



Meeting: Conservation Services Programme Technical Working Group

Date: 4 June 2020

Time: 9:00 am – 1:30 pm

Place: Microsoft Teams Meeting

Chair: Ian Angus (iangus@doc.govt.nz)

Attendance: Igor Debski, Karen Middlemiss, Graeme Taylor, Clinton Duffy, Anton van Helden, Katie Clemens-Seely, Samhita Bose, Shannon Weaver, Kristina Hillock, Tiffany Plencner, Kath Walker, Graeme Elliot, Kirsten Rodgers (DOC), Janice Molloy (SSST), Rochelle Constantine (University of Auckland), Richard Wells (DWG), Dave Goad (Vita Maris), Hilary Ayrton, Austin Burgess, Marco Milardi, Stewart Alderson, Dominic Vallieres (FNZ), Tamar Wells (TOKM), Liz Slooten, Steve Dawson (University of Otago), Tom Clark, Oliver Wilson, Brianna King (FINZ), David Thompson, Dana Briscoe (NIWA), Simon Childerhouse, Deanna Clement (Cawthron Institute), Chris Gaskin (NNZST), David Middleton (Pisces Research), Graham Parker (Parker Conservation), Sue Maturin (Forest and Bird), Christine Rose (World Animal Protection), Mike Percy (Pollen Island Care Group), Laura Tremblay-Boyer (Dragonfly), Carol Scott (SIFM), Genevieve Robinson (Independent)

Antipodean albatross population research 2019/20 - DOC

OW Were you asked to get any biological samples this year? If so were you able to collect any this year considering logistic challenges. I know that biological samples have been collected in the past

GE We were going to collect faecal samples but due to time constraints we only collected two

Note to change table heading about tracking devices to read 'Duration (days)'

GT The pre-breeder birds, did they have bands on them?

KW Yes banded as chicks, some were quite young and would have been back on the island for the first time, between 7-11 years old

RW Was White-315 a known age bird?

KW Yes, that was her second nesting attempt and has been successful in the past

GE Unsure what made her leave the nest, a common thing is the egg can be broken when swapping care

RC What is the best tag?

GE Depends on the situation but for this case the smaller the better

KW For the birds, the solar powered tags are lighter

GE They are more costly though so lots to consider in deciding the best tag

RW Need a specific tag report

RW On a hooks per day basis the distant water vessels would likely set more hooks

DV Certainly when compared to NZ EEZ boats

RW Will you look at squid jigging for overlap?

ID Yes we will add that one in the mix

MM Our main concern is that the methodology isn't covered very much in the report or presentation. The resolution of 100km x 100km, I would like to know why that was decided on? Would also like to understand how the correction in overlap was done

ID 100km x 100km resolution was due to accuracy wanted across tag types, also due to traveling speed of the bird and amount of points provided by tags. Was the minimum resolution that could be achieved

Discussion around overlap calculation methodology

LS What proportion of total fishing effort is represented in AIS data?

ID Is a bit of an unknown, definitely some vessels not represented. Next steps involve checking this in NZ EEZ and broader scale across RFMOs

LS Is it mostly the larger vessels that use AIS?

ID Haven't done that analysis yet

LS How much would you expect overlap to change? E.g. if regulations were brought in

ID Just using overlap as a metric of potential risk. Risk of bycatch very much determined by mitigation in use

KW It is important that we keep tracking across different years to get more information in variation in movements across time. Will need a few years to better determine overlap

DM At some point it will be important to consider the number of birds tracked and the extent to which the bird distribution indicated by the tagged birds is representative of the population

MM I think the bird population distribution should be modelled, rather than the single tracked birds distribution

SM Is El Niño and La Niña likely to impact on fishery location and albatross foraging?

KW Yes and no, it's not significantly correlated

JM Is it possible to map the flag state by high and medium risk areas? Also seems next steps would be identifying names and companies of vessels. In determining ports, many do visit NZ, wondering if there may be some shortcuts there

ID On the ports, we've got the data and quite simple to quantify so should be done in the next couple of days

POP2017-03: Salvin's albatross Bounty Islands population project - NIWA

RW I know you've reported from the western chain eggs not on nests, have you seen this on the Bounty Islands when doing transects?

GP We don't see nests with zero material. there is almost always at least a small amount of material. If the nest is active, there is a bird sitting on the egg

GT Has there been any analysis of footage from the trail cameras?

DM Not as yet but it could be done of course

POP2019-01: Investigation of electronic device options to assess distribution, diving and foraging behaviour of Hector's dolphins – Cawthron Institute

AVH Did you exclude larger odontocete studies?

SC No they are included in the report

Discussion around suction cup tags

TC What about clip on tags as used for sharks? Come off over wear or have a dissolvable pin.

SC Haven't seen anything in the literature about use for dolphins

TC The ones that I have seen are spring loaded

SC Haven't heard about use on dolphins but may be something worth evaluating

GR I'd have concerns about any of these tagging methods being used on Hector's

AVH Some of these have already been used very successfully on Hector's....but yes some are inappropriate as Simon has indicated

LS I agree that it's important to start with the research question, and review the method(s) most useful to answer it

Discussion around costs of tagging studies

AVH Collaboration could help costs

Discussion around where tagging studies fit within 5-year research plan for Hector's and Maui dolphins

Discussion around tagging technology only providing small amount of data of some animals not population level information

DM The seabird presentations earlier indicate that tagging information can be useful for management. But sample sizes/individual differences certainly need to be evaluated

LS The seabird presentations show that you can find out (for a very small sample of individuals) whether they forage off Chile. i.e. very long-distance movements. Most of these tags would not be useful for small-scale movements, such as whether a Hector's dolphin is inside or outside a protected area

TC Industry interest is only in non-invasive techniques to provide management information on matters such as dive profiles and distribution. this is an entry project to considering management options if the need is recognised

LS Can get much more valuable, population-level data from surveys (boat and aerial) and photo ID

Discussion around including stopping rules in methodology when animal reaction is strong enough to abort study

Discussion around a negative tagging study for vaquita dolphins

SC Will follow up on that as its quite rare that negative results were found in the literature

MIT2019-01: Dolphin dissuasive device mitigation in inshore fisheries – Cawthron Institute

AVH Not all pingers are designed as DDDs, some alert rather than dissuade

LS the devices usually known as DDDs are very loud, much louder than normal "pingers"

Discussion around terminology use- dolphin dissuasive device vs. pingers

AVH There seems to be a miscalculation of the costs?

SC That was a UK study covering a cost of implementing across the fishery so directly quoting there

Discussion around the Stone et al. 1998 study

Discussion around studies that have shown an increase in dolphin bycatch where pingers were missing/not working particularly when scavenging from the fishing net

SC Also a case in South America where it reduced dolphin bycatch but increased sea lion bycatch

MIT2018-03: Setting mitigation for small longline vessels – Fisheries Inshore NZ/ Pisces Research

JM Would the TDRs affect buoyancy on a surface longline branchline?

DM I don't think so, slightly negatively buoyant

Discussion around paired testing of surface and bottom longlining

End of meeting