HEADLINE 🕇

Observer update

Government fisheries observers work year-round in different areas. However, summer is always the busiest time for inshore observers as the settled weather means better fishing for all. In recent months, what's been going on? MPI updates us.

In terms of Māui dolphin work, MPI is still covering 100% of set net effort for vessels fishing between 2 and 7 nautical miles around Taranaki. This has seen more than 1,000 days of coverage achieved since July 2012. During this period no Māui dolphins have been sighted. MPI is also ramping up to 50% coverage of the trawl fleet operating within 2 to 7 nautical miles between Maunganui Bluff and Pariokariwa Point on the west coast of the North Island.

FMA1 is also very busy with 50% of the Snapper 1 trawl fleet currently being covered as well as some limited coverage of the Danish seine fleet. Seabird liaison officers (see the last issue of *Bycatch Bylines*) have been working their way around snapper and bluenose bottom longliners and fisheries observers will be placed on bluenose vessels shortly.

In the South Island, MPI has been covering set net vessels fishing out of Karitane, Bluff and Riverton with coverage continuing to move around vessels until the end of June.

MPI staff are regularly asked what happens to the data that observers collect and why they have to return to fisheries year after year. Observer data is sent to NIWA and compiled into a database. This data is then used by MPI and DOC to determine the total number of captures of seabirds and marine mammals as well as informing fisheries management on issues such as discards. Because of the low level of observer coverage on the inshore fleet, there is a high level of

uncertainty around protected species captures. This leads to a higher risk ratio for some species regarding their interactions with fisheries. Long story short: the more observer coverage provided means better information to manage protected species bycatch risks and keep everyone fishing.

As an aside, it would appear that times are changing with both snapper and kingfish catches being reported off Southland. This is the first time that one skipper had seen either species in more than 20 years of fishing in the area.



An adult and juvenile Māui dolphin: the closest most of us will get to this endangered marine mammal. *Photo: Martin Stanley/DOC.*

WHAT'S UP?

Divide and conquer

For many years, commercial fishers have been in the spotlight because of seabird captures on fishing gear. However, there is increasing attention on seabird catch in recreational fisheries. With support from new quarters, it's a great time to divide and conquer the bycatch problem.

It's not news that recreational fishers sometimes catch seabirds. However, the importance of seabird catch in recreational fisheries is increasingly being recognised. Putting its money where its mouth is,

Forest and Bird is funding a 1-year liaison officer position to work with recreational charter boat operators on the management and prevention of seabird catch. Seabirds like black petrels and flesh-footed shearwaters are amongst the potential beneficiaries of this work that recognises a shared responsibility for seabird-friendly fishing.



The prize for a day of (hopefully seabird-friendly) recreational fishing. *Photo: J. Pierre.*

WHAT THE FAQ?!

Storm in a tea cup?

The New Zealand storm petrel was presumed extinct until 2003. Its rediscovery at sea off the Coromandel Peninsula caused a huge flap, and work is ongoing to uncover its secrets. So why such a large fuss over such a small bird?

 New Zealand storm petrels are about the size of a sparrow and weigh only 35 g. Yet, they spend most of their lives at sea.



The New Zealand storm petrel – it is so small, it could almost fit in a tea cup.

Photo: Aviceda, CC by 3.0.

- Their breeding site was only discovered in 2013, on Te Hauturu o Toi/ Little Barrier Island.
- They lay one egg per year in a nest burrow.
- New Zealand storm petrels tend to occur in northern New Zealand waters. Their distribution outside New Zealand is poorly known.
- They were presumed extinct for more than 100 years.

THE BIG PICTURE

A summer of sea lions

New Zealand sea lions are classified as 'nationally critical', so it's no wonder they get so much attention. A lot happens over summer for sea lions, and sea lion researchers. How did the past summer stack up for this marine mammal?

New Zealand sea lions come ashore to have their pups in a few places around the New Zealand coast and subantarctic islands. The Auckland Islands and Campbell Island/Motu Ihupuku are the main breeding areas, while much smaller numbers of sea lions have pups on Otago Peninsula and Stewart Island/Rakiura.

In the past, most attention has been focused on the Auckland Islands colonies of sea lions, and their interactions with trawl fisheries nearby, especially those targeting squid. While around 80% of New Zealand sea lions make the Auckland Islands their summer home, the other 20% are still very important. Consequently, the sea lions breeding on Campbell Island/Motu Ihupuku came under the spotlight this past summer, with research supported by the Deepwater Group (DWG), MPI, NIWA and DOC. NIWA and DOC came together to find out where the sea lions on Campbell Island go at sea – more on that in another newsletter. DWG and MPI focused on the population of sea lions at Campbell – in particular, how many pups were born there.

The news from Campbell was good and bad. The good news is that the number of pups born at Campbell Island this past summer was very similar to the number born in 2009/10 – around 668 pups, compared to 681 in 2009/10. It's great pup numbers haven't gone down.



The New Zealand sea lion, focus of much research attention this summer. Photo: Karora

The bad news is that as in the 2009/10 season, around 50% of pups died at the Campbell colony. This was due to a number of causes, including pups getting trapped in mud bogs, streams and holes, and squashed by aggressive males. Unfortunately, this is nature. But, the research team at Campbell was able to rescue more than 60 pups. They also installed safety ramps to help pups escape places that would have otherwise been their doom. When a species is nationally critical, creative conservation is called for!

So why do pup numbers matter for fisheries management? Sea lions are marine animals. Therefore, it is very hard to estimate population size from counting adults – they are at sea most of the time. Counting pups provides an alternative method. This information can then be used to investigate whether any fishing-related mortalities are having population-level impacts. Knowing this is vital for ensuring New Zealand's fisheries are sustainable.

To hear what home for a New Zealand sea lion sounds like, check out the link in 'Want to know more?'. It's just like being there, except for the smell ...

WORLD WATCH

Progress at Tokyo tuna meeting

The idea of sitting in a meeting room for days talking about tuna management issues might make fishermen squirm. However, for a highly migratory stock like southern bluefin tuna, getting all fishing nations on the same page is essential for good management and a sustainable fishery. So what kind of progress happened in Tokyo?

New Zealand is a Member of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT). Other members include Australia, South Korea, Japan, Indonesia and the fishing entity of Taiwan. As well as managing the tuna themselves, CCSBT has responsibilities for so-called 'ecologically-related species' (ERS), for example, seabirds, turtles and sharks. These species were the focus of the meeting in Tokyo that New Zealand representatives attended in March.

This was the first ERS meeting in 2 years and an obvious opportunity to progress key pieces of work in this field, such as a southern hemisphere porbeagle shark stock status assessment. This latest project will be led by the ABNJ tuna project and involves inputs from a wide number of countries. (ABNJ 'Areas Beyond National Jurisdiction', mean the oceans outside Exclusive Economic Zones, also known as the high seas). Obtaining commitments from Members to input into this process was a significant and necessary achievement during the ERS meeting. New Zealand continues to be a strong advocate at ERS meetings and presented information to other members on a number of topics including the seabird risk assessment and our recent line weighting trials. Members were generally supportive of the information provided by New Zealand and there is growing acceptance of the risk assessment framework.

One of the key outcomes of the meeting was an agreement among Members to collect and make available set-by-set observer data on the type of mitigation used on longline trips. This information will allow scientists to better understand the risks to seabird populations and will provide valuable input into the seabird risk assessment work. The move also highlights the growing international pressure on commercial operators to comply with mitigation requirements. Generally the meeting was quite positive with Members showing a willingness to cooperate and compromise in the interests of improving bycatch management in this fishery.



Lumo leads: the focus of some of the New Zealand work discussed at the CCSBT ERS meeting in Tokyo. *Photo: D. Goad.*

WANT TO KNOW MORE?

- The Big Picture: What home sounds like for New Zealand sea lions: http://tinyurl.com/pun9lcu.
- World Watch: Read more about the ABNJ tuna project at: http://www.thegef.org/gef/ABNJ and CCSBT at http://www.ccsbt.org/site/.



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