Fiordland Marine Guardians
Beneath the Reflections

March 2012

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.

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Successful breeding for Doubtful Sound dolphins

Photograph of Dolphin courtesy of DOC, Te Anau

Doubtful Sound's resident pod of bottlenose dolphins have had the best two breeding seasons for some time.

Over the last two summers, the dolphins have had the most calves surviving for over a decade. This gives the Department of Conservation (DOC), Otago University researchers, and the local tourism industry optimism about their future.

DOC's marine mammal ranger Kath Blakemore said alarm has been raised about the rapid rate of decline this well-researched population has been undergoing in recent years. Calf survival rates have been low since around 2002. This is more critical as research shows that this small group of dolphins exists separately from others, living almost exclusively within Doubtful Sound.

Of the sixteen calves that have been born over the last two summers, 11 of these have survived so far, and another three have been born so far this summer. Otago University researcher, Shaun Henderson said that in 20 years of the University's research there has only been one other year with more calves born. If most of these calves survive it will be a significant boost to the population.
"While we don't know the reason for this increased rate of births, everyone involved is hoping this trend continues," Mr Henderson said.

Since 2009, DOC has been working with boat operators to implement a set of rules for vessel use in Doubtful Sound to minimise any potential impacts from the dolphins interacting with boats. In addition, a research programme has begun to explore some of the other potential causes of the decline, such as genetics, habitat modification, broad-scale climate changes and diet. Other research being carried out by Otago University includes investigating how the dolphins behaviour and communication changes when boats are present, and looking at the condition of the dolphins in Doubtful Sound versus Dusky Sound.

The commitment from the Doubtful Sound tourism industry to work alongside DOC and others to protect these dolphins has been encouraging. All boat operators, private or commercial, must be familiar with the protection guidelines before heading into Doubtful Sound. These are readily available from the DOC website or your local DOC office. The guidelines aim to reduce the amount of time dolphins spend interacting with boats so they can spend more time doing what dolphins should naturally do.

Kath Blakemore, DOC, Te Anau

A sample of the unique habitat off Seymour Island taken during the ROV survey
Photo courtesy of Environment Southland

Cruise Ship Anchoring Survey Update

Following last year's side scan sonar survey, which indicated areas for further study to determine if some are suitable or unsuitable for anchoring, a second survey using a remotely operated underwater vehicle (ROV) was initiated.

This survey was carried out in mid-February, and, in summary:

- 42 surveys were carried out in Dusky, Breaksea, Thompson, Bradshaw and Doubtful Sounds;
- the areas surveyed, using the ROV, were predominantly anchorage sites that had been identified, in the sonar survey, as likely to contain sensitive organisms, or areas identified as possible alternate anchorages;
- other anchorage areas were surveyed as well, as time permitted, such as in Hall Arm, First Arm, Precipice Cove (including the Real Journeys' mooring), and some of the Doubtful Sound marine reserves. In Pickersgill Harbour a small cruise ship was at anchor so we were able to survey the chain and anchor, as well as the surrounding area;
- smaller cruise ships are anchoring off Blanket Bay and Seymour Island, and there was evidence of recent drag marks. This is an area that should be protected in some form, as it contains a considerable expanse of sensitive organisms, such as sea pens, and red and black coral that supports abundant marine life;
- other potential anchorage areas have been identified, such as in Supper Cove in Dusky Sound, and off Macdonell Island in Bradshaw Sound. These are in the Deed of Agreement "Red Zones" and consequently are unavailable to cruise ships; but they are largely mud and sand bottoms with little in the way of sensitive organisms.

The Council may be able to use the Deed of Agreement between Environment Southland and the Cruise Ship Industry to prohibit cruise ship anchoring in varous identified locations, although off Seymour Island all anchoring should be prohibited. Currently there are no mechanisms in place to enforce a full prohibition. We will consider providing other anchorages to cruise ships to replace prohibited areas too.
Kevin O'Sullivan, Maritime Manager/Harbourmaster, Environment Southland

Have you considered being a Fiordland Marine Guardian?

On behalf of the Minister for the Environment, the Ministry for the Environment will be running an open nominations process to identify potential new members. Nominations will open in the next few months (most likely in May). The Fiordland Marine Guardians (the Guardians) are appointed by the Minister for the Environment for a maximum of four years (although in some instances more than one term can be served). The Guardians need to have a mix of knowledge and experience in relation to the Fiordland Marine Area (FMA). Members come from a range of

backgrounds including recreational and commercial stakeholders. However, if appointed as a Guardian, you will not represent a particular interest group. Five members must be from the Otago or Southland regions.

The role of the Guardians is defined in the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005. The key functions can be summarised as to:

- advise and make recommendations to the Government on the management of the FMA
- facilitate and promote the integrated management of the FMA
- obtain, share, and monitor information on the state of the FMA
- assist the management agencies to prepare and disseminate information, monitor the state of the marine environment and biological diversity and plan for the enforcement of, and compliance with, the management of the FMA.

The Guardians receive a small honorarium payment for their time. Travel expenses are also covered to attend meetings.
To register your interest in receiving further information, please email info@fmg.org.nz
Jacqui Yeates, MfE, Wellington

Historic whaling in Fiordland

The Cuttle Cove Whaling Station was established in 1829 in Preservation Inlet, to take advantage of the migration of southern right whales/Tohorā from the southern ocean to warmer waters. This shore based whaling station was one of the first in New Zealand, and was set up to take oil, as opposed to just baleen. The station was managed by Peter Williams on behalf of the owners, Sydney merchants Bunn and Company. In 1829 the station produced 120 'tuns' of oil, a 'tun' being estimated at 252 gallons, or roughly a ton in weight.

Photograph of whale in the Fiordland Marine Area.
Photograph courtesy of DOC Te Anau

In early 1836 the Station was taken over by Johnny Jones, and early in that year, 39 men were working at the station. When the station was abandoned at the end of 1836, production was still holding up, with 45 whales caught and 170 tuns of oil produced. It is possible that the station was abandoned due to an increase in bay whaling, where whales were hunted inshore from boats anchored in bays.

A brass plaque on a large rock at the northern end of the beach commemorates the Cuttle Cove Whaling Station, as very little of it remains.
Kath Blakemore, DOC, Te Anau

Japanese seaweed (*Undaria*) still confined to Sunday Cove, Breaksea Sound

Since early 2010, the Ministry of Agriculture and Forestry (MAF), Department of Conservation, and Environment Southland have joined forces on an attempt to eliminate the marine pest seaweed, *Undaria pinnatifida,* (*Undaria*) from a small isolated area in Sunday Cove, Breaksea Sound.

Undaria is a fast-growing seaweed that can spread rapidly, displacing native species, and having major impacts on marine ecosystems. It could have devastating impacts on the unique Fiordland marine environment.

Divers vigilantly searching for *Undaria* in Sunday Cove
Photo: Department of Conservation

The joint-agency response to this marine pest is ongoing and, as expected, *Undaria* specimens are still being found during regular monthly surveys. Recent surveys have indicated that the number of plants being found is decreasing but the hard work is still far from over. Other strategies such as chemical warfare in the form of
chlorine, and kina acting as biocontrol agents, have been successfully employed to destroy the plant's microscopic life stages which can persist for up to two years.

The Fiordland Marine Guardians are fully supportive of the programme. "This find reinforces the need for everyone entering the Fiordland Marine Area to take care not to introduce or spread marine pests. It is vital that that the owners and operators of boats entering Fiordland ensure their vessel hulls are clean and thoroughly antifouled, and that all marine equipment such as ropes, mooring lines, pots, buoys, fishing and dive gear are clean and dry," says Malcolm Lawson, the Guardian's chairperson.

Fiordland has a special and unique marine environment and a lot of effort by various agencies is going into protecting the area from the introduction of marine pest species.

What can vessel operators do?

If you own or operate a vessel and are about to visit the fiords, or are about to relocate marine equipment such as buoys or ropes, please:

- ***check*** your vessel's hull before entering Fiordland and if it is fouled, ***clean it***;
- ***dispose*** of any debris removed from the hull on land (i.e., prevent it getting back into the water);
- ***check, clean and thoroughly*** **dry** any mooring lines and buoys, kayaks and any other marine equipment before using them in Fiordland waters. If lines or buoys cannot be dried, disinfect them before coming into Fiordland waters from areas known to be affected with marine pests (such as Bluff and Stewart Island/Rakiura). Soaking equipment in bleach overnight should be sufficient; and
- ***remove*** all marine debris such as seaweeds from dive gear and ***rinse and soak*** gear in fresh water. Preferably rinse with a wetsuit cleaning product, and allow to ***air dry*** for a few days where possible.

As well as helping keep the fiords free of pests, regular cleaning of your hull will enable your vessel to obtain maximum speed and reduce running costs. If your vessel is moored in either Bluff or Stewart Island it should be subject to a free monthly hull inspection by Young Fishing Ltd (under contract to MAF) for the presence or absence of marine pests. You can contact Young Fishing Ltd directly (Paul Young 027 680 1258) if would like an inspection prior to your visit to Fiordland. These free inspections also determine the overall cleanliness of your hull and its anti foul condition.

We need your help to keep harmful marine pests out of our coastal waters. If you are visiting Fiordland, particularly to dive, please keep watch for any marine life that appears out of the ordinary to you. If you spot any anything you consider unusual, please carefully note its location, and phone MAF's free phone as soon as possible: **0800 80 99 66.**
Jennnie Brunton, MAF, Wellington

US Visit – Cruise Shipping

On behalf of Environment Southland I was invited by Cruise New Zealand to participate in the annual visit to US cruise ship companies. Cruise ships visiting Southland provide a significant source of revenue for Environment Southland's coastal work, through the Marine Fee, and it's important to maintain closer links with the operators, not just the New Zealand agents. It is equally important that cruise ship operators understand the details of the Deed of Agreement between Environment Southland and the Cruise Ship Industry, and their responsibilities, to ensure their ships have minimal detrimental effects on our environment.

The visit to the US from 3 March to 16 March included meetings in southern California, Seattle and Florida:

Santa Clarita (California):	Princess Cruises
Seattle:	Holland America Line
	Seabourn Cruise Line Ltd
Miami/Fort Lauderdale:	Royal Caribbean Cruise Line
	Prestige Cruise Holdings – owners of Oceania and Regent Seven Seas
	Carnival Cruise Lines
	Residensea

The principal issues discussed with cruise ship operators were:
Updates to the Deed of Agreement, including a prohibition on anchoring in some areas;
Planning for the next generation of cruise ships – the 140,000GT *Voyager of the Seas* and the 150,000GT *Queen Mary 2* are coming next season;
Emissions and discharges, including the replacement of heavy fuel oils with marine gas oil, in the fiords, to minimise visible air emissions;
Biosecurity issues, including hull fouling;
Ship emergency response plans – ensuring each ship lodges a copy, with Environment Southland, that is easily accessible in an emergency;
Stewart Island - planning for ships greater than 70,000GT, and considering an increase in the numbers of ships coming to the Island;
Carriage of observers in the fiords;
Other issues that have arisen from the loss of the *Costa Concordia.*

Two Cruise Ships pass while in Thompson Sound.
Photo courtesy of Environment Southland

Two issues that were of particular interest to the cruise ship companies were the introduction of a requirement to use marine gas oil (MGO) in the fiords, rather than the cheaper heavy fuel oils (HFO) currently used by many ships, and the Import Health Standard (IHS) for Vessel Biofouling.

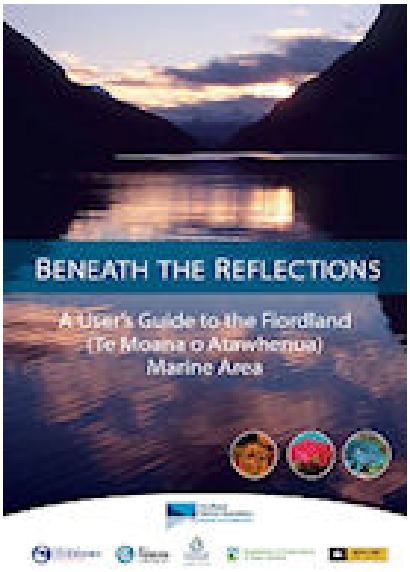
Our goal is to reduce visible smoke emission in the fiords, and it will be left to the ships how they achieve this, but the simplest process will be to substitute MGO for HFO. However, this will substantially increase costs for the period that the ships are passing through Fiordland; ships that use smokestack scrubbers, to remove sulphur, may be able to reduce or eliminate visible emissions while still using HFO. So any change that we introduce will have to be flexible enough to permit technology that will produce the effects we are looking for, ensuring that the outcome is a reduction in air emissions.

The IHS for Vessel Biofouling will be in place in 2016 and the companies will have to have plans and procedures in place before this to ensure there are no hold ups in port. This is an issue for all of New Zealand, and for all shipping coming to New Zealand, but it is particularly important that cruise ships do not introduce any unwanted organisms to Fiordland.
Kevin O'Sullivan, Maritime Manager, Environment Southland

From the Editor

I do hope you have enjoyed this newsletter. We really appreciate your feedback and would welcome your ideas or suggestions for future newsletters.
Alison O'Sullivan

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