



Meeting: Conservation Services Programme Technical Working Group
Date: 21 February 2025
Time: 10:00 am – 11.30 am
Place: Microsoft Teams Meeting
Chair: Kris Ramm (Marine Bycatch and Threats Manager)

Attendees:

Kris Ramm, Hollie McGovern, Katie Clemens-Seely, Hendrik Schultz, Anton van Helden, Hannah Hendriks, Igor Debski, Kristina Hillock, Olivia Rowley, Jody Weir, Erin Hewetson (DOC), Amba Blommaart-Klay (Marine Review), Victoria Warren (JASCO), Dave Goad (Vita Maris), Rosa Edwards, Ben Steele-Mortimer (Seafood NZ), Heather Benko, John Richardson, William Gibson (Fisheries New Zealand), Steve Dawson (Otago University), Deanna Clement (Cawthron)

Presentations:

10:05 am	INT2024-02 Port-based audit and Protected Species retention programme – proposed methodology	Marine Review
10:50 am	Dolphin Acoustic Device characterisation	JASCO

1. INT2024-02 Port-based audit and Protected Species retention programme – proposed methodology

Amba Blommaart-Klay (Marine Review) presented key findings from the research/planning phase and proposed methodology for the port-based audit and Protected Species retention programme.

Discussion:

SD: What is the reason the set net fishery was not included in this programme?

AB: Essentially location based for the pilot, the main fishing methods in FMA1 are SLL and BLL. There are set net vessels in the area, but the pilot project is currently focused on risk reduction for black petrels and flesh-footed shearwaters. Designed in a way to be quite versatile, could move between fleets or any part of the country.

SD: See two components of verification: 1) what proportion of the true events are actually captured by the camera review process, and 2) determining identification of the protected species. It seems this project is focusing exclusively on identification; how will the first component of verification be considered?

AB: You can see a great deal from the onboard camera footage and there are robust review processes.

SD: In these fisheries, is 100% of the footage reviewed?

AB: There is a process for the review team including protected species review, full review and mitigation review. MPI manage this process.

KR: The scope of this work was not meant to be a review of the camera programme in its entirety, more looking at opportunities and how we build on these.

SD: Just trying to clarify use of the word “verification” which in my mind is about much more than knowing what species are being caught, verification encompasses how much of the truth we are obtaining.

KR: This is one for debate but probably out of the context of this programme.

BSM: This is a massive logistical piece of work moving forward, making this a reality requires a lot of discussion and engagement from different groups. How much engagement has there been with LFRs or core industry, particularly around protected species retention, as they will need to be fully involved if this is something that will move forward unless other independent contractors would be collecting specimens. Would it be the same people collecting the specimens as conducting the audits?

AB: For the pilot phase, data collection will be completed entirely by myself and then we will identify people that could potentially fill that gap. To begin with using a “responder” was considered through identifying a pool of people that would go and collect the specimen. If this is to be contracted out, this needs to be the right person which will be considered during the pilot.

BSM: In the design of this project, it is essential that LFRs and industry are onboard as they will play a significant role.

AB: Agree it is important to take some of the steps off the fisher.

AvH: Is there any scope to include marine mammal bycatch events? With discussion of rolling this out around the country, hoping to make sure that forms are scoped and aligned with current data collection needs.

AB: Forms have been developed for all fishing methods; the detail is there but just in the background with potential if the programme continues beyond the pilot.

KR: This programme can be expanded and adapted once we identify problems.

DG: Looking at the audit/verification of Protected Species Risk Management Plans (PSRMP) you only have limited time on the boat, need to be careful about what you can verify and what you are asking as these are two very different things. The PSRMP is a record of when a liaison officer went on the boat and asked what they did, and if there is a mismatch then you need to consider how this will be treated down the line. The management plan should reflect what is actually happening on the boat, rather than what should be happening. I would suggest a review and update of the PSRMP, as would not want the responder to be seen as a compliance officer. What is the value on each of the data fields collected, and if we don't get desired outcomes what does this mean?

DG: Would also suggest using some kind of sealed container inside the chilly bin so it is watertight, might be more friendly to fishers. Focusing on ports north of Auckland in the summertime there may not be many vessels around.

RE: Would like to catch up in the next couple of weeks regarding this project. Need to be thinking about what happens if we find non-compliance to regulations, this is where we need to find out how this programme works through that without being compliance.

KR: The purpose of this pilot is testing those things, to pose these kinds of questions and how the programme fits within the wider scheme of fisheries and mitigation processes in general.

2. Dolphin Acoustic Device characterisation

Victoria Warren (JASCO) presented on the characterisation of dolphin acoustic devices, quantifying operational sound levels of two device types and modelling their applicability in different scenarios with reference to manufacturer specifications.

Discussion:

SD: I think it's useful to remind everyone that the hearing curve for these animals is assumed. A couple of new pieces of research might suggest that using harbour porpoise as a reference when modelling might not be correct, as we might reasonably expect that their range of hearing is broader. We undertook a study of reactions to piledriving in Lyttleton harbour and found that Hector's dolphin's reaction to sound were considerably lower than those applied to harbour porpoises in greater sensitivity. Modelling results might be more conservative than you may think.

VW: This is a great point and there are a lot of assumptions and caveats with all the work.

CM: The hearing curve we have used does consider generalised hearing range, there is a reasonable amount of energy from 1 kHz upwards that is included in

the hearing curve. If there is a difference between Hector's dolphins and harbour porpoises there is probably not likely to be a large error.

SD: It is possible that Hector's might be expected to hear these devices a little further away than expected.

CM: They may also be more sensitive and respond differently, not necessarily just distance based. We did model very low sea state, as soon as sea state changes attenuation increases strongly so tried to look at this from a very idealistic perspective

DC: Are the devices that were tested models that are currently used in New Zealand?

VW: Yes, the Netguard Dolphin Pinger and the STM DDD are currently being used in New Zealand.

RE: These devices are being used in the inshore space; a third type is used in the deepwater space for common dolphins.

CM: In this project we were careful not to recommend a specific manufacturer or type, just assessing those currently in use.

DC: Noticed that one of your outcomes was quite different to manufacturer specifications?

VW: The main idea was to look into what the manufacturer was reporting to figure out what exactly they are describing (average, maximum or peak sound for example) and compare this quantified sound levels.

DC: Is the 24 hours mentioned, time they are exposed and the time they have to recover? There is some recovery in there because they never sit with one device or one place for that length of time. If the animal is swimming along with the trawler, does this mean they will experience temporary threshold shift (TTS) with a device in use?

VW: When the device was static there was a TTS and permanent threshold shift (PTS) range if they stayed in the area for 24 hours.

CM: With subsequent exposures within this time period the animal could potentially experience further TTS onset, but we were modelling a very simplistic scenario. The animal does have a recovery rate, but we don't really understand what this is.

DC: We know that dolphins can come and go within a 24-hour period, but trawlers could come back the next day, recovery period is important when we're considering cumulative effects and is something to consider when using a DDD constantly or intermittently.

CM: Reports of this kind are time and budget restrained, there are a number of additional scenarios that would be useful to model.

AvH: Just to note that we now have actual cruising speed data at 2m/second for Hector's/Maui dolphins. Also have a future piece of work looking into how this operates in worldwide scenarios, appropriate ways these are used, and where/how they are being attached needs to be explored down the track.

CM: Tag data allows for a better interpretation of movement around vessels, can create a behavioural profile and use this data to run the sound source along a nominal pattern of use for a long period of time and assess nominal exposure of the animals. Applicable to other scenarios like offshore wind farms. Can only do this if you have input information for how the animal behaves in the scenario.

AvH: Data currently doesn't contain behaviour around trawl fisheries.

VW: Spacing of devices explored was based on 1.3 metres/second so if they are swimming faster then the spacing would need to be smaller because they are approaching the net faster.

SD: My understanding of the MMPA is that the current use of DDDs and Pingers is illegal, what progress has there been addressing that situation?

AvH: Have taken some advice on this and looking into regulations within other jurisdictions. As it stands, acoustic devices are in operation anyway and we have little management capability over that. Looking at what is currently being used we can get a real understanding of how they are being used by fisheries currently and what could be considered for mitigation and whether they are even doing what they are expecting to do. Some limits as to what we can actively demand people to get a permit for under the MMPA.

Any additional comments should be provided to csp@doc.govt.nz by 5pm, 7th March 2025. Close of Meeting @ 11.40am.