BYCATCH BYLINES

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HEADLINE

Future of Our Fisheries

While some elements of our fisheries management regime may be leading edge, there is always room for improvement. But how might this happen? Making fisheries management better is the focus of MPI's Future of Our Fisheries consultation, which is now underway.

The Future of Our Fisheries covers three main areas:

An Integrated Electronic Monitoring and Reporting System (IEMRS)

In the past year, both the Minister for Primary Industries and MPI staff have talked about IEMRS. This programme proposes mandatory:

- electronic catch reporting (including protected species captures) for all commercial fishing permit holders from October 2017
- automated reporting of fishing activity locations (e.g. using VMS), for all commercial fishing permit holders from October 2017, and
- automated camera monitoring of fishing activities on commercial vessels, phased in from October 2018.

The purpose of IEMRS is to provide significantly better information on commercial fishing activity, faster than this information is now available. It will serve to resolve many existing criticisms of the commercial sector, such as those that come out in the media. It will also show where industry is doing things well, and better enable individual accountability. See further on in this issue for more about IEMRS.

Enabling innovative trawl technology

This involves reviewing existing regulations around trawl nets, which are quite prescriptive. As a result, the development and use of innovative trawl gears is problematic. MPI would like to address this by amending regulations to allow the use of approved innovative trawl gear.

Cameras are a key part of systems proposed for monitoring commercial fisheries. *Photo: www.st.nmfs.noaa.gov/advanced-technology/electronic-monitoring/index*

Fisheries management system review

As part of an ongoing work plan, MPI has developed three proposals for consultation this year relating to:

- maximising value from our fisheries
- better fisheries information, and
- agile and responsive decision-making.

The scope of these programmes includes protected species but is also much wider. There will be more opportunities to provide feedback as MPI's approach develops over time.

Consultation on the proposals this year includes port meetings around the country. To have your say, follow the link in *Want to know more?*

WHAT'S UP?

Royalcam is back

The lives and loves of the northern royal albatross are once again in the spotlight. Taiaroa Head's #Royalcam is focused on a new set of stars for 2016/17.

- Royalcam is a webcam that will track the trials and tribulations of a northern royal albatross family throughout the upcoming breeding season. They live on Taiaroa Head, near Dunedin – the only mainland breeding colony of albatross in the world.
- About 80 birds have returned to the colony this breeding season.
- Last year, Royalcam attracted hundreds of thousands of views around the world, for around 5 million minutes of viewing time. This is clearly riveting stuff!
- Click the link in *Want to know more?* for some real reality TV.

A northern royal albatross. *Photo: XLerate at the English language Wikipedia, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=2878116*

WHAT THE FAQ?!

What was Flipper?

Anyone who remembers TV and movies from the 1960s or 1990s will remember Flipper. What sort of dolphin was Flipper and does she have a counterpart down under?

- Flipper was a bottlenose dolphin. Bottlenose dolphins occur widely around the world, and in three main places here – Fiordland, the Bay of Islands, and around the top of the South Island.
- Bottlenose dolphins are smart. They use tools in their daily lives and have very advanced communication systems.

A bottlenose dolphin. *Photo: NASAs, http://mediaarchive.ksc.nasa.gov/detail.cfm?mediaid=21807*

- Sharks and orca are predators of this dolphin. Many bottlenose dolphins have scars as evidence of such encounters.
- Bottlenose dolphins that became world famous in New Zealand include Moko (Bay of Plenty, 2000s) and Opo (Hokianga Harbour, 1950s).

THE BIG PICTURE

Eyes on IEMRS

It's more than a year since IEMRS was first mentioned, and MPI has now released information about how this proposed system might progress. How do the benefits of IEMRS relate to protected species interactions with commercial fisheries?

IEMRS is MPI's proposed Integrated Electronic Monitoring and Reporting System. In short, IEMRS as proposed by MPI includes:

- electronic commercial fisheries catch and effort reporting
- automated reporting of commercial fishing locations
- automated camera monitoring of commercial fishing activities.

There are clear pros and cons for industry in MPI's proposal, and a lot still to be resolved. However, the benefits of the proposed system include resolving issues with observer placements, recognising good performance and future-proofing market access for our wild-caught seafood.

The black petrel. For sceptics of the seabird risk assessment, IEMRS will help. *Photo: DOC*

Observer coverage

In inshore fisheries in particular, accommodating observers on small vessels in very close quarters can be tough. Observer placements may require dropping a crew member. Observers also eat, which is a cost concern for some operators.

One consequence of all this is that for protected species, bycatch information is often not good enough to meet management needs. For example, bycatch estimates for threatened seabirds and dolphins are hamstrung by low levels of monitoring information. Camera-based monitoring proposed under IEMRS addresses these issues. It provides for better monitoring coverage with less inconvenience to operators.

Individual accountability

Major bycatch events can highlight issues with compliance or vessel operations. However, it is often unknown how extensive such issues are among fleets. In the past, this situation has led to regulations being brought in across a fishery and a lot of disgruntled operators! Under IEMRS, government would have the information needed to recognise good performance, and identify specifically where issues remain. This enables targeted management and gives government a new ability to decide if blanket regulations really are the answer.

Market access

In the past, some New Zealand fisheries have been unable to obtain sustainability certifications like Marine Stewardship Council because of inadequate information (including on protected species interactions). In future, having robust information will be a requirement for access to some markets. In a few years, seafood will not be accepted into the USA if import provisions under their Marine Mammals Protection Act are not met. IEMRS can provide the information necessary to meet these requirements, helping secure market access for New Zealand seafood.

For more on the IEMRS proposal, see the link to the Future of Our Fisheries, in *Want to know more?*

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WORLD WATCH

Ghostbusters

Gear that gets lost, or can't safely be recovered, is an inevitable part of commercial fishing. However, what happens to that gear? How much might be out there and is it good for anything?

In October and November, Australia's Maritime Border Command removed around six tonnes of lost or abandoned fishing gear from the oceans around our nearest neighbour. This adds to almost 25 tonnes of so-called 'ghost' fishing nets already retrieved in 2016. From 2004 – 2012, more than 12,000 ghost nets were recovered in Australia. That's a lot of gear, but it's still just part of the picture. It has been estimated that globally, 640,000 tonnes of fishing gear is lost per year.

It's called ghost gear in part because it keeps on fishing, but what does that mean? Depending on the gear (e.g. traps, pots, nets, hooks), it can mean otherwise economically valuable fish are lost from commercial fisheries. In shared fisheries, ghost gear can also cost recreational fishers their catch. As well as fish, ghost gear keeps catching protected species (e.g. turtles, sharks, dolphins) and it can cause damage to the sea floor. As if all that wasn't enough, ghost gear can also be a navigational hazard. For example, it entwines around vessel propellers. As well as the annoyance and cost in dealing with entanglements, there are cases of ghost fishing gear contributing to vessels becoming disabled and sinking.

Nylon fibre made from ghost fishing gear. It could be in your next pair of Speedos. *Photo: https://twitter.com/gibonazzi*

And what about solutions? There are several. Minimising gear loss and maximising gear recovery where and when losses occur, are obvious. Cleaning up ghost gear that washes up on the shore is important too. While picking up rubbish is always a good thing to do, if stronger motivation is needed, money talks. So, quiz question: what kinds of products can be made with ghost fishing gear? Skateboards? Carpets? Swimsuits? Jackets? Sneakers? Socks? Answer: All of them. Innovative manufacturers around the world are grabbing ghost gear as a valuable and cost effective material for their products. Cavalier Bremworth – a household name in the carpet business here – is one of them. There are even celebrities taking on the ghost gear challenge, like US surfing champion Kelly Slater. His clothing line of shorts, t-shirts and jackets is made in part from ghost fishing gear.

Addressing the issue of ghost gear is not just for environmentalists. It's a win for all – consumers, manufacturers, mariners, fishers, and ocean ecosystems.

WANT TO KNOW MORE?

- *Headline:* For more on the Future of Our Fisheries: *https://t.co/qxG6ITWVXe.*
- *What's up?:* Royalcam is at: *www.doc.govt.nz/royalcam*

FEEDBACK

To submit feedback or questions, please email: jpecnz@gmail.com

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