OCTOBER 2020 NEWSLETTER

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Diver performing the October sampling on the mussels at Grant Bay.



ARINE FARMING

CHART

Vanguard skipper Stoney Burke and Brent Shone on board the Vanguard in Tasman Bay earlier this year.

IMPORTANT DATES

MDC Smart & Connected Aquaculture 11th November 2020 10am MFA Boardroom

MFA Environment Committee Meeting (Committee Only)

13th November 2020 10am MFA Boardroom

MFA Executive Committee Meeting (Committee Only) 16th November 2020 2pm Zoom Meeting

MFA Conference (Members & Invited Guests) 20th November 2020 9.30am Queen Charlotte Yacht Club, Picton Registration is now closed

AQNZ Board Meetings (Members & Invited Guests) 26th November 2020 - Plant and Food

Smart & Connect Aquacuture Value & Innovation workshop 27th November 2020 8.30am Havelock Bowling Club RSVP: info@marinefarming.co.nz

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GM's Comment

Well that is another election done and dusted, with Covid management and stability clearly top priorities for voters. We will be looking to reconnect with Central Government as soon as the ministerial shakedown is complete and ensure that aquaculture remains front of mind for economic recovery and future growth. Labour now has the opportunity to demonstrate its commitment to the Aquaculture Strategy and to work with industry to make it a reality.

Spring certainly arrived with enough wind to see us through an entire year, giving crews, vessels and farm infrastructure a real hiding. The outer Pelorus and Golden Bay copped some particularly strong winds during October that resulted in 100's of floats vacating their backbones. This is a good opportunity to remind all operators to keep on top of the farm checks, with the unrelenting weather quick to find damaged floats and lashings.

NIWA are expecting La Niña conditions to strengthen during the coming months, with the likely result being warmer than average air and ocean temperatures for most of the country. Here in the Top of the South, at the very least, we can expect more NE winds and the occasional ex-tropical storm venturing south.

Most of you will have had a chance to digest the latest Export Stats by the time this Newsletter reaches your inbox. The Covid-19 challenges continue with lockdowns internationally impacting on both price and volume for most product formats. The silver linings would have to be the continued rise of live mussel sales into China and value increases for smoked and frozen salmon.

On the policy front, MDC are signaling that the aquaculture provisions are likely to be notified this side of Christmas and prior to the NES-MA taking effect. The move into AMAs will no doubt present some challenges, but the 'carrot' of obtaining controlled activity status once there remains. We will be running a 'best guess' session at the upcoming Conference Day on what the provisions might entail and will be providing an update on the wider MEP process.

Despite several hurdles, Tasman District Council and the Provincial Development Unit are back at the negotiating table over the Port Tarakohe Development Project. We are unable to provide any detail at this time, but rest assured there is a concerted effort underway to get this project across the line.

Work on the Environment Programme revamp is tracking nicely, with trials of the proposed scoring system underway with several companies. This is an important piece of work that aims to keep the industry ahead of the rising tide of expectation around environmental performance. The focus will be moved from reaching a benchmark and obtaining certification indefinitely to a continuous improvement model.

The next step for the Mussel Restoration Project is the deployment of adult mussels to the areas where shell material was placed on the seabed back in August. The final deployment is planned for early 2021 and involves placing juvenile mussels in intertidal areas within the Kenepuru. Mussels once thrived in the intertidal zone, and it is hoped that the move out of the subtidal zone will reduce the extent of starfish predation experienced at some of the trial sites. MFA have entered the project in the Cawthron Environment awards this year and will be meeting with the judges in late November.

On the King Shag front, Mike Bell is flat out drafting the Year Two reporting and preparing a presentation for the Conference Day. With another year's worth of banding and tracking data, the Year Two reporting will be more detailed and look to draw some conclusions about how the birds are interacting with marine farms. Once again, the results are showing feeding activity in and around farms and highlighting the importance of farms as roosting areas.

We have had huge interest in the upcoming Conference Day, with over 100 people signing up for the day session and 130 expected at the dinner. The event is shaping up well and we look forward to seeing those who RSVP'd there on the 20th of November.

Ned Wells General Manager - MFA





Aquaculture NZ Stats

An update on the statistics we normally provide from AQNZ, the statistics that are normally printed in the MFA newsletter are just a small sample of the statistics available through the AQNZ online tool.

We now recommend that you request access to the AQNZ online tool and access these yourself. That way you can change all the parameters to what you would like to see.

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Tasman BioStrategy



A Tasman BioStrategy is now being prepared, it will see aquaculture and marine biosecurity coming together within the framework set out by the NZ Biodiversity Strategy 2020.

Te Mana o te Taiao (launched in August 2020) sets out a strategic framework for the protection, restoration and sustainable use of biodiversity, particularly indigenous biodiversity, in Aotearoa, from 2020 to 2050.

Collaboration and partnerships are a key focus in Te Mana o te Taiao.

A regional response to this for Tasman is being developed through the Tasman BioStrategy process.

The NZ Biodiversity Strategy gives priority to:

- Mapping and caring for marine areas of high biodiversity value
- Restoring marine ecosystems to the healthy functioning state
- Definition of clear environmental limits and
- Developing protection standards for coastal and marine ecosystems.

The Tasman BioStrategy will be proposing responses to these and other priorities such as reducing pollutants to the marine environment early next year.

For more information see https://www.facebook.com/TasmanBioStrategy/. To comment or ask questions email: tasman.biostrategy@tasman.govt.nz

Peter Lawless Coordinator TOS Marine Biosecurity Partnership www.marinebiosecurity.co.nz/ Ph: 0064 21 894 363

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Port Marlborough Update

Port Marlborough provides multiple wharf facilities in the Marlborough Sounds that are used by the marine farming industry. The four sites are Havelock, Elaine Bay, Oyster Bay (Port Underwood) and Picton.

Marine Farming is a key component of Port Marlborough's wider customer portfolio, and the Port recognises the importance of the marine farming industry to Marlborough, and continues to invest in key infrastructure to support the industry. Port Marlborough and the MFA share a beneficial collaborative relationship, and meet on a quarterly basis to discuss any operational issues or requirements.

Oyster Bay Jetty Replacement

In Oyster Bay, facilities provided primarily for the marine farming industry include a sheet pile wharf, reclamation, car parking and a fuel jetty.

The fuel jetty had reached the end of its life and was no longer fit for purpose so the decision was made to invest in the replacement of this jetty. The jetty was originally constructed back in 1965 and was 15m long and 1.5m wide, this design was suitable for much smaller vessels, and was not suited for today's commercial activity as vessels have become significantly larger over time adding unforeseen daily stress to infrastructure. This new Jetty structure is twice the length and width of the old jetty and is designed to safely accommodate the majority of marine farming vessels operating from Oyster Bay.

Pokiki Wharf

The Havelock Marina is used by recreational customers and commercial operators. As well as providing berth and trailer boat storage facilities, Port Marlborough provides wharf facilities that are used by the aquaculture industry.

A few months ago, PMNZ initiated user forum meetings with commercial operators and as part of these the operators identified a number of process





and infrastructural changes required to ensure operations can function in a safer manner. These forums produced the Havelock **Marina - Health & Safety and Environment User Protocols.**

The user forums worked through risks and hazard identification, putting in place controls and an overall risk assessment for restricted operational areas. One of these areas was Pokiki Wharf. In line with the agreed protocols, access control systems were established on either side of the wharf. Anyone requiring access to Pokiki Wharf will now need to be inducted prior to entry. The system is due to go live early in November.

Please contact Steve McKeown at Havelock Marina if you need to organise inductions, steve@msmarinas.co.nz or 03 5742366.





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Alternative feeds for Spat

Recent research has demonstrated that seeding out with larger spat may be the best way to combat high spat losses following seeding spat onto farms. However, due to the high costs associated with producing phytoplankton to feed theto spat, there currently isn't any cost-effective way to take small spat and grow them to larger sizes prior to seeding out.

Production of live phytoplankton at a scale required to feed large numbers of mussel spat is extremely costly and can account for anywhere between 30% and 50% of the total operational costs of a hatchery. Therefore, there is a need to develop artificial feeds that could reduce the dependence on live phytoplankton for feeding to spat in hatcheries or nursery systems.

We have examined the potential for a new alternative type of feed, liposomes, to replace live phytoplankton for feeding to Greenshell[™] mussel spat. Liposomes are tiny spherical particles with a protective oil coating that helps to contain nutrients in their centre (Fig. 1). The feeds in the centre can be customised to meet the dietary requirements of spat, making them an ideal candidate to replace live phytoplankton. They can be produced to be the exactly the same size as phytoplankton, so the spat filters them out of the seawater in the same manner.

We fed mussel spat diets consisting of live phytoplankton with varying proportions replaced with liposomes and measured the growth and survival



Fig. 1. Diagram of a liposome next to a phytoplankton cell. A liposome uses a protective oil coating to make a tiny particles that encloses and protects nutrients which are consumed and digested by the spat.

of the spat over time. The results were promising, showing that up to 25% of the live phytoplankton can be replaced with liposomes without resulting in a major reduction in growth compared to those fed only live phytoplankton. Furthermore, spat fed liposomes survived just as well as those fed only phytoplankton. While these results are extremely promising, we think we can do better.

Currently, we are looking at determining the dietary requirements of Greenshell[™] as they grow, from primary settlers, to large spat (i.e., > 6 mm in length). Once we better understand the nutrients that spat need to grow, we can fill the liposomes up with those same nutrients. We hope that by matching our feeds with the nutritional requirements of spat we should be able to develop a feed that will reduce the costs of growing small spat to larger sizes, where they can be seeded out with much higher rates of retention.

Brad Skelton

PhD student, University of Auckland and MFA Andy Ritchie Scholarship recipient Bske663@aucklanduni.ac.nz

Will McKay PhD student, University of Auckland Wmck554@aucklanduni.ac.nz Andrew Jeffs a.jeffs@auckland.ac.nz





Big gains loom for Golden Bay

Golden Bay community is poised to gain hundreds of thousands of dollars a year in income after the signing of documents formalising the agreement to transfer to it 160ha of marine farming water space.

SMW Consortium (Sealord, MacLab and Westhaven Group representing Westhaven Shellfish, Wakatu Incorporation, Bluff Oyster Farms Limited, Peter and Elizabeth Brierley) committed to give space to local residents in seeking consent for its 1000 hectare farm nearly two decades ago.

Local businessman Tom Sturgess and fellow trustee Bob Butts and his wife Joan, formed the agreement with SMW for a Golden Bay Trust to administer the assets and funds generated.

Marine Farming Association GM Ned Wells says if the community chooses to lease its water space, between \$400,000 and \$500,000 could be generated for the trust each year once fully developed.

"That's a substantial amount for a community of around 4000 people." Development would be staged though, progressively increasing the revenue generated for the community over the next decade.

The farms are sited 5.5 kilometres off Parapara and the first lines are already in the water. The first crop of greenshell mussels is expected to be ready for harvest from late next year. The Aquaculture Management Area 2 Puramakau was approved late last year, some 20 years after resource consent applications were first made.

MacLab director Andrew Broadbent says it's exciting for farming to be underway after a long, costly and challenging journey.

"From the start we backed the idea of Golden Bay people seeing the benefits of developed water



MacLab's vessel Vanguard putting the first lines down earlier this year in the AMA area off Parapara which will benefit the Golden Bay community and SMW consortium.





Above: There will soon be bags of greenshell mussels like these, harvested in Tasman Bay by MacLab, being brought ashore in Golden Bay to the direct benefit of the local community.

Left:Vanguard skipper Stoney Burke and Brent Shone on board the Vanguard in Tasman Bay earlier this year.

space flowing widely through their community. We are looking forward to setting a benchmark for sustainable and responsible marine farming.''

Tom Sturgess has already given the Golden Bay community a taste of the benefits by funding close to \$100,000

in grants that the Trust he chairs has distributed over the last two years. In future, the Trust will provide grants from its growing revenue stream as the water space is progressively developed.

"This has been a lot of years in the making," says Tom. "The Idea that the community gains direct benefit from the use of its water space feels right. I'm delighted we are aligned with industry players who saw the benefit of investing back in their community."

The Trust's aims are: "To enhance environmental ecosystems, build community connections, further the education and improve the health and wellbeing of Golden Bay residents."

Further benefits are also provided to iwi, who gained 20% of the approved water space through the Maori Commercial Aquaculture Settlement Claims Act. Iwi are pursuing its development via a number of options.

The trustees for the Golden Bay Community Trust are: Tom Sturgess, chair, Bob Butts, Dorje Strang, David Lyttle, Andy Wotton. The Trust appoints a Distribution Committee, all permanent residents of the Golden Bay Community to assess applications for funding and make recommendations to the Trust.

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Marine Farm Compliance Audit Programme

Declarations are Due 31st October 2020

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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)

Tackling plastic in Aquaculture

Back in May MFA joined a forum of 40 aquaculture and plastic industry representatives to discuss plastic use within the sector as part of a joint initiative between MPI, AQNZ and the Sustainable Business Network (SBN).

The workshop and earlier stakeholder interviews were essential first steps in bringing industry together with experts in plastic manufacturing and recycling to identify areas where we can improve existing initiatives and implement new programmes.

The 13 page 'Opportunities Report: Tackling plastic waste in aquaculture' is available here, with some key points highlighted below.

SBN used a three-element framework based on circular economy principles for addressing plastic waste. This was created by the Ellen MacArthur Foundation, an international environmental group which estimates business as usual will result in more plastic in our oceans than fish by weight by 2050.

The three elements include:

- Eliminate the plastic we don't need.
- Innovate to ensure the plastics we do need are reusable, recyclable, or compostable
- Circulate all plastic items we use to keep them in the economy and out of the environment



MFA General Manager Ned Wells says that "elimination isn't an easy proposition, as unfortunately, plastics have strength and microbial resistance properties that make them ideal for use in marine environment". In time he is confident that innovation will lead to the development of sustainable alternatives, but in the interim suggests we need to focus on efficient use and recycling.

SBN General Manager James Griffin said the aquaculture industry was ahead of some sectors on the plastics journey and that he was impressed by some of the initiatives already underway. Some of these existing initiatives include:

- The Top of the South float recycling scheme
- Research into alternative float attachment methods
- Trials of compostable materials
- The MFA Environment Programme aimed at minimising plastic loss
- Companies moving away from the use of polybins
- The AQNZ A+ sustainability framework



The report authors did however challenge the industry to develop a plastic waste commitment, such as the 100% reusable, recyclable or compostable packaging by 2025 declaration signed by companies including Foodstuffs, Countdown and Coca-Cola.

New Zealand

Initiatives suggested by the Opportunities Report for the mussel industry include extending the float recycling scheme to nationwide and fasttracking the development of new float attachment systems.

For the salmon sector, a key issue identified was addressing processing and distribution plastics. Potential initiatives included eliminating liners in distribution packaging (polyboxes or replacements), establishing a range of recycling facilities and a 50% reduction in PPE consumption.

Oyster producers will be looking to better understand the full environmental cost versus benefits of materials used in farming practices via a life cycle assessment (LCA).

Ned says the MFA and AQNZ are now working on timelines and next steps towards delivering on the opportunities identified.



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Attention Members

The MFA Members website is now live, you will need to register for access.

- Step 1 Go to www.marinefarming.co.nz
- Scroll down and click on the "Members Area" button Step 2
- Step 3 Complete the registration form

MFA will approve access based on your membership and you will Step 4 receive an email to confirm you have access.



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Days of Meetings

With our upcoming annual industry event planned for November 20, we look back on how it was done nearly 40 years ago...

You needed to set aside four days for the (Marlborough Sounds) Marine Farming Association annual get-together and seminar in 1982.

You checked in for a wine and cheese at the Blenheim Auto lodge (now the Scenic Circle) on Thursday July 22 with the Official Opening at 9.30 the next morning. Local MP Doug Kidd and then mayor Ted McMurtry officiated this event.

Four workshops were available to choose from before lunch including Harvesting Standards (Ministry of Ag and Fish and Chris Godsiff), Advanced Techniques in mussel farming (John Young and Bruce Hearn), Anchor Systems (Vaughan Canham) and Marine Farm Establishment (Don Mitchell and Noel Parsons.)

After lunch, costing \$6.50 per head, Joe Wallace walked you through Taxation as it affects Mussel Farming before more presentations and the AGM from 8pm-10pm (that would not work these days...)

Saturday's agendaincluded a presentation from Marlborough Harbourmaster Captain Don Jamison who spoke about navigational safety and how



regrettably so many marine farmers were failing to display appropriate farm lights. This would now be viewed as seriously as vessels without lights. (This was three years before Captain Jamison managed to pilot the Mikhail Lermontov onto rocks at Cape Jackson resulting in her sinking.)

Saturday night saw the Grand Cabaret (featuring Blenheim's Big Band) at the Waterlea Hall (racecourse) before final sessions concluding at 1pm Sunday!

The 1983 seminar sliced a whole day off the programme, with a Friday evening start and Sunday lunchtime finish. Incoming President Chris Godsiff, replacing



Ron Bell, criticised dwindling support for the Association with people not paying their 'measly' \$75 sub. He said the marketing of mussels lacked the necessary concerted, co-ordinated effort and many tons of premium-grade mussels remain unharvested. "Idiotic and grossly irresponsible' damage had been done to the industry's prospects in local and export markets.

The market for live exports to the US has just reopened "a bright prospect" but the Minister of Fisheries and his officials were condemned by Chris for a 'short-sighted and inexcusable" decision to allow live exports of mussels at only 10mm. He said the Association was fighting this.

"In closing, I have heard it said on several occasions that the Industry has come a long way and still has a long way to go. I am afraid that all this distance covered has been done with very little financial reward to the grower and feel sure that a lot of us have not very far to go until we are finished." '

Ouch. Glad you hung in there Chris.





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

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Creating a cascade of value

Andrew Stanley has been a man on a mission since joining Sanford more than quarter of a century ago – to extract the maximum value from fish and aquaculture resources.

Now as GM for Innovation, he's leading a small team which with company backing will next year move into a \$20m+ extraction facility being built in Blenheim and become Sanford's innovation centre.

After completing a degree in food science and microbiology, Andrew started with Sanford in 1994 in a quality assurance job at its Timaru factory. Three years later he went to Auckland to take on the national quality role before an operations management job at its Tauranga facility. Here he was first able to start applying some of the value principles.

"What bugged me for years was the realisation that there's still a significant amount of quality oil and protein in a fish after it's been filleted," says Andrew.

After fitting in an MBA, Andrew began six-year stint commuting to Sanford's Chinese production facilities near Qingdao in Shangdong province before in 2012 setting up a Product Development (R&D) team back in Auckland, a focus which had been absent in the company for a decade. This has now morphed into his Blenheim-based role leading innovation with a particular focus on marine extracts.

One of the first visible signals of this re-focus for Sanford was its 2017 purchase of long-standing Blenheim company Enzaq, a pioneer in mussel powder processing and production. In late 2018, Sanford's introduced its own Sea to Me mussel powder capsules using the Enzaq facility.

By this time, Sanford was also expanding into other nutraceuticals including mussel oil, fish oil and collagen beauty products made from hoki skins.

The new facility in Blenheim will become the centre where these innovative extracts are produced. It will include laboratories, offices and meeting rooms as well as factory space. Among other machinery, it will host a mid-size super critical CO2 plant producing greenshell mussel oil. Andrew expects his team to be operating from the new facility and innovation centre at Riverlands near Blenheim by this time next year.

Meantime, he is building his innovation team. Research Manager Dr Sabrina Tian remains Auckland based. She has Chinese university degrees and a PhD from Massey University in bio-chemical engineering.

Space has been rented alongside the Marine Farming Association office in Blenheim to house three other young staff, which some are dubbing the brains trust. Dr Matthew MacDonald specialises in chemical and process engineering and is playing a big role in maximising the value from the new facility: Logan Nutsford has an engineering degree in mechatronics (robotics and advanced technologies); Logan has already come up with and delivered Mussel Vision which uses AI to scan mussels and determine whether they are ready for harvest and best for eating or nutraceuticals; Alex Maan who has a Masters in neuro-science is looking at medical research applications from marine extracts; Mark Gornall completes the innovation team working as a contractor providing expertise on quality and processing from his base in Nelson.

"It's all about extracting value from a limited resource – using everything that God gave us and being really focused on creating smart cascades of products," says Andrew.

He's now had two years living in Blenheim with his wife Lisa and it's also home base for their four children aged 13 to 21.

"We just love it here, especially being given the chance to lead such a great team and do a job I've wanted to do since I started with Sanford 26 years ago."



Innovation Team: (left to right) Dr Matt MacDonald, Logan Nutsford, Andrew Stanley, Alex Maan. Insert: Dr SabrinaTian



HATCHERY FOR SALE STEWART ISLAND Expressions of Interest



We offer two assets for sale, either together or separately;

- a hatchery, originally designed as a paua (abalone) hatchery and grow out facility
- a marine farm (3.35ha) at Nathans Island, which is in the process of being reconsented.

Contact Bruce for a copy of the Information Memorandum

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Mussel Restoration Project

October mussel sampling

Survival of the mussels that were placed at five sites on the seabed in the Pelorus Sound in late January remains high after nine months. Mussel survival ranges from 99%-88% at all five sites with the lowest survival at Grant Bay, which had a large spike in the 11-armed starfish at 5-months after deployment (Figure 1). The starfish continue to reinvade the mussel beds, despite continual removal at each sampling, but the starfish numbers have declined at four of the five sites (Figure 1).



Total Starfish Collected By Site

Assessing biodiversity on the mussel beds

We are currently in the process of assessing the biodiversity on the mussel beds versus adjacent control areas. We are looking at the fish visiting the mussels, the animals and seaweed living inside of the beds, along with the animal community now living in the sediment underneath the mussels. Early results show that there are more animals living inside and visiting the mussel beds compared to adjacent mud areas (Figure 2). The most common species we have found included blue cod, spotties, triple fins, 11-armed starfish, cushion starfish, and sea snails. We also found crabs, brittle stars, and sea slugs (nudibranchs). The initial results appear to show that the presence of the mussels on the seafloor greatly increase the number and diversity of animals living there compared to bare seafloor.

If you have any questions or comments on this project, please feel free to reach out to Emilee Benjamin via email at egol669@aucklanduni.ac.nz.



A triple fin, sea snail, and an 11-armed starfish on the mussel bed at Grant Bay.

A brittle star resting on some algae that is covering the mussel bed at the Skiddaw site.



A sea slug (nudibranch) crawling along the mussel bed at Weka Point.

Diver performing the October sampling on the mussels, while a blue Cod and spotty swim over the mussel bed at Grant Bay.

BUNDLING FLOATS

Best practice to aviod loosing 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)







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Marine Biosecurity Toolbox

Around this time last year, a new research programme came to life to help protect New Zealand's marine environments from the impacts of nonindigenous species.

The Marine Biosecurity Toolbox (2019-24) is jointly funded by the New Zealand government and a unique group of science, Maori, regulatory and industry organisations.

The programme's objective is to develop transformative 'tools' that empower regulators, industry, Mana Whenua and the community to effectively manage risk pathways, prevent pest establishment, and detect and respond to new incursions in urban, natural and aquaculture marine environments.

Over the past 12 months, the team around the Marine Biosecurity Toolbox have worked hard to kick-start a diverse range of research activities around antifouling, ecological engineering, molecular science, Matauranga Maori, economic and network modelling, social science, and education.



Kia tirotiro mangōpare, arā ko ngā tai e whā Look through the eyes of the mangōpare, observing in all directions

The logo and whakatauki for the programme were gifted by Patuharakeke Te Iwi Trust. Both are inspired by the mangopare (hammerhead shark), which is seen as a kaitiaki and tohu.

We are excited to see the programme gain momentum, with activities occurring from Northland all the way to Otago, as well as Australia and the UK.

We are happy to announce that a website for the programme has now been launched.

Check it out at <u>www.biosecurity-toolbox.org.nz</u> to find out about the programme team, our objectives and research activities, latest news items and to join our mailing list.

If you have queries about the programme feel free to contact our team via the website or email Anastasija Zaiko (anastasija.zaiko@cawthron.org.nz) or Oli Floerl (oliver.floerl@cawthron.org.nz).



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Phone 027 453 9348 Scott Madsen

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.

The due date for articles is the 20th eg: for something to appear in the February edition we will need it before 20 February.

Marine Farming Industry - we thank you!

Every week, almost 3,000 Marlborough young people are directly impacted by Graeme Dingle Foundation programmes. We connect kids with mentors and role models and teach important skills and values to prepare our young people for the workplaces and communities of the future.

We empower kids to overcome life's obstacles.

Now with three transformational programmes in



Empowering kids to overcome life's obstacles Whakamanawatia ngā tamariki kia eke panuku





Marlborough:

"Kiwi Can" builds lifelong skills, positive relationships and qualities like integrity, respect and resilience among primary school children.



"Stars" pairs all Year 9 students with senior college students trained as peer mentors. Stars supports Year 9s as they undergo the tricky transition to college and adolescence. Stars builds trusting relationships that enable students to reach out to each other in times of need.



"Career Navigator" is our unique mentoring programme which connects college students with local industry, career pathways and eye-opening opportunities.

Thanks to Ted (Sanford), Jono (MFA), Paul and Damian (New Zealand King Salmon) – and all their supporters - who together raised over \$44,000 in Drop For Youth 2020.



A big thumbs up from the thousands of local kids who will benefit.

Graeme Dingle Foundation Marlborough is 99% funded by local business and community support.

If you'd like to know how you or your business could partner with us, contact: Kelvin Watt on 021 420 962 or kelvin.watt@dinglefoundation.org.nz





Sanford - proud Platinum sponsors of Graeme Dingle Foundation Marlborough since 2013

havelock and seafood festival

13 March 2021 10am-6pm Havelock Domain FEATURING

ROBINSON

AND

with celebrity chef Michael Van de Elzen **SB**Theatre **TICKETS FROM www.asbtheatre.com** Marlboroud WWW.HAVELOCKMUSSELFESTIVAL.CO.NZ

















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Carmanah M550 1-3 NM Lantern

This Solar LED Marine Lantern is ideal for Aquaculture applications.



- Fully Self-contained, Programmable, IP68, up to 3 NMs
- Weighs just 400gms. Direct swap for M502
- 3x NiMH AA batteries 5 Yr life. \$30.00/set to replace.
- Over 1,500 sold in NZ since 2014. Avail ex Stock.

M660 – World's lightest 4 NM Cardinal Mark Lantern



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



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