# MARINE FARMING ASSOCIATION To Promote & Nurture Sustainable Marine Farming

### **JUNE 2021 NEWSLETTER**

### CONTENTS

President's Comment	2 - 3
Aquaculture NZ Statistics	4
Marine Farming & Country Calendo	<u>er 5</u>
Environmental Update	6 - 8
ToS Biosecurity Partnership	10_
MFA Mussel Restoration Project	11 - 13
From the sea to the land	15 - 17
Firstmate New Zealand	19 - 20
Spotlight - Aquaculture Mentors	21 - 23
Save the Date	23
Ticking all the boxes	24 - 26
MFA Newsletter Stories	26
Cruise Liner Mishap	27 - 28
Working with our Young People	29 - 30
Cawthorn & Salmon Industry	31 - 32
Separating spat from seaweed	33 - 34
MFA Conference and Awards Dinn	<u>er</u>
Programme 2021	35 - 36
Award Nomination Form	37 - 38





### IMPORTANT DATES

AQNZ Board Meeting/AGM 11th August 2021 Rutherford Hotel

MFA & MSQP AGM / Conference / Awards 27th August 2021 Queen Charlotte Yacht Club

AQNZ Conference Day 1 22nd September 2021 Rutherford Hotel

AQNZ Conference Day 2 23rd September 2021 Rutherford Hotel

PO Box 86 . Blenheim . New Zealand | † 03 578 5044 e info@marinefarming.co.nz | w www.marinefarming.co.nz

# President's Comment

Well winter has certainly arrived, with Wellington getting hammered by 6m plus swells and a polar blast as we write. Luckily, the areas that we farm are well protected from those true southerlies. However, no doubt this will trigger further spawning events with the drop in temperatures.

The last couple of months have been full on at MFA, with MEP and careers activities keeping the team busy.

On the MEP front, Ned has been spending most of his weeks tied up in natural character, landscape, and indigenous biodiversity mediation on behalf of members. Whilst going into this process we had high hopes of resolving some issues via mediation, many of the key issues have been deferred until the Variation 1 hearings have played out and will likely need to be resolved in Court.

On the careers front, we do this work on behalf of the industry, with the goal being to get young people enthused about aquaculture and ultimately working in to members businesses. This work exposes kids, their parents, and most importantly their teachers to our industry and the wide array of employment opportunities and pathways available. It is important that we are getting feedback from our members about their staffing needs so that we can tailor our messaging to the requirements of your operation.

In recent weeks, we have had over 40 students from four Nelson high schools out on the water looking at oyster and mussel farms, we have attended a Careers Evening at Stadium 2000, participated in filming for the Youth Employability Programme and got the careers section on the MFA website up and running. We urge you all to explore the website and provide the team with feedback.

We are starting to see some good signs coming out of the international markets, especially in the US for mussels. This is a direct result of the higher vaccination rates in the US, with restaurants now reopening and demand for our products increasing. However, price is lagging behind demand, and it is going to take some time for the price of half shell to recover. We all hope we can get back to pre-COVID levels on our farm gate pricing as soon as possible.

Coming up we have the release of our new Environmental Certification Programme, Beach Cleaning Programme, and the MFA App. There has been a lot of working going on behind the scenes over the past year and we look forward to sharing the improvements with members. We are also planning an interactive workshop for crews focusing on practical elements such float tying techniques and knot types for specific areas. The more coverage of the industry we can get the better, so we encourage you all to attend. There will be food and drinks at the end as a reward for participation!

Lastly, the MFA Conference/AGM/Awards night is coming up on 27 August for members and invited guests, the registration forms have been emailed so get in quick as we sold out last year and had a waiting list.

If you have missed your registration form, they are all on the members site for download or email admin@marinefarming.co.nz.

Don't forget to get your nominations in for the awards; the awards are Merit Award, Environmental Award, Marine Farmer of the Year, New Entrant Award & Research & Development Award.

It's going to be hard to top last year however we have some great speakers lined up and we are confident that it will be another cracker conference.

Look forward to catching up with you all at our conference over a drink!

Jonathan Large President MFA

### 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)









### 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

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.



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

# Marine Farming & Country Calendar

Our industry has been fortunate over the last 2 years, we have had several stories showcasing aquaculture and our beautiful backyard on <u>Country</u> <u>Calendar</u>.

The latest being a story about Jonathan Large and his family.

If you missed the episodes or want to watch again, they are still on the Country Calendar website.

### The Large Family

A Marlborough man harvests mussels for nutraceuticals and wild seaweed for natural fertilisers and divides his time between the family rose nursery and his vineyard home.



https://www.tvnz.co.nz/shows/country-calendar/episodes/s2021-e17

### The Pooley Family

A mussel and oyster farmer appreciates how lucky he and his young family are to make a living amidst the remote beauty of Marlborough's Pelorus Sound.

### https://www.tvnz.co.nz/shows/ country-calendar/episodes/s2020-e17

### The Blom Family

A remote off-grid family strikes the perfect balance between working at their successful mussel business and enjoying the remote Marlborough Sounds paradise where they live.

https://www.tvnz.co.nz/shows/countrycalendar/episodes/s2019-e24





# Environmental Update

### Clova Bay and Crail Bay – Big Day Out – 28 July 2021

Believe it or not - it is coming up a year since we all banded together to clean up Manaroa! So we have decided to do it all again as we know this is a problem area. This year we thought we would also include Wet Inlet, the Bobbery & Elie Bay.

Most of the companies who participated last year have signed up again, but as Manaroa is accessible by road, it is a great opportunity to bring people along from other parts of your business i.e. a great day out for those who don't normally get the opportunity.

Last time we amassed 126 person hours, 40 vessel hours and collectively manged to remove 255kg of rubbish and debris.

This effort was widely appreciated by the local community, and it was nice to work with the locals.

If you have not already signed up but want to be involved, contact amber@maringfarming.co.nz.



### MFA App

The Marine Farming Association (MFA) App is now live and operational! It has been designed to make data reporting faster, easier, and more accurate. The App focuses on environmental data and allows our members and the wider community to report beach cleans and float retrievals in real time.

This information helps the MFA monitor environmental performance and to proactively put training programmes in place to mitigate any issues that arise. The vessel & farm check aspects of the App have been built in for our environmental mentors to report with ease when out auditing and training members on best practise.

The app can be used when offline, so it works anywhere in the Top of the South (NZ). To start using the App:

- Step 1 Download the app from Apple store or Google Play Store
- Step 2 Sign up to get a log in Here

Step 3 – MFA will send you your log in details

**Step 4 –** Log in to App – instructions on use can be found on our website - <u>here</u>

### MFA Environmental Certification Programme

The Marine Farming Association operates an Environmental Certification Programme for our members; this operates in conjunction with the <u>A+ programme</u> run by <u>Aquaculture New Zealand</u>, or as a standalone certification.

This certification has been relaunched in 2021 and information about the new certification programme can be found <u>here</u>.

### MFA Beach Cleaning Programme

With the relaunch of the MFA Environmental Certification Programme, we have also relaunched our Beach Cleaning Programme which ties into the Certification.

Participating members will now have beach cleaning targets and have been assigned beach cleaning areas for which they will be 'guardians'.

Beach Cleaning Targets are calculated based on the participants "impact area", which is calculated based on total backbone metres (for mussels).

We have also assigned frequency targets to the beach cleaning areas, based on the amount of debris known to wash up in that area. This takes into account location, current flow, prevailing winds etc. If you know of any areas that need a little extra attention, please let us know - <u>here</u>

The MFA beach cleaning programme will be an ongoing project for continuous improvement, and we will be updating it annually.

We now invite members to start working through updating their Environmental Certification and they will be processed in the order in which they are received. Application information and forms can be found on the members only website.

### MFA Environmental Workshop

We have an Environmental Workshop coming up for on water crews in August at the Havelock Domain. It will focus on:

- Beach cleaning technique
- Float tying techniques and developments
- The new Environmental Programme
- App use

Followed by a BBQ, a couple of drinks and a yarn!

The workshop will be run multiple times to accommodate for shift variances.

### Sustainable Coastlines

Last Friday we headed out to Long Island, a DOC marine reserve in the Queen Charlotte Sound.

The purpose of the trip was to learn how to be a Citizen Scientist from Tash at <u>Envirohub Marlborough</u> so that we can lend a hand with the litter monitoring site as set up Long Island by <u>Marlborough Girls' College</u>.

There are two litter monitoring sites set up on Long Island that need quarterly monitoring.

A huge thank you to the <u>Department of Conservation</u> for running the quarantine session before we left Waikawa and to Marine Farm Management for the ride!

If you want to know more about <u>Litter Intelligence</u> or <u>Sustainable</u> <u>Coastlines</u>, please click on the links.



Modeling the swanky vest



Marking out site



Cleaning Site



Logging the debris





### **BUY NZ MADE**

Quality Equipment 124 Vickerman Street, Nelson Ph: 03 546 9179 | 027 473 9132 E: <u>nelson@qe.co.nz</u> www.musselrope.co.nz

### Marine Farm Compliance Audit Programme

### Declarations are Due 31st July 2021

If you have not sent in your declaration for the 3rd 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)



### 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



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

### ToS Biosecurity Partnership Update Auckland steps up control of marine pests.

New stringent rules made by the Auckland Council will help protect the Top of the South from harmful marine organisms.

Auckland has a wider range of harmful marine organisms than any other region in New Zealand and is a key source region for hull fouling organisms that can reach us here.

The Council is using education and regulation and has stepped up regional surveillance. They say that "Tamaki Makaurau / Auckland is highly connected to other regions of Aotearoa / New Zealand through the movement of both commercial and recreational vessels, and it is likely that new species will continue to be introduced and spread. However, effective management systems would reduce the rate of spread and prevent some new species from establishing."

The new rules are largely aligned with a number of other regional and territorial authorities, to assist in reducing the human-mediated spread of pests between regions, as well as within Tamaki Makaurau / Auckland itself. They say that "Aligned rules will also make compliance easier for vessels moving between regions. "

### In summary the new rules say that:

- All owners or person in charge of any craft in the Auckland region must ensure that the level of fouling on the hull and in niches of the craft does not exceed 'light fouling'.
- Any craft entering any marine water body in the Auckland region from the land must be free of all ballast water, bilge water, holding tank water or sea water held in any other container.

### No more than "light fouling" means:

- Slime: a hull can be partially or completely covered in biofilm (aka slime). You can "write" with your finger through slime.
- Macro-fouling (barnacles, worms, weed etc): can cover no more than 5% of the hull, including niches such as inlets, outlets, rudders, propellers etc... The species of fouling doesn't matter to this measurement: total coverage must be no more than 5%. However, if pest species are present then you must not move the craft to a new location as this will involve communicating the pest.

The Council has also made it unlawful to allow a hull to become so heavily fouled in its region that passive discharges occur, without obtaining a resource consent. All of this means that all vessels coming to the Top of the South from Auckland will now be required on leaving to meet higher standards than are set by local rules here.

### MFA Mussel Restoration Project June 2021 Update

### Trialling Intertidal Mussel Restoration

### <u>Background</u>

Wild mussel beds once covered extensive areas of Pelorus Sound, but were dramatically overharvested in the 1960s and '70s. The Pelorus Sound Mussel Restoration Project has successfully trialled restoration efforts for these lost beds and so far has focused on the subtidal zone, or areas that are always underwater even at low tides.

However, the intertidal zone, or areas that are exposed at low tides, were a very common habitat for historical mussel beds making them a promising area for restoration. The intertidal zone is also easier and less expensive to monitor, meaning more data for lower costs.

Despite these benefits, intertidal mussel restoration elsewhere in the world has seen poor results as mussels are eaten by predators or dislodged by waves, confirming that we need to trial the restoration at a smaller-scale before moving onto large restoration efforts in the area. Specifically, we are running a small-scale intertidal restoration trial in Kenepuru Sound, an area with protection from extreme waves and few predatory starfish.

### **Experimental Design**

With generous support from the crew at Just Mussels Ltd, we deployed five tonnes of mussels in May to three locations in Kenepuru Sound (Goulter Bay, Nopera, and Double Bay). At each location six subtidal plots were each filled with 250kg of adult mussels. We then allowed the mussels one month to acclimate from the farm to the seabed. Finally, in late June we transferred half of the mussel plots into the lower intertidal zone, ultimately creating three subtidal plots and three intertidal plots at each location.

### **Monitoring**

We plan to monitor these restored mussels monthly for up to one year for survival, density, growth, and condition index. The results of our first monitoring have shown strong survival (~98%) after the one-month subtidal acclimation period, but we will rely on future monitoring to reveal the survival of the mussels that have been newly translocated to the intertidal.

I hope this has provided an interesting look into some of the work going on in the area and I'll continue to update with more information and results! As always if you have any comments or feedback, please feel free to reach me at ttoo112@aucklanduni.ac.nz!

Trevyn Toone, Ph.D. Researcher, University of Auckland (based in Nelson)



Above: Mussels were deployed from bags into each location in Kenepuru Sound with the help of Just Mussels Ltd.

Below: The intertidal plots are fully exposed on low spring tides, allowing for easier monitoring, but adding additional stress for the mussels.





Subtidal plots remain covered by water on low tides, allowing us to directly compare restoration success at the two depths.



ALEXANDER HAYWARD

#### **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** 

13

1. 1 Lan 2 2'



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





# From the sea to the land

Mussel farms and vineyards have been put together in what may prove a very virtuous circle.

Marine Farming Association president Jonathan Large has always been looking for ways to better dispose of the waste stream of shells and other material from his mussel farms.

Last week, he hosted a demonstration on his Riverlands vineyard for the Marlborough Grape Growers Cooperative of which he's a member. This saw mussel waste mixed with mushroom straw compost spread across twothirds of his vineyard.

This followed an earlier application in March which saw a third of his block receive the mix for almost immediate benefits. "The canopy stayed on longer and the vines stayed much greener. Now the magic will begin on the rest of the vineyard."

Yvette Herd, of H & H Contractors 2018 Ltd which spread the mix, believes he's right. The contracting company has been spreading the mushroom compost for the last 18 months and getting some startling results.



Jim Hagen explaining the benefits of compost to growers

A recent comparison of soils on the vineyard her and husband Tim own on Hawkesbury Rd showed huge benefit in the rows where compost had been spread in late 2019.

"It was just totally different soil. It was moist and full of worms."

Nearby rows which hadn't received the compost were dry, with no worms.

H+H Contractors, owned by Yvette, Tim, her brother Jim Hagen and wife Kristy, is getting increasing demand from growers for the mushroom compost. They sometimes ask for their own additions to the mix, so Jonathan's request was not unusual. He's convinced the mussel waste will add to the benefits of the mushroom compost.

Jonathan says "You've got to have a mix because straight mussel waste would provide too much calcium (lime) to the soil."

He says his vineyard has been planted for 15 years and tests of the soil had shown it was slowly depleting the nutrient base. "If you keep feeding them, you'd have to think the plants will last longer and continue being productive."

Yvette says her and Tim's vineyard, planted 30 years ago, was also showing signs of depletion until the compost started restoring the balance.

While Jonathan mixed his mussel waste and the mushroom compost with a tractor bucket, H+H Contracting has just taken delivery of a mixer wagon which does that task before unloading onto a compost spreader.

"The compost is becoming popular," says Yvette. "We've been very busy with it particularly post-harvest."

The mushroom compost is bought from Meadow Mushrooms near Christchurch.



Spreading the 'magic' mix of mussel waste and mushroom compost



Marlborough Grape Growers Coop members watching the application.

Jonathan says if the mussel waste proves to be the effective additive he's already seeing, there'd be no shortage of supply.

"Otherwise much of it is going to landfill. This is cross-utilisation of a waste stream from one industry which benefits another. It's especially good that we can do that within one region which is blessed to have both aquaculture and vineyards."

### Contact:

Jonathan Large, Marine Farming Association president, 027 477 2377 Jim Hagen, H&H Contracting 021 472 544





Developing your Marine Farm?

Need a lawyer who understands the aquaculture scene?

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

### Aquaculture Specialists

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

Marine Farms

Aquaculture Law Reform

Water Permits and much more...

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

Call us now...



Proud supporters of the Marine Farming Association AGM



Quentin Davies



Amanda Hills

79 High Street | 🗄 enquiries@gwlaw.co.nz | www.gascoignewicks.co.nz | 🕆 03 578 4229 | 🏌 03 578 4080







# FirstMate New Zealand

Last year, Fisheries New Zealand (FNZ) received Government funding to support the establishment of a new national seafood sector support network. Similar to the Rural Support Trusts in the farming sector, this network will increase the scale and reach of support individuals, whanau and firms who are dependent on the revenue of the seafood sector, which will help build adaptability and resilience against future challenges.

A diverse set of sector representatives, including Steph Hopkins of Aquaculture New Zealand, have been working on this initiative with FNZ and in



SUPPORTING OUR SEAFOOD WHĀNAU

March 2021 the network was established as a charitable trust. The board of trustees is comprised of five individuals who are drawn from across the sector and have a diverse set of skills and experience. The trustees continued to work with FNZ to determine further aspects of the network and in June 2021 it was launched under its operating name of FirstMate New Zealand.

The trustees chose FirstMate in recognition of the importance of having a name that the sector can relate to and believe it reflects the goal of offering hardworking people across the seafood sector the support they need to address the pressures and complexities that come with the job.

Importantly, FirstMate won't duplicate the work of existing bodies and networks but will create easily accessible connections to the support



needed by fishers and aquaculture farmers, and their whanau. This could include training, mentorship, community events, counselling, financial and business advice and help with accessing innovation advice and grants.

FirstMate will therefore provide a clear avenue for delivery of seafoodspecific support, and while the trustees are still working to oversee development of a fit-for-purpose structure and service delivery model, it was recognised that the time was right to start promoting FirstMate to the



wider sector at the recent conference of the NZ Federation of Commercial Fishermen in Dunedin. Trust Chair Geoff Donley, General Manager of Aramoana Seafoods Ltd, explains, 'This network will operate groundup at a regional level, via a number of advisers who will connect those seeking support to the appropriate services. As the success of FirstMate will therefore depend heavily on us finding the right people to be involved at a local level, we need to start looking for those people as soon as possible. At its core, FirstMate is about connecting with seafood operators, their whanau and communities, so it's imperative that we identify key people who can engage with marine fishers and farmers in their local area, to ensure that we continue to offer services that are relevant and effective for them."

A video introduction to FirstMate featuring Marlborough mussel farmer Simon Pooley and his family is available to view at <u>www.firstmate.org.nz</u> More information on what the role of regional adviser will involve will be made available shortly, but in the meantime anyone who is interested can get in touch through the website.

If you are in need of support or advice, you can get in touch any day between 7am and 10pm on 0800 ADRIFT (237 438).

# Spotlight on: Aquaculture Mentors giving back!

### Sanford: Grant Boyd

Grant Boyd (Floating and Farm Development Manager at Sanford) is currently serving his fourth year in a row as a Career Navigator mentor - volunteering his time to make a difference for our rangatahi in Marlborough!

Grant says he originally became a mentor because he "could see the value of all the Graeme Dingle Foundation programmes, and I wanted to give back and make a difference to my community". Since being a mentor Grant says he has witnessed how Career Navigator builds confidence, trust in others, and helps students to find their way beyond their school years.

One of Grant's Career Navigator highlights to date, was the aquaculture industry day: "Seeing all the kids out on the mussel boats having a great time and discovering new sides to the aquaculture industry was amazing. And for some, it was the first time out in the Marlborough Sounds on a boat. It was magic to be part of making it happen."



Grant Boyd and Amber McNamara - second from far right and far - right - pictured here with the other mentors and course coordinators. Photo taken in Picton, at the Career Navigator Mentor Training Day, February 2021

### New Zealand King Salmon: Chelsea Yates

Although her day job as "Community Sponsorship and Events Coordinator" for New Zealand King Salmon kept her mighty busy, that did not stop Chelsea Yates from jumping at the chance to be a Career Navigator Mentor.



Chelsea says she originally became a mentor for Career Navigator because "I never got to see many options as a high school student – and I would have loved to have had Career Navigator then!"

Chelsea has been a mentor for the 2019 and 2020 cohorts but is currently taking a break while she is on maternity leave. She says the most rewarding part of being a mentor is seeing the students' confidence grow through the programme.

### Kono: Dean Condon

Dean says he has had "plenty of mentors throughout my working life, and they all had two things in common: work ethic; and not taking life too seriously. Important life lessons!" In turn he is keen to help the next generation realise their potential



and help them to become valuable employees.

Dean works at Kono as the Marine Manager and has had an interesting career journey – starting on land, working on a farm in the Awatere Valley. He spent time as a fencing contractor, a shed hand and in a wool store. He then ventured on to the water and into aquaculture - starting on a mussel barge part-time, before gaining a job as a deckhand. From there he worked his way up to Skipper then to management.

Dean came on board as a mentor for our second Career Navigator Community programme in 2021 – and obviously 'caught the bug' as he willingly came back for the third Career Navigator Community programme this year too!

### Marine Farming Association: Amber McNamara

MFA's Office Manager, Amber McNamara has come on board for the first time as a Career Navigator Mentor in 2021. Amber explains "I want young people to know about all the options available to them when they leave school. From my personal experience, schools can't always give a rounded view of this."

She has experienced firsthand, the importance of a mentor figure and



Career Navigator is for <u>Year 12-13 college</u> students.

It doesn't matter whether they are looking to go into the workforce, uni or apprenticeships – or have no idea what they want to do! Career Navigator helps our young people find <u>their</u> pathway.

The programme is made up of:

- Career mentoring
- ✓ Workshops
- 🗸 Industry Days



Career Navigator Community is for 16–25year-olds <u>not in work or training</u>, but keen to be!

The programme includes:

- ✓ Career mentoring
- ✓ 'Work-readiness' related workshops
- $\checkmark$  Developing a career action plan
- ✓ Worksite visits
- ✓ Extended job-seeking + transition support

is now 'paying it forward'! "In my early 20s I had an awesome boss, who pushed me, allowed me to learn about self-management, she let me make mistakes and learn from them. She was always there to support me and bounce ideas off, but she encouraged me to think on my own. This has been hugely beneficial in my life and career". Amber is currently working with her 2021 students and is excited to see where their Career Navigator journey will take them.

Keen to know more about how you could get involved?

Contact Kelvin at the Graeme Dingle Foundation Marlborough: kelvin. watt@dinglefoundation.org.nz or 021 420 962.



### Ticking all the boxes for packaging sustainability and the environment

### A totally new corrugated box with export fish in mind



"Rockstock corrugated Stone Board" is a white coloured rich mineral corrugated board manufactured on custom made machines using 100% stone paper which is mostly calcium carbonate from waste marble plus a small amount of non-toxic resin from The Stone Paper Company Limited.

Corrugated Stone is a high quality food grade waterproof protective material with excellent insulation properties as well as world-class fridge and freezer performance with higher strength. This base material does not require any further treatment, coatings or lamination to render it suitable for it's intended purpose.

**White** –Bleach free and naturally white due to abundant use of inorganic calcium carbonate. No optical brighteners or titanium dioxide is added.

**Versatile** – Easily convertible into various packaging materials available in sheets for local finishing or finished products

**Protective**–Provides excellent combination of rigidity and cushioning quality.

**Cold/Wet** – Exceptional performance in fridges and freezers.

**Pest / Insect resistant**–100% free from cellulose fibre which are a food source for pests and insects.

**Recyclable** – Please use in combination with other Rockstock stone paper products to maximise recyclability including number 2, soft plastics, added to injection moulded plastics as calcium carbonate is a useful additive when recycling plastics or re-use.

**Printable** —by flexographic or flatbed inkjet UV with good results.

### Food Contact? Corrugated Stone Board has:

**EFDA** –Corrugated Stone Board is made with Rockstock S-Thermo which has passed SGS lab's FDA tests, proving this material is non-toxic. It also is manufactured under Environmental Choice, Cradle2Cradle global, ISO14001, KIWA and other tests.

 Image: Provide the image: Providet the image: Provide the image: Provide the image: P







Available in E-Flute, in either 2 layer or 3 layer format. Thickness 1.5mm –2mm Available in sheet size e.g. : 1020mm x 720mm. (Other sizes available ) -Approximately 600sheets/pallet for 2 layer and 500sheets/pallet for 3 layer. -Pallet wrapped.

#### Replacing a 5 layer kraft corrugated carton a 3 layer B-Flute stone corrugated carton is also available.

If frozen food products defrost during shipment or at destination, the 5 layer corrugated pulp box can still weaken even if it is water resistant....In contrast a Rockstock corrugated rich mineral box or carton is extremely waterproof. Even fully immersed in cold water it will keep intact.



The pricing of white corrugated Stone board can not be compared to kraft corrugated boards. However the high durability of corrugated Stone board in freezer and wet environments means that it can be reused repeatedly in these environments.

Depending on order volume, the pricing of corrugated stone board is closer to synthetic materials. However, when comparing the two, corrugated Stone Board will outperform synthetic equivalents in freezer environments. Like our other Rockstock stone Paper products, corrugated stone Board is mostly comprised of calcium carbonate.

Director and Founder of Te Matuku Oysters, Jennie Lady Fenwick, was an early adopter of Rockstock in her seafood business. "We have always been driven to be a sustainable model across all aspects of our business, from growing the oyster to getting it out to market. Rockstock ticked all the boxes in our retail seafood business and made it easy to provide quality and environmentally friendly solutions.



Te Matuku Rockstock printed Fish Tray mat (81%CaCO3)

Te Matuku Rocktack self adhesive Half shell labels



Te Matuku Rocktak Pacific Oyster Labels



A RATORE DELA

Te Matuku Oysters Rocktak Tub labels



Above: Rocktherm thermoformed clamshell

Rocktherm plates and trays

Maximising recyclability can be achieved using Rockstock corrugated Stone Board in combination with other stone paper Materials including:

-Rockstock Antibacterial Stone Substrate

- -Rocktak self adhesive Adhesive Label (Facestock)
- -Rockstock non adhesive Ultra Stone low density paper
- -Rockstock Heat Sealing Substrate SP (for lidding and lightweight bags)
- -RockstockRPD S-Eco -Rockstock RBD S-Board Rocktherm DT
- -RockstockSP-Film -Rocktherm ST -Thermoform Rocktak DT

-Rockbag zip lock bags, zip lock bags, pouches, courier bags, carry bags

### **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.

# Cruise liner mishap may boost marine farming

Sounds marine farmers may end up benefitting from an incident in which a cruise liner hit a rock at the entrance to Tory Channel.

Marlborough Harbourmaster Luke Grogan says the drive for a new realtime tidal flow monitoring system now being installed in Queen Charlotte Sound emerged after the Azamara Quest struck Wheki Rock on her way to Picton in January 2016.

A Traffic Accident Investigation Commission (TAIC) report found especially strong currents in the tight turn entering Tory Channel were a factor. Luke Grogan says while the vessel only suffered minor damage to the hull and one propeller, the consequences of it having been holed would have been catastrophic – not least for the Sounds aquaculture industry.



Marlborough Harbourmaster Luke Grogan

The system will provide real-time monitoring of tides, currents and water depths, all hugely beneficial for navigational safety of any vessel in the area.

"Strong tides and currents can pose risks to navigation," he says. "Traditional tidal predictions can be quite different to what actually occurs in the Sounds so real-time information is the key to ensuring the most accurate information is available on which to base decisions."

Luke sees the potential for marine farmers to enjoy wider benefits from the new system other than just than navigational.

By next year, enough data should be available to allow complex flows in Queen Charlotte Sound to be projected at least to three hours ahead, perhaps longer.

"That could be awesome information if you were planning to tow a salmon pen."

While stressing he's not a scientist, Luke says the new information may also be helpful in such things as predicting the dispersal of mussel spat in tidal flows.

"You can do this at any depth in the water column."

He says better tidal flow information may also help with better understanding flows of warmer and colder water.

Currently, anyone seeking tidal flow information has to rely on the Nautical Almanac published annually by Land Information NZ, but mariners widely report significant discrepancies between almanac predictions and actual observations. Once established, new data will greatly improve the accuracy of predictions.

Once the three tide stations are in place and operating, consideration will be given to any other locations which would benefit around Marlborough's coastline. Luke Grogan says the tide station project is only possible on account of the information provided by Council's multi-beam mapping of the Sounds.

"The combined results will deliver a novel but powerful solution that will not only reduce grounding risks but likely assist an emerging array of other benefits, including some for aquaculture," he says.

The new real-time system is being created and installed by marine and oceanographic survey specialist's Ocean Numerical (whose MD Dr Peter McComb spoke at last year's Smart+Connected Aquaculture forum), working with French company IX Blue.

"The idea to pursue such a novel technique to determine current flows was possible because of the marine data that Marlborough District Council had commissioned and made freely available," says Dr McComb.

"We were able to rapidly test the concept of water level monitoring to predict flows with a computer model of the Sounds. The solution is an innovative hybrid of computer model and machine learning, but driven by real time measurements," says Dr McComb.

Luke Grogan says all commercial shipping, aquaculture, fishing operators and recreational boaties, will be able to use the system free of charge.

# Working with our young people

The MFA have been busy this month, attending careers fairs, taking school groups out to experience Marine Farming and filming for the <u>Youth</u> <u>Employment Success program</u>. The aim is to raise the profile of aquaculture and encourage youth into jobs within the industry.

### **Careers Fairs**

The MFA along with NZ King Salmon and Sanford represented the industry at the Blenheim <u>Future of work conference</u> and the Marlborough Boys College careers fair. Here we had the chance to engage with young people and encourage them to consider working in the aquaculture industry.



Students investigating careers on our website



Amber discussing career options with a student

### Just Say YES

On behalf of the industry, MFA has joined the Youth Employment Success program. This is a community-based initiative designed to connect Industry with future employees. Representatives from the aquaculture Industry, MFA & Marine Farm Management took to the water to showcase the beauty of the sounds and the benefits of marine farming. The clip will be featured on the YES website <u>www.youthemployer.nz</u>

### Students on water day – Round 2

Following on from our successful "On water days" in Marlborough, students from four Nelson high schools took to the water for an aquaculture experience. They were taken to see a mussel farm where Emillee Benjamin (<u>MBR</u>) & Dave Taylor (<u>AQNZ</u>) discussed ecosystem benefits, followed by a Flip Farm oyster experience with Aaron Panell and his team. The students really enjoyed their time on the water and asked some great questions.



Above: Filming for the YES programme

Below: Learning about Oysters



# Cawthron & Salmon Industry

Cawthron & salmon industry advisory group agree on 'shared challenges and priorities' for research



The talk of the town in Nelson last week was salmon, as industry representatives from across Aotearoa converged on the Rutherford Hotel to hear updates from Cawthron researchers working on the MBIE-funded salmon Feed Conversion Efficiency (FCE) Research programme.

The salmon Industry Advisory Group meeting was the final meeting to be held under the banner of the five-year FCE research programme, which is drawing to a close at the end of 2021.

The aim of the programme was to understand what makes fish efficient in order to enhance the productivity of the salmon industry and improve the health of the fish.

Interviewed during a break in the day's back-to-back workshops and presentations, Cawthron Institute's GM of Aquaculture Dr Serean Adams said it was important for Cawthron to work closely with industry from the outset of the programme to design research that would produce solutions to key shared challenges.

"We wanted to deliver best bang for buck, both for Government, and their research funding... and for industry, so we're working on things that are going to maximise opportunities and solve their biggest problems."

Programme co-leader Dr Jane Symonds said that Cawthron researchers are focused on both feed conversion efficiency and aqua health – both issues that are important to salmon farmers.

"This (meeting) has given the industry the opportunity to hear about what we've been doing, communicate with us and share their priorities."

Dr Symonds said the meetings provided a useful forum for free and frank discussion and had established a collaborative approach to industry development that was delivering benefits to all contributors.

Dr Symonds said Cawthron is currently seeking funding for future research that builds upon the progress gained over the past five years, particularly with respect to producing robust and resilient fish that will thrive in changing environmental conditions, for example as a result of the offshore expansion of marine farming, or due to the effects of climate change.

"We hope to build on the momentum we have gained and continue to act as a bridge between science and industry, so while this is the last IAG meeting under the banner of the FCE research programme, we hope there will be many more in the future."

See Video here https://vimeo.com/568191657

For original article see <u>https://www.cawthron.org.nz/our-news/salmon-industry-advisory-group/22</u>



# GREENSHELL MUSSELS

#### We're interested in your Mussel farms!

We're offering a full range of services from outright purchasing at very competitive prices through to complete farm management and term leasing. We have particular interest in farms in Okiwi Bay, Okaha & Forsyth areas.

For more information contact: Raymond Taylor: 027 483 8533

# Separating spat from seaweed

Our recent research has demonstrated that growing small spat to a larger size (i.e., > 6 mm shell length) and seeding it onto coastal mussel farms as detached single seed can greatly improve the retention of spat.

However, for farmers to seed out with larger spat, a nursery culture stage (will need to be added into the Greenshell<sup>™</sup> production cycle that takes small spat, such as Te Hiku – Kaitaia spat, and grows them up to a larger size efficiently. We have recently demonstrated this can be done effectively in a floating upweller system or FLUPSY.

The FLUPSY and other nursery systems, which contain the spat in meshed enclosures, require that the spat is separated from the seaweed and spat ropes to which it is attached.

Spat attach to material with fine but very strong threads that are like human hair and detaching spat from their substrate without destroying them can be difficult. Therefore, for nursery culture to become a viable option for the Greenshell<sup>™</sup> industry, we need to develop approaches for separating spat from settlement substrate that don't stress the spat.

We have investigated approaches for separating Te Hiku – Kaitaia spat from the seaweed material to which it is attached. By testing a variety of chemical agents it is possible to wash the spat and separate up to 93% of the spat from the seaweed, while maintaining up to 65% survival of the spat. Further adjustments to the technique look likely to improve the methods further.





Left: Bags of Te Hiku – Kaitaia spat material Right: Single seed spat stripped from the seaweed material

Using these methods more than 30 kg of Te Hiku – Kaitaia spat material was separated, to liberate clean spat of only 0.5 - 2 mm in size, which were then grown in a FLUPSY for 12 weeks to an average size of 7 mm (with some individuals reaching 13 mm), and then seeded out as single seed on a coastal farm in the Coromandel over 2 km of line. Subsequent measures indicate that spat retention has been as much as 60 times higher than had the Te Hiku – Kaitaia spat material been seeded directly onto a coastal nursery mussel farm.



A section of dropper rope 3 months after being seeded with FLUPSY grown single seed spat.

We are currently working on further improvements to FLUPSY nursery culture systems and the methods for seeding out single seed using modifications to conventional seeding methods using mussock.

### **Brad Skelton**

University of Auckland Bske663@aucklanduni.ac.nz

Andrew Jeffs University of Auckland a.jeffs@auckland.ac.nz

### **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





### **2021 Conference & Awards Dinner Programme**

The Marine Farming Association and the Marlborough Shellfish Quality Programme will be holding their annual AGM & Conference for members & invited guests in Picton at the Queen Charlotte Yacht Club on Friday 27<sup>th</sup> of August 2021.

9.00am	MORNING TEA			
9.30am	Karakia			
	Amai Thompson, Te Atiawa			
9.40am	Welcome & Housekeeping			
	Jonathan Large, Marine Farming Association			
9.50am	Annual General Meeting			
	Marine Farming Association			
10.20am	Annual General Meeting			
10.40	Marlborough Shellfish Quality Programme			
10.40am	Panel discussion.			
11.05 cure	Scientific developments in the industry.			
11.250m	Gascoiane Wicks			
12 10pm				
12.10011				
1.00pm	Kelvin Watt – GDF and the Aquaculture Industry.			
	Graeme Dingle Foundation Marlborough			
1.10pm	Chris Shaw – MCOC labour shortages and connection with schools.			
	Marlborough Chamber of Commerce			
1.20pm	Mike Hutcheson – Practical innovation & thinking differently.			
	Auckland University of Technology/Hutch			
2.05pm	Steph Benseman – Mitigating risk when innovating & funding innovation.			
0.50	Icehouse Ventures			
2.50pm	Amber McNamara - MFA Environment Programme 2021			
2.00pm	Marine Farming Association			
3.00pm	AFIERNOON TEA			
3.15pm	Gary Hooper – Market update			
	Aquaculture NZ			
4.00pm	CLOSING			
6.00pm	Pre dinner drinks & Canapes			
6.30pm	Welcome & Housekeeping			
	Mark Preece, QCYC Commodore			
6.40pm	Awards Ceremony			
7.20pm	DINNER			
8.20pm	Tony Christiansen			
0.20011	Motivational Speaker			
9.00pm	DESSERT			

### A huge thanks to our 2021 sponsors...





# **Award Nomination Form**

It's that 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 27th August 2021.

Please complete the details below and return your nomination to admin@marinefarming.co.nz by 5pm on 30st July 2021.

Details of Nomination:		
Nominee Name:		
Nominee Company:		
Category:		
Merit Award	Outstanding Marine Farmer	

- Environmental Award
- Research & Development Award
- Outstanding Marine Farmer
- Recent Entrant Award

Please supply a supporting statement for your nominee. We need to know why they are more deserving than other nominees. Feel free to attach additional pages to your supporting statement.

Signed:	Date:	
	27	



# 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.



### Environment

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

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 our industry.



#### **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.

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.

### 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



Sabik Marine is world's largest supplier of Marine AToNs. Over 100 Yrs combined experience.



### **SENSOR SYSTEMS (NZ) LTD**

Ph: (09) 275-4578 Email: <u>info@sensorsytems.co.nz</u> www.sensorsystems.co.nz