

OCTOBER 2022 NEWSLETTER

CONTENTS

GM's Comment	2
AQNZ Export Data	4
Incident Response Exercise	5
Not for the faint hearted	7 - 12
CH4 Global	14 - 16
Environmental Achievements	17
Malaysian TV to mussel factory	19 - 20
Third Flood in a Year	22 - 26
New use for old rope	27 - 28
PM visits new Sanford Bioactives Site	31 - 32
NIWA releases	33
Impact of floods	35
Stay Ship Shape	36 - 39



IMPORTANT DATES

- Ring Roads AGM**
9th November 2022
- MFA Board Meeting**
18th November 2022
- ECSC Meeting**
25th November 2022
- RTSC Meeting**
2nd December 2022

GM's Comment

It's certainly nice to feel some warmth in the air again as we move towards summer. Unfortunately, water temperatures are also on the rise and the ENSO outlook suggests another La Nina is on the way. Hopefully this year the La Nina conditions are only short lived, with forecasts suggesting a return to neutral conditions in early 2023. For those interested in water temperatures nationwide the Moana Project heatwave forecast is an excellent resource <https://www.moanaproject.org/marine-heatwave-forecast>

After a two-year hiatus it was great to catch-up with so many people at the AQNZ Conference. I must congratulate the AQNZ team for putting on such an amazing event! As several of the presenters articulated, there is no hiding from the fact that we are in for a challenging few years as geopolitical tension, inflation and labour shortages bite. But, there is also cause for optimism as the world increasingly looks to the ocean and to aquaculture as a means of sustainably producing food/resources.

It was great to also attend the 'Tech Innovation for our Blue Economy' forum facilitated by Chris Cornelison and SftI team, and the 'Seaweed Symposium' run by Clare Bradley and the Aotearoa New Zealand Seaweed Association (ANZSA), either side of the Conference. There is a real sense of excitement around the development of an oceantech sector and the potential for scalable seaweed aquaculture in New Zealand. Members can expect to see/hear more about both in the coming months.

The King Shag Research Project final report is now available via the MFA website. Mike Bell has done an excellent job of bringing three years of research effort together and has said that the report could have easily gone beyond the 98 pages. I would like to thank all of the organisations that participated in the King Shag Working Group and that provided funding support. The Working Group will continue to meet for now, on a less frequent basis. The band resighting research is also continuing for another three years.

We are still waiting for the MEP Variation 1/1A decision to be released. While no official update on timing has been provided, it appears that there have been some delays and that an early 2023 release date is now likely. This is disappointing as it means the uncertainty for marine farmers persists. We will share any official updates around timing with members ASAP.

All the best,

Ned.

MOVE

NZ Market Leader for all Aquaculture Transport Solutions

MOVE's specialised fleet of MPI-approved trucks and experienced drivers ensure the highest transport standards are met for these in-demand New Zealand products.



Call Graeme to enquire: 027 246 8978



CH4 GLOBAL
Zero Methane Agriculture

Through sustainable aquaculture production...

we are working to impact climate change at scale, **with urgency.**

If you have consented waterspace that may be suitable for growing asparagopsis, contact us to discuss potential partnerships.

ch4global.com

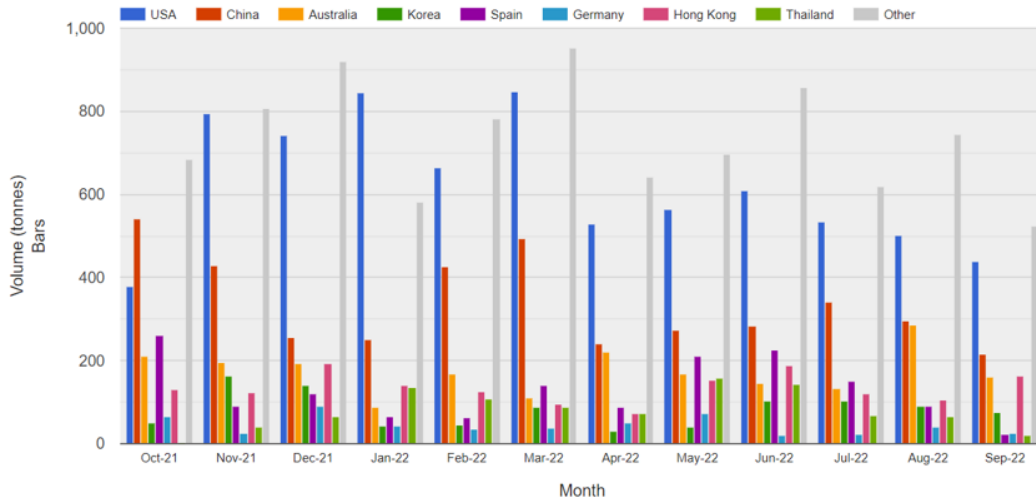


September Export Stats – AQNZ

Mussels – All Exports

All countries

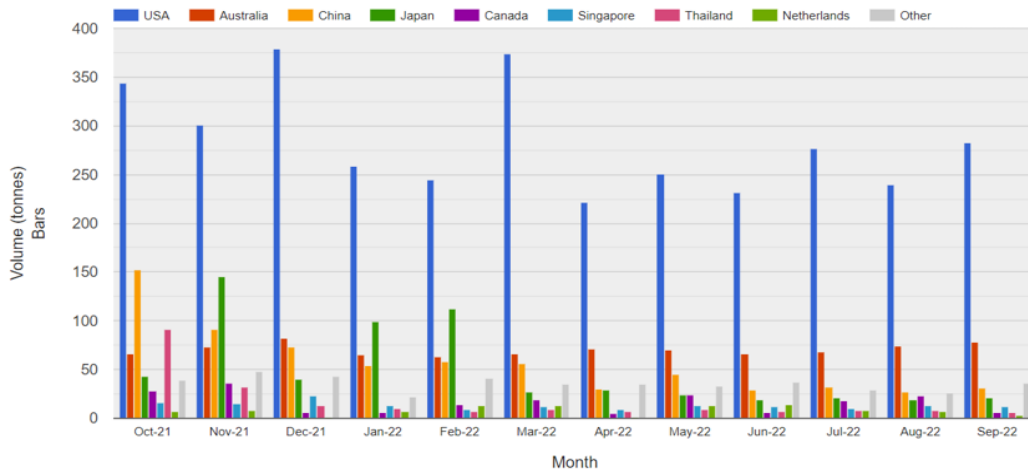
\$293.6m ↓3% 27,979 tonnes ↓17%



Salmon – All Exports

All countries

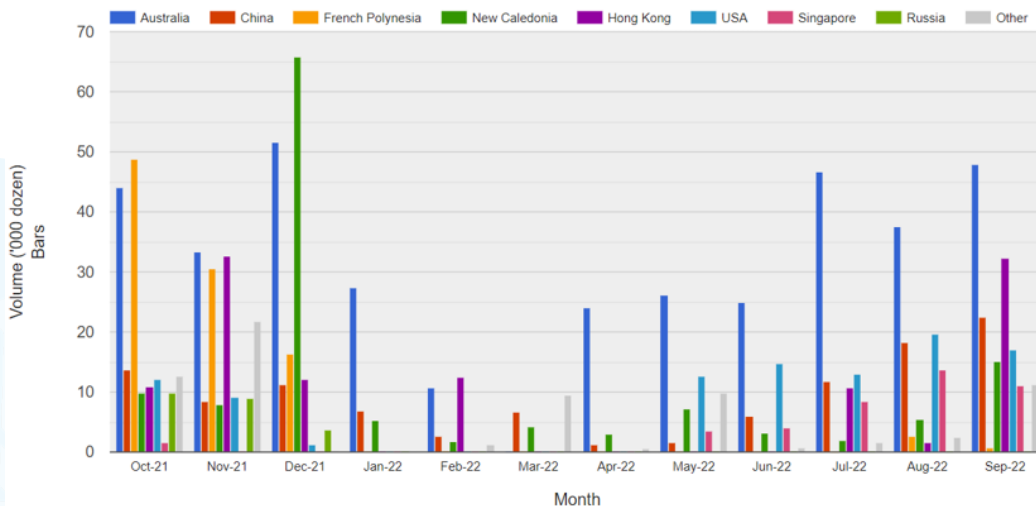
\$150.3m ↑20% 6,605 tonnes ↓6%



Oysters – All Exports

All countries

\$15.7m ↓10% 1,062 '000 doz ↓21%



Incident Response Exercise Shows the Importance of Being Prepared

Everyone needs to be prepared for marine biosecurity incidents, and marine farmers especially.

Marine farming is the industry most at risk from new diseases and harmful marine organisms. When new risks are identified in a region it means that prevention measures have failed and rapid action is needed.

On 29 September marine farming representatives participated with 50 others in desktop simulations to socialise and test marine biosecurity incident procedures for the Top of the South Island.



One of the scenarios modelled what might happen if the abalone virus prevalent in south Australia were to be found in New Zealand. This drew out the role of the marine farming industry under its Deed of Agreement with Government for biosecurity readiness and response. This limits the industry's liabilities for costs in larger incidents. At the same time it creates obligations to be ready to respond when incidents occur.

For anyone wanting to understand incident response procedures the TOS Marine Biosecurity Partnership continually maintains an Incident Response Manual and this can be found at <https://www.marinebiosecurity.co.nz/manuals-plans>

For information on the Government Industry Agreements see <https://www.gia.org.nz/Resource-Library>

Peter Lawless



havelock mussel and seafood festival'23

**11 MARCH 2023, 10AM-6PM
HAVELOCK DOMAIN**

MARKET FRESH
SEAFOOD

CELEBRITY CHEF
SIMON GAULT

ENTERTAINMENT Feat:
**JORDAN LUCK BAND
PLUS MORE TO
BE ANNOUNCED**

Tickets from:

havelockmusselfestival.co.nz



Not for the faint hearted

Chris and Trish Redwood of pioneering vacuum-packed mussel producers Omega Seafood might be described as salt of the earth people, or more accurately, salt of the sea.

Chris grew up on wind-lashed Forsyth Island in outer Pelorus Sound. His father Pem (Pembroke Henry Redwood) instilled a hard work ethic in his family, which was fortunate because after 40+ years of mussel-farming and production, Chris is still hard at it along with Trish.



Timothy, Philippa, Gerardine and Chris Redwood on the Forsyth wharf.

There are wider family values at play, as reflected in how the company's 20 staff, including some long-servers, who are thanked after each shift at the plant in the Cloudy Bay business park near Blenheim.

The family legacy is reflected in Omega's company structure named PHR Processing Ltd and PH Redwood farms. Pem and his wife Gerardine farmed sheep at Forsyth but even before Chris went off to do a diploma in agriculture at Lincoln in the late 1970s, he had seen the future was not in farming the rugged 750 hectares.

'It was nearly crofting. Granny helped with the school fees to keep us going. You had to diversify and the only thing at the time was mussels.'

Chris was the driving force in the family leasing line space from Davy Jones at nearby Whakatahuri Bay before buying a licence from Francis Wells. The Redwoods supplied NZ Marine Foods with mussels for processing and the fresh mussel trade.



Homewood Hall hosted a school day out in summer 1968. From left Glenda Robb, Richard, Rodney and Jane Paterson, Chris Jones, Susan Paterson and Chris Redwood.



Redwood vessels Buccaneer and Balaena at Hopai Sports 100 years. Built 1912, Balena chased whales to 1925 and was Dr Vic Jaccobson's first whale chaser.

Chris met Trish in May 1985 and their first date was at a hockey cabaret in Blenheim (Trish was a Marlborough rep.) They married in September that year and she moved to live at Forsyth. The following year sheep farming became even more marginal with Rogernomics wiping guaranteed minimum pricing.

To help supplement the family's income, Chris took on managing the Titirangi Farm Park (1986-92) for what would become DOC, as well as leasing half of neighbouring Pohuenui island. He also developed more farms in and around Forsyth Island which would eventually prove their value as sources of spat and also supply of mussels when algal blooms affected inner Sounds farms.

But in earlier years, being five hours steaming time from Havelock didn't make the family's mussels attractive to companies which could do round trips to other farms in the same time.

So Chris began crossing Cook Strait in Sealord, a 44ft former fishing boat, to land fresh mussels directly to clients at Paremata north of Porirua.



“The first trip we got a cheque and it bounced. It was to be a good lesson in fiscal management.”

They framed the cheque. “You have to keep positive.” Ironically, it was another debt that turned them towards developing into vacuum packed processing.

Marlborough mussel industry pioneer John Turner owed Chris \$40K for seeding and harvesting work he'd done. John couldn't pay but offered them some processing and vacuum-pack equipment.

“I should have, in retrospect, have put the gear on the truck and taken it to the dump,” says Chris.

Trish says the change from grower to processor is immensely challenging.

“It's just this massive minefield.”

Meanwhile, Forsyth Island was proving its own challenge, not least because the Redwoods had started a family with twins Patrick and Vincent, born 1988, being the first of six children who needed to go to school.

Pem and Gerardine had moved to Blenheim in 1991 and in 1994, Chris and Trish sold Forsyth Island to German investor, Dr Farhad Vladi, who now lists it among a series of exclusive islands he rents out around the world.



Vincent, Trish, Zoe, Patrick and Chris

The Redwoods bought 180ha at Seaview in the Awatere Valley, leasing 80ha to what is now Pernot Ricard. They moved the former Catholic presbytery to the site and refurbished it as their family home. Some of the land is grazed by both sheep and horses which have become a family passion.

Still living near the coast, the couple began eyeing up the waters off the Awatere coastline. It was the start of a 20-year battle to establish a huge greenshell mussel farm at Clifford Bay.

"It's not for the faint hearted," says Chris. Some 424ha was eventually allocated though only 2ha has been developed as a spat farm in front of Yealands vineyards near Seddon. The Redwoods remain shareholders with others including Ngai Tahu. Chris says it's been challenging to get equipment that works in an open ocean environment but says it's now producing excellent spat.

With farming operations managed by staff, Chris and Trish put their energies into processing, leasing the factory in 2004. Initially they processed fresh mussels before the trial and error of vacuum packs. The Omega Seafood brand packages freshly cooked whole greenshell mussels in 500g and 1kg packs.

Vinny (Paddy's twin) left his job at a local accountancy firm to help manage all the administration and compliance that processing entails.

"We could not have done it without him," says Trish. Her sister Jo O'Connell



Chris Redwood soaking wet after the splash from dropping a 100kg weight over the side

went cold-calling restaurants to sell the packs.

“These didn't exist before. The idea of making mussels clean and convenient worked - eventually.”

New food safety rules helped. The company now also markets clams sourced from Golden Bay or Dunedin's Blueskin Bay.

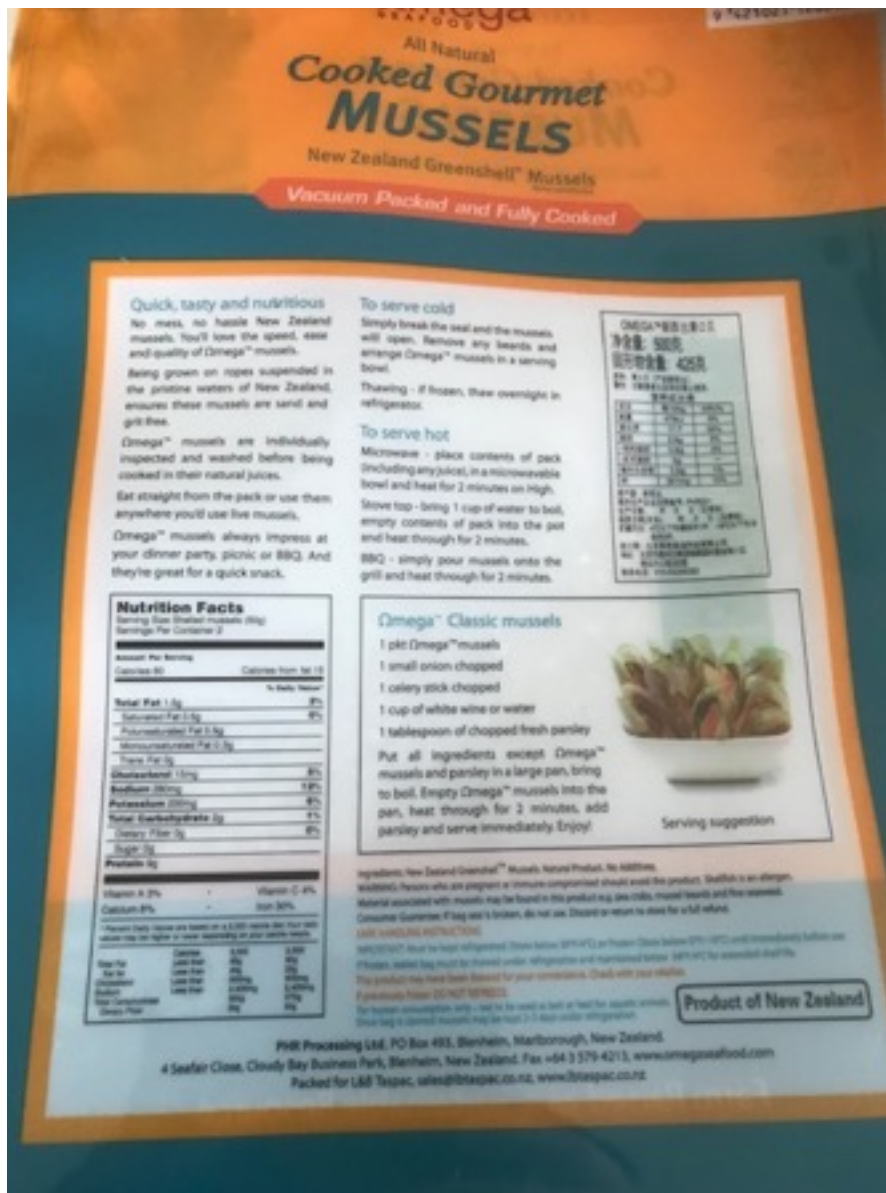
Meanwhile Chris was struggling with a lung autoimmune disease which eventually saw him in August 2020 get one of the 15-30 lung transplants done each year in NZ from donors who have passed.

“It's somebody else's tragedy and our miracle.”

By 2020, Omega Seafood was starting to hit its stride, with 85% of its 2000 tonne production exported



Kiss that spat – marine engineer Andy Robertson at Clifford Bay



mostly to overseas restaurants – including Australia, China, Asia, the Middle East and Denmark.

Then Covid-19 hit. “We went from a full order book to nothing overnight,” Trish recalls.

Things are now recovering with 20+staff and plans to lift production to 3,000 tonnes.

Son Patrick now manages the factory and daughter Lizzie does the marketing and other family have been involved.

“We chose if we can, to only work with family-owned and run companies,” says Trish, who remains active on Omega’s board. “There’s continuity and their values don’t change overnight.”

You see those values at their factory. Cairo Ngawhare, who's just been promoted to supervisor after 8-9 years at Omega, says it's an awesome place to work. “It’s like being in a family.”

One where hard work is in the genes along with salt.



Port Marlborough

Working together to support the marine, aquaculture and tourism industries in Marlborough

03 520 3399 | RECEPTION@PMNZ.CO.NZ

PORTMARLBOROUGH.CO.NZ

It's what's beneath the surface that counts.

OCEANLAW NEW ZEALAND

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



PO Box 921, Nelson 7040 | Freephone 0800 Oceanlaw | www.oceanlaw.co.nz



CH4 GLOBAL

Zero Methane Agriculture

CH4 Aotearoa to build first scale ecopark at Ocean Beach in Bluff

Auckland, NZ 25 August 2022, CH4 Aotearoa is about to start construction of its first ecopark to cultivate a NZ-native seaweed, *Asparagopsis armata*, for its methane reduction animal supplements. The ecopark, a full scale land based aquaculture farm, is a world first for the New Zealand company, enabling large scale commercial production.

The ecopark uses technology developed at CH4 Global's R&D facility based at NIWA's Northern Aquaculture Park. It has been validated on a pilot-scale tank farm at the NIWA site that commenced commercial production in July this year

The land-based facility will be built at Ocean Beach near Bluff, which is on track to become New Zealand's largest Aquaculture Park. The CH4 Aotearoa facility will be built in two phases with phase one being commissioned by the end of this year and reaching full production by the middle of 2023. In phase two the facility will be expanded to a full ecopark of 500 bioreactors with the capacity to supply up to 15,000 head of cattle.

CH4 Aotearoa has contracted Fresh By Design to design and construct the pilot facility at Ocean Beach. Fresh By Design is a leading recirculating aquaculture system (RAS) provider across Australia and New Zealand and has a strong background in land based tank facilities including seaweed systems. Fresh By Design have finalized the detailed design and will start construction work onsite at the start of October. In the meantime, Ocean Beach have started upgrading the site to meet CH4 Global's requirements.

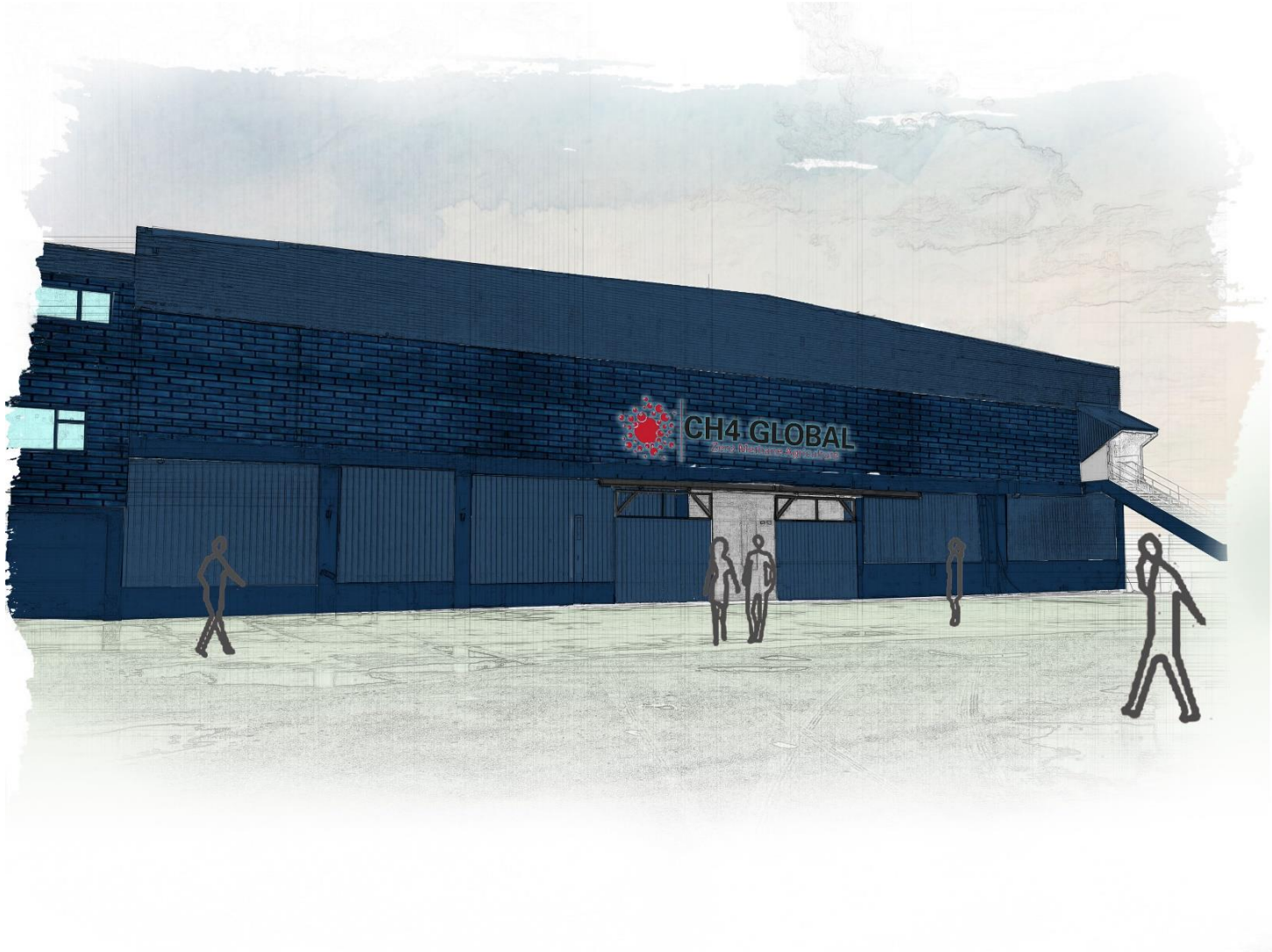
In June 2022, CH4 Global announced the first commercial sales of its asparagopsis-based livestock supplement which drastically reduces methane produced by cows by up to 90%. The new Ocean Beach ecopark will guarantee controlled, consistent asparagopsis production at scale as CH4 Global expands commercial supply to the Australian and New Zealand markets. Most of the seaweed will be exported to Australia for use within the large feedlot cattle market. At any one time, there are more than 1.5 million cattle being finished on Australian feedlots.

Commenting on the announcement CH4 Aotearoa GM Nigel Little, said: *"This is a key milestone in our path to full commercialisation. This ecopark is proof of our ability to scale our technology on a sound commercial basis – both for us and for the farmers that use our product. It will be the first of many ecoparks planned over the next five years as we scale up to be able to support a million cattle. We will be working closely with Blair and his team at Ocean Beach who share our passion and vision."*

Commenting on the announcement Ocean Beach Managing Director Blair Wolfgram, said: *"We are very excited about our partnership with the CH4 Global team that has gone from strength to strength over the last couple of challenging years. The technology CH4 have developed to grow this exceptional seaweed at scale is very impressive. Globally, Steve Meller; and Nigel Little, domestically here in Aotearoa, have built an incredibly talented team with a true international outlook for this worldwide issue."*

CH4 have a strong alignment with Ocean Beach's aspiration to be an Aquaculture Centre of Excellence and will be a significant contributor with our other partners to growing the aquaculture industry in Murihiku / Southland. We are sure the founder of Ocean Beach and former Prime Minister, Sir Joseph Ward, would be very proud that what he created at Ocean Beach is now being utilised to grow a seaweed that helps farmers fight against global warming."

Fresh By Design General Manager Lachlan Bassett said: *"We are extremely proud to be working on this project with CH4 Global at Ocean Beach. The opportunity to work with a world class team in CH4 Global on their mission to reduce global methane emissions is incredibly exciting. We look forward to supporting CH4 Global on their path to large scale commercial production of Asparagopsis"*



An artist impression of the front of the building housing the ecopark

About CH4 Global

CH4 Global is an aquaculture solutions provider dedicated to urgently impacting climate change. The company is leveraging proven science and technology for growing seaweed into an innovative new livestock supplement that reduces methane produced by cows by up to 90%.

CH4 Aotearoa is partnering with globally recognised aquaculture science organisations and leading mussel aquaculturists to develop the systems and technology needed to commercially farm native seaweed *Asparagopsis armata* at scale in New Zealand's nutrient rich coastal waters and on land-based aquaculture parks

About Ocean Beach

Ocean Beach is a land-based Aquaculture Park located at the gateway to Bluff, New Zealand with spectacular views across Foveaux Strait to Rakiura / Stewart Island. The Ocean Beach Aquaculture Park is spread over 15 hectares with an adjacent 160 hectares of rural farmland. This unique property has Coastal Permits and infrastructure in place to utilise large quantities of sea water from the fast moving and cold clean waters of Foveaux Strait as well as sea water supply from the nearby Bluff Harbour.

Located at the narrowest part of Aotearoa and bridging two harbours, Ocean Beach has historically been an important seafood and seaweed harvesting site for local Māori. In 1891, Ocean Beach was established as a freezing works by Bluff resident and former Prime Minister, Sir Joseph Ward. The Ocean Beach Freezing Works closed in 1991 due to technological change and started its rejuvenation journey to be an Aquaculture Centre of Excellence in 2018.

Media Contacts

Aotearoa New Zealand & Australia - Sam Hardy
0456 714 622
shardy@hughespr.com.au

Marine Farm Compliance Audit Programme

Declarations are Due
31st October 2022

If you have not sent in your declaration
for the 4th quarter,
please do so as soon as possible



ONE DECLARATION FORM PER SITE
DUE BY THE END OF EACH PERIOD

November, December, January	(1)
February, March, April	(2)
May, June, July	(3)
August, September, October	(4)

ADVERTISING RATES



1 / 4 Page Advert

Vertical - 87mm x 130mm
Ordinary Members \$25 +GST
Associate / Non Members \$50 +GST



1 / 2 Page Advert

Horizontal - 180mm x 130mm
Ordinary Members \$50 +GST
Associate / Non Members \$100 +GST



Full Page Advert

No boarder - 210mm x 297mm
With boarder - 180mm x 267mm
Ordinary Members \$100 +GST
Associate / Non Members \$200 +GST

Congratulations!

We would like to say a huge congratulations to the following companies

Kono



Sanford



Aroma Aquaculture



Maclab Tasman



Maclab NZ



BUNDLING FLOATS

Best practice to avoid losing floats

- Use >24mm Rope
- Use tight bunches
- Tie first and last float securely to >24mm rope (This will ensure if the rope chafes off the backbone or warp, the bundle will stay together)



KEEP THEM ON BOARD

CONTROL YOUR WASTE

REID TECHNOLOGY

leaders in solar power

Sealite SL15 1-2nm

Sealite Advantage

- User adjustable flash code
- User replaceable battery
- NiMH battery for long service life
- Completely sealed and self-contained
- IP68 water-proof
- Advanced LED compact lamp



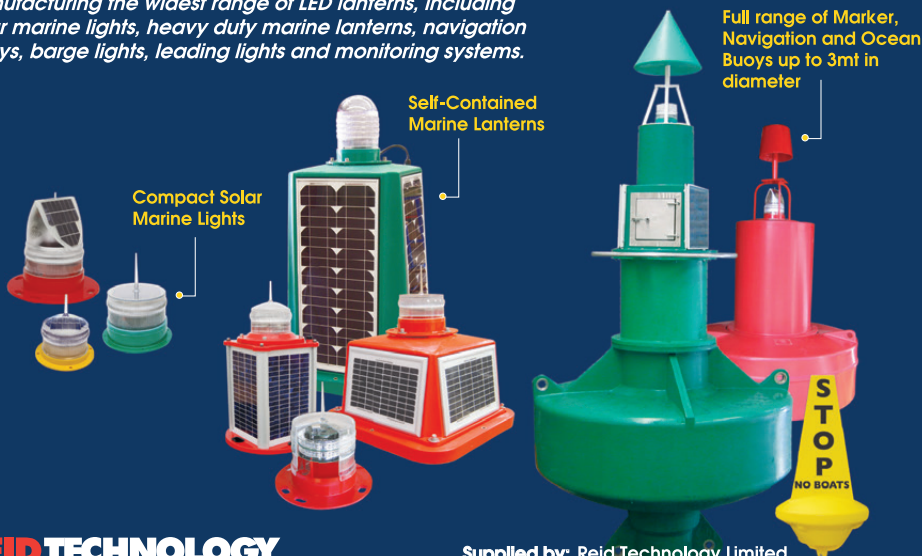
www.sealite.com.au

"Trusted by more than
200 government agencies
worldwide..."

Marine Navigation Aids



Manufacturing the widest range of LED lanterns, including solar marine lights, heavy duty marine lanterns, navigation buoys, barge lights, leading lights and monitoring systems.



Full range of Marker, Navigation and Ocean Buoys up to 3mt in diameter



RF Synchronised Solar LED Lanterns



Poseidon Safe Water Mark, Australia



Sealite's Nautilus 2.2m diameter ocean buoy with SLC420 solar marine lantern, Australia

REID TECHNOLOGY
leaders in solar power

Supplied by: Reid Technology Limited
Tel: + 64 9 489 8100
Web: www.reidtechnology.co.nz

Product enquiries to sales@reidtechnology.co.nz

From Malaysian tv to mussel factory operations manager



He thought he might give his first fish factory job a go for a few weeks, but eight years later, Armi Chia is now a senior manager. Chia will tell you that his move from the factory floor as a mussel opener, to a site operations manager for Talley's Blenheim aquaculture division, is due to luck and good timing. His success with productivity and staff safety projects tells a different story however – one of a forward-thinker with an engineer's aptitude for innovation.

Chia was established as one of Malaysia's top TV broadcast audio engineers in 2013 when his partner Jeslyn suggested they take a brief working holiday in New Zealand. They had intended to end their adventure with a South Island roadie, but this plan took a detour when Chia got a hot tip from a Motueka local that went something like this: "Go and get a job with Talley's mussels! It's bloody good pay if you can open them fast!"

Chia and Jeslyn applied for jobs and were opening mussels the next day. Chia didn't get the chance to 'get fast', however, as his supervisor quickly spotted his potential and started training him as a machine operator.

With a work visa secured, Chia was promoted to a senior supervisor role in 2017, followed by a role on a project to build

a gaming-style app to help mussel openers develop fast techniques.

Fast mussel opening has to be safe however and the project had a second workstream to improve workers' techniques and avoid sprains, strains and cuts.

"We filmed hundreds of openers in action and then analysed their techniques at about one-tenth of their normal speed. After a month, we'd found the best, safest technique for opening mussels and broke this down into six clear steps.

"We played staff footage of themselves, alongside the footage of workers with the best technique to help them see where they could improve," Chia says.

By this stage Chia was on general manager Don Boote's radar, who pulled him in to participate in the build of the new Blenheim mussel processing plant in 2020. Armi had been teaching himself 3D design and printing in his spare time, designing a range of robotic arms with factory automation in mind. His initiative did not go unnoticed.

"I like building stuff and with some quiet time during COVID-19 lockdowns we managed to implement some out-of-the-box ideas, like a system to produce whole blanched mussels and meat, simultaneously, on a half-shell line."

Once the Blenheim plant build and new processing line development could pick up the pace, post-lockdowns, Armi was offered the site production manager's role. This meant moving from Motueka to Blenheim, something that he and Jeslyn have no regrets doing.

Jeslyn is now a payroll clerk for Talley's Blenheim, and they've recently gained their residency so they can now settle more into the Marlborough lifestyle and progress their many great ideas for the seafood sector.

MFA Newsletter Stories

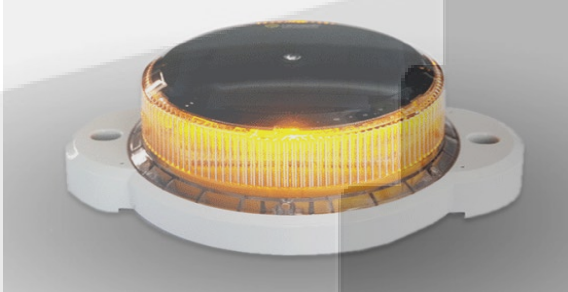
If you have a story that you would like to see published in our newsletter, please forward it to info@marinefarming.co.nz for consideration.

Our newsletter comes out every two months – February, April, June, August, October, and December.

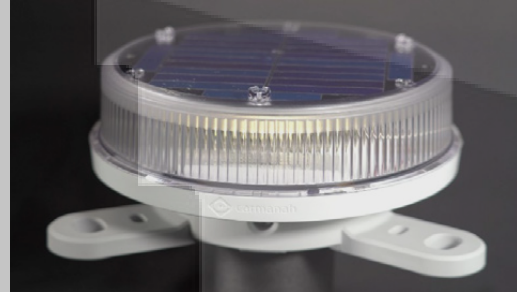
**SABIK
MARINE**



**Aquaculture Light Applications.
SPECIAL MARK & CARDINAL MARK
1-3NM M550 & 4NM M660 SABIK LANTERNS**



- Fully Self-contained, Programmable, IP68, up to 3 NMs
- Weighs just 400gms.
- 15 Year design life & 3 Year warranty. Made in USA



- Fully Self-contained, Weighs 800gms, IP68, up to 4 NM
- Bluetooth Programming using Smartphone up to 50 Mtrs
- 7 Year battery. All colours. Bird Spikes incl as standard
- 15 Year life & 3 Year Warranty. Made in USA

SENSOR SYSTEMS (NZ) LTD

Ph: (09) 275-4578 Email: mark@sensorsystems.co.nz

www.sensorsystems.co.nz

MUSSEL FARMERS

Here at Talley's we are eager to continue expanding our Grower base, as our Shellfish business continues to grow.

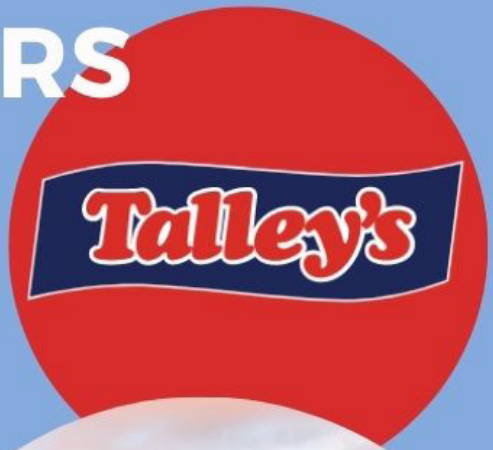
To do this WE WANT YOU!

We offer highly competitive prices across all mussel grades, to process through our factories in Blenheim and Motueka, producing;

- halfshell
- marinate
- meat and
- nutraceuticals products.

If you are interested, please **contact us**

Jordy.Taylor@talleys.co.nz



Third flood in a year brings devastation

Simon Pooley has spent most of his life in and around Elaine Bay but he's never experienced a flood like the one that engulfed the central Sounds in August.

The owner of Waimana Marine and his wife Gabrielle returned to Christchurch from a holiday in Vietnam, expecting to drive home.

They made it to Blenheim before the closure of State Highway 6 halted them.

The next day they tried their luck at the Wairau River bridge and were allowed through as far as Havelock. Lew, skipper of Waimana's mussel vessel Dawnbreaker picked up the couple and their four children - who'd been staying with grandparents - and took them to Elaine Bay.

"There were just hundreds of slips on the way there," says Simon.



“The water was just like chocolate milk.”

Two major slips had hit Elaine Bay itself. One, located behind the main wharf, went from skyline to the sea, had covered everything with metres of silt and debris. The Dawnbreaker landed the Pooleys at the camping ground wharf.

“Not in my lifetime have I seen devastation like that. It was like an earthquake had hit us.”

After a quick check that their home was ok, Simon jumped on a digger. It took a day and a half to clear a path to the landing ramp, working with three guys operating chainsaws to cut up fallen logs, stumps and slash. With a passable lane developed, they turned their attention to the wharf.



That took seven straight days – using two diggers – to get off the worst of the mud.

MacLab, which works closely with Waimana Marine, had rung and asked how it could help. Stoney Burke, skippered in the Vanguard with a harvest crew on board as well as some water blasters.

They worked non-stop to wash the mud off the wharf and its approaches. Meanwhile, Simon was worrying about what the silt and freshwater were doing to his mussel farms. Remarkably, all fared pretty well.

There was a bit of mortality for GSMs in the first metre of two of water but the spat was healthy.





“It was all submerged four metres,” says Simon. “All that freshwater went over the top.”

The seawater colour returned to normal within little more than a week. It took three weeks for Waimana to get fully operational, with no long-term production damage of note. In this period, the road out to Rai Valley was impassable so the Dawnbreaker acted as a water taxi, ferrying staff to and from Nelson where most are based.

They can now come through by road from Rai Valley though their accommodation and Waimana Marine’s base – the original Elaine Bay homestead – remains yellow-sticker.

Snapper – the only Waimana staffer who was left at the Homestead - stayed there right through the storm, using bags of rope to divert the water.

Simon reminds us that this is the third such event in the Sounds in a little over a year. The road was badly damaged in the July 2021 floods, then again by those in the February storm which saw three times the usual monthly rainfall in some locations. Repairs were not complete before the August floods hit.

“It’s damage on damage.” Whereas the road was down to one lane in half a dozen places in February, now its in that state in a dozen locations. For Simon and the rest of us the question is: what is yet to come?

Brendon Burns

Developing your
Marine Farm?

Need a lawyer
who understands
aquaculture?

Call us on
03 578 4229
for the very best
legal advice.

Aquaculture Legal Experts

Quentin Davies and Emma Deason have extensive experience in aquaculture related legal matters, and are available to help you with

- > Resource Consents
- > Aquaculture Law Reform
- > Strategic Planning

Gascoigne Wicks is a full service law firm, so we can help with all your other personal and business legal matters.

Call us now...

 **Gascoigne
Wicks** LAWYERS

Proud supporters of the Marine Farming Association



Quentin Davies



Emma Deason

New use for old rope

Vimal Vijayan studied bioinformatics and molecular microbiology across a dozen years at three universities but when it came to sourcing a durable rope to help breed mussel spat, he turned to something that's been around for centuries. As Quality Assurance Manager for Sanford, Vimal got talking with a colleague working in the SpatNZ facility which Sanford developed in partnership with MPI and Cawthron Institute.



He says as a company committed to sustainability, Sanford was trying to find an alternative to plastic rope, used both at SpatNZ and widely across the mussel industry.



Having grown up in India, Vimal was well aware that rope made from the husks of coconuts had been around since ancient times. We often see the same material used in things like door mats.

Vimal undertook to source some of the coconut coir material. It is made into various products and strengths, depending on how much coir is used. Literally it can be made to elephant-strength. Elephants were traditionally used in India for heavy tasks such as hauling logs and sometimes took part in cultural festivals on either end of a rope. Vimal says this is a bit like the tug-of-war contests we sometimes see in NZ – only we use humans.

Vimal says coconut coir rope is very versatile in its applications being used in horticulture and agriculture as a growing material and in ropes for transport. If it were able to be more widely used in aquaculture, being 100% natural, it would reduce plastic rope usage and the level of micro plastics in water space, as well as being biodegradable and able to be composted.



Of course, a rope for marine use not only needs to be strong, it needs to be able to endure salt water. SpatNZ General Manager Rodney Roberts says coconut coir which Vimal has been very helpful in sourcing and importing, is now being used as a settlement substrate for the mussels at the hatchery. But does it have a future as a rope?

“It lasts well in seawater without breaking down, but the lifetime and strength would need to be tested on farms for load-bearing jobs.”

Brendon Burns

ALEXANDER HAYWARD LIMITED

**Registered Valuers,
Property Consultants, Arbitrators.**

Specialising in all aspects of Marine Farm
Valuation including
**Processing, Shore Bases,
Specialist Plant and Machinery**

**Experienced in all
NZ Aquaculture Regions**

CONTACT **Lex Hayward** dip VFM, FNZPI, AAMINZ

Phone: **03 578 9776**
Level 1 - 20 Market Street
Blenheim

Fax: 03 578 2806

email: valuations@alexhayward.co.nz

Our SRL training schedule is now confirmed for 2023



MARITIME

**Please follow the link for
further details:**

www.sisnz.co.nz/skipper-course-srl/



havelock mussel and seafood festival '23



CELEBRATE SEAFOOD!

SATURDAY 11TH MARCH 2023

With the cancellation of the Havelock Mussel & Seafood Festival 2022, organisers are looking forward to hosting an incredible day for everyone at the upcoming festival, on Saturday the 11th of March 2023.

Second time lucky, internationally acclaimed chef Simon Gault will be entertaining us all in the NZ King Salmon culinary tent, as well as hosting Private Cooking Classes. The festival wouldn't be complete without some incredible live music, including Kiwi Legends Jordan Luck Band, supported by an eclectic mix of music to be announced.

Attendees can prepare for another stunning day, enjoying nothing but fresh seafood at the source and dancing the day away to some good ol' kiwi music.

WHATS NEW IN 2023!

Ocean inspired
cocktail bar

VIP Upgrade*

Twilight Mussel
Cruise & Bird
Watching Cruise*

Under 16's go free

**Not included in festival
entry ticket. Limited
tickets available.*



OUR SUPPORT

The Havelock Mussel & Seafood Festival has been embedded in Havelock’s local community for 18 years and has been contributing all the proceeds back to the local community since 2004, that’s about **\$300,000**.

Over the years, the festival has received incredible support from the local Seafood Industry, businesses and community. Without the considerable support for the festival, it would not be where it is today.

We are so grateful and appreciative for all of the contributions we receive from sponsors, and excited to have two new sponsors on board this year, Go Media and First Mate.

If you are interested in being involved and supporting the festival in 2023, feel free to get in touch.



2023 SPONSORS

A big thank you to our Cornerstone Partners and Platinum Sponsors for their significant contributions towards the upcoming festival. Check out all our sponsors [here](#).

CORNERSTONE PARTNERS



PLATINUM SPONSORS



PM visits new Sanford Bioactives Site

After years of following a vision, the new Sanford Bioactives facility will officially open its doors at the end of November this year. There has been a lot of activity getting the site ready to operate, which involved a pre-opening tour for a special VIP guest.

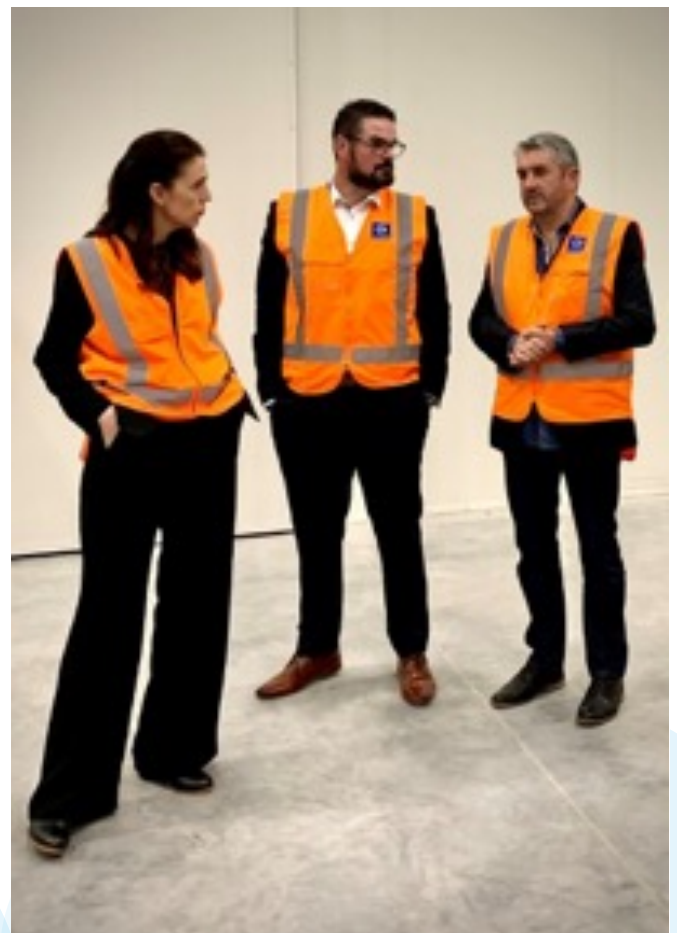
Sanford started investing in marine extracts in 2017 with the purchase of ENZAQ, a company based in Riverlands, which produces Greenshell™ mussel powder through a unique drying process. In 2021 the business case for a purpose-built facility was accepted and building work commenced early 2022. The site is the next step in Sanford's vision to use all of what we catch or farm in the best way possible, and ensure we make the most of our raw materials. Greenshell™ mussel powder is only one in a long list of extracts the site will be able to produce.

The site isn't just a production facility, however. It is also the new base for Sanford's innovation team. The team will continue to explore new and exciting opportunities to utilise currently under used or undervalued raw materials as well as supporting the wider Sanford business to improve and innovate the way we work.

On 29th September we had the honour of showing our Prime Minister Jacinda Ardern and Parliamentary Undersecretary Rino Tirikatene through the facility. They got to see



The PM holding a piece of hoki skin - the raw material for the collagen process.



During the factory tour. The PM, Andre Gargiulo (CCO) and Andrew Stanley (GM Innovation).



Figure 3: The Sanford Bioactives Team and VIP visitors

first-hand all of the hard work that has gone into the new centre and the science and innovation behind it all. Andrew Stanley, General Manager Innovation, introduced them to our collagen facemasks made from hoki skin and our mussel powder products. A 45-minute tour resulted in the PM getting to see behind the scenes and saying she was very excited to see where this could go. She said, "It's fantastic to see some of the innovation going on in our seafood industry".



robertson
environmental

OUR SERVICES



Ecological
Assessment



Compliance
Monitoring



Habitat
Mapping



Dr Ben Robertson
P: 027 823 8665
E: ben.robertson@robertsonenviro.co.nz
www.robertsonenvironmental.co.nz

NIWA releases regular forecasts of sea-surface temperature and condition of harvested mussels

Earlier this year, NIWA launched a new web-site (<https://shiny.niwa.co.nz/musselforecast/>) that offers forecasts out to six months into the future for: (a) sea-surface temperatures in open-waters adjacent to several of New Zealand's key marine farming zones and (b) the condition (yield-score) of mussels harvested from within Pelorus Sound. A second website (<https://niwa.co.nz/climate/sea-surface-temperature-update>) offers the same temperature forecasts but also includes details of prior ones. The two sites are updated around the 20th of each calendar month. Development of the forecast tools and delivery of the forecasts has been undertaken through NIWA's Aquaculture Environment Interactions programme (funded from the Strategic Science Investment Fund that NIWA receives from the Ministry for Business, Innovation and Employment).

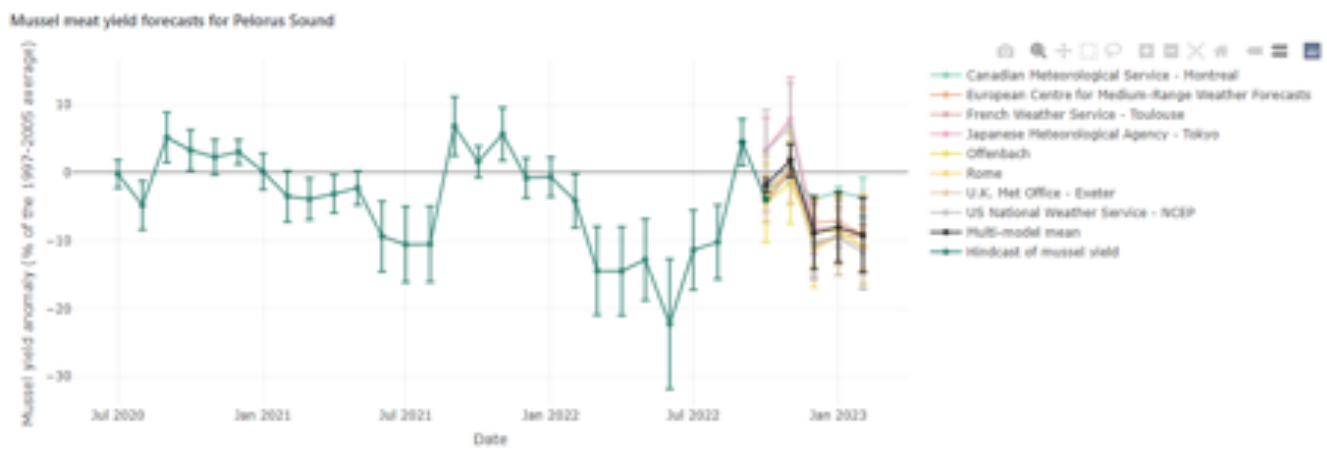


Figure 1. Forecasts of mussel meat yield anomalies for the coming six months. Month-specific anomalies are expressed relative to the 1997–2005 average for the calendar month in question derived from historical Sealord harvest data. Several forecasts are made – each draws upon forecasts of environmental conditions (temperature etc) stemming from a different global-scale climate model. The climate model data is sourced from the Copernicus Climate Change Service (C3S, <https://climate.copernicus.eu/>).

We hope that you will find the forecasts useful and interesting and welcome any suggestions as to means by which the tool could be improved. We would also welcome the opportunity to develop a project that compares our forecasts of sea-surface temperature and mussel condition with any data that the industry would be prepared to share.

For further information, please contact Niall.Broekhuizen@niwa.co.nz



Have you signed up & started your free online training voyage with MarineSAFE?

- ▶ All 8 MarineSAFE modules are free for industry!
- ▶ You also get a certificate after completing each MarineSAFE module AND you have access to various free templates to support MOSS and HSWA systems onboard



Scan Me with phone camera & click on link

Sign up to get started on your MarineSAFE voyage today at **www.marinesafe.nz**

Impacts of floods continue for mussel industry

Silt left behind after the devastating floods which hit the top of South in August is still impacting mussel industry operations, along with road closures.

Clearwater Mussels Operations Manager Mike Holland says the silt which came down the Pelorus and Kaituna rivers has reduced the draught in the Havelock channel.

As any marine farmer or Marlborough boatie knows, the channel is low at the best of times but Mike says the usual two-hour avoidance on either side of low tide can now be a four hour wait. This is hampering harvesting and other mussel industry vessel operations.

His personal view is the channel needs regular dredging especially after major flood events such as have occurred over the last two winters.

Mike says the August flood also stopped harvesting for about a fortnight because of the amount of silt in the Sounds.

There was little other damage for Clearwater other than a couple of broken mussel lines and sea anchors that dragged as well as the need to remove logs from some farms.

Clearwater Mussels got around road closures by chartering Wings over Whales aircraft from Kaikoura to fly staff between Nelson and Blenheim.

Mike says with the road between the two centres closed, the alternate was bussing them over Lewis Pass which would have made for very long days.

The Marine Farming Association AGM and conference also employed a similar tactic, hiring a SoundsAir plane to allow Nelson MFA members to fly into Picton for the event, held August 28 at the Queen Charlotte Yacht Club.

Sanford's Mussel Farm Manager Mike Mandeno says one of the impacts of the August floods was a small amount of mussel mortality due to the volume of fresh water generated.

This effected a small percentage of greenshell mussels in the first couple of metres of water space on farms at the north end of Beatrix Bay, parts of Yncyca Bay and the Kenepuru Sound entrance. "But it wasn't material."

Mike says another flood impact was the road into Port Underwood which suffered multiple slips and faults. The road remained restricted to residents and subject to temporary closures into October, meaning mussel harvesting vessels had to go to Picton to unload rather than using trucks from Oyster Bay.

Staying Ship Shape: getting support to approach challenges

FirstMate New Zealand is a charity set up to support the health and wellbeing of the hardworking people, and their whanau, across the commercial seafood sector.

The fishing industry faces a range of unique issues that have evolved over time. In years' past, the life of a fisher was extremely tough and only the hardy could endure the harsh working conditions. Thankfully times have changed and working conditions have improved. But even so, working at sea remains one of the most challenging jobs in the world.



FirstMate exists to support fishers and their whanau with tools, advice, useful information and much more, including dedicated Navigators, a support network only a phone call away.

FirstMate Navigators, who are based across Aotearoa, have worked in the industry and have years of experience and therefore understand, often first-hand, what fishers may be going through.

FirstMate Trustee, Geoff Donley says “Currently, we’re seeing that the general economic environment is creating uncertainty for fishing operations (as with many other industries) which can create stressor for owners, operators and fishers. This in turn can affect mental wellbeing, so knowing that there are services available to our sector provides some comfort for our people.”

“We are proud of the work that our fishers do out at sea to bring in quality catch for New Zealanders to enjoy. The sea can be a lonely place for fishers and having the friendly ear of our Navigators is a great way to check in”.

Staying Ship Shape resources

FirstMate also have a series of free video wellbeing resources called ‘Staying Ship Shape’ that offer insights on a range of topics, from leadership to conflict management and even drugs and alcohol. Each video provides practical advice and tips from experienced fishers and others from the industry.

FirstMate Navigator Cindy Bailey believes that the videos are a great way to connect on challenging and private topics and recommends that people have a watch.

“The ‘Staying Ship Shape’ series deals with some difficult subjects. I have been an owner/ operator for many years and know full well the stressors in the industry. There’s a lot of pressure for our skippers out there... and it can be overwhelming unless they have strategies in place to deal with the stress.”

“I see my role as a Navigator is to make sure that the resources are available. We can help get fishers and their whanau support from the right people and then follow through with that support. I can provide a listening ear as needed, always remaining non-judgemental and confidential.”

To watch the Staying Ship Shape videos, visit www.firstmate.org.nz.



Supporting a Skipper through business stressors

There are now numerous examples of where fishers have picked up the phone and been connected to services to support them.

Johnny (name changed to protect identity) is just one example. Johnny started working in the fishing industry in his early teens and diving from aged 12. As his whanau industry, it was an obvious future career.

"I always wanted to be a Skipper and started my own business when I was 17 as a commercial paua, kina and crayfish diver."

Johnny describes being a Skipper as challenging, rewarding and invigorating.

"You become master of your vessel and sometimes feel you are on top of the world. I have gained a lot of satisfaction in being a business owner. Unfortunately, there have now been more lows than highs and it became a bigger responsibility than I expected."

Business and life took a turn for the worse for Johnny in 2021. The long hours and physical demands were compounded by the stress of owning a vessel and the responsibilities that came with it.

A relationship breakup left him without a business administrator, which is when he discovered there was unpaid business tax. The pressure of having to manage the business admin, keep the fishing operation running by himself, and dealing with financial stress was challenging.

It all came to a head when Johnny was notified that the Inland Revenue Department (IRD) were about to take legal action against him to recover the business tax debt they were owed.

Johnny had first learned about FirstMate during a wellbeing event that visited the fishing community he was a member of in 2020. "If it wasn't for them visiting the community, I would have never known FirstMate existed to help fishers."

Johnny kept in contact with FirstMate over the next few months on a casual basis, before reaching out for support. "I knew I needed help real fast as it wasn't looking good for me at all. Without help I would have let everything fold."

Johnny connected with a FirstMate Navigator, who joined him at a meeting with the IRD, where it became clear Johnny needed expert representation by professionals equipped with the experience, skills, and the ability to support him through the process. FirstMate helped Johnny to source a solicitor who could handle the legal implications, and accounting services through BDO NZ. These services proved invaluable during this challenging time.

Through it all, FirstMate was there for Johnny to facilitate, support and encourage him to make good decisions. FirstMate also coordinated



wellbeing support services to help Johnny on his personal journey. Eventually Johnny and IRD were able to agree a payment schedule and Johnny is still operating his business today.

“I am still not where I want to be but can now see a light at the end of the tunnel. This battle will carry on for a while in many different directions with twists and turns, but I will succeed – that I am now certain of.”

As Jonny reflects, “PLEASE reach out for help and don’t let pride and shame stand in your way. One thing you can be sure is someone else has been through whatever you are going through. FirstMate are the most amazing support group where you feel safe. It’s as if you are in a rough sea but then it calms. They have an incredible network and seem to have the ability to offer support without expectation. Their confidentiality and professionalism are remarkable. We are so fortunate to have this support group keeping an eye out for all of us fishers.”

If you, or someone you know, needs support or advice, please call 0800 ADRIFT (237438), anytime between 7am and 10pm any day. You will be able to speak to a member of the FirstMate team, who will put you in touch with the support you require.

Attributed: Credit to Moana



We're interested in buying your mussel farm

Thinking of selling? If your mussel farm is located at the Top of the South we are interested in purchasing your farm at a very competitive price.

Contact Scott Gillanders / scott.gillanders@maclab.co.nz / 027 649 0239

MacLab



AQUACULTURE DIRECT

Aquaculture Direct believes that New Zealand can benefit from the economic, cultural and environmental opportunities that sustainably managed aquaculture can deliver.

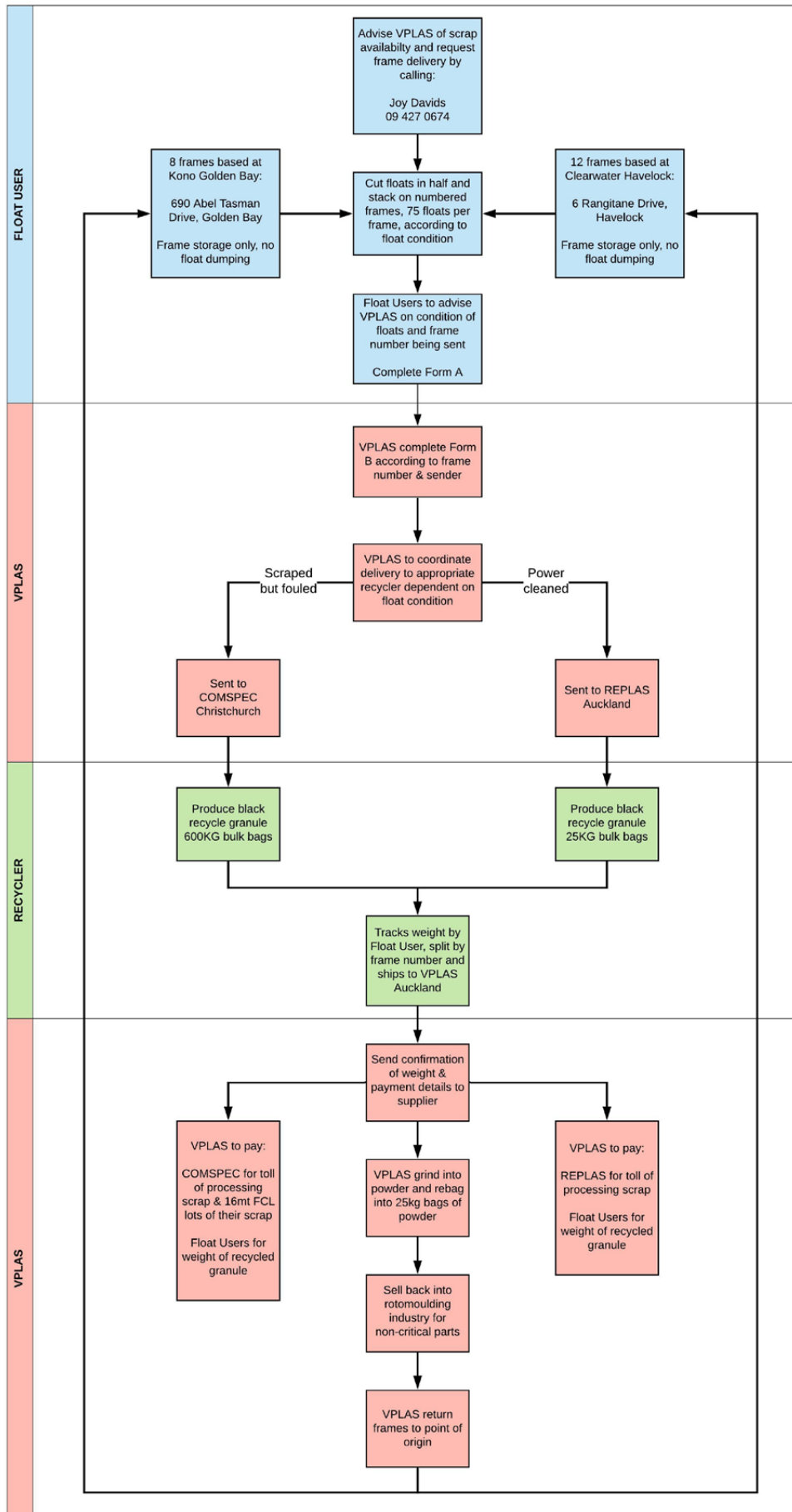
Our dedicated team of specialists have extensive experience over all aspects of the aquaculture industry - advising and supporting government, councils, policy makers, iwi, marine farmers, research agencies and new entrants into the industry.

From strategic planning, feasibility studies and resource consents, through to marine farm development, monitoring and compliance requirements, we provide a comprehensive consultancy service for the aquaculture industry in New Zealand. We provide pragmatic aquaculture expertise to support innovation, collaboration and new investment into this exciting sector.



We are Aquaculture Direct.

bruce@aquaculturedirect.co.nz | aquaculturedirect.co.nz



**SABIK
MARINE**



Aquaculture Light Applications.

SPECIAL MARK

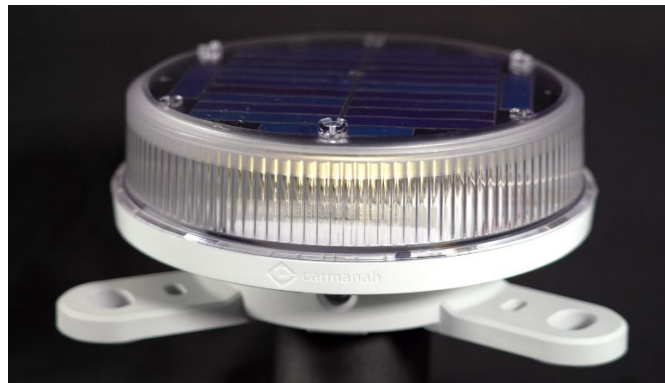
Solar 1-3NM Sabik M550 Lantern



- Fully Self-contained, Programmable, IP68, up to 3 NMs
- Weighs just 400gms.
- 15 Year design life & 3 Year warranty. Made in USA

CARDINAL MARK

Solar 4NM Sabik M660 Lantern



- Fully Self-contained, Weighs 800gms, IP68, up to 4 NMs
- Bluetooth Programming using Smartphone up to 50 Mtrs away
- 7 Year battery. All colours. Bird Spikes incl as standard
- 15 Year design life & 3 Year warranty. Made in USA

**SABIK
MARINE**



SENSOR SYSTEMS (NZ) LTD

Ph: (09) 275-4578 Email: mark@sensorsystems.co.nz

www.sensorsystems.co.nz