



Meeting: Conservation Services Programme Technical Working Group

Date: 7 November 2019

Time: 9:00 am – 12:30 pm

Place: G.04 Tohora room, Conservation House, 18-32 Manners Street

Chair: Igor Debski

Attendance: Malcolm Francis (NIWA), Johanna Pierre (JPEC), Paul Taylor, Lily Kozmian-Ledward, Kerry Lukies (NNZST), Marco Milardi, Austin Burgess, Dominic Vallieres, Hillary Ayrton (MPI/FNZ), Tom Clark (FINZ), Samhita Bose, Megan Melidonis, Karen Middlemiss, Trude Hellesland, Igor Debski, Graeme Taylor, Shannon Weaver (DOC)

Apologies: Tamar Wells (Te Ohu Kaimoana)

POP2019-02: Fish shoal dynamics in north-eastern New Zealand, methodology presentation– Northern NZ Seabird Trust

Presentation on milestone 1 of the project- Lily Kozmian-Ledward

- **TC** Is the underwater camera a series of cameras or one?
 - **LKL** Six cameras on different angles
 - **TC** How deep?
 - **LKL** About a metre and a half below surface
 - **TC** Am wondering if you'll be getting footage of the kingfish coming up from below, but should see them on the cameras coming through the shoal feeding. Would be good to go deeper to get the full composition of the school and the levels of species underneath
 - **GT** Would be good to talk to Chris Gaskin about
 - **LKL** Yes definitely something to think about
 - **GT** We are interested in that top area because of diving seabirds but like you sat it is important to get an idea of what is lower down to drive prey to the surface
- **TC** How many trips are you doing?
 - **LKL** About seven
 - **TC** Will be a snapshot but more would be good
 - **GT** Trips are very data heavy so there is a lot of work behind each one

Discussion around the use of a drone to get a birds eye view of fish schools and the ability to estimate the size if the boat is captured in the photograph

- **HA** The University of Auckland is doing some similar stuff with drones
- **LKL** Yes, we work closely with them
- **GT** Is this marine mammal work?
- **LKL** Yes with Rochelle Constantine

- **MC** You mention seasonality, are you sampling throughout the year?
 - **LKL** From now until April
 - **GT** Most seabirds are summer nesters
- **GT** How many work-ups do you see on average?
 - **LKL** Varies greatly depending on how far we travel but around four on average per trip.
 - **GT** Important to get those schools further out near the islands

Presentation on milestone 2 of the project- Paul Taylor

- **GT** Do planes just circle around the school until the boat arrives?
 - **PT** That can sometimes happen, can be multiple vessels involved

Discussion around fish shoaling movements around coastal waters and variability across species

- **TC** Some will be quite moveable, other species not. What are the outcomes of this data analysis wanted?
 - **GT** One aspect is looking at the tonnage difference between past and present shoaling events. Any information around the size and dispersal of these shoals to try and answer why we are seeing such a decline in seabird populations

Discussion about the wider project and seabird species of particular concern in the study area

MIT2019-03: Lighting adjustments to mitigate against deck strikes/vessel impacts, methodology presentation - Northern NZ Seabird Trust

- **TC** A lot of inshore trawl don't fish at night but surface longline will be an important fishery to focus on.
 - **ID** Yes, this is an important thing to take into consideration
- **MC** What is it about foggy nights that is so bad?
 - **KL** That light refraction aspect from water seems to have an impact
- **GT** Is it white light used normally on vessels?
 - **TC** Yes, though lots of vessels are moving towards headlamps on crew
- **GT** May be that infrared light helps camera footage remain visible, but seabirds can't see

Discussion around different seabird flying styles e.g., common diving petrels commonly recorded as deck strikes, bullet like flight style so hit structures hard. Other species more of a fluttering flying style.

MIT2017-01: Protected species liaison co-ordination 2017-2019- JPEC

- **MC** White shark was dropped from triggers
 - **JP** Yes due to a lack of currently available management actions post capture
- **MC** Why don't night and day sets add up? (in regards to surface longline results)
 - **JP** Some vessels did a combination of both
- **ID** Looks like weights may have been closer to hooks in the second year?
 - **JP** It appeared that way at port
 - **MM** We have heard a lot about weights being right at the hook
 - **JP** In Australia they definitely do
 - **TC** Various people trying things like weight stapled on top of hook, doesn't seem to have a negative impact on catch though safety issues remain around flybacks
 - **MC** When sharks are caught the snoods are cut off so lose the weight and hook
 - **TC** Yes one of the costs of fishing
- **TH** So you received seven audits last year?
 - **JP** Yes and 13 the year before that.
- **TC** What is classified as fish waste vs. offal?

- **JP** Dependent on vessel. Fish waste included old baits, usually discards too. Offal was guts specifically.
- **TC** Seems like a low amount of audits in comparison to plans. Need the feedback loop and there needs to be a faster response to skippers
 - **TH** Yes, they are the most important thing to see what is going on out at sea

Discussion around government mitigation standards that will come out of the National Plan of Action- Seabirds

INT2018-05: Updated analysis of spine-tailed devil ray post-release survival - NIWA

- **TH** What were the prior best practice methods for ray handling?
 - **MC** I don't think there was anything. It is best to release while still in water. a lot of damage and mortality if hauled on board in an empty net
- **ID** Should the higher east coast North Island capture events be included in the 'hotspot' region
 - **MC** Yes I can do that

End of meeting