January 2022 | Issue 7 Kaitiak Ata Whenua

In this issue, we provide an important update on our fisheries sustainability mahi, including the self-reporting fishing app being trialled in the Fiordland Marine Area. We meet long-time Guardian Mark Peychers and welcome two new Guardians, Gavin Tayles and John Cushen. You can also read about progress with the Fiordland *Undaria* Control Programme and a fabulous new e-guide to the marine biota of Fiordland.

Last, we invited former Guardian Malcolm Lawson to share the low-down on the current health and management of the Fiordland lobster fishery.

As always, we welcome your thoughts and feedback.



Who are the 'Guardians'?

The Fiordland Marine Guardians are an advisory committee that works with government agencies and their Ministers to manage the Fiordland Marine Area.

Mark Peychers was a member of the original 'Guardians of Fiordland', in the 10 years before the establishment of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 and was involved in setting up Fiordland's first two marine reserves. He continues to advocate for the area as one of eight Guardians.

I began by asking Mark about where he grew up and his interest in the sea.

"I grew up in Nelson and our neighbour was a fisherman so I did the odd trip on his boat fishing around D'Urville Island, catching butterfish and lobster. I remember falling asleep on the deck while gutting butterfish one evening. I was nine years old at the time."

What first brought you to Fiordland? What was particularly memorable about that trip?

"I first travelled to Fiordland cray fishing with Vic King-Turner, our neighbour, in 1976. We left Nelson and 48 hours later arrived in the middle of the night into Milford Sound. I recall coming into the fiord from the north side where you cannot see the entrance until you get very close. It all looked very narrow, with mountains coming out of the water. At 16 years of age it was 'the big adventure' and there were very few people in Milford compared to what we see today."

What was it like in Fiordland at that time?

"Rugged, like the surroundings.

There were very few tourists, and they were confined to Milford and Doubtful Sounds. Commercial fishermen stayed in Fiordland for the 'season' and returned home to either Buff or Nelson. I cannot recall seeing a boat not associated with commercial fishing in the first few years. The crew from Nelson stayed on the boats in Milford when we were not fishing for the first few years and rarely went out to Te Anau. The road at that time was only partially sealed, with the most part gravel."

How did you become involved in the earlier work of the Guardians before 2005?

"Working in Fiordland as a commercial fisherman, I spent a considerable amount of time on the water. It was blindingly obvious that the environment was unique and needed to be looked after. Also, as I was involved in managing the commercial lobster fishery and its rebuild, I knew



what challenges likely lay ahead for the Fiordland marine environment. I wanted to ensure that the marine area was managed sustainably into the future."

What other professional or volunteer roles have you had that equip you in your governance role as a Fiordland Marine Guardian?

"I was a trustee of the Fiordland Conservation Trust and a founding and current trustee of Southern Coastal Charitable Trust. These roles have connected me with a broad range of conservation and environmental work across Fiordland and Rakiura. In terms of fisheries: past president of the Fiordland Fisherman's Association, Director of Fiordland Lobster Company, Board of CRA8 Rock Lobster Industry Association, Chair of CRA4, Director of the Rock lobster Industry Council, and I have recently retired from the Victorian (Australia) Rock Lobster Resource Assessment Group.

With so much history in Fiordland and experience at the wheel, what important messages would you like to give to people new to the Fiordland Marine Area (FMA), including folks who might eventually step into the role of Guardian?

"Think not only about your individual impact on the area, but the impact that everyone collectively has on the FMA. Managing Fiordland requires managing the impacts of humans.

If you are considering becoming a Guardian, be prepared to really commit yourself to the role. It is a lot more than attending meetings and requires a good amount of reading. The Guardians do a lot of work across several sub-committees, including biosecurity, monitoring, RMA consents, compliance, and communications and outreach."

Finally, Mark, tell us about your favourite kaimoana.

"For me, it can only be Grouper cheeks and throats. Second to none panfried in butter; my mouth is salivating just thinking about them!"



These recommendations were the culmination of more than two years of engagement with recreational fishers, operators of amateur charter vessels and the four southern Papatipu Rūnaka, spurred by increasing community concern about the state of key fish stocks. Over this time the Guardians met with focus groups, presented information at Mahinga Kai Hi Ika Komiti, conducted a survey, analysed data sets held by the Ministry of Fisheries, and had wide-ranging discussions with members of the community at boat shows and because of a campaign in the *The Fishing Paper and Hunting News*. The Guardians also have extensive first-hand knowledge of the issues and status of fisheries through their own experience fishing in the FMA.

It has become abundantly clear that multiple species targeted by recreational fishers, including blue cod/rāwaru, groper/hāpuku, pāua, and scallops are considerably depleted in the internal waters of the fiords. There is clear evidence of increasing fishing pressure over time and that trend is forecast to continue. It has also become apparent that an unintended consequence of the fishing regulations introduced in 2005 has been a concentration of fishing effort in the entrances of many fiords, seaward of the habitat lines. There are clear signs that the current level of fishing pressure occurring inside the fiords is unsustainable, and many key fish stocks require rebuilding.

The Guardians vision is central to all that we do. This is that the quality of Fiordland's marine environment and fisheries, including the wider fishery experience, be maintained or improved for future generations to use and enjoy. The community has fed back strong sentiment that most want their mokopuna to experience the abundant fisheries they have been so fortunate to enjoy in their lifetimes.

The Guardians firmly believe that considerable changes to recreational fishing regulations are required to realise this vision and ensure that the solution will be enduring for decades to come.

The Guardians have advised the Minister that a multifaceted approach is required for proposed changes to be successful. The concept of 'Fishing for a Feed' is one the Guardians have long embraced, and we wish to align the recreational bag limits with this in mind. We have also emphasised the critical need for robust data that will enable us to better detect and respond to change in the future. Another critical component is finding a way to encourage the majority of fishing pressure to occur in the most productive parts of the FMA. And finally, we have recommended changes to the way fishing charter vessels are managed in fisheries legislation to improve data collection and reduce the potential contribution of these platforms to localised and serial depletion of fish stocks.

Keeping in touch

As always, the Guardians will work hard to facilitate community-led, proactive approaches that are informed by the best scientific information and knowledge available. We place a high value on the experiences and understanding of the Fiordland community and encourage you to share your thoughts with us. For more information about the proposed changes to amateur fishing regulations in the FMA visit the 'news' section at fmg.org.nz.

New app to improve Fiordland's blue cod fishery

We'd like to thank Fish Mainland for the following contribution.

Fish Mainland Inc. has taken steps to address the dearth of data on recreational fishing in South Island waters, starting with the blue cod fishery. These steps address the major shortcoming of the National Blue Cod Strategy, the traffic light system, which lacks any specifics on the data needed to legitimise colour changes in management areas as they improve or decline.

Fish Mainland successfully applied to the Ministry for Primary Industries' Sustainable Food and Fibre Futures programme for financial support to develop and implement a system for recreational fishers to selfreport their data.

Fish Mainland is working with Plink Software in Nelson to develop and implement the self-reporting system. Recreational fishers' interface with the system is a smartphone app compatible with both Apple and Android devices

The app prompts fishers to report the species, size (legal or under), landed or released and by method and platform. While the data is recorded as catch by latitude and longitude, it will be reported only at the area level, ensuring fishers' spots are not disclosed.

Fish Mainland's Directors have been the first to trial the app on the water. This summer it has been made available to select South Island fishing clubs prepared to assist with the system's final development and implementation, as are the Fiordland Marine Guardians.

The direct benefit for them is the use of specific reporting codes to regularly receive reports on their collated catch and effort data, while aggregated anonymised data for each area can be made available to the public and MPI officials to improve management decision-making.

Alan Key, a Fish Mainland Board of Director and founding Fiordland Marine Guardian, says "recreational fisher self-reporting will greatly improve management decision-making in Fiordland and elsewhere by reducing reliance on anecdotal information about what was caught where and when."



Fabulous new e-guide for Fiordland

The Fiordland (Te Moana o Atawhenua) Marine Area has a new e-guide for its marine biota thanks to a partnership between the Department of Conservation, NIWA and the Fiordland Marine Guardians.

Fabulous Fiordland is a fully illustrated e-guide to many of the commonly encountered shallow-water marine invertebrates and seaweeds in the Fiordland Marine Area. NIWA developed it with input from a host of marine taxonomic experts brought together by DOC.

The e-guide is designed for New Zealanders and visitors who love our oceans, dive and snorkel, explore our coasts, and for those who educate and are charged with kaitiakitanga, conservation and management of our marine realm.



Download Fabulous Fiordland FREE from https://niwa.co.nz/coasts-and-oceans/marine-identification-guides-and-fact-sheets/fabulous-fiordland



The Ata Whenua Fiordland *Undaria* Control Programme aims to contain *Undaria* within Te Puaitaha / Breaksea Sound and eliminate it from Taiari / Chalky Inlet. Environment Southland is overseeing the programme which is funded through Jobs for Nature – Mahi mō te Taiao. We spoke with Kathryn McLachlan, Team Leader Marine at Environment Southland, about how the project is going.

It's a mighty job pulling a team of scientific divers together for this project. How did you do it?

We put out an Expression of Interest in May 2021 and received 54 responses from across the southern region; many were local to Fiordland. While it wasn't essential for people to be trained divers, we sought individuals passionate about the Fiordland Marine Area and willing to undergo training if needed.

Twenty respondents were selected to attend a two-day shake-down in Invercargill, where we put them through a series of team-based activities and a pool session that involved swimming and free-diving. People who didn't already have an open water diver certificate attended that training in Invercargill and Milford

Sound/Piopiotahi with Descend NZ (based in Te Anau).

Thirteen applicants undertook three weeks of scientific dive training with Waiheke Dive Ltd in Lake Te Anau and Invercargill. It was an incredibly comprehensive and challenging programme, including diving at night, full face mask and buoyancy training, oxygen provision, and PADI Divemaster certification.

Fiordland Outdoors Co. provided invaluable vessel support for the training, alongside the Environment Southland Harbourmaster in the vessel *Kewa*. We now have an 11-person Fiordland *Undaria* Dive Team working in Te Puaitaha / Breaksea Sound over the next 12–18 months. Seven team members are Fiordland-based; two are from Invercargill; and two are from Otago.

What is the programme focused on this summer, and who else is involved?

Awesome Charters Ltd, who operate out of Bluff, have provided the vessel *Awesome* to support the first phase of the work. Southern Lakes Helicopters

provide transport to and from Breaksea Sound.

The team have undertaken an initial survey to confirm the extent and estimate density of the *Undaria* in the fiord. We are now removing, safely transporting, and disposing of the *Undaria* biomass.

How is this Jobs for Nature programme different from what was already being done in the FMA and why is that important?

Partners of the Fiordland *Undaria* control programme, including Environment Southland, the Department of Conservation, the Ministry for Primary Industries, and the Fiordland Marine Guardians, have been trying to contain *Undaria* in Te Puaitaha / Breaksea Sound for years. The Jobs for Nature programme provides a refreshed approach and significant financial investment to remove as much of this invasive marine pest as possible. Large scale removal of *Undaria* from the fiord will help slow the spread and minimise its ecological impacts on the wider Fiordland Marine Area.





Welcome to our new Guardians, John Cushen and Gavin Tayles

Environment Minister David Parker announced two new appointments in late November 2021.

John Cushen and Gavin Tayles have joined the Guardians, while Rebecca McLeod, Mark Peychers, and Stewart Bull were re-appointed.

John has a passion for Fiordland and has worked there as a tourism business advisor, nature guide, and boat skipper. He is involved in several community conservation projects, including Predator Free Rakiura, the Stewart Island/Rakiura Community and Environment Trust, the Wakatipu Wildlife Trust, and the Tuckers Beach Wildlife Reserve group.

Gavin Tayles' heritage is in Southland, and he resides in rural Northern Southland. He has had a life-long association with recreation in the Fiordland National Park and has been a recreational fisher and diver in the FMA for more than 20 years. Gavin has a deep connection to the area and a strong desire to preserve it for future generations to enjoy.

John and Gavin hit the ground running. Having participated in our fisheries sustainability hui in 2020, they were both really engaged with this work. Their ability to contribute from the get-go when we have so much work to do has been enormously beneficial.

If these walls could talk – passive acoustic monitoring in the FMA

Are you interested in the underwater sounds of Fiordland's marine environment? Do you operate a vessel in the FMA, and would you be interested in supporting acoustic research?

Researchers from the universities of Otago and Waikato are seeking help with accessing remote locations in the FMA for the deployment and servicing of acoustic underwater recorders.

Leah Crowe is a PhD student at the University of Otago and is one of several researchers studying underwater sounds in Fiordland. Leah will be deploying acoustic recorders in various locations from Taiporoporo / Charles Sound to Rakituma / Preservation Inlet to monitor the critically endangered Fiordland bottlenose dolphin population. Her research is part of a national study examining underwater sounds in marine reserves throughout the motu.

If you would like to offer logistical support for this research, please get in touch with Leah at leah.crowe@postgrad.otago.ac.nz.

Read more about this research here



Fiordland user's guide

Have you got your copy of the 2021 edition of Beneath the Reflections – A user's guide to the Fiordland (Te Moana o Atawhenua) Marine Area? Our guide is packed with information, stunning images, and some essential updates. We encourage people to replace their current copy to ensure you are up-to-date with all the rules and regulations.

The guide is available online at www.fmg. or.nz, or you can purchase a hard copy from DOC's Fiordland National Park Visitor Centre: Lakefront Drive, Te Anau 9600

Phone: +64 03 249 7924

Email: fiordlandvc@doc.govt.nz

Printed copies cost \$25.00 if collected from the visitor centre. Inquire about



The CRA8 commercial rock lobster fishery

With so much focus on the recreational fishing sector in Fiordland over the past 2–3 years, we wanted to share something about commercial fishing in the FMA. The status of rock lobster (Koura, spiny, red, *Jasus edwardsii*) in Fiordland is frequently touted as a success story. And there is good evidence to back this up. We asked former FMG Chair and CEO of CRA8 Rock Lobster Industry Association Malcolm Lawson to give us a run down.

The Fiordland Marine Area is part of the CRA8 quota management area. Currently, CRA8 produces 43 per cent of New Zealand's commercial rock lobster catch, with the majority of this coming from the Fiordland coast. That means the coast from Te Wae Wae Bay to Big Bay is the country's most productive rock lobster ground.

The CRA8 industry is represented by the CRA8 Rock Lobster Industry Association Inc (the Association), part of the NZ Rock Lobster Industry Council. The Association has adopted the following vision statement:

"The CRA8 industry continues to be a national leader in sustainable rock lobster fisheries management. Advancing the interface between commercial fisheries and marine environmental integrity is critical in maximising the economic return for members and the nation from a limited natural resource."

The Association has promoted initiatives focused on fishery and environmental management to deliver its commitment. When integrated, these have produced a high abundance fishery while having minimal impact on the marine environment.



CRA8 have adopted:

- a more responsive method of management to determine catch limits
- a management strategy to maximise economic returns while maintaining high stock abundance
- investments in research
- promotion of protection for the highly sensitive and internationally important Fiordland Marine Area
- coastal clean-up operations to lessen the human impact on the coastal environment by removing lost fishing gear and other waste.

The CRA8 management strategy operates on an annual review of the fishery and adjustment to the total allowable commercial catch (TACC); any change to the abundance of the fishery – up or down – is addressed quickly.

The Association also promotes a management philosophy of maximum economic yield (MEY) – where the aim is to maximise the economic return from the available TACC. MEY strategies result in fewer fish being taken as the aim is to make more fish by taking less. CRA8 maintains a conservative TACC, resulting in high stock abundance well above any sustainability concerns.

In turn, fishers target their fishing effort to times of year and fish sizes to meet the market demands that provide the greatest financial return. These are lobsters between minimum legal size and 2kg. Fishers return the larger lobsters to the sea at the time of capture. While having lower economic value, large lobsters have high biological value as the main breeding stock. These larger lobsters are also sought after by recreational fishers.

It is clear that this strategy has benefits for all of the commercial, customary and recreational sectors and also for divers who simply want to see large numbers of rock lobsters in Fiordland waters.

CRA8's approach to managing the Fiordland fishery was recognised in 2020 when the Association won the Operational Innovation Award at the inaugural Seafood Sustainability Awards. The Association was also a finalist in several other categories, including the Kaitiakitanga Award for their focus on the Fiordland Marine Area and other environmental efforts.



Keeping in touch

Our website fmg.org.nz is based on the content and layout of the User Guide: Beneath the Reflections and provides helpful and informative information for those wanting to get out on the water.

You can email us at info@fmg.org.nz

Te Rūnanga o **NGĀI TAHU**















FMG-AGENCY MEETINGS 2022

NEXT MEETING

Thursday 24 February, Te Anau

Agenda items by Wednesday 2 Feb
Board reports by Tuesday 8 Feb
For more information visit
www.fmg.org.nz

All welcome

Our quarterly FMG agency meetings are open to the public and agenda items for discussion at these meetings can be brought to the Guardians. The agenda is set three weeks in advance of a meeting.

Te Pānui Kaitiaki o Ata Whenua is available online at <u>www.fmg.org.nz</u> or via email.

In the interest of sustainability, we encourage people to opt for an electronic copy. Please emailinfo@fmg.org.nz to update your contact details or to switch to electronic communication with the Guardians.

Thank you!

The Guardians would like to thank the following individuals and businesses for photographs used in this issue: Descend NZ, Graham Dainty, Mark Peychers, Pure Salt Charters NZ, Richard Kinsey and Vincent Zitzen.