

BLL - Protected Species Risk Management Plan

FV		Vessel ID		Home Port	
Owner		Skipper/s		Date	

Purpose of this PSRMP

This PSRMP documents agreed procedures 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. Information in this plan will be provided to MPI and SNZ Inshore for reporting and management.

Regulations

Regulatory requirements can be found in the BLL circular (2021), 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				
Discharge management <i>Describe how used bait and fish waste is contained; location of discharge; contingency plan</i>	- No discharge immediately before or during setting. - While hauling, all used bait is retained. Fish waste is held or batched at ≥30 minute intervals (select one or indicate if both are used) . - Storage, batching procedures & discharge point: Example – used bait and fish waste are held in fish bins and discarded off the opposite side to the hauling station. Check open scuppers near processing. - Gear and deck are kept clean of any remaining fish waste			
Tori line	- Tori line meets regulations, can be adjusted over hook-bearing line, and used duration of all sets - Attachment height and location: x metres above waterline at stern - Spare materials and/or second tori line is carried on board			
Weighting regime	Regime 1 (target)	Regime 2 (target)	Regime 3 (target)	Comments
Backbone diameter				
Setting Speed	(Range)	(Range)	(Range)	
Low Risk weighting (Night)	kg/m (Hooks)	kg/m (Hooks)	kg/m (Hooks)	(material)
High Risk weighting (i.e. Day or moonlit night)	kg/m (Hooks)	kg/m (Hooks)	kg/m (Hooks)	(remove floats/change speed)
Float size and placement	m (Hooks)	m (Hooks)	m (Hooks)	(Flag variable configurations)
Rope length: wt to mainline				
High-risk periods/areas	- Some high-risk periods/areas include: (include areas and times discussed with LO) - Examples – Stop fishing, increase setting sink rate, avoid fishing near seabird colonies?			
Sink rate/Hook depth	Bottle or TDR tests will be conducted (when/how often?) on slowest sinking hook for each setup Records are kept onboard for x amount of time (record sheet in PSRMP folder) Bait is sufficiently thawed (i.e. not fully frozen)			
Hauling protocols <i>Describe how seabirds are actively deterred</i>	- If break during hauling, hooks are ensured to remain 10m below the surface (how?) - Hauling mitigation behaviour: Examples - hose, low pressure water sprayers, sound (such as banging a gaff against the superstructure) and/or vessel manoeuvres - Hauling mitigation device: Example – baffler			
Light management <i>Describe agreed daily practices</i>	All/No/Some - Lighting reduced to minimum requirements and intensity for operations and safety All/No/Some - Non-essential activities requiring external lighting at night are avoided All/No/Some - High-risk areas (as discussed with LO) are avoided when using external lights All/No/Some - Black-out blinds and amber (blue and violet-filtered) lights are used as appropriate All/No/Some - Essential lights are shielded, angled, and/or positioned to only light required areas			
Handling and Release	- Skipper and crew know and follow safe protected species handling and release procedures - Live fish (meeting legal requirements) are returned to the sea as soon as practicable			
Other (gear/mitigation)				

Contact your Liaison Officer when a TRIGGER POINT (below) is reached

24 hr period	(Alive or Dead) Any great albatross, penguin, dolphin, whale, sea lion, turtle or basking shark (Alive or Dead) 2 albatrosses/mollymawks, or 5 small (e.g. petrel/shearwater) seabirds (Dead) Any black petrel, flesh-footed shearwater or white pointer shark
7 day period	(Alive or Dead) 10 protected seabirds of any type or 5 fur seals
Contact:	Ph:
Email:	

TEN GOLDEN RULES

FOR INSHORE BOTTOM LONGLINERS TO SAVE PROTECTED SPECIES

- 1. Ensure your vessel has on board the current inshore Bottom Longline Operational Procedures (OP), a Protected Species Risk Management Plan (PSRMP), and the current bottom longline regulations, and that you and your crew are familiar with them.**
- 2. Ensure your tori line meets legal specifications**, is adjustable so it stays over the mainline and carry ample spare parts (see the BLL tori line guide for extra help).
- 3. Be aware of high-risk periods, and maintain a 50m aerial extent during these times:**
 - During daylight hours (0.5 hrs before nautical dawn and 0.5 hrs after nautical dusk)
 - During a full moon and three days either side of a full moon
- 4. As legally required, when setting, weight your lines to achieve a depth of 5m (on slowest sinking hooks) within the aerial extent of the streamer line.** Carry out monthly sink rate tests as required by the regulations and maintain a record of the results on board.
- 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 as per legal requirements.** Discharge of any offal or fish waste is not permitted on the hauling side of vessel, unless a hauling mitigation device is deployed, **and** the fish is either alive or >30cm in length.
- 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
- 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

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

- 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);
- Protect 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.

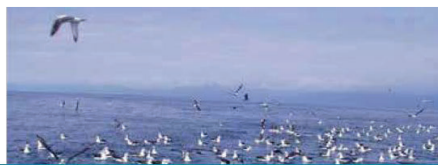
If there is more than one NFPS capture during an event, they will all be recorded on the same NFPS Catch Report.

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/
- A fuller set of invertebrate NFPS material is available at: 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



Fisheries (Seabird Mitigation Measures – Bottom longlines) Circular 2021 Requirements for vessels between 7 and 20 metres (excl. autoliners)

The development of the National Plan of Action for Seabirds 2020 prompted Fisheries New Zealand and the Department of Conservation, in conjunction with stakeholders, to formulate a set of non-regulatory Mitigation Standards for bottom longline vessels to reduce risks to seabirds. The Fisheries (Seabird Mitigation Measures – Bottom Longlines) Circular 2021 better aligns the mandated measures with the 'best practice' mitigation standards.

Streamer Line Specifications

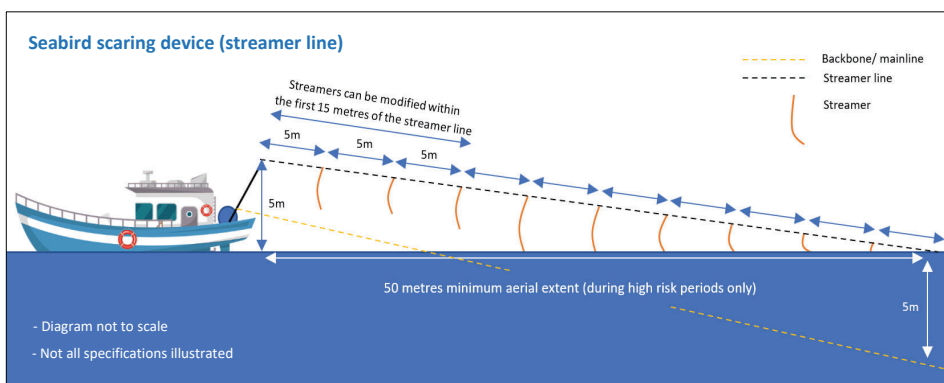
All bottom longline vessels that are between 7 and 20 metres in overall length (excl. autoliners) must deploy a streamer line during the setting of bottom longlines that meet the following specifications:

- The streamer line must be attached to the vessel at a point 5 metres above the surface of the water in the absence of swell.
- The streamer line must be attached such that when deployed, baits are protected by the streamers, even in a crosswind.
- Streamers must be brightly coloured.
- Streamers must be spaced a maximum of 5 metres apart, beginning no more than 5 metres from the stern of the vessel and extending the full aerial length of the streamer line.

- When deployed, each of the streamers must reach the sea surface in the absence of wind and swell. Streamer length will vary depending on the height of their attachment point above the water.
- However, streamers on the first 15 metres of the streamer line may be modified to avoid tangling with the backbone as long as a minimum length of 1 metre is maintained.
- The streamer line must achieve a minimum aerial extent of 50 metres when fishing during high risk periods (i.e. during daylight hours or for 3 days either side of a full moon).¹
- **Note:** Vessels using the method of Dahn lining are not required to use a streamer line.

Fish Waste Management

During hauling of bottom longlines, any live fish or dead fish (those which can be legally discarded) that are larger than 30 centimetres in fork length may be discharged on the side of the vessel where the hauling station is located, as long as a hauling mitigation device is deployed. A hauling mitigation device physically deters or blocks seabirds from flying or swimming directly into the area where lines are being hauled, without causing harm to birds. All other fish waste must be discarded on the opposite side of hauling station.



¹ There is no aerial extent requirement outside of high risk periods

Line Weighting Regime

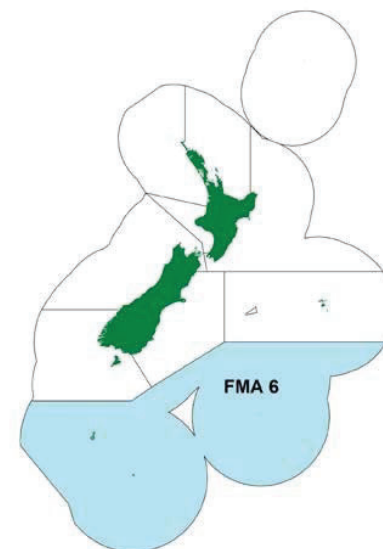
When bottom longlining, lines must be weighted so that the slowest sinking hook¹ can be demonstrably shown to reach a depth of 5 metres within the protection of the aerial extent of the streamer line.² Sink rates must be measured at regular intervals (defined as once per calendar month or when gear setup significantly changes) and the information recorded and retained for one year. This data must be made available upon request by Fisheries Compliance Officers and Observers.

Fishers can measure sink rates either through bottle tests or using time-depth recorders (TDRs). While TDRs are considered to provide more accurate information, they are more expensive. Bottle tests provide a cheap and easy way of measuring sink rates. A bottle test is conducted by clipping an empty biodegradable bottle³ to the mainline using rope/monofilament line of a known length. Once the bottle has been pulled underwater, the mainline will have sunk to a depth equal to the length of the rope/monofilament line. By measuring the time it takes for the bottle to sink, setting speed and aerial extent of the streamer line, it is possible to calculate the sink rate of the mainline and determine whether the desired depth was reached within the aerial extent of the streamer line. Materials on measuring sink rates have been developed by Fisheries Inshore New Zealand and Department of Conservation Liaison Officer Programme ([bottle test guidelines](#)).

The requirements for line weighting are proposed as an intermediary solution that enables fishers to continue their operations with minimal impacts on seabirds while additional data is collected on sink rates of hooks using various gear set ups. Once more data is available, these regulations will be revisited and a more permanent solution developed, in conjunction with stakeholders.

Area Specific Line Weighting

All bottom longline vessels operating in FMA 6 (Sub-Antarctic) between 1 November and 31 May must use integrated weight lines (IWL) with a lead core of at least 50 grams per metre. This is to reduce the risk of seabird captures during the seabird breeding season when birds are foraging more aggressively to feed their chicks. Evidence has shown that the use of integrated weight lines may reduce the incidental capture of seabirds and since many vessels that are active in the area already utilize IWL, the impact of requiring this gear is considered low.



¹ For the purpose of the Bottom Longline Circular 2021, the slowest sinking hook means the mid-way point between two weights near the centre of the line.

² Vessels using the method of Dahn lining do not have to meet the sink rate requirement.

³ Fisheries New Zealand encourages the use of biodegradable bottles and asks that care is taken to retrieve bottles following testing. Biodegradable water bottles can be found at [Compostable Bottle](#), [Bottle Made From Plants: For The Better Good](#).

Streamer Line and Bottle tests – The Basics

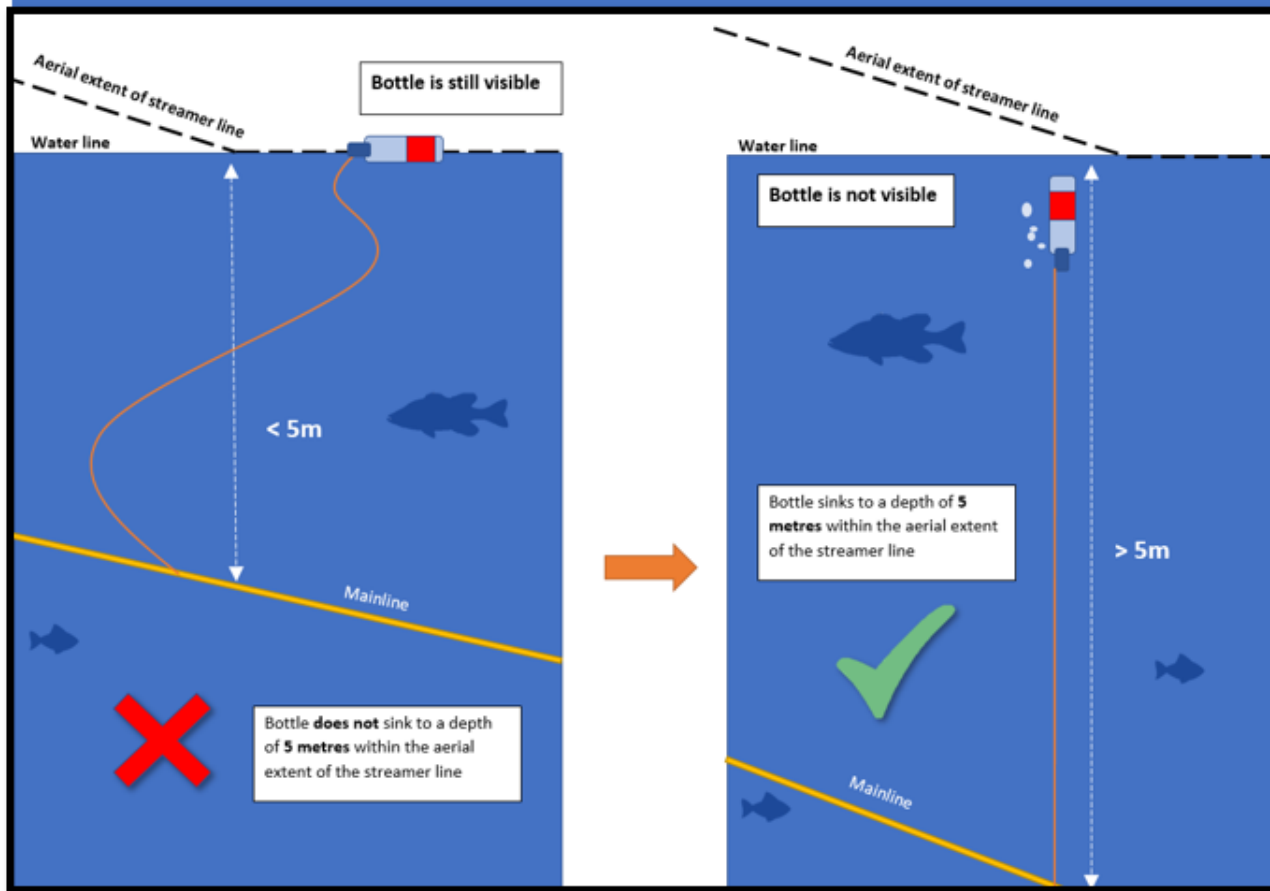
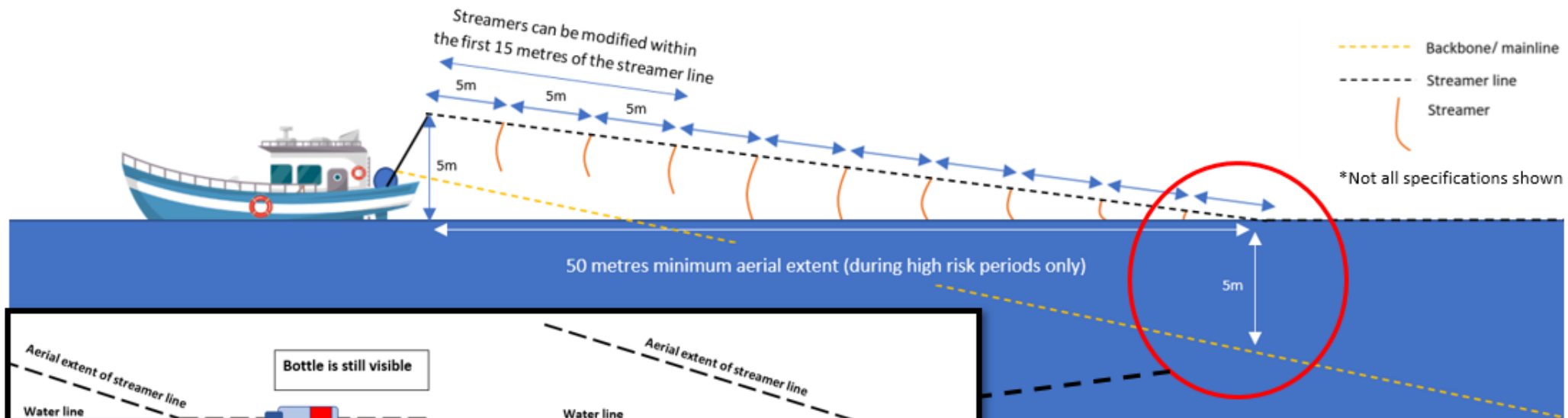
August 2021



Fisheries New Zealand
Tini a Tangaroa



Department of Conservation
Te Papa Atawhai



- Attach bottle with 5m snood to slowest sinking part of mainline (mid-way point between two weights)
- Does the bottle disappear before the streamer line enters the water? If not:
 - Add more weight, decrease the spacing between your weights, remove floats and/or decrease setting speed; and
 - Improve performance of streamer line to increase aerial extent (i.e. increase drag and/or height of attachment point)
- Sink rates must be tested at least once per month and/or when gear set up changes significantly
 - Record sink rate results on a form and keep on board for a minimum of one year

BLL Bottle Sink Rate Test Protocol

Purpose: To measure whether the slowest sinking hook reaches 5 meters depth before the end of the tori line.

Longlines must be weighted so that the slowest sinking hook can be demonstrated to reach a depth of five metres (5m) within the aerial extent of the tori line. The tori line needs to maintain 50m aerial extent when fishing during high risk periods. You are required to conduct sink rate tests for the different longline gear configurations you use and record those results onboard. The tests must be carried out and calculated at least once per month and or whenever there is a gear change which may alter the sink rate and you've not recorded a bottle test for.

The bottle test is a simple way to measure your longline sink rate. Clip an empty plastic bottle onto the backbone when setting with a 5m length of line between the bottle and the clip, when the bottle is pulled below the surface that indicates distance astern when the gear was at 5m depth.

Consider doing the tests on a calm day while steaming out to the fishing grounds, in a similar depth using same gear set up. Rather than when you are fishing, (make sure there's very low risk of seabird captures) and set a few daylight lines (*don't need to have baited hooks*) bottle testing will be much easier and you will have more time do it properly.

Preparation before the bottle test:

- Get a plastic drink bottle, 500ml to 1lt 'water bottle' (a longer narrow bottle is much easy to see).
- Cut a 5m piece of light-line and tie one end to the neck of the bottle and the other end to a shark clip.
- Pop open or remove the cap of the bottle and drill small hole in the base to allow water in and air out.
- Wrap the line around the bottle so that it can unwind freely when conducting the test.
- Have a stopwatch ready before the test and if doing tests at night, wrap reflective tape around the bottle and use a decent torch, 'spot-light' so see the bottle off in the distance as it sinks.

Undertaking a bottle test:

- Record the vessel information before undertaking the test (e.g. setting speed, line weight size, aerial extent of tori line) When shooting, clip the bottle onto the mainline halfway between 2 weights, (usually the slowest sinking part of the line) Check Health and safety measures and stay clear from the bottle-line when deployed.
- Do the test in good weather in the depth the gear is set up for; wait until the end weight is on the seabed. During the test you need to record the; (1) length of the tori line aerial extent (2) record distance astern the bottle sinks, there are 2 ways of calculating your sink rate using the bottle-test method:
- The easiest way, before sailing pull out your tori line and mark it at 40m, 50m, 60m+etc (*these measurements need to be from the stern*) when ready, clip the bottle to the mainline and use the tori line as a measuring-tool, watch when the bottle is pulled underwater in relation to your tori line aerial extent and record the distance.
- The other option is the time-speed calculation method. Clip the bottle onto the mainline and start the stopwatch when the mainline leaves the vessel stern. Stop the stopwatch when the bottle is pulled underwater. Using the time it took along with the boat speed in the table below, lookup the distance astern the backbone reached 5m depth.
- Bottle tests will be varied due to changing environmental conditions and other factors so do a few tests to get consistent results you may require changes to gear the set-up, until you manage to sink the gear to the required level, record all test results on the below form.
- Having trouble meeting the required sink depth before the tori line reaches the water surface, you need to make changes to improve your sink rate; add larger weights, or add more weights at closer intervals, improve tori line aerial extent performance and or reduce floatation, perhaps extend the length of the float-ropes. (*Reducing boat speed will help improve the sink rate but you will also reduce your tori line aerial extent*) likely you may need to do some or all of these to reach the standard.



Bottle test look up table to find distance travelled from speed and time taken

Lookup the time taken along the top row and follow that column down until it matches setting speed (through the water) on the left-hand column. The figure in the box gives the distance travelled before the bottle sank.

Speed		Time (seconds)																														
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2	1.03	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	22	23	24	25	26	27	28	29	30	31
2.5	1.29	0	1	3	4	5	7	8	9	11	12	13	15	16	17	19	20	21	22	24	25	26	28	29	30	32	33	34	36	37	38	40
3	1.54	0	2	3	5	6	8	9	11	12	14	15	17	19	20	22	23	25	26	28	29	31	32	34	35	37	39	40	42	43	45	46
3.5	1.8	0	2	4	5	7	9	11	13	14	16	18	20	22	23	25	27	29	31	32	34	36	38	40	41	43	45	47	49	50	52	54
4	2.06	0	2	4	6	8	10	12	14	16	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	54	56	58	60	62
4.5	2.32	0	2	5	7	9	12	14	16	19	21	23	25	28	30	32	35	37	39	42	44	46	49	51	53	56	58	60	63	65	67	69
5	2.57	0	3	5	8	10	13	15	18	21	23	26	28	31	33	36	39	41	44	46	49	51	54	57	59	62	64	67	69	72	75	77
5.5	2.83	0	3	6	8	11	14	17	20	23	25	28	31	34	37	40	42	45	48	51	54	57	59	62	65	68	71	74	76	79	82	85
6	3.09	0	3	6	9	12	15	19	22	25	28	31	34	37	40	43	46	49	52	56	59	62	65	68	71	74	77	80	83	86	90	93
6.5	3.34	0	3	7	10	13	17	20	23	27	30	33	37	40	43	47	50	54	57	60	64	67	70	74	77	80	84	87	90	94	97	100
7	3.6	0	4	7	11	14	18	22	25	29	32	36	40	43	47	50	54	58	61	65	68	72	76	79	83	86	90	94	97	101	104	108

Speed		Time (seconds)																														
		30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
2	1.03	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	54	55	56	57	58	59	60	61	62
2.5	1.29	40	41	42	44	45	46	48	49	50	52	53	54	56	57	58	60	61	62	64	65	66	67	69	70	71	73	74	75	77	78	79
3	1.54	46	48	49	51	52	54	56	57	59	60	62	63	65	66	68	69	71	73	74	76	77	79	80	82	83	85	86	88	90	91	93
3.5	1.8	54	56	58	59	61	63	65	67	68	70	72	74	76	77	79	81	83	85	86	88	90	92	94	95	97	99	101	103	104	106	108
4	2.06	62	64	66	68	70	72	74	76	78	80	82	84	86	88	91	93	95	97	99	101	103	105	107	109	111	113	115	117	119	121	123
4.5	2.32	69	72	74	76	79	81	83	86	88	90	93	95	97	100	102	104	106	109	111	113	116	118	120	123	125	127	130	132	134	137	139
5	2.57	77	80	82	85	87	90	93	95	98	100	103	105	108	111	113	116	118	121	123	126	129	131	134	136	139	141	144	147	149	152	154
5.5	2.83	85	88	91	93	96	99	102	105	108	110	113	116	119	122	124	127	130	133	136	139	141	144	147	150	153	156	158	161	164	167	170
6	3.09	93	96	99	102	105	108	111	114	117	120	123	127	130	133	136	139	142	145	148	151	154	157	161	164	167	170	173	176	179	182	185
6.5	3.34	100	104	107	110	114	117	120	124	127	130	134	137	140	144	147	150	154	157	161	164	167	171	174	177	181	184	187	191	194	197	201
7	3.6	108	112	115	119	122	126	130	133	137	140	144	148	151	155	158	162	166	169	173	176	180	184	187	191	194	198	202	205	209	212	216

Sink Rate Test Record Sheet

Date <i>dd/mm/yy</i>	Time <i>hh:mm</i> NZST	Set test number	Avg Line weighting config <i>kg/m</i>	Float size <i>(mm)</i> config <i>(m)</i>	Back bone diameter <i>mm</i>	Setting speed <i>knots</i>	Aerial extent of the tori line <i>(m)</i>	Time to sink to 5m <i>(seconds or distance from stern it sank)</i>	Did hooks sink to 5m within the aerial extent? <i>Y/N/U</i>	Comments <i>Weather, gear-set type, night or day test, bird activity etc.</i>
20/09/20	03:45	1	6kg / 80m	200mm /40m	2.2	4.5	55	23sec -53m	Y	<i>Nice day, set 4000m line with the tide, day-light test, Little bird activity, bottle sank few meters before tori line hit the water</i>

(Note: if a test fails, you must change the configuration of you gear and conduct another test until you meet the requirement. You will need at least 3 successful tests to show consistently for each gear configuration / species-target configuration

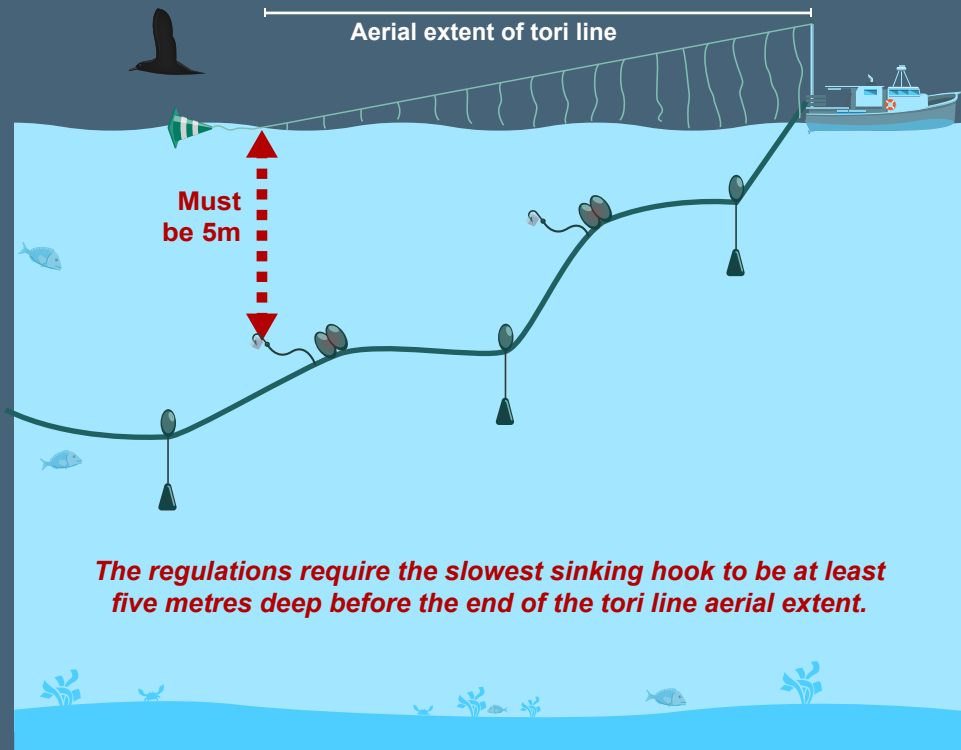
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Keep seabirds from accessing hooks

New Regulations (August 2021)



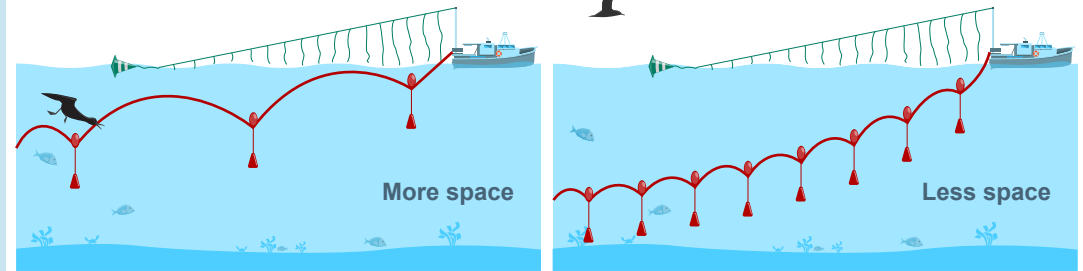
Three guiding principles to improve tori line aerial extent

1. Increase the height of your tori pole
2. Increase drag to hold up longer tori lines
3. Make aerial sections lightweight so they are easier to hold up
The recommended aerial section of tori line is 3 mm dyneema with light streamers.

 If this still doesn't provide enough aerial extent, reduce weight spacing and / or use larger weights.

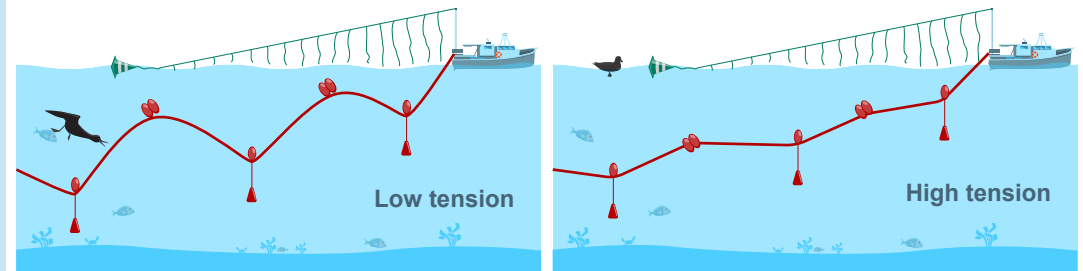
Five guiding principles to help sink your line closer astern

1: Reduce the distance between weights



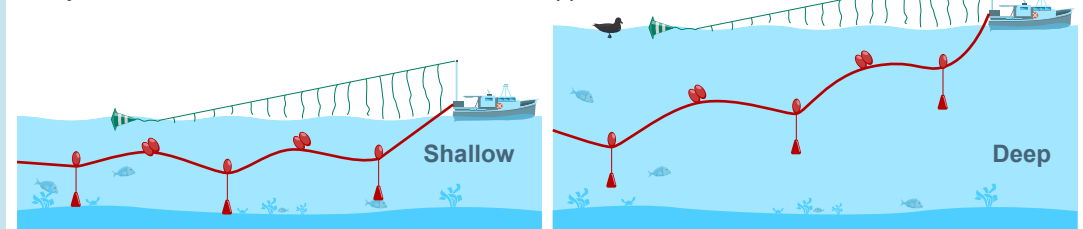
2: Increase line tension

More tension on the line speeds up sink rate for hooks midway between weights



3: When setting in shallow water, reduce weight spacing

Lines sink slower in shallow water because weights hit the bottom earlier, so there is less weight pulling the line down. In very shallow water, or with large weight spacing, a weight may even hit the bottom before the next one is clipped on.



4: Increase line weighting on thicker backbone

Thicker backbone sinks slower, so requires more weight to keep a good sink rate

5. Reduce setting speed

Hooks will sink closer to the boat and reduce the aerial extent required. However, during high-risk periods tori line aerial extent must always reach at least 50m.

Tables for estimating required tori line aerial extent (m)

Look up your gear set-up in the tables below to estimate the aerial extent required to protect hooks up to a depth of five metres. Numbers will vary between boats so this should only be used as a guide.

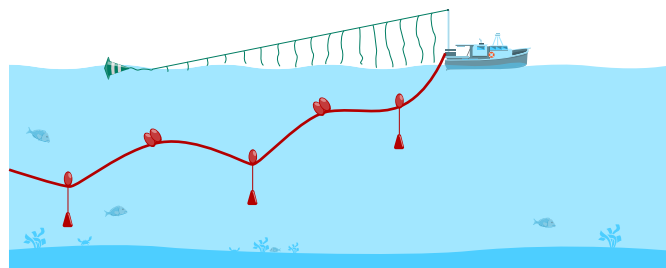
Green = recommended aerial extent, use a 5m pole

Orange = difficult to achieve, use a 7m pole

Grey = not recommended

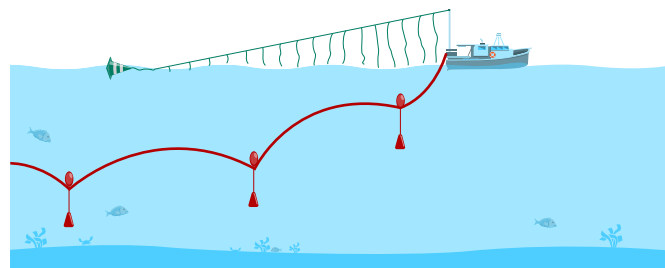
Floating / eggs

Gear set-up		Speed (knots)			
weight	spacing	4	5	6	7
3kg	50m	70	85	95	115
3kg	75m	80	95	105	125
3kg	100m	110	135	160	190
3kg	150m	124	155	185	215
5kg	50m	50	65	75	90
5kg	75m	60	75	90	105
5kg	100m	75	93	110	130
5kg	150m	125	155	180	215
7kg	50m	40*	50	60	75
7kg	75m	55	70	80	95
7kg	100m	80	100	120	140
7kg	150m	105	130	155	180



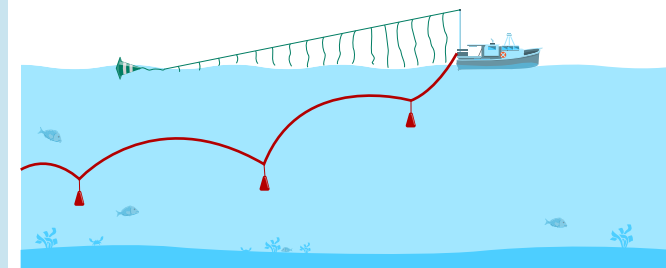
Droppers / bommies

Gear set-up		Speed (knots)			
weight	spacing	4	5	6	7
2kg	25m	65	80		
2kg	50m	92	115		
2kg	75m	100	130		
2kg	100m	130	160		
4kg	25m	35*	45*	55	65
4kg	50m	55	70	85	100
4kg	75m	75	95	105	125
4kg	100m	90	115	145	165
4kg	150m	115	145	180	208
6kg	50m	40*	55	65	75
6kg	75m	50	65	80	90
6kg	100m	65	80	95	110
6kg	150m	95	120	130	150



Hard down / just weights

Gear set-up		Speed (knots)			
weight	spacing	4	5	6	7
1kg	12m	55	70		
1kg	25m	65	80		
1kg	50m	70	85		
1kg	75m	85	105		
2kg	25m	40*	45*	55	65
2kg	50m	55	70	80	95
2kg	75m	70	90	105	125
4kg	25m	30*	40*	45*	55
4kg	50m	40*	50	60	75
4kg	75m	60	75	90	100
4kg	100m	70	90	105	122
4kg	150m	110	140	170	195

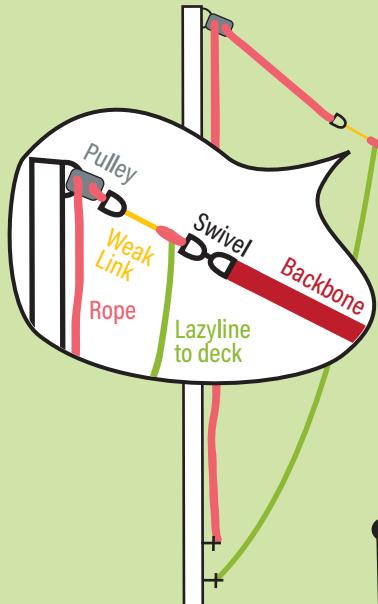


* During high-risk periods tori line aerial extent must always reach at least 50m.

These guidelines are based on trials conducted with a free-wheeling hydraulic drum with 2.2 mm mono backbone, lead weights, 150 mm diameter hard floats on 3.6 m rope droppers, with TDRs clipped midway between weights. For the floating setup, two egg floats were clipped on midway between weights.

Vessel Attachment

Attached to the vessel at least 5m (recommended at 7m+) above the surface of the sea in calm conditions, and as close to the stern as practically possible.



Streamer Aerial Section

Lightweight to improve aerial extent, but durable, at least 60m+ in length (plus your drag section). The aerial extent section must achieve a minimum aerial extent of 50m when fishing high risk periods (not including the drag section):

- High risk period: all day light hours and for three days either side of the full moon.

Each Streamer must reach the sea surface, streamers must be spaced at a maximum of 5 metre intervals along the full aerial extent of the line.

Streamers must be brightly coloured and may be shortened along the first 15 metres however streamers must be maintained at a minimum length of one metre.

Minimum 5m (Ideally 7m+)

max 15m

max 5m

This section is often in/out of water. Streamers in this section should be of a material and length that is less likely to tangle with the setting gear and/or birds.

Drag Section

For vessels with Auto baiting machines and those 20m or greater, the tori line must be a minimum of 150m in length.

There needs to be enough drag to maintain a minimum of 50m of aerial extent during high risk periods.

Braided rope or mono is best attached to a drag object like a float or cone or larger diameter rope.

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 or float/cone etc

Setting

Long Line

Recommended Streamer Materials:

- Bright coloured rubber or plastic tubing
- Rigid, stiff tape or cord connected in a manner to reduce tangling with other streamers and the backbone

BLL Tori Line Design and Build – Guiding Principles (vessels greater than 7m)

Use the tori line design guide diagram (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 need to protect the sinking hooks, lines must be weighted in order to achieve at least a five metre depth within the aerial extent of the tori line.

Tori lines (streamer lines) must be used on BLL vessels 7m or greater in overall length for all sets (vessels Dahn lining are not required to use tori lines).

The streamer line must achieve a minimum aerial extent of 50 metres when fishing during high risk periods; High risk periods are all day light sets and during a full moon and three days either side of a full moon.

All autoliners and BLL vessels 20m or greater in overall length, must have a tori line that is a minimum of 150m in length.

To maximise performance, the tori line needs to be:

1. Well-constructed, light weight but durable, 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..
2. The key to reducing tangling issues – sink your gear to a required depth before the tori line reaches the water surface, be able to adjust or move the tori line to protect baited hooks with a bridle etc to suit the changing conditions. Keep all the streamers in the air not lying in the water and the drag in-water section needs to be streamlined to reduce the risk of tangling.

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 5m above the surface of the water and as close to the stern as possible. Ideally it should leave the stern at around 7m+ above the waterline. If necessary, fit a pole to get extra height (for every 1m of extra height above 5m you'll achieve about 7m 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 at least 50m to 60m long from the stern and you need to maintain a minimum 50m in the air, when fishing during high risk periods. Choose a material that is light-weight, durable and braided as it twists less.
- **Streamer materials:** Must be brightly coloured, suitable/durable, 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 at maximum of 5m intervals, along the aerial extent section, beginning not more than 5m from the stern of the vessel.
- **Streamers may be shortened:** along the first 15m of the streamer line to reduce tangling with the setting hooks as long as these are not shorter than 1m. The rest of the streamers need to reach down near the water surface (in calm conditions) along the aerial extent.
- **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 (braided rope materials twist less) or mono or an object like a cone or float, (or a combination of both) fitted to the end of the aerial streamer section. It needs to provide enough drag to maintain the streamer section to the required 50m aerial extent during high risk periods.
- **To achieve 50m to 60m plus of aerial extent Sea-trials have shown a tori line deployed from a height of:**
 - 5m to 6m (at around 5kn) requires about 30m to 50m of 9mm braid (500L) with either gill net-floats placed every few metres on the drag rope and a small road cone or buoy etc at the end to act as a drogue.
 - 8m to 10m, (at around 3kn to 4kn), required about 60+m of 9mm braid (500L) plus a short length of mooring rope or road cone or a float etc at the end to act as a drogue.

For more advice: Contact your local BLL 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 Bottom Longlines, for use by the fishing industry. This is not intended to be nor should it be used, as a substitute to any statutory, regulatory, and/or non-regulatory requirements for Bottom 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.

Inshore Bottom Longline

Operational Procedures - Protected Species Risk Management

Version 2 October 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

Inshore bottom longline (BLL) vessels operate in areas overlapping with marine protected species, particularly seabirds. In addition to seabirds, the BLL fleet occasionally captures other protected species including white pointer sharks, and less commonly, marine mammals and turtles. It is therefore important to use a structured approach to mitigate the risk of protected species captures in this fishery.

The protected species caught by the BLL fleet are of significant importance to the community and some 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 inshore BLL fleet to take all reasonable steps to acknowledge, understand and reduce as much as possible impacts on protected wildlife encountered.

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 BLL fleet are black petrels, flesh-footed shearwaters, white-chinned petrel, and Salvin's albatross.

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.

No protected marine mammal species have been assessed as being at high risk from commercial inshore bottom longline fishing operations, therefore this document focuses on seabird capture mitigation methods and techniques.

The purpose of the inshore BLL 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.
-

2. Main species at risk

Currently four seabird species observed captured by the BLL fleet are known to be high or very high-risk category and warrant immediate and ongoing reduction in captures and risk of capture. Captures occur in all areas frequently fished by the fleet.

Species at Risk	Species Code	Main Risk Area	Risk Profile, Place, Time
Black petrel	XBP	East Coast North Island (Particularly FMA 1)	<ul style="list-style-type: none"> • Highest risk seabird in FNZ Risk Assessment • <i>Nationally Critical Threat Status</i> • Nests on Great and Little Barrier Islands, active in BOP, HG, Northland • Most common in Spring/Summer/Autumn. • Aggressive feeder in Summer near nest sites (strong divers)
Flesh-footed shearwater	XFS	East Coast North Island (particularly FMA 1)	<ul style="list-style-type: none"> • <i>Nationally Vulnerable Threat Status</i> • Nests on many out-lying islands around upper North Island • Most common during Autumn/Summer/Spring • Aggressive Feeder (strong diver) - feed during daylight hours
Salvin's Albatross	XPB	All Areas	<ul style="list-style-type: none"> • <i>Nationally Critical Threat Status</i> • North Island during Spring/Summer • Aggressive surface feeder (rarely plunge or dive)
White-chinned petrel	XPB	All areas, particularly (FMA 2, 3, 5, 7)	<ul style="list-style-type: none"> • Range restricted Threat Status • Nest on southern offshore Islands • Predominantly feed over continental shelf south and east of NZ during breeding season • Visit North Island coasts year-round south of East Cape, especially Spring/Summer • Aggressive surface feeders (rarely plunge or dive)
Wandering albatross (Gibson's and Antipodean)	XAG	East Coast North Island (particularly FMA 1)	<ul style="list-style-type: none"> • <i>Nationally Critical Threat Status</i> • Nest on Antipodean, Campbell and Auckland Islands, most common in Tasman Sea and over Chatham Rise • Pelagic foragers₁, focus on upwelling areas & features - overlap where deepwater occurs close to land i.e. Offshore East coast Northland, East Cape, Kaikoura, Cook Strait/Wairarapa, Otago Canyons, Three Kings and Fiordland

3. Managing the main risks associated with the Inshore BLL Fishery

BLL vessels must use a combination of mitigation practices to best address the risks of their individual operations. As the BLL fleet is diverse with respect to vessel size and gear set-up, the particulars of mitigation practices may differ between vessels. Fishers are best placed to develop mitigation techniques, if fishers have innovative ideas about reducing the probability of protected species interactions contact your liaison officer. These risks are applicable to all seabirds (mostly petrels, shearwaters and albatross).

Risk Item	Ways to Manage Risk
<p>Food Attractant</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"> Control (hold or batch) offal/waste discharge immediately before or during setting and hauling. If batching cannot occur, then discharge any attractant on the opposite side from which the hauling station is located (exceptions outlined in section 4: Mandatory Mitigation Requirements). If hauling over the stern, discard used baits, offal/waste and live fish in batches on the leeward side of the vessel.
<p>Baited Hooks – Setting</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"> Use a tori line(s) to deter seabirds from accessing baits. Use appropriate line weighting to ensure a sink rate that mitigates the risk to diving birds (placing weights closer to hooks can help). Slow the vessel or free spool the drum to let the line sink faster if possible. Set at night to reduce visibility of gear to seabirds (blue-dyed bait also reduces visibility to seabirds). Avoid setting the line when large numbers of birds or marine mammals are present. While ensuring vessel & crew safety, reduce additional & unnecessary lighting on the vessel to a minimum. Use thawed bait rather than frozen bait that floats (take out of freezer or ice several hours before setting).
<p>Baited Hooks – Hauling</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"> Use bird exclusion or scaring device at the hauling station (<i>i.e.</i> hose spray, mitigation device, and/or vessel manoeuvres) Haul as quickly as practicable. Towing a single terminal buoy 140-175m astern has proved effective at reducing seabird catches. Ensure line weighting is appropriate and floats are hauled in a timely manner. Ensure vessel is moving at an appropriate speed to keep the line underwater. Avoid hauling the line when large numbers of birds or mammals are present. While ensuring vessel & crew safety, reduce additional & unnecessary lighting on the vessel to a minimum.
<p>High Risk Periods and Areas</p> <p>Increased seabird numbers and aggressive feeding during breeding season, migration periods and/or moon periods</p>	<ul style="list-style-type: none"> Avoid setting on a full moon and three days either side when possible. Increase sink rate (<i>e.g.</i> increase weight and/or remove floats and/or reduce setting speed, noting reduced setting speed may mean adjusting tori line drag to maintain aerial extent). Add another streamer line. Move from the fishing area, particularly if fishing close to nesting areas. While ensuring vessel & crew safety, reduce additional & unnecessary lighting on the vessel to the minimum (particularly while at anchor).

4. Mitigation Measures

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 – Bottom Longlines) Circular 2021* - <https://gazette.govt.nz/notice/id/2021-go3770>

4.a Mandatory Tori Line requirements

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

- The tori line must achieve a minimum aerial extent of 50m during high risk periods (0.5 hrs before nautical dawn and 0.5 hrs after nautical dusk, and three days either side of the full moon)
- During both high and low-risk periods, the tori line must cover hooks until they reach a depth of 5m.
- The tori line must be attached to the vessel at least 5m above the waterline and the streamers must reach the sea surface. Streamers will therefore vary in length along the line.
- The streamers must be brightly coloured, be spaced a maximum of 5m apart, and extend along the entire aerial extent of the line.
- Streamers along the first 15m may be shortened to a minimum length of 1m, but the first streamer must be no more than 5m astern.
- Vessels >20 LOA must have a tori line at least 150m in length.

Best operational design guide for tori lines:

Aim to achieve a 50m aerial extent using a 3-part system:

1. Vessel attachment: Tori line placed as high as possible and recommended 7-8m above waterline (every 1m of extra height past 5m will give you 8-10m more aerial extent).
 - Must be able to adjust or move the tori line or use a bridle to place the tori line in best spot relative to fishing gear.
 - Have a breakaway system fitted so tori line will break free before fishing gear breaks or tangles.
 - Have a lazy line back to deck so you can regain the vessel end of the tori line and retrieve it.
2. Streamer aerial section: Backbone of the tori line with minimum of 10-12 sets of streamers spaced at a maximum of 5m intervals.
 - Depending on height (off water) of each streamer line, reduce length of each streamer by approximately 30-50cm going down the backbone
 - Once deployed (without setting gear) the first time, trim streamers away to stay well above the water to reduce drag, tangling gear and birds (*i.e.* so streamers are in the air not the water)
3. Drag section: can be either a float(s) or rope or mono. If the vessel is over 20m length, the whole tori line must be at least 150m in length (including the drag section).
 - Maintain high separation between tori line and setting gear for as long as possible to reduce risk of tangle.
 - Increase drag by increasing size, length and weight of drag object.
 - For vessels <20m LOA it is recommended that in order to achieve at least 50m aerial extent the tori line should be deployed at a height of:
 - a) 5-6m (at 5kn) and requires 30-50m of 9mm braid (500L), with gill net floats placed every few metres on the drag rope and a small road cone or buoy at the end to act as a drogue.
 - b) 8-10m (at 3-4kn), requires 60+m of 9mm braid (500L) plus a short length of mooring rope or road cone or float etc at the end to act as a drogue.

Talk to your local Liaison Officer. Trial and experiment to find what works best.

*Adjust tori line to best suit weather, gear and processing conditions to minimise risk during periods of high seabird interactions.

4.b Mandatory line weighting requirements

During all sets the line must meet the following specifications:

- Bottom longlines must be weighted so that the slowest sinking hook can be demonstrated to reach a 5m depth within the aerial extent of the tori line (during high-risk periods the aerial extent must be at least 50m).
- You are required to conduct sink rates tests at least once per calendar month, or when gear significantly changes. These tests may be done using bottle tests or time-depth recorders (TDRs).
- Results of these sink rate tests must be documented and retained onboard for at least one year and made available to Fisheries Officers and Observers upon request.

Best operational guides for line weighting and good sink rate (around 0.3m per second)

- Weight line to achieve satisfactory sink rate so seabirds have less time to target the baited hooks.
- In times of heightened risk (*i.e.* if black petrels or other diving birds are present), add more weight and/or remove some floats.
- Slower setting speeds will help improve sink rate but will also reduce aerial extent of the tori line.
- Applying similar weights at regular intervals will help maintain a steady sink rate.
- Do not fit single large weights at wide intervals, this will pull down the backbone in one area while floating the rest of the line behind it.
- Mainline diameter and material as well as the distance between weights and numbers of floats all can affect the sink rate.

4.c Mandatory offal & fish discharge requirements

The following minimum specifications must be followed:

- **During setting**, offal or fish cannot be discharged from the vessel. The only exceptions are:
 - Fish that are legally undersize (sub-MLS) or
 - Fish that are listed in Schedule 6 of the Fisheries Act and that are likely to survive.
- **During hauling**, offal, used bait or live fish or fish may only be discharged from the side of the vessel opposite to the hauling station (or the leeward side of the vessel if hauling astern). The only exceptions are:
 - Any live fish or whole dead fish >30cm fork length can legally be discarded on the hauling side of the vessel, **only if** a hauling mitigation device is deployed.

Best operational guides for offal control and used bait

- No continuous or *ad hoc* discharge of fish waste or used bait. Particularly while hauling, all offal, fish waste and bait discharge is either held, batched, or discharged as per the legal requirements above.
-

5. Risk Management Plan Responsibilities

Responsibilities of Operator and Skipper

- Display a copy of “The 10 Golden Rules for Inshore Bottom Longline Vessels” on the bridge.
 - Ensure all crew are briefed on the BLL OP, and the vessel’s PSRMP and fully understand their responsibilities.
 - Be aware of protected species (seabird and marine mammal) activity around the vessel and in the immediate area; assess risks and take actions needed to minimise risk.
 - 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.
 - Deploy mandatory mitigation measures and additional measures as considered appropriate to reduce 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 that Trigger reports are sent promptly to the Liaison Officer identified on your PSRMP.
 - Ensure crew are meeting their responsibilities listed below as listed below.
 - Address any deficiencies in implementation of the PSRMP as noted by any observer.
 - Address the effectiveness and content of the PSRMP if seabird captures exceed the trigger points.
-

Responsibilities of Crew

- 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.
 - Maintain a watch of seabird and marine mammal activity around the vessel and advise the skipper when it is clear there is risk that requires action, including:
 - Not shooting in presence of significant seabird feeding activity.
 - Adjusting hauling speed and operation to reduce risk.
 - Advising if any animal is seen caught and ensuring its immediate release if alive.
 - 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.
-

6. Reporting Protected Species Captures - Trigger Limits

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.

7. Audit & Review

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.

8. Fisheries NZ Reporting Requirements

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)*

NFPSCR Codes – Species ID and leg bands/ tags

Seabirds

- If you are 100% sure of the species identification use the species individual codes supplied by FNZ and listed on page 3 of this OP.
- If you are not 100% sure of the species identification, take a photo and send it to your Liaison Officer who may help you ID the protected species.
- If you still cannot identify the species you may use the **XAL** (unidentified Albatross/mollymawk) and **XXP** (unidentified Petrels & Shearwaters) species codes.
- Record any leg band numbers on the form, these are really important and FINZ urges skippers to record any leg bands.

Marine mammals, Sharks and Turtles

- If you are able to identify the protected species, report these captures at the species level as outlined on page 3 of this OP.
 - If you are unsure, take photos of the head, whole body, and any distinguishing marks on an animal, do this without any crew or vessel features in the picture.
 - Share these photos with your Liaison Officer, who may identify the species for you.
-

9. Animal Handling/Release and Crew Safety

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.**

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.
-

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.
-

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.
-

Returning Dead Protected Species to the Sea

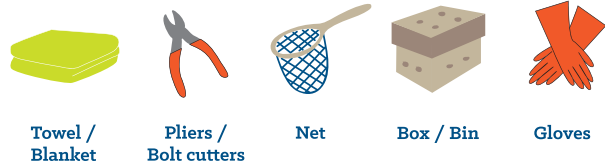
The entire body of any dead protected species must be returned to the sea, unless a MPI observer onboard the vessel directs the skipper to, or they themselves keep it or the skipper has been advised otherwise by DOC or Fisheries NZ. Usually, they only keep seabirds.

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

HOOK REMOVAL FROM SEABIRDS

Agreement on the Conservation of Albatrosses and Petrels

Release Kit



Towel / Blanket

Pliers / Bolt cutters

Net

Box / Bin

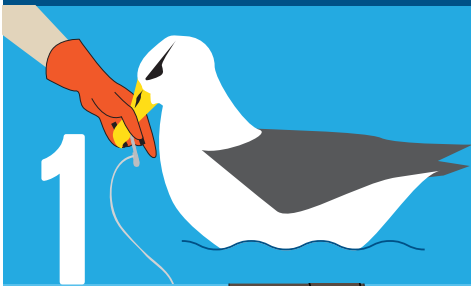
Gloves



A C A P

Visit www.acap.aq 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.**

2



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.

Remove the hook

If the hook is visible

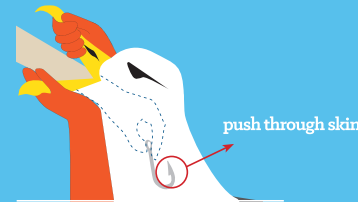
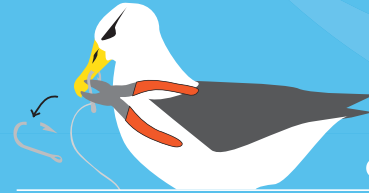
Use pliers (or bolt cutters for large hooks) to cut through the hook shaft (or to flatten the barb). Pull the hook back out of the bird.

OR

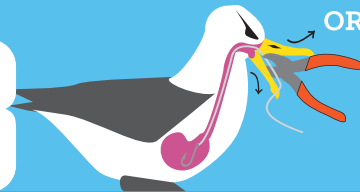
If the hook is swallowed and removal is possible

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.



3



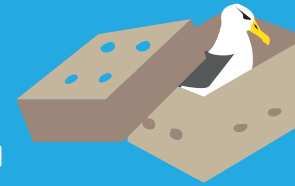
If hook removal is not possible

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.

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.

4



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.

5



HOOK REMOVAL FROM SEABIRDS

Visit www.acap.aq for more information



Fisheries (Seabird Mitigation Measures—Bottom Longlines) Circular (No. 2) 2021 (Notice No. MPI 1375)

This circular is issued by the Chief Executive of the Ministry for Primary Industries under Regulation 58A of the Fisheries (Commercial Fishing) Regulations 2001.

Circular

1. Title

This circular is the Fisheries (Seabird Mitigation Measures—Bottom Longlines) Circular (No. 2) 2021.

2. Commencement and Application

This circular comes into force on **1 October 2021**.

This circular applies to the operator or master of a vessel whose responsibilities for compliance are described in regulation 58B of the Fisheries (Commercial Fishing) Regulations 2001.

3. Interpretation

In this circular, unless the context otherwise requires,—

Act means the Fisheries Act 1996

aerial extent means the section of the streamer line backbone running from the vessel stern to where the backbone of the streamer line enters the water

bottom longline means a line to which 7 or more hooks (whether baited or not) are attached, and is sunk using weights

hauling means the period from when line retrieval commences to when all the hooks are onboard

hauling mitigation device is any device that physically deters or blocks seabirds from flying or swimming directly into the area where lines are being hauled, without causing harm to birds

high risk period means during daylight hours (0.5 hours before nautical dawn and 0.5 hours after nautical dusk) or during a full moon and three days either side of a full moon

nautical dawn means the time at sunrise when the centre of the sun is at a depression angle of 12 degrees below the ideal horizon for the location of fishing

nautical dusk means the time at sunset when the centre of the sun is at a depression angle of 12 degrees below the ideal horizon for the location of fishing

offal means parts of a fish that are usually discarded, including minced parts

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

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

For the avoidance of doubt, if a term that is used in this circular is defined in the Act or Fisheries (Commercial Fishing) Regulations 2001, that term carries the same meaning as in those provisions.

4. Streamer Line Required

Any vessel seven metres or greater in overall length using bottom longlines as a method of fishing must—

- a. carry a streamer line on board the vessel; and
- b. permit inspection of the streamer line at any reasonable time by a fisheries officer or an observer.

Vessels which exclusively use the method of Dahn lining are not required to carry a streamer line.

5. Use of Streamer Line Required During Setting of Bottom Longlines

A streamer line must be used on vessels seven metres or greater in overall length during the setting of bottom longlines, in accordance with clause 6. Vessels using the method of Dahn lining are not required to use a streamer line.

6. Streamer Line Specifications

1. For vessels utilizing automatic baiting machines, and those 20 metres or greater in overall length, the streamer line must meet the following specifications:

- a. the streamer line must be attached to the vessel so that when deployed the baits are protected by the streamer line, even in a crosswind; and
- b. the streamer line must be a minimum of 150 metres in length; and
- c. the streamer line must achieve a minimum aerial extent of 50 metres when fishing during high risk periods; and

- d. streamers must be brightly coloured; and
 - e. streamers must be spaced at a maximum of five metres apart, beginning not more than five metres from the stern of the vessel and extending along the full aerial extent of the line; and
 - f. when deployed, each of the streamers must reach the sea surface in the absence of wind and swell. Streamer length will therefore vary depending on the height of their attachment point above the water; and
 - g. despite subclause 1(f), streamers may be shortened along the first 15 metres of the streamer line, however streamers must be maintained at a minimum length of one metre.
 - h. the streamer line must be suspended from a point on the vessel at least five metres above the water in the absence of swell.
2. For vessels that are seven to 20 metres in overall length, the streamer line must meet the following specifications:
- a. the streamer line must be attached to the vessel so that when deployed the baits are protected by the streamer line, even in a crosswind; and
 - b. the streamer line must achieve a minimum aerial extent of 50 metres when fishing in high risk periods; and
 - c. streamers must be brightly coloured; and
 - d. streamers must be spaced at a maximum of five metres apart, beginning not more than five metres from the stern of the vessel and extending along the full aerial extent of the line; and
 - e. when deployed, each of the streamers must reach the sea surface in the absence of wind and swell. Streamer length will therefore vary depending on the height of their attachment point above the water; and
 - f. despite subclause 2(e), streamers may be shortened along the first 15 metres of the streamer line, however streamers must be maintained at a minimum length of one metre.
 - g. the streamer line must be suspended from a point on the vessel at least five metres above the water in the absence of swell.
3. The specifications in subclauses (1) and (2) do not apply to additional or secondary seabird-scaring devices fishers may choose to use (such as a second tori or streamer line).

7. Restrictions on Use of Bottom Longlines

1. A bottom longline must not be set in New Zealand waters to take fish, aquatic life, or seaweed unless line weighting is used in accordance with clause 8.
2. A bottom longline must not be set to take fish, aquatic life, or seaweed between 1 November and 31 May in FMA 6 unless using an integrated weighted line with a lead core of at least 50 grams per metre.

8. Line Weighting

1. Bottom longlines must be weighted such that the slowest sinking hook can be demonstrably shown to reach a depth of five metres within the aerial extent of the streamer line under clause 6.
2. Sink rates must be measured at regular intervals (at least once per calendar month or when gear setup significantly changes) via bottle tests or time-depth recorders and the results documented and retained on the vessel for a minimum of one year. These records must be made available to fisheries officers and observers upon request.
3. Vessels that exclusively use the method of Dahn lining are not required to weight lines in accordance with subclause 1.

9. Restriction on Discharge of Offal or Fish While Setting and Hauling Bottom Longlines

1. Offal or fish must not be discharged during setting of bottom longlines.
2. Offal or fish may be discharged during the hauling of bottom longlines, but only from the side of the vessel that is opposite to the side on which the hauling station is located.
3. Subclause (1) does not apply to—
 - a. fish that are legally undersize; or
 - b. fish that are listed in Schedule 6 of the Act and that are likely to survive.
4. Despite subclause (2), during the hauling of bottom longlines, —
 - a. Patagonian toothfish may be discharged on the side of the vessel on which the hauling station is located; and
 - b. Any live fish and those whole dead fish greater than 30cm in (fork) length that can legally be discarded may be discharged on the side of the vessel on which the hauling station is located if a hauling mitigation device is

deployed.

10. Revocation

Fisheries (Seabird Mitigation Measures—Bottom Longlines) Circular 2021 (Notice No. MPI 1366) is revoked ([New Zealand Gazette, 24 June 2021, Notice No. 2021-go2467](#)).

11. Schedule

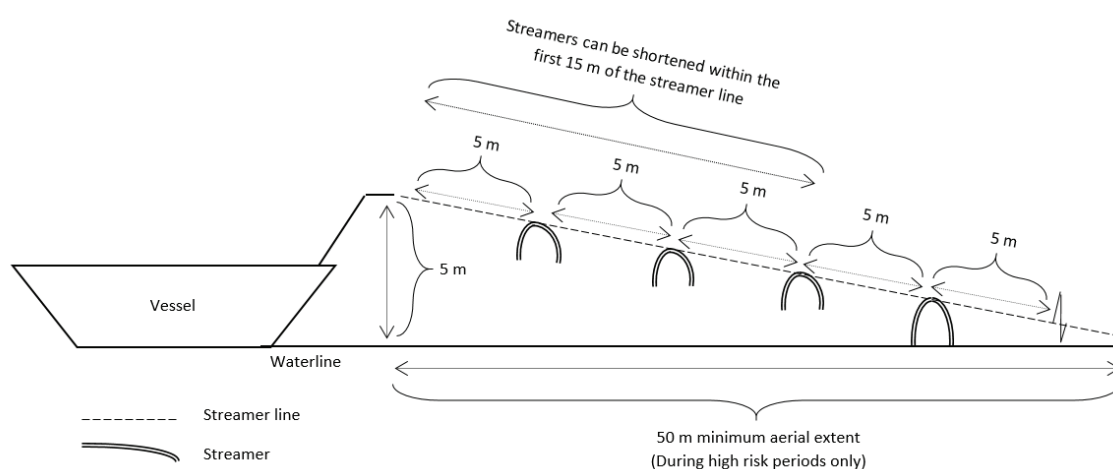
1. The Schedule provides further guidelines on the design and deployment of streamer lines as seabird-scaring devices.
2. The Schedule is not part of the specifications.
3. If there is any inconsistency between the guidelines in the Schedule and the specifications, the specifications prevail.

Schedule

Seabird scaring device (streamer line)

Diagram not to scale

Not all specifications illustrated



1. The streamer line needs to protect baited hooks from seabirds. This means that the streamer line should be positioned in such a way that streamers are flapping in an unpredictable fashion, above the area in which the baited hooks enter the sea, so that seabirds are deterred from attempting to take bait from the hooks. In order to achieve this even during cross-winds, it is expected an operator or master of a vessel will have to make adjustments to the configuration of the streamer line depending on the conditions.
2. It is generally recognised as best practice to maximise the aerial extent of the streamer line, because this maximises the area in which the baited hooks are protected from seabirds. Best practice would be to achieve an aerial extent of 100 metres or more. In order to maximise aerial extent, it is necessary to create tension in the streamer line. This can be achieved by—
 - towing an object on the terminal end of the streamer line; or
 - towing extra length of streamer line; or
 - increasing the diameter of the in-water section of the streamer line.
3. In order to be effective at scaring seabirds away from the line of baited hooks, the streamer lines should not become tangled, either with each other or with the backbone. Each streamer shall be attached to the streamer line in a manner to prevent fouling of individual streamers with the streamer line, and to ensure individual streamers reach the waterline in the absence of wind or swell (except within the first fifteen metres where streamers can be shortened). Swivels or a similar device can be placed in the streamer line in such a way as to prevent streamers being twisted around the streamer line. Each streamer may also have a swivel or other device at its attachment point to the streamer line to prevent fouling of individual streamers.
4. Streamers are to be spaced at five-metre intervals along the aerial extent of the line. The total number of streamers in use will vary depending on how the line is configured. Streamers that are hanging in the water can be prone to tangling. Because the far end of the streamer line will frequently be in the water, it may not be desirable to have streamers the whole way down the line. However, it is important that streamers are present to deter birds from taking baited hooks all along the part of the line that remains above water, as outlined in the specifications.
5. To ensure streamers are visible to birds, they should stand out against the surroundings. Streamers should be made of brightly coloured fluorescent plastic tubing or other material. Bright colours such as red, yellow, orange, or pink are most effective during day setting. For night setting, the streamers should be of a colour that contrasts with the

surroundings. Colours such as blue and green are less likely to be effective, because they are less likely to be highly visible to birds.

6. A complete additional streamer line should be carried as a spare.

Dated at Wellington this 31st day of August 2021.

TIFFANY BOCK, Manager Deepwater Fisheries, Fisheries New Zealand.

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 1 October 2021, is made under Regulation 58A of the Fisheries (Commercial Fishing) Regulations 2001 (“Regulations”). It is made by the Manager Deepwater Fisheries, of the Ministry for Primary Industries pursuant to an authority delegated under the Public Service Act 2020.

This circular revokes the Fisheries (Seabird Mitigation Measures—Bottom Longlines) Circular 2021 (Notice No. MPI 1366) and replaces it. The revocation and replacement is to make some minor changes to Clauses 7 and 8 to clarify that line weighting must be used at any time a bottom longline is set, and that line weighting does not apply to vessels that are exclusively fishing by Dahn lining.

This circular sets out mandatory mitigation measures that apply to commercial fishers using the method of bottom longlining. The measures are designed to mitigate the effect of fishing-related seabird mortality. The circular requires that, when setting bottom longlines, commercial fishers—

- use and configure streamer lines in accordance with the specifications prescribed in the circular; and
- weight lines in order to achieve five-metre sink depth within the aerial extent of the streamer line.

Streamer lines meeting the requirements of this circular are approved seabird-scaring devices for the purposes of Regulation 58(1) of the Regulations. The Schedule sets out best practice guidelines for—

- the configuration and use of streamer lines.

The guidelines do not form part of the specifications set under Regulation 58A of the Regulations and do not have the force of law. In the event of any inconsistency with the specifications set out in clauses 6–8, the specifications prevail.

This circular also imposes restrictions on the discharge of offal or fish while setting and hauling bottom longlines.

INTERNATIONAL AND NATIONAL SEABIRD RISK FRAMEWORKS

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.



Seabird Bycatch Mitigation Standards Guide

Bottom Longline (hand baiting)

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- Bottom Longlines) Circular (No. 2) 2021

1. Deploy a legal tori line for the duration of **ALL** setting events.
2. Tori line length is a minimum of 150m for vessels greater than or equal to 20m length overall.
3. Tori line achieves an aerial extent of 50m when fishing in high-risk periods.
4. Tori line streamers are brightly coloured and spaced ≤ 5 m apart along the entire aerial extent.
5. Weight lines to achieve a 5m sink rate depth before the end of the tori line aerial extent.
6. Discharge of offal or fish during setting is not permitted (*see Circular for exceptions*).
7. Discharge of offal or fish during hauling is only permitted from the side opposite to the hauling station (*live fish or dead fish larger than 30cm may be returned on the hauling side, only if a hauling mitigation device is used*).

'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**
 - Use a 'fit and proper' tori line that can be adjusted over the hook-bearing line to suit varying conditions.
 - During low-risk periods, weight lines to achieve a 5m depth before the end of tori line aerial extent.
 - During high-risk periods, weight lines to achieve a 10m depth before the end of tori line aerial extent.
 - 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.

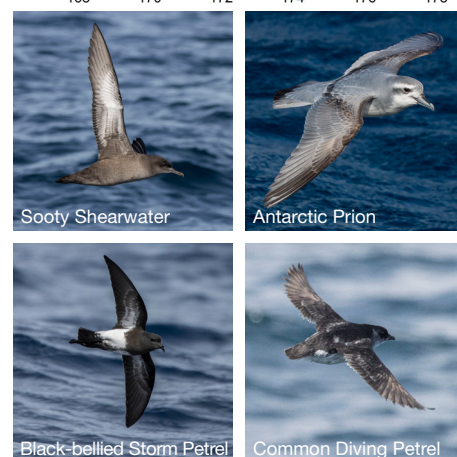
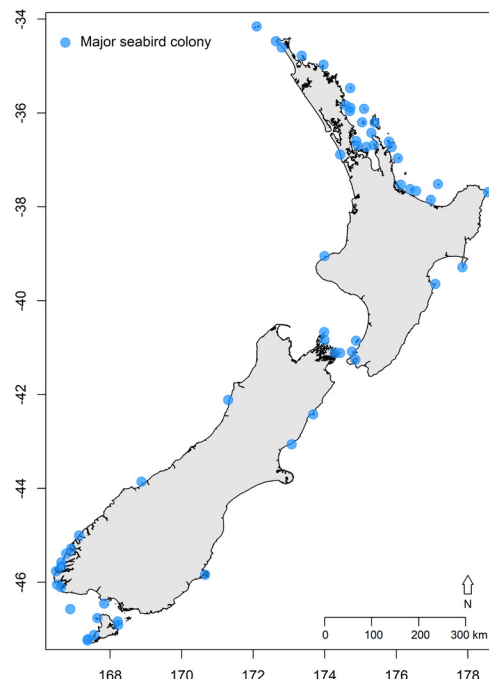
What can you do to help seabirds?

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

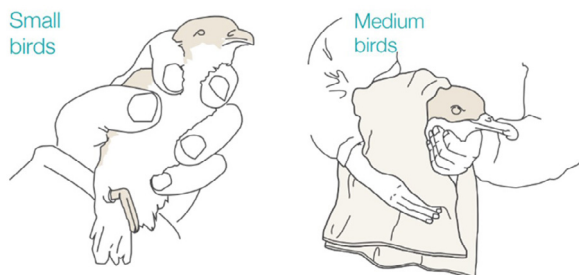
- Follow your Protected Species Risk Management Plan and operational procedures.
- Contact your liaison officer for more information.



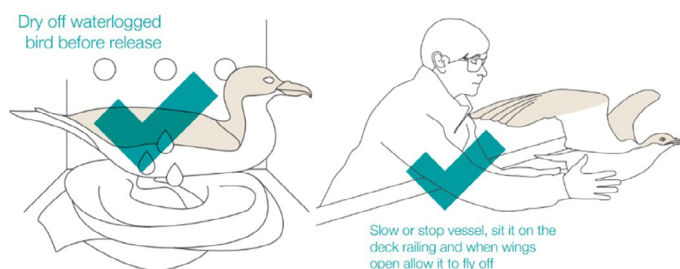
Shearwaters and petrels (including diving petrels, storm petrels and prions) are particularly susceptible to vessel strikes. Photos: Oscar Thomas

For more information contact marine@doc.govt.nz.

Safe seabird handling techniques



Safe release techniques





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.

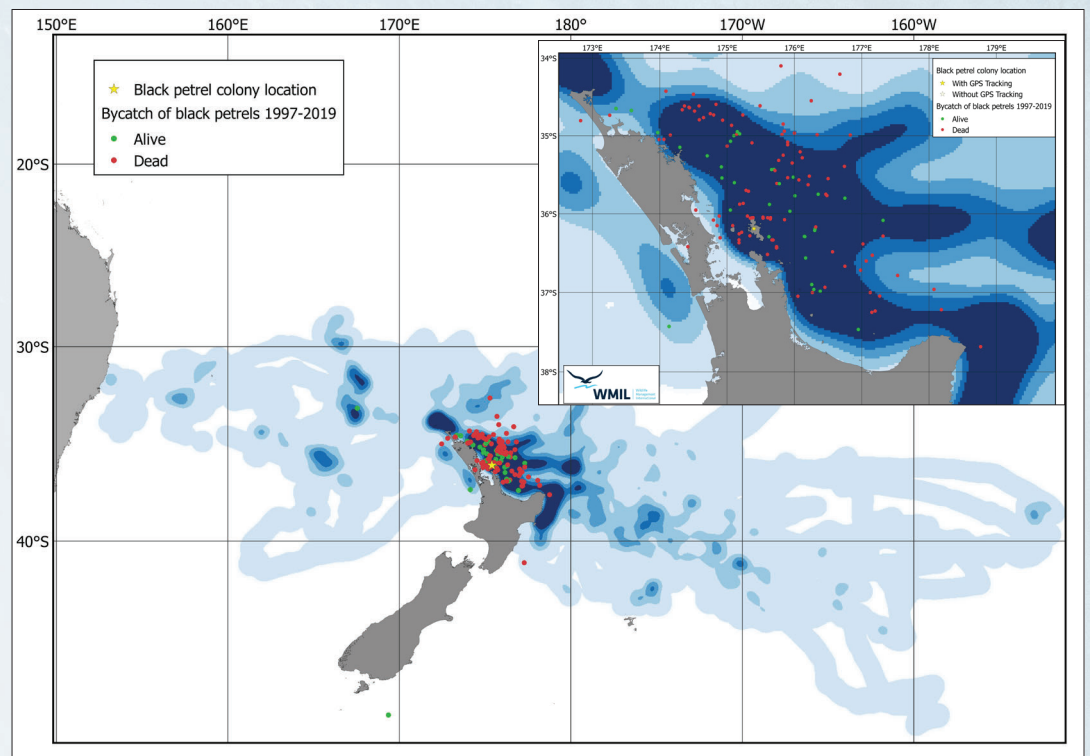
Distribution Map:

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

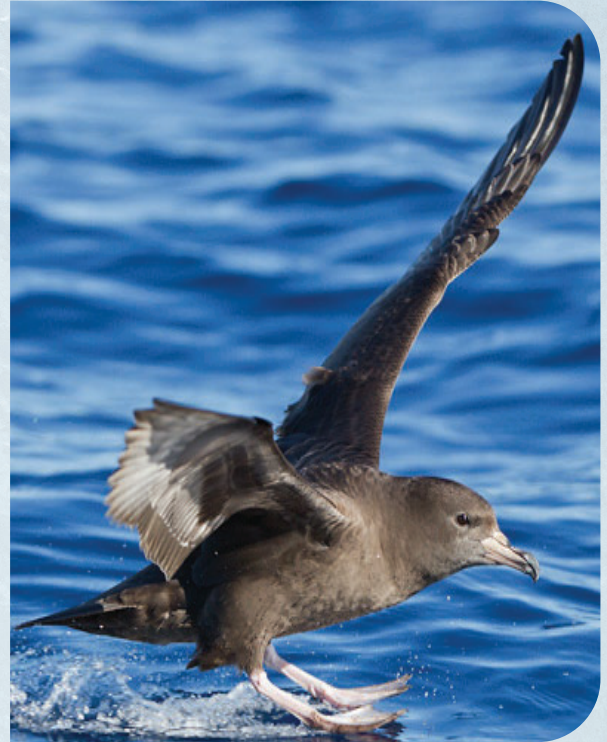
Toanui/Flesh-footed Shearwater

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.

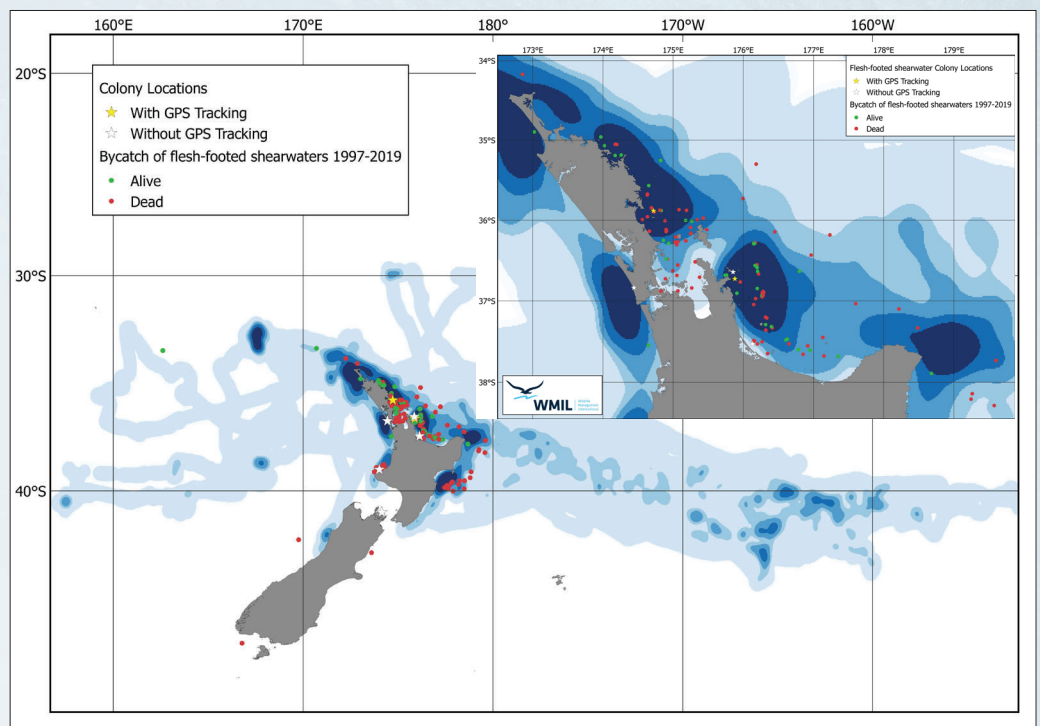
Distribution Map:

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 Bottom 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 on the reverse.

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?	N/A
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?	N/A
Item 3	Were the skipper and crew familiar with the contents of the:	
	(a) Operational Procedures?	N/A
	(b) 10 Golden Rules?	N/A
	(c) Protected Species Risk Management Plan?	N/A
Item 4	Were any protected species capture trigger points reached during the trip? <i>(If yes, please describe in the comments).</i>	N/A
Item 5	After a trigger point was reached, did the crew: <i>(If yes, please describe in the comments)</i>	
	(a) Make changes to fishing operations?	N/A
	(b) Change the mitigation measures they implemented?	N/A
Item 6	Did a gear or equipment failure contribute to the risk of protected species captures during the trip? <i>(If yes, please describe in the comments)</i>	N/A
Item 7	Were all protected species captures reported on the Non-Fish Protected Species Catch Return as required by fisheries reporting regulations?	N/A
Item 8	Were protected species that were caught alive, handled and released according to the DOC Handling and Release Guide?	N/A

Fish waste and bait management

Item 9	Was all fish waste/offal discharge managed as per the vessel's PSRMP?	N/A
Item 10	Was all fish waste held on board immediately before and during setting?	N/A
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?	N/A

Mitigation

Item 12	Was a tori line deployed for the entirety of all sets?	N/A
Item 13	When deployed, did the tori line aerial extent* appear to be at least 50m?	N/A
Item 14	Were streamers brightly coloured and appear to be spaced at a maximum distance of 5 m apart along the entire aerial extent of the tori line?	N/A
Item 15	Could the tori line be adjusted or repositioned over the setting line to suit varying conditions?	N/A
Item 16	Did the vessel carry a spare tori line or parts to construct a second tori line if required?	N/A
Item 17	Did the vessel set exclusively at night**?	N/A
Item 18	Were any sink rate tests conducted while onboard? (i.e. bottle tests or TDR) Did the vessel	N/A
Item 19	Keep records of any sink rate tests conducted? (i.e. bottle tests or TDR)	N/A
Item 20	Was the use of totally frozen bait avoided?	N/A

Hauling Protocols

Item 22 Were hooks kept below the surface during any breaks in hauling?

N/A

Item 23 Was there any mitigation used during hauling? (If yes, please describe in the comments)

N/A

Deck landing/impact

Item 24 Were lighting practices managed in a way that avoids attracting or disorienting seabirds?

N/A

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

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

Please make a detailed comment for each item when required.

Item No:

Item No:

Item No:

Item No:

Any further comments/observations: