

Background: the vessels

- Bottom longlining carried out by a diverse fleet of vessels
 - Physical diversity, e.g., vessel size
 - Operational diversity, e.g., manual and autoliners
- Typically BLL vessels characterised as inshore or offshore
 - Inshore: smaller vessels, SNA, BNS, HAP/HPB
 - Offshore: larger vessels, LIN
- Another group: smaller vessels operating in deeper water
 - 'Middle-sized' vessels, LIN, BNS, RIB

Background: the risks

- Risk factors
 - Bait attractant
 - Auto-baiting systems: large numbers of hooks, trail of bait bits
 - Some processing at sea
 - Some day-setting
 - Variable mitigation use
 - Diverse gear setups incl. for different target species
- Highest risk to seabirds and greatest uncertainty
 - Richard and Abraham 2013
 - Vessels < 34 m that do not target SNA, BNS
 - Chatham albatross, Salvin's albatross, Black petrel, Flesh-footed shearwater
- Vessels < 34 m targeting BNS the next highest risk group, then vessels > 34 m



Image: DOC





Objectives

Overall objective:

To characterise the smaller vessel deep water bottom longline fishery with respect to factors relating to seabird capture.

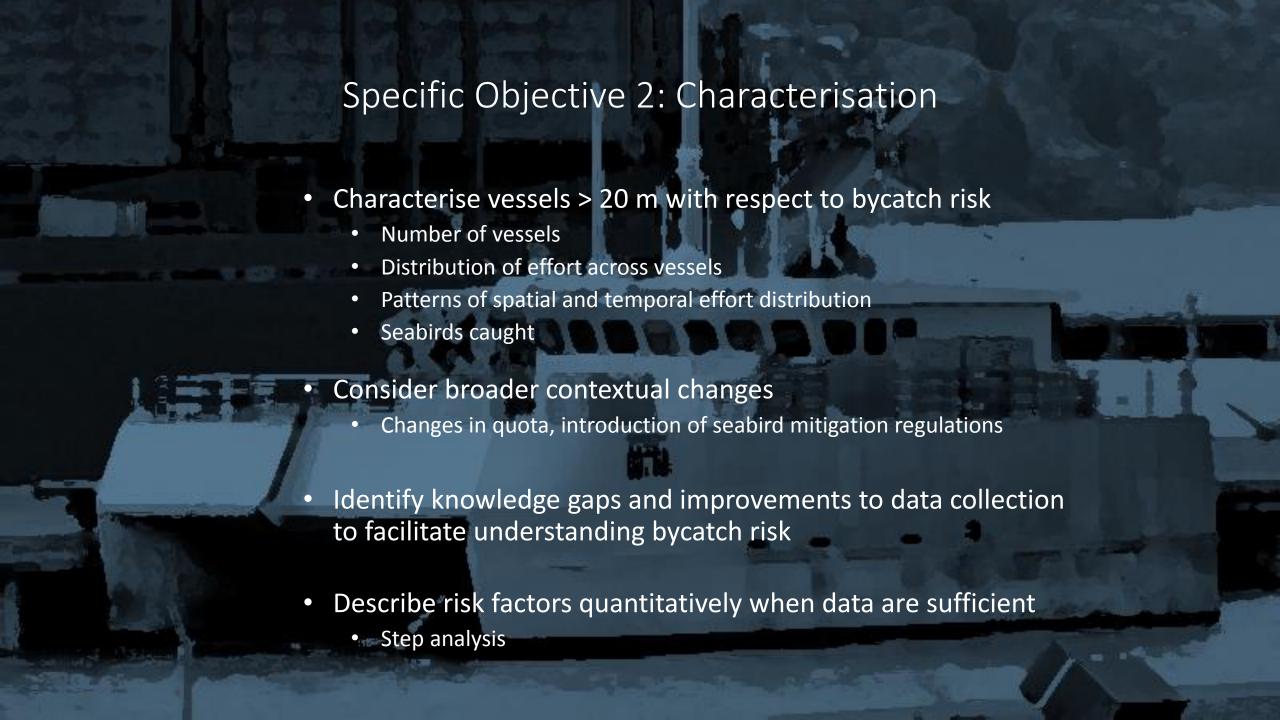
Specific objectives:

- 1. To review observer, fisher and catch effort data on vessel operations, and findings from previous mitigation projects in deep water bottom longline fisheries, and identify key risk factors for seabird interactions.
- 2. To characterise the range of bottom longline vessels over 20m with respect to factors relating to seabirds captures.
- 3. To provide recommendations on mitigation practices in this fishery.



- Fisher and catch effort data on vessel operations
 - MPI Warehou database (2001/02 2011/12)
 - Vessel, catch, and effort data
 - Fisher-reported seabird capture data
 - Explore patterns in fishing activity that relate to seabird bycatch risk
 - Date, time, location, target species, vessel characteristics
- Observer data
 - MPI COD database (10 years, 2001/02 2011/12)
 - Observer trip reports, diaries
 - Gear characteristics e.g., hooks set, weighting regimes
 - Mitigation practices
 - Seabird captures
 - Focus more detailed investigation on selected key trips





Specific Objective 3: Recommendations

- Recommend appropriate methods with which to reduce risk of seabird bycatch
- Identify barriers to implementation
- Identify improvements for observer data collection to characterise bycatch risk
- Describe future work to reduce bycatch risk

Outputs

- Report
- Fact sheet
- Findings promulgated in industry newsletters
- Industry liaison

BYCATCH BYLINES



HEADLINE +

The weight is over: findings of the bottom longline bycatch-busters

operational measures reducing seabird bycatch risk. The project operational measures reducing seasont oycarch risk. The project has now finished and the results are in. So what have the bottom

There were 150 observer days allocated to collecting information from bottom longline fisheries. Observers spent time on eight ressels and collected information from more than 120 sets and hauls. This included seabird non more than 120 sets successed. 1440 annualities sensitive sensitive abundances, effects on bird numbers of discharging old abundances, enects on our namous or encuraging our baits, longline sink rates under different weight regimes, descriptions of tool lines in use, and fisher experuse on operational approaches to reduce byeatch risk news is the



Increasing longline sink rates is rule number one for reducing bycatch Increasing longine sink rates is ruse manner one not retricing option ask. There are lots of ways to do this Adding more weight is one.

the photos are putting weights closer together, using weights that are Outse opnous are printing weights closer together, thang weights that are more even-sized, setting at slower speeds, and using denser weights (for

Using a good too line is an inexpensive way to reduce burd access to longues. In the current study, among vessels many ton lines, longlines were at depths of less than 5 m when the ton line ended. Longer ton lines would protect longlines better, keeping birds away until longlines have sunk to deeper depths.

As a good benchmark, sinking longling



Albert's Column

packed day u

bessions cove

In addition,

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speakers and a

by seafood che

(or rather, fish

development I am standing down my long range 'freefeed-fighter' divisions, as those 'big steel unch boxes' finish catching squid, catches at the Auckland Island have been poor. I am deploying what I have left to the Snare's shelf, where the remaining few squid boats are, to get the last of those 'free-feeds' for the chicks, which are now turning into

'A-little-birdie' told me; only three of those pesky sea lions were captured with about 90% observer coverage that makes only 3 animals observed for 3 seasons now! You'd wonder what all the

Common Dolphin & Vessel Interactions

The NZ common dolphin is found in huge numbers in NZ waters, at times seen in large schools of several thousand members. Common dolphins (CDD) belong to the species known as the shortbeaked common dolphin.

Different dolphin's species overlap with many fishing activities. Dolphin captures are generally observed in shallow coastal waters where recreational and commercial fishing with 'set-nets' and trawling occur, as well as deep-sea factory trawlers further

Deep-sea trawlers targeting jack mackerel (JMA) mainly off the North Island's West Coast over the summer months overlap with CDD foraging areas. Often the

Mitigation for marine mammals is difficult, and even more so for dolphins, as they can interact with the trawl during the active fishing operations (when the gear is at depth) A increase in the risk of captures occurs in some areas further up the North Island's coast (larger populations present) as well as other factors like smaller size JMA and new moon fishing which also increases the risk.

The DWG has well documented mitigation procedures for dolphin mitigation, and a risk reduction training programme delivered to vessels. Mitigation includes; not discharging offal/fish waste, getting the trawl gear out of the water