Fiordland Marine Guardians
Beneath the Reflections

December 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.

Humpback whale tail flukes can be used to identify individuals. Photograph courtesy of Chloe Corne

The Humpback Whale Migration

The spring season of 2014 has seen a large number of humpback whale sightings around the Fiordland coast. At this time of year whales are heading south to their Antarctic feeding grounds from their summer breeding grounds in the tropics.

Many reports have been received since October of both small and large groups of humpback whales travelling and feeding off the Fiordland coast. Reports have ranged in area from Milford Sound/Piopiotahi down to Dusky/Breaksea Sound, encompassing both outer coast waters and some inner fiord areas in Dusky Sound.

Humpback whales were sighted daily by the dolphin monitoring team in Dusky and Breaksea Sounds during the October monitoring trip, with feeding behaviour observed in and around Five Fingers Marine Reserve, Anchor Island and surrounds, and the Acheron

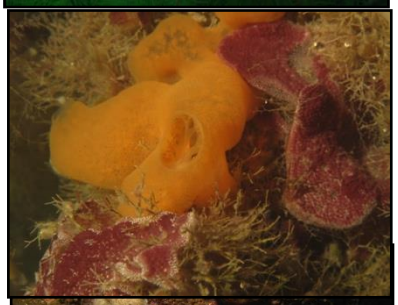
Travelling Humpback Whales – *Photograph courtesy of Chloe Corne.*

Photographs of their unique tail flukes and dorsal fins were obtained for the majority of the whales encountered, which enables researchers to identify individuals. By comparing photographs from previous years, one individual has been identified as having visited Fiordland waters every year since 2012.

Chloe Corne, DOC Te Anau

If you see marine mammals whilst out in Fiordland, please contact Chloe or Richard at the Department of Conservation on 03 249 0200, or email clcorne@doc.govt.nz with ***Date, Location*** *and* ***Species****.*

DOC/NIWA Biosystematics December 2014



The Department of Conservation (DOC) have recently received the finished biosystematics report from NIWA that documents the species richness of Sunday Cove, Breaksea Sound.

In July 2014 three specialist NIWA taxonomists conducted collections of algae, ascidians and sponges in Sunday Cove to create a comprehensive atlas of what is found there.

Sunday Cove was chosen because of the work that is currently underway by Environment Southland (ES), Ministry for Primary Industries (MPI) and DOC, to rid the area of the invasive seaweed *Undaria pinnatifida*. It was thought that should the eradication attempt not be successful and Undaria starts to spread, it is really important to have some idea of what might happen to the biodiversity of the area and whether it changes or not. Also, by having a comprehensive list of species available any other unwanted pest or new species can be referenced to the atlas.

A total of 131 species were collected and photographed from the Sunday Cove area. Of the samples collected; there were 24 ascidian, 50 sponge species and 57 algal species. Many of the collections are undescribed, potentially new species and many others have not been found so far to the South.

DOC see the research as a vital step in understanding the flora and fauna of a small part of the fiords and as a live document, any subsequent species found will be added to the list. Hopefully in the future additional groups of species such as bryozoans can be collected.
Richard Kinsey, DOC Te Anau

Photographs courtesy of DOC and NIWA

Thanks for the Feed back

A big thank you for all your positive feedback about our newsletter. A lot more people are choosing to receive an electronic copy of the newsletter and love the colour photography this option offers. It's also great to hear comments on the various articles that are presented. Please remember if you would like to be added to the electronic list for the newsletter just let me know and I will add you to the list and send out an electronic copy of the current newsletter so you can see what you've been missing!
My email is: info@fmg.org.nz
Alison O'Sullivan
FMG Secretary/Admin

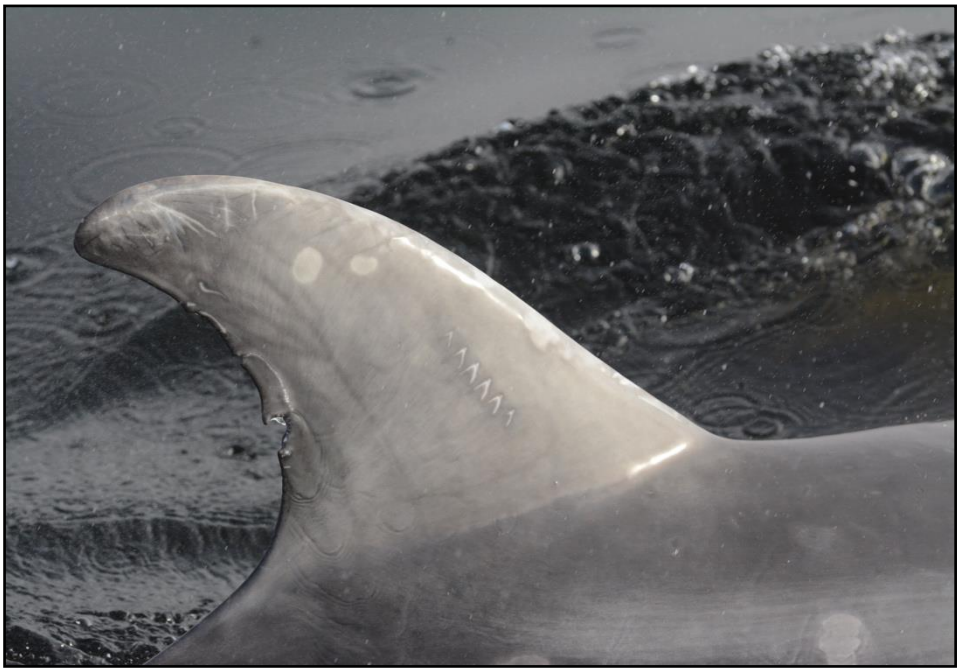
Dolphin Monitoring

Long term monitoring of two of Fiordland's bottlenose dolphin populations in Doubtful Sound, and Dusky/Breaksea Sounds reveal that both populations are slowly increasing. A team from DOC Te Anau and Otago University run three monitoring trips per area every year, with the trips being timed around the start and end of the calving period in spring/summer, and a winter trip to assess survival over the colder months. The trips are aimed at assessing abundance, adult and calf survival and mortality, and long term distribution patterns using a non-invasive technique known as photo identification.

Bottlenose Dolphin calves socializing, Vancouver Arm, Dusky Sound.
Photograph courtesy of David Johnston, Otago University

A dolphin's dorsal fin is as unique as a human fingerprint, collecting scars and notches from social interactions over the course of their lifetime. Photo identification aims to get a good photo from a 90° angle, which can then be compared against a catalogue, and changes in individual markings can be tracked over time.

There are currently 71 individuals in the Doubtful Sound bottlenose dolphin population. This is the second highest recorded abundance since monitoring began in the early 1990's; the highest recorded abundance for this population was 75 in 1995/96. Three out of the four calves born over the summer of 2013/14 are still alive, with no sightings at present of new calves for this summer period.



Dorsal fin photos are used to identify individuals.
Photograph courtesy of David Johnston, Otago University

In July 2014, seven adults from the Doubtful Sound population were sighted in Dusky Sound not far from a pod of resident Dusky Sound bottlenose dolphins. This is the first confirmed sighting of resident Doubtful Sound dolphins in Dusky Sound since 2003.

The resident bottlenose dolphin population in Dusky Sound now numbers a record high of 131 individuals since monitoring began in 2007.

The population increase is due mostly to the 2013/14 breeding season, which saw a record number of 14 calves born in one summer. At least 11 of the 14 calves survived through the winter. The most recent monitoring trip in October recorded three new calves for the current summer season.

Chloe Corne, DOC Te Anau.

Rock Lobster Rules Reminder

Maximum Daily Limit		
Fiordland Marine Area: *(excluding Milford Sound internal waters)*	**6** per person fishing	Accumulation applies
Milford Sound internal waters	**3** per person fishing	**No** accumulation applies

Limits on Accumulation
Within the Fiordland Marine Area a limited provision exists to allow accumulated rock lobsters taken over 3 or more days only if:
➢ Not more than 15 rock lobsters are possessed; and
➢ The daily limit of 6 rock lobsters was not exceeded on any day; and
➢ Not more than 3 rock lobsters were taken from within the Milford Sound internal waters of Fiordland; and
➢ Rock lobsters held on board or landed from a vessel (including those removed from a holding pot) are held in labelled containers that: o Contain only rock lobsters taken in a single day; and o Are clearly labelled to record: *i. the individual fisher's full name; and* *ii. the date taken by the fisher; and* *iii. the number of rock lobsters in the container; and* iv. *the number (if any) taken from within the Milford Sound internal waters of Fiordland.*
➢ For rock lobsters held temporarily in a holding pot at sea, the fisher maintains and is able to immediately produce for fishery officer inspection, a legible written record showing: *i. the individual fisher's full name; and* *ii. the date taken by the fisher; and* *iii. the number of rock lobster in each holding pot, including numbers of rock lobsters taken from within the Milford Sound internal waters of Fiordland; and* *iv. GPS co-ordinates or physical location or each holding pot; and* *v. the date the fisher removed rock lobsters from each holding pot; and* *vi. the number of rock lobsters removed from each holding pot.*

NB: Fishers need to be aware that there are also other regulations relating to rock lobster fishing in the Fiordland Marine Area. Full details are available at www.mpi.govt.nz or contact a fishery officer at the nearest MPI office.

Travelling to Fiordland this summer?

Fiordland's marine waters are an environmental treasure and provide a fantastic boating and diving opportunities. But they're vulnerable to the introduction of harmful marine pests and diseases hitchhiking on vessel hulls and marine equipment.

Photograph courtesy of Jonathan Davies

Already an area in the remote Sunday Cove, Breaksea Sound has been affected, with the discovery of a population of the invasive pest seaweed *Undaria.* A huge effort by the Ministry for Primary Industries, Department of Conservation, Environment Southland, and the Fiordland Marine Guardians is currently underway to get rid of this pest; we don't want any further situations like this to threaten the area.

If you're planning a trip to Fiordland this summer, help protect this precious place from further threats:

- Check your vessel's hull before travel, and if it's fouled, clean it.
- Ensure your antifouling paint is thoroughly applied and effective.
- Check, clean and dry any mooring lines and buoys, kayaks and any other marine equipment before using in Fiordland's waters.
- Remove all marine debris such as weeds from diving gear and rinse and soak gear in fresh water. Allow to air dry for a few days if possible.
- Keep an eye out for any unusual marine life or events such as mass deaths of fish. Note the location, take a sample if you can and immediately call MPI's freephone **0800 80 99 66**

It is hoped that soon Fiordland will once again be free of *Undaria*. This will be significant for the area's unique marine biodiversity, as well as being very important in protecting its commercial, recreational and cultural uses.

Full information is at www.biosecurity.govt.nz/fiordland

Jen Brunton, MPI, Wellington

The Fiordland Marine Guardians and agency staff would like to wish you a safe and happy holiday season and thank you for your continued support .