



MARINE FARMING ASSOCIATION
To Promote & Nurture Sustainable Marine Farming

AUTUMN 2024 NEWSLETTER

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IMPORTANT DATES

Board meeting

5 July 2024

Q3 Light audit due

31 July 2024

MFA AGM & conference

16 August 2024

GM's Comment

It's great to see the recent media coverage on how mussel farms in the Hauraki Gulf are supporting fish populations. While the mussel growers in northern regions already knew this, and perhaps don't view the marauding schools of snapper and parore as a positive post-seeding, it does highlight how aquaculture can actually assist with restoring degraded ecosystems. In short, the research identified that snapper inhabiting mussel farms were faring as well nutritionally as those inhabiting highly productive natural reefs (which are now in short supply). It would be very interesting to repeat the study in some of the top of the South growing areas.

It's also great to see that export pricing remains high for the 'big three' species across most product formats. Fresh gilled and gutted salmon achieved a record high in April, half shell mussels are at near-record prices and the various oyster formats are all trending in the right direction. There is however room for improvement on the volume front. From what I'm hearing, there's plenty of room in the global markets, we just need to produce more!

One production constraint is the cost and complexity associated with retaining and obtaining waterspace. We are all eagerly awaiting more detail on how the new national direction will address this. A more enabling regulatory regime would allow the aquaculture industry to focus its energy on productivity and innovation, as opposed to plan changes and Environment Court proceedings. Ideally, this new national direction for aquaculture would obtain bipartisan support to inspire investment confidence and prevent a wild 'pendulum swing' back towards the status quo. There is plenty of work for the industry to do in this space.

After a flurry of mediation activity in March and April on both Variation 1 and wider Marlborough Environment Plan (MEP) matters, we are currently in a holding pattern awaiting the next tranche. The mediation on the spatial appeals (i.e. the shape of the AMAs) is expected to commence in late 2024. There is an element of 'wait and see what happens with the national direction' creeping into the later stages of the MEP negotiations.

MFA was recently awarded Sustainable Food and Fibre Futures (SFFF) funding for research on developing cost effective nursery feeds for greenshell mussels. This project is aimed at improving spat retention and teasing out what role a nursery stage could play. We look forward to sharing updates with the membership as the project progresses.

The reports of top-quality mussel seed and crop coming out of Golden Bay in recent months are encouraging, especially given the shortages of both at present. Hopefully the transition between El Niño and La Niña provides us with the best of both worlds, the productivity-boosting upwelling associated with El Niño westerlies, and the La Niña assisted easterlies on 90 Mile Beach that facilitate good spatfalls. Probably optimistic I know, but as the saying goes, dreams are free.

It is nearly MFA Conference and AGM time once again, with the date set for the 16th of August. We are currently bringing together an interesting group of speakers and will be opening registrations/issuing the programme in the next few weeks. Please remember, both the day session and the awards dinner usually sell out, so get in quick.

All the best, Ned.

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Marine Farm Compliance Audit Programme

**Declarations are Due
31st July 2024**

If you have not sent in your declaration
for the 3rd quarter,
please do so as soon as possible



ONE DECLARATION FORM PER SITE
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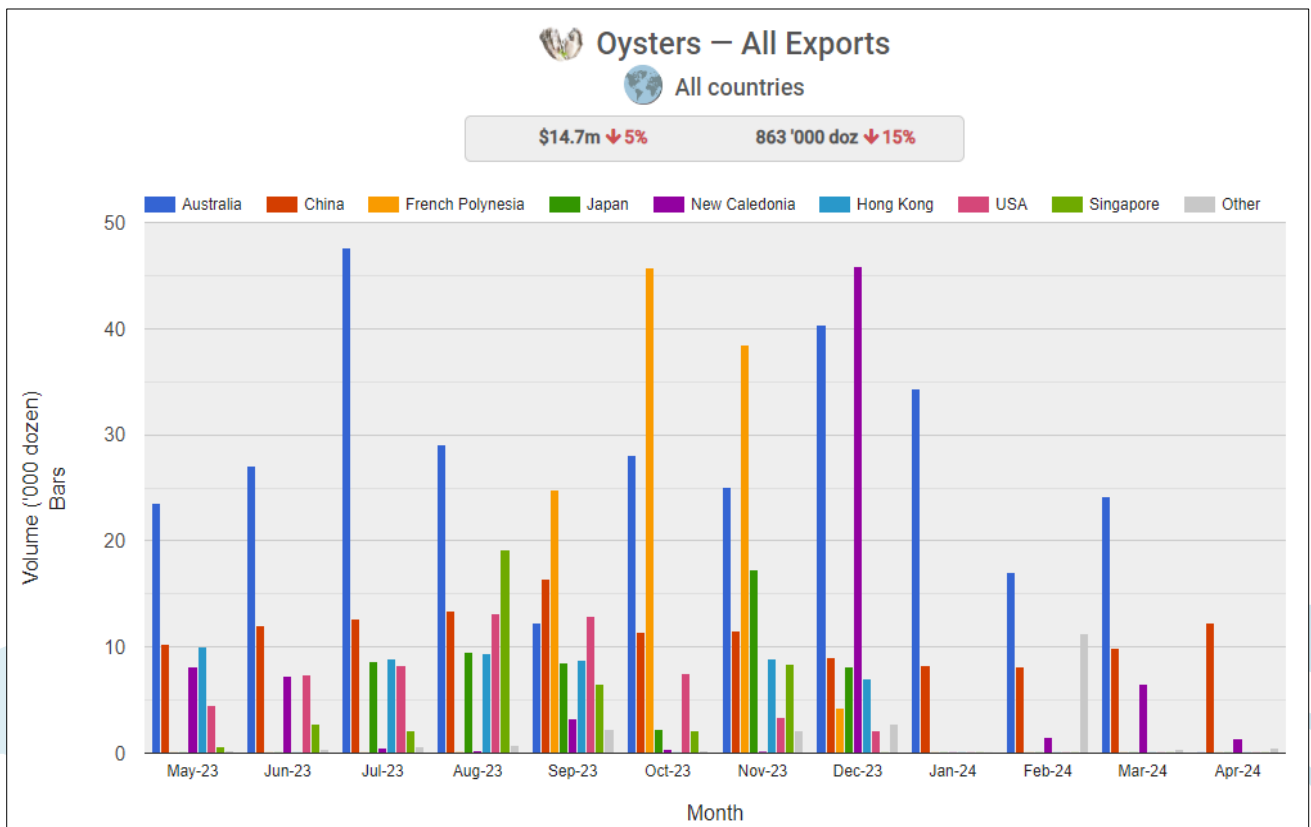
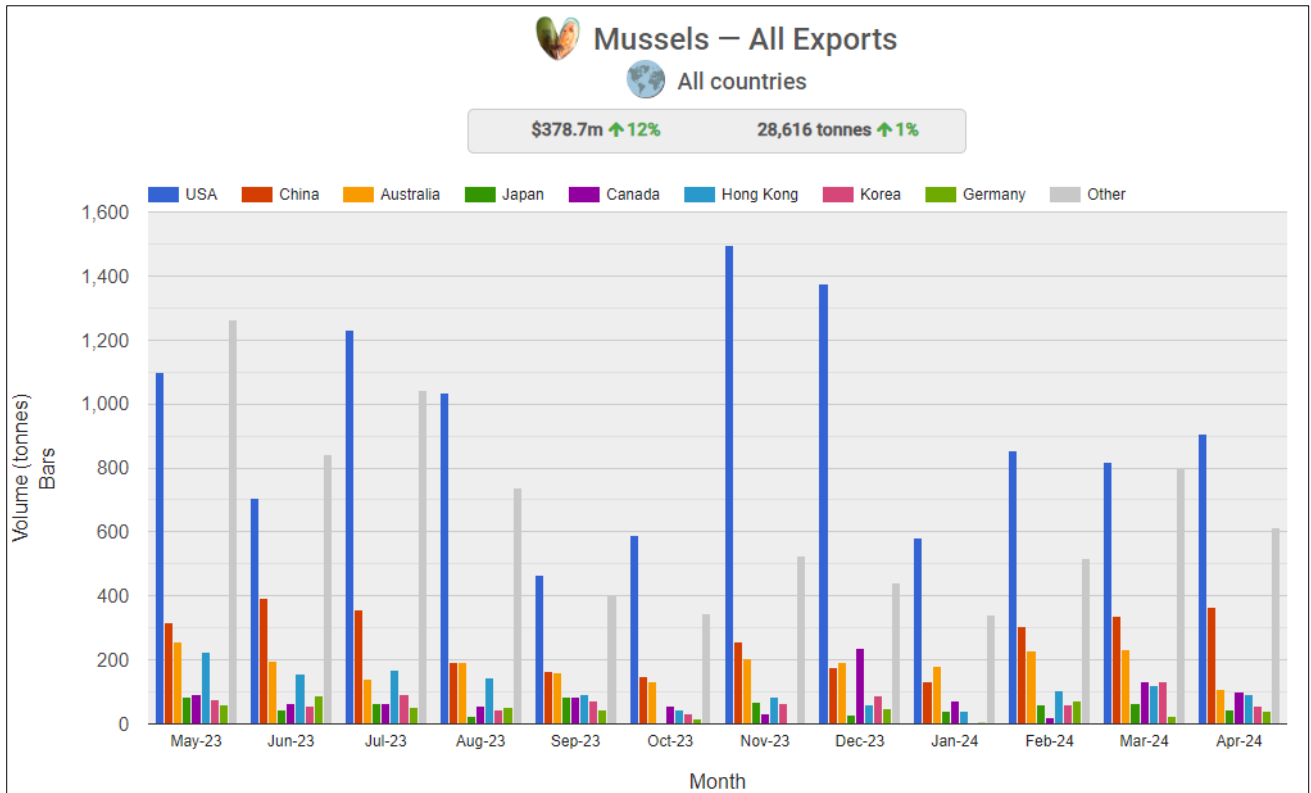
November, December, January (1)

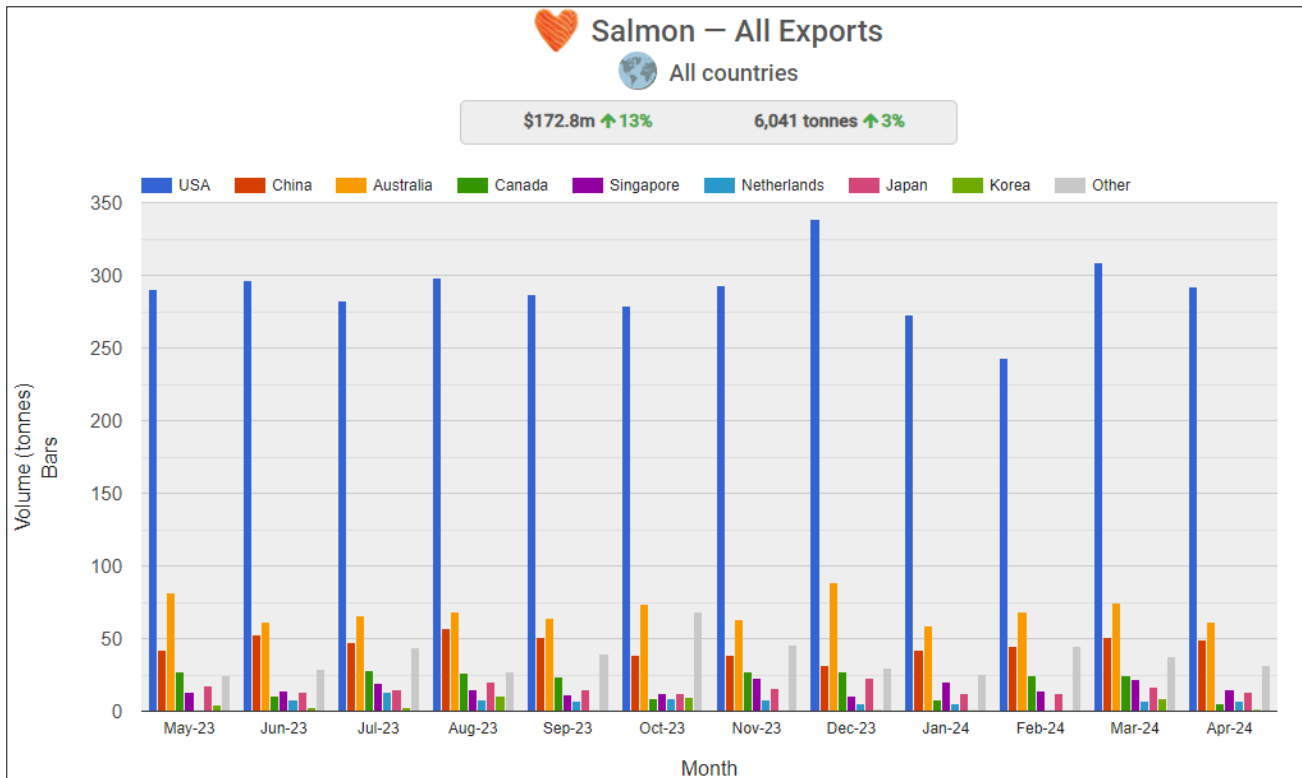
February, March, April (2)

May, June, July (3)

August, September, October (4)


AQNZ Export Stats





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A fin-tastic collaboration



Some of the Graeme Dingle Foundation Marlborough Team joined forces with the Sanford Team at the Havelock Mussel and Seafood Festival 2024

Good vibes, a great cause, and delicious kai moana were all on the menu at the Havelock Mussel and Seafood Festival in March.

The teams at Sanford and New Zealand King Salmon were cooking up a storm in support of the region's youth. All proceeds raised at these two stalls were donated to the Graeme Dingle Foundation Marlborough to support their work with local young people, from age 5 to 25.

The New Zealand King Salmon offering was a Thai-style Cold Smoked Regal Marlborough Salmon dish, while Sanford were serving up seven different dishes including Red Curry Greenshell mussels, mussel fritters, and oysters. Regional Manager for Graeme Dingle Foundation Marlborough, Kelvin Watt is delighted that the event has seen over \$7,000 donated through the two companies' efforts.

"We're incredibly grateful for this fin-tastic collaboration" he says. "We're so grateful to Sanford and New Zealand King Salmon for their support through the festival for 7 years now. Our team just love the opportunity to get in there and work side by side with their teams for a common goal".

"And every dollar raised at the festival stays right here in Marlborough and directly supports our work with our young people. In 2023 we were able to help nearly 5,000 tamariki and rangatahi – and we're excited for what 2024 has in store".

Zara Jopson (Manukura / Head Girl of Marlborough Girls' College) is just one of the young people the foundation worked with last year. She says her *"first experience was actually many years ago during the Kiwi Can programme at my primary school. The Kiwi Can lessons on integrity stood out to me and has made me the person I am today! Through*

the positive energy that the leaders expressed to us I knew that one day this was the sort of role model I wanted to be."

"I had the honour of being one of the first recipients of the Stars programme. Stars enabled me to meet new people and move out of my comfort zone to do things which I wouldn't normally do before. I looked up to my mentors like older sisters. With this experience I was inspired and motivated to sign up to be a Stars mentor in Year 12 - helping our new Year 9s transition to the college! And hands down, it was one of my favourite memories I've made in MGC. I can say that Stars has changed my life and so many other young students' lives coming into college."

Sanford's Executive GM (Mussels), Andrew Stanley says, "We think it's a nice tie-in – we're about growing great seafood, they're about growing great kids! We're a proud sponsor of Graeme Dingle Foundation nationally and have been for over 20 years now. And this is just one of the ways we like to get behind this great youth charity at local level."



The collaboration saw the Sanford and New Zealand King Salmon partner up – to popular effect – with the Graeme Dingle Foundation Marlborough at this year's festival

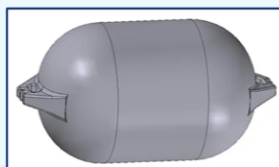
- Graeme Dingle Foundation

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havelock mussel and seafood festival



Seafood Galore at the 20th Celebration!



Despite the rain the evening prior, Marlborough came alive for the 20th celebration of the Havelock Mussel & Seafood Festival. The weather couldn't dampen the spirits of the attendees, as around 4000 eager seafood enthusiasts poured through the gates, a remarkable increase of 500 from the previous year.



For those who ventured to Havelock, the air was charged with excitement. The scent of sizzling seafood mingled with the laughter of families and friends, creating an electric atmosphere. From succulent mussels to freshly grilled salmon, the culinary offerings delighted every palate. Meanwhile, the NIWA Kids Zone buzzed with youthful energy, the MFA Industry Tent offered entertainment and education in equal measure, with engaging demonstrations. In the NZ King Salmon Culinary Tent attendees were treated with everything, from shucking to the art of torching salmon to masterful cooking techniques.

Top: Lost Tribe Aotearoa entertaining the 2024 crowd.
Middle: Go Media Intercompany Mussel Opening competition winners, Talleys Blenheim Team 2
Bottom: Attendees enjoying the MFA Industry Tent.
Credit: Richard Briggs Photography

It was a day filled with sunshine and brimming with activities, embodying the quintessential Marlborough experience. From culinary delights to lively entertainment, ensuring every attendee had plenty of entertainment to enjoy. The Havelock Mussel & Seafood Festival once again proved itself as a highlight of the region's calendar, a celebration of community, tradition, and of course, delectable seafood.

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The 2024 Festival also received funding from Marlborough District Council



SAVE
THE
DATE!

havelock
mussel and seafood festival
8 MARCH 2025



Building a Maritime Career – Ben Pierce's Story

From childhood coastal adventures to becoming a professional skipper, Ben Pierce's journey is a testament to where passion and hard work can take you. In this interview, Ben shares his journey and his experience doing the Skipper Restricted Limits (SRL) course with Skipper Training NZ and reveals the challenges, lessons, and camaraderie that have shaped his life at sea. Ben gives us a glimpse into the life of someone who turned their love for the water into a career.



What motivated you to pursue a career in the maritime industry?

Ben: I grew up around the coast and spent plenty of time on the water as a kid, but I never considered it a career opportunity until I stumbled into the aquaculture industry by chance when I was 18 and found a job in Havelock. Initially, I was working land-based, but it opened my eyes to the opportunities on the water and in the Marlborough Sounds.

What led you to choose Skipper Training NZ for your maritime education?

Ben: I was at a crossroads in my career journey and had a few free months. I'd worked up a few years of sea time on mussel boats all over the country and driving kina tenders in Southland. I knew I was keen to do my SRL eventually, but I wasn't sure I was quite ready yet. But after a conversation with Milo (Milo Coldren, Director & Tutor Skipper Training), he assured me I had plenty of experience and would be a great fit for the course, so I enrolled and never looked back!

What were the highlights and challenges of the SRL course, and do you think it prepared you for your maritime career?

Ben: I loved the way Milo helped you realise that you already have most of the knowledge. He'd just help you find it and give you the confidence that you actually do know your stuff.

It really helped me to see that I do know how to handle a vessel, and it gave me confidence that I'm ready to take command. It was a small class, and we all became quite close. It's great to still be crossing paths with classmates and seeing what we're all up to. Plenty of smiles were shared from beginning to end!

Were there any particular skills or lessons from your training that you found particularly valuable in your current role?

Ben: Having the opportunity to walk through some worst-case scenarios in drills was invaluable. Having confidence that I can take a crew through the abandon ship process

from the initial distress calls right until jumping into the life raft (heaven forbid I ever actually need to). It's so important to know how the life rafts look and feel before your life depends on it.

Milo also ran a particularly good fire drill on board the vessel, but I won't share any spoilers for future students ;)

Can you tell us about your current role in the maritime industry? What are your main responsibilities?

Ben: I am a first mate on a 23m all purpose mussel farming vessel, Morning Star, working for Waimana Marine out of Elaine Bay in the Marlborough Sounds.

As a first mate, I'm essentially running the deck and working as a relief Skipper in case our regular Skipper is away. I will also take care of most of the health and safety and vessel survey compliance admin in Seaflux. As a side hustle, I also skipper the Gleam, a 1946 trawler that has been converted to a passenger vessel to promote the fishing, aquaculture, and maritime industries in Port Nelson. I've also returned to Skipper Training NZ as a relief Skipper for a few days, which was great fun! I also still drive the tender boats in the free-diving fisheries occasionally.



How does your work contribute to the broader maritime sector or community?

Ben: I love my seafood and love our seafood industry so I take great pride in helping to produce some of the world's freshest, most delicious and sustainable protein! I also love to give back to the industry and help people following in my footsteps. This is where my work with Young Fish, on the Gleam and Skipper Training comes into play.

What have been the most significant challenges you've faced in your career so far, and how have you overcome them?

Ben: Learning to balance work and life while working at sea, away from home, and on irregular work patterns and rosters. I know it's a common struggle for fishermen, aquaculturists and seafarers. I really had to make an effort to spend as much time with friends and family as possible. It also helps to get outside and away from the house, make the most of your time off, and get comfortable with your own company.

Conversely, what have been the most rewarding aspects of working in the maritime industry?

Ben: The long days and nights spent at sea throw out some pretty special moments at both ends of mother nature's spectrum. I have fond memories of the glassy calm sounds

with bright orange sunsets, and equally special memories of 60-70+kt squalls filling up entire bays with seawater spouts.

We work some hard hours at times, which also comes with a pretty rewarding sense of achievement. You also tend to forge a pretty tight friendship with the people you work with at sea, and we take part in our fair share of shenanigans... good thing we've got plenty of work to do to keep us on our best behaviour ;)

There's also so much to learn and so much history in our sector. I love learning from and hearing stories from all of the people that have come before me. It makes me proud to be continuing the legacy of a pretty hard-working sector with a proud, passionate history.



How do you see the maritime industry evolving in the next few years?

Ben: Emissions reductions seem to be on the horizon in every industry, and for the maritime sector, which currently relies heavily on heavy diesel engines, I think there'll be big changes in my lifetime away from diesel towards other power sources.

There could be a shift towards hydrogen / electric motors. Or other alternative power sources. It'll be a whole other world of learning for me the day they become normal on mussel boats.

What advice would you give someone considering a maritime industry career or considering enrolling in Skipper Training NZ?

Ben: Jump in and do it. So much to learn and so many opportunities

Are there any skills or areas of knowledge that you think are particularly important for success in this field?

Ben: Attitude is most important. You need to think ahead, show initiative and be keen to get stuck in and help because there's always a never-ending list of jobs from the moment you drop ropes until you step off the ship. Cooking ability is also a great way to make a good first impression!

How has your perception of the maritime industry changed since before you started your training?

Ben: I'm not sure the maritime sector was every really front of mind growing up... I definitely had a twisted perception of what a fisherman looked like (imagine yellow rain coat, sailors hat, long grey white beard, a cigarette and an anchor tattoo on the biceps.) While there's plenty of fisherman who fit at least part of that mould there's definitely

plenty of diversity and unique characters around too! I consider myself a fisherman now and don't think I fit any of those descriptions!

What are your future career aspirations, and how do you plan to achieve them?

Ben: My ultimate goal is to buy a boat and go into business for myself as an owner/operator... right now I have no idea how that looks, whether I'll be farming my own mussels (or other shellfish / species), doing contract farm work, commercial fishing, even operating in tourism, or maybe a combination of all of the above... I do see opportunities to emulate the agri-tourism sector with an aquaculture spin. There are plenty of opportunities out there, and I'm forever coming up with new ideas, so we'll just need to see what the future holds. One thing is for sure: it won't be far away from seafood!

I think I'll go about achieving these dreams by starting small... likely by running a small operation in my off-shifts and probably in partnership with others (another perk of the job is having a 4-on 4-off roster, which means we end up working less than half the year leaving plenty of time for a side hustle). I've definitely got a lot to learn, but that's never stopped me before! And of course... and last but not least, I'll need to keep working bloody hard, but we're mariners, that's what we do).

- *Brendon Burns*





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*"For me, learning the theory,
then going out on the boat to practice it -
that's what made it make sense,
even for someone like me, where the theory
usually goes in one ear and out the other."*

- Jo, 2023 SRL Graduate



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Mussels cleaning up Port Nelson

A collaborative project involving MacLab, Cawthron, Port Nelson and Moananui is seeing greenshell mussels (GSM) being grown on one of the Port's wharves to improve water quality in the wider Nelson haven.

Shannon Holroyd, Port Nelson's Environment Manager, says the prompt was her CEO Hugh Morrison sending her an article about similar projects at the Ports of Auckland. These saw 38 seeded mussel lines attached to public space on an inner-city wharf, as well as mussels being reseeded to improve water quality in the Hauraki Gulf.

Port Nelson, MacLab, and Cawthron are partners in the Moananui blue economy cluster. Moananui serves as the national centre for blue economy innovation and high-value creation, fostering collaboration, knowledge exchange, and access to innovation opportunities to accelerate responsible development within the maritime sector.

The entities developed a proposal for the Living Filters project, a six-month trial to put GSMs into the Port which was awarded funding via Sustainable Seas. MacLab supplied nearly 29,000 juveniles for two frames, which were deployed in January.

Shannon says they'd grown between 8-11mm when first looked at 6 weeks later. "They're obviously happy and growing."



From left to right – Callan Kotua (Maclab Tasman), Dan Crossett (Marine ecologist, Cawthron), Julien Vignier (Senior aquaculture scientist, Cawthron), Mark Burnaby (Maclab Aquaculture Manager), Shannon Holroyd (Environment Manager Port Nelson), Brent Shone (Senior Skipper, Maclab Tasman)

Cawthron has installed data loggers and samplers to monitor a range of parameters including, water temperature and the presence of heavy metals and hydrocarbons.

Being sited on the estuary at the mouth of the Maitai River brings heavy metals off rooves, hydrocarbons and other urban contaminants.

Port activities such as painting and cleaning ships can also discharge contaminants, which it's hoped the mussels may reduce through filtration (also called 'bioremediation').

"Largely, however, we want to improve the clarity of the water," says Shannon.

"When fully grown each of these mussels have the ability to filter up to 200 litres each per day. Meaning altogether they could potentially filter 5.76 million litres per day."

To help beer drinkers, Cawthron's Shellfish Aquaculture Platform scientist Jess Ericson worked this out to be 10.1 million pints a day!

Cawthron is also getting data on how often the mussels open and close (gaping behaviour) which can indicate feeding and filtering behaviours, and the presence of stressors such as a freshwater event, predators, or toxic algae, for example.

In March, Port Nelson had an Open Day, and the GSM project was among the attractions for more than 2,000 visitors. Cawthron and port staff were on hand to demonstrate what was being done.

Cawthron brought along their 'mobile living lab' setup to demonstrate mussel's filtering ability, with gaping sensors.

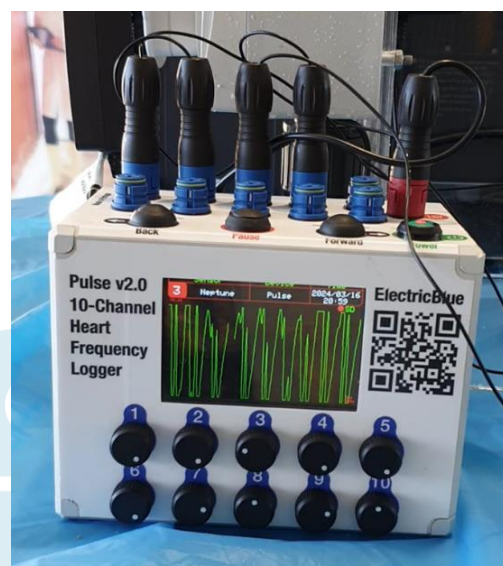
It also had heart rate monitors attached to real live mussels on show. "You could see the mussels' heartbeat," says Shannon.



And for those who've never seen a mussel's heartbeat, what does it look like?

"It's very similar to ours but much slower."

Cawthron is hoping the outcome of the six-month trial at Port Nelson may provide a blueprint for wider use at ports. They also hope this study will stimulate thinking toward greater restorative programmes on urban coasts.



Shannon Holroyd says Port Nelson is very open to much wider use of them to improve water quality and clarity.

"There's a lot of area under our wharves where we could just let them go."



- *Brendon Burns*



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MacLab

Aroma steps up production with big purchase

Aroma Aquaculture has landed a significant acquisition with the purchase of Nelson Ranger Fishing's marine farms off Banks Peninsula which see changes in its own operations there.

Merv Whipp, Aroma's GM for aquaculture says the purchase last December included two 25 hectare open ocean sites at Scrubby Bay, and mussel farms in Menzies Bay and Double Bay as well as two farms in Pigeon Bay and two in Port Levy.

"The purchase will complement our open ocean site at Squally Bay allowing the inshore sheltered farms to be worked when outside swell conditions are not favourable."

He says the acquisition includes the 23 metre farm work vessel *St George* which in the interim will complement Aroma's existing vessel *Gladiator* before it (*Gladiator*) returns to work in the Sounds later in the year.

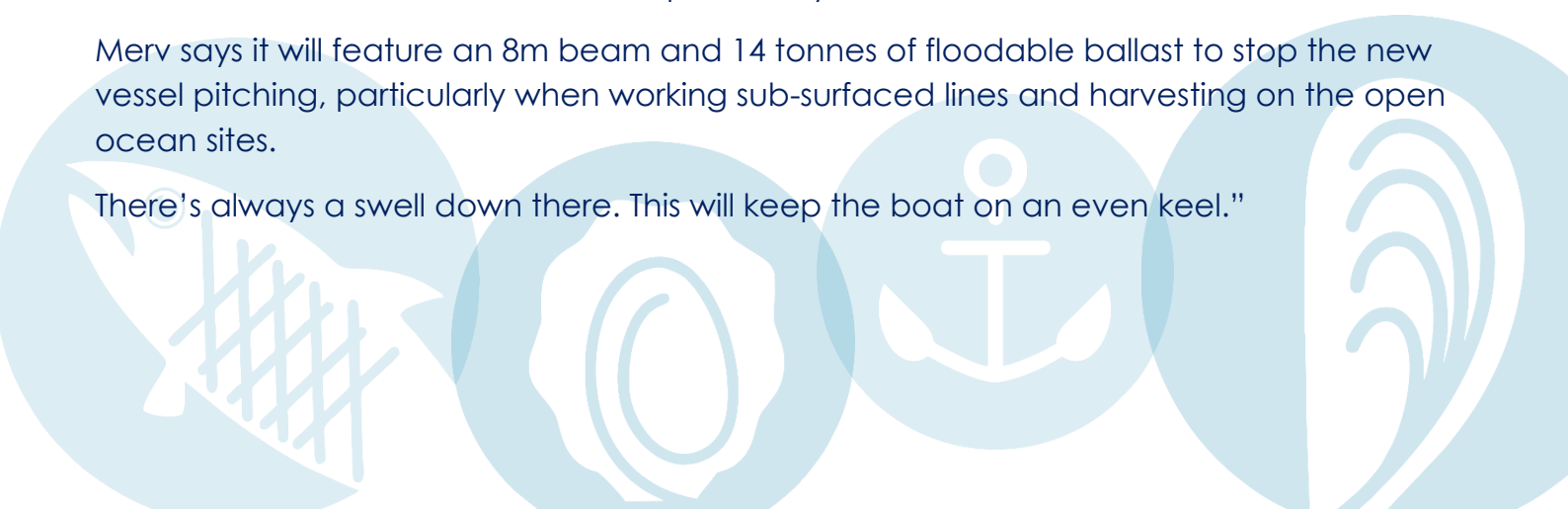


Former Nelson Ranger vessel St George working in calm conditions off Squally Bay.

A new 24m vessel for Aroma's Banks Peninsula operations is currently under construction at Aimex in Nelson with the launch expected by October.

Merv says it will feature an 8m beam and 14 tonnes of floodable ballast to stop the new vessel pitching, particularly when working sub-surfaced lines and harvesting on the open ocean sites.

There's always a swell down there. This will keep the boat on an even keel."



Aroma has hired Mike Moy, currently Operations Manager at North Island Mussels in Coromandel to manage its Banks Peninsula operations. Mike starts mid-May.

Merv says the purchase of Nelson Ranger Fishing's assets will take Aroma's farm space off Banks Peninsula to 160ha with 250 lines. This along with the company's 45 own or contracted mussel farms in the Marlborough Sounds are expected to see Aroma produce around 10,000 tonnes of GSMs a year.

Aroma processes mussel powder at its Havelock factory while also having three factories in Christchurch respectively producing powder and oil, pet food balms and collagens.

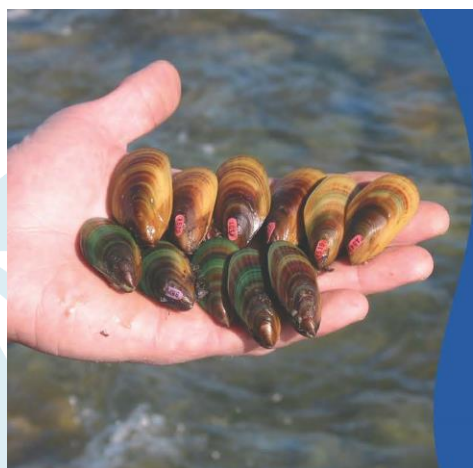
The purchase of Nelson Ranger Fishing by Aroma marks the retirement of Simon Acton-Adams from the industry.



Twenty years ago, Nelson Ranger Fishing was the largest employer in Picton with a staff of 70 to 80 including fish cutters, shellfish openers, cooks and packers. It had farms in Port Underwood as well as fish quota.

More recently the company has been focused on its mussel farms off Banks Peninsula.

- Brendon Burns



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 **CAWTHRON**

Hands-on pioneers with hi-tec connections

Graeme Clarke has likely been a hands-on continuous marine farmer longer than anyone else in New Zealand and shows no signs of handing over the reins.

He and his wife Liz moved to live in Crail Bay in late 1977, the year after they put in their first longline.

They remain there 47 years later along with their younger daughter Joanne who despite holding three university degrees, has opted for marine farming alongside her father and mother.



Joanne and Graeme lifting spat rope

Now 76, Graeme, known to many as Clarkey, grew up swimming and boating on the nearby Ōpaoa River in Blenheim as well as spending a lot of time at a family friend's bach in Queen Charlotte Sound.

His interest in diving was evident when he became secretary of the Marlborough Underwater Club while still at school.

During his days as a science degree student at Victoria University, a tutor, Professor Salmon, spoke enthusiastically about the future for growing mussels via raft systems he'd seen in Spain.

After qualifying, Graeme wanted to start marine farming but was told that as the legislation to allow it was still being drafted, he was better to join the Ministry of Agriculture & Fisheries.

He doubted this was possible given most Fisheries staff were still imported Brits but was taken on to start at the end of 1969.

Initially, he worked in Wellington in a project measuring trawler catch and fish size (which later fed into the TAC system.) In 1972, he was given a scholarship to the UK to study fisheries management where he met Liz, then a school teacher and sailing instructor with salt in her veins.



On their return, Graeme was posted to Nelson from where he supervised the late stages of the Kenepuru hand-harvest of wild mussels. At one point he saw the first concrete pontoon rafts leaving Nelson, destined for the Sounds where Bert Batenburg took over the new technology from a company who'd developed it and given up.

"By that time, the Marine Farming Act had come in and I had bought a property at Crail Bay when at uni as an investment."

He'd been at school with Peter Yealands who was selling rope and importing Spanish lace, a predecessor to spat stockings.

"I bought a lot of gear off him." Graeme by-passed the concrete rafts and went straight to longlines. "It was simple and modular. We didn't have a licence, we just put it in. This was 1976. They (Ministry of Agriculture & Fisheries) then gave us a licence (number 32) to legitimize it."

The licence was under Graeme and Liz's names, and he was still working for MAF. It was perceived a conflict of interest and they parted ways.

Graeme and Liz, who'd married 1975, saw the chance to go into marine farming full-time. They moved to a small hut at Crail Bay with no power or phone just before Christmas in 1977. The power was connected in 1979 – the phone a year or two later. A neighbour's phone was used for any business in the interim.

For the marine farming and transport they initially used a launch owned by Graeme's father Bruce.



The launch Larissa, owned by Graeme's father Bruce was used as their first boat until they could afford the Windswell which is still in use today.

Liz was pregnant and when it came to head towards hospital, the launch's motor wouldn't start. Graeme rowed them to Elie Bay where neighbours took them to Raetihi where a water taxi then took them into Havelock.

Daughter Samantha is now, in Graeme's words, a "high-flier in Silicon Valley." His wish to connect with her and the rest of the world saw him active for years trying to get decent connectivity.

In 2015, Picton-based wireless Internet provider Soundsnet provided his first high-speed broadband connection. The link in 2019 supported the first trial of remote monitoring via sensors of a marine farm in a Marlborough District Council-led project. Graeme was able to monitor live data about the levels of dissolved oxygen, temperature, salinity, and turbidity in the water around his farm.

He wishes there was a capacity to also live monitor spat performance which remains the biggest challenge in managing his family's five farms across 15 ha in Crail Bay and Grant Bay. In recent months, he has been using a mussel larvae trap, where spat is caught by mesh and sent to Aquaculture Solutions in Nelson for analysis.

If he gets a good set from the Kaitaia spat he uses on his lines, Graeme says it has a double benefit of a better crop – and reducing the number of blue mussels.



One News interview, 2020, about the first use of remote sensors to monitor mussel health

"Things are a bit flat at the moment though because of the lack of spat to start with."

The current returns of circa \$1,700 tonne green weight for half shell mussels also contrast with the \$4,000 a tonne he and Liz were first receiving back in the late 1970s.

With Clem Mellish and a few others, they'd helped set up a cooperative. "It was a bloody struggle at first because there were no markets."

They were connected with the Nelson Packhouse which was a cooperative dealing in fruit.

"They basically funded us to build what is now the Sanford's factory."

The packhouse's engineer, Jim Brett, also developed the technology for the first half shell product. The co-op was selling to McFarlane's Fisheries in Auckland which supplied fresh mussels to the Auckland market developed on the back of the now depleted Hauraki Gulf and Marlborough wild mussel beds. Graeme recalls getting \$18 for a 20kg sack – big money in the early 1980s.

After a time, the Clarkes left the co-op and were supplying the Neylon family which had a factory at Riverlands near Blenheim, which later became the base for Kono.

“Unfortunately, this was after the time Britain had gone into the EEC and the loss of guaranteed access for lamb and butter was beginning to impact us. The Muldoon Government was putting up all types of incentives to diversify.”

Inevitably investment in mussel farming burgeoned and flattened the returns.

By this time, Graeme had become active in the Marine Farming Association which he'd been introduced to by Peter Yealands while at home from uni in the early 1970s.

“At various times I threw my toys out of the cot - but I always came back.”

He's now been on the MFA board since 1992. “I've personally known every MFA President.”

Graeme hopes to continue with the MFA alongside his own long life as a marine farmer. He says the machinery now used along with Joanne and Liz's help, means he's able to handle the work in his mid-70s. “I still enjoy it.”

Retirement is not under consideration. “Maybe when I'm in a wheelchair.”

Perhaps there'll be a celebration in a year or so to mark 50 continuous years of marine farming at Crail Bay.

- *Brendon Burns*



Liz & Graeme at the 2022 MFA AGM/Conference

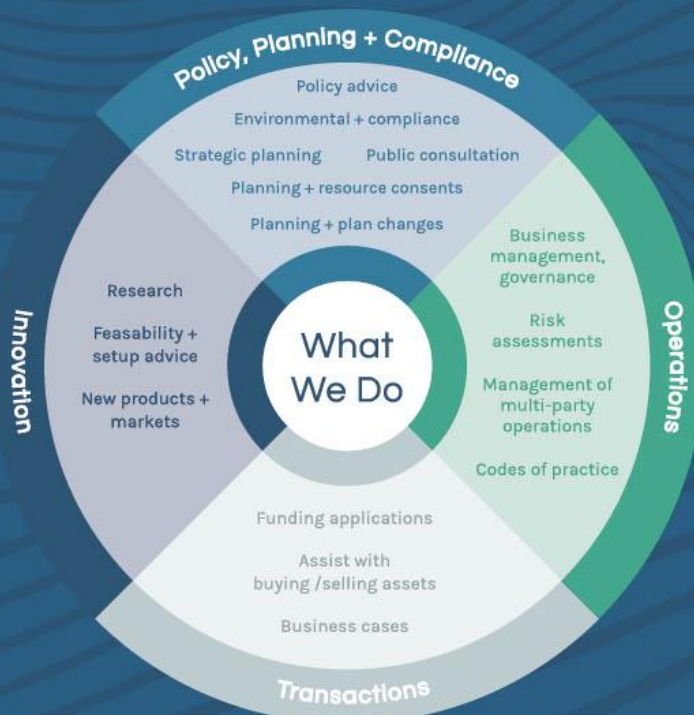


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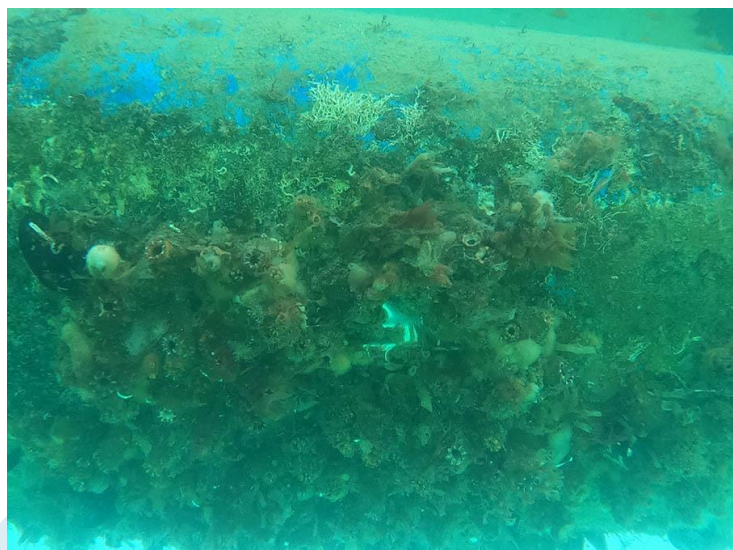


TOS Biosecurity Update

Marine pests can do serious harm to our natural ecosystems. They can establish quickly in an area, out-competing and displacing the native species that live there. Marine pests also pose significant risks to the economy, especially aquaculture and marine industries, tourism, recreational and commercial fishing, as well as having impacts on human health. Most marine pests arrive in New Zealand on vessel hulls. New Zealand's marine biosecurity protocols focus on stopping them from arriving in our waters, as well as reducing the risk of spread once they get here.

The Top of the South Island faces potential marine pest invasions, particularly through fouling on the hulls of recreational vessels. The Top of the South summer marine pest surveillance programme aims to educate boat users on the risks posed by marine pests, minimise the introduction of marine pests to the regions (such as Exotic *Caulerpa*, currently present in Northland and Auckland) and reduce the spread of species already present (such as Mediterranean fanworm, pictured below).

Two rounds of hull inspections were carried out, the first in early January during the Christmas break and the second in late January to coincide with the Nelson Tasman Anniversary weekend. Divers targeted areas popular with boaties, including Abel Tasman National Park and Queen Charlotte Sound. Hulls and niche areas (areas that are more likely to harbour marine pests) such as the keel, rudder, trim tabs, propeller shaft, pipe outlets, bow-thruster tunnels, and hard-stand support strips of vessels are inspected thoroughly for marine pests.



Example of biofouling on a yacht keel where Mediterranean Fanworm still present.
(Photo by Boffa Miskell)



Example of a Mediterranean fanworm found during the summer hull inspections.
(Photo by Boffa Miskell)

The hull surveillance programme is funded by the Top of the South Marine Biosecurity Partnership, coordinated by Boffa Miskell and undertaken by specialist divers from Wai Dive. The Partnership is a collaboration between Nelson City Council, Tasman District Council, Marlborough District Council, Greater Wellington Regional Council and Ministry for Primary Industries. In addition, key partners such as the Department of Conservation, the local aquaculture industry, port companies and mana whenua provide their expertise to improve regional marine biosecurity planning, advocacy, and action through collaboration.



Specialist divers from Wai Dive, undertaking the summer hull inspections. (Photo by Boffa Miskell)

What can you do?

Boat owners must ensure their vessels and equipment are not harbouring any marine pests. A vessel is considered high-risk when more than 5% of the hull's surface is covered with biofouling. By taking an interest in marine biosecurity, educating yourself and others on marine pests and following simple biosecurity procedures, boat owners play a vital role in preventing the invasion and spread of marine pests in the Top of the South. Vessels should ideally be inspected and cleaned appropriately every 3-6 months before leaving your home port.

If you come across a suspect marine animal or plant pest, report it as soon as possible to MPI by calling the Exotic Disease and Pest Hotline **0800 80 99 66** or report it online at <https://www.mpi.govt.nz/biosecurity/how-to-find-report-and-prevent-pests-and-diseases/report-a-pest-or-disease/>. Remember to take a photo or sample if you can.

For more information, please visit <https://www.marinepests.nz/tos>.

Farewell to Jono Underwood

We bid farewell to Jono Underwood, who departed from his position as Biosecurity Manager at Marlborough District Council on 5 April this year.

He has been an integral part of the TOS Marine Biosecurity Partnership (TOSMBP) Committee since 2012 and played a pivotal role in the Partnership's achievements over the years. In 2017, thanks to his contributions, the TOSMBP received a highly commended biosecurity award.

Jono has effectively cultivated and maintained relationships with various stakeholders involved in marine biosecurity, including industry, iwi, local council, and research institutes. His reputation is held in high regard, and he has exerted influence at a national level.

He consistently fostered an excellent rapport with Biosecurity New Zealand and made valuable contributions to initiatives concerning the Mediterranean fanworm and other domestic pathways management. Jono was a strong advocate for the biosecurity profession, serving on the Board of the NZ Biosecurity Institute for numerous years, most recently as President.

We extend our sincere gratitude to Jono and wish him every success in his new endeavour of managing a solar company. With his rural background, we hope he continues to enjoy the beautiful open spaces in Marlborough and finds time to take care of his small block of land near Seddon in the Awatere Valley.

Jono, your absence will be deeply felt!



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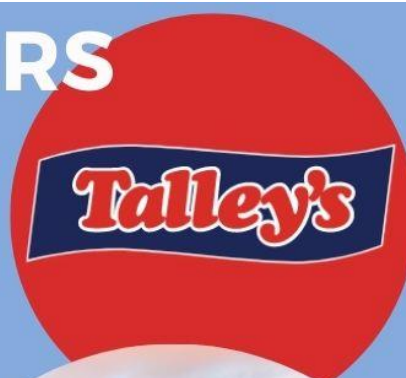
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For consideration, please forward it to:

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Our newsletter is released quarterly – March, June, September, and December

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CONTROL YOUR WASTE



NOT IN THE WATER
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Aquaculture Light Applications.

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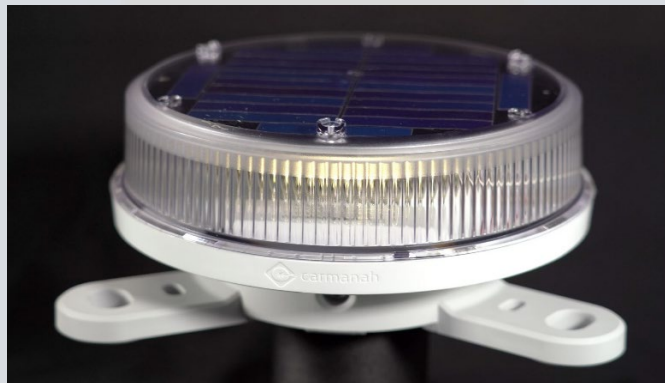
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Celebrating Sea Week

*Toitu te marae a Tane, Toitu te marae a Tangaroa, Toitu te iwi.
If the land is well and the sea is well, the people will thrive.*

This is the message a group of tamariki from Campus Corner Early Learning Centre were taught during Sea Week this year, as they ventured across to the NMIT aquaculture department, visiting fish in the aquariums and enjoying several interactive activities. Anja Studer, aquaculture and marine conservation tutor at NMIT, was there to guide the group, and talked about fish diets, the broader food web and the importance of respecting marine life.

"The tamariki were excited to see and feed the colourful fish we keep here," says Anja.

"They particularly loved the action when the fish got into a frenzy over frozen blood worms – which we refer to as their ice cream treat."

The children also engaged with a touch tank of starfish, kina, seaweeds and mussels, got to dig for shells on a mini beach, construct tinfoil boats and even race sea snails.

"It was a wonderful opportunity to engage with these lovely tamariki and hopefully plant some seeds in the minds of the future kaitiaki of our planet," says Anja.

Head Teacher of Campus Corner, CJ Strange, sends a huge thank you to the NMIT Aquaculture team for making the experience possible for the tamariki.

"This visit to the aquaculture labs not only provided a practical application of our Sea Week learnings but also profoundly enriched the children's understanding and respect for marine life, aligning with our current curriculum focus around Kaitiakitanga - taking care of our environment," says CJ.

Sea Week is New Zealand's annual national week celebrating the sea and was from 2 March to 10 March for 2024.



Tamariki look at the aquariums and help feed fish their 'ice cream treat'.





Tamariki from Campus Corner check out the touch tank set up for them at NMIT in celebration of Sea Week.

For more information about our aquaculture and marine conservation programmes, visit the NMIT website.

-NMIT

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How mussels respond to climate change – preparing the next generation to face the challenges ahead

In what is believed to be a first of its kind learning activity, senior Ōpōtiki College students studying mussel aquaculture have tested mussel responses to simulated changes in seawater temperatures.

Using a desktop recirculating aquaculture system (see image), designed and built by Cawthron Institute, the year 11, 12 and 13 students studying science and statistics tested the heart rates of mussels at different temperatures during a three day in-class programme in late March.

Overseen by Cawthron aquaculture scientist Jess Ericson, the students were able to observe the extra stress that some mussels experienced, when the water temperature was raised from 16 to 24°C. The activity was designed to teach the students how ocean warming affects mussels, and how climate change may influence their physiology. The students were also able to observe the spawning behaviour of the mussels, which was an unexpected surprise.

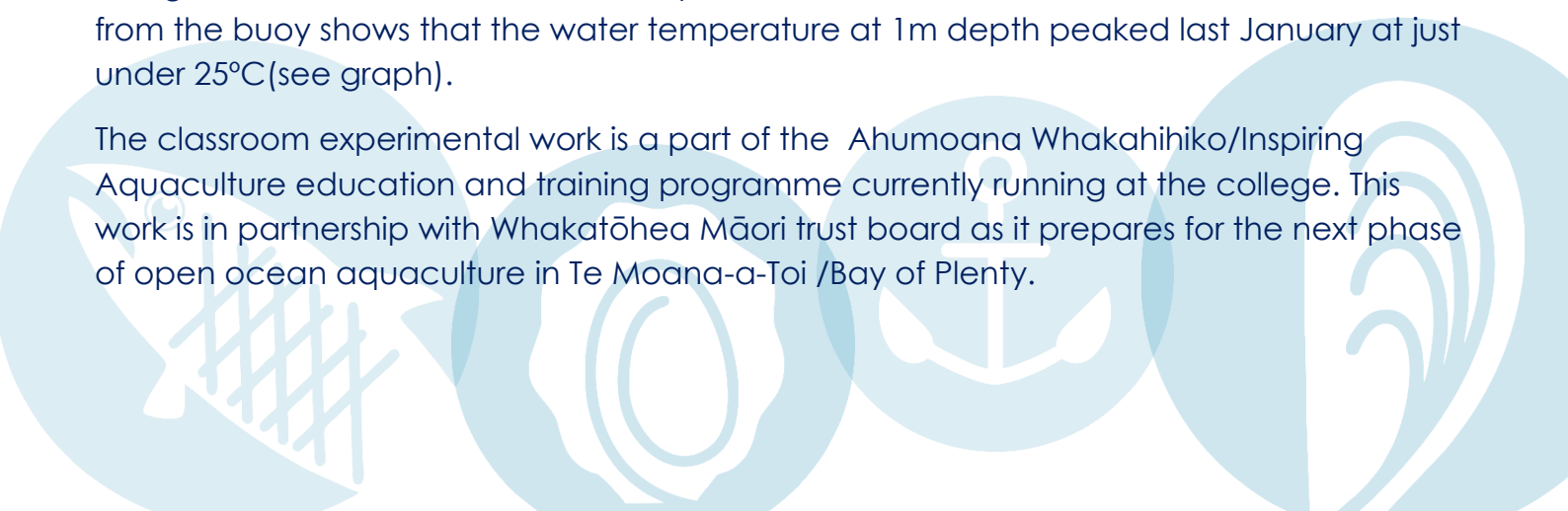
The college's science teacher, Alison Waller, said the mussels seemed very relaxed at 16°C but when the water was warmed to 24°C degrees their heart beats generally increased. There were, however, some mussels that managed to maintain a lower heart rate in the warmer seawater.

This experiment neatly highlighted the different responses of individual mussels to water temperature change - which points to the potential for selective mussel breeding for thermal tolerance.

The in-class work is part of Cawthron's MBIE-funded Open Ocean Aquaculture programme, Ngā Punga o te Moana, which is supporting the college teachers' switch this year from studying agriculture to aquaculture across their science and statistics programmes.

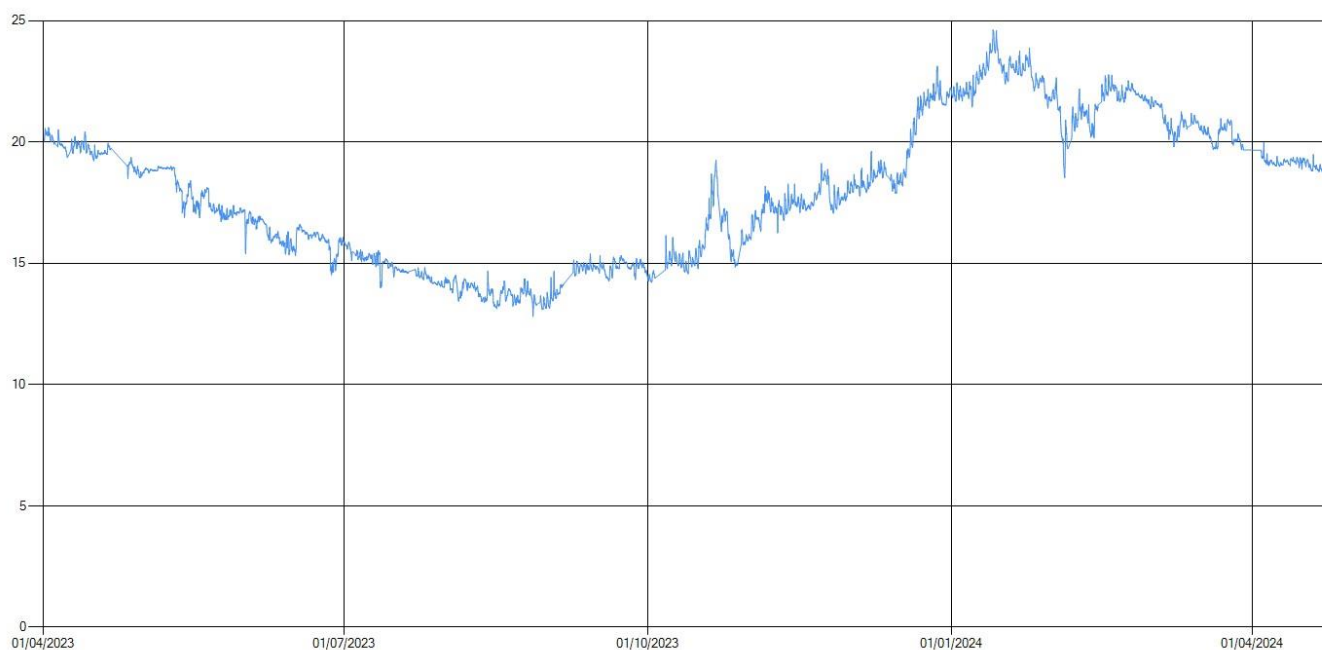
In related work, the school's year 12 and 13 statistics students have access to five years of water temperature and weather data from Cawthron's monitoring buoy located alongside the 3800ha Whakatōhea Open Ocean Mussels farm 10km offshore. The data from the buoy shows that the water temperature at 1m depth peaked last January at just under 25°C (see graph).

The classroom experimental work is a part of the Ahumoana Whakahihiko/Inspiring Aquaculture education and training programme currently running at the college. This work is in partnership with Whakatōhea Māori trust board as it prepares for the next phase of open ocean aquaculture in Te Moana-a-Toi /Bay of Plenty.

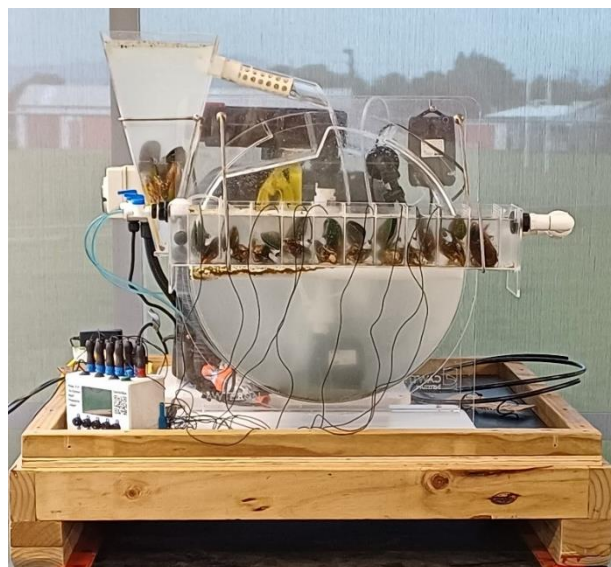
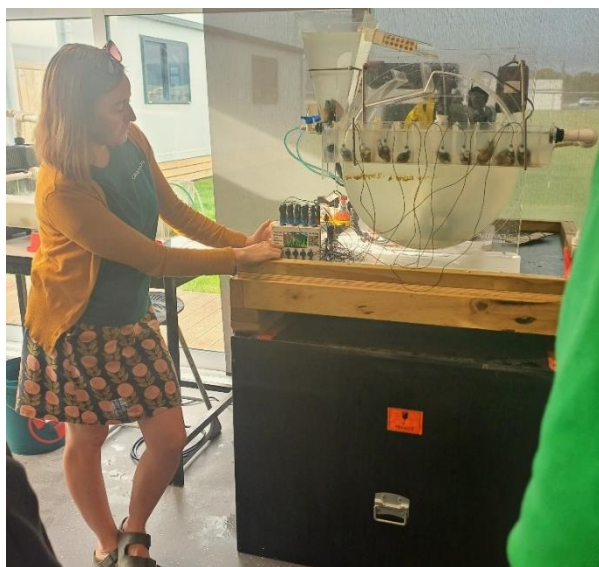


Our partnership is to build upon Whakatōhea mātauranga and interweave that into the new 5000ha farming space which has a focus on oysters, scallops and seaweed farming.

Craig Prichard - Cawthron Institute



Ocean Temperature change: Cawthron's Ōpōtiki water, wind and swell monitoring buoy captured water temperature change in Moana-a-Toi/Bay of Plenty from April 2023 to April 2024 at 1m depth. The graph shows the water temperature varied between 14 to 25 degrees over the year and remained above 22 degrees from December through to late February.



Monitoring Mussel heart rates: Cawthron aquaculture scientist Dr Jess Ericson shows the students the heart rates of mussels in the specially built reticulating aquaculture system during classes at Ōpōtiki College.

Mussel science: The Cawthron built desktop aquaculture system used for in class experiments on shelfish now part of Ōpōtiki College's NCEA aquaculture programme for senior students.

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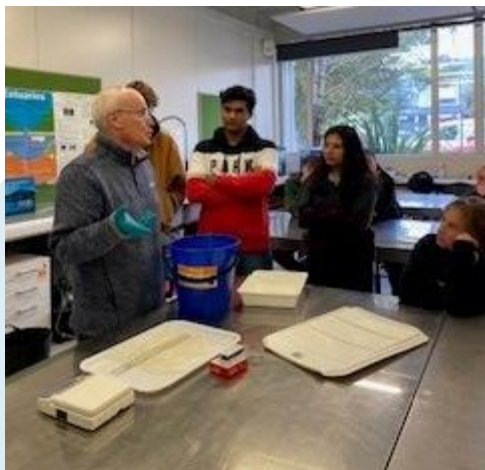
Aquaculture careers day for Tasman teenagers

Kirsten from Aquaculture New Zealand and Nicola from the Marine Farming Association had such a fantastic day with students from both Nelson and Tasman schools! Our goal was to show them the diverse roles within the Aquaculture Industry, and we're so grateful for the support from **Moana, MacLab, Cawthron's Blue Tech team, NMIT**, and the **NRDA**.

The students had a great experience starting at Moana, where Olin and Dan introduced them to the Oyster Hatchery and Nursery, along with algae feed. Then, MacLab hosted us and explained their business model and the nutraceutical product from their mussel farms. A big thanks to Dale and Aaron for showing us how mussel powder is made for health products.

At Cawthron, we met the Blue Tech team and got an inside look at the tech used in Aquaculture for Research and Development, including diving. Our final stop was NMIT, where Mark Burdass introduced study options and even showed how they diagnose sick fish (who knew they were anaesthetised).

It was such an informative and enjoyable day, and we're grateful to the enthusiastic students and teachers who joined us. Thank you for making it a pleasure!



Maritime Operations

– Skipper Restricted Limits Licence



We are an approved Category 1 training provider by NZQA and an approved training provider by Maritime New Zealand to deliver this training programme for the licence Skipper Restricted Limits. This is essential for potential Skippers of vessels up to 12 metres (or 24 metres with further endorsement), who navigate to a distance of up to 12 nautical miles off the New Zealand coast.

This course combines theory with practical skills to give you the knowledge and skills you need, and is for employment in the maritime transport, tourism and fishing sectors. We also include First Aid, Fire Prevention, Passenger Endorsement and up to 24m vessel size endorsement. It is best suited to those who are already employed in these industries, or about to enter a role.

For 2024 we are going to adhere to our very successful 2023 schedule by offering courses in the Nelson/Marlborough area, and in Te Anau.

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Return of mussel shells restores seafloor habitat and enhances benthic biodiversity

Over three years ago, as part of the mussel restoration project in Te Hoiere, mussel shells were transplanted onto the seafloor from Sanford's factory to help understand the potential for aquaculture shell to be used as a restoration tool. Today, those shells are increasing seafloor biodiversity in two locations that were historically impacted by shellfish overharvesting in the early 1970s.

In February 2023, we performed a follow up biodiversity assessment on the transplanted shell layer to quantify changes. We tested two habitat types, muddy and sandy, and found that after ~ 2 years on the seabed, the organisms living on the shell (i.e., epifauna) and in the sediment (i.e., infauna) shifted in response to the shell layer. This led to an increase in biodiversity of the organisms living on the shell and no change in the biodiversity of organisms living in the sediment. Additional fine scale changes were observed on the different habitat types, and these are discussed in greater detail in the study.



Shell layer on the seabed three months after deployment

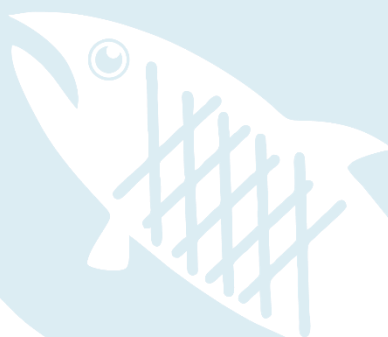
These results are important to Te Hoiere and elsewhere in New Zealand as this study demonstrates that returning mussel shells as a habitat restoration tool, can enhance biodiversity in soft sediment habitats historically impacted by shellfish overharvesting.

Please feel free to get in touch with any questions or if you'd like to get involved.

Emilee Benjamin:
emilee.benjamin@auckland.ac.nz



The Sanford team deploying mussel shells in October 2020.



AED Incident in Anakoha

On the 23rd of April, at approximately 10am, the Waihono was leaving a farm in Anakoha and they noticed a vessel heading directly for them, so they stopped and waited for the vessel to come along side. As soon as they got close the people aboard started yelling for an AED (Automated external Defibrillator).

Neihana retrieved the AED from the wheelhouse and handed it over to the vessel, they then took the AED to another vessel where the patient was. There appeared to be four or five vessels traveling together and someone in their party had said that quite often the mussel boats carry AEDs, so one of the vessels had headed to the nearest mussel vessel that they could see, which happened to be the Waihono.

There was also the Brightstar and San Nikau in the area that were heading to the vessel to lend assistance.

The Waihono stood off the vessel with the patient in case they were needed, and they could hear the AED working. The Waihono crew were then asked where a helicopter could land, so they suggested the wharf on Forsyth Island and started to steam around into Forsyth Bay to lead the vessels to the wharf.



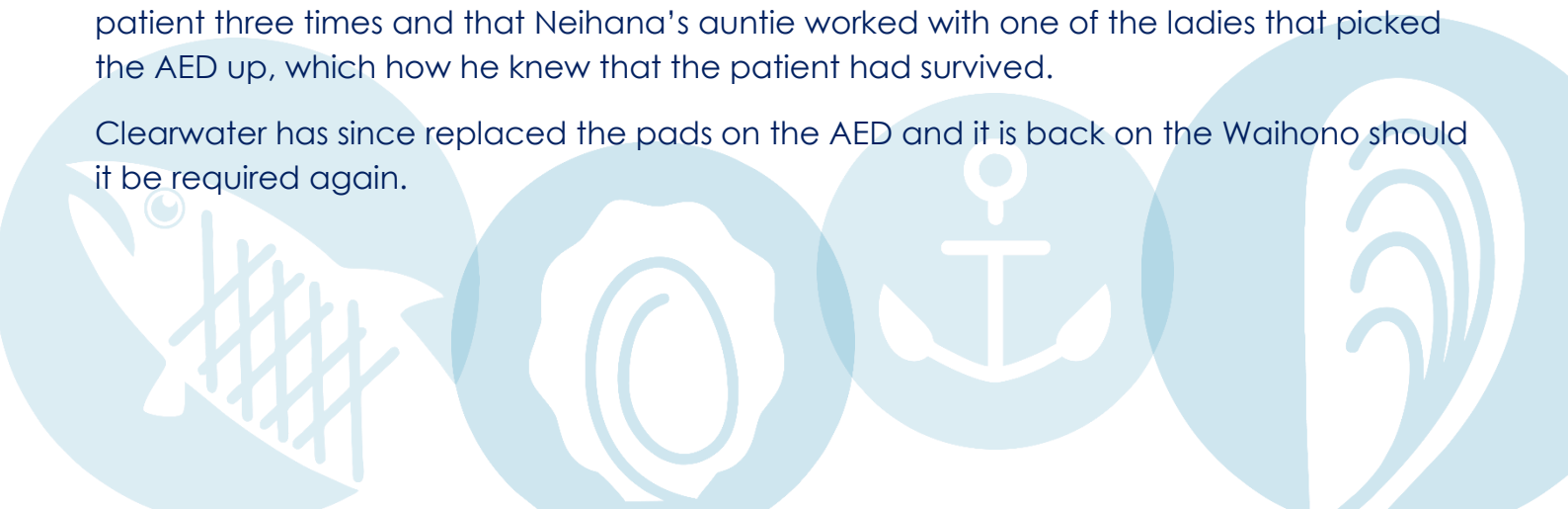
Neihana Seymour holding the AED on the Waihono

By time the vessels reached the wharf in Forsyth Bay the rescue helicopter was already landing.

The patient was then transferred to the helicopter and flown to Wellington hospital.

When the AED was returned to the Waihono, they learned that the AED had shocked the patient three times and that Neihana's auntie worked with one of the ladies that picked the AED up, which how he knew that the patient had survived.

Clearwater has since replaced the pads on the AED and it is back on the Waihono should it be required again.



TOS Marine Farming vessels with onboard AED

Company	Vessel	Company	Vessel
NZ King Salmon Co	All barges	Maclab	Vanguard
NZ King Salmon Co	Milton Bay	Waimana Marine	Dawnbreaker
Clearwater Mussels	Arista Cat	Waimana Marine	Morningstar
Clearwater Mussels	CW Resolution	Sanford	Pelorus Trader
Clearwater Mussels	Jolly roger	Sanford	Lady Marie
Clearwater Mussels	Kay 7	Sanford	Pacifica
Clearwater Mussels	Muscat	Sanford	San Nikau
Clearwater Mussels	Pelorus Image	Sanford	Enterprise
Clearwater Mussels	Sounds legend	Sanford	Intrepid
Clearwater Mussels	Stray Cat	Sanford	San Sinnika
Clearwater Mussels	Te Au Miro	Sanford	Hawkeye
Clearwater Mussels	Tuawhiti	Sanford	Kaiumanui
Clearwater Mussels	Waihono	Sanford	Platinum

Heartsaver AED maintenance advice

If you own an AED, you've made a significant investment in a life-saving medical device. Chances are that it's been sitting unused for a while. A status indicator/light is not a guarantee that your AED will shock.

Heart Saver recommends all AEDs, regardless of brand, are checked once a year, to make sure the unit is ready to go when / if you need it and to show you have exercised due care.

AED battery and electrode pads have expiry dates. Pads do degrade over time, making the device ineffective. We keep a record of these details for our clients to guarantee replacement in time. In some cases we have found units have been used or expired and no one has replaced the pads.

Heart Saver finds the 'deemed useful life' of a defibrillator is 8 - 10 years. While the units often outlast that time and remain safe to use, the likelihood of them beginning to fail increases outside of that window.

Additional details can be found via at: <https://www.heartsaver.co.nz/aed-testing/> & <https://www.heartsaver.co.nz/info/faqs/>





AED PERFORMANCE VERIFICATION

Why should I performance test my AED?

If you own an AED, you've made a significant investment in a life-saving medical device. Chances are that it's been sitting unused for a while. An indicator light is not a guarantee that your AED will shock.

In some cases we have found units have been used and no one has replaced the pads. Pads do degrade over time, making the device ineffective.

We recommend all AEDs, regardless of brand, are independently verified once a year, to make sure the unit is ready to go if/when you need it and to show you have exercised due care.

How does this service differ from some other providers?

Our specialised equipment runs a series of internationally-recognised tests in alignment with New Zealand Safety and Performance Parameters for AEDs (NZ/AUST Standard 3551:2012).

We also have a specific defibrillator analyser which performs a live test to check cardiac waveform and delivered energy.

AED battery and electrode pads have expiry dates. We keep record of these details for our clients to guarantee replacement in time.

How much does it cost?

\$149+GST per year

For \$449+GST we will include an hour's training for your staff or community on how to use an AED - ideal if you have new team members.



What do compliance checks include?

Heart Saver's Annual Performance Verification includes:

✓	A machine-simulated 'live shock' test using a defibrillator analyser
✓	Full functionality testing
✓	Battery and pad expiration check
✓	Physical inspection and cleaning of your AED & components
✓	Full written inspection and performance report
✓	Cabinet / bracket integrity check
✓	Sourcing of replacement batteries and electrode pads on expiration
✓	Inclusion on AED Locations website if applicable
✓	Inclusion on our performance verification database, so we can remind you each year when your unit is due to be checked

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We recommend that all AEDs, regardless of brand, are verified every year. Annual Performance Verifications (APVs) reassure you that you've done all you can to ensure your AED is in good working order in case of emergency.

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SUDDEN CARDIAC ARREST (SCA)

What you need to know

What's the difference between Cardiac Arrest and a Heart Attack?



CARDIAC ARREST

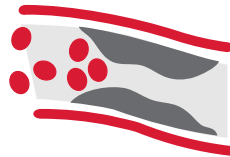
is an ELECTRICAL PROBLEM of the heart



the person will be unconscious and not breathing

What should you do?

- Call 111
- Start CPR
- Use a Defibrillator



A HEART ATTACK

is a CIRCULATION PROBLEM (blocked artery)



the person will probably be conscious and breathing

What should you do?

- Call 111
- Keep Person Calm

NZ Statistics:

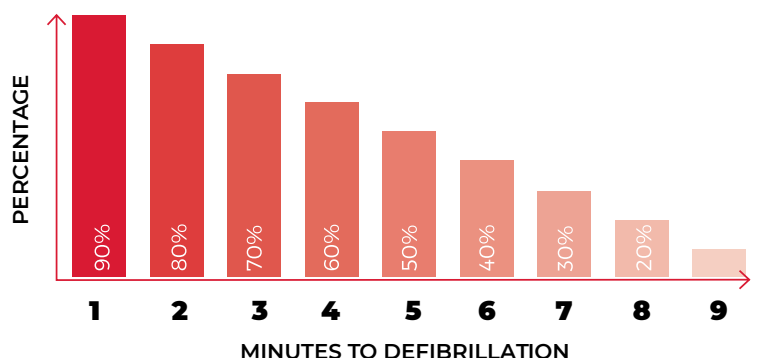
1,881 Kiwis die of Sudden Cardiac Arrest every year*

An AED can increase survival rate by up to

44%



Chance of survival reduces by 10-15% every minute that defibrillation is delayed



← 4 minute round trip →



For the best chance of survival an AED should be located no more than a 4-minute round trip away.

It takes on average 9-12 minutes for St John to respond with their AED.*



9 minutes

* 2021/2022
Hato Hone
St John OHCA
National Report

Anyone can (and should!) use an AED in the event of Sudden Cardiac Arrest.

A treasured tradition in Marlborough

From start to finish, the 20th anniversary of the Havelock Mussel and Seafood festival proved another one to remember.

Opening the March 16th event, Marlborough's Mayor Nadine Taylor said the festival was now a treasured tradition that captures the spirit of the region. "Our Summer. Our sea. And our Sounds."

Around 4,000 people confirmed that view by attending, an increase of about 500 on last year. In perfect weather, the Queen Charlotte College kapa haka group followed the Mayor's opening and set the stage for another memorable day.



An early festival highlight was the mussel opening competition.

Shaun An with 3 minutes and 9 seconds for 100x mussels opened, took the individual title. Current record holder Angela Fredericks remains supreme with her extraordinary record of 1 minute and 51 set in 2018.

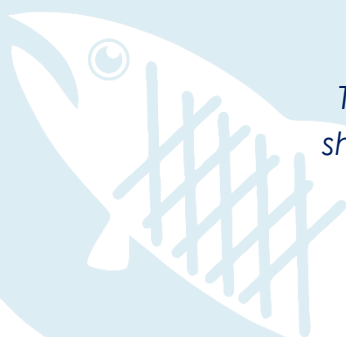
In the Go Media Intercompany Mussel Opening competition, it was the tale of the Talley's with its Blenheim Team 2 taking out the title from Talley's Motueka.



In the New Zealand King Salmon Culinary tent, the junior NMIT Festival Chef winner was Tessa Zilwood who created a Miang (food wrapped in leaves) NZ King Salmon and Seaweed Salad. Joan Sebastian Diaz Portillo took the senior title with a Regal Salmon Encocado (coconut sauce) dish with Greenshell mussels.

The MFA hosted industry tent was busier than ever with adults and children taking time to explore what was on offer.

Top Auckland chef Zennon Wijlens, showing everyone how it was done.





Wayne and Anne Marie Monteith from Auckland who as first timers rated the event as 'tops.'

The festival featured a stellar line up of bands including local seven-piece act Eclectic Fix who got some early dancers on their feet.

The headline acts were Hollie Smith and Lost Tribe Aotearoa who got things really moving before the festival's close.

The Havelock Mussel & Seafood Festival is a not-for-profit charity which is strongly supported by the local community. It has handed back more than \$315,000 to local community organisations since its start two decades ago on the pathway to becoming a treasured Marlborough tradition.

- Brendon Burns

There were several science-focused displays including one on the MFA's Sounds Mussel Bed Restoration Project led by Dr Emilee Benjamin from Auckland University. Mayor Nadine mentioned the project in her opening speech saying it was exciting research, now starting to show ecosystem benefits with an improving abundance of fish and seafloor creatures developing around the new mussel beds.

Aquaculture NZ's tattoos were again a hit with festival goers of all ages including



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Mexico's oyster revolutionary

Alan Espinoza, founder of Bendito Mar, is determined to transform Mexico's shellfish farming sector in order to improve the environment and create new livelihoods for people in fragile former fishing communities.



Alan Espinoza, founder of Bendito Mar, standing next to one of the oyster farms his company works with on the Baja California Peninsula ©Vicente Covarrubias

Espinoza spent his formative years on Isla Natividad, on Mexico's Pacific Coast, a community in which fisheries co-operatives were a mainstay of the economy. It was there that his father – a marine biologist – became involved in farming sea cucumber, abalone and seaweed.

"It was normal and natural for me to talk about aquaculture and seafood products," he reflects.

Following high school in Ensenada, Espinoza studied business administration at university and, after graduation, decided to try to combine his new-found training with his passion for ocean life and coastal communities.

"I decided to mix the two things I loved – the sea and the fair-trade business. Because at that time the Chinese buyers controlled all the seafood that my dad's company was producing. They were paying good prices but not enough. So I decided to make a business to help develop new opportunities for the fishermen in the island," he recalls.

His first business involved the export of lobsters and geoduck clams to the Asian market, but after five years he decided he needed a change.

"I needed to do something more with my life than buying and selling, buying and selling. My dad was doing aquaculture, I was trading seafood – it made sense to start working together," Espinoza reflects.

The end result was that they founded their own company, Bendito Mar (meaning blessed sea), with the original plan to produce sea cucumbers, abalone and seaweed. However, economic reality meant that they needed to look for alternatives that would produce swifter returns, which led them to an area 800 km further south, on the Baja California Peninsula.

"Abalone are high value but take five years to grow. But we found small communities growing small volumes of oysters in the area and I suggested working with them in a sort of joint venture instead," explains Espinoza.

It was, Espinoza reflects, a chance to make a difference by working with families who had been struggling to make a living from fishing.

"We initially started to work with a local family as our partners. Later, we agreed with another family that over a period of time they will stop fishing and join Bendito Mar, where they will have social security, legal benefits, and a salary proportional to what they would earn catching wild species. The difference is that, as fishermen, they did not have benefits or social security. In the next stage, we help families develop their cultivation and buy their oysters at a better price than the industry average," he explains.



Oyster baskets on adjustable lines - Bendito Mar is currently producing around 40 tonnes of oysters (around 480,000 shells) a year using the Australian method of growing in baskets on adjustable lines.
©Vicente Covarrubias

Four local families have now signed up to grow oysters for Bendito Mar and the company is currently producing around 40 tonnes of oysters (around 480,000 shells) a year, in baskets using the Australian method, on adjustable lines.

One of the key advantages of the area, according to Espinoza, is the excellent water quality, which means that the company doesn't have to depurate their oysters prior to selling them.

Meanwhile, the rich feeding in the water means that they can grow their oysters to market size in 7-8 months, although Espinoza adds that this figure is in the 12-15 month range for high end oysters. More recently they have also diversified into growing clams and scallops and they currently harvest about a tonne of each. In terms of sales, the company is focused on the domestic and US markets, selling to dealers in Ensenada.

Overcoming early hurdles

Espinoza admits that the first three years were very challenging for a number of reasons, including the impact of the Covid pandemic and the embryonic nature of the oyster farming sector in the region.

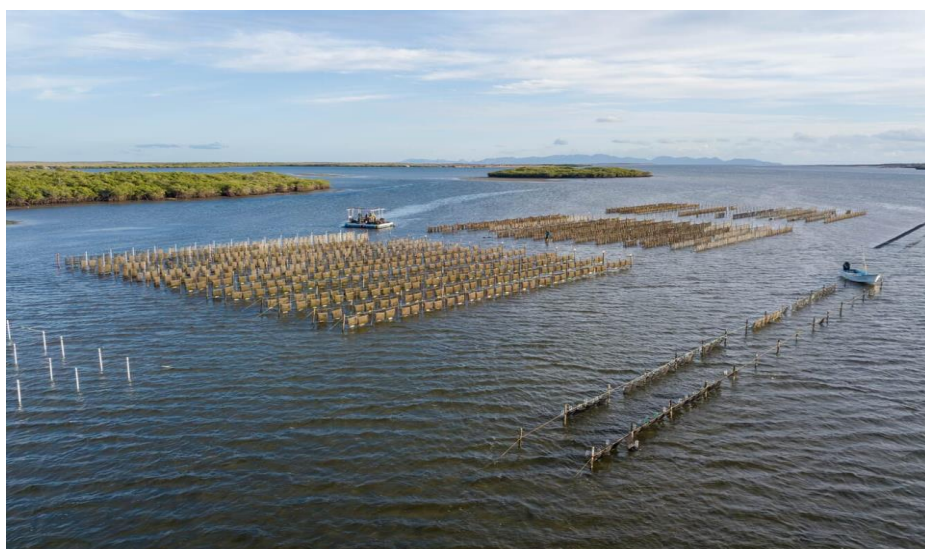
"People have been farming oysters for no more than 15 years in this area, so there aren't many examples to follow and we have had to learn a lot by ourselves," he explains.

But the biggest challenge he faced was the shortage of oyster spat.

"The government has tried to make people stop fishing and start farming, but we don't have the hatcheries, the infrastructure, the packing facilities. Buying seed has been a big problem," he reflects.

However, the arrival of a new hatchery nearby has helped to change the company's fortunes.

"In 2021 we were only able to buy 500,000 seeds, this year we were able to buy 3 million in two months from a company called MariMex which has built a huge hatchery near La Paz and can now produce 120 million seeds a year," Espinoza explains.



Aerial view of one of the oyster farms Bendito Mar works with on the Baja California Peninsula - Espinoza believes that one of the key advantages of the area is the excellent water quality, which means they don't have to depurate their oysters prior to selling them. ©Vicente Covarrubias

The remote location of Bentido Mar's farms has been another obstacle.

"We don't have much transport: there are no trains, no planes and we didn't produce big volumes of oysters, which made transport very expensive. But now the logistics cost is decreasing as our volumes rise," Espinoza notes.

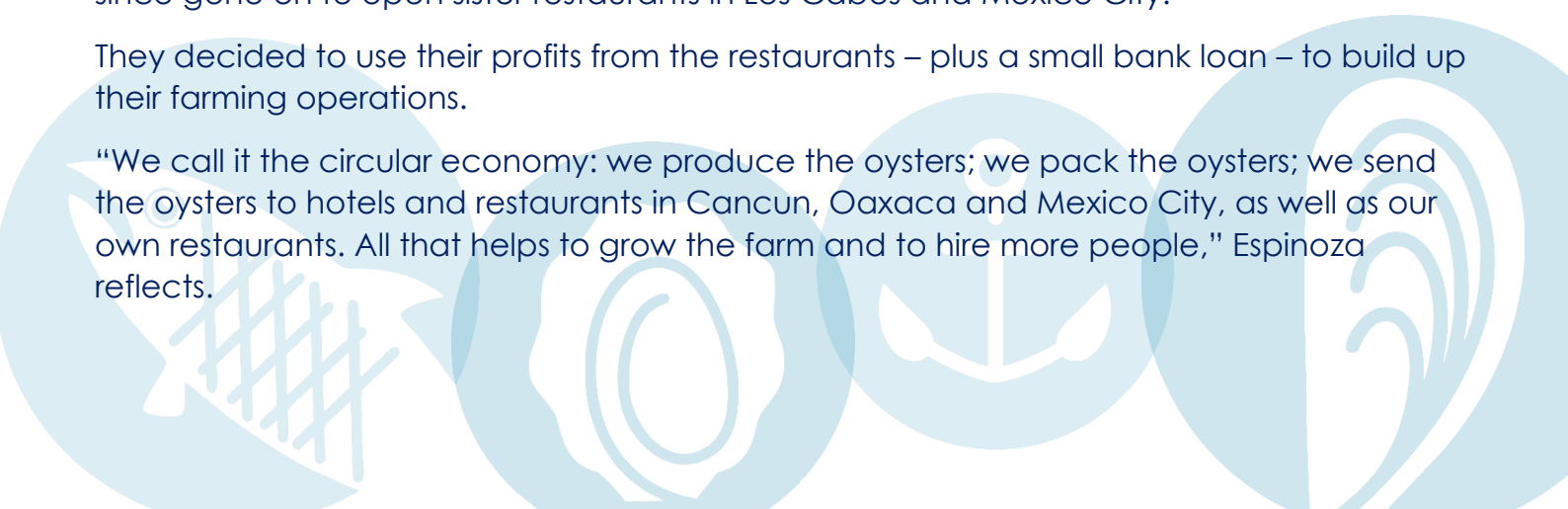
Collaboration and diversification

One of the major milestones for the company has been their decision to form a partnership with Luis Baquedano, who owned a kampachi packaging facility in La Paz and had a background in hospitality.

The duo decided to open a restaurant that specialised in farmed seafood, with oysters as the star ingredient. The Oyster House, in La Paz, proved a great success and they have since gone on to open sister restaurants in Los Cabos and Mexico City.

They decided to use their profits from the restaurants – plus a small bank loan – to build up their farming operations.

"We call it the circular economy: we produce the oysters; we pack the oysters; we send the oysters to hotels and restaurants in Cancun, Oaxaca and Mexico City, as well as our own restaurants. All that helps to grow the farm and to hire more people," Espinoza reflects.



It will also allow them to produce the oysters more efficiently, with their first grading machine already on order, to help them meet the growing demand. It has also helped Espinoza buy more baskets and expand, while a local company is now offering baskets to him on credit, which has helped to catalyse the company's expansion.

While Bendito Mar may be growing, it is still dwarfed by the country's established oyster behemoths – Baja Shellfish Farm and Sol Azul – which account for 80-90 percent of the shellfish volumes, according to Espinoza.



Espinoza checking an oyster basket - Diversifying into hospitality with the opening of several seafood restaurants – all selling the star ingredient, oysters – has secured extra income for the company and allowed Espinoza to buy more oyster baskets and expand operations. ©Vicente Covarrubias

“But I’m proud of us because we are growing in a sustainable and regenerative way. For example, when we grow scallops we harvest just 80 percent of the volume – the other 20 percent we leave to reproduce,” he explains.

Their model has been widely praised and won them first prize in a national competition for artisanal aquaculture producers in 2022. And it has also attracted the attention of The Nature Conservancy (TNC), who will be working on a project with the company next year, to analyse the impact of Bendito’s farms.

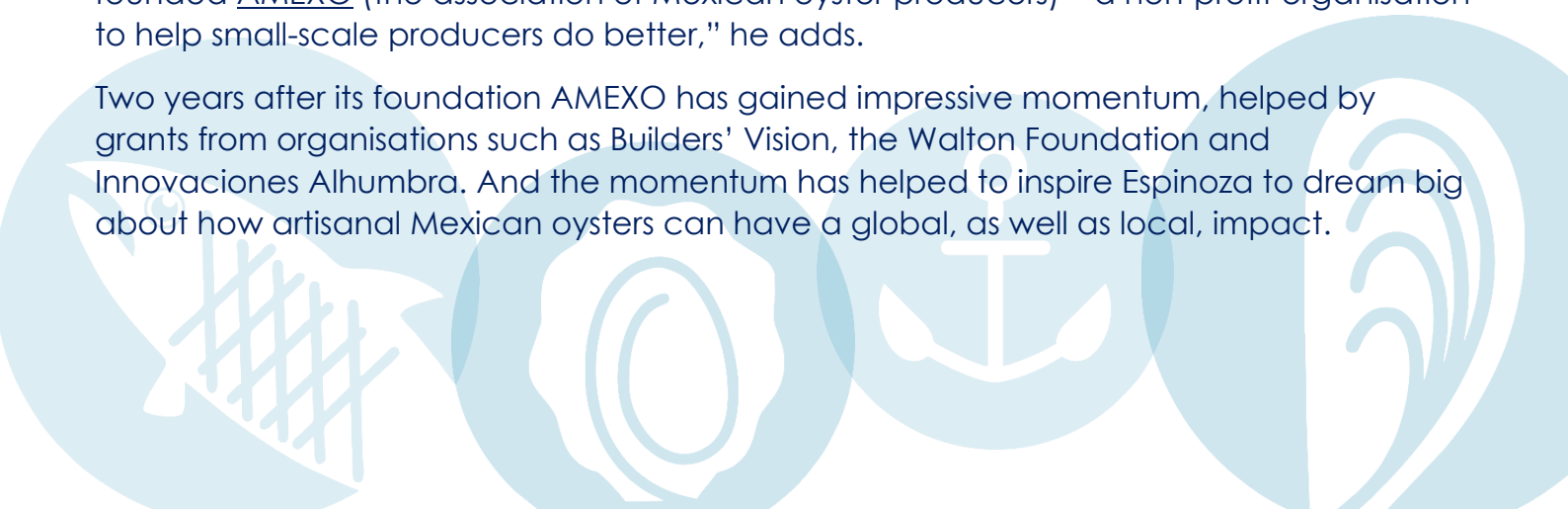
A celebration of shellfish

One of the key local initiatives that Espinoza has been responsible for is establishing Baja California Sur’s first oyster festival, the third edition of which is set to take place in May 2024.

“After the first festival many doors opened to us and I’ve been invited to speak at lots of different aquaculture shows. When I went to a World Aquaculture Society event in Merida in 2021 I met other Mexican oyster farmers. They came from different states but had the same problems as us,” he recalls.

“It made me think that I had two options: either focus on growing my own company or use our experience to work as a team. I decided on the second option and founded AMEXO (the association of Mexican oyster producers) – a non-profit organisation to help small-scale producers do better,” he adds.

Two years after its foundation AMEXO has gained impressive momentum, helped by grants from organisations such as Builders’ Vision, the Walton Foundation and Innovaciones Alhumbrá. And the momentum has helped to inspire Espinoza to dream big about how artisanal Mexican oysters can have a global, as well as local, impact.



"We want to make an oyster farming revolution. I think that in the next 10 or 20 years, Mexico will be one of the best-known oyster farming countries in the world. My mission is that when you think about oysters you think about Mexico," he concludes.



The remote location of one of Bendito Mar's oyster farms on the Baja California Peninsula - An obstacle Espinoza faces with the remote location of his farms is the expense of transporting small volumes of oysters once they've been harvested – but, he explains, now the logistics cost is decreasing as the volumes rise.
©Vicente Covarrubias

by Rob Fletcher Senior editor, *The Fish Site*

Re-published with thanks from *The Fish Site* where this article was first published.

<https://thefishsite.com/articles/mexicos-oyster-revolutionary-alan-espinoza-bendito-mar>

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Award Nomination Form

It's the time of year again when the Marine Farming Association offer all members the opportunity to nominate an individual or organisation for the MFA Annual Awards.

The Awards will be presented at the MFA Annual Awards Dinner, this year being held at the Queen Charlotte Yacht Club on Friday 16 August 2024.

Please complete the details below and return your nomination to office@marinefarming.co.nz by 5pm on Thursday 25 July 2024.

Nominee Name: _____

Nominee Company: _____

Category:

- | | |
|---|--|
| <input type="checkbox"/> Merit Award | <input type="checkbox"/> Outstanding Marine Farmer |
| <input type="checkbox"/> Environmental Award | <input type="checkbox"/> Recent Entrant Award |
| <input type="checkbox"/> Research & Development Award | <input type="checkbox"/> Community Award |

Reason for Nomination:

Signed: _____

Date: _____

Award Categories



Merit Award

Awarded to an individual or an organisation that has made significant and beneficial difference to our industry over a sustained period.



Outstanding Marine Farmer

Awarded to a farming individual or an organisation that has made a significant contribution to the marine farming industry in the Top of the South over the last 12 months.



Recent Entrant Award

Awarded to an individual who during the first few years of involvement in our industry has shown exceptional passion, commitment, and achievement.



Community Award

Awarded to an individual who is an ambassador for the industry within the community in which we operate.



Environment Award

Awarded to an individual or an organisation that has demonstrated outstanding commitment to the environment through advocacy, leadership, best practice or just getting out and doing it.



Research & Development Award

Awarded to an individual or an organisation that has demonstrated excellence in research and development, with measurable outcomes relevant to the understanding, growth, sustainability, or profitability of our industry.

Note: The choice of the award recipients will be made by a panel of adjudicators.

Their decision will be final, and no correspondence will be entered.

It will be the adjudicator's decision to whether all awards will be presented.

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