



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

**Date:** 1 March 2017

**Time:** 9:00 am – 11:30 pm

**Place:** The Terrace Conference Centre House, 114 The Terrace Wellington.

**Chair:** Ian Angus

**Attendance:** Jim Roberts, Jingjing Zhang, Di Tracey (NIWA), Anton Van Helden, Katrina Goddard, Karen Baird (Forest & Bird), Tiffany Bock, Nathan Walker, Rich Ford, Amanda Richards, Erin Breen (MPI), Bruce Robertson (Otago Uni), Oliver Wilson, Tom Clark (FINZ), Richard Wells (DWG, FINZ, Resourcewise Ltd), Graham Parker (Parker Conservation), Igor Debski, Ian Angus, Katie Clemens-Seely, Kris Ramm, Freya Hjorvarsdottir, Graeme Taylor, Laura Boren, Jody Weir, Julie Knauf, Kath Walker (DOC).

#### MIT2015-01 Seabird bycatch reduction (small vessel longline fisheries)

- **KB** How much does it cost to build a tori line?
  - **RW** About \$300, but vessels should have at least two of them
- **RF** How customised are they?
  - **RW** Very, can't just produce a bunch and assume they will fit on all boats.
- **IA** Why do you think there will be a change in the Southern bluefin fishery this year?
  - **RW** Because of a change in the market, there has been a glut of tuna into the market, causing the values to drop.
- **KB** Tori line is only one out of three mitigation options and they need to use one more option. Is the operation of tori line different in combination with other mitigation methods? Are you collecting data on the vessels that are using different mitigation methods in addition to tori line?
  - **RW** Documenting this all in the mitigation plans. There is a section on the mandatory requirements that they need to full out and we also collect information on line weighting, but not collecting fine scale data in the same way as with some previous projects and ongoing observer coverage.
- **KB** Do you have any feedback? For example, if they are having problems with the tori line or finding them difficult to use?
  - **RW** We expected to hear about lots of difficulties but found that most skippers knew how to build and operate good tori lines. From that we're planning to change the focus of any workshops we may hold
- **ID** Remember that this project is not a science project, it's about implementing an already mandatory mitigation method, project MIT2015-02 is seeking to further improve the design and efficiency of mitigation options.

#### POP2016-07 New Zealand Sea Lion: Auckland Islands pup count

- **JR** The change in pup production this year is very positive. It looks like it's been relatively stable since at least 2009. However, pup production is possibly not the best index, if compared to number of breeders. We have seen a big drop followed by pup count slowly going up in the following years, I would treat the change in pup production with a caution.

- **SC** Pup production is only an index of total population size, if those are changing then the population is changing. Agree that the real measure is breeders rather than pup production and accept the caution that this may not be a long trend, but when the drop happened, we were happy using pup count, this should recent trend should be seen as a positive.
- **NW** In relation to research planning, I want to stress the importance of resighting effort to any population modelling
  - **SC** The resight data is critical to monitoring and factors such as linking pup production to breeding population. Thus, I would push for the resights being a strong part of the programme as it is very important.

**Non-CSP presentation – Trends in fur seal abundance at three west coast colonies over time**

- **RW** We have data for all pups since 1991? Do you have an idea or proportion of the pups that we have information on?
  - **JR** Yes, it's over 50% of pups and we have an ongoing inventory for every pup tagged and it's resights through time
- **RF** Do you think, given the level of precision and strong trend, this large amount of resighting effort could best be used in other places?
  - **JR** This was originally done to give power to satisfy the working group, but yes this could be reallocated to resights at years 1+
- **BR** Discussion around the difficulty of using DNA to attribute colony of origin to bycaught animals – only around 60% accuracy. There is work to improve this with SNPs, but unsure about the results.
  - **RW** Some tag data should exist for this from observer records
  - **JR** The tag return is very low as tags tend to be lost. We could look at that as a possible way, or possibly the spatial foraging.
- **RW** Should look at the seasonality of fur seal movements and how that overlaps with the highly seasonal fisheries such as hoki in the hokitika trench.
  - **JR** Certainly, seasonal changes in foraging from the limited tracking data, linked to pup size and feeding intervals.
- **RW** Worth looking at the Waugh paper on Westland petrels and links to oceanographic changes. Similarly with the hoki fishery.
- **AvH** Support the continuation of this work as it is one of the few time series of such scale.