Department of Conservation
Te Papa Atawhai

Meeting: **Conservation Services Programme Technical Working Group**

Date: 3 September 2020
Time: 9:30 am – 2:15 pm
Place: Microsoft Teams Meeting
Chair: Katie Clemens-Seely (kclemens@doc.govt.nz)

Attendance: Igor Debski, Karen Middlemiss, Graeme Taylor, Katie Clemens-Seely, Shannon Weaver, Tiffany Plencner, Clinton Duffy, Samhita Bose, Cassandra Spearin, Dave Houston (DOC), Randall Bess (Fish Mainland), Gaia Dell'Ariccia (Auckland City Council), Richard Wells (DWG), Jill Gower (SSST), Dan Kerrigan, Lyndsey Holland, William Gibson, Sonja Austin, Marty Bowers (FNZ), Kerry Lukies, Chris Gaskin (NNZST), David Middleton (NIWA), Jesse Rihia (TOKM), Neil Green, Penny Turner, Jeremy Gardiner, Kate Walsh (SenateSHJ), Kalinka Rexer-Huber (Parker Conservation), Peter Frost (Science Support Service).
Apologies: Ian Angus (DOC), Mary Livingston (FNZ).

BCBC2019-07c: Recreational fishing bycatch programme, stakeholder engagement framework - SenateSHJ

WG I noticed that when you asked people if they understood what protected species were, there was mention of pāua, crayfish and blue cod, do you think this may affected how they responded to consequent questions? e.g. invalidates some of the results presented?

> **PT** Yes, it is an area that needs further education on what marine species are protected. An awareness campaign is needed as one of the very first steps.
> **WG** So the people that said they had caught a protected species may also be the people that don't understand what a protected species is?
> **PT** We will look into this.

RW I noted in the presentation that Māori and Asian [recreational fishers] may have been underrepresented, does this include Pacifica?

> **PT** Pacifica are a different segment and we only had 1% so we do agree that they are also underrepresented. A better approach in future work will be to get a more random sample.

RW In the line fishing and bird issue, I wondered if beach fishing via motorised kontiki is being included?

> **KM** Yes this is definitely an area of recreational fisheries that does require some focus
> **MB** Less than 1% of fishers use Contiki.

MB I'm looking at the % of respondents that are members of clubs, these results are very weighted towards club respondents. Only 3-5% of rec fishers are club members.

> **PT** Yes, the sample is skewed and we weren't really able to identify that until we received the results.

MB Where did the 350,000 recreational fishers come from? National panel survey (NPS) had 595,000 and Sport NZ has very similar figures.

> **NG** We will follow that up after meeting to make sure that figure is correct.

SA Would there be value in taking a more distinct approach for different groups of protected species i.e. a tailored approach for seabirds?

> **NG** Because we don't know what kind of species are being caught, this limits the ability to have a more targeted approach. Recreational fishers are interested to know what

protected species are, particularly in their local area. Specific approaches may be detrimental in making fishers think only seabird bycatch needs to be reported etc.

DM The NPS, what extent was this considered in this work? And had you engaged with the people that run that survey? Whether they considered is feasible to add questions to that related to protected species bycatch?

KM We had early conversations with the National Research Bureau (NRB) and they were invited to come along today and will be included in the future also.

PT That survey is mostly based on boat ramp surveys so the point of this work was to go beyond that data collection mechanism.

DM The NPS survey is a nationwide random survey to quantify recreational harvest. It is not boat ramp specific. The boat ramp component collects size information.

Further discussion around the national panel survey.

RB Can we conclude that there is a pretty sizable commitment by DOC and MPI to follow these engagement pathways with a large component of education and what's the time frame?

KM Yes, definitely, the whole aim is to develop the initial framework first, upcoming discussions with MPI on how to work together on this significant issue and significant effort being put towards this.

RB Working with different age groups in terms of your design.. younger age groups are an important segment in terms of educating the younger generations.

KM I think that's where the value of setting up working groups will assist with collectively identifying the target approach going forward. Agree that the younger generation is really important.

PT Yes, the younger generation were much more likely to report based on our findings. This is an initial investigation with more work required.

JG Given the issues and barriers identified, what is the likelihood a self-reporting approach will result in information that is robust enough to support better outcomes for protected species? What's the end goal? More investment? Or a better/different approach to encourage fishers who are doing harm to do better?

KM The challenges with trying to collect robust bycatch data through the use of self-reporting tools is well known. Survey question was about understanding the preferred methods that rec fishers would like to use to report bycatch to us and they were given several options to choose from. Trying to understand their preferred method of engagement. SenateSHJ recommended a multi-pronged approach to communication channels. End goal is to better understand nature and extent of bycatch problem with an overarching view towards how to reduce bycatch. Education will play a key role as recommended by SenateSHJ.

General discussion around the educational requirements of this work.

MIT2019-03: Lighting adjustments to mitigate against deck strikes/vessel impacts, land-based results and at-sea methodology – NNZST

GT With the third quarter moon during these trials, were they conducted during the first half of night or when moon was above?

KL A mix of both, 9pm-3am.

GT Any issues with weather?

KL Graded the weather by clear, cloud cover etc. No really cloudy/foggy nights.

GT It would be ideal to get some of that really foggy/wet weather into this research.

MF Hopefully if we can get more samples we can account for more weather variability.

GT Yes, it is a really important factor.

RW The worst arrival of birds on a single vessel was on a foggy night in the subantarctics. Very low cloud/fog creates the loom effect of lighting.

Discussion around how lighting could be different on vessels during foggy/stormy weather and during anchor.

RW Have you looked at oil rig platforms if they have done any work on light attraction and

whether they have any maritime oriented lighting standards? There is a minimum light standard required in the factory to process fish. Needs to be some consultation on the safety requirements of lighting for crew. May need to talk to Maritime NZ.

SW That is definitely something DOC will do but we felt it was important to first run this project so see if something was promising enough to progress further.

KL One of the surveyed skippers did use green anchor lights and said it attracted less birds.

RW Waikato regional council have some information on navigational vessel lighting requirements online that may be worth considering in the at-sea experiment.

MF The vessel we are using would have those standard light requirements and we are hoping there won't be many other vessels around to limit that influencing factor.

CG One of the things we would have liked to have done was operate from a commercial vessel and is definitely something that should be considered in future trials.

MIT2019-04: Optimum batching interval for discharge management on vessels in the scampi fishery – Pisces Research

RW The first trials that were done around batching were based around if you hold discharge back how long does it take for the volume of birds around the vessel to reduce. What would be interesting is how long does it take for them to arrive.

DM Yes, those trials were primarily looked at timing between discharge

Discussion around the multiple variables influencing seabird attraction to vessels

RW Scampi vessels are much like shrimp trawlers, the reality is that twin or triple rig configurations, the nets don't even come aboard, just the cod end, until they stop fishing entirely, go to anchor etc. So quite different to other trawl fisheries where the whole net comes onboard on each haul.

Drone-based Salvin's albatross population assessment, Bounty Islands – Parker Conservation

RW The plot with the earlier ground count and aircraft aerial census which you acknowledge aren't comparable, the title on that plot needs to be changed slightly. Highlights to me we do need to be doing things that are comparable. Second question for wider group is around drone use for counting shags, erect crested penguins and fur seals there as well?

KRH Certainly for fur seals and the penguins yes, the shags are slightly more difficult as they like the steep edges of the islands where the image quality gets compromised slightly. Not impossible though as can fly a drone at a set distance from land. In response to first question I had deleted that figure in the most recent version of the presentation.

GT I think one of the biggest variables we have never been able to know is the amount of nest loss that occurs, e.g. egg loss. Did the trail cameras provide any info on that?

KRH The trail cameras could definitely be something we could look into more.

Discussion around comparability and that timing of counting also needs to be consistent.

KRH Aerial counts have always occurred around that 2nd week of October which is good, ground counts, November.

GT Something we need to bear in mind is standardising this work.

PF What are we looking for, e.g. decent estimate of the population at regular intervals and try to detect trends in those counts. I wonder if with drones we focus more so on representative sites to estimate population trends.

KRH Took two days to do all the islands which isn't a large timeframe required. It could be that whole island is photographed but only a subset is counted to reduce that processing time.

PF Yes understandable to make the most of being down there. One other point, the steepness of the islands was raised, what's the prospect of the drones taking oblique photographs looking laterally at the steeper edges?

KRH Yes that is possible by programming the flightpath to always remain say 40 metres from the surface. Strength of a drone is that maneuverability.

GT Would it be better to have 2-3 drones? Is battery life an issue? What is the optimal set up?

KRH Multiple drones would certainly maximise flight times and would be a useful thing. The battery life is a limitation and how quickly it will charge, but it's just a matter of simply taking more batteries for the amount of work required. One thought was if a small portable generator on island for charging batteries or boat-based charging would be best.

GT This technology is really useful so is good to know the limitations and what would be ideal.

End of meeting