

# SLL - Protected Species Risk Management Plan

FV	Vessel ID	Home Port
Owner	Skipper/s	Date

## Purpose of this RMP

This PSRMP documents agreed procedures and actions that skippers of this vessel will follow to reduce risk of protected species captures and includes implementation of best practice as outlined by the Mitigation Standards. **This document is to be prominently displayed onboard.** Skipper(s) and crew must also read and understand the supporting 10 Golden Rules & Operational Procedures.

## Regulated measures for seabird risk reduction

Regulatory requirements can be found in the SLL circular (2019), which are included in your mitigation folder. All protected species captures must be reported using the electronic NFPS Catch Report.

**Remember it is not illegal to catch a protected species however it is illegal to not report it!**

Vessel's Practices	
<b>1. Fish waste management</b> <i>Describe equipment and procedures to hold or batch fish waste; contingency plan where required</i>	<ul style="list-style-type: none"> <li>- No discharge immediately before or during setting.</li> <li>- While hauling, fish waste is held or batched opposite side to the hauling station. All used bait is retained till after haul.</li> </ul> <p><u>List discharge storage &amp; batching procedures &amp; discharge point (e.g. check open scuppers near processing point)</u></p>
<b>2a. Tori line</b>	<ul style="list-style-type: none"> <li>- Tori line meets regulations and is used for duration of all sets.</li> <li>- Can it be adjusted/repositioned to cover hooks to suit varying conditions?  <i>-(Describe attachment height x metres above waterline and drag)</i></li> <li>- Spare materials and/or second tori line are carried on board</li> </ul>
<b>2b. Hook-shielding device</b>	-x% gear coverage (or No)
<b>2c. Night-setting</b>	Always/Sometimes/Never (+ during x target species)
High-risk periods/areas	<u>Don't fish during these times? Increase setting gear sink rate?</u>
<b>2d. Weighting regime</b>	<p><u>Weighted snood (all/some/none); type?</u>  <u>Weight and distance from hook (g/ m)</u>                      Use bait that is sufficiently thawed (ie. not fully frozen)</p>
<b>3. Hauling protocols</b> <i>Describe deterrent</i>	<ul style="list-style-type: none"> <li>- If break during hauling, hooks must be below surface</li> <li>- <i>-(Describe how seabirds are actively deterred from approaching hooks, ie. hose, low pressure water sprayers, sound (such as banging a gaff against the superstructure), hauling mitigation devices and/or vessel manoeuvres)</i></li> </ul>
<b>4. Deck landing/impact</b>	Reduce unnecessary deck lighting, while maintaining safe lighting practises
Training	Crew know and follow safe marine mammal & seabird-handling procedures and protocols Return live fish to the sea as soon as practicable after they were landed
<b>Other- gear/mitigation</b>	

## Contact your Liaison Officer when a TRIGGER POINT is reached.

### Any 24 hr period

(Alive or Dead) Any great albatross, penguin, dolphin, sea lion or basking shark

(Alive or Dead) First turtle of the fishing year (Oct- Sept)

(Alive or Dead) 3 large (e.g. albatross/mollymawk, giant petrel, gannet), or 5 small (e.g. petrel/shearwater) seabirds, or 2 fur seals

(Dead) Any black petrel or flesh-footed shearwater

### Any 7-day period

(Alive or Dead) 10 protected seabirds of any type, or 3 turtles, or 5 fur seals

**Contact:**

**Ph:**

**Email:**

*\*Information in this plan will be provided to MPI and FINZ for reporting and management purposes\**



# TEN GOLDEN RULES

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## FOR SURFACE LONGLINE FISHING TO SAVE PROTECTED SPECIES

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- 1. Ensure your vessel has onboard the current Surface Longline Operational Procedures (OPs), a Protected Species Risk Management Plan (PSRMP), and the current surface longline regulations, and that you and your crew are familiar with them.**
- 2. As legally required during setting ensure you are either using:**
  - A tori line and setting at night (0.5 hrs after nautical dusk to 0.5 hrs before dawn), **OR**
  - A tori line and line weighting to legal specifications, **OR**
  - Hook-shielding devices on 100% of your hooks set.
- 3. Ensure your tori line meets legal specifications and always maintains a 75m aerial extent.** Ensure it is adjustable so it stays over the mainline and carry ample spare parts.
- 4. Ensure you meet the line weighting legal standards, at a minimum use:**
  - ≥40g within 0.5m of hook, **OR**
  - ≥45 g within 1m of hook, **OR**
  - ≥60g within 3.5m of hook, **OR**
  - ≥98g within 4m of hook.
- 5. No discharge of offal or fish waste immediately before or during setting** and use thawed bait.
- 6. While hauling, either hold or batch discharge offal, fish waste, and bait from the side opposite to the hauling station,** and return live fish (meeting legal requirements) as quickly as practicable.
- 7. While ensuring safe operating standards, minimise additional and unnecessary lighting** so as not to attract or disorientate seabirds, especially while sheltering or at anchor.
- 8. Ensure you and your crew are familiar with and follow safe protected species handling procedures and protocols** (See DOC Handling and Release Guide). Record and report bird band numbers to [bandingoffice@doc.govt.nz](mailto:bandingoffice@doc.govt.nz)
- 9. Notify your local Liaison Officer (same day) when protected species captures reach a Trigger point.** The Trigger points are outlined in your PSRMP. Assess the event and if possible, implement further methods for risk reduction.
- 10. Report protected species captures by ERS.** Remember it is not illegal to catch a protected species, however it is illegal to not report it!

**For support phone your local Liaison Officer.**





# TEN GOLDEN RULES

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## NON-FISH OR PROTECTED FISH SPECIES (NFPS) CATCH REPORTS

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- 1.** The Fisheries (Reporting) Regulations 2017 require reporting of **all** NFPS captures (dead or alive). It is an offence to fail to report.
- 2.** All permit holders and skippers must know the law and be able to file an NFPS catch report using their vessel's Electronic Reporting system.
- 3.** Fisheries New Zealand observers file their own NFPS catch reports, but this does NOT mean the vessel's obligation to report has been removed.
- 4.** *Captures* means that the NFPS has become fixed, entangled, or trapped in such a way that it cannot move freely or free itself from any part of the fishing gear. (includes for example tori lines and paravanes)
- 5.** *Deck strikes* means seabirds injured or dead from colliding with the vessel, or any that need crew assistance to leave the vessel because they are disoriented.
- 6.** Treat all animals with respect and care (dead or alive).
- 7.** Return all NFPS to the sea promptly and carefully unless required to be kept on board by a Fisheries New Zealand observer.
- 8.** Unauthorised retention or any further interference with protected species is an offence under the Wildlife Act 1953.
- 9.** If unsure of the species name (NFPS code) use the generic codes provided.
- 10.** E-logbook Users Instructions and Codes can be found here:  
<https://www.mpi.govt.nz/dmsdocument/53995-Fisheries-E-logbook-Technical-Specifications-Circular-2022>

## **Non-Fish or Protected Fish Species Catch Report - Summary Information**

*(from Fisheries New Zealand Electronic Catch and Position Reporting Guide 2021)*

You must complete an NFPS Catch Report if there is an interaction with the following by the vessel or gear during a trip:

- Birds;
- Marine mammals (e.g. New Zealand fur seal);
- Marine reptiles (e.g. turtles);
- Protected fish species (e.g. basking shark, great white shark, manta ray, black spotted grouper);
- Selected benthic organisms (corals, sponges, and bryozoans).

You will be prompted for more information about how the capture happened if a seabird is taken during trawling or surface or bottom longlining.

You must take care when choosing codes where there is a group option and a specific option so that you do not accidentally report an organism twice.

If there is more than one NFPS capture during an event, they will all be recorded on the same NFPS Catch Report.

The NFPS Report must be completed and provided at the same time as the Fish Catch Report, if it occurs as part of a fish catch event.

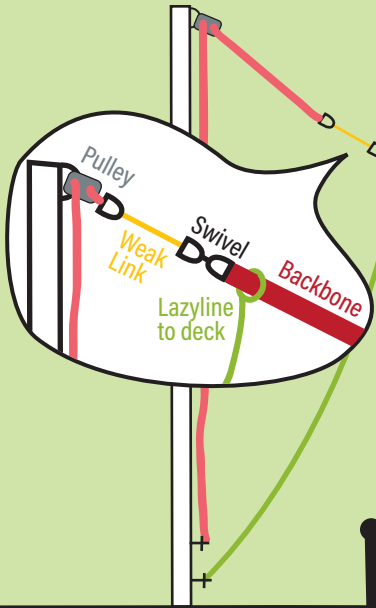
If the capture happens while you were not actually fishing (e.g. while steaming), the NFPS Catch Report will be a standalone report, i.e. it will not be linked to a Fish Catch Report and must be completed and provided to FishServe before the end of the day on which you became aware of the capture.

### **Online resources to assist you with NFPS identification**

- The DOC website has material on coastal and deep water seabird species. Guides include MPI reporting codes and are available in multiple languages: [doc.govt.nz/our-work/conservation-services-programme/csp-resources-for-fishers/a-fishers-guide-to-new-zealand-seabirds/](https://doc.govt.nz/our-work/conservation-services-programme/csp-resources-for-fishers/a-fishers-guide-to-new-zealand-seabirds/)
- A fuller set of invertebrate NFPS material is available at: [fs.fish.govt.nz/Doc/23020/AEBR\\_86.pdf.ashx](https://fs.fish.govt.nz/Doc/23020/AEBR_86.pdf.ashx)
- A coral guide is available at [doc.govt.nz/Documents/conservation/marine-and-coastal/fishing/coral-id-guide-updated.pdf](https://doc.govt.nz/Documents/conservation/marine-and-coastal/fishing/coral-id-guide-updated.pdf)

## Vessel Attachment

Attached to the vessel at least 6m above the surface of the sea in calm conditions, and as close to the stern as practically possible.



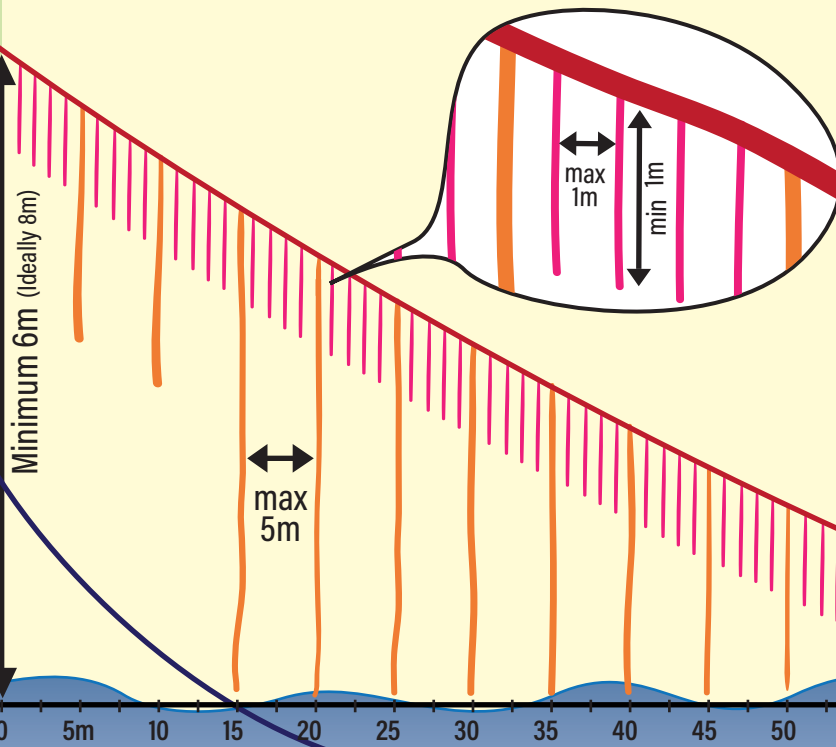
## Streamer Aerial Section

The aerial extent section needs to be in the air (in calm conditions) for 75m, (not including the drag section). Streamers must be brightly coloured.

Within the first 15m streamers may be modified to minimise the risk of entanglement. Streamers must be fitted every 1m along the aerial extent.

Long streamers: Must reach the sea surface and be fitted at a max of 5m spacings.

Short Streamers: Must be spaced 1m apart and be a min of 1m long.



This section is often in/out of water. All streamers in this section should be 1m long, and of a material that is less likely to tangle with your gear (ie. smaller diameter, hard material).

## Drag Section

There needs to be enough drag to maintain 75m of aerial extent.

Braided rope or mono is best (less likely to tangle with setting gear rather than a float or a cone etc).

The drag material or 'object' needs to be designed and constructed to reduce entanglement with setting line i.e. streamline and seamless construction.

The join between the backbone and drag rope is a "catch point", ensure its streamlined, whip/tuck and wrap this join.

Drag "rope" section

Setting  
Long Line

### Recommended Materials:

- Main/Long Streamers: Heavier Rubber or Plastic Tubing
- Secondary/Short Streamers: Lighter weight tubing/tape etc

# ***Tori Line Design and Build – Guiding Principles (vessels less than 35m)***

***Use the tori line design guide (over page) as a starting point to construct something that works for your vessel design and fishing practices.***

A well-designed and deployed tori line reduces risk of seabird captures but only if it is used in conjunction with an effective sink rate.

Tori lines (streamer lines) must be used when setting surface long lines at any time and must achieve a minimum of 75m aerial extent.

To maximise performance, the tori line needs to be:

- Well-constructed, light weight, easy to deploy and retrieve. It should leave the vessel as high as possible and have plenty of drag. You will need spare parts and should have a spare line set up and ready to deploy if a major tangle or breakage occurs.
- The key to reducing tangling issues - is to keep as much as possible of the streamer section in the air above your setting hook line. The drag section construction and materials need to be streamlined to reduce the risk of tangling. To do this, make sure the joins are whipped and taped to create a smooth surface so it is less likely to catch your gear.

## **Three Main Sections of a Tori line:**

### **Vessel Attachment – This height is crucial in order to increase aerial extent**

- Height: You are required to suspend the tori line from a point on the vessel at least 6m above the surface and as close to the stern as possible. Ideally it should leave the stern at around 8m+ above the waterline. If necessary, fit a pole to get extra height (for every 1m extra height above 6m you'll achieve about 8m more aerial extent).
- Weak link/ breakaway system: fit a weak link at the attachment point so that the tori line will break off at your weak link, or before the tori line 'spools off' your gear. Use a lazy line back to the deck so that you can regain control of the vessel end of the tori line if/when it breaks.
- If the tori line breaks or is lost, you need to redeploy another before setting any further gear.

### **Aerial Streamer section – Suitable materials make a difference**

- Backbone: This is the main part of the tori line which supports the streamers, the aerial extent 'backbone section' needs to be 75m from the stern and you need to maintain a minimum 75m in the air. Choose a material that is light-weight, durable and braided as it twists less.
- Streamer materials: Must be brightly coloured, suitable/durable, use rigid, stiff, strong materials such as rubber tubing, tape, or cord attached in a way that prevents streamers from wrapping around the backbone and tangling with each other.
- Streamer placement: Must have streamers fitted every 1m along the aerial extent section, however within the first 15m the streamers may be modified to reduce tangling with the setting hooks.
- Long streamers: Often are heavier 5/6mm rubber tubing, placed at a maximum of 5m intervals, need to reach the water surface (in calm conditions) along the 75m aerial extent.
- Short streamers: Lighter weight 2-3mm plastic tubing, or strips of plastic-tape etc, placed at 1m intervals must be a minimum of 1m in length.
- Do a test deployment: Trim each longer streamer to suit your deployment height. In calm conditions the streamers must reach down close to the surface, but ensure most of the time they are in the air and not the water (streamers in water are more likely to tangle with setting hook line, reduce aerial extent and can even tangle birds).

### **Drag Section - Drag section is crucial in order to increase aerial extent**

- Drag object: A length of rope or mono (or an object like a cone or float, or a combination of both) fitted to the end of the aerial streamer section and needs to provide enough drag to maintain the streamer section to the required 75m aerial extent.
- The connection between aerial section and drag section needs to be as seamless as possible to prevent tangling with the setting gear (braided rope or mono material twists less).
- *Sea-trials have shown a tori line deployed from a height of 6m (at 6 knots) requires about 90m of 9mm braided (500L) drag rope to achieve 75m aerial extent. When deployed from a height of 8m, about 70m of 9mm braided (500L) drag-rope was required.*

***For more advice: Contact your local SLL Liaison Officer, listed in your Protected Species Risk Management Plan***

#### **Disclaimer:**

*This document has been produced to serve as a guide to the MPI Fisheries Regulations for Seabird Mitigation Measures Surface Longlines, for use by the fishing industry. This not intended to be nor should it be used, as a substitute to any statutory, regulatory, and/or non-regulatory requirements for Surface Longline fishing. Before acting in reliance, either wholly or partially, on any information contained in this document 'guide/design', readers should seek advice as to how current legislation, rules and regulations may affect their interests. It is the duty of the operator to know and understand the current Regulations that apply.*

# Surface Longline Operational Procedures - Protected Species Risk Management

Version 3 December 2021

**FISHERIES**  
INSHORE NEW ZEALAND

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**Disclaimer:** These OPs do not replace or override any fisheries legislation or other regulations including Health & Safety, Maritime Safety, Fisheries, Animal Welfare or the Wildlife Act. Vessel operators are required to ensure that both they and their crew understand all regulations that are relevant to the fisheries and environment that they are operating in, and that crew and vessel safety must always be considered.

**MPI has stated that at-sea inspections will become more directed as a result of the availability of GPR data. Make sure you know what you need to meet legal requirements on protected species mitigation measures and reporting. Please contact your Liaison Officer for support if you need assistance.**

## 1. Background, Rationale and Purpose

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Surface longline (SLL) vessels operate in areas overlapping with marine protected species, particularly seabirds. In addition to seabirds, the SLL fleet has observed captures of other protected species including turtles, sharks and less commonly marine mammals. It is therefore important to use a structured approach to mitigate the risk of protected species captures in the fishery.

The protected species caught by the SLL fleet are of significant importance to the community and some are rare (*i.e.* have very small and/or threatened populations). The Government will be responsive in ensuring that undue impacts are not occurring on these species. It is in the best interests of the SLL fleet to take all reasonable steps to understand, acknowledge and mitigate impacts on protected wildlife encountered.

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### National Plan of Action - Seabirds and Risk Assessment

The National Plan of Action (NPOA) Seabirds focuses on education, partnering to find innovative solutions to bycatch mitigation, and ensuring that all fishers know how, and are taking all practicable steps, to avoid seabird bycatch. The NPOA sets out objectives for the next five years to guide management of risk to by-caught seabirds in New Zealand fisheries. This management comes mostly from Fisheries New Zealand (FNZ) with support from the Department of Conservation (DOC) and industry bodies such as Fisheries Inshore NZ (FINZ), Southern Inshore Fisheries Management Co. (SIFMC) and the DeepWater Group (DWG).

The New Zealand seabird risk assessment is the main way FNZ evaluates the impact of commercial fisheries on New Zealand seabirds. The assessment incorporates spatial overlap of seabird populations and fishing effort, as well as population size and productivity to determine each species' risk category. A key part of the NPOA Seabirds is the objective to decrease the number of fishing-related seabird mortalities and show a reduction in their risk ratios, so that populations can recover and stabilise.

Currently 13 seabirds are assessed to be in a risk category that warrants prompt and considered attention. Of particular concern to the inshore SLL fleet are black petrels, flesh-footed shearwaters, Wandering (Antipodean and Gibson's) albatross, and Salvin's albatross.

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### National Plan of Action - Sharks and Risk Assessment

Similarly to seabirds, NZ's shark species are included under a 'NPOA – Sharks' that documents NZ's planned actions for conservation and management of those species. Several sharks and rays are also protected under NZ legislation and some of those may be encountered when fishing in your region. There are increasing numbers of turtle's captures being reported by the SLL fleet too. **While other protected species (sharks, turtles and marine mammals) are caught by this fleet, seabirds are currently at the highest risk to SLL fishing, therefore this document focuses on seabird capture mitigation, regulations and techniques.**

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### Purpose

This Operational Procedure (OP) has been established so that agreed and required management measures are clearly communicated to and understood by vessel skippers, managers, and annual catch entitlement (ACE) providers/Licensed Fish Receivers (LFRs).

This OP aligns with the 'Mitigation Standards to Reduce the Incidental Captures of Seabirds in New Zealand Commercial Fisheries (Toolbox of Measures)' developed by DOC and FNZ. The Mitigation Standards builds on existing statutory requirements to show bycatch mitigation options that are above and beyond minimum regulations. The fishing industry focuses on ensuring our fleets are meeting statutory requirements and encourages vessels to further reduce their risk of seabird captures, as appropriate to their vessel operations.

The purpose of the inshore SLL Operational Procedures is to ensure:

- The risk of seabird mortalities from longlining is mitigated and seabird captures are reduced.
  - All mandatory measures are understood and adhered to.
  - Vessel skipper and crews are aware of additional, voluntary measures that go above and beyond statutory requirements.
  - Vessels report as required and as accurately as possible all capture events (FNZ reporting) as well as any event triggers required by the Protected Species Liaison Programme.
  - Vessel crews actively implement protected species mitigation measures *i.e.* **Look – Think – Act.**
  - Vessel skippers and crew are aware of systems to manage protected species risk and can stand up to audit or review by vessel owners, skippers or Government.
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## 2. Main seabird species at risk

Species at Risk	Species Code	Main Risk Area	Threat Classification, Risk Profile, Time, Place
Black Petrel	XBP	East Coast North Island (Particularly FMA 1)	<ul style="list-style-type: none"> <li>• <b>Highest risk seabird in FNZ Risk Assessment</b></li> <li>• <i>Nationally Critical</i></li> <li>• <b>Highest risk during breeding season Oct-May</b></li> <li>• Nests on Great Barrier Island and Little Barrier Island</li> <li>• <b>Jan-Feb</b>, forage around breeding islands, North Cape to HG, out to the shelf and down to BOP</li> <li>• <b>Mar-May</b>, forage close to breeding islands, North Cape to HG and offshore Coromandel</li> <li>• Aggressive feeder near nest sites, boat positive, strong diver</li> </ul>
Flesh-footed shearwater	XFS	East Coast North Island (particularly FMA 1)	<ul style="list-style-type: none"> <li>• <i>Nationally Vulnerable</i></li> <li>• <b>High risk period between Dec-May</b></li> <li>• Nests on many out-lying islands around upper North Island</li> <li>• Previous captures focused North Cape to BOP, with some captures observed from Lachlan Banks area and Taranaki</li> <li>• Aggressive Feeder, strong diver and forages during daylight hours</li> </ul>
Salvin's albatross	XPB	All Areas	<ul style="list-style-type: none"> <li>• <i>Nationally Critical</i></li> <li>• During breeding season (Aug-Apr) found across NZ, particularly in the Cook Strait</li> <li>• <b>Higher risk in North Island Sep-Mar</b></li> <li>• Aggressive surface feeder (fish, squid, krill, offal), boat positive but rarely plunge or dives</li> </ul>
Wandering albatross (Gibson's and Antipodean)	XAG	East Coast North Island (particularly FMA1) and Kermadec	<ul style="list-style-type: none"> <li>• <i>Nationally Critical</i></li> <li>• Pelagic boat positive foragers</li> <li>• <b>Forage on upwelling areas &amp; features</b> - overlap where deepwater occurs close to land <i>i.e.</i> East Cape, Kaikoura, Cook Strait/Wairarapa, Three Kings, Otago Canyons and Fiordland</li> <li>• Nest on Antipodean, Campbell and Auckland Islands, most common in Tasman Sea and over Chatham Rise</li> </ul>
NZ White-capped Albatross		All Areas	<ul style="list-style-type: none"> <li>• <i>Declining</i> - main threat is fisheries bycatch</li> <li>• During breeding season (Nov-Jun) they occur all around NZ, particularly Cook Strait and south</li> <li>• After breeding season most birds remain in Australasian waters</li> <li>• Aggressive surface feeder (fish, squid, krill, offal), boat positive but rarely plunge or dive</li> </ul>
Westland Petrel		All Areas, particularly West Coast South Island	<ul style="list-style-type: none"> <li>• <i>Naturally Uncommon</i></li> <li>• Commonly seen east coast South Island, Cook Strait, Chatham Rise south to Fiordland and Stewart Island</li> <li>• Rarely north of Cape Egmont and East Cape</li> <li>• <b>During Mar-Nov range over shelf waters (&lt;800m depths) during breeding season</b></li> <li>• Migrate to South America during non-breeding periods</li> <li>• Boat positive foragers, particularly in tuna longlining</li> </ul>



### 3. Other protected species at risk

Species at Risk	Species Code	Main Risk Area	Threat Classification, Risk Profile, Time, Place
Leatherback Turtle	LBT	All areas, particularly East Coast North Island, Kermadecs	<ul style="list-style-type: none"> <li>• <b>Leatherback</b> – <i>Critically Endangered</i>, pelagic forager commonly sighted in northern NZ during summer months, has been sighted in South Island too</li> <li>• <b>Green</b> – <i>Endangered</i>, spring/summer in upper North Island</li> <li>• <b>Loggerhead</b> – occasional visitors found around upper North Island but sighted as far south as Stewart Island</li> <li>• <b>Hawksbill</b> – tropical species, rare visitors to NZ waters, mostly seen upper North Island, on continental shelf but sighted as far south as the Cook Strait</li> <li>• <b>Olive Ridley</b> – rarely seen in NZ but has been sighted around North Island</li> </ul>
Green Turtle	GNT		
Loggerhead, Hawksbill & Olive Ridley	TLE		
Spine-tailed devil ray	MJA	All areas, particularly East Coast North Island, Kermadecs	<ul style="list-style-type: none"> <li>• Migrate to northern NZ waters (east and west coasts) during spring and summer</li> <li>• Predominantly pelagic (in water deeper than 200m) but do occur coastally</li> <li>• Look very similar to Manta Rays and often misidentified</li> <li>• Little is known of their biology in NZ waters</li> <li>• Susceptible to fishing pressure due to being slow growing/slow to mature, low numbers of eggs e.g. 1/year</li> </ul>
Dusky Dolphin	DDO	All Areas, particularly East Coast	<ul style="list-style-type: none"> <li>• <i>Not Threatened</i></li> <li>• Found in large groups around the coastline of NZ, but more so on the East Coast (generally &lt;2000m deep)</li> <li>• Forage offshore at night on anchovies, hake and squid</li> </ul>
Common Dolphin	CDO	All Areas, particularly East Coast	<ul style="list-style-type: none"> <li>• <i>Not Threatened</i></li> <li>• Commonly found in large groups offshore NZ year-round, particularly in warm-temperate waters</li> <li>• Forages on squid and small schooling fish</li> <li>• In spring often associated with Pilot, Bryde's and Sei whales</li> </ul>
Bottlenose Dolphin	BDO	All Areas	<ul style="list-style-type: none"> <li>• <i>Range Restricted</i></li> <li>• A pod of ~450 range between Doubtless Bay (Northland) and Tauranga</li> <li>• Another pod ranges from the Marlborough Sounds to Westport</li> <li>• Feed on mid-water fish and oceanic squid</li> <li>• Commonly associated with pilot whales, rough-toothed and Risso's dolphins, and humpback whales</li> </ul>
NZ Fur Seal	FUR	All Areas	<ul style="list-style-type: none"> <li>• <i>Not Threatened</i></li> <li>• Present year-round on entire NZ Coastline, mainly rocky shores</li> <li>• Forage both nearshore and offshore (down to 200m deep) on squid and small mid-water fish</li> <li>• Also known to forage off the continental shelf</li> </ul>

## 4. Managing the main risks associated with the SLL fishery

RISK ITEM	WAYS TO MANAGE RISK
<p><b>Food Attractant</b></p> <p>Offal, waste, discarded baits, whole fish returned to the sea, whole fish on the line.</p> <p>The more food, the more birds around the vessel, increasing the risk of captures.</p>	<ul style="list-style-type: none"> <li>• Stopping or controlling (batching) offal/waste discharge immediately before or during setting and hauling lines.</li> <li>• If batching cannot occur then discharging any attractant on the other side from which the hauling station is located.</li> <li>• If hauling over the stern, discard used baits, offal, waste and live fish in batches on the leeward side of the vessel.</li> </ul>
<p><b>Baited Hooks - Setting</b></p> <p>Predominantly beak hooked, foul hooked, or entangled in the line.</p> <p>Poorly designed or deployed tori line increases the risk.</p> <p>Poor sink rate (the longer the hook is on or near the surface) increases the risk.</p>	<ul style="list-style-type: none"> <li>• Use a tori line(s) to deter seabirds from accessing baits (unless hook pods are used on 100% of hooks).</li> <li>• Use appropriate line weighting to ensure a sink rate that mitigates the risk to diving birds (locating weights closer to hooks can help).</li> <li>• Slow the vessel or free-spool the drum to let the line sink faster if possible.</li> <li>• Set at night to reduce visibility of gear to seabirds (can also use blue-dyed bait).</li> <li>• Avoid setting the line when large numbers of birds or marine mammals are present.</li> <li>• While ensuring vessel &amp; crew safety, reduce additional &amp; unnecessary lighting on the vessel to the minimum.</li> <li>• Use thawed bait rather than frozen bait that floats (take out of freezer or ice several hours before setting).</li> </ul>
<p><b>Baited Hooks - Hauling</b></p> <p>Predominantly beak hooked, foul hooked or bird entangled in the line.</p> <p>Risk increases the longer the hook is on or near the surface, made worse by a slow retrieval rate</p>	<ul style="list-style-type: none"> <li>• Use a bird exclusion or scaring device at the hauling station (<i>i.e.</i> hose spray, mitigation devices and/or vessel manoeuvres).</li> <li>• Haul as quickly as practicable.</li> <li>• Ensure line weighting is appropriate and floats are hauled in a timely manner.</li> <li>• Ensure vessel is moving at an appropriate speed to keep the line underwater.</li> <li>• Avoid hauling the line when large numbers of birds or marine mammals are present.</li> <li>• While ensuring vessel &amp; crew safety, reduce additional &amp; unnecessary lighting on the vessel to the minimum possible</li> </ul>
<p><b>High Risk Periods and Areas</b></p> <p>Increased seabird numbers and aggressive feeding during breeding season, migration periods and/or moon periods</p>	<ul style="list-style-type: none"> <li>• Avoid setting on a full moon and three days either side when possible.</li> <li>• Increase sink rate (<i>e.g.</i> weight and/or remove floats, and/or reduce setting speed (noting reduced setting speed may mean adjusting tori line drag to maintain aerial extent).</li> <li>• Add another streamer line,</li> <li>• Move from the fishing area, particularly move away from nesting areas.</li> <li>• While ensuring vessel &amp; crew safety, reduce additional &amp; unnecessary lighting on the vessel to the minimum (particularly if at anchor).</li> </ul>

## 5. Mitigation Measures

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FNZ has implemented regulatory requirements for seabird risk mitigation. You should have a full copy of the regulations onboard and understand them. The regulations that apply are: *Fisheries (Seabird Mitigation Measures – Surface Longlines) Circular 2019* - <https://gazette.govt.nz/notice/id/2020-go30>.

### In summary,

**Tori (streamer) lines:** If hook-shielding devices are not used, tori lines must be deployed during setting (day and night) and meet design specifications.

**Night setting:** SLL vessels must set only at night unless line weighting is employed, or hook-shielding devices are used.

**Line weighting:** Line weighting is required for day setting, unless hook shielding devices are used.

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### 5a. Mandatory Tori Lines requirements

Tori lines are regarded as one of the most effective mitigation tools. **All longline vessels 7m or longer in LOA must deploy a tori line during all setting events.**

#### **Tori line requirements for vessels under 35m LOA:**

- The tori line must achieve a minimum aerial extent of 75m .
- The tori line must be attached at a point at least 6m above the waterline (as close to the stern as possible).
- The streamers must be brightly coloured, be spaced a maximum of 1m apart, and extend along the aerial extent of the line,
  - Short streamers must be at least 1m in length and must be attached no further than 1m apart along aerial section,
  - Long streamers (must be long enough to reach the surface of the sea in calm conditions) must be attached at intervals of no more than 5m apart along at least the first 75m of the streamer line.
- Streamers may be modified in the first 15m of streamer section to minimise risk of entanglement.
- If the tori line is damaged/broken during setting, stop set until it's repaired and or deploy another line.

#### **5b. Best operational design guide to achieve at least 75m of aerial extent:**

1. Vessel attachment: place as high as possible above the waterline (recommended **at least 8m or more**).
  - Crew must be able to adjust or move the tori line or use a bridle to place the tori line in the best spot relative to fishing gear.
  - A proper pole or attachment point is essential.
  - Fit a breakaway (weak link) so if a tangle occurs the tori line breaks at the weak spot, then there is no damage to other gear.
  - Have a lazy line back to deck so you regain the vessel end of the tori line and retrieve it.
2. Streamer aerial section: backbone of the tori line with streamer of a minimum length of 1m be spaced at no more than 1m intervals:
  - Depending on height (off water) of the streamer line, reduce length of each streamer by approximately 30-50cm going down the backbone.
  - Once deployed (without the setting gear) the first time, trim long streamers to stay just above the water to reduce drag, tangling gear, and birds (*i.e.* so streamers are in the air not in the water).
3. Drag section; can be either a float(s) or rope or mono.
  - There is no minimum or maximum length the drag rope or object can be other than you must achieve 75m aerial in your streamer section.
  - If the vessel is under 20m, recommended is 80 m to 100m long with either rope, float (or both) or mono for drag. For vessels over 20m length, the whole tori line must be 150m long.
  - Adjust tori line to best suit weather, gear and processing conditions to minimise risk during periods of high seabird interactions.

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4. Tangling: Tori lines if not deployed or adjusted correctly often tangle with setting gear. To reduce this maintain height separation for as long as possible between the tori line and setting gear:

- Fix the tori line as high as possible to vessel (every 1m height will give you 8-10m more aerial extent).
- Increase the drag (most tori lines don't have enough drag) by increasing size, length or weight of drag object or object needs to be attached so its streamline with no catch-points for the setting gear to 'grab'.
- Keep streamers out of the water. Only the last section of the backbone with short streamers should be in contact with the water.

#### **5c. Mandatory Line Weighting Requirements (also see regulations)**

*Note: Line weighting can lead to risk of accident or injury, fishing practices need to be assessed, risks identified and procedures both documented and implemented to manage these risks.*

During all daylight sets (see Regulations for detail of what constitutes day and night) the line must meet the following specifications:

- 1 weight 40g or more within 0.5m of the hook; OR
- 1 or more weights of 45g or more 1m from hook; OR
- 1 or more weights of 60g or more 3.5m from hook; OR
- 1 or more weights of 98g or more 4m from hook.

Vessels that cannot meet mandatory weighting measures must set at night, with tori lines deployed, OR use hook-shielding devices in line with the regulations.

#### **5d. Best operational guides for line weighting and good sink rate (around 0.3m/s best practice)**

- Weight line to achieve satisfactory sink rate so seabirds have less time to target the baited hooks.
- In times of heightened risk, add more weight and/or remove some floats.
- Using line setters or slowing vessel's setting speed will reduce tension on the setting line and increase sink rate.
- Applying weights at regular intervals will help maintain a steady sink rate.
- Mainline diameter and materials, the distance between hooks and numbers of floats used can all effect the sink rate.
- Night setting makes it difficult for seabirds to see baited hooks (except full moon).

#### **5e. Best operational guides for offal and fish discharge**

- No continuous or ad hoc discharge of fish waste, offal should be held (in bins, fish pounds, etc.) for as long as practicable and 'batch' discharged when fishing ceases or, if required, during hauling on the opposite side of the hauling station.
  - When setting and/or hauling, used bait must be held and discharged after operations have ceased.
  - If too many birds are crowding the hauling line, discharge a batch of offal/ waste or whole fish on the opposite side of the hauling station to distract the birds.
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## 6. Risk Management Plan Responsibilities

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### Responsibilities of Vessel Owner and Operator

- Display a copy of “The 10 Golden Rules for SLL Vessels” on the bridge.
- Ensure fishing operations are meeting mandatory requirements.
- Ensure all crew are briefed on the SLL OPs, the vessel’s PSRMP and fully understand all the actions required.
- Be aware of marine protected species activity around the vessel, assess risks and take actions needed to minimise risk.
- Ensure the vessel has on board a fit and proper tori line, plus spare and sufficient parts to maintain and repair in event of loss or damage.
- Ensure vessel is using mandatory mitigation measures and additional measures as considered appropriate to the risk to seabirds.
- Deploy and/or adjust mitigation measures to best suit weather, fishing and processing conditions to minimise risk of seabird interactions.
- Ensure correct reporting (FNZ and LP) and that trigger reports are sent promptly to your Liaison Officer.
- Ensure crew are meeting their responsibilities listed below.
- Address any deficiencies in implementation of the PSRMP as noted by any observer.
- Address the effectiveness and content of the PSRMP with a liaison officer if seabird captures exceed trigger points.

### Responsibilities of Crew

- Be familiar with the SLL OP and other documents provided and put these into practice.
  - Ensure offal/fish waste is not discharged immediately before or during shooting and if discharge during hauling is unavoidable, batch discharge from the side opposite the hauling station.
  - **Hauling:** *Period from when the marker buoy is taken on board until the last of the longline is on board.*
  - **Shooting:** *Period from when the marker buoy is off the deck until the last hook is at fishing depth.*
  - Haul the line as quickly as practicable and always minimise the time the line remains at or near the surface.
  - Tori lines are deployed and adjusted to best suit weather, fishing gear and operations, and fish waste discharge conditions to minimise risk of seabird interactions.
  - Ensuring the tori line (and other bird scaring devices) remain ‘fit and proper’, using spare parts to rebuild/replace if they are damaged or lost.
  - Maintain a watch of seabird and mammal activity around the vessel and advise the skipper as appropriate when it is clear there is risk that requires action including:
    - Not shooting in presence of significant feeding activity.
    - Adjusting hauling speed and operation to reduce risk.
    - Advising if any protected species is seen caught and ensuring its immediate release if alive.
    - Handling captured seabirds safely and carefully, returning all seabirds to the sea (unless requested otherwise by MPI observer) as per best practice to reduce potential of cryptic mortality.
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## 7. Reporting Protected Species Captures – Trigger Limits

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### Trigger Limits & Vessel Action

#### Trigger Points include:

##### Any 24 hr period

- (Alive or Dead) Any great albatross, penguin, dolphin, sea lion or basking shark,
- (Alive or Dead) First turtle capture of fishing year,
- (Alive or Dead) 3 large (e.g. albatross/mollymawk, giant petrel, gannet), or
  - 5 small (e.g. petrel/shearwater) seabirds, or
  - 2 fur seals,
- (Dead) Any black petrel or flesh-footed shearwater.

##### Any 7-day period

- (Alive or Dead) 10 protected seabirds of any type, or 3 turtles, or 5 fur seals.

### Action Required

**Report all trigger points to your local Liaison Officer within 24 hours so that any follow-up can be discussed and carried out. Emails from Sat-C or texts are OK.**

Your local Liaison Officer's contact details are on your Protected Species Risk Management Plan.

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## 8. Audit & Review

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Government fisheries observers on your vessel will audit the implementation of your PSRMP. Information they collect will be provided to DOC, Fisheries NZ and the Liaison Officer.

If your PSRMP is not being implemented effectively, it means that either the Plan needs updating or practices onboard need to be improved. Your Liaison Officer can work this through with you and update your Plan if necessary.

Your PSRMP may also need updating at other times. For example, if you change gear or target species, or there are changes in any element of your fishing operations that relate to the risk of protected species captures. At these times, please contact your Liaison Officer.

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## 9. Fisheries NZ Reporting Requirements

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### All protected species captures

It is not illegal to accidentally capture protected species while commercial fishing, but **it is illegal to fail to report the capture**. It is important that all captures and mortalities are reported accurately. All protected species (captures or deck strikes, see below) dead or alive (then returned to the sea) must be recorded on the Electronic Logbook.

Fisheries NZ observers may decide to keep some protected species caught for autopsy and identification. They are permitted to do so. The vessel may only do so if it holds a DOC permit.

### **Always meet your legal requirements.**

- **Captures:** *An animal (dead or alive) which is brought onboard on/by the fishing gear and requires assistance/help off the vessel.*
  - **Deck-Strikes:** *Birds that 'collide' with the vessel/deck/superstructure and are dead or injured, and are unable to leave vessel of their own accord, report as 'deck-strikes'.  
**Not reported if alive and leaves the vessel unassisted (i.e. landed on vessel).***
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## 10. Animal Handling/Release and Crew Safety

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### Release Alive

Every care should be taken to release animals alive and in the best condition possible. Handle with care to minimise any further stress, harm or injury to the animal, and to increase its survivability back at sea. Refer to the [DOC Handling and Release Guide](#) for further diagrams and instructions. **Deliberately harassing or harming these animals after an incidental capture is an offence.**

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### Seabirds

- Keep the bird calm by covering the head with a cloth. Use two crew if possible; one to support the bird, while the other frees the gear from the bird. Use gloves and eye protection (some birds can inflict a nasty bite).
- Carefully isolate the tangled snood or hook. Remove the snood or hook while holding the bird firmly.
- Once freed, place the bird gently back into the water. If the bird is waterlogged keep it in a safe place, such as an empty fish case, until it has recovered.

Refer to the [DOC Handling and Release Guide](#) for further diagrams and instructions.

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### Marine Mammals and Sharks

- If possible, remove animal from the longline without bringing aboard. This is especially important for sharks as their body structure does not protect their internal organs when hauled on deck or over rails.
- If possible, give seals time and space to leave the vessel. Do not take actions that will antagonise the animal and watch carefully for signs of aggression.
- Do not allow crew to be in the animal's path or escape route. Use netting as a moving barrier or a deck hose to persuade/guide the animal back to the sea.
- Seals can carry a number of diseases infectious to humans. Handling marine mammals should always be kept to a minimum and should only occur if absolutely needed.

When attending to animals landed on deck, the following steps should be followed to ensure crew safety:

- Whenever handling bodies of drowned fur seals (or any other marine mammals), wear waterproof gloves and waterproof protective clothing.
- Avoid direct contact with blood, urine, faeces, and other body fluids. It is also important to avoid the mouth of the marine mammal as this is a major source of disease.
- If bitten or grazed by a marine mammal, wash and disinfect the wound immediately, apply betadine/antiseptic ointment and cover the wound. This minimises the risk of 'seal finger', a chronic and very painful infection caused by bacteria carried by some marine mammals. Visit a doctor once ashore as infection is very common with seal and sea lion bites.
- After handling any marine mammal, crew should wash their hands and forearms with antibacterial soap and hose down their protective clothing.

Refer to the [DOC Handling and Release Guide](#) for further diagrams and instructions.

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### Turtles

- Utilise the dehooker and line cutter in your turtle kit (if you don't have one on board, contact your Liaison Officer to supply you with one).
  - Release while in the water, do not pull onboard.
  - If hooked or swallowed, cut the snood as close to the animal as possible.
  - If tangled, cut the snood as required to remove the line.
  - Refer to the [DOC Handling and Release Guide](#) for further diagrams and instructions.
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### Returning Dead Protected Species to the Sea

The entire body of any dead protected species must be returned to the sea, unless a MPI observer onboard the vessel directs the skipper to, or they themselves keep it or the skipper has been advised otherwise by DOC or Fisheries NZ. Usually, they only keep seabirds.

**Taking any part and keeping it or cutting or mutilating the body of a protected species is an offence.**

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# Turtle Handling & Release

## Information for longline fishers

(Fact Sheet 1/1)

The purpose of this fact sheet is to provide best practice methods for handling and release of sea turtles hooked/entangled in longline gear. Turtles can be accidentally captured in a range of fisheries, but they are most commonly caught in surface longline fisheries. Handling turtles correctly is safer for you and gives them a better chance of survival.

### Reporting requirements

You must report the turtle capture for that fishing event in the Ministry for Primary Industries' Non-Fish and Protected Species Catch Return (NFPSCR). The NFPSCR reporting codes are:

- Leatherback turtle - LBT
- Green turtle - GNT
- Loggerhead turtle - LHT
- Hawksbill turtle - HBT
- Marine turtle (unidentified) - TLE

### 'Best Practice' handling and release methods

#### 1. Minimise turtle access to baited hooks during settings

- Large circle hooks (18/0) and setting deeper (below 40m) helps to avoid interactions with turtles.
- Avoid line setting in areas where turtles, particularly leatherback turtles, are caught.

#### 2. If a turtle is hooked or entangled in your longline

- If a turtle is noticed on the line, slow down to reduce trauma to the animal.

### For More Information

If you do not have a specialised turtle dehooking kit, contact your Liaison Officer at the email address below. Other questions can be directed to either of the below emails.

[liaison@doc.govt.nz](mailto:liaison@doc.govt.nz)

[HMS@mpi.govt.nz](mailto:HMS@mpi.govt.nz)

- Use turtle de-hooker provided by Liaison Officer
  - Use de-hooking devices to remove externally embedded hooks.
  - De-hooking devices should not be used to remove hooks from the mouth, throat, or flippers.
  - If the hook is visible the shank should be cut with bolt cutters, and if possible, the barb should also be cut off.
  - If the hook is not visible the line should be cut as close as possible to the mouth, as trailing gear is likely to be fatal.

- If the turtle is too large to bring on board, bring it as close to the boat as possible without putting strain on the line - then cut the line as close to the turtle as possible.
- If a turtle is deceased, make sure to record the life status accurately in your NFPSCR report.

#### 3. If a turtle is small enough to be brought on board

- Always lift turtles out of the water with the aid of a dip-net.
- Use the supplied dip-net to lift small turtles aboard for disentanglement, hook removal and recovery. Do not use a gaff or pull on the line.
- Once a turtle is on board, place a piece of wood in the turtle's mouth so it cannot bite, then cut the hook or line.
- If the turtle is inactive place it in a shaded location to recover before being released.
- If the turtle is conscious and active carefully return the turtle to the water headfirst, after slowing down or stopping the fishing vessel.
- Record any tag numbers recovered from the turtle.
- Ensure the turtle is well clear of the vessel before making way again.

## Fur Seal Handling & Release and Crew Safety

### To reduce risk:

- Do not connect line setting near large congregations of marine mammals

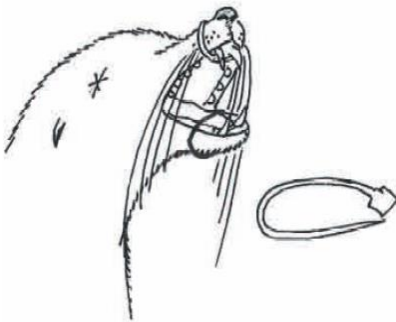
### Handling Dead Marine Mammals:

- The entire body of any dead mammal must be returned to the sea,
- Mutilating or taking any part from the body of a marine mammal and keeping it is a serious offence in New Zealand.

### Marking and Returning Dead Mammals:

Any marine mammal returned to the sea must be marked with twine. The purpose of this is to avoid the same animal being counted twice if its body is caught again.

(This can and does happen especially on other/ trawl fishing grounds. When marking a dead fur seal: simply use either a cable tie or twine fixed firmly behind the lower or upper jaw canine teeth prior to returning to the sea.



### Handling Marine Mammals – Crew Health & Safety:

Fur seals carry a number of infectious bacteria that can be dangerous to humans. You must be very careful with regards to hygiene practices when handling live or dead animals to avoid contamination or infection.

#### Always:

- Wear waterproof gloves and waterproof protective clothing
- Avoid unnecessary contact with blood, urine or faeces or other body fluids
- If you are bitten or grazed you must wash and disinfect the wound immediately and treat with antibacterial ointment such as Betadine.
- After handling any animal wash your hands and forearms with soap or disinfectant, wash your deck and gear

### Seal release and handling equipment:

- Gloves, bolt cutters, A line cutter and Optional- A dehooker

### MPI 'NFPSR' Reporting Codes; Fur Seal – 'FUR'

# HOOK REMOVAL FROM SEABIRDS

Agreement on the Conservation of Albatrosses and Petrels

## Release Kit



Towel / Blanket



Pliers / Bolt cutters



Net



Box / Bin



Gloves



A C A P

Visit [www.acap.aq](http://www.acap.aq) for more information

1

## Bring bird aboard

If possible, slow or stop hauling and slow or stop vessel to release line tension. If practical, use a landing net to lift small birds on board, otherwise retrieve the bird on the line as safely and quickly as possible. When within reach, grab it by the bill. **Never grab the wing.**

## Restrain bird and hold securely

Carefully fold the wings into the bird's body. Wrap the bird in a towel/blanket (not too tightly) and cover the eyes if possible. Make sure the bird doesn't come into contact with oil on deck.

**For large birds** that you cannot manage under your arm, restrain the bird securely between your legs without squeezing. Hold the bill gently shut but **do not cover the nostrils.**

If the bird vomits, loosen hold on bill so the bird does not suffocate.

nostrils

2

## Remove the hook

*If the hook is visible*

Use pliers (or bolt cutters for large hooks) to cut through the hook shaft (or to flatten the barb). Pull the hook back out of the bird.

OR

*If the hook is swallowed and removal is possible*

A second person can find the hook position externally by feeling along the neck or internally by following the line to the hook. Gently force the tip of the hook so that it bulges under the skin of the bird (for **large birds**, this may be easier if you reach down the bird's throat and hold the hook). If you can get a good grip on the hook, push the tip of the hook through the skin and remove.

**Never try to extract the hook backwards**



push through skin

3

OR

*If hook removal is not possible*

Either because removing the hook will cause further damage to the bird or the hook is too deeply ingested, cut the line as close to the hook as possible and leave the hook in the bird.

4

## If the bird is exhausted or waterlogged

If possible, place in a **ventilated** box or bin in a quiet, dry, shaded place to recover for an hour or two. Otherwise, contain bird in a quiet dry area, **away from oil.** The bird is ready for release when the feathers are dry, bird is alert and able to stand.

5

## Release the bird

If the bird is strong and mostly dry, release it onto the water (but clear of the vessel) immediately after hook removal. Having again first grabbed the bill, lift and slowly lower the bird onto the water letting go of the bill last.

**Where birds cannot be lowered directly onto water,** lift and release the bird from the side of the vessel into the wind letting go of the bill at the same time. The bird may remain on the water for some time after release.

wind



HOOK REMOVAL FROM SEABIRDS

Visit [www.acap.aq](http://www.acap.aq) for more information



## INTERNATIONAL AND NATIONAL SEABIRD RISK FRAMEWORKS

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1. United Nations (UN) Law of the Sea, Fish Stocks Agreement & Responsible Fishing Agreement:
  - Nations must catch their fish but not harm the environment.
2. UN-FAO delivers required base standards through an International Plan of Action (IPOA) for seabird risk management globally and each nation must have its own plan.
3. Seabirds, especially albatross are recognised as the world's most threatened bird group.
4. Association for Conservation of Albatrosses and Petrels is a global treaty on reducing threats to seabirds, in NZ it is the responsibility of the Crown through the Department of Conservation (DOC) with Fisheries NZ (FNZ) involvement.
5. NZ has a National Plan of Action (NPOA) for Seabirds with 2 goals:
  - No risk to populations (they can grow, not decline due to fishing).
  - As few deaths as practical (further affordable and sensible mitigation).
6. The Fisheries Act allows for utilisation (catch your fish) while avoiding, remedying, or mitigating adverse impacts on the environment.
7. Under the NPOA, NZ has a Seabird Risk Assessment that gives each species a '*risk-rating by fishery*' where there is a risk of unsustainable mortality levels.
8. FNZ is obligated to meet the Act, therefore they have introduced mandatory measures in many fisheries, with more to come, guided by updated risk assessments.
9. The Crown (FNZ and DOC) are being held to account by eNGOs and others.
10. Most NZ trawl, line and net fisheries have known issues with certain bird species.
11. Anywhere those seabird captures are high while monitoring (observer coverage) is low will drive FNZ to intervene to meet its obligations.
12. FNZ can, and will set mandatory limits on mortalities if necessary (e.g. NZ sea lions).
13. Industry has worked with and demonstrated to Government that a joint approach with risk plans, liaison and support works better than more laws.
14. Liaison programmes are in place to support many fleets now, ~300 vessels (inshore and deepwater) and more as time goes on.
15. These programmes are paid for by quota owners directly or through Govt. levies
16. Industry aims to ensure the programmes are practical, sensible and that all vessels in each fleet are dealt with the same way.
17. Vessel owners and skippers need to understand and engage in these programmes.



## **Fisheries (Seabird Mitigation Measures—Surface Longlines) Circular 2019 (Notice No. MPI 1104)**

This circular is issued by the Manager, Offshore Fisheries, of the Ministry for Primary Industries under Regulation 58A of the Fisheries (Commercial Fishing) Regulations 2001, after complying with the requirements of Regulation 58A(2) of those Regulations.

### **Circular**

#### **1. Title**

This circular is the Fisheries (Seabird Mitigation Measures—Surface Longlines) Circular 2019.

#### **2. Commencement**

This circular comes into force on **10 January 2020**.

#### **3. Interpretation**

In this circular—

**aerial extent** means the distance from the stern of a vessel to the place where the streamer line backbone enters the water under normal setting speed in calm sea.

**hook-shielding device** means a device that-

- a. encases the point and barb of baited hooks to prevent seabird bycatch during line setting; and
- b. meets the requirements set out in the Schedule.

**nautical dawn** means the time at sunrise when the centre of the sun is at a depression angle of 12° below the ideal horizon for the place.

**nautical dusk** means the time at sunset when the centre of the sun is at a depression angle of 12° below the ideal horizon for the place.

**set**, in relation to a surface longline, means releasing the surface longline into the water.

**streamer line** means a type of seabird-scaring device, also known as a tori line.

**surface longline** means a line—

- a. to which hooks (whether baited or not) are attached; and
- b. that is suspended by floats; and
- c. that is not attached to the sea floor.

#### **4. Restrictions on use of surface longlines without hook-shielding devices**

An operator or master of a vessel must not set a surface longline in New Zealand fisheries waters without using a hook-shielding device, unless at all times when the line is set, a streamer line that complies with clauses 6 to 8 is used, and either:

- a. the line is set only during the period of time between half an hour before nautical dawn and half an hour after nautical dusk on the same day; or
- b. the line is weighted in accordance with clause 5.

#### **5. Weighting of surface longlines**

For the purposes of clause 4(b), for each hook attached to a surface longline, the following weights must be attached to that line:

- a. 1 weight equal to or greater than 40g must be attached within 50cm of the hook; or
- b. 1 or more weights equal to or greater than a total of 45g must be attached within 1m of the hook; or
- c. 1 or more weights equal to or greater than a total of 60g must be attached within 3.5m of the hook; or
- d. 1 or more weights equal to or greater than a total of 98g must be attached within 4m of the hook.

#### **6. Specifications for all streamer lines**

1. The streamer line must be attached to the vessel.
2. A streamer line must use streamers that are—

## NEW ZEALAND GAZETTE

- a. brightly coloured; and
  - b. resistant to damage from ultraviolet light.
3. A streamer line must be configured so that streamers with a minimum length of 1m are attached at intervals of no more than 1m along at least the aerial extent of the streamer line.
  4. If the streamer line in use breaks or is damaged, it must be repaired or replaced so that the vessel meets the specifications in this clause and clauses 7 and 8 before any further hooks enter the water.
  5. A streamer line must be strong enough to maintain the aerial extent of the line over the sinking baited hooks.

### **7. Specifications for streamer lines on vessels less than 35m in length**

1. A vessel that is less than 35m in overall length must comply with clause 6 and with this clause.
2. A streamer line must—
  - a. use either:
    - i. streamers long enough to reach the surface of the sea in calm conditions as well as streamers with a minimum length of 1m; or
    - ii. streamers with a minimum length of 1m; and
  - b. be set in a way that achieves an aerial extent of at least 75m; and
  - c. be suspended from a point on the vessel that is—
    - i. at least 6m above the surface of the sea in calm conditions; and
    - ii. as close to the stern as practicably possible; and
  - d. be deployed in a way that creates sufficient drag to maximise aerial extent and maintain the aerial extent of the line over the sinking baited hooks.
3. Streamers that are long enough to reach the surface of the sea in calm conditions must—
  - a. be attached at intervals of no more than 5m along at least the first 75m of the streamer line; and
  - b. be attached to the streamer line in a way that prevents the streamers from wrapping around the streamer line.
4. Streamers may be modified along the first 15m of the streamer line to minimise the risk of entanglement.
5. If 2 streamer lines are used, they must be deployed on opposing sides of the main line of baited hooks.

### **8. Specifications for streamer lines on vessels equal to or greater than 35m in length**

1. A vessel that is equal to or greater than 35m in overall length must comply with clause 6 and with this clause.
2. A streamer line must—
  - a. use both streamers long enough to reach the surface of the sea in calm conditions and streamers with a minimum length of 1m; and
  - b. be set in a way that achieves an aerial extent of at least 100m; and
  - c. be at least 200m long; and
  - d. be suspended from a point on the vessel that is—
    - i. at least 7m above the surface of the sea in calm conditions; and
    - ii. as close to the stern as practicably possible.
3. Streamers that are long enough to reach the surface of the sea in calm conditions must—
  - a. be attached at intervals of no more than 5m along at least the first 55m of the streamer line; and
  - b. be attached to the streamer line with swivels that prevent the streamers from wrapping around the streamer line.
4. If 2 streamer lines are used, baited hooks must be deployed within the area bounded by the 2 streamer lines.
5. If only 1 streamer line is used, the streamer line must be deployed windward of the baited hooks.

### **9. Circular does not apply to additional or secondary device**

This circular does not apply to an additional or secondary seabird-scaring device.

### **10. Revocation**

The Fisheries (Seabird Mitigation Measures—Surface Longlines) Circular 2018 (LI 2018/213) is revoked.

**Schedule**

**Requirements for hook-shielding devices**

cl 3

A hook-shielding device must -

- a. encase the point and barb of the hook until it reaches a depth of at least 10m or has been immersed for at least 10 minutes; and
- b. comply with clause 5; and
- c. be designed to be retained on the fishing gear rather than being lost.

DOMINIC VALLIERES, Acting Manager, Offshore Fisheries, Ministry for Primary Industries.

**Explanatory note**

*This note is not part of the circular but is intended to indicate its general effect.*

This circular, which comes into force on 10 January 2020, is made under Regulation 58A of the Fisheries (Commercial Fishing) Regulations 2001.

This circular contains mandatory mitigation measures that apply to operators or masters of vessels using the fishing method of surface longlining. These measures are designed to mitigate the effect of fishing-related seabird mortality.

This circular replaces the Fisheries (Seabird Mitigation Measures-Surface Longlines) Circular 2018 to bring New Zealand into line with international regulatory requirements adopted by the Western and Central Pacific Fisheries Commission in December 2018

The revised measures mean that, when setting surface longlines, operators or masters of a vessel must—

- use and configure streamer lines in accordance with the specifications in the circular; and
- either set lines at night or weight lines in accordance with the specifications in the circular; or
- use hook-shielding devices as a stand-alone mitigation option. The performance characteristics of approved hook-shielding devices are set out in the Schedule of the circular.

Streamer lines meeting the requirements of this circular are approved seabird-scaring devices for the purposes of Regulation 58(1) of the Fisheries (Commercial Fishing) Regulations 2001. The circular contains minor changes to the use of those lines to clarify existing requirements that—

- vessels under 35m in length can use long and short streamers or short streamers only; and
- vessels equal to or over 35m in length must use long and short streamers.

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**Corrigendum—Fisheries (Seabird Mitigation Measures—Surface Longlines) Circular (No 2) 2019 (Notice No. MPI 1111)**

In the notice with the above title, published in the [New Zealand Gazette, 8 January 2020, Notice No. 2020-go30](#), the wording of clause 4 is incorrect. The correct wording for clause 4 is

**4. Restrictions on use of surface longlines without hook-shielding devices**

An operator or master of a vessel must not set a surface longline in New Zealand fisheries waters without using a hook-shielding device, unless at all times when the line is set, a streamer line that complies with clauses 6 to 8 is used, and either:

- a. the line is not set during the period of time between half an hour before nautical dawn and half an hour after nautical dusk on the same day; or
- b. the line is weighted in accordance with clause 5.

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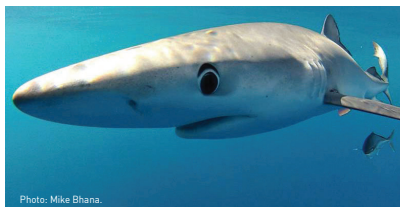


Photo: Mike Bhana.

# Conservation and management of New Zealand sharks

Over 113 species of sharks have been reported in New Zealand waters. Sharks are now known to be an important part of marine ecosystems and New Zealand's National Plan of Action – Sharks (available at [www.mpi.govt.nz](http://www.mpi.govt.nz)) recognises this.

## SHARK FINNING BAN

From 1 October 2014, it is **ILLEGAL TO REMOVE THE FINS FROM A SHARK AND DISCARD THE BODY OF THE SHARK AT SEA**. The Fisheries (Commercial Fishing) Regulations 2001 require that any shark fins landed must be naturally attached to the body of the shark (see fact sheet 2).

The Regulations provide exceptions to the "fins attached" requirement for eight species of shark. These exceptions take two forms, the first is for blue shark and it allows the fins to be removed from the body but requires that the fins be attached to the trunk after processing (before landing). The second exception is for seven other QMS species, for which the fins may be landed separately but in accordance with a gazetted ratio (see fact sheet 3).

The management of individual shark species depends on Note that you are not required to land any fins.

Approach	Species	
Fins naturally attached	Spiny dogfish	SPD
	All non-QMS species	
Fins artificially attached	Blue shark	BWS
	Elephant fish	ELE
Ratio	Ghost shark	GSH
	Mako shark	MAK
	Pale ghost shark	GSP
	Porbeagle shark	POS
	Rig	SPO
	School shark	SCH

the scale of catch, as well as other factors such as how vulnerable they are to fishing. You are likely to come across the following categories –

### • QUOTA MANAGEMENT SPECIES

- Blue shark BWS
- Elephant fish ELE
- Ghost shark GSH
- Mako shark MAK
- Pale ghost shark GSP
- Porbeagle shark POS
- Rig SPO
- School shark SCH
- Spiny dogfish SPD

Nine species of shark are managed under the Quota Management System (QMS). Catches of these species must be retained like any other QMS species, unless they are listed on Schedule 6 of the Fisheries Act 1996. A separate fact sheet is available explaining the conditions under which Schedule 6 applies and providing information on the appropriate recording of Schedule 6 releases (see fact sheet 4).

### • NON-QUOTA SPECIES

The remainder of shark species are not managed under the QMS. Reporting obligations still apply for these species, but they do not have to be retained and landed.

You are encouraged to use best practice handling methods to release sharks alive wherever possible.

## Conservation and management of New Zealand sharks

- **PROTECTED SPECIES** – catches of these species both in the EEZ and on the high seas cannot be retained by law, but all catches must be reported on the "non-fish species or protected fish species catch reports":
  - Basking shark BSK
  - Great white shark (White pointer shark) WPS
  - Oceanic whitetip shark OWS
  - Deepwater nurse shark ODO
  - Whale shark WSH

### • CITES-LISTED SPECIES NOT OTHERWISE PROTECTED:

- Porbeagle shark POS
- Smooth, scalloped and great hammerhead sharks HHS
- Shortfin mako shark MAK

Porbeagle, hammerhead, and more recently mako sharks have been listed in Appendix II of the Convention on International Trade in Endangered Species. Any landings from the high seas now require a "CITES introduction from the sea" permit before bringing any sharks into NZ fisheries waters. Exports of these sharks or their products now requires a "CITES export/re-export" permit.

Note that sharks caught in the New Zealand EEZ but not exported are not subject to CITES regulation. The CITES documentation process is administered by the Department of Conservation. For more information see <http://www.doc.govt.nz/cites>

### FOR MORE INFORMATION

- Fact sheet 2 – Landing sharks with fins attached
- Fact sheet 3 – Landing shark fins subject to a ratio
- Fact sheet 4 – Requirements for returning sharks to the sea [Schedule 6]

A copy of the regulations is available at: <http://legislation.govt.nz>

The content of this Fact Sheet is information only. The requirements are set out in the Fisheries (Commercial Fishing) Regulations 2001 and the Fisheries (Shark Fin to Greenweight Ratios) Circular 2014. The Ministry for Primary Industries does not accept any responsibility or liability for any error of fact or opinion, nor any consequences of any decision based on this information.

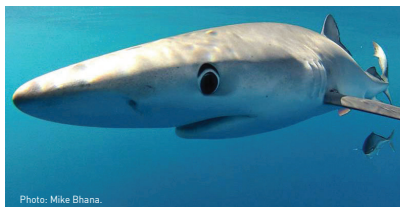


Photo: Mike Bhana.

Fact Sheet 2/4

# 2

## Landing sharks with fins attached

The Fisheries (Commercial Fishing) Regulations 2001 require that for all non-quota management system (QMS) species, spiny dogfish, and blue shark, any fins to be landed must be attached to the remainder of the shark.

### Blue shark

If you are planning to land the fins of any blue shark they must be attached to the trunk of the shark.

If you are retaining blue shark fins, you may land the shark either green (whole) or as the principal product state of "SHARK FINS ATTACHED" (SFA). This state is described as the shark being processed to the dressed state (see Figure 1 over the page) and then the fins re-attached by some artificial means. This includes (but is not limited to) stitching them on, or storing both the dressed trunk and the fins in the same bag (one shark per bag).

This rule will allow the small fishery for blue shark meat to continue, by allowing processing at sea to maximise the value of the fish, but still allowing for retention of the fins.

Note that you are not required to land the fins; you may land a different principal product state of blue shark. It is only if you wish to retain the fins that you must land it in either the "SHARK FINS ATTACHED" state or green. You are allowed to return unwanted blue shark to the sea under Schedule 6 provisions (see fact sheet 4).

### Spiny dogfish and all non-QMS species

For spiny dogfish and non-QMS species, any fins landed must be **naturally** attached to the remainder of the shark. This means that there must be some portion of uncut skin connecting the fins to the body. If you are retaining fins, you may land these sharks either as green (whole) or as the principal product state "SHARK FINS ATTACHED". This is defined for spiny dogfish and all non-QMS species as the fish being processed to the headed and gutted state with the primary fins naturally attached (i.e. the pectoral fins, dorsal fins and some or all of the caudal (tail) fin).

You may cut the fins to allow them to be folded flat against the fish, or to allow for bleeding, but they must remain naturally attached to the trunk of the shark if they are being landed.

Note that this does not preclude landing another primary landed state. It is only if you wish to retain the fins that you must land it in the "SHARK FINS ATTACHED" state.

Non-QMS species can also be legally returned to the sea (dead or alive) if you don't wish to retain them (reported on disposal reports under disposal code "D"). Spiny dogfish can be returned (dead or alive) and reported on disposal reports under disposal code "M".

### FOR MORE INFORMATION

Fact sheet 1 – Conservation and management of New Zealand sharks

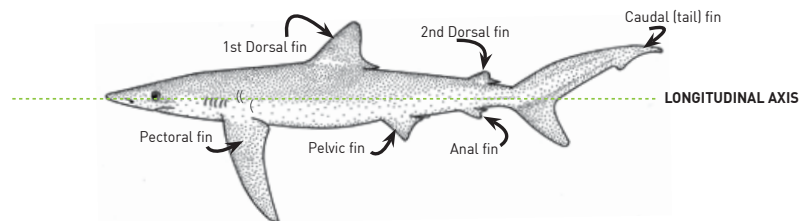
Fact sheet 3 – Landing shark fins subject to a ratio

Fact sheet 4 – Requirements for returning sharks to the sea [Schedule 6]

A copy of the regulations is available at: <http://legislation.govt.nz>

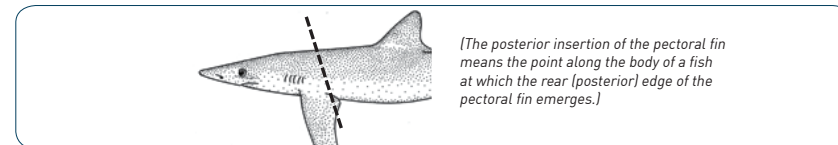
The content of this Fact Sheet is information only. The requirements are set out in the Fisheries (Commercial Fishing) Regulations 2001 and the Fisheries (Shark Fin to Greenweight Ratios) Circular 2014. The Ministry for Primary Industries does not accept any responsibility or liability for any error of fact or opinion, nor any consequences of any decision based on this information.

FIGURE 1: BLUE SHARK (BWS) DRESSED (DRE)

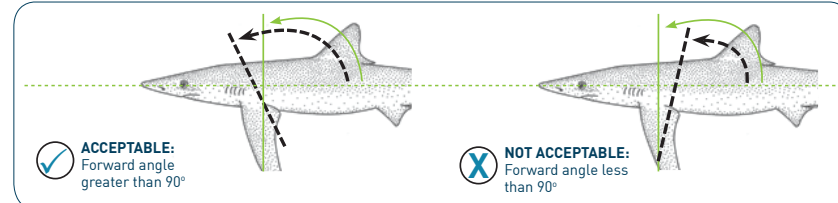


The body of a fish from which the head, gut and fins have been removed with:

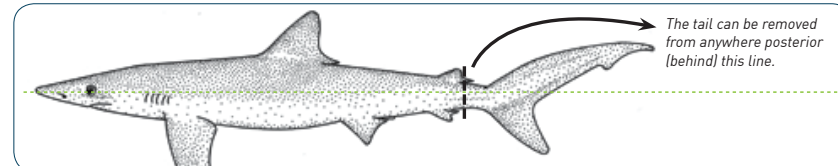
1) the anterior cut being a straight line passing immediately behind the posterior insertions of both pectoral fins.



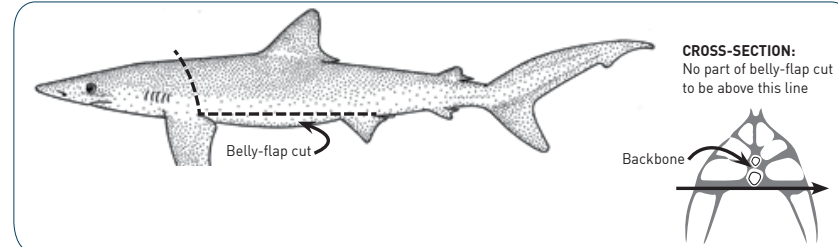
2) the forward angle of the anterior cut not less than 90 degrees in relation to the longitudinal axis of the fish.



3) no part of the tail cut forward of the posterior base of the anal fin.



4) the belly-flap may be removed by a cut, no part of which is dorsal to the cartilaginous backbone.



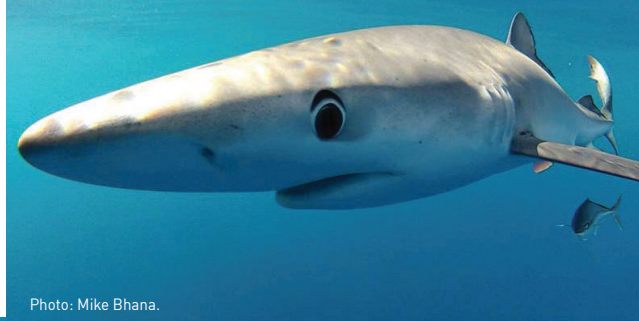


Photo: Mike Bhana.

## Landing shark fins subject to a ratio

# 3

The Fisheries (Commercial Fishing) Regulations 2001 prohibit shark finning and require that any shark fins landed must be naturally attached to the remainder of the shark (or artificially in the case of blue shark). However, an exception to the fins attached requirement is provided for seven QMS species to allow at-sea processing to continue.

These seven QMS species are:

- Elephant fish           ELE
- Ghost shark            GSH
- Mako shark             MAK
- Pale ghost shark       GSP
- Porbeagle shark       POS
- Rig                      SPO
- School shark           SCH

For these species, the weight of all fins landed must not exceed a specified percentage of the greenweight of the shark. For example, if the ratio for a particular species is set at 3.5, if sharks are landed that have a total greenweight of 100 kgs, the fins of that species landed cannot weigh more than 3.5 kgs. They may weigh less than that. The ratios will be applied to landings on a trip-by-trip basis.

The species which may have fins landed separately, the specific ratios for each species, and the "primary fins" which have been used to set the ratios are defined in a *Shark Circular* which can be found at: [www.mpi.govt.nz](http://www.mpi.govt.nz)

Note that landing other fins may result in being over the gazetted ratio for a species.

### How will the ratio work?

For species where you normally process the catch at sea and keep both a trunk (for example, dressed) and also

the fins, not a lot should change, but you will need to **STORE AND LAND THE FINS SEPARATELY BY SPECIES**. Fins must be landed wet. This will be a legal requirement from 1 October 2014, and will allow monitoring to make sure you are not retaining any more shark fins than the trunks they come from.

Future reviews of ratios will be based on direct sampling over the coming years.

For the main inshore shark species, the ratios have been set so that if you follow normal processing practices, you shouldn't exceed the ratio with your landings of shark fins. The ratios for each species have been set based on statistical analysis of at-sea sampling data. However, you will need to monitor your landings more closely so you can be confident you aren't exceeding the weight ratio, especially as you become familiar with the new rules.

**FOR MAKO AND PORBEAGLE**, there are some differences in cut and which of the fins are retained across different fleets. **THE RATIO IS SET BASED ON RETAINING THE WHOLE TAIL (CAUDAL) FIN**. This has been done to try and avoid any accidental non-compliance (which could occur if the ratio was set lower), but you will still

need to monitor your landings more closely to ensure you don't exceed it, especially if your vessel normally lands the whole tail. You can choose to land just the lower tail lobe. Close monitoring will occur to make sure no high-grading is occurring within the ratio.

Over the next two years, there will be ongoing monitoring and continued data collection to ensure that the ratios are set appropriately. Monitoring and enforcement will differentiate between slight variation around the ratios, which is to be expected, and a consistent trend of too many shark fins compared to shark bodies.

It is your responsibility to ensure you are within the ratio, but if you think the ratio is set incorrectly for a particular species, talk with MPI and/or a commercial stakeholder organisation such as Fisheries Inshore.

If you land any fins, you will need to report the actual weight of the fins for each species in the appropriate part of landing reports.

Retaining the fins from one shark and the trunk from a different shark (high grading) is an offence under the shark finning regulations.

### FOR MORE INFORMATION

Fact sheet 1 – Conservation and management of New Zealand sharks

Fact sheet 2 – Landing sharks with fins attached

Fact sheet 4 – Requirements for returning sharks to the sea (Schedule 6)

A copy of the regulations is available at: <http://legislation.govt.nz>

The content of this Fact Sheet is information only. The requirements are set out in the Fisheries (Commercial Fishing) Regulations 2001 and the *Fisheries (Shark Fin to Greenweight Ratios) Circular 2014*. The Ministry for Primary Industries does not accept any responsibility or liability for any error of fact or opinion, nor any consequences of any decision based on this information.

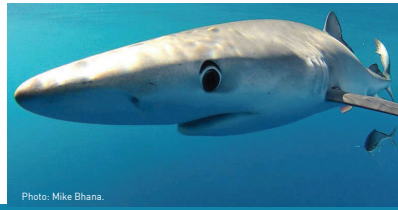


Photo: Mike Bhana.

Fact Sheet 4/4

# 4

## Requirements for returning sharks to the sea (Schedule 6)

Schedule 6 of the Fisheries Act 1996 sets out QMS species that may be returned to the sea, so long as the specified conditions are met.

As part of the regulatory package to ban shark finning, MPI has made changes to Schedule 6 for several species of shark to allow them to be returned to the water. This provides a legal option for fishers who accidentally catch a shark for which they have no market.

In many cases, the best option is to try and avoid catching the sharks altogether if they are not marketable species. There may be different ways to avoid shark catches, depending on the species and the fishery. Some research is currently being done for surface longline fisheries.

Schedule 6 returns to the sea provide another option if you have already caught the shark. This fact sheet has been produced to explain the Schedule 6 provisions for shark species and detail the associated reporting requirements.

### Live release only

The following species of sharks may only be returned to the sea **ALIVE**, if they are **LIKELY TO SURVIVE** and returned as soon as practicable:

- Rig SPO
- School shark SCH

Any returns of these species must be reported on disposal reports under disposal code "X" and will not be counted against your Annual Catch Entitlement (ACE).

### Live or dead – pelagic sharks

For the following species:

- Mako shark MAK
- Porbeagle shark POS
- Blue shark BWS

Sharks may be returned to the sea **ALIVE**, if they are **LIKELY TO SURVIVE** and returned as soon as practicable. Any sharks returned to the sea **ALIVE** must be reported on disposal reports under disposal code "X" and will not be counted against ACE.

As of 1 October 2014, these sharks may also be returned to the sea if they are **DEAD** or **UNLIKELY TO SURVIVE** provided they are correctly reported. Any sharks returned to the sea dead or unlikely to survive must be reported on disposal reports under disposal code "Z". These returns will be counted against ACE. You need to accurately estimate the weight of the sharks discarded this way.

### Live or dead – spiny dogfish

Spiny dogfish may be returned to the sea either live or dead. There is no differentiation between live and dead fish. Any spiny dogfish returned to the sea must be reported on disposal reports under disposal code "M" and will be counted against ACE.

### FOR MORE INFORMATION

Fact sheet 1 – Conservation and management of New Zealand sharks

Fact sheet 2 – Landing sharks with fins attached

Fact sheet 3 – Landing shark fins subject to a ratio

A copy of the regulations is available at: <http://legislation.govt.nz>

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## Requirements for returning sharks to the sea (Schedule 6)

### SUMMARY OF OPTIONS BY SPECIES OF SHARK

SPECIES	LIVE RETURN	Destination Code	Balanced with ACE	DEAD RETURN	Destination Code	Balanced with ACE	
School shark	SCH	Yes	X	No	Only observer- authorised discards	J	Yes
Rig	SPO	Yes	X	No	Only observer- authorised discards	J	Yes
Mako shark	MAK	Yes	X	No	Yes	Z	Yes
Porbeagle shark	POS	Yes	X	No	Yes	Z	Yes
Blue shark	BWS	Yes	X	No	Yes	Z	Yes
Spiny dogfish	SPD	Yes	M	Yes	Yes	M	Yes





# Seabird Bycatch Mitigation Standards Guide

## Surface Longline

### What Are Seabird Bycatch Mitigation Standards?

August 2021

The seabird bycatch Mitigation Standards were developed alongside the NPOA Seabirds 2020. They document the 'best practice' mitigation methods for reducing the risk of seabird captures in New Zealand commercial fisheries. It is expected that by 2025 each vessel will have a Protected Species Risk Management Plan (PSRMP) that is tailored to their operational needs and works towards achieving the best bycatch mitigation options available.

These Mitigation Standards do not replace or override any fisheries regulations, or legislation on workplace health and safety, maritime safety, or other relevant subject.



### Legal Requirements- Fisheries (Seabird Mitigation Measures- Surface Longlines) Circular 2019

1. During setting fishers must either:
  - a) use hook-shielding devices on 100% of hooks or
  - b) deploy a legal tori line and either night set or line weight to legal specifications.
2. For vessels under 35m, tori lines must achieve an aerial extent of  $\geq 75\text{m}$  and attach at a point  $\geq 6\text{m}$  above the water.
3. Tori line streamers are brightly coloured and spaced  $\leq 1\text{m}$  apart along the entire aerial extent.
4. At a minimum, weighted gear is either:  $\geq 40\text{g}$  within 0.5m of hook, or  $\geq 45\text{g}$  within 1m of hook, or  $\geq 60\text{g}$  within 3.5m of hook, or  $\geq 98\text{g}$  within 4m of hook.

### 'Best Practice' Mitigation Methods

1. **Control the discharge of fish waste**
  - No discharging of fish waste immediately before or during setting.
  - During hauling, either hold or batch discharge fish waste at intervals of no less than 30 minutes.
  - During hauling, retain all used bait on board until hauling has finished.
  - Return live fish (meeting legal requirements) to the sea as soon as practicable.
  - Document a plan for fish waste discharge should there be any equipment failures. Keep a copy on board.
  - Whilst still allowing the free movement and egress of water, maintain a secondary system that prevents uncontrolled fish waste discharge (*i.e.* equipment to minimise fish waste lost to factory floor or deck, grating and/or trap systems in fish sorting and gutting areas that lead overboard).
2. **Minimise seabird access to baited hooks during setting**
  - Either use hook-shielding devices on 100% of hooks or
  - Use a 'fit and proper' tori line that can be adjusted over the hook-bearing line to suit varying conditions,
    - and set in the period between 30 minutes after nautical dusk and 30 minutes before nautical dawn (night set),
    - and weight gear:  $\geq 40\text{g}$  within 0.5m of hook, or  $\geq 60\text{g}$  within 1m of hook, or  $\geq 80\text{g}$  within 2m of hook.
  - Carry a second (back-up) tori line and sufficient materials onboard to effect repairs when necessary.
  - Use sufficiently thawed bait.
3. **Minimise seabird access to hooks during hauling**
  - Minimise the time hooks are at or near the surface of the water. Haul as quickly as practicable.
  - Implement hauling mitigation measures, device(s) and/or vessel manoeuvres when appropriate.
4. **Minimise deck landings or vessel impacts by seabirds**
  - Keep additional and unnecessary deck lighting to a minimum so as not to attract or disorientate seabirds, especially while sheltering or at anchor.
  - Keep gear and deck clean of any remaining fish waste where possible.
  - Ensure crew are familiar with safe seabird handling procedures (see [DOC Handling and Release Guide](#)).

### For More Information

Contact your Liaison Officer for any questions you may have. They will be working with you to try and achieve these Mitigation Standards. The full document is available on the [MPI website](#).

# Managing artificial lights to reduce seabird vessel strikes



Aotearoa New Zealand is the seabird capital of the world. Our seabirds are taonga (treasures) and our long coastline is dotted with their colonies. Unfortunately, many of our seabirds are threatened with extinction, so managing threats, including light pollution, is critical to their survival.

## Why is light management important?

Many seabirds get disorientated by artificial lights at night, which can lead to collisions with vessels (vessel strikes). Following vessel strikes, seabirds can be contaminated with chemicals on deck (eg oil or fuel), causing loss of waterproofing and subsequent drowning. Vessel strikes can also cause direct seabird deaths. The risk of vessel strike is highest during foggy and rainy nights.

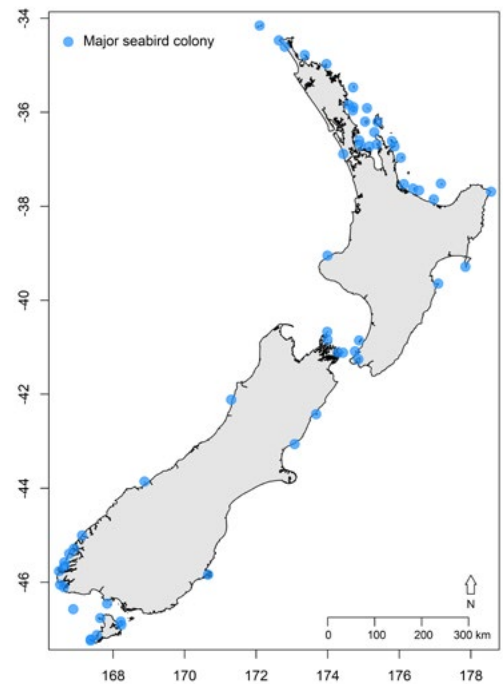
## What can you do to help seabirds?

We recommend taking the following actions, while maintaining vessel and crew safety.

- Minimise light use, especially spotlights and floodlights, when you are within 5 km of an offshore island, where most seabird colonies are located.
- Avoid unnecessary movements and activities at night.
- Eliminate unnecessary lights.
- Shield lights to only light areas essential for safe operations.
- Use lights with reduced or filtered blue and violet wavelengths (eg 2200 K).
- Use black-out blinds wherever possible.
- Practice safe seabird handling and release techniques when vessel strikes occur (see diagrams below).
- Record and report vessel strikes.

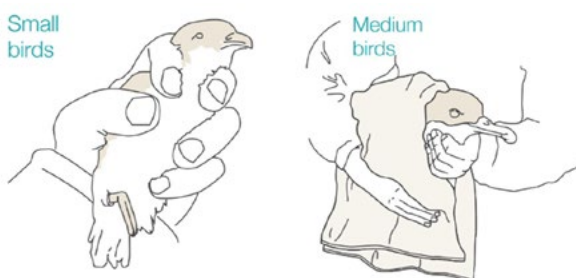
## Commercial fishers

- Follow your Protected Species Risk Management Plan and operational procedures.
- Contact your liaison officer for more information.

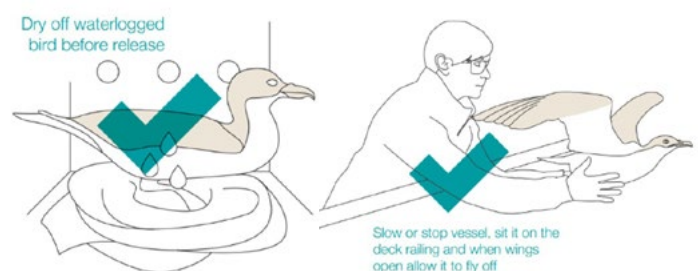


Shearwaters and petrels (including diving petrels, storm petrels and prions) are particularly susceptible to vessel strikes. *Photos: Oscar Thomas*

### Safe seabird handling techniques



### Safe release techniques



For more information contact [marine@doc.govt.nz](mailto:marine@doc.govt.nz).

# Small Vessel Surface Longline Crew and Vessel Safety Guide

## Line Weighting, tori lines and deck lighting

**Background:** There are methods and equipment used to reduce the risk of seabird captures. The information below is to be used as a guide to risk management for vessels and crew handling fishing gear using branch line weighting and deploying tori lines. It also considers issues with managing deck lighting; these methods have recognised hazards components. Vessel operators should have written safe operating procedures and crew training information covering all safety issues onboard including in relation to their seabird mitigation practices. Parts of this information below should be discussed with crew and included in the vessel owner's hazard Identification process. The creation of a vessel safety operating procedure should be considered also.

### **Past Safety Issues (lead swivels)**

Line weighting snoods to reduce gear tangling and increase sink rate of snood and baited hook to reduce the risk of seabird captures has been carried out for many years. A fatality and several major injuries from recoiling weights on larger vessels in the mid-late 1990s occurred.

MNZ investigations found the following often contributing to incidents:

- *inexperienced crew with little or no training*
- *excessive force when the hauling gear created high-tension recoil (vessel speed and/or using winch)*
- *crew hauling from vessel with high bulwarks so the angle of the snood lead-weight recoil was travelling towards the crew's upper body*
- *lack of personal protective equipment*
- *poor communications, between skipper, winch operator and crew*

### **Hazards associated with line weighting near the hook**

During a bite off or hook release when line is under tension the weight becomes a bullet-like projectile recoiling with significant speed and force towards the vessel. It is the stretch-energy within the monofilament line, coupled with high pulling force and vessel speed which results in the recoil speed and hence weight energy.

**Lead swivels:** A lead swivel released with 100kg of tension could recoil at speeds upto 200+km/h not allowing sufficient time for crew to react. Reducing the tension applied to the snood will reduce the risk of harm. The first point of impact is often in the proximity of the person or device (hauler) that is applying the tension to the snood.

### **Sliding leads** (Lumo/Glo-leads, double lead branch-lines etc)

Sliding leads are a line-weighting device designed to improve safety by reducing the recoil force during a 'bite-off' by allowing the weight to either slide off the snood or move in opposite direction down the snood thus reducing the force and possible impact of the weight back to the vessel. While sliding-leads have proven to reduce recoil impacts (when compared to weighted swivels) they should however not be considered 'safe' and safety measures should be in place to reduce the risk of serious harm injury to crew.

**Risk mitigation options:** Look to replace some or the entire snood, mono with another material which won't have the re-coil properties of mono, lead weights will have greatly reduced pressures during fly-back situations. Other option is a short weighted section, of line use several smaller leads spread over 1 or 2mtr, or combine with a section of lead core braid etc.

**Identify hazards** associated with seabird mitigation devices and procedures, list what equipment and procedures can be used to reduce the risk of accident and or injury. Add these hazards to the vessel's hazard register as per MOSS requirements. Ensure controls are in place and all crew understand these and are briefed as to the hazards and any safe operational procedures you develop. We have listed some of these hazards and risks and ideas and how to minimise them as a guide to get you started.

### **Safety Guide: Line weighted Mono snoods** (*All weight types placed near hook mono*)

Reducing the force or tension applied to the snood will reduce the risk of harm, keeping recoil trajectory away from the person's head and upper body. Ensure when using sliding leads you follow the manufactures recommendations.

- Crew on deck are immediately made aware when a large fish/shark is on the line, use a fighting line to play large fish, only experienced/trained crew should handle this line
- The vessel speed should be reduced to a safe-speed to reduce the force on the snood
- Hand landing of fish is recommended or set hydraulic haulers to low-pressure settings (i.e. no more tension than a person could apply)
- Locate lead blocks or pull the snood from a position to lower the impact zone (generally the lead with recoil to position of the applied force, i.e. don't pull from head height)
- Crimps fitted too tightly or general wear and tear on snoods can often result in mono breaking well within its 200kg expected breaking load
- Use the correct Personal Protective Equipment (PPE). Either use head protection or have area where you can haul/stand that's protected/shielded to isolate crew from recoiling weighted snood

### **Safety Guide: Tori line**

**Background**, tori line safety incidents can occur when crew are deploying and or retrieving the device. A tangled tori line can require a lot of force to retrieve. Deployment is most often carried out from the stern and or from an elevated position, potentially placing the crew at risk from a fall from height and or a fall overboard.

- When deploying tori line crew should be under the watch (visual sight) of skipper or other crew
- If tori line is fitted to a high gantry or pole, etc use a lazy-line from deck level to deploy
- Ensure tori line backbone, streamers and drag object are properly stowed (bin, drum or reel etc) to reduce tangling during deployment and reduce risk of crew tripping and falling
- Around 10kg of drag is required to maintain 75m of the streamer section in the air, reduce vessels speed to a safe level for deployment and more so for retrieval to reduce the effort and force placed on the crew
- Tori lines are prone to tangle with the setting hook line, ensure there is system/procedures in place so when the tori line breaks free crew can maintain safe-control of the breakaway and have another spare ready to deploy.

### **Safety Guide; Deck lighting**

**Background**, Reduced light emission on the stern deck and from spotlights astern reduces the risk of bird captures.

- Ensure general deck lighting is maintained for safe working on deck when shrouding, redirecting or turning off any lights which are attracting seabirds





# Protected Species Information for Commercial Fishers

## Tākoketai/Black Petrel

### Where are black petrels?

**Breeding location:** Tākoketai/Black petrel breed only in New Zealand. There are two remaining breeding colonies found in the Hauraki Gulf on Aotea/Great Barrier Island and Te-Hauturu-o-Toi/Little Barrier Island.

**Breeding time:** Tākoketai/Black petrel breed from October through to June each year. When they are not breeding, they migrate to South American waters to forage and feed.

**Foraging distribution:** Tākoketai/Black petrels forage and feed in the entire inshore area of the East Coast of the North Island from Mahia to Kaitaia. Their distribution is focused on deeper water near the continental shelf, with concentrations found closer to Great Barrier Island where they breed. Offshore they extend and are found on the East and West of the North Island.



### How to recognise black petrels

Tākoketai/Black petrels are black or very dark brown, with black feet. The bill is pale yellow with a black tip and a distinctive double tube nostril on top.

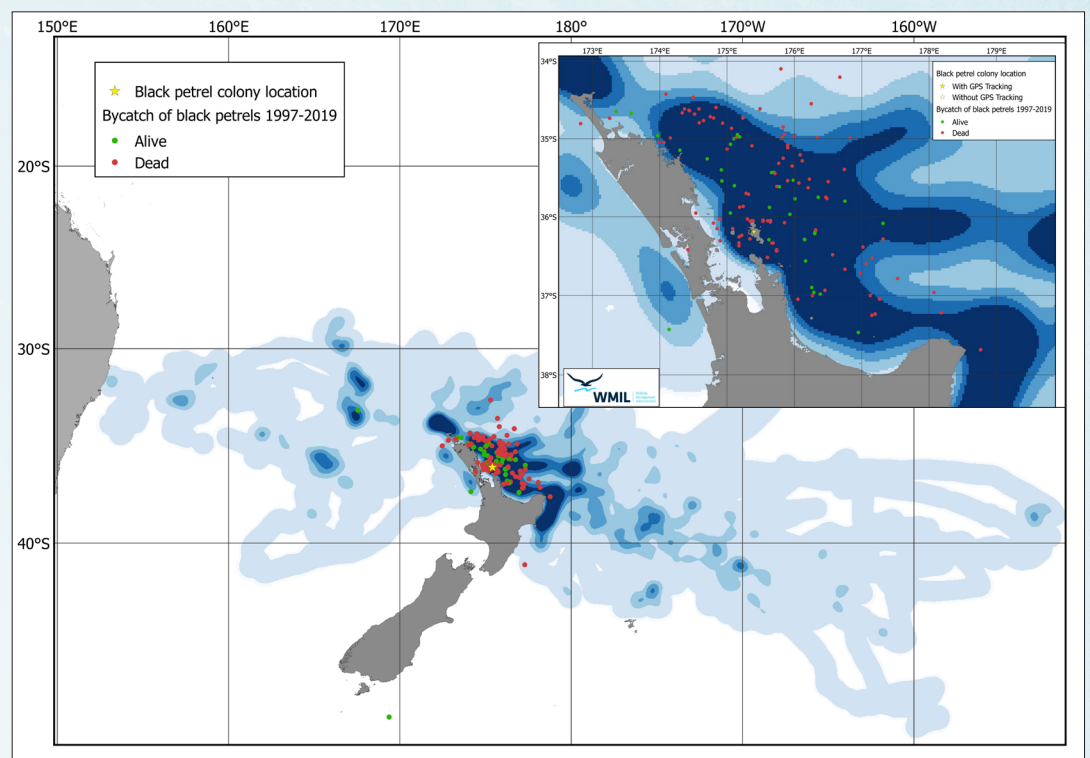
### Distribution Map:

The distribution map shows where Tākoketai/black petrels are more likely to be found during the breeding season and where bycatch has occurred.

The dark blue areas indicate where numbers are most concentrated (hot spots) for foraging and feeding. These areas are also where most captures have been reported.

This data was accumulated from 1997 to 2019 breeding seasons.

It is not illegal to capture seabirds. IT IS ILLEGAL not to report captures of seabirds.







# Protected Species Information for Commercial Fishers

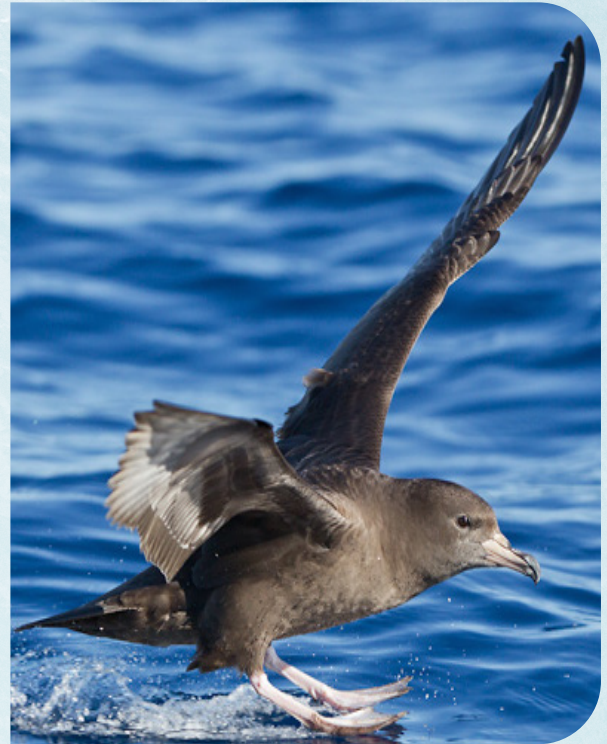
## Toanui/Flesh-footed Shearwater

### Where are flesh-footed shearwaters?

**Breeding location:** Toanui/Flesh-footed shearwaters breed on islands off the coast of north of New Zealand and in the Marlborough Sounds, Australia, and on St Pauls Island in the Indian Ocean. Mauima/Lady Alice Island, Northland Ohinai Island, Coromandel and Titi Island, Marlborough also carry large colonies.

**Breeding time:** Toanui/Flesh footed-shearwaters breed from September to May. When they are not breeding, they migrate to the Northern Hemisphere to forage around Japan, India, and North America.

**Foraging distribution:** Toanui/Flesh-footed shearwaters forage and feed in the entire inshore area of the North Island and the upper South island, with concentrations found closer to where they breed. Offshore they extend and are found on the East and West of the North Island. They are active at the day and night during their breeding season, with most feeding occurring during the day.



### How to recognise flesh-footed shearwaters

Toanui/Flesh-footed shearwaters are approximately 45cm long and are dark brown. They have a light pink coloured bill and white-flesh coloured legs and feet.

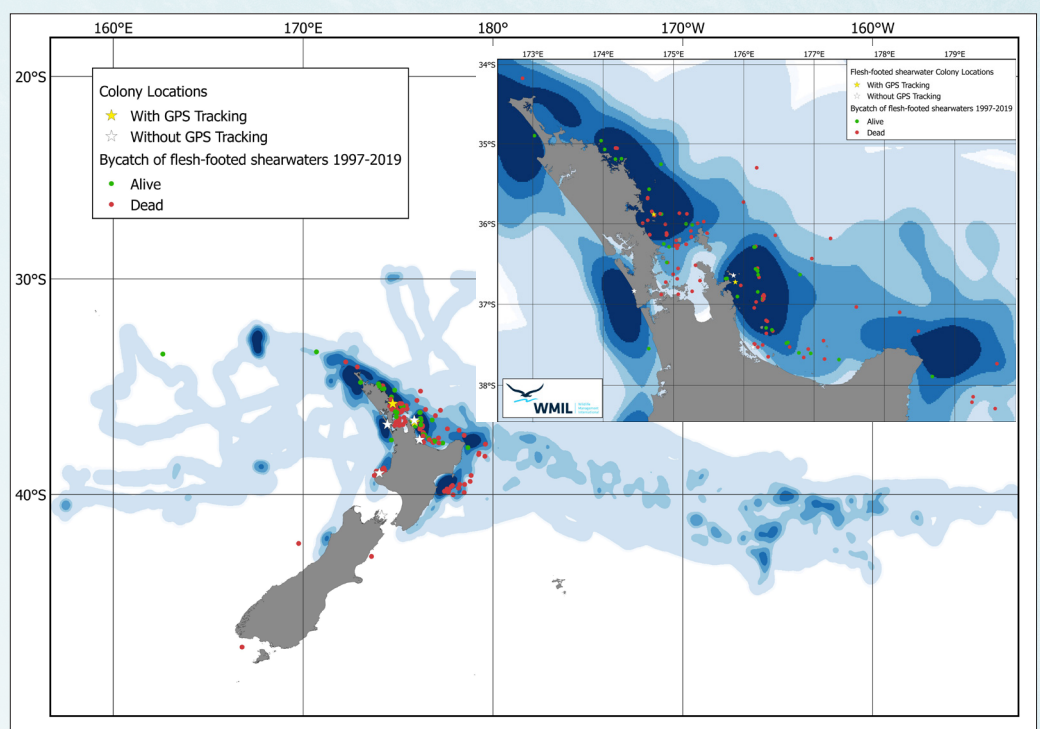
### Distribution Map:

The distribution map shows where flesh-footed shearwaters are more likely to be found during the breeding season and where bycatch has occurred.

The dark blue areas indicate where numbers are most concentrated (hot spots) for foraging and feeding. These areas are also where most captures have been reported.

This data was accumulated from 1997 to 2019 breeding seasons.

It is not illegal to capture seabirds. IT IS ILLEGAL not to report captures of seabirds.



# Inshore Surface Longline Vessel: Observer PSRMP Audit



Trip Number	Observer Code	Vessel Name		Trip start date	Trip end date
Target Species		FMA's fished		Number of sets	
Name of Skipper(s)					

**Record Yes (Y), No (N), Not Applicable (N/A) or Unknown (U) in the boxes provided. If you answer N or U to any questions, please make detailed comments.**

- Item 1 Did the vessel carry a copy of the appropriate Operational Procedures and 10 Golden Rules on board that was made available upon request?
- Item 2 Was a copy of the vessel's Protected Species Risk Management Plan (PSRMP) readily available and in a place accessible to all crew?
- Item 3 Were the skipper and crew familiar with the contents of the:
- (a) Operational Procedures?
  - (b) 10 Golden Rules?
  - (c) Protected Species Risk Management Plan?
- Item 4 Were any protected species capture trigger points reached during the trip? *(If yes, please describe in the comments)*
- Item 5 If a trigger point was reached, did the crew: *(If yes, please describe in the comments)*
- (a) Make changes to fishing operations (e.g. move to a different fishing area)?
  - (b) Change the mitigation measures they implemented?
- Item 6 Did a gear or equipment failure contribute to the risk of protected species captures during the trip? *(If yes, please describe in the comments)*
- Item 7 Were all protected species captures reported on the Non-Fish Protected Species Catch Return, as required by fisheries reporting regulations?
- Item 8 Were protected species that were caught alive, handled and released according to the DOC Handling and Release Guide?

## Fish waste and bait management

- Item 9 Was all fish waste/offal discharge managed as per the vessel's PSRMP?
- Item 10 Was all fish waste held on board immediately before and during setting?
- Item 11 During hauling, were used baits and fish waste/offal held or batch discharged at intervals opposite to the side the vessel was hauling?

## Mitigation

- Item 12 Which of the following mitigation methods were in place?
- (a) Hook-shielding devices
  - (b) A tori line deployed for the entirety of all sets?
  - (c) Setting exclusively at night\*?
  - (d) Line weighting as per their PSRMP?
- (Please describe weight and distance from hook in the comments)*
- Item 13 If hook-shielding devices were in use, were they used on every hook?
- Item 14 When deployed, did the aerial extent\*\* of the tori line appear to be at least 75m?
- Item 15 Were streamers brightly coloured and appear to be spaced at a maximum distance of 1 m apart and a minimum of 1 m in length, along the entire aerial extent of the tori line?
- Item 16 Did the tori line attachment point appear higher than 6 m above the water?



Item 17 Could the tori line be adjusted or repositioned over the setting line to suit varying conditions?

Item 18 Did the vessel carry a spare tori line or parts to construct a second tori line if required?

Item 19 Was the use of totally frozen bait avoided?

Item 20 Were any other mitigation methods or deterrents used? *(If yes, please describe in the comments)*

### **Hauling protocols**

Item 21 Were hooks kept below the surface during any breaks in hauling? Deck landing/impact

### **Deck landing/impact**

Item 22 Were lighting practices managed in a way that avoids attracting or disorienting seabirds?

\* 'Night' is defined as between 0.5 hours after nautical dusk until 0.5 hours before nautical dawn.

\*\* 'Aerial extent' is the distance from the stern to the place where the streamer line backbone enters the water.

Please make a detailed comment for each item when required.

**Item No:**

**Item No:**

**Item No:**

**Any further comments/observations:**