Department of Conservation
Te Papa Atawhai

Meeting: Conservation Services Programme Technical Working Group
Date: 27 October 2026
Time: 14:00 – 14:50
Place: Microsoft Teams Meeting
Chair: Katie Clemens-Seely (Programme Manager, Conservation Services Programme)

Attendees: Katie Clemens-Seely, Tiffany Fischer, Igor Debski, Johannes Fischer, Hollie McGovern, Hannah Hendriks, Olivia Rowley, Caroline Reid, Steve Pilkington, Jody Weir (DOC), Steve Dawson (Emeritus Professor Otago University), Christine Rose (Māui and Hector's Dolphin Defenders), Chelsea McGaw (Forest & Bird), Jodi Milne, Phil Heath, Alexander Arkhipkin, John Richardson, Olivia Hamilton, William Gibson, Greg Lydon (FNZ), Dave Goad (SNZ), Ben Steele-Mortimer (DWC SNZ), Richard O'Driscoll, Emma Jones (Earth Sciences NZ), Alasdair Hall (Independent), Jacquetta Udy (Pelagia Research), Charles Heaphy (Sealord), David Middleton (Pisces Research for SNZ IC), Jack Fenaughty (SRL for Sanford), Monique Holmes (Te Ohu Kaimoana), Warrick Lyon (Marine Research), Ben Sharp (Corvus North Ecological Consulting, for Seafood NZ), Janice Molloy (Southern Seabirds), Rosa Hunt (Blue Coast Research), Natalie Jessup (Endangered Species Foundation), Inger Perkins (West Coast Penguin Trust)

Presentations:

14:00	INT2025-06 Factors influencing risk of marine mammal and seabird bycatch in inshore trawl and set net fisheries

1. INT2025-06 Factors influencing risk of marine mammal and seabird bycatch in inshore trawl and set net fisheries

Jacquetta Udy (Pelagia Research) presented the results from a study looking into the factors influencing risk of marine mammal and seabird bycatch in inshore trawl and set net fisheries

Discussion:

SD questioned the reliability of analyses based on very small sample sizes, particularly the Hector's dolphin set net and trawl analyses. Concerns were raised about smooth plots for set net height that appeared to imply greater certainty than the underlying data supported.

> **JU** acknowledged these limitations, noting that the analyses were undertaken using the available dataset and should be interpreted cautiously. Additional variables, including target species, were tested within the trawl models to assess the robustness of observed relationships.

DM cautioned against drawing strong conclusions from datasets with very few capture events and many explanatory variables. He noted that statistical relationships may arise by chance and that model selection approaches such as stepwise AIC do not necessarily indicate meaningful relationships. He suggested bootstrapping analyses to assess the likelihood of detecting spurious relationships and emphasised that many findings appeared to reflect spatial co-occurrence rather than identifying operational factors influencing captures.

> **JU** advised that BIC values were reported alongside results to provide additional model assessment and reiterated that the project brief was exploratory in nature. Spatial factors were included as a necessary component of the modelling, and all findings should be treated with caution.

BS considered the analytical approach sound but noted that many predictors likely act as proxies for animal presence. He suggested incorporating existing spatial distribution and density layers for species such as Hector's and Māui dolphins as predictor variables. This could better account for animal distribution, allowing operational fishing variables to be assessed independently and improving understanding of factors relevant to mitigation measures and gear restrictions. He encouraged DOC to consider rerunning the analyses with spatial layers, where available, so residual operational variables might have more power.

> **JU** noted that incorporating distribution layers was beyond the project scope. She also highlighted the potential value of integrating observer sighting data to compare animal presence with capture rates, particularly given reports of frequent dolphin observations by fishers.

CRo queried the management value of the findings. While acknowledging ongoing uncertainty around some mitigation measures, she noted that the report largely reinforced existing understanding that fishing activity within dolphin habitat is the primary driver of dolphin deaths.

WG supported the use of abundance or distribution proxies where available but noted that suitable fur seal distribution models remain lacking. He suggested methods such as Bonferroni corrections to address multiple-testing concerns and expressed interest in further exploration of net headline height, particularly relative to the proportion of the water column occupied by fishing gear. Additional comments on the report will be provided separately.

DG emphasised the difficulty of adequately accounting for spatial overlap. He noted that mitigation measures such as low headline heights and deterrent devices are often deployed in higher-risk areas, making their effects difficult to disentangle from underlying risk. He suggested that fisher interviews may provide valuable insights into capture drivers and encouraged greater emphasis on interview findings in the report.

> **JU** advised that interview findings are discussed in greater detail within the report. Fishers were asked what factors they believed influenced dolphin captures, but responses were varied and often contradictory. Gear design was the only theme raised consistently, with many fishers unable to identify specific operational differences associated with capture events.

Any additional comments should be provided to by 5pm, 10th November 2026.

Close of Meeting @ 15:23.