in my overalls and gumboots' and 'have I still got my makeup on' because to me, I couldn't care about things like that at sea. But young girls are a little bit more conscious.

"I've got a pretty robust personality and I enjoy men's company."

Jackman adds that it's a supportive culture, where "you only have to be nice to a guy and they'll help you".

"A big strong man can help me and I'm not too scared to ask him to help me lift something really heavy. Because, it was really tough in those days, lifting big heavy sacks - you weren't made to, but you sort of wanted to do.

"Then by the same token, I'd reward them with putting aside something nice for them at the bain-marie or help them put the laundry through. That's the way it works being a woman - a woman is never going to be strong as a man - so forget it.

"So, I don't have to be 'I am woman, hear me roar'. I roar in my own way. I don't need to be too demonstrably 'feminist on a bike'.

"I'm pretty fit, even at this age... but if you respect the difference between a man and a woman, I think you'll go well in the fishing industry".





The cat that got the cream: Jackman loves her new role as a steward for NIWA onboard *Tangaroa*.

Jackman also acknowledges the positive culture shift in the post 'me too' era of calling out sexual harassment and is a positive role model and mentor for other women on board.

"I'm pretty capable of fending off any unwanted guys that might be pushing their luck a bit, but I understand that younger girls aren't and that's probably where [having] someone like me was quite good, to tell them 'if you need to talk about something you can come and talk to me'.

"Then I would be able to approach the guy and that's usually where it stopped because [I'd say] 'you're going to get in trouble if you push this mate, because she'll go straight to the skipper, and you know all the drama of sexual harassment now'."

Jackman got her Advanced Deckhand Fishing (ADH-F) ticket in 2018, towards the end of her fishing career so she could go to Norway to bring a big fishing boat through the Panama Canal back to New Zealand with her husband



Cooling off on a hot day.

Mike, a skipper she met on *Columbia* when she first started working for Talley's ("always looking up," she jokes).

"My husband said, 'that's the best ticket you'll ever have' and he was right, because it got me the job into NIWA and it will get me the job into any other thing sea-related.

"I'm pretty happy. I feel like I'm the cat that got the cream working on *Tangaroa*."

Jackman feels she's adjusted to life outside of fishing – but has managed to retain some of her spark.

"I think they [NIWA] like my ability to work. They probably had a little bit of doubt about me, the culture I come from, which can be a little bit raw. But I'd like to think I could feel the crowd.



Even More Drama: Jackman started racing yachts in Napier.

"I still do poke a bit of fishing talk in the air, just to keep them all straight, because they can sometimes be a little bit too quiet and gentle with me. But they usually receive it pretty well.

"They need a bit of reality check now and then," she laughs.

As for her days off, Jackman and her husband have their own vessel, *Silver Spray*, and take every opportunity to venture out on it.

"We have a great life. Just come back from Great Barrier for nearly three weeks.

"It's been fantastic."



TINDALE MARINE RESEARCH CHARITABLE TRUST INSHORE FISH TAGGING PROGRAM

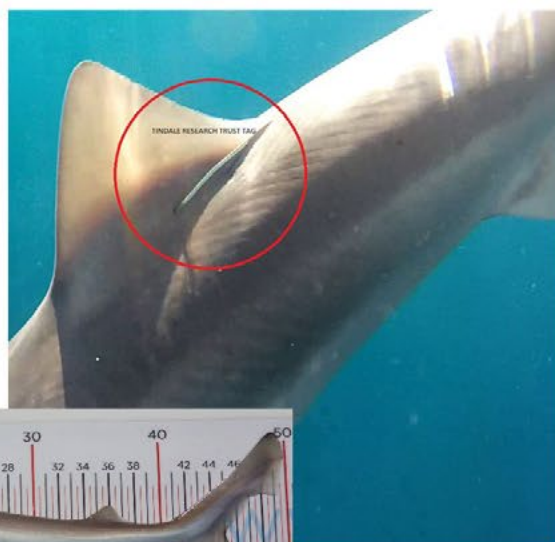
WANTED

REPORT TAGGED SCHOOL SHARKS

Massey University PhD student Alex Burton would like your help in recording sightings of school sharks. Alex is researching the biology of school sharks from around New Zealand gathering further information on their life stages, growth rates, seasonal movements, and habitat use. Also known as Tope, school sharks can be found throughout NZ from sheltered harbours to beyond the continental shelf. School sharks range in size from 30cm to 180cm and are easily identified by their translucent snout, greyish upper body, and distinctively shaped tail.



A mini-PAT satellite tag attached to an adult school shark Kaipara Harbour 2021



Green serial numbered marker tags attached to school sharks

A sample of school sharks have been fitted with electronic satellite tags (top left) and green serial numbered marker tags (centre and right). If you catch one of these tagged sharks, please record the following details along with the individual's **sex** and **maturity stage** and any photos or interesting observations you make e.g., bruising, scars, etc. If possible, please release the shark again to continue the research.

1. Date captured
2. Tag serial number
3. Overall length measurement
4. GPS location
5. Depth of water

Please report these details via the online recapture form at:

<https://tindaleresearch.org.nz/tagging-program/fish-tag-recovery-form/>

Alternatively, you can email the details to tindaleresearch@xtra.co.nz or scan the QR code.



Find us on Facebook

If you would like to find out more about this and other exciting research projects visit our website

www.tindaleresearch.org.nz or phone 0274760687



Catching fish not seabirds

Welcome to our new regular column, *Mythbusters*, taking some of the most prevalent 'myths' about the seafood industry and discussing where the truth lies – with the facts, stats, and science to back it up.

Myth: Fishers do not care about the seabirds that follow their vessels looking for a free feed

Fact: No fisher wants to catch a seabird and most make a huge effort to avoid incidental captures. The fisheries that pose the greatest risk to seabirds have regulated measures in place to lessen the chance of catching birds. Most vessels use additional voluntary measures and many of these have been developed by fishers based on their extensive experience and observations of bird behaviour.

Myth: Fishers just ignore these rules

Fact: Fishers can and have been penalised if they do not implement the legal requirements to mitigate risk. Many vessels have Government observers on board to monitor seabird bycatch and the use of regulated mitigation measures.

In 2018, an industry initiative put cameras on board inshore bottom longline vessels to better understand the risks posed to black petrels. Fishers continue to be actively involved in this programme, and the Ministry for Primary Industries (MPI) is currently implementing cameras on more vessels to increase monitoring at sea.

Fishers are required to report the capture of any seabird.



Tori lines deter seabirds from danger.

Myth: Colourful steamers off the back of a vessel aren't going to scare away birds

Fact: Tori lines are streamers hanging off a suspended line above the most high-risk areas: the baited hooks, and in the case of trawlers, above the warps. They scare birds away from areas of risk.

Tori lines are a simple design but very effective. According to the Department of Conservation (DOC), tori lines are "one of the most thoroughly tested seabird bycatch reduction measures available" and "have been proven effective in reducing seabird bycatch in both trawl and longline fisheries lines".

Myth: So that's it?

Fact: No.

Most vessels have operational plans that detail the measures used to reduce the risk to all protected species. Liaison Officers employed by the DOC visit vessels regularly to talk with skippers and crew, and ensure they are using the best mitigation measures for their specific operations. They also assist fishers to review their mitigation methods if a significant capture event occurs. In the case of longline vessels, some will also use hook shielding devices (which enclose the hook in a pod and the hook is not released until the pod is below the diving level of birds); or set their lines at night when there are fewer birds around; or weight the hooks so they sink before the seabirds can reach the bait.

Crews also manage fish waste (offal) on board to avoid attracting seabirds to the vessel, and some dye the bait blue to make it harder for seabirds to see.

Vessels will also keep deck lighting low at night so as not to attract seabirds, especially at anchor; ensure crew are familiar with safe seabird handling and release; and minimise the time the fishing gear is near the surface of the water to avoid catching seabirds.

MYTHBUSTERS

Myth: Our seabirds are at great risk from fishing

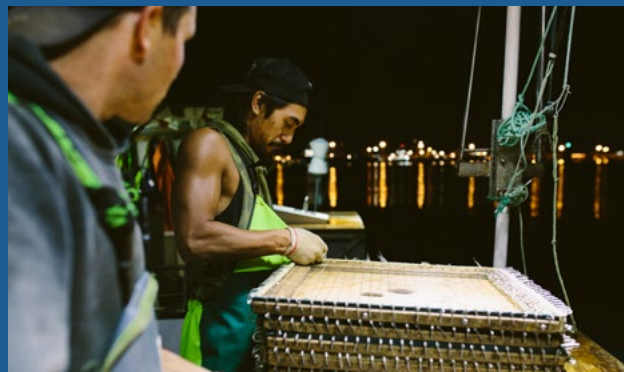
Fact: MPI has conducted a comprehensive risk assessment for 72 New Zealand seabird species. This assessment concludes that only one seabird species is at very high risk from fishing, with the remaining 71 having average estimated fatalities below that which the population can sustain and allow it to grow.

Myth: Fishers just don't care about seabirds; they care about catching fish

Fact: Most skippers and crew are familiar with the birds they encounter at sea, and many can individually name the species. They are as upset as the public is if a bird is captured or killed. Many crew help DOC with seabird tagging, particularly for the endangered black petrel and attend workshops on how to be "seabird safe". The industry works closely with Southern Seabirds, a Charitable Trust, to educate fishers about the birds that breed in New Zealand waters and those that visit.

The industry is also the principal funder of research into seabird populations and mitigation of risks to seabirds.

For more information on seabird mitigation, risks, and research, the *Aquatic environment and biodiversity annual review (AEBAR) – 2019/20*, Chapter 8: Seabirds, is available for download from the Ministry for Primary Industries website.



Setting at night.

Exploring what pāua fishery investors need to know

Researchers from the Sustainable Seas National Science Challenge are working with an east coast pāua fishery to identify and assess the risks being created by climate change and other environmental stressors on the industry, and what they mean for quota owners, divers, and the communities the industry supports.

The *Upholding the value of pāua* quota project aims to show where industry, local and central government communities, iwi, and other stakeholders will need to invest to mitigate the risks identified.

The research brings together recent advances in marine science and climate change knowledge with Māori pāua quota owners, sustainable finance, and pāua fishery management.

The project extends along the east coast of Te Ika-a-Māui /North Island from southern Hawke's Bay, through the eastern border of Manawatū-Whanganui to Wairarapa.

The project will characterise the PAU2 fishery and build quantitative and qualitative risk analysis tools. It will also profile environmental risks that pertain to the fishery, and document key response strategies essential to reducing those risks.

Project co-leader Katherine Short, from project partner Terra Moana Ltd, describes the māhi as bringing together interdisciplinary knowledge to build new ways of shaping investments to respond to environmental challenges. Short says the project is about defining and understanding future challenges, so they can be planned for and mitigated. Responses could include reducing sedimentation and building resilience to climate change.

"We're translating the science into business impact assessment so that the seafood industry can consider appropriate options. This improves the clarity for everybody about why investment is needed in mitigation and adaptation responses, the scale of those responses, and who pays how much to deliver them."

Iwi hold a large portion of the commercial pāua quota in PAU2, so this project is also about understanding their role in protecting the taonga species.

Project co-leader Tony Craig, also from Terra Moana Ltd, who's been in the industry more than 30 years, says the idea is to inform owners, investors, and lenders in the financial sector about what can be done to protect their interests over coming decades.



Growth over 12 months (Credit: Tom McCowan).

"This project is about looking at those factors that would influence risk and the level of information you need to make a sensible decision about how to protect one's investment," says Craig.

According to Craig, pāua is the 'perfect animal' to use in the study as they stay in the same habitat, unlike other marine animals.

"It's very much like a canary in the coal mine. It can't move. We're going to see the impacts to it quicker than anything."

Storm Stanley, chair of the Pāua Industry Council, agrees.

"We know a lot about pāua, the biology, where they exist, and have a fair idea of where the climate change threats come from. It's a very good case study, and certainly a useful one for financial modelling."

Stanley entered the industry in the 1980s, like many as a keen diver who wanted to make a living out of being in the ocean every day. Things like climate change and other

environmental stressors were far from his mind, but that's not the case today.

"We have to face facts that change is coming, and we need to be able to adapt and mitigate the impacts if we can. The pāua industry is interested in the outcome of this project, we'll be very interested to see what the bankers who are involved will make of it."

Dean Spicer, Head of Sustainable Finance at ANZ Bank, is also part of the research team. As one of the largest lenders into the seafood sector ANZ is committed to supporting the sustainability of the country's fisheries. Spicer says the hope is that it will improve the bank's understanding and ability to measure and model risks, so the bank and quota owners can see those risks and adapt if necessary.



Tagging for growth research Wairarapa Coast (Credit: Tom McCowan).

"We're looking at how the data captured can be modelled from a financial modelling perspective – so what is the data telling us, and how can we model it so it's useful for the businesses who are going to be impacted?"

"Our interest is trying to support the businesses who own the quota, and the wider community, to ensure they're thriving and have ongoing sustainability."

About the Sustainable Seas National Science Challenge

Sustainable Seas is a 10-year research programme with the vision that New Zealand has healthy marine ecosystems that provide value for all New Zealanders. It has funded 75 interdisciplinary research projects that bring together around 250 ecologists, biophysical scientists, social scientists, economists, and mātauranga Māori and policy experts from across New Zealand. It is funded by MBIE and hosted by NIWA. For the latest research, tools and resources, sign up for the newsletter: sustainableseaschallenge.co.nz/newsletter



Dr Tom McCowan.

Navigators: the team helping with wellbeing



FirstMate New Zealand is a charity that the industry has set up to support the health and wellbeing of hardworking people across the commercial seafood sector. Each issue, the team behind this pilot project will aim to outline how it's going, the challenges the industry face, and the people behind the scenes and at the coalface that are ensuring it thrives.

At the heart of FirstMate's support team is a network of capable and trained navigators. Navigators work on the ground in communities around New Zealand, ready to provide one-on-one support to fishers and their whānau.

The network currently includes 14 navigators, with five working in the North Island, eight in the South Island, and one navigator who currently serves both islands. We know that working at sea comes with its own unique challenges, and our team of navigators understand that first-hand – having all lived and worked in the seafood sector, and many of them having overcome challenges themselves.

The navigators have had training for the job and are ready to help find options to help those in the sector deal

with what is troubling them. FirstMate is available to help tackle issues that impact on the health and wellbeing of those working in the sector and their whānau. They understand the underlying stressors that contribute to those issues, whether they are business or personal issues, and are building strong connections with local advisory and support services, local representatives of key government agencies and key industry contacts. Their role is to help facilitate advice and support on the best way forward for anyone who contacts FirstMate. They have access to a nationwide database of support service contacts, which will continue to develop as FirstMate grows, to facilitate connections and referrals.

Navigator Training

Our team of 14 is the first cohort of navigators, who underwent the pilot training course in Nelson at the end of August 2021, led by “GoodYarn” – an evidence based, mental health literacy programme.

The training focused on increasing awareness of health and wellbeing, recognising underlying stressors, building the confidence to be able to start a conversation if you are concerned, how to maintain complex relationships, and improving overall knowledge of where and how to get help.

The course also helped to refine and refresh what they already know from their years of experience working within the seafood sector, strengthening their knowledge of previous, current, and possible future industry stressors. This important aspect of the training was to help create a holistic picture of what people in the sector are experiencing so the navigators can provide the best solution or advice.



Cindy Bailey.



Brendan Woodnutt.

Meet two of the navigators

Bailey is one of our navigators who offers support to the far north - Te Tai Tokerau of the North Island. Bailey is a proud member of the New Zealand fishing community and has been involved for many years in the Leigh Commercial Fishermen's Association and on the NZ Federation of Commercial Fishermen executive. Bailey is part of the first cohort of navigators in the newly established trust. “The trust is still evolving and as a navigator it has been a huge learning curve,” she says.

Bailey participated in the recent training for the navigators and shared that it was “very informative and it gave us an opportunity to share some ideas and get to know more about each other.

“A highlight was the ‘GoodYarn’ part of the training, which was about getting people to talk about mental health and what its influences and challenges are”.

Bailey shared that FirstMate is offering support for more than mental health issues in the seafood industry and expressed that they're here to help with all areas of wellbeing.

“Stressors are everywhere in our industry and it can get overwhelming very quickly. FirstMate navigators can offer support to fishers and their partners and families. Sometimes it may just be a chat and for them to know

someone understands where they are coming from, or it may be a suggestion as to who they can contact to sort a specific problem. A navigator can follow up to ensure that it has been sorted. Any information that has been exchanged is confidential.”

Bailey emphasises the importance of FirstMate's role in connecting with fishing families.

“Fishermen by nature are usually very proud, especially the older ones, and it is difficult for them to ask for help. That is why it is important to be inclusive of spouses, partners, and families as they are the first point of support. They may need support themselves or ask for support for their fisherman.”

Brendan Woodnutt offers navigator support in the Canterbury - Waitahi / Timaru - Te Tihi-o-Maru areas of the South Island. He's been involved in the fishing industry for many years, primarily as a Health and Safety Manager for a nationwide stevedoring company.

“Working with the FirstMate team, it has been refreshing to meet another group of people interested in caring for the lives of those around them.”

Woodnutt shared a recent success story from helping a fisher with business support.

“The person has a very successful business, however, due to stressors in his personal life he'd let things fall away and needed help to address issues that had built up.”

Woodnutt was able to work with the fisher to build a business plan for the future and helped put a process in place to get his business back on track that also met all tax and other requirements for operation. Helping get those things sorted did a lot to improve his state of mind and general wellbeing.

Woodnutt completed the training in Nelson and shared that it was “an eye-opening experience” to witness “such a level of care was available to the people of the fishing industry”.

“We learned about tools on how to enable people to cope with mental health issues and other challenges that can impact their safe work operation. The key takeaway was letting people know that in the industry someone does



First navigator training in Nelson, August 2021.

care for them and that we can help by even just giving a listening ear. If someone needs more support than we can offer, we can channel people to those who can help them."

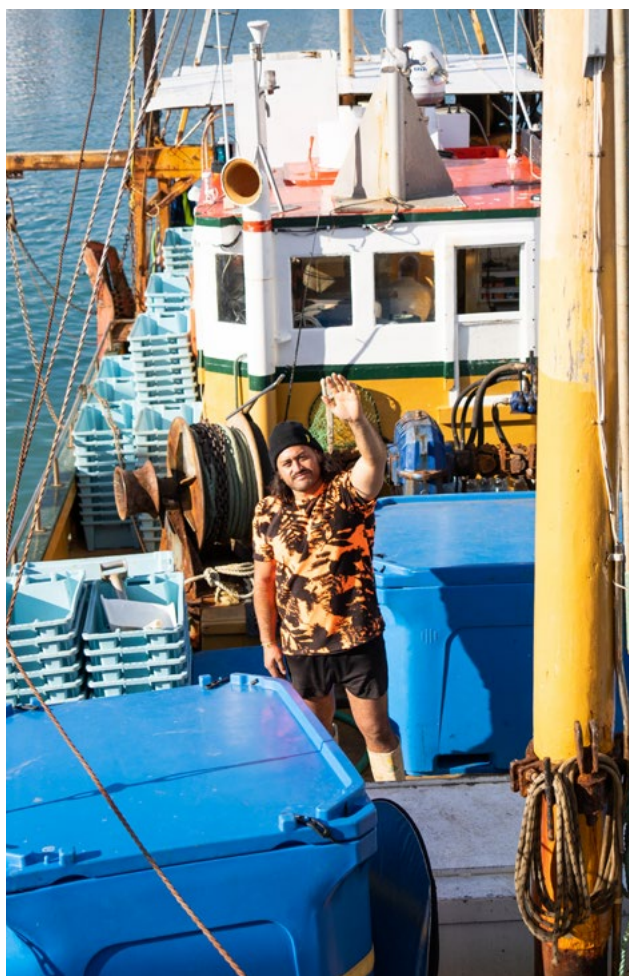
The changing Covid environment has meant navigators have had to work around restrictions, but Woodnutt shared that they've been able to adapt.

"The care for us navigators during this pandemic has been excellent. Our well-being has also been a focus, which in turn enables us to do the same for the people that we are here to serve."

We're here to help

The commercial seafood sector faces unique challenges that, at times, can weigh on industry workers in different ways. Whether that weight on your shoulders could be eased by a pointer to financial business advice, health and wellbeing resources, or you just feel like having a yarn after a hard day of work, our team of navigators are here to offer the support you need to adjust and thrive.

If you or someone you know would benefit from connecting with our team, please contact us at 0800 237 438 or visit our website www.firstmate.org.nz to learn more.



Tori lines deter seabirds from danger.

NOSTALGIA CORNER

Celebrating 30 years of stories

This year our Seafood New Zealand magazine turned 30, so we popped back into the archives to revisit our founding issue.

One of most interesting snips comes from the 'Tail End' of the magazine about Zach Aitken, then aged 13, the youngest person to ever hold a Tuna Handling Certificate.

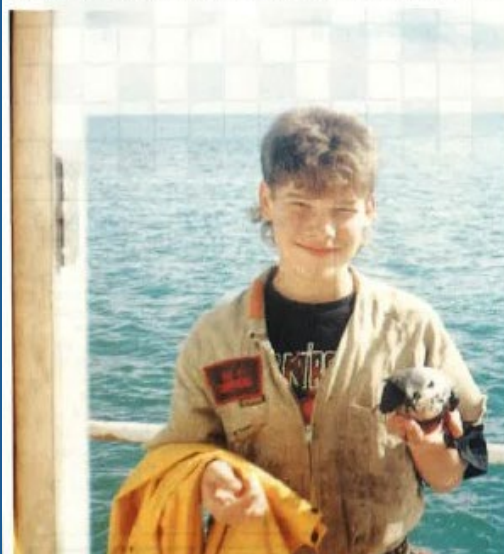


Young Man With A Mission

At 13 years Zach Aitken has probably had more fishing experience than many fishermen of twice his age. In fact he has been fishing with his father Peter Aitken part-time for most of his 13 years and full time on the "F.V. ATU" for the past two years.

On board the "Atu" Zach does his school work by correspondence and "after school" and on weekends he carries out his fishing work. According to Peter, Zach is an excellent deck hand and is proficient in all aspects of deckwork and watchkeeping. For instance Zach attended the June '93 Tuna Handling Course run at Tauranga by Andy Smith and later Andy stated that Zach already knew more than he could teach him.

There's little doubt that Zach at age 13 is the youngest to ever hold a Tuna Handling Certificate. One for the record books for sure. Peter Aitken should have no doubt as to who is going to follow in his footsteps when he gives it up - or even well before.



Iwi-led aquaculture

Mat Bartholomew, Director Aquaculture

We are all getting very good at change. Whether it's new ways of operating in the pandemic, working through supply chain challenges, or adapting to geo-political uncertainty; the pace of change seems to be accelerating.

Against the backdrop of constant change, it is vital that the seafood sector is strong and resilient.

The Ministry for Primary Industries (MPI) *Fit for a Better World Roadmap* sets out practical ways for the primary sector to grow in value and create more jobs while protecting our reputation for sustainability. We will get there by focusing on productivity, employing more New Zealanders from all walks of life, and reducing our impact on the environment.

I'm excited for when we start to put this into action. For example, the work underway to grow a world-class aquaculture sector in Te Moana-a-Toi/Bay of Plenty and its potential to impact not just that region, but also Aotearoa's reputation as a leader in the aquaculture sector.

The work is being led by the iwi of the Bay of Plenty and holds strong to Te Ao Māori foundations, requiring any future iwi aquaculture project to be built on cultural, social, economic, and environmental principles. This approach also aligns with the Government's Aquaculture Strategy which aims to transform aquaculture into a sustainable industry that contributes \$3 billion to the New Zealand economy.

A key driver of the work is the future aquaculture settlements that are imminent in the region. The iwi-led aquaculture project has received central Government investment as well as support and investment from local government and iwi in the current Ōpōtiki harbour transformation project and newly opened Whakatōhea mussel processing facility. There has also been crucial

support from a supportive industry sector and iwi-led science and technology expertise.

Fisheries New Zealand partnered with iwi and Te Ohu Kaimoana to develop a three-stage project to help understand the opportunities for iwi-led aquaculture in the Bay of Plenty. Work began in 2020 with marine surveys, followed by in-depth analysis of opportunities looking at the range of possible species.



Mat Bartholomew, Director Aquaculture.

MARINE ENGINEERING



**SHIP REPAIRS
BOAT BUILDING
DRY DOCKING
ENGINE REPAIRS**



"Proven Abilities" Worldwide

Stark Bros is fully conversant with all aspects of the ship repair industry, from afloat maintenance to full dry docking and survey work, and the skills associated with a strong boatbuilding foundation. With the combination of specialist personnel, facilities, equipment, knowledge and experience of ships and the marine industry, Stark Bros Ltd is able to provide a high level of service and expertise at competitive prices.

Ph: +64 3 328 8550
P.O. Box 144, Lyttelton, New Zealand
www.starkbros.co.nz

TV chef's road trip

celebrates unsung seafood heroes

Ganesh Raj is a TV chef and the award-winning restaurateur behind The Tasting Shed in Auckland. He's teamed up with Best Foods to embark on a 'Foodie Roadie', sampling the very best of Aotearoa's local produce on a quintessential classic Kiwi road trip. From harvesting green-lipped mussels with James Marine skipper Peter James in the Coromandel to reeling in Moeraki fresh blue cod with local chippie The FishWife, Janan Jedrzejewski finds out more.

Tell us your culinary journey to becoming an award-winning TV chef

I'm originally from Singapore. That's where I was born and raised and where I got all my food education from. It's a place where there are no rules around food. Everything is bastardised, because that whole area is full of intermingling mongrel humans. There are no boundaries, which is wonderful. So, there's all that cuisine that develops. I got a real sense of that from Singapore... [it] gave me my kind of adventurous tastebuds vibe. I studied audio engineering... which then led me into learning how to be a director. I met my wife, who is a producer, and then we decided we will leave to come to New Zealand.

We basically adopted a television attitude towards food. We just treated food, the food business, like the television business. They're both shows. The doors open, it's 'action'. When the doors close, it's 'cut'. The audience are the people that turn up. If they like your stuff, they tell people. If they don't like your stuff, they tell people.

What do you love about New Zealand seafood?

I love how New Zealand seafood connects people to the land and the sea. In this country, everyone has it in their souls. There's kaimoana, and that idea of the ocean and what's in it.

People love going fishing. It's more than seafood here. It's a cultural thing that enriches people who are into it. There's a romance attached to it. I think that's what I love the most about what fishing means, including mussel farming - and pipis! What a godsend. I'm a big fan of oysters, of course.



But, for me personally, I always go back to my model, [which] is \$20 for four people. That's what I'm always thinking about. So, as far as I'm concerned, that's always going to be the benchmark, because that's how four-fifths of the planet eats - and the food's amazing.

We have to promote affordable seafood, so that more people can cook it and not buy crap to substitute the fact that stuff is so expensive. There's a direct correlation between the price of things and takeaway foods, and how that affects the health of the country.

So, let's give people raw material that they can afford and show them how to use it. So that they have the skills. That's the simplest way of empowering them.

You're fighting the good fight. Why are you so focused on this in particular?

Well, let's go back to where I was raised. This is exactly why I'm this way. Singapore, as a hub of food, taught me that it's all in the skill. I've seen \$1 dishes, with raw ingredients of 20 cents here and 30 cents there, turn to the most delicious thing.

As I've travelled the planet, I always gravitate towards village food. So, the common thread is the poorest people on the planet invented the most delicious food, they just happened to have to cook it for rich people because that's how they got paid. You can see that there was a natural thread. Rich people aren't going to cooking classes, they just hire servants. It's still happening today.

Why is it so important to support local producers?

In the seafood domain, I think it's our best bet to get that kind of high-quality protein into our diet. We do have a lot of varieties that are accessible, so we need to promote them, you know, the lings of the world. Ling gets a bad name. Maybe we should rebrand ling, bring it to the public. People need affordable seafood that they can get to. So, when you promote it, attach recipes to it and a bit of know-how -- suddenly that is the funnel.

The mussel story is of this kind of unsung hero. I learned so much about farming and how mussel farming is almost the exact mindset as farming, let's say, corn; how you lease a piece of the ocean, lay your lines, and then the ocean current does its thing and you're doing it there, because you think the minerals going to the ocean are going to be right. But you're dealing with temperatures going up all the time, your mussels not being big enough, viruses as well. You can't just move. You can't just pick up sticks and move - because you've signed a lease - but you don't control any of it. It's Mother Nature. I never knew all those things, about the background.

The mussel is just beautiful, humble, wonderful.

You certainly learned a lot about mussels! What else did you discover about New Zealand seafood on your 'Foodie Roadie'?

The people. The farming side was one side of it, then there's the people story side... They told me all the stories, and you get a real understanding. I think that's what people need to know. The mussel itself is a very beautiful thing, but the stories of the people behind it have not been spread enough... The 'people's storyline' and about how [Peter had] been there that long, and all the different people that have worked there.

I bet it's the same story if you go to, like, certain parts of Houston, Texas. That's like an oil town [but with] mussels. The Coromandel is like 'mussel town'.

They should make like a TV drama series [about it]. It'd be dope.

How would you encourage Kiwis to get more seafood into their weekly diet?

Seafood patties. The fish patty. The potato and seafood combo. That little patty vibe. Golden brown and with a little yogurt and dill dressing vibe.

That's very accessible to people. It's like the mussel fritter or patties, because smoked fish patties have been such a big part of culture. Smoked fish definitely is something people talk about much more in my experience than fresh. It's very funny, ironic, in fact, that the fresh version does not get as much love, but it does on the sashimi front. People can't wait to tell me about the stories of sashimi-ing something on a boat and eating it raw. And then, the next moment, it's been smoked. You

bypassed the bit where you can pan fry it deliciously and enjoy by itself.

But that's in my experience, the stories I hear. So, let's start with giving people something that they understand; it would be like a smoked fish recipe of some description.

Yum. Good call. blitzing up smoked kahawai in with cream cheese and loads of lemon is another crowd-pleaser. What's your favourite native fish?

In Asia, blue cod is the god of soft, firm fish, primarily for the purposes of Hong Kong-style Cantonese steaming, which is then glazed with a hot peanut and sesame oil. With the spring onions. This is a dish that is part of the ten-course menu on a Chinese New Year table across almost every Cantonese household.

Blue cod has got to be my favorite. So, what I did for that dish [for the 'Best Foods Foodie Roadie'], was basically inspired by Hong Kong-style steamed sea bass. I steamed these beautiful chunks, and they came off this beautiful boat and the dude had a boat, and then there was the guy who filleted seabass, and there was the dog - it was like an Enid Blyton story.

The boat came in. The fish came. There it was -- beautiful. We filleted it, and I went to get to cook it in the most fresh form. Anyone would be salivating at this recipe - that's how fresh it was.

Best part is when the producers eat my food and they love it. That's my favorite part. Because it's a version that they've never had before. But they've known this stuff for their lives. For their whole lives. They've known this product. And here and now they're having it in a new way. So, that's I think that's definitely the greatest joy for me of doing this Foodie Roadie, was giving them that experience.

To watch the gastronomic adventures of Ganesh Raj for yourself, head over to bestfoods.co.nz/foodieroadie.



Mussel fritters with sweet chilli mayo



This fritter with an unexpected Thai-style twist was created by TV chef and restauranter Ganesh Raj (The Humble Yum Yum, The Tasting Shed) for his 'Best Foods Foodie Roadie' series, a Kiwiana-fuelled road trip. Harvesting mussels straight off the line in the Coromandel, this flavourful dish was effortlessly whipped up and served to his hungry crewmates. Watch Ganesh Raj make the dish at bestfoods.co.nz/foodieroadie

Ingredients

24 mussels (approx. 500g of meat)
Sliced ginger to taste
1 Tbsp chopped ginger
1 Tbsp chopped garlic
1 Tbsp lemongrass
2 Tbsp fish sauce
2 chopped red chillies
1 cup chopped coriander or parsley
6 limes

Batter

2 eggs
½ cup milk
1 cup standard flour
1 tsp baking soda

Sauce

1 cup Best Foods mayonnaise
2 Tbsp sweet chilli sauce
A drop of lime (to taste)
1 loaf white bread
4 Tbsp oil for cooking
coriander work best)
Sesame seeds, toasted

Method

1. Cook the mussels by boiling 2 cups of water in a pan big enough to hold the 24 mussels and add slices of ginger. Put the mussels in, put the lid on, and simmer till the mussels open. Remove mussels from shell and set aside
2. Clean and de-beard the mussels.
3. Chop the mussels to a medium roughness. Add to a mixing bowl.
4. Grate the ginger, garlic, lemongrass and add to the mussel mix. Add the chopped coriander, chilli, lime juice, and fish sauce. Combine.
5. In a separate bowl, combine the batter ingredients. Beat the mixture until just smooth.
6. Pour the batter a little at a time and combine into the mussel and herb mix.
7. Heat oil in a pan over a medium heat.
8. Cook all the fritters, a few at a time so as not to crowd the pan, until golden brown on both sides.
9. Mix the mayonnaise with the sweet chilli and set aside. Add a little lime to balance.
10. Butter one side of bread. Lay the fritter down.
11. Drizzle mayonnaise on top of the fritter.
12. Garnish with coriander and serve.

For the love of seabirds

Lesley Hamilton



Dave Moore and Darrin Fabricius with weights and vessel camera (Credit: Shanna Moore).

It is difficult to imagine what is more awkward - wizened fishers being made to attend a cocktail function with Ministers of the Crown or having to put their best Zoom smile on to do it virtually due to Omicron. Frankly they would all rather navigate the Southern Ocean. We have a look at the 2021 Seabird Smart Awards and the wonderful work of the recipients.

Every two years Southern Seabirds, a charitable trust, canvasses the country to seek nominees in the commercial fishing fleet who make an extra effort to ensure the seabirds who breed in New Zealand, 80 percent of which breed nowhere else in the world, are being looked after - over and beyond the strict regulations that cover seabird captures.

The 2021 nominations were judged by Department of Conservation (DOC), Fisheries New Zealand, WWF New Zealand, Deepwater Group, Te Ohu Kaimoana, the Federation of Commercial Fishermen, and the Southern Seabirds Trust.

Dave Moore and his partner Darrin Fabricius of Wild Fish (NZ) were delighted to take away the 2021 Supreme Trophy. Moore and Fabricius operate six snapper long line vessels out of Leigh and fish the seabird-heavy Hauraki Gulf, where threatened species like black petrels and flesh footed shearwaters live and play.

Based at the picturesque Leigh township, this is artisan fishing at its finest. The approach is low impact, some fish are released alive, and the rest are killed with the more humane 'ikejime' method, a practice that originated in Japan of quickly and directly 'spiking' the fish which leads to a quality product that is exported all over the world.

Moore says it's a privilege to fish the Gulf and has been heavily involved in seabird education and working groups since he began. He was one of the first to trial cameras on vessels and now says most of his young skippers have never fished without a camera on board.

If you have ever met Tony, or TK Walker, you know he is never short of a word or two and that he is the winner of the Advocacy Award in the 2021 Seabird Smart Awards should be no surprise. A New Zealand boy, he is currently based in Mooloolaba in Queensland, and still has 'fishing seabird smart' in his veins, and this Ngāpuhi native has Tangaroa tattooed on his arm. Seeing Walker's mana as he walked into a sometimes-hostile recreational fishing club while he was still in New Zealand showed he had no fear when it came to telling the story of the commercial fleet's care of seabirds.

Three years on, fishing out of the Coral Sea, Walker has not mandated to use seabird mitigation but still does, beyond what the law requires of him, because of the

EVENT

petrels and shearwaters in the area. He designed his own tori lines (lines with streamers to scare away birds) and designed a set-up to keep birds away from the hauling line. As such, Walker reports no seabird deaths in his Australian fishing operations.

And he talks about it constantly. On his Facebook page, *Tk Offshore Fishing*, videos are followed heavily and his more than 125,000 followers raise knowledge about what he is up to on *FV Sharp-shooter II*, a surface long-lining tuna and billfish vessel which runs 3200 hooks per day and 750,000 hooks per annum.

Walker's brother died a few years back. Albatrosses are said to follow lost sailors. An albatross followed Walker from dawn to dusk the next day - not feeding, just squawking at him in the wheel-house - he likes to think it was his brother.

Unsurprisingly, the winner of the Seabird Smart Innovation award was Mike Te Pou, who has skippered *Commission* for eight years and has been fishing commercially for 30. Whilst affiliated to Ngāpuhi, he spent a lot of time fishing and diving in the North with his grandfather, and was an early adapter of the Hookpod, which keeps baited hooks enclosed until beyond a seabird's diving reach. He reports to DOC and the company, Hookpod Ltd, to make adjustments on how to integrate these devices into fishing operations.

Te Pou is also designing a system that will show the Ministry for Primary Industries that fishers are setting their hooks at night and correctly routinely using bird scaring lines. It is called EARS (Electronic Automated Reporting System) and just another example of how Te Pou is constantly looking for ways to make innovation do the hard work for the benefit of the planet.



The crew of the Supreme Trophy winners on *FV Coral*.

The last major award of the night went out to skipper Jessie Crasborn and the crew of Sealord's *FV Rehua*. Crasborn and his crew are being nominated for the Innovation Champions Award for showing outstanding leadership in creating new techniques that will prevent seabirds being caught in deepwater trawl nets. Crasborn and his crew are at the forefront of trialling ways to prevent seabirds being caught in trawl nets and spends much onshore work as well as 'at sea' time looking at solutions.

Katrina Bowers of the Bay of Plenty is also worthy of a special mention, as she volunteers her time to educate recreational fishers and the wider public on safe release of seabirds and handling. Bowers is recognised for her voluntary work around seabird conservation.



Feed your microbe mates with New Zealand seafood

There are so many benefits to eating fish but it's now understood that we are not just feeding ourselves when we eat it, but also the team of microbes that live in our gut - where we find there are even more benefits. The Gut Foundation tells us more.

The human gut has become an intensely studied part of our body in the last decade since scientists now have the tools to be able to. We now know that over 100 trillion microbes live inside us and that 95 percent of those are in our gut. In fact, you have 10 times more microbes than human cells in your body. There is overwhelming data showing that the microbes that live in our gut are critical to our well-being in a variety of ways. We also know that everyone's gut is as unique as their fingerprint and that this begins when the child is in the womb. Typically, by the time you are three years of age the patterns of these organisms are well established and by the age of 10 years, you will take that community into adulthood.

The old saying "we are what we eat" is especially relevant in terms of our gut microbiome.

In recent years much focus has been placed on the beneficial effects of fish consumption and here in New Zealand we are blessed with both a wide variety and good access to fish.

Many of the beneficial effects of fish consumption have been attributed to Polyunsaturated Fatty Acids (PUFAs) which are found in certain fatty fish, especially salmon, tuna, mackerel, sardines, and herring. However, there are other fish that are low in fat and have high levels of PUFAs, especially shrimp and trout. Recent studies have shown that marine n3 PUFAs can change the intestinal microbiota compositions by increasing the abundance of Bifidobacterium.

Not all the bacteria in our gut are helpful but these three are very important:

- Bifidobacteria - which (a) modulates our immune responses and (b) produces vitamins
- Lactobacilli - which (a) produces vitamins and minerals, (b) boosts immunity and (c) protects against carcinogens
- Clostridium Butyricum - which (a) produces important



fatty acids, and (b) has a potential benefit in inflammatory bowel disease.

Bifidobacterium is known as one of the most beneficial bacteria family and maternal fish consumption in pregnancy is associated with an infant microbiota where Bifidobacteria has a dominant profile. It is suggested that during pregnancy fish is an essential food for women and that woman should consume 2-3 servings of fish a week with known low mercury levels. Many studies have outlined the role of the gut Microbiome in health with Bifidobacteria playing a critical role.

Our microbes live in a mutually beneficial relationship with us, as in return for their hard work the bacteria get to thrive in a safe, nutrient-rich environment. However, we as the human host need to ensure we are eating the right foods that will ensure not only the survival of the microbes but equally as important a good diversity of microbes in our gut. Think of your microbes as a team there to support your health. Your part is to feed them the right foods to do their best work.

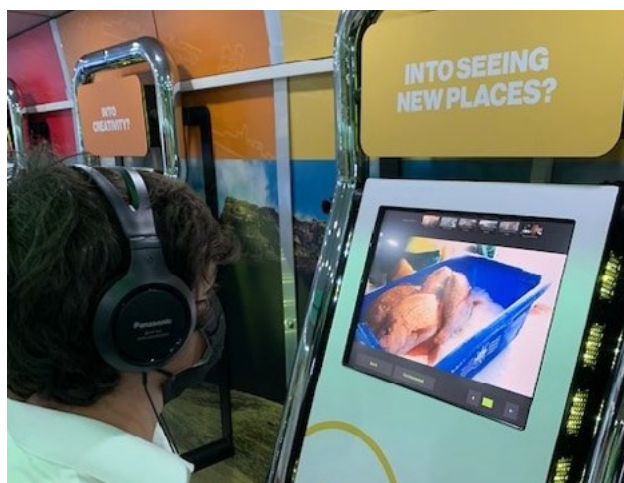
Inzone hits the road



Students Rowan Liu (left) and Rohil Prasad (right).



Ruby Shortus, Lily Shortus, and Sophie Matthews from Waimate High School.



Jacob Booth from Waimate High School looking at one of the many Sealfishing videos on display inside the Careers Coach.

Inzone has toured New Zealand schools since 2003, inspiring hundreds of thousands to find a career they can be passionate about, allowing them to follow their dreams and ambitions.

For the Inzone team, it's been a challenging 12 months with running the Careers Coach Roadshow with some events being cancelled. However, the schools have been overwhelmingly supportive of the bus pulling in for a visit.

Inzone also been working closely with the Ministry of Social Development throughout New Zealand, which means presenting the sea fishing employment opportunities to people of all ages.

Seafood New Zealand has supplied video and images

to educate school leavers about the great career options available in the industry and the visit to the Christchurch Careers Expo last year attracted 5000 young people.

The Careers Coach has also undergone a new fit out, with both its external and internal branding being changed.

The regional managers for the Mayor's Taskforce for Jobs (MTFJ) have also been supportive of having the Careers Coach visit schools and running local public events in their towns. MTFJ have also been fantastic in sponsoring the World of Work Kiosks into their schools and public libraries.

Find out more by going to www.inzone.co.nz

Introducing Caroline Read



Caroline Read.

environmental policy in Australia, the UK, and New Zealand. Read set up the Overseer Limited business in 2016, having spent two years with the tool's owners working through options for how to improve its reputation, function, and value, and to remove the need for ongoing government funding. The company transformed an existing free-ware tool used primarily in regulatory systems into a value-add software service for farmers to support

FishServe welcomes Caroline Read as its new Chief Executive, replacing Lesley Campell after her 23 years of service.

Read comes from a sheep and beef farm in the south Wairarapa and, following her geologist training, spent a decade developing and implementing

decisions around sustainability of farming practices.

Read says she sees many similarities between the agriculture sector and the seafood industry, as both are providing essential services within challenging regulatory environments.

"I had a firsthand view in my previous role of how data collected primarily through regulatory requirements could add value to farming businesses and FishServe offered the opportunity to build on that in a critical food production industry for Aotearoa, she says.

"I'm really excited to join FishServe. It's an organisation full of highly capable people and has a fantastic reputation for integrity and continual improvement."

Read is excited about her new role and getting fully involved in the industry.

"Right now, I'm loving learning as much as I can about the seafood sector and how FishServe supports it.

"I'm looking forward to a time when I can get out and meet in person with those who bring kaimoana to our plates."

OCEANLAW NEW ZEALAND

The only law firm in the South Pacific dedicated to the sea



New Zealand's specialist fisheries and maritime law practice delivering results to the country's seafood industry since 1998.

Our practice is one of the country's pre-eminent advisers in this specialist field.

We look forward to serving you in the future.



Mike Sullivan
Partner
021 274 3590
mike@oceanlaw.co.nz



Justine Inns
Partner
027 2275 324
justine@oceanlaw.co.nz



Hamish Fletcher
Partner
027 220 5122
hamish@oceanlaw.co.nz



Karyn van Wijngaarden
Partner
021 323 884
karyn@oceanlaw.co.nz



Hayley Campbell
Senior Solicitor
027 533 1350
hayley@oceanlaw.co.nz



Kim Proctor-Western
Special Counsel
027 4800 690
kim@oceanlaw.co.nz

Montgomery House, 2nd Floor, 190 Trafalgar Street, Nelson 7010. Freephone 0800 Oceanlaw. www.oceanlaw.co.nz

Economic Review

of the seafood industry to December 2021

Welcome to the latest update on the economic performance of New Zealand seafood. This edition provides provisional data for the year ending December 2021.

KEY RESULTS FOR THE PERIOD:

- Seafood exports have bounced back slightly, up \$70m compared with 2020.
- Increases in exports to Poland and South Africa have placed them among our top 10 trading partners.
- Exports to China have remained stable when compared with 2020 but are still down when compared with 2019.
- Exports of rock lobster are now sitting above 2019 figures.

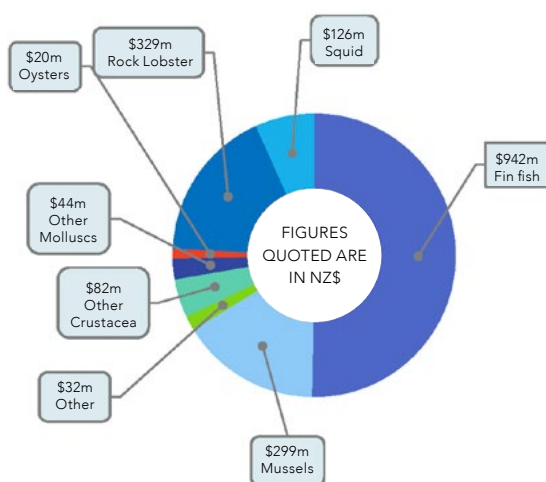
EXPORT STATISTICS

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 year to December 2021.

Seafood exports to the end of December 2021 totalled NZ\$1,874 mil with 264,595 tonnes exported.

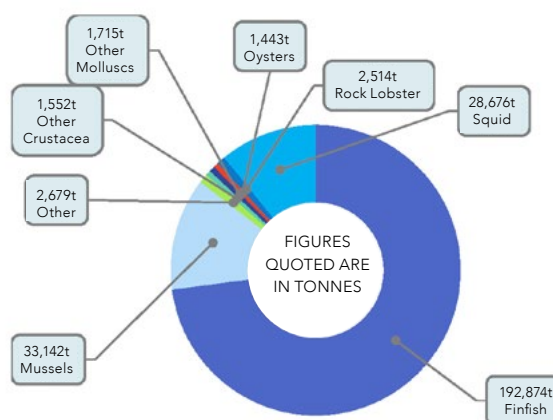
Export value (YTD to December 2021) = NZ\$1,874 mil



EXPORT TONNES

Overall export volumes increased in 2021 compared with 2020. Most categories increased in volume, with Finfish jumping up by just over 15,000 tonnes. Squid saw a reduction of just over 9,000 tonnes.

Export volume (YTD to December 2021) = 264,595 tonnes



Source: Export data, Statistics New Zealand, Seafood New Zealand.

FOB = Free on board. The value of export goods, including raw material, processing, packaging, storage and transportation up to the point prior to loading on board ship.

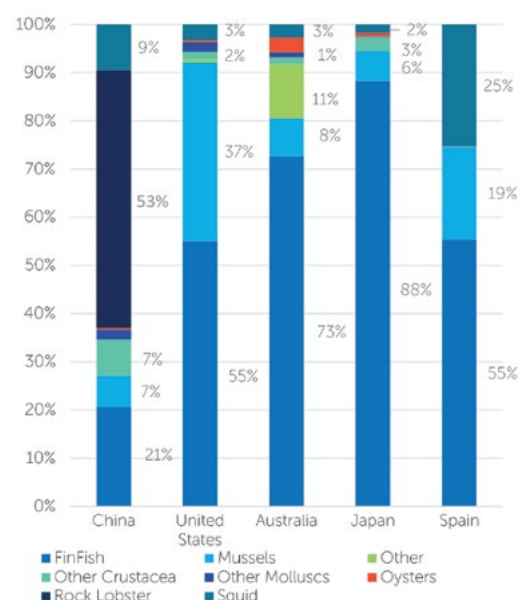
EXPORTS BY COUNTRY

Poland has shot up to 6th place on our top 10 list – mainly due to a significant increase in hoki exports. The USA has bounced back to pre-COVID figures.

Top 10 Export Countries by Value (YTD to December 2021)

Country	2021	2020	% Change
1 China, People Republic Of	\$636m	\$641m	-1 ▼
2 United States	\$287m	\$236m	22 ▲
3 Australia	\$238m	\$223m	7 ▲
4 Japan	\$78m	\$82m	-5 ▼
5 Spain	\$51m	\$67m	-24 ▼
6 Poland	\$51m	\$24m	112 ▲
7 Hong Kong	\$42m	\$36m	17 ▲
8 South Korea	\$40m	\$56m	17 ▼
9 Canada	\$39m	\$42m	-7 ▼
10 South Africa	\$31m	\$23m	35 ▲

Composition of Exports to Top 5 Trading Partners (YTD to December 2021)



EXPORTS BY SPECIES

A number of key species saw an increase in export value in the year to December 2021, however squid was down significantly. The export value of mussels has continued to fall, despite a small increase in export volume.

EXPORTS OF MAIN COMMODITIES

Exports of the main commodities for the year ended December 2021 saw total exports up by 6 percent. Logs, wood and wood articles saw the biggest percentage increase – up 23 percent over 2020.

TOP 10 EXPORT VALUES (NZ\$)

Species Name	2021	2020	% Change
Rock Lobster	\$329m	\$292m	13 ▲
Mussels	\$299m	\$332m	-10 ▼
Hoki	\$192m	\$165m	16 ▲
Salmon*	\$139m	\$104m	34 ▲
Squid	\$126m	\$193m	-35 ▼
Mackerel, Jack	\$81m	\$67m	21 ▲
Ling	\$64m	\$51m	25 ▲
Orange Roughy	\$54m	\$54m	0
Paua	\$33m	\$22m	50 ▲
Barracouta	\$32m	\$30m	50 ▲

Source: Export data, Statistics NZ

*Salmon includes all exports of Salmon excluding Atlantic Salmon.

EXPORTS OF MAIN COMMODITIES (NZ\$)

COMMODITY	2021	2020	% Change
Milk powder, Butter & cheese	17,092m	15,825m	8 ▲
Meat and edible Offal	8,716m	8,113m	7 ▲
Logs, wood and wood articles	5,533m	4,507m	23 ▲
Fruit	3,906m	3,934m	-1 ▼
Wine	1,958m	2,014m	-3 ▼
Mechanical machinery & equipment	1,946m	1,658m	17 ▲
Fish, crustaceans and molluscs	1,680m	1,617m	4 ▲
Total Exports	63,445m	59,945m	6 ▲

Source: Overseas merchandise trade, Statistics NZ.

*Fish, crustaceans, and molluscs (excludes fishmeal & processed oils, powdered products)

CLASSIFIEDS



AOTEAROA QUOTA BROKERS

QUOTA TRADER + QUOTA MARKET REPORTS + QUOTA MANAGEMENT + QUOTA CONSULTANCY + AQUACULTURE

ACE FOR LEASE

BCO1, BCO8	KAH1, KAH8	SQU
BUT2, BUT7	LIN3, LIN4, LIN6	STN1
ELE1	PAR1, PAR9	TOR1
FLA1, FLA2, FLA3, FLA7	POR3	TRE7
GAR2, GAR3, GAR8	SCH1, SCH4, SCH7, SCH8	YEM9
GMU1, GMU7	SPD1, SPD3, SPD4, SPD5, SPD7	
HOR3, HOR7	SPE2, SPE3, SPE4, SPE7	
HPB4, HPB5, HPB7, HPB8	SPO1, SPO8	

QUOTA SHARES FOR SALE

FLA3 2,000kg

BUT7 1,000kg

Package

ANC7, GSH7, LEA2, MAK1, MOK1, PAD7, RCO7, RSK7, SSK7, TAR7, WAR7

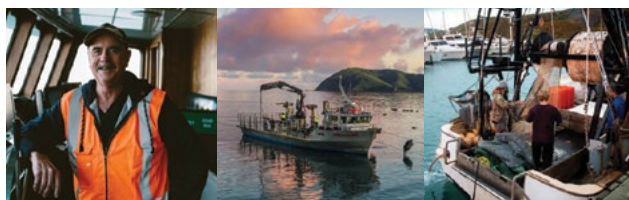
BOATS FOR SALE

5.05m Allenco dory - Honda 60Hp outboard, GPS/Sounder, road cover - \$25,000 + GST

7.5m alloy, 150Hp Volvo, hauler, ideal live fish or marine farm work horse - \$75,000 + GST

DOMINIC PREECE
Managing Director

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



OPERATIONAL WORKPLACE SAFETY

- Health & Safety videos and E-learning
- Training
- Operational risk assessments
- Full safety system creation
- At sea service
- MOSS audit support
- COVID-19 Policies and Procedures support



**YOUR PARTNER
IN HEALTH & SAFETY**

Contact us today: 027 436 2396 or 021 041 6283
www.guardsafety.co.nz

FISHY GIFTS

We have a great range of fish poster merchandise available at:

www.seafood.co.nz/shop



Contact us at info@seafood.org.nz to discuss a bulk order.



64th NZFCF Conference & Annual General Meeting

PO Box 297
Wellington 6140
Phone: 04 802 1501
Email: nzfcf@seafood.co.nz

Thursday 2nd and Friday 3rd June 2022

Napier War Memorial Centre, 48 Marine Parade, Napier

Registrations open mid April via our website - www.nzfishfed.co.nz/conference

FORMAL NOTICE OF MEETING

The 64th Annual General Meeting of the
New Zealand Federation of Commercial Fishermen (Inc)
Friday 3rd June 2022, 10.30am, Napier War Memorial
Centre, 48 Marine Parade, Napier



Marine Services NZ Limited
Specialists in Screw Anchors, Moorings, Jetties & Construction Diving



Screw Anchoring for accurate positioning & strong
holding power
Block Positioning to ensure compliance
Commercial Diving for inspections and maintenance
Barging for logistical support
Moorings for Vessels 5m to 40m in length

www.marineservicesnz.com | (03) 573 8045 | info@marineservicesnz.com



Follow us on
Facebook!



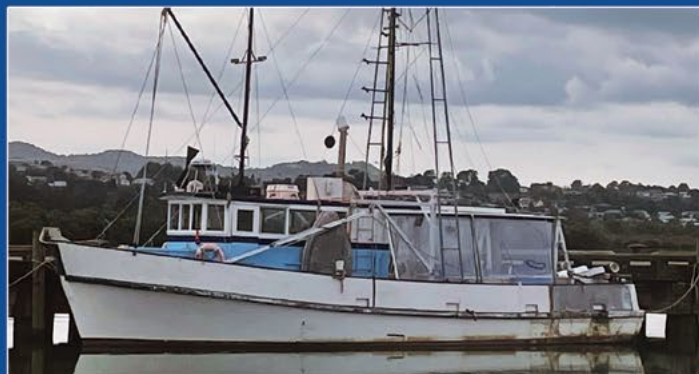
SPLASHZONE
Marine



www.splashzone.co.nz

All enquiries to Richard or Jean
fish.man@xtra.co.nz or 027 230-2333

BNS	CRA	HPB	KIN
TRU	ACE & SHARES		BCO
TRE	Inshore Parcels		WAR
TAR	North Island		GUR
SNA	WANTED		LIN
PAU	MOK	SCH	SPO



5314 ALBACORE TROLLER KAURI

LOA 14.41m x B 5m x D 2m Built by Jeffcoat
Detroit 6V92 250hp Rebuilt 2021 1800 hours
Alison gearbox. Fuel 3,000 litres
7 tonnes ice hold.
4 berths. Toilet/shower. Good Galley
Scallop winch. Tuna poles. Albacore pullers
Good electronics. Survey 100 miles
Beautiful sea boat

\$185,000



#5306 MUSSEL SEEDER
11 TONNES DECK LOAD
LOA 12.5m x 4.3m x 1.25m
Caterpillar 3208. Bunk room
saloon/galley. Toilet/shower
3 davits. Palfinger crane
Simrad electronics
Survey to 3 April 2023
PRESENT ALL SENSIBLE
OFFERS

\$200,000



5318 AUTO LINER
22.5m x 6.1m x 3.2m
Cummins KT19 500hp (2016)
Perkins 80kVA genset
Cummins 100kVA genset
Fresh or Freezer holds = 30 ts
Ice maker. Water maker
Mustad auto line system
8 berths. Good electronics

MAKE YOUR BEST OFFER



5309 LONG LINER TROLLER
L15.5m x B4.9m x D2.3m
Detroit 6/71 180hp
Sea Wasp 10kVA genset
5,000 litres fuel
Fish rooms 9 tonnes total
Long line drum. Tuna poles
Good electronics
Survey 100 miles May 2026

\$220,000



#5305 NETTER & BOTTOM
LINER. L21.2 x B6.7m x D2.6m
Iveco main 285hp
Aux driving 40kVA generator
Fish hold 27 tonnes
Gill net drum. Rope roller
Nets & bottom line gear
New survey February 2022
Possible ACE package to
approved buyers.

\$190,000



5307 STERN TRAWLER
L22.87m x B6.7m x D2.7m
Detroit 12V71 500hp
Perkins 6 cyl 50kVA genset
Perkins 6cyl hydraulics
24 tonnes refridge hold
Spacious accommodation
Large capacity hydraulic
winches. Assorted nets

MAKE YOUR BEST OFFER



5315 LINER TROLLER L 21M
Detroit 12V71 rebuilt 2019
Ford 50kVA genset
Fuel 20,000L, Water 5,000L
20 Tonnes ice hold
6 single & 1 double berth
Good galley.
Long line drum 40 miles
Survey to July 2023

\$450,000

5308 Rose Croix BOTTOM LINER TROLLER

Aluminium LOA 13.53m X B 4.88m
Cummins KT19. Isuzu 20kVA genset
Twin Disc gearbox.
4 berths. Good galley
15 tonnes chiller hold.
6 miles line plus gear
Good electronics. Stabilizer arms
HIAB
Survey 100 miles to November 2022

\$375,000



All prices indicated are plus GST unless otherwise stated.

150 VESSELS AT



WESTPORT DEEP SEA FISHING SCHOOL

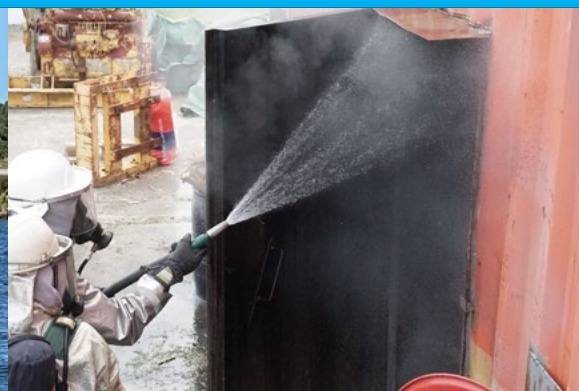
2022 Maritime Training - All courses on demand

Advanced Deckhand Fishing is fully funded for 2022 (Fees Free).

Skipper Restricted Limits, Skipper Coastal Offshore, MEC6 & MEC5
STCW Basic, FPFF, PST, PSSR, EFA and refresher training for PST
& FPFF.

We are pleased to offer practical training for MNZ licences on our training
vessel *Blyth Spirit*.

Complete part or all of MNZ Training Record Books while on the program.



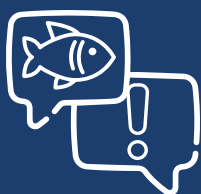
CONTACT Peter: 027 450 7585 | 0800 DEEP SEA | 0800 333 7732 | peter@deepsea.co.nz

www.deepsea.co.nz

SFMblue is coming

A WHOLE NEW MARKETPLACE, AT THE CLICK OF A BUTTON!

SFMblue is an online trading platform connecting buyers, suppliers, fishers and wholesalers of quality seafood. It is a fast, intuitive, and user friendly tool that will transform the way you trade seafood.



DIVERSE RANGE AND ACCESS

Easy and efficient procurement and ordering tool for purchasing seafood.



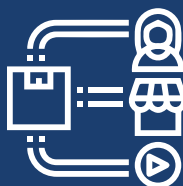
SET PRICE SALES

Use SFMblue to sell fresh product at set price, including while it's in transit to auction.



TRACKING & TRACEABILITY

Receive notifications on how your purchase is tracking in the supply chain and when it's available to collect.



NEW SALES CHANNELS

No longer a market focused on fresh seafood, list your frozen, processed, or long-life product on SFMblue.



If you would like more information on SFMblue,
please contact our team.
service@sydneyfishmarket.com.au or
(+612) 9004 1100