

Welcome to Te Pānui Kaitiaki o Ata Whenua, the new newsletter of the Fiordland Marine Guardians (the 'Guardians'). We plan to keep you updated on some of the issues we are grappling with in the region and welcome your thoughts and feedback.



Who are the 'Guardians'?

The Fiordland Marine Guardians are an advisory committee who work with government agencies and their Ministers on the management of the Fiordland Marine Area (FMA).



In this issue we talk to Dr Ken Grange

Ken was appointed to the Fiordland Marine Guardians in 2005. But his passion for Fiordland and his involvement with the establishment of the FMM Act goes way back. Until recently Ken held the role of Regional Manager of NIWA in Nelson (he is now 'retired'). In 2017, Ken was awarded the New Zealand Marine Sciences Medal (the John Morton Award) for his outstanding contribution to marine conservation in New Zealand. The Guardians were chuffed that Ken received this level of recognition. In this newsletter we have asked Ken to share a few insights into what has inspired him and where he thinks things are heading.

Ken, where did you grow up?
Was the marine environment an important part of your childhood?
I grew up in Auckland, but spent most of my childhood and teenage years fishing and surfing the waters of Northland (much to the anger of my school teachers). I never imagined not being far from the sea and learning as much as I could about it. I hate to think how many hours I have spent watching waves break to

understand surfing, and how some conditions wash up the treasures that can be collected on beaches.

When did you first visit Fiordland and what were your first impressions?
What were you doing? I first visited as part of a research cruise in 1976. I was blown away with the underwater environment. So many animals and plants I had never seen before, totally alien, yet calm and serene with no waves or strong currents. What caused this difference?

When you received your award you were described as "providing a measured, steady hand, and operating with a high degree of professionalism that embodies both scientific rigour and kaitiakitanga". Describe one particularly tricky situation where you have had to really bring this to the fore in your role as a Fiordland Marine Guardian. I believe this is part of everyday life as a Guardian. You use your experience to guide thoughts but always listen to others, and keep the kaitiakitanga foremost. Fiordland "belongs" to everyone, and the Guardians vision is to keep it special and functioning.

Is there one place in Fiordland that is particularly special to you? Why? There is a very small cove in Doubtful Sound just large enough to anchor a medium vessel. This is the place where I have spent over a thousand hours underwater running experiments, exploring, and noting changes. We call the cove "Tricky Cove" after my long-term dive buddy and colleague.

What does being 'retired' actually look like for you? I had hoped for more time to devote to nature appreciation, but so far it has been more about answering emails from previous colleagues and clients, building a house, and trying (unsuccessfully) to wind down after 42 years of professional life. I have, though, really enjoyed exploring and learning about the early history of the far north and Kerikeri in particular. I am about to offer my experience to a guardians group trying to protect the marine environment of the Bay of Islands.

Do you eat seafood? What is your favourite kai moana? I love kai moana. Any sort, and lots of it. Favourite? Fresh scallops and rock lobster. Blue cod are wonderful, but the snapper up here in the north take some beating as well. I also really enjoy catching or collecting my own kai moana, always tastes even better.

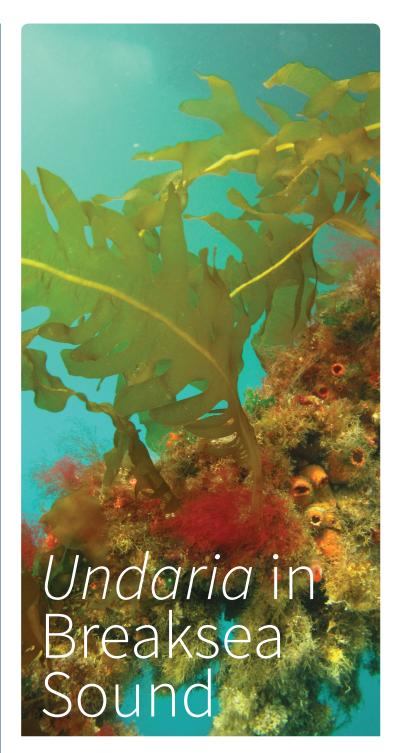
Guardians' response to proposed aquaculture in Fiordland

In 2016, the Guardians became aware that Fiordland was being considered as a location for the establishment of aquaculture. We were firm in our belief that if such developments were unfolding, then the Guardians should very much be involved in the discussion. Representatives from the Southland Regional Development Strategy, Te Rūnanga o Ngāi Tahu, and the Ministry for Primary Industries (MPI) were invited to meet with the Guardians. Over the course of a few months a relationship was built based on trust that resulted in open sharing of information.

We fought the urge to object to salmon farming in the southern fiords because we simply didn't have enough information on which to assess the risks and benefits of this activity. This is the way the Guardians have worked since the beginning: we form our opinions when, and only when, we have gathered the best possible information and had an opportunity to consider it in detail. By the end of the year we were advising the group of our concerns, our thoughts on information gaps, and the suitability of sites that were being scientifically investigated.

The Guardians are now represented by Ken Grange on the Southland Aquaculture Reference Group. Even though the recent focus for aquaculture opportunities has been on Port Pegasus (Stewart Island/Rakiura), the previous Government set high targets for aquaculture growth and we're certain that it will only be a matter of time before the FMA is reconsidered.

So we're putting it to you, the regular users of the FMA – what do you think? Is there a place for salmon farming in Fiordland? By getting a better understanding of your views, we can be better prepared to represent the community next time the sights turn in the direction of Fiordland.



In May this year it was confirmed that the highly invasive Asian seaweed *Undaria pinnatifida* (commonly referred to as *Undaria*), had established in Breaksea Sound at the popular anchorage of Beach Harbour. The current infested area also takes in the waters around the John Islands.

This news was incredibly disappointing and heart breaking. Agency staff from DOC, MPI and Environment Southland (ES) had been working tirelessly to eradicate a small infestation of *Undaria* from Sunday Cove since April 2010. The results had been very promising suggesting that eradication would be achieved.

Undaria has reached many coastlines around the world including in New Zealand. It grows quickly, is large in size, and has a very high reproductive output. Such characteristics suggest that Undaria can out-compete native sessile species (species that don't move around) for light and space, and therefore has enormous potential to modify Fiordland's unique marine ecosystem.



The discovery of an extensive area of mature plants dealt a bitter blow to this campaign. Yet, at the same time, it shone the light on the ever-present threat of marine pests to the FMA and what an incursion might actually mean for users on a day-to-day basis.

ES, MPI and DOC are now engaging with the Guardians and users on a plan to slow *Undaria's* spread to other parts of Fiordland.

How did *Undaria* get to Fiordland?

Undaria can attach itself to substrates including the hulls of vessels and marine equipment such as fishing and dive gear, mooring lines, or other structures. Therefore, it is likely to have arrived via transport on a vessel or marine gear.

Do your bit to slow the spread of Undaria out of Breaksea Sound

- At all times maintain your vessels hull and marine equipment in a clean state, and ensure you have good, thorough and functioning antifoul coating.
- Plan your voyage so as avoid overnight stays in the infested area.
- Avoid anchoring (or mooring) in the infested area. *Undaria* can get caught in anchor chains and transported to new sites when you drop anchor.
- Do not store and/or remove marine equipment within the infested area (eg, lobster holding pots, ropes to establish mooring lines).

If you see *Undaria* or any other marine pest in Fiordland, report this to the

MPI Biosecurity hotline 0800 80 99 66.



BEWARE

If a Vessel or equipment you are transporting is fouled with Undaria it is an offence under the Biosecurity Act 1993. The offender can be prosecuted by Environment Southland. The maximum penalty for an individual is \$5000 and for a corporation is \$15,000.

For all enquiries about *Undaria* in Breaksea Sound please contact:

Shaun Cunningham, Biosecurity Officer

at Environment Southland

03 211 5115 or shaun.cunningham@es.govt.nz



Monitoring in the Fiordland Marine Area

In 2016, the National Institute of Water and Atmospheric Research (NIWA) was awarded the contract to resurvey five of the marine reserves in the FMA. The results surprised us. Here we explain briefly what was found and what it may mean.

In 2005, DOC was tasked with leading the monitoring plan for the FMA. The plan was developed primarily to monitor the state of the marine environment and biological diversity over time to determine how the ecosystems in the marine reserves have responded to increased protection. Key agencies work together to implement the plan, with direct input from the Guardians.

After 10 years of full protection, there was no evidence of strong differences in fish assemblages, or abundances of key species among reserve and non-reserve sites. Similarly, an analysis comparing fish assemblages and densities at sites with long-term monitoring data showed little evidence of changes over time.

So why might there be no detectable changes observed when traditionally marine reserves are well-known to result in more and bigger fish?

The answer is likely to have something to do with the unusual marine environment of the fiords. Perhaps changes occur more slowly in the fiords, and we are yet to see any 'recovery'. Some of New Zealand's first marine reserves took upwards of 15 years for signs of recovery of fish stocks to become apparent.

Or perhaps, the management measures were put in place early enough to prevent the fish stocks declining to low levels. While the numbers and sizes of some exploited species, such as rock lobster, have increased, they appear to have increased both inside and outside the marine reserves, a testament to the success of the management options that have been implemented.

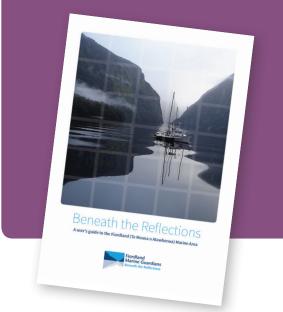
On-going monitoring will help answer the question around how long it will take for full recovery or restoration in this special ecosystem. But we need to keep in mind that marine reserves aren't always put in place with fisheries outcomes in mind – they are there to preserve the entire ecosystem, from seaweed to corals, and from snails to fish.

New user's guide

In July this year we released a new edition of Beneath the Reflections – A user's guide to the Fiordland (Te Moana o Atawhenua) Marine Area. The guide is packed with information, stunning images, and some really important updates. We would really like to encourage people to replace their original copy (now over 10 years old!) so you are up-to-date with all of 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 e-mail: fiordlandyc@doc govt n:

Printed copies cost \$25.00 if collected from the visitor centre or \$30.00 if posted within New Zealand.





Clean vessel pass update

Under the new Fiordland Marine Regional Pathway Management Plan 150 Clean Vessel Passes were issued by Environment Southland as of late September. Key information is being collated about the different types of vessels, intended activities in the FMA, a vessel's home port and ports to be visited, and the frequency of anti-fouling. This data will provide an invaluable baseline for the Guardians and agencies as we endeavour to keep new marine pests out of the FMA.

All vessels must hold a Clean Vessel Pass

The Fiordland Marine Pathway Plan sets out rules which apply to all vessels entering within one nautical mile of the landward boundary of the Fiordland Marine Area. All vessels must hold a Clean Vessel Pass.

For more information and to apply for your Clean Vessel Pass visit: www.es.govt.nz/environment/pest-animals-and-plants.

'The Rock FM Boat Show Southland'

This annual event is the largest of its kind in the region. This year we shared a stand with Environment Southland (thank you!) and used this valuable platform to connect with our community. Approximately 5000 people came to see national and local exhibitors with different products associated with the marine industry. A good number stopped by our stand to talk with us and update their user's guide. People continue to express surprise that we are an advisory body and to understand how we function – highlighting a continued need for the Guardians to communicate and engage with the public.

Southland Regional Coastal Plan

The Southland Regional Coastal Plan is under review. The first phase is for Environment Southland to set the strategic direction for managing the coast in Southland. From October 2017 to early 2018 the Guardians will be consulted on marine farming, natural hazards, water quality and ecosystems, and use and development. Public consultation is expected to begin in late 2018.

National update on marine pests

MPI conduct biannual surveys at high-risk locations around New Zealand for new marine pests. In the year to July 2017 no new pests were identified at Bluff, Lyttelton or Dunedin ports. However, the clubbed tunicate *Styela clava* has increased in distribution and number within Otago Harbour. The invasive Mediterranean fanworm *Sabella spallanzanii* continues to expand its range around New Zealand, especially in the North Island, and top of the south, as well as Lyttelton where it has been found since 2008. These pests are only one boat ride away from Fiordland so we must all remain vigilant and responsible.





FMG-AGENCY MEETINGS

NEXT MEETING Friday 23 February in Te Anau.

Agenda items are due Friday 2 February. For more information visit www.fmg.org.nz.

All welcome

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

Te Panui Kaitiaki o Ata Whenua is available online at www.fmg.org. nz or via e-mail. In the interest of sustainability we encourage people to opt for an electronic copy. Please e-mail info@fmg.org.nz to update your contact details or to switch to electronic communication with the Guardians.

Thank you!

Fhe Guardians would like to thank the following individuals and agencies for photographs: DOC, MPI, NIWA, K. Blakemore, V. Zintzen, J. Davies. and G. Read.











