



**Meeting:** Conservation Services Programme Technical Working Group/ MPI Aquatic Environment Working Group

**Date:** 31 May 2019

**Time:** 9:00 am – 4:30 pm

**Place:** G.01 Tangaroa room, Conservation House, 18-32 Manners Street

**Chair:** Graeme Taylor (DOC)/ Ben Sharp (MPI)

**Attendance:** Trudi Webster (Yellow-eyed Penguin Trust), Jack Fenaughty (Silvifish Resources for Sanford), Edin Whitehead, Chris Gaskin (Northern NZ Seabird Trust), David Thompson (NIWA), Graham Parker, Kalinka Rexer-Huber (Parker Conservation), Barry Baker (Latitude 42), Mike Bell (WMIL), Thomas Mattern (Eudypetes Eco-Consulting), Monique Holmes (Te Ohu Kaimoana), Richard Wells (DWG, FINZ), David Middleton (Trident Systems), William Gibson, Jenny Oliver (MPI), Kath Walker, Samhita Bose, Lou Hunt, Trude Hellesland, Igor Debski, Graeme Taylor, Shannon Weaver (DOC)

**Apologies:** Tom Clark (FINZ)

**POP2017-03: Salvin's albatross, Bounty Islands population project – NIWA / Latitude 42**

- **GT** What time was the trip?
  - **DT** In October, during incubation
- **RW** The timing of the actual data collection, where does that fit with their mean time of laying?
  - **DT** Occurred around peak egg laying
  - **BB** About mid incubation, 4-6 weeks into incubation
  - **GT** They lay September – October
  - **BB** Peak egg laying would be a month earlier as discussed in the workshop prior to work
  - **RW** Plan is to go back at the same time next year?
  - **DT** Correct
- **RW** Is there any info around why some islands are unpopular?
  - **BB** Probably low-lying islands aren't favoured
- **RW** When you did the snares, same thing, aerial and ground-work, were these ratios similar?
  - **BB** There were a lot of loafers I remember that, I can't recall the ratios of that work though
- **RW** Were the dates different?
  - **BB** One days difference between 2013 and 2018
  - **TM** Tawaki were 3-4 weeks earlier this season so it could be that breeding was off a bit
- **KRH** Oceanographic conditions are a good hold all for potential reasons for the lower breeding

- **GT** Are broken eggs counted?
  - **GP** Yes, but resources are used up pretty quickly for nesting material by penguins etc

Discussion around the count comparisons between 2013-2018

Discussion around the lack of nesting material making it difficult to discern definite nesting birds from aerial survey

Discussion around distance between nests

Discussion around pros and cons of aerial surveying of seabird populations

Discussion around timing of aerial survey, loafers arriving in the afternoons

Discussion around drone use for resampling multiple times instead of plane flight.

- **BB** Duration issue with drones- have around 10-12 minutes of use
  - **GE** My drone has half an hour life and flies in 40 knot winds
  - **BB** We are looking into drone use but we don't feel like they are there just yet
- **KW** How do you know what the weather is going to be?
  - **BB** Metview or the windy app, though sometimes we have used fishing vessels in the area or, of course, having someone on the ground is the best
- **RW** When contemplating future work down here, considering H&S, does congruent aerial and ground-work need to be considered as a back-up/future proofing monitoring?
  - **ID** There are safety issues with aerial too. Boat based aerial drone use would be the safest option
  - **RW** Significant investment in both options
- **KW** Are fur seals expanding into the pop?
  - **ID** That's why we are trying to establish a baseline of where they are so we can monitor that change over time

#### **POP2017-04: Seabird population research: Auckland Islands 2017-20- Parker Conservation**

- **RW** Is there a proportion where only one of the pair got a band on it?
  - **KRH** Yes
- **KW** When would be the optimum time?
  - **KRH** Mid to late January, difficult to get to at that time. A boat would be beneficial
- **GE** Do they take their mates to new burrows or are they widowed?
  - **KRH** Unsure on that one
- **GP** Sometimes the original burrow is gone, very wet and muddy
- **RW** Do DOC have any intention on modelling?
  - **ID** At this stage we can reassess the work and whether there is priority to continue.
  - **KRH** Real data now to base further decision-making on
- **GT** Low recapture issue the problem

Discussion around teaming work up with eradication work on Auckland Is.

- **RW** What is the definition of nesting success?
  - **KRH** Egg laid

Discussion around the Gibson's birds being biennial breeders, and presentation of data

- **DT** First population drop in 2000, what was that?
  - **GE** A year off breeding potentially
  - **KW** Global seabird population issues (issues seen with other seabirds globally that year)
- **JM** Around that crash time did they alter foraging?
  - **KW** Didn't start tracking until 2009
  - **GE** Had tracking before, foraging had changed- it expanded, looked like they had to go further

- **JM** Interesting to compare to antipodes albatross

Discussion around nervousness of birds, can be species specific and even island specific

- **GP** Some individuals are really tolerant others not
- **KW** Steep sites

Discussion around the project addressing basic information gathering on White-capped albatross- fledging times etc

Discussion around sealions and skua impacting on nests

## **FNZ Presentations**

### **Antipodean albatross population research: 2018/19 field season – DOC**

- **RW** are there nest sites all over the island?
  - **GE** Yes all over the island, all the flat ground

Discussion around pest eradication on Antipodes Islands

- **RW** take out that area where there is no data
- **JM** All these new birds but population is the same, why?
  - **GE** Because there was still high mortality
  - **RW** It's suggestive that the pre-recruits are not exposed to what makes the females disappear

Discussion around age at first breeding for Antipodean albatross

- **TM** We are seeing a reduction in age at first breeding in hoiho and we think this is because there isn't the old recruits there anymore.
- **RW** where does fledging success fit in?
- **GT** Is there an issue with feathers growing over tracking gear?
  - **KRH** Mounted on the backbone so not a lot of coverage by feathers, may be partially covered when wings are tucked in but when spread out it'll be fine
- **KRH** The data in the app is updated as we go?
  - **SB** Working on automating that- currently manually, will be a weeks lag

Discussion around global fishing watch site

Discussion around analysing overlay with fisheries over different species

### **POP2018-02: Hoiho population and tracking project– Eudyptes Eco-consulting**

- **RW** The survival plot..lots of husbandry of these animals now
  - **TM** These are for boulder beach birds which did not have interventions
- **TM** Population is so low that every effort is required
  - **RW** I agree, it is just whether data represents a realistic population

Discussion around Moeraki based Hoiho population

- **KW** Hoiho in Auckland islands, is that population more secure?
  - **TM** Chilvers has published beach counts over a number of years where she found a slight increase but counts were only over a day so unsure how reliable that is
- **KW** How about Stewart Island?
  - **TM** Whenua Hou is looking particularly grim. 20 breeding pairs on entire north east coast. Recruitment is the issue, haven't seen a juvenile in years. That is the big issue
  - **BS** Is that universal?
  - **TM** Also an issue on the main land
- **CG** Pegasus Bay, is that an area you want to work?
  - **TM** Yes to look at different benthic foraging habitat and prey variation across sites. The greater the diversity of data the more accurate our utilisation models

will be

- **KW** What do think is behind population changes?
  - **TM** Many factors that influence this, predators, disease, habitat degradation etc. but with rising SST the environmental pressures are increasing. We can only reduce pressure on the things we can influence
- **GT** Whenua Hou you would think would be a good island, low impact?
  - **TM** No as there is big set netting effort there that may be influencing that population

Discussion around natural predators, barracouta and sharks, leopard seals increasing

- **BS** The habitat modelling you showed, has there been an attempt to do it at a wider scale?
  - **TM** Foraging is too site specific to expand at a wider scale
- **JO** What is leading to the starvation?
  - **TM** I think that is where the SST comes in, affecting productivity by the reduction in mixing between warmer and cooler waters
  - **GP** Increase in sedimentation from forestry also. Lots of harvesting at the moment
- **DM** SST will also affect movement of predators into those areas
- **TM** Last year showed a shift in diet over time, penguins are getting bigger, fatter fish that can't be adequately fed to chicks. That negative feedback is not being provided to adults as they are coming back with a bellyful of fish

Discussion around sprat being an important part of their diet

**End of meeting**