



March 2014

## *The Guardians Newsletter*

The Fiordland Marine Guardians are an advisory committee who work with government agencies and their Ministers on the management of the Fiordland marine area. They welcome this chance to keep you informed and up to date with happenings in the Fiordland Marine Area.

### **Kina to the rescue in Sunday Cove!**

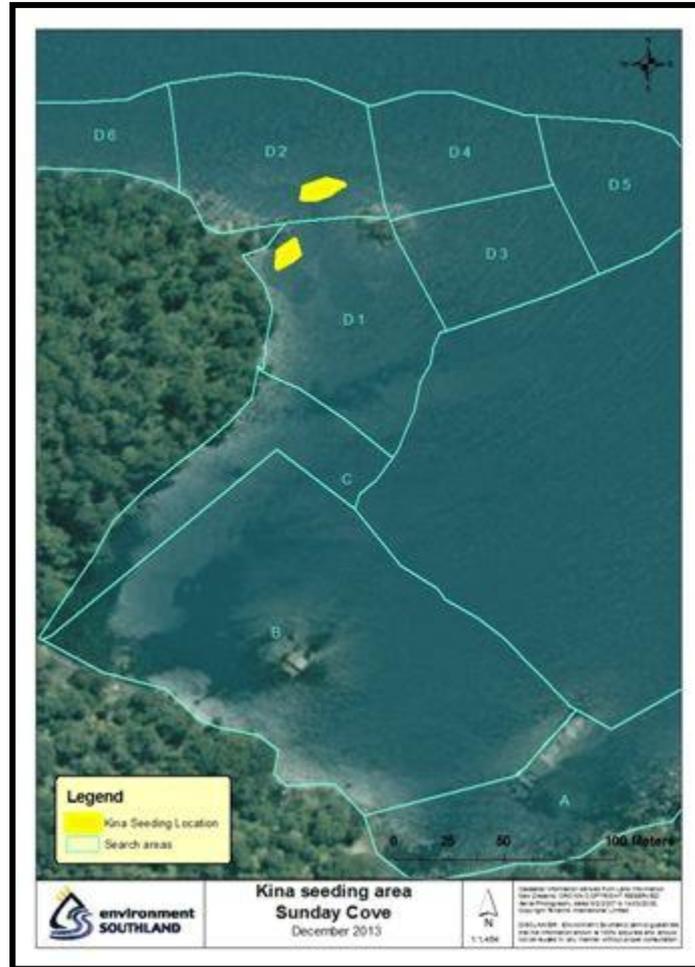
Since May 2013 no *Undaria* individuals have been found within Sunday Cove.

This means that for the last nine months we have been “*Undaria* free”. Even though these results are positive, the response team (MPI, DOC and ES) and the Fiordland Marine Guardians are still cautious due to the reproductive ecology of this highly invasive seaweed.

With this in mind, the team transferred another ~3000 Kina (*Evechinus chloroticus*) into Sunday Cove in areas that we had previously found large numbers of *Undaria*. One of the reasons this was done was due to the large amount of native seaweed regrowth in these areas, causing difficulty with searching. Since the transfer, the Kina have “grazed” down the native seaweed in these difficult to search areas ensuring that searching is far more effective. The added bonus is that if there is any remaining *Undaria* in these areas the Kina will likely consume them as well.

**If you’re planning a trip to Fiordland this Easter for the Roar, you can help protect this precious place from further threats by checking your vessel’s hull (including niche areas) and gear are clean and free of marine pests before travel, and if it’s fouled, clean them.**

For more information please visit:  
<http://www.biosecurity.govt.nz/fiordland>  
Derek Richards, Biosecurity, Environment Southland

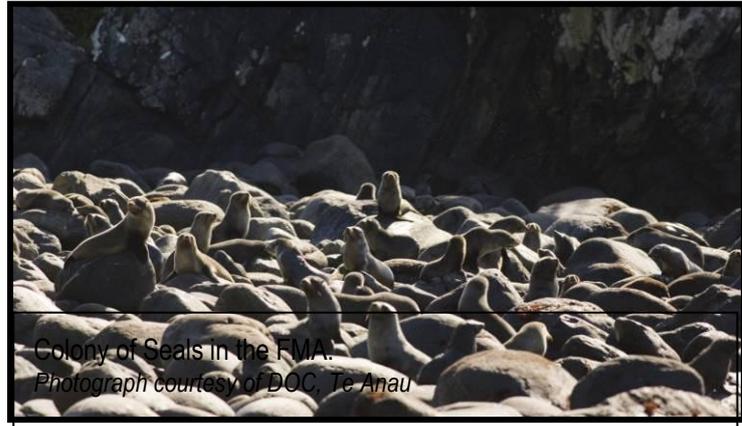


Kina ready to be ‘deployed’ in Sunday Cove.  
Photograph courtesy of Environment Southland

# Seal diet update

In 2010 the Fiordland Marine Guardians carried out a review of their initial five years. During that review there were a number of public discussions held throughout Southland. One of the topics of discussion that was raised in the public forums was the question of how seals fit in to the food web and what it is exactly that they feed on.

There have been a number of seal diet studies carried out around the country over the years and there is variation between particular areas. It does appear that the major prey items are squid, octopus, lanternfish, red cod, hoki and other deeper sea species but no specific studies have been carried out solely within the Fiordland area.



Colony of Seals in the FMA.  
*Photograph courtesy of DOC, Te Anau*



Due to the public interest in what seals are eating and the Guardians desire to continue to gather information that will help with their ability to manage the Fiordland Marine Area (FMA), a Fiordland specific diet study will be initiated this year by DOC. The plan is to gather information about what seals are eating in Fiordland throughout different seasons and to find out how much they feed within the fiords themselves.

Watch this space for more information in the future.

*Richard Kinsey, DOC, Te Anau*

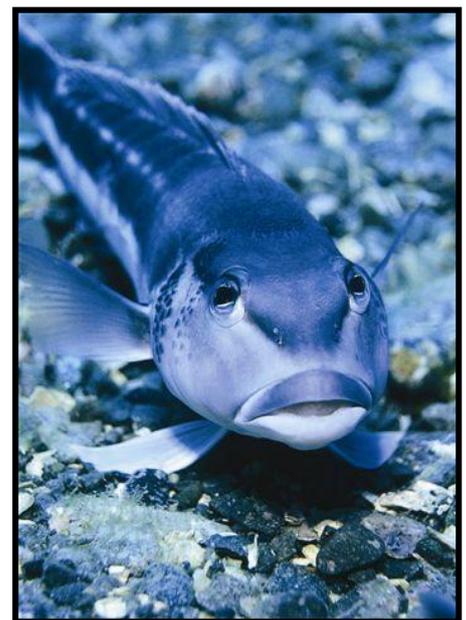
Photograph of Fur Seal.  
*Photograph courtesy of DOC, Te Anau*

# Milford and Doubtful Sounds Blue Cod Fisheries

In 2013, the Guardians recommended that the Ministry for Primary Industries (MPI) consider reopening the recreational blue cod fisheries in Milford and Doubtful Sounds. This recommendation has been carried through MPI's annual fisheries planning processes, and prioritised for the 1 April 2015 regulatory round. Keep an eye out for the initial position paper (IPP), which will be released for consultation later this year. The IPP will outline options for this fishery, including a potential reopening.

All stakeholders are welcome, and encouraged, to consider the proposals in the IPP and write a submission to MPI. Points raised in submissions will be included in the final advice for the Minister for Primary Industries (the Minister). MPI has a target for the Minister's decision on this fishery to be made in time in time for any potential changes to be implemented by 1 April 2015.

*Jenny Oliver, MPI, Wellington*



Blue Cod  
*Photograph courtesy of MPI*

# Meridian Energy

## Physical and biological monitoring in Doubtful Sound

Meridian Energy Limited have been monitoring the physical and biological environment in Doubtful and Milford Sounds since 1997, as part of their consent to discharge freshwater from the Manapouri Power Station into Deep Cove.

For the past eight years scientists from the Cawthron Institute, NIWA and Otago University have been collecting and analysing environmental data to determine whether there are any changes to the environment beyond those associated with the original construction and operation of the station.

In 2010, Meridian was granted consent to increase the tailrace discharge, and in 2012 to 2013 this consent was implemented for a 32-day period. However, over the whole year the mean tailrace discharge was the lowest on record since the monitoring programme began, due to low lake levels.

Analysis of salinity and temperature data from eight moorings in Doubtful Sound and a reference mooring in Milford Sound showed that the behaviour of the low salinity layer (LSL) in Doubtful Sound was similar to previous monitoring years, and weather events and subsequent deepening of the LSL fell within the typical ranges observed in the fiords.

The short duration of the increased discharge means that a full assessment of the effects cannot be made at this stage, but will be investigated in more detail in 2014.

Most recently, in February 2013, staff from the Cawthron Institute and NIWA were in Doubtful and Milford Sounds to monitor rock wall habitats including seaweed and invertebrates such as sponges, mussels and black corals.

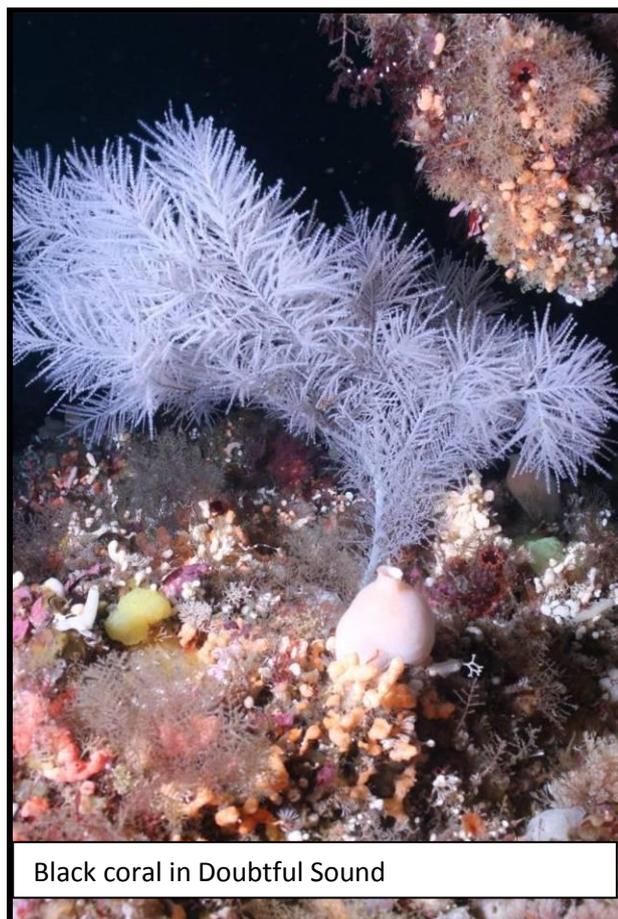
Established sites were visited and photographs were taken at different depths in the intertidal and subtidal habitats, and counts, measurements and depth ranges were recorded for a number of target species.

Several soft sediment sites in the inner sounds were also visited, and cockles and pipi were measured and counted at shallow depths.

“Over the course of the monitoring programme, we haven’t observed changes that suggest there are effects associated with ongoing operation of the tailrace,” Cawthron Institute marine scientist Robyn Dunmore says.

“We have seen some fluctuations in the abundances of some organisms, but these changes have also been observed at our reference sites and are therefore associated with wider natural variability.”

The increased discharge of the tailrace has been implemented for a longer period in 2013, and this will allow the research team to do a fuller assessment of the effects in 2014.



Black coral in Doubtful Sound



### **Photographic evidence**

To assist with the monitoring programme, the research team has taken thousands of photographs of permanently marked underwater sites. Over the past eight years, they have compiled what is believed to be New Zealand’s most extensive collection of photographs from permanently marked underwater sites, with more than 4000 photographs.

Having this long-term data set is valuable in monitoring changes in species, populations and habitats.



Divers taking video footage and counting brachiopods

“Photographs taken at permanently marked places on the rock wall each year allow us to compare increases or decreases in the abundances of seaweeds and invertebrates,” Robyn says.

“It is interesting to see how long-lived some species are. For example, the same individual sponge, black coral, sea squirt or seaweed can be present every year (see photos below for an example).”

Counting important indicator species in the field also allows us to assess any changes in abundances, and recording depth limits enables us to determine any changes in species’ depth ranges. Black coral, sponges, brachiopods, sea stars, urchins and sea lettuce are just some of the invertebrates and seaweed the scientists are monitoring data on.



2006



2013

“It is interesting to see how long-lived some species are; the same individual sponge, black coral, sea squirt or seaweed can be present every year (see photos above for an example),” Robyn says. Photographs taken in 2006 and 2013 at a site near First Arm at 10m depth, showing the same sponge.

Article and photographs provided by Andrew Feierabend, Meridian Energy.

## On Email?

# You may receive your next newsletter electronically in the future ...

More and more people are opting to receive the FMG newsletter electronically. A large number have stated that the colour photography in the newsletter is a major reason for changing, as well as all the environmental aspects, which make this option very attractive.

For these reasons your next newsletter may be sent to you online if we have your email address.

If you would like to receive newsletters electronically in the future, and we don't have your email address please contact Alison with your details:

[info@fmg.org.nz](mailto:info@fmg.org.nz)

# Fiordland Marine Guardian & Agency signage

Watch out for new signage, which will appear at Milford, Deep Cove, Blanket Bay and Deas Cove in the coming months.

As time has passed the FMG signage has become dated, with changes to regulations, no anchoring, no potting areas therefore it is intended to update the signs with a more generic sign which should not date so quickly.

Free brochure packs with all the relevant information pamphlets, current MPI fishing regulations and the User Guide will be available at the Deep Cove Hostel Office and The Fiordland Lobster Company, Milford Depot. These will be provided to Users heading into the Fiordland area.



PouPou designed by Cliff Whiting and carved by Bubba Thompson – lined up and ready for their role as Kaitiaki of Marine Reserves in the FMA.  
*Photograph Richard Kinsey, DOC. Te Anau*

## TE POUPOU O RUA O TE MOKO

The Pou Pou having been erected to mark the marine reserves in Fiordland are seen as a great achievement for the Fiordland Marine Guardians, but especially so for the iwi Ngai Tahu, Katimamoe, Waitaha!

To have these images placed into Fiordland is to reconnect that association of the Manawhenua/Kaitiaki, the Iwi, with that place.

The Pou Pou are symbols of our ancestral connections with Fiordland, the deities, the explorers, the Whanau, Whanui who have traveled these pathways before us, are able to be recognized, talked about and therefore brought back to the minds of those who take the time to enquire and those who should gaze upon these images.

The pou pou erected in Charles Sound recognise one of our great deities Kahukura. In this instance when we think about this particular pou/image it brings to mind that great korero about Tuterakiwhanoa's great feats of carving out the land to create the fiords to make the place suitable for humans.

The story of Kahukura in this instance is how Tuterakiwhanoa called for assistance to carry out the challenge before him, and Kahukura the Goddess of travelers stepped forth to assist with the job in hand in Charles Sound.



Kahukura after being unveiled in Charles Sound.  
*Photograph Stephen Logie, MPI, Invercargill*

The second pou pou in Charles depicts one known as Heheue. This name reminds us that after Tuterakiwhanoa finished his great feats that man and others came to explore this great place. Heheue was one of Maui's sailing masters who accompanied Maui as he explored Aotearoa.

And so the stories go, these were but an abbreviation of the bigger story, but as we apply the names to the rest of the pou pou in the other sounds, it is the intention that people will come to know the stories associated to those places. The pou pou will hopefully bring to light those stories of a time long ago, of the so called mythology of those who make up the whakapapa/genealogy of the first people's of this land ( THE MAORI)

These Pou pou are placed looking over these marine reserves as Kaitiaki/guardians. They are watching over these places to observe the activities of those who enter and symbolize the importance of these marine reserves.

*Stewart Bull, Fiordland Marine Guardian/Kaitiaki*

Heheue looking over the other boundary of the marine reserve in Charles Sound.  
*Photograph Stephen Logie, MPI, Invercargill.*



## Guardians mark unveiling of Pou pou marine reserve markers in Fiordland

The Fiordland Marine Guardians celebrated a significant milestone with the unveiling of newly erected Pou pou marine reserve markers in Kahukura Marine Reserve, Charles Sound. During the unveiling ceremony on the 12<sup>th</sup> February, Guardians Chairperson Malcolm Lawson acknowledged that the new Pou pou markers erection was a culmination of several years collaborative concept planning and effort by the Fiordland Marine Guardians, the Department of Conservation and local Iwi from the Oraka-Aparima Runaka (the mandated Iwi Kaitiaki) on behalf of the wider Te Runanga o Ngai Tahu.

The ceremony in Charles Sound was held aboard the DOC vessel *Southern Winds*, which had transported in the main body of Fiordland Marine Guardians, invited Agency advisors and representatives from each of the four Southland Runaka: Oraka-Aparima; Awarua; Waihopai; and Hokonui.

The invited dignitaries were Sir Mark Solomon, the Chairperson of Te Runanga o Ngai Tahu and Kevin O'Connor, Deputy Director-General, Conservation Services who were flown into the area by Southern Lakes Helicopters before being transported to the site of the ceremony by fishing boat.

The Pou pou project stemmed from the Guardians desire to adequately promote and indentify marine reserve boundaries with markers that were more in keeping with the wilderness values of the fiords. Traditionally marine reserves are marked with standard DOC triangle boundary markers. Significantly for tangata whenua, the new Pou pou symbolise Ngai Tahus' enduring kaitiakitanga (Guardianship) of Atawhenua (Fiordland) and the present shared partnership with the Guardians and the management agencies.



The Guardian's initiated project was led by Stewart Bull, a long serving Ngai Tahu representative on the Guardians and project managed by Richard Kinsey, DOC Marine Ranger from Te Anau. Bubba Thompson, a talented local carver from the Awarua Runanga was commissioned to design and carve the Pou pou, with each one representative of various ancestors from Ngai Tahu mythology.

Now approaching 9-years since the management regime inception in 2005, Guardians and Agency collaborative management model is touted both nationally and internationally as being highly successful in delivering ongoing sound conservation management of Fiordland's fisheries and marine environment for the future benefit and enjoyment of all.

This point was well made by several speakers including Sir Mark Solomon, who warmly praised the success of the Fiordland Marine Guardians in his speech. Sir Mark acknowledged the Guardians model as a template and inspiration to others. Having closely followed the progress of the Fiordland Marine Guardians, Sir Mark acknowledged the community led structure, which his own Kaikoura Community have emulated in setting up Te Korowai o Te Tai o Marokura/ The Kaikoura Coastal Marine Guardians.



Speeches during the unveiling ceremony in Charles Sound. L to R Stewart Bull (FMG) Sir Mark Solomon (Ngai Tahu), Kevin O'Connor (DOC), Michael Skerrett (Waihopai Runanga)  
*Photograph Stephen Logie, MPI, Invercargill*



Richard Kinsey and carver Bubba Thompson (Awarua Runanga) after unveiling the Pou pou Kahukura  
*Photograph Stephen Logie, MPI, Invercargill.*

The new Pou pou are designed to be both attractive and functional to withstand the vigorous fiord marine environment. The Pou pou have been individually carved and mounted on stainless steel poles drilled into the fiord rock wall. The Pou pou production and installation has been jointly funded by Te Runanga o Ngai Tahu and DOC.

In the lead up to the Charles Sound ceremony, Bubba Thompson and Ron Bull (representing local Iwi) worked with DOC staff on the GV *Southern Winds* to erect a further four Pou pou in Bligh Sound to mark the Hawea (Clio Rocks) Marine Reserve. The installation work continues with the team heading south down to Acheron Passage to erect markers for the Moana Uta (Wet Jacket Arm) Marine Reserve and Taumoana (Five Fingers) Marine Reserve in Dusky Sound. As time permits Pou pou will also be erected in Te Tapuwae o Hua (Long Sound) Marine Reserve in Preservation Inlet and Te Hapua Marine Reserve in Sutherland Sound.

The Guardians intend initiating discussions with DOC regarding the possibility of changing the markers in Piopiotahi (Milford Sound), Kutu Parera (Gaer Arm), Te Awaatu Channel (The Gut), and Taipari Roa (Elizabeth Island) from the current white triangle markers to Pou Pou in the foreseeable future.

*Stephen Logie, MPI; Richard Kinsey DOC; Malcolm Lawson FMG.*

## A Big Thank You!

The Fiordland Marine Guardians would like to thank the following organisations for enabling this momentous occasion to take place:

### **Real Journeys**

Who provided transport across Lake Manapouri and the Wilmot Pass and were most accommodating with our requirements. Their staff are true professionals who are informed about the area and very friendly.

### **Southern Lakes Helicopters**

Provided transport for the VIPs from Te Anau to the chopper pad in Charles Sound and then back to Te Anau at the conclusion of the ceremony. Richard Hayes gave them a really memorable trip along the Sounds due to the low cloud level, which sounded fantastic!

### **Deep Cove Outdoor Education Trust**

A very big thank you to Paul Gay and the Trust, for providing accommodation for the majority of the people attending the ceremony free of charge in your new hostel, and to Billy for being so helpful. The hostel was most comfortable and it was much appreciated.

*Alison O'Sullivan, FMG secretary*



# ARE YOU UP TO DATE?



**There have been some recent changes to the recreational fishing rules for the Fiordland Marine Area.**

To make sure you have the latest information about fishing rules in Fiordland, pick up a free Recreational Fishing Rules brochure from the Ministry for Primary Industries office.

137 Spey Street, Invercargill - Phone (03) 211 0060  
73 Otaki Street, Dunedin - Phone (03) 466 3607

Find fishing information or download the free fishing rules app at <http://www.mpi.govt.nz>

The following web link will take you directly to the new Fiordland brochure on the MPI website: <http://www.mpi.govt.nz/Default.aspx?TabId=126&id=2087>