Department of Conservation
Te Papa Atawhai

Meeting:	Conservation Services Programme Technical Working Group
Date:	20 March 2024
Time:	9:30 am – 11.00 am
Place:	Microsoft Teams Meeting
Chair:	Kris Ramm (Manager, Marine Bycatch and Threats team)

Attendees:

Lyndsey Holland, Hollie McGovern, Kris Ramm, Jordi Tablada, Mike Ogle, Karen Middlemiss, Katie Clemens-Seely (DOC), David Middleton (Pisces Research), Chelsea McGaw (Forest & Bird), Simon Childerhouse (ELI), Heather Benko, Greg Lydon, Mark Geytenbeek, William Gibson (FNZ), Mel Underwood, Malcolm Clark, Di Tracey, Jaret Bilewitch (NIWA), Fabrice Stephenson (Newcastle University), Karli Thomas (Deep Sea Conservation Coalition), Will Carome (University of Otago), Ellie Hooper (Greenpeace Aotearoa), Jack Fenaughty (Silvifish Resources Ltd), Ben Steele-Mortimer (SNZ Deepwater Council), Rosa Edwards (SNZ Inshore Council), Yvan Richard (Dragonfly), Cath Wallace (ECO), Steve Dawson (University of Otago)

Apologies: Richard O'Driscoll (NIWA), Marco Milardi (SNZ), Barry Weeber (ECO)

Presentations:

9:35 am	INT2022-04 Risk assessment for protected corals	NIWA
10:20am	INT2022-06 The distribution and abundance of marine mammals observed around commercial fishing vessels in New Zealand waters	Dragonfly

1. INT2022-04 Risk assessment for protected corals (NIWA)

Malcolm Clark and Fabrice Stephenson presented the proposed methods of the risk assessment for protected corals project.

Discussion:

DM - How did you come to the decision to evaluate these three methods? There seems to be some historical context of potential Risk Assessment methods missing, in particular there was a lot of method development work done previously for FNZ project BEN2019-04 (A spatially explicit benthic impact assessment for inshore and deepwater fisheries in New Zealand). Do you expect to be in a position at the end of the project to make a

recommendation on which is the appropriate method to use?

> **MC** - We looked at a wide array of Risk Assessment methodologies, as well as the sustainable seas work that occurred recently. It's a complex selection process spanning a range of general approaches and data availability, and trying to balance what we can do with the data that is available, with what DOC wants to do with it. It gives a good basis to move forward on and give clarity on what methods can support what DOC needs.
>
> **DM** – It would be good to get more detail on that in the June presentation, are you heading toward a favoured method?
>
> **MC** – It's an evolving space, we need to ensure the outputs are fit for purpose in terms of where the managers what the Risk Assessment to go.

JF - Happy to have a response later from NIWA team. How is SAR accounted for within a cell when multiple trawls in some instances may generally closely overlap each other (i.e. cover the same trawl path?

Post meeting reply:

MC - SAR is the annual total area swept by trawl gear within a given grid-cell of seabed, divided by the area of that grid-cell. This question is whether it is the "swept area" that takes the aggregated area of all tows in the cell, or if it is the "trawl footprint" area which is just the area of actual seabed contact.

Owen Anderson (not at meeting) - Because a substantial fraction of historical recorded trawl start and end positions are rounded to the nearest minute, random "jittering" is applied to arbitrarily separate out tows that lie on top of each other due to this rounding. This may have the side-effect of separating out trawl tows that truly do overlap each other closely in some instances, especially around features. This procedure affects estimation of the "trawl footprint" as Malcolm describes it and which we calculate by randomly overlapping jittered trawl polygons, but not the calculation of SAR (as correctly defined by Malcolm below, but can be calculated for any time period) which does not account for overlap of trawl tows (i.e. it could be done without jittering).CW - It would be very helpful if the email questions and response could be share with all of us, given we are out of time here.

BSM – It would be good to have an explanation of how the bioregions were developed?

> **JT -** A seafloor bioregionalisation for New Zealand - ScienceDirect

2. INT2022-06 The distribution and abundance of marine mammals observed around commercial fishing vessels in New Zealand waters (Dragonfly)

Yvan Richard presented a draft report on the marine mammal sightings data collected by observers.

Discussion:

BSM - Was the 2022-23 year only half a year of data?

YR – Yes, the fishing year was not complete at the time. The systems are in place now so it will be possible to update on a regular basis.

CW - So the sightings were only from observers on fishing boats, rather than reports from the fishers themselves? Last week there was Trans-Tasman Resources hearing, and was wondering whether this data was available to the decision making committee.

KR – Yes it's just from observer data. This data has been used for other processes in the past, but would have to check whether it was put forward for the Trans-Tasman hearing.

CW – There are a series of hearings, with the next one in May. It would be a pity if the information has been collected and analysed, but not provided to the hearing.

DM – Thanks for providing the report in advance of the meeting, and it is a really worthwhile effort to bring together a data source that has been unavailable to a large extent for some time. The report doesn't include much about identification vs misidentification possibilities, and how certainty of identification was assured. It would be good to know as this is going along with public sightings database where there is a protocol for how an identification of marine mammals from the public is verified. The second question relates to the what have we learned aspect, this report shows us new data, but there are no plots that show us how the new data has added to the past sightings data, so it would be good to have a contrast of what we knew in the past about the distribution of species through the public and researcher sightings, and what new information we have gained by adding the observer data. Thirdly, it's quite hard to find information on the marine mammal database that DOC maintains, and to see what information has gone into it and what hasn't e.g. do all sightings from DOC permitted activities get entered into the database?

KR – These are all valid points. The data that is in the database is all of the data we have, but we can't say whether it is all the data from all activities, as we don't have control over that.

YR – Regarding your first point, the purpose of the app that we made is to be able to review the species recorded not in their usual distribution etc. Ideally we would like to add in observer photos as well to help with that review, however that is beyond the scope of this project. As for your second question, we did not have the previous dataset so was unable to make comparisons with the new data, that would be really useful though.

MO – Our intention long term is that the whole database will become publicly available, we just have some tidying up to do to combine all data we have available to us. It would be helpful to include Catch Per Unit Effort.

SD – Agreed, it is a great idea to make sightings data accessible, however noting that it is not an alternative to distribution abundance surveys. It tells us some things, but does not give an indication of effort, so need to be careful how we might interpret holes in the data. Secondly, noting that many of the sightings from observers are unidentified whales or dolphins, is there a recommendation for better facilities available to observers to be able to make more confident species ID. I also endorse David's point about the ID verification process.

KR – There are a whole range of resources given to observers, including guides and training sessions, and that is a real focal point to continue to upskill in species ID in general. The catch is that a lot of this is from offshore observers, who have a long list of tasks to complete, so sightings are often done on the side of their other work.

WG - There is an indication of effort from the observer time and position data but it is inherently biased towards where fishing effort occurs

BSM – Just noting the obvious that this information is weighted on observer coverage, so need to make sure it is used properly, e.g. see occurrences of sealions down near Campbell Island, where there is 100% observer coverage in the Southern Blue Whiting fishery, so you are going to see a lot of sea lions down there.

JF – Agreed that this type of information is not a substitute for well-designed survey, it's only presence data and not absence data. There needs to be a firm plan to provide details of outstanding deficiencies in the document, then liaise with FNZ and SNZ observer groups to improve the situation. Is there going to be communications outlining the deficiencies, or perhaps have a meeting to identify the problems and how to fix them?

KR – We can try do that, it's a bit of a slow road getting change across but can take that forward with the observer programme.

YR – To reiterate, the aim of this project was to add to the marine mammal database. If we can link effort and get absences, then can turn accounts into distribution e.g. with the seabirds database, despite limitations of data, with enough data we can get information for where species are distributed.

SD – Not related to this meeting, but stage are discussions at, in regard to holding an AWEG meeting to discuss recent results of camera trials?

WG – This question might be better targeted at Fisheries Management. The AWEG is more focused on discussion research projects.

Any additional comments should be provided to csp@doc.govt.nz by 5pm, 5th April 2024.
Close of Meeting @ 11:00 am