



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

National Plan of Action – Seabirds Technical Working Group

**Date:** 16 March 2009

**Time:** 1.00 pm – approx. 5.30 pm

**Place:** Conference Room, 4<sup>th</sup> Floor, Department of Conservation, 18-32

Manners Street, Wellington

**Chair:** Johanna Pierre (DOC)

**Attendees:** Stephanie Rowe (DOC), Igor Debski (DOC), David Middleton

(SeaFIC), Greg Lydon (SeaFIC), Richard Wells (Clement & Associates), John Cleal (FVMS), Ed Abraham (Dragonfly), Shelly Biswell (SSS), Nathan Walker (MFish), David Thomson (NIWA), Di Tracey (NIWA), Eric Mellina (MFish), Martin Cawthorn (Cawthorn & Associates), Darryl MacKenzie (Proteus), Kirstie Knowles (Forest & Bird), Liz Slooten (Univ. Otago), Janice Molloy (SSS), Wendy Norden (Univ. Maine), Jeremy Helson (MFish), Aoife Martin (MFish), Tom Chatterton (MFish), Martin Cryer (MFish), Nikki Pindur (MFish), Spencer Clubb (MFish), Steve Halley (MFish), Peter Ballentyne (Solander, NZJT), Louise Chilvers (DOC), Steve Smith (DOC), Ian

Angus (DOC), Simon Banks (DOC).

**Apologies:** Chris Robertson (Wild Press), Pat Reid (Area 2), John Reid (Area 2),

Biz Bell (WMIL), Mike Legge (Univ. Otago), Rebecca Bird (WWF),

Paul Breen (NIWA), Rob Mattlin (MFish).

#### **Mitigation projects:**

MIT2006/02 Mitigating seabird interactions with trawl nets. Draft final report - John Cleal & Richard Wells (Clement & Associates)

- JC presented the draft final results from sea trials (report and presentation available on MCS website).
- RW clarified that the mesh size used on bottom trawls is much smaller than mid-water.
- LS asked if there was any data available on bycatch from vessels using and not using net binding and turning on haul.
- JC/RW no, as certain types of vessels must use one or other techniques in their fishing (e.g. must turn during hauling, or must haul part of net straight).
- LS are further trials planned?
- JC recommended that further trials of net binding could be made, and trials of feasibility of both techniques on bottom trawls could be conducted.
- DMid is this the final stage of the project?

• JP – The final report will be the end of the project contracted to Clement and Associated, but through CSP, there are still observations being made by government observers. Information gathered through the contracted project and current at-sea observations will feed into the future development of work in the area of net capture mitigation.

### <u>Efficacy of batch discharge in reducing seabird attendance at trawl vessels. Draft final</u> report - Ed Abraham (Dragonfly)

- EA presented the draft final results from this project (report and presentation available on MCS website).
- DMid clarified that originally it was thought batching could act as a mitigation technique by reducing exposure time of seabirds to discharged fish waste.
- JC/EA there was some discussion on bird risk and bird numbers, the 10 m zone was though to be a better proxy for risk than wider zones. While bird numbers were too low in this zone for models to be constructed, results from the 40 m zone were broadly similar to the 10 m zone.
- MCryer added that there was no risk when no birds were present.
- RW do bird numbers increase instantaneously? offal in front of warps poses the danger.
- EA data not recorded in fine enough time intervals to assess, but video footage was collected and can be analysed to assess this. Numbers increase within 5 minutes the resolution offered by the observations made
- DM/EA clarified details of the random effects.
- LS if offal can be batched for up to 8 h, could it just be released between tows?
- EA Yes
- LS would release at night be effective?
- JP there can still be considerable bird activity at night.
- RW if you can hold until night, better to dump between tows.
- DMid clarified that results were only comparing different batch periods, not comparing batching against continuous discharge.
- RW experience of fishers is that batching is much better than continuous discharge in terms of reducing bird numbers attending the vessel.
- DMid added that maintaining discharge continuously for long periods may not be normal practice.
- RW noted it was the time that it took birds to reach the offal vs the time it took for offal to exit the danger zone (area in forward of warps) that was important.
- JC/EA/RW discussed that instant discharge (i.e. high volume discharge in the shortest possible time) could be different to discharging from the conveyor belt. Sump discharge appeared to maintain bird interest in the vessel enabling a rapid response to batch discharge events.
- DMid video footage may provide further information on this timing issue.

### <u>INT2007/03</u> <u>Identification or protected corals - Di Tracey</u>

• DTracey presented a progress report (presentation and report available on MCS website).

- DMid questioned how greenweight is recorded if a coral sample comes back that is then determined to contain three coral taxa during identification.
- DTracey this is usually only an issue for stony coral samples and observers are requested to take random samples. The database can be updated with additional information
- DMid old database has observed ID and confirmed ID but you have three types (observer, tentative ID and expert ID), how will these be tracked?
- DTracey additional tables are built into COD.
- DMid how will you keep track of what the ID is tested against?
- DTracey can also be incorporated into COD.
- RW what non-fishing data is available on coral distribution etc?
- DTracey trawl surveys, biodiversity surveys and historic accounts by various authors are the main sources.

# $\frac{INT2007/02\ Identification\ of\ seabirds\ captured\ in\ New\ Zealand\ fisheries\ -\ David}{Thompson}$

- DThom presented results from the 2007/08 fishing year (report and presentation available on MCS website).
- PB noted that 26 of the 27 birds captured by the charter pelagic longline fishery were caught under special permit and as such should be treated separately as they do not reflected normal practices in the fishery.
- NW explained this was part of a tori line trial co-ordinated by MFish for Ed Melvin of Washington SeaGrant. The trial resulted in the capture of large numbers of birds during the control treatment.
- JP/SR ensured that tables would be changed in the final report to reflect this.
- DMid/PB/JP/NW there was discussion on how databases were updated to reflect such trials so that captures made under special permit can be allowed for in future analyses.
- DMid enquired if there was a single database for bird banding details.
- SR yes for New Zealand, generally works very well. Graeme Taylor (DOC) is the National Banding Scheme coordinator.
- DMid is cause of death determined from autopsy only?
- DThom no, observer comments are also consulted.
- DMid has data recorded changed over time, thus influencing determination of cause of death?
- DThom injuries generally very consistent with observations, does not appear to be a problem.
- EA were non returned birds photographed?
- SR yes, but depending on circumstances. A new project is proposed to identify all photos and feed confirmed identifications into the databases.
- DThom presented initial results from the 2008/09 fishing year (presentation available on MCS website).
- SR noted that these results include those collected from the new Hectors dolphin monitoring initiative.
- JC are XPP (spotted shags) common?

- DThom no while there is not a lot of information on their status nationally, they are considered rare and a capture of the size recorded in inshore trawl should cause concern.
- DMid was there a process put in place after the XBP mis-identifications to avoid future cases.
- SR yes, reminders to all observers, and particular instruction provided where needed, as well as ongoing observer training.

#### **Population studies**

## POP2005/02 A population and distributional study of white- capped albatross (Auckland Islands) - David Thompson

- DThom presented an update on this project for 2008/09 field season (report available on MCS website).
- DMid which birds were satellite tags used on?
- DThom only on birds at Disappointment Island because deployment sacrificial. Expense prevents their widespread use. Ability to achieve representative samples was balanced against resources available.
- DMid has the effect of pigs remained constant?
- DThom yes.

# POP2007/01 New Zealand sea lion: Model options for data analysis - Darryl Mackenzie (Proteus)

- DMac presented updated model options following previous CSP TWG input (report and presentation available on MCS website).
- EA are there constraints on the model parameters?
- DMac no, but these could be added.
- DMid how many simulations were run?
- DMac one for each iteration.
- DMid why were data for cohorts after 2003 not used?
- DMac recent cohorts have very little sighting data, 2003 was chosen as the cut off.
- DMid could the influence of including later cohorts be tested?
- DMac yes.
- DMid there is evidence of a little correlation in some of the MCMC plots, were they all inspected?
- DMac there are over 100, a good sample were inspected, all those investigated looked good.
- DMid is one model better than another?
- DMac the deviance values suggest the 3 and 4 age class models fit the data about the same, better than the single age class (using liberal definition at least).
- LS is there any AIC equivalent?
- DMac there is a DIC approach, but this has problems, so approach of comparing deviances is preferred.
- DMid any diagnostics for the full age-specific model?

- DMac yes, P values, which were omitted from the report but will be added.
- LS have you constructed charts of age class distribution?
- DMac this would be an alternative presentation of the data, but can be calculated for the data presented here.
- DMid/EA/DMac there was some discussion on the influence of priors on the pupping rate and mortality. All priors have some influence, although it should be minimal with uniform priors. More data for the 15+ age class is probably needed to overcome the small influence of the prior (with mean value of 0.5).

## POP2007/01 New Zealand sea lion: brief update on Auckland Islands field trip 2008-09 - Louise Chilvers (DOC)

- LC presented an update on this project for the 2008/09 field season (presentation available on MCS website).
- AM is the number of dead pups comparable to other years?
- LC this is lower than average.
- EA are pup weights an indicator of condition?
- LC yes, reflecting pup and mother condition.
- DMid noted there was some variation in the reduction of age classes sighted.
- LC yes, but not major differences.
- LS are missing females alive or dead?
- LC probably dead as they are philopatric and would have returned if alive.
- AM would animals have died during winter?
- LC any time after March when last field team departed.
- AM what can cause such a decrease in numbers?
- LC in other sea lion species resource competition is one factor that has had large effects.
- AM noted that recent fish abundance surveys suggested increased fish abundance.
- KK this reduction means we should minimise current human impacts.

Presentations on projects INT2007/01 and INT2008/01, observing commercial fisheries, were postponed until a later date. However, the report from INT2007/01 is on the MCS website, and comments on the report (or notice of intention to provide comments) were requested by March 27.

JP requested written comments on any of the projects by March 27 if possible, and the draft minutes by April 9 2009.

Meeting closed.