



# Fiordland Marine Guardians Beneath the Reflections

September 2013

## *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.

## **Big Mum, Small Mum, Good Mum Bad Mum..... The Doubtful Sound Dolphins**

A recent study by Otago University in conjunction with the Department of Conservation has unearthed some interesting factors associated with calf survival rates of the bottlenose dolphins in Doubtful Sound. For the first time ever, the study could also accurately estimate the size of each individual in the pod using a special camera set up.

The population of bottlenose dolphins living in Doubtful Sound has been studied since the early 1990's. In that time a great deal has been learnt about the composition of the pod, their numbers, calf survival rates and areas that they like to spend time in.



Dolphin mother 'Stripes' and calf in Doubtful Sound.  
Photo supplied by DOC Te Anau

### ***Sizing individuals using a stereo camera***

Estimating the sizes of bottlenose dolphins is not a very easy task, especially as they don't stay at the surface for long each time they breathe. However, using two cameras very close together and a lot of long elaborate equations, it was possible to work out how large each dolphin was in the Doubtful Sound population. These estimates found that some of the largest bottlenose dolphins in the world live in the fiords, growing to over 4 metres in length! The relative sizes of each adult female were then checked to see if it related to their success as mothers.

### ***The good Mum bad Mum scenario***

Because the dolphin population in Doubtful Sound has been studied for so long researchers know a detailed history of each animal. Using this historical knowledge on when they give birth and how their calves have survived in the past – and combining this with the recent estimated sizes of each female, researchers have been able to model how good each mother actually is at successfully rearing offspring, and what factors might contribute to their success (or otherwise).

It turns out that a third of mothers are very successful, a third are okay and a third are not very good. The best Mums are comparatively large and like to give birth in January when the water is at its warmest, whilst the others are not quite so big and do not seem to favour the magic month of January.

This new information adds another piece to the puzzle that will hopefully help us to better understand the unique populations of bottlenose dolphins in the fiords. This increased understanding will help us to protect them in the future.

*Richard Kinsey, DOC, Te Anau*



## Good News on the Sunday Cove Undaria response!

**Good news everybody!**

The programme to locally eliminate the pest seaweed *Undaria (Undaria pinnatifida)* from Sunday Cove, Breaksea Sound is still on track! Since the single mature *Undaria* specimen was found in April 2010, 37 control operations have been conducted, and a total of 1887 individuals have been removed. Over this calendar year (2013), only three immature *Undaria* individuals have been found in the search area, despite an increased level of search effort (two teams of three dives and searching the high risk areas twice per trip).

Although these results are very exciting it is still too early to say whether *Undaria* has been eliminated from this special place. The Response Team (Environment Southland, DOC and MPI) and the Fiordland Marine Guardians believe the project is firmly on track to achieve the goal of locally eliminating *Undaria* from Fiordland. However, the Response Team and Fiordland Marine Guardians urge any users of this area to ensure their vessels and equipment are clean and free of *Undaria* and any other marine pest prior to travelling to Fiordland.

*Derek Richards, Environment Southland*

Photographs of divers searching for *Undaria* within Sunday Cove, Fiordland.  
*Photographs supplied by Derek Richards, Environment Southland.*



## Sunday Cove Undaria response a feature at International Conference

In August 2013, Jennie Brunton from the Ministry for Primary Industries attended the Eighth International Conference on Marine Bio invasions in Vancouver.

This conference attracted many international scientists and professionals involved in the control, management, and research of invasive marine species. A key theme for the conference was rapid response to, and eradication of invasive species. Jennie presented to this international audience the methods and outcomes of the joint-agency response to *Undaria* in Sunday Cove, Breaksea Sound. As *Undaria* is invasive on many temperate shores worldwide, the methodology and outcomes of this response were of considerable interest to this international audience of scientists and pests managers. Results to date suggest this response will be successful in locally eliminating *Undaria* from Sunday Cove, Breaksea Sound. If this is the case, it will be the first time that *Undaria* has been successfully eliminated from

natural substrate anywhere in the world. This is significant, as previous attempts to eradicate *Undaria* from natural substrates elsewhere in the world have failed.

This audience also took interest in the new legislation that is now available under the Biosecurity Act 1993 that allows for the development of pathways plans. Jennie believes pathway management is essential to keep Fiordland free of marine pests. Please assist by ensuring your vessel and any equipment is clean and free of marine pests prior to use in Fiordland's beautiful waters.

*Jennie Brunton, MPI, Wellington*



One of the structures which will be utilised to improve VHF radio reception in the FMA.  
Photo courtesy of Al Babbington

## VHF Project update

As reported previously Environment Southland has undertaken a project to improve VHF reception in the Fiordland Marine Area. The plan is to utilise structures already in place, as well as to install additional repeaters, which will improve radio reception in the area, and ensure that there is coverage throughout the fiords.

Planning is continuing with the contractors and a concession application has been lodged with the Department of Conservation for the two marine radio repeater stations on Mt Grono & Mt Clerke. In addition Environment Southland is investigating the possibility of co-siting a repeater station on Wednesday Peak with Maritime New Zealand.

It is expected that the initial part of this project, to improve radio reception in the southern fiords, will be completed early in 2014.

*Kevin O'Sullivan, Environment Southland*

## What's happening at the Deep Cove Hostel

At the Deep Cove Hostel the Brasell Point Nature walk introduces children to some of the natural wonders of Fiordland.

The children and their parents are given 'self teaching' work books that guide them to sixteen investigation stations on the track.

The children study the tall canopy rimu and beech trees and the great variety of ferns and other sub-canopy plants. When they reach the rocky outcrop of Brasell Point they have a great view of the headwaters of Deep Cove and the Helena Falls. They are asked to estimate the distance to Secretary Island which is outlined on the horizon and answer questions about the tourist boats and fishing fleet moored in the area.

Often there are resident seals on the rocks and these can be observed at close hand and smelt from quite a distance!

Some 2000 children, teachers and parents visit Deep Cove each year and on completion of the Brasell Point Nature Walk many children say that it's one of their best Deep Cove learning experiences.

*Paul Gay, Deep Cove Education Trust*



Here Emma, Marcus, Annabel, Benjamin, Rebekah and Katie gather with their workbooks at the start of the track. They were on holiday with their parents at Deep Cove.

*Photograph supplied by Paul Gay, Deep Cove Education*

## Biosecurity focus of trip to Doubtful Sound

The Guardians had the opportunity of spending time in Doubtful Sound recently, together with government agency staff, and invited guests when they undertook an overnight charter onboard Real Journeys *The Milford Wanderer*. The charter was partially funded by the prize for winning the Environmental Achiever Award last year which was sponsored by Real Journeys.

The trip was an opportune time to focus on the importance of biosecurity issues for the whole Fiordland Marine Area, particularly as the finding of *Undaria* in Sunday Cove has highlighted how crucial biosecurity issues for the area are. The Guardians commended the work of the *Undaria* response team who have worked so hard and prevented *Undaria* from taking a permanent hold in Sunday Cove. As reported earlier in the newsletter this work is ground breaking and will be a world first if *Undaria* is eliminated from the area. Agency staff also gave presentations of the role of their agency in the management of the FMA.

The Chief Executive Officers of Otago and Southland Regional Councils were invited on the trip and experienced firsthand some of the challenges that could arise with the isolation of this area.

The consensus was that it was definitely a worthwhile exercise where everybody was able to interact and learn from each other without the usual time constraints that are typical of the regular meetings of Guardians and Agency staff. *Alison O'Sullivan, Fiordland Marine Guardians Secretary.*



Sir Alan Mark gives an informative address onboard the *Milford Wanderer*.

*Photo courtesy of Alison O'Sullivan*

## The Future of Gut Hut

Thank you to all of you who agreed to assist Geoff Milne with the ongoing maintenance of the Gut Hut. Geoff is in the process of liaising with DOC concerning this. We'll update you of progress in future newsletters.

**If you would like to help please contact Geoff:**

6 McLew Road, Kennington or

Phone (03) 230-4870

Or mobile 0274 353 191

Email: [g.milner@slingshot.co.nz](mailto:g.milner@slingshot.co.nz)



# Amateur Rock Lobster Rule Changes

Based on recommendations from the Fiordland Marine Guardians, rock lobster amateur fishing rules are set to change in the Fiordland Marine Area from 1 October 2013. The changes are:

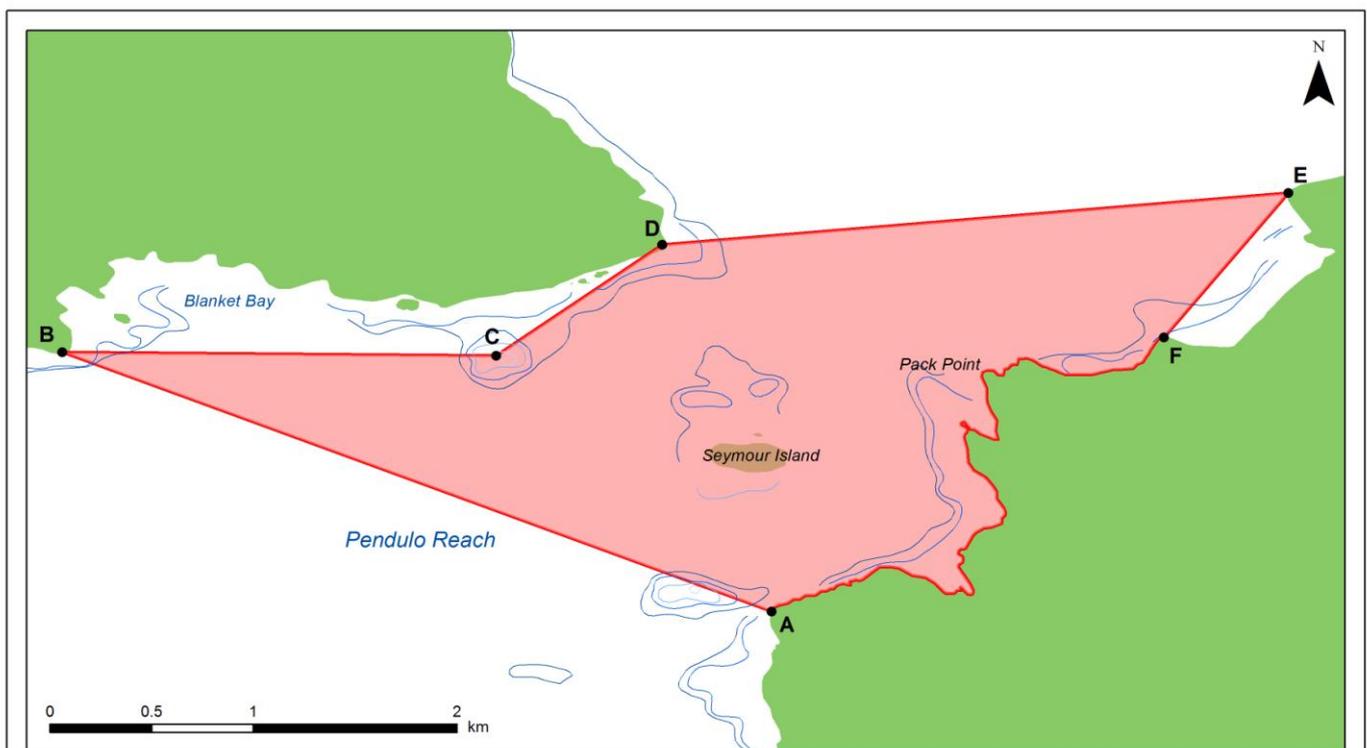
- The maximum daily number of rock lobsters that may be taken or possessed by amateur fishers will increase from 3 to 6 in the internal waters, except for Milford Sound where the maximum will remain at 3.
- Amateur fishers will be able to accumulate up to 15 rock lobsters in the internal waters, except for Milford Sound where an accumulation limit of 3 will remain.
- Amateur fishers will have to maintain a written record of rock lobsters stored and removed from holding pots in the Fiordland Marine Area. This includes the fisher's name, the date the rock lobster was taken, the number of rock lobsters held in each holding pot, the location of each holding pot, and the date and number of rock lobster removed from a holding pot.
- The use or setting of an amateur rock lobster pot or holding pot will be prohibited in the internal waters of Fiordland adjacent to Seymour Island in Pendulo Reach, Doubtful Sound.

The first two changes will allow for greater utilisation opportunities for amateur fishers and are possible because of higher abundance of rock lobster in the area.

Requiring fishers to keep a written record is of assistance for catch identification when multiple fishers use the same holding pot to store their rock lobster catch. This will help ensure compliance with the rules around maximum daily take and accumulation for rock lobster.

The rock lobster pot prohibition in part of Doubtful Sound will help to protect marine life and habitat diversity. In particular, it will help protect significant bottom sill species and biodiversity associated with the habitat in the area.

For further information on the amateur rock lobster rule changes contact the Invercargill Ministry for Primary Industries Office on 03 211 0060



## LEGEND

- |   |                         |
|---|-------------------------|
| <span style="display:inline-block; width:15px; height:10px; background-color:red; border:1px solid black;"></span> Pendulo Reach Amateur Potting Prohibition                      | Depth contours (metres) |
| <span style="display:inline-block; width:10px; height:10px; background-color:lightblue; border:1px solid black;"></span> Coordinates of Pendulo Reach Amateur Potting Prohibition | — 10                    |
|   | — 20                    |
|   | — 30                    |
|   | — 40                    |

## Coordinates

- A. Espinosa Point 45°18.86'S, 167°00.45'E
- B. Quintano Point 45°18.16'S, 166°58.57'E
- C. Omapere Rock 45°18.17'S, 166°59.72'E
- D. Common Head 45°17.87'S, 167°00.16'E
- E. opposite Common Head 45°17.73'S, 167°01.82'E
- F. unnamed point 45°18.12'S, 167°01.49'E

Ministry for Primary Industries  
Manatū Ahu Matua



Ref: 130148  
Date: 08/08/2013  
Projection: WGS84  
Produced by: Geospatial Data Management

This map is intended to be used as a guide only, in conjunction with other data sources and methods, and should only be used for the purpose for which it was developed. Although the information on this map has been prepared with care and in good faith, no guarantee is given that the information is complete, accurate or up-to-date.

## Example Fiordland Marine Area recreational rock lobster written record template

First day of trip	Last day of trip	Landing date	Vessel Name	ACV Operator Number	Vessel Landing location	Page
/ /	/ /	/ /				of

HOLDING POT 1							
Date	Fishers First Name & Surname	Number of rock lobster taken	Number of rock lobster stored in holding pot	Holding pot GPS location or location description	Date	No. of rock lobster removed from holding pot during trip for consumption	Number of rock lobster removed from pot at end of trip
/ /							
HOLDING POT 2							
Date	Fishers First Name & Surname	Number of rock lobster taken	Number of rock lobster stored in holding pot	Holding pot GPS location or location description	Date	Number of rock lobster removed from holding pot during trip for consumption	Number of rock lobster removed from pot at end of trip
/ /							
Name of Vessel Skipper		Signature			Date Signed		
					/ /		

## Want to receive Electronic Copies of Newsletters in the Future?

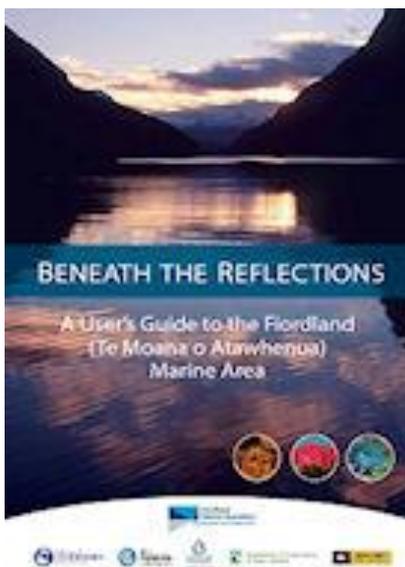
Just let Alison know your email address and you'll receive electronic copies of the newsletter. The benefits are that you'll get your newsletter early and all the photographs will be in full glorious colour as well as being environmentally friendly.

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

## Anything to Contribute?

If you would like to contribute to the newsletter by way of articles, or even comments, please just let Alison know at the above email address.

# DON'T FORGET YOUR COPY OF BENEATH THE REFLECTIONS –



## A User's Guide to the Fiordland (Te Moana o Atawhenua) Marine Area

This is a practical Guide to everyone who visits, or intends to visit the Fiordland Marine Area.

It has all the relevant information pertaining to the area including the history of the area, practical user information, Fisheries information and guidelines, along with a Fiord-by-Fiord guide containing maps of each Sound with navigational information. The book is full of beautiful colour photographs of the area and is a MUST HAVE for all.

Water resistant paper is an added attraction of the User Guide for those people wanting to make full use of all the practical information it contains while in the area.

**Stocks are still available at The Department of Conservation Visitor Centre in Te Anau and at the DOC office in Invercargill. The User Guide will also be available in selected retail outlets in Te Anau, Invercargill, and Gore**

The User Guide is heavily subsidised by the Government Agencies involved and retails for

**the low price of only \$15.00**