

# Protected Species Bycatch Liaison Coordination

CSP Project MIT2017-01

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# Introduction

- Up to date knowledge of mitigation needed to ensure bycatch minimised
- Liaison Officers part of Govt's approach to promoting adoption of optimal practices

CSP project MIT2017-01 objectives:

- To provide Liaison Officers to the relevant inshore and surface longline fishing fleets, to assist those fleets in reducing their protected species bycatch, and,
- To coordinate the Liaison Officer roles with wider efforts targeted at protected species bycatch reduction in relevant fisheries to achieve the greatest reduction in bycatch possible.





# The Programme

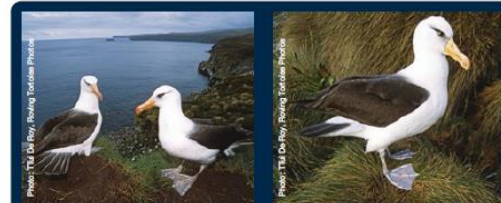
- FMA 1 bottom longline (SNA, BNS)
- Surface longline (NZ-wide)
- Coastal trawl Otago
  
- Coordination



- Initiation workshop
- Fleet identification
- Preparation of information for fishers
- Triggers finalised
- Mitigation resources identified, purchased
- Information management system created

### Campbell albatross

*Thalassarche impavida*



**Head:** White. Black eyebrows. Irises are honey-coloured.

**Body:** Medium-sized albatross with a white body.

**Wings:** Dark upperwings. Underwings white with black margins.

**Feet:** Bluish white.

**Bill:** Yellow with a red tip.

**Juvenile features:** Dark bill with blackish tip. Grey plumage on lower neck. Eye colour initially dark brown and therefore easily confused with juvenile black-browed albatross.

NZ Conservation Status:  
Nationally Vulnerable

MPI Species Code: XCM  
MPI Group Code: XAL



#### Feeding and range

**Eats:** Mainly fish, squid and crustaceans.

**Range:** The species disperses widely around the Southern Ocean and into the temperate seas of the South Atlantic, Indian, and South Pacific oceans.

#### Interesting facts

Long considered a New Zealand subspecies of the black-browed albatross, the two species are now known to breed in mixed colonies on Campbell Island. While some hybrids have been found, the birds appear to prefer to mate with their own species.





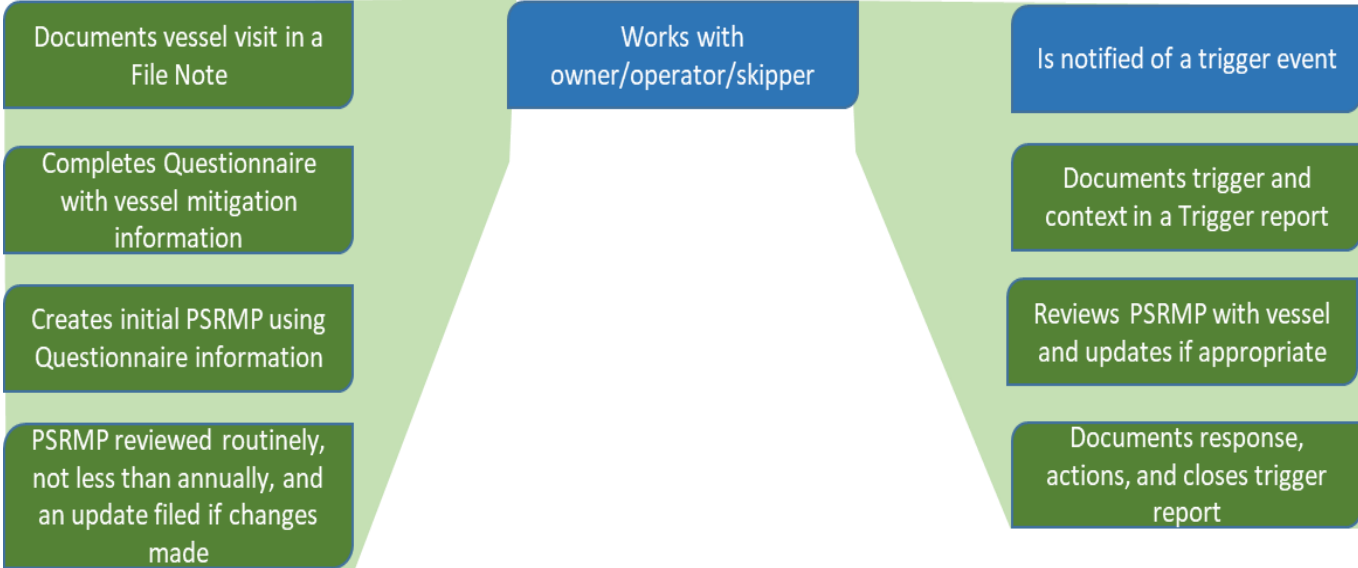
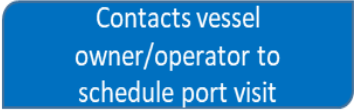
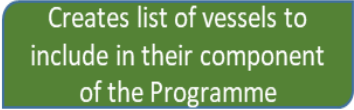
Purpose: Prompt skippers to stop – think – act on reducing future bycatch risks, and contact Liaison Officer

Longline vessels:

- Any black petrel, flesh-footed shearwater, or turtle;
- In a 24-hour period, three or more large seabirds, or, five or more small seabirds, or, two or more fur seals;
- In a seven-day period, 10 or more seabirds of any type.

Coastal trawl:

- Any penguin, dolphin, sea lion, leopard seal, great white or basking shark;
- In a 24-hour period, three or more large seabirds, or, five or more small seabirds, or, two or more fur seals;
- In a seven-day period, 10 or more seabirds of any type, or, five or more fur seals.





# Results: Surface longline

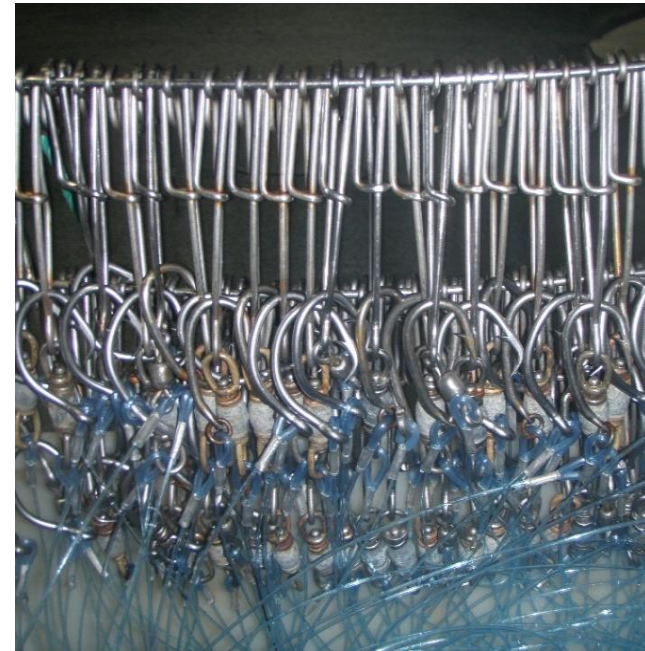
- 33 PSRMPs finalised
  - Legal requirements: tori lines, line-weights, setting time, reporting
    - 17 vessels reported partial or full line-weighting
    - Weighted swivels, lumo leads, hook pods
    - Night and day fishing
  - Fish waste management:
    - No discharge during line-setting
    - Baits and offal often reported to be retained during hauling
  - Lighting managed at the stern
  - Haul mitigation, lasers, dyed bait





# Results: Surface longline

- PSRMPs broadly similar in 2016/17 as 2017/18
- Key differences:
  - 3 new vessels adopted line-weighting
  - 1 vessel stopped weighting
  - 12 vessels intend/prepared to day set
  - 2 vessels no longer intend to day set
  - No discharge on setting increased from 14 to 27 vessels







# Results: Surface longline

- 13 observer audits of PSRMPs
  - Tori lines in use in all but 2 cases
    - Extreme weather
    - Broken then replaced
  - Spare parts for tori lines onboard
  - Fish waste management often differed from PSRMPs
  - Light management as documented except one vessel



Photo: FNZ/DOC



# Results: Surface longline

- Trigger reports from 8 vessels, 25 events
  - 3 turtle reports
  - 1 fur seal events
  - All others: seabirds
  - One report: unobserved vessel
- Full moon: particularly high risk



Photo: Duncan Wright, CC BY-SA 2.0



# Results: Bottom longline

- PSRMPs finalised for 37 vessels
- Legal requirements: tori lines, reporting
  - Use of >1 tori line reported in 5 Plans
- Diverse range of practices amongst vessels
  - Line-weighting and float arrangements
  - Fish waste management
- Haul mitigation: hooks below surface at breaks
- Reactive mitigation





# Results: Bottom longline

- 12 observer audits on 10 vessels
- Tori line use on all sets in 10/12 audits
- Fish waste management observed differed from measures in PSRMPs
- Plans document a broader range of practices than audit could capture
- Optional and reactive procedures difficult to audit
- Need to refresh audit form and ensure PSRMPs include measures that are assessable





# Bottom longline: Results

- 12 trigger reports from 11 vessels, 25 events
- All petrel or shearwater captures
- 5 reports from unobserved vessels
- LO response: working through events with skippers to try to identify risk factors





# Coastal trawl: Otago

- Exploratory in 2017/18
- 12 PSRMPs in place
- Broad awareness of risk factors
- Warp strike mitigation and fish waste management
  - Range of devices intended to reduce warp strike
  - No discharge shooting and hauling
  - Most batch discharge
- No observer audits
- No triggers reported





# Mitigation resources

- BLL:
  - 12 tension releases
  - 3 tori line + pole setups
  - 2 tori lines
  - 1 tori line backbone
- SLL:
  - Tori line construction materials to all vessels
- Trawl:
  - N/A given unknown efficacy of measures







# Stakeholder engagement

- MPI, FNZ, FINZ, DOC
- Licensed Fish Receivers
- Fishing companies
- Commercial Stakeholder Organisations
- Southern Seabird Solutions
- Seabird Advisory Group
- Black Petrel Working Group
- FNZ Highly Migratory Species Workshop





# Conclusions and Recommendations

## Programme context and structure

- Maintain focus on continuous improvement
- Support with audits, policy, and collective momentum
- Transition to regional approach to improve cost-efficiency

## Documentation

- Continue to grow consistency across programme
- Develop programme manual

## Resources

- Continue to build resource base (e.g. guides, fact sheets)

## Evaluation

- Evaluate efficacy of regional approach at end of year



# Acknowledgements

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