

Purse Seine

Operational Procedures for

Protected Species Risk Management

Version 1.0

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Disclaimer: This document has been produced to serve as a guide to the fisheries regulations relevant to commercial purse seine fishing operations for use by the industry. This is not intended to be used as a substitute to any statutory, regulatory and/or non-regulatory requirements for purse seine fishing. Before acting in reliance, either wholly or partially, on any information contained in this document, 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.

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.

Part 1: Introduction

These Operational Procedures (OP) are written by Fisheries Inshore New Zealand (FINZ) in collaboration with the Department of Conservation Services Programme (DOC CSP) Liaison Programme, Fisheries New Zealand (FNZ), and purse seine fishers. It sets out the management measures required by the Ministry for Primary Industries (MPI) by law (the mandatory measures) as well as additional best practice measures and reporting requirements.¹

Background on Purse Seine fishing

Purse seines are fishing nets designed to catch schooling fish. The gear is set around a fish shoal beginning with the launch of a net-skiff, which is a smaller vessel attached to one end of the net. The main vessel then moves to encircle the fish school, laying out the net as it goes, until it returns to the position of the net-skiff.²

The top of the net is hung on a float line lined with buoys. The bottom is attached to a lead line, which usually consists of a steel chain with steel rings, known as “purse rings”, and is attached below the chain. The purse line that runs through the purse rings is made of steel and allows the pursing of the net.

The fish are harvested from the purse seine net using a large scoop net or “brailer” (brailing operation) or by using fish pumps.^{3,4}

Purpose and rationale of these Operational Procedures

The Purse Seine (PS) OPs have been established so that protected species risk reduction practices are documented and able to be understood by vessel owners, skippers, and crew.

Support to fishers to achieve best practice outlined in this OP is provided by the [DOC CSP Liaison Programme](#). DOC Liaison officers (LOs) are working with the fishing industry to:

- assist fishers to avoid captures of seabirds and other protected species
- support fishers to stay up to date with best practice mitigation and any changes to relevant legislation
- develop vessel specific Protected Species Risk Management Plans (PSRMPs).

This OP is for New Zealand flagged purse seine vessels and includes the domestic purse seine fleet and New Zealand flagged purse seine vessels that fish on the high seas. These vessels target pelagic fisheries that are managed as highly migratory species (HMS) fisheries as well as inshore fisheries.

¹ At the time of publication of of Purse Seine OP Version 1.0, Mitigation Standards have not been drafted for the purse seine fleet. When Mitigation Standards are drafted, these Operational Procedures will be reviewed and updated if needed.

² Otto Gabriel et al., eds., *Von Brandt's Fish Catching Methods of the World, 4th Edition* | Wiley, 4th ed., 2005.

³ [Food and Agriculture Organization, “Guidelines to Reduce Sea Turtle Mortality in Fishing Operations” \(Rome, 2010\), http://www.fao.org/3/i0725e/i0725e.pdf.](http://www.fao.org/3/i0725e/i0725e.pdf)

⁴ [Barry Baker and Sheryl Hamilton, “Seventh Meeting of the Seabird Bycatch Working Group Impacts of Purse-Seine Fishing on Seabirds and Approaches to Mitigate Bycatch” \(La Serena, 2016\).](#)

These OPs are to be used alongside or with (but do not replace or override) the following:

- Vessel Specific Protected Species Risk Mitigation Plans (PSRMPs) for each purse seine vessel: the mitigation processes and measures agreed by the vessel owner/operator that will be used to mitigate fishing risks on that vessel;
- Trigger Reporting: reporting of captures of significant species or numbers that might indicate a mitigation failure or a need to review a vessel plan;
- [DOC's Handling and Release Guide](#) and other documentation provided as attachments to this document provided by the liaison officer;
- Monitoring and Audit: observer reporting of vessel use of measures and auditing the performance of mitigation measures by the fleet;
- All or any relevant laws and regulations pertaining to fisheries activities in New Zealand waters.

Objectives of these Operational Procedure

The objectives of these OPs are to ensure:

- Marine protected species mortalities are mitigated by reducing the risk of capture;
- That all vessels in the fleet have the same information as well as robust and documented systems to manage protected species risk and therefore are working together as a fleet to manage the risks;
- The vessel's skipper and crew understand marine protected species mortalities are mitigated by reducing the risk of capture;
- That the vessel crew is actively involved in protected species mitigation measures and undertakes improvements through ongoing on board observation, review and improvement processes, i.e. **Look – Think – Act**;
- That vessels report as required and as accurately as possible all capture events (MPI reporting) as well as any event triggers;
- Understand and adhere to mandatory measures.

Additionally, these OPs ensure the wider public are informed of the measures undertaken by industry to reduce the risk of capture of protected species.

Status of these Operational Procedures

These OPs came into effect in 2020 and this current version is 1.0, which has been published and circulated in November 2020.

Application of these Operational Procedures

The Purse Seine OPs detail best practice for handling dolphins, sharks, rays, and sea turtles caught during purse seining fishing efforts, as these species constitute the majority of historical captures. Information specific to handling whales, pinnipeds, birds, and sea snakes can be found in supplemental material. Any protected species interactions, including birds and sea snakes, must be adequately reported and in line with statutory requirements.

Other key documents or rules & regulations

The key legislation that underpins the management and protection of all seabirds, marine mammals and some sharks in New Zealand includes:

- Wildlife Act 1953 and Marine Mammals Protection Act 1978: Require that the accidental capture of any marine wildlife including birds and marine mammals is permitted provided that the capture is reported to the appropriate authority without delay. **It is not an offence to accidentally capture a marine wildlife species, but it is an offence to not report it.**
- Marine Mammal Protection Act 1978: Requires that purse seine nets have escape panels or apertures from which any dolphin or porpoise can readily escape and that fishers follow practices acceptable to the Director-General of Conservation. Some exemptions may be granted (except if fishing for yellowfin tuna).
- Fisheries Act 1996: Requires that measures are taken to avoid, remedy or mitigate any adverse effects of fishing related mortality on any protected species and include requirements to report captures.
- Animal Welfare Act 1999: Governs the welfare of animals (including fish) in NZ. The Act contains provisions to prevent ill treatment and inadequate care of animals.
- Fisheries Commercial Fishing Regulations 2001
- [National Plan of Action – Seabirds 2020](#)
- [National Plan of Action – Sharks 2013](#)

Marine mammals

More than 15 dolphin species have been recorded in New Zealand waters, all of which are protected. Off the northeast North Island bottlenose dolphin, long-finned pilot whales and false killer whales are common over the continental slope to about 1000 m depth, while striped dolphin occur further offshore in the Bay of Plenty. Although dolphins are often associated with schools of fish, the number of dolphins caught in purse seine fishing gear is small.

Table 1 provides for a list of species that are observed around purse seine operations and so should be treated with caution.

Marine Mammal Protection Act

This OP describes fishing practices that are acceptable to the Director-General (DG) of Conservation for purse seine vessels in respect to the statutory requirements of s17 of the Marine Mammal Protection Act 1978.

Sharks and Rays

Spine-tailed devil rays are a species of significant importance to the community. The Government has a responsibility to ensure that undue impacts are not occurring to them. It is in the best interests of the commercial fishing industry, and in this case the purse seine vessel fleet and quota owners, as users of the coastal space, to take all reasonable and practicable steps to understand, acknowledge and mitigate risk and impacts on protected wildlife encounters.

All shark species are assessed for risk by FNZ. Three shark species are classified as Protected Species – the basking shark, the spine-tailed devil ray, and the great white shark. Of these three species, the spine-tailed devil ray is at direct risk of being captured during purse seine operations.

Spine-tailed devil rays, manta rays and whale sharks are attracted to free swimming schools of skipjack tuna while sei whales have been observed in association with schools of mackerel.

All New Zealand shark populations are included under a National Plan of Action – Sharks 2013 (NPOA-Sharks) that documents New Zealand's planned actions for the conservation and management of sharks.

Table 2 provides for a list of species that are observed around purse seine operations and so should be treated with caution.

Turtles

While no turtles have been observed or reported caught in New Zealand purse seine operations through the end of the 2018 fishing year, an increased presence of turtles may be expected if recent oceanic conditions continue as a consequence of warmer seas in recent years.

Table 3 provides for a list of species that are observed around purse seine operations and so should be treated with caution

Seabirds

The National Plan of Action (NPOA) for Seabirds is part of an internationally visible management framework for seabirds. The NPOA was established as part of New Zealand's obligations under the FAO's International Plan of Action (1999) and is linked to UN and FAO processes and guidelines. It sets out objectives for the next five years to guide the management of risk to seabirds in New Zealand fisheries.

This OP acknowledges commitments under the NPOA-Seabirds and supports vessel specific protected species management plans to achieve the goals of the NPOA-Seabirds. Of the 71 species included in the current risk assessment, New Zealand white-faced storm petrels (as well as unidentified storm petrels) have been reported to be captured alive during purse seine operations. Giant petrels have also been reported as captured, however they are not listed on the current risk assessment.

Table 4 provides for a list of species that are observed around purse seine operations and so should be treated with caution.

Part 2: Risks Associated with Purse Seine Fisheries

Overall, purse seine fisheries are regarded as highly selective and result in minimal interactions with non-target species. Protected species and other bycatch may interact with a purse seine accidentally, or may become attracted to the net once other fish are captured. Once they interact with the net, they are at risk of being caught, injured, and/or drowned.

Tables 1 – 4 provide detail on the protected species risks associated with purse seine fisheries.

Table 1: Main marine mammal species at risk in purse seine fisheries.

Species name	Species Code	Main Risk Area
New Zealand fur seal	FUR	<ul style="list-style-type: none"> • Known to feed on jack mackerel • Fur seals are found throughout New Zealand, mainly on rocky shores throughout mainland New Zealand, the Chatham Islands and the subantarctic islands as well as in parts of Australia.
Bottlenose dolphin	BDO	<ul style="list-style-type: none"> • In New Zealand three main coastal populations exist: <ul style="list-style-type: none"> ○ Around 450 individuals live in the North Island area, ranging from Doubtless Bay in Northland to Tauranga. ○ 250-300 individuals live in the Fiordland/ Stewart Island/Otago region. • Another group range from the Marlborough Sounds to Westport.

Table 2: Sharks and rays at risk in purse seine fisheries.

Species name	Species Code	Main Risk Area
Spine-tailed devil ray	MJA	<ul style="list-style-type: none"> • In New Zealand, devil rays appear to favour an area near the shelf edge off the northeast coast of the North Island. • However, they can occur as far south as East Cape and Cape Egmont.
Manta ray	RMB	<ul style="list-style-type: none"> • It is a largely tropical, subtropical and semi-temperate species that is sometimes seen off the northeast coast of North Island. • They are likely to migrate between New Zealand waters and tropical seas to the north.
Whale Shark	WSH	<ul style="list-style-type: none"> • Reported from 34 – 38° S. They migrate annually to northeast New Zealand and may range as far south as waters off Fiordland and South Canterbury.
Oceanic whitetip shark	OWS	<ul style="list-style-type: none"> • Recorded off the North Island and around the Kermadec Islands
Great white shark (aka white pointer shark)	WPS	<ul style="list-style-type: none"> • Found throughout NZ waters. • Most subadult and adult white pointers here also spend part of the year in the SW Pacific.

Table 3: Marine reptiles at risk in purse seine fisheries.

Species name	Species Code	Main Risk Area
Sea turtles	TLE	<ul style="list-style-type: none">• Leatherbacks (LBT), Greens (GNT), and Hawksbill (HBT) are commonly seen around the Kermadecs and have been seen as far south as Cook Strait.• Loggerheads (LHT), Olive ridleys (TLE – generic code) have been recorded off the North and South Island, as far as Stewart Island.

Table 4 Main seabird species at risk in purse seine fisheries.

Species	Species Code	Main Risk Area
White-faced Storm Petrel	XST	<ul style="list-style-type: none">• Subspecies breeds only in New Zealand. The species usually forages over the continental shelf during the breeding season. In the non-breeding season (April to August), birds disperse to the eastern tropical Pacific, with sightings in Ecuador and the Galapagos Islands. During the summer breeding season this is the most commonly encountered storm-petrel in coastal waters, particularly near breeding sites, such as north-east of the North Island and near the Chatham Islands.
Giant petrel	XNP (Northern), XSP (Southern), XXP (Unidentified petrel)	<ul style="list-style-type: none">• Northern Giant Petrel: Birds disperse widely over the Southern Ocean, mainly north of the Antarctic Convergence. The northern giant petrel is more restricted to foraging near shorelines than the southern giant petrel. Many mature northern giant petrels remain near their breeding colonies year-round, while immature birds appear to make circumpolar journeys.• Southern Giant Petrel: Breeding adults spend summers near breeding colonies. In winter, some adults remain in Antarctic waters, while others move further north and disperse across the Southern Ocean

Part 3: Industry Responsibilities

Commitment to these procedures

All vessel owners or operators of vessels in purse seine fisheries are required to adhere to these OPs and ensure that crew are trained on these procedures with assistance of their Liaison Officer.

Generic Mitigation techniques

Ways to reduce risk during SETTING include:

- Avoid known areas of high activity of protected species (season, area, time of day or night etc);
- Not deploying the skiff if protected species are observed swimming with the target school of fish;
- Ensure that the net is clean of any meshed fish or other potential food attractant when being set;
- For seabirds, close attendance of purse seine gear during setting and retrieval during daylight operations allows the implementation of mitigation measures, particularly tow-off procedures that remove folds in the nets that can entrap birds, as well as water spraying.

Ways to reduce risk during PURSING include:

- Manage offal and fish waste so as not to be discharging at this time;
- Where possible, manage lofting of the net above the sea surface in high wind or wave conditions when seabirds and marine mammals are present;
- In the presence of large numbers of seabirds or marine mammals be very vigilant when pursuing the net;
- Use acoustic or other devices to deter the presence of risk species at the gear;
- If a protected species is observed once the net is committed, mindful of vessel and crew safety, release the bow or stern of the net attached to the tow line cable to recreate the aperture and allow the animal to escape;
- If the animal does not swim free and it is safe to do so, every effort should be made to encourage the animal to leave using the work boats.

Vessel owner and operator responsibilities

The vessel owners and operators will:

- Ensure all crew are briefed on these OPs and fully understand all the actions required with the OPs kept in the vessel wheelhouse at all times;
- Be aware of all regulatory requirements and protected species reporting;
- Manage fishing operations in time and place based on their experience and the information provided in these OPs to minimise overlap in time and space with protected species;
- Be aware of seabird/mammal activity around the vessel, assess risks and take those actions needed to minimise risk especially carefully managing the setting of gear in midst of such activity. The fishing operation must be delayed or relocated if protected species are observed within 500 meters of the fish school or vessel. If protected species are attracted to the net during fishing, their behaviour must be closely monitored to ensure successful avoidance. Be aware that protected species are often well below the surface and may not be visible prior to deployment of the fishing gear

- Carry onboard and ensure crew are aware of the standards and requirements of “The 10 Golden Rules for Purse Seine Vessels”;
- Ensure correct reporting to FNZ and that trigger reports are sent promptly to the relevant Liaison Programme personnel;
- Address any deficiencies in implementation of these Procedures as noted by any observer;
- Communicate further with the Liaison Officer Programme and FINZ if protected species captures consistently exceed the triggers and there needs to be a review of these OPs;
- At least one crew member (such as the Bridge Officer) must be made solely responsible for determining the presence/absence of protected species before the commencement of and during the fishing operation, particularly during net retrieval. They must report any sightings immediately to the Vessel Master,
- Ensure crew are meeting their responsibilities listed below.

Vessel crew responsibilities

All vessel crew must:

- Manage fish waste to reduce attraction of protected species to the vessel;
- Maintain an alert watch of protected species activity around the vessel and advise the skipper as appropriate when it is clear that there is risk that requires action;
- Before setting, if a protected species is observed swimming with the target school of fish, the skiff must not be released,
- Before pursing, if a protected species is observed once the net is committed, the Master (mindful of vessel and crew safety) will release the bow or stern of the net attached to the tow line cable to recreate the aperture and allow the animal to escape. If the animal does not swim free and it is safe to do so, every effort should be made to encourage the animal to leave using the work boats,
- If a protected species is observed once the net is fully closed and stacking of the net has commenced, it will no longer be possible to release the ends of the net and recreate the aperture. In this case, it may be possible to coax the animal out over the cork line or use the brailer to lift it up and over the net,
- Check and maintain any equipment such as acoustic pingers or other deterrent devices.

Liaison officers' responsibilities

- The Programme Liaison Officer will review each vessel's adherence to these OPs via observer audits and during any vessel visit;
- They will also provide support and training where necessary.

Part 4: Protected Species Handling & Release and Crew Safety

Release alive

Every care should be taken to release animals alive, reduce stress and handle with care to minimise any further harm or injury to the animal, and to increase survivability when it is being returned to the sea alive. **Deliberately harassing or harming an animal after incidental capture is an offence.**

All crew handling of protected species will follow best practice guidelines where appropriate as detailed in the broader protected species documentation. [DOC's Handling and Release Guide](#) is provided as supplementary material.

General advice

- All vessels should carry a large-mesh cargo net made of webbing which can be placed over the hopper to retain large species as the brail is tipped into the hopper/hold. Tuna will pass through the mesh of the net, while large rays will be retained and can be easily released back into the sea without having to handle them.
- If a protected species is observed once the net is committed, the Master (mindful of vessel and crew safety) will release the bow or stern of the net attached to the tow line cable to recreate the aperture and allow the animal to escape. If the animal does not swim free and it is safe to do so, every effort should be made to encourage the animal to leave using the work boats.
- It may be possible to coax the animal out over the cork line or use the brailer to lift it up and over the net if the net has already been pursed.
- For rays, great white sharks, and sea turtles the accepted practice is to encourage the animal to swim out over the top of the net.
- If the animal is entangled, manoeuvre the work boat or skiff alongside the animal if possible rather than herding the animal to the main vessel.
- Try keep the animal in the water while the fishing gear is carefully removed. All fishing gear and ropes should be completely removed from the animal before it is released.
- If the fish are landed, the brailer/webbing cargo net can be used to manoeuvre the accidentally caught protected species back into the water. Note that lifting and/or hoisting an animal can cause permanent damage and should only be adopted as a last resort.
- Note that rays or turtles may be present in the brail without the crew realising.

Seabirds

- Keep the bird calm by covering the head with a cloth. If available use two crew; one to support the bird, while the other frees the gear from the bird. Use gloves and eye protection (beware large birds can inflict a nasty bite).
- Carefully isolate the tangled meshes. Peel the netting back over the tail, feet, and then the wings, while holding the bird firmly. Remove the head from meshes last.
- When freed, place the bird gently back into the water. If the bird is exhausted/waterlogged, put it in a safe space, e.g. an empty fish crate, box, or an open, safe area on deck away from oil. Let the bird dry out for an hour or two. When the bird is dry or active again, ease

the bird back into the water as close to the water surface as possible. Where birds cannot be lowered directly on to 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.

- Release bird carefully. Do not throw seabird into air.

Marine Mammals

- In the event that a dolphin requires direct handling, support the dolphin's head above the water at the side of the boat using a piece of thick webbing placed under the body between the top (dorsal) fin and the side (pectoral) flippers.
- If you absolutely have to bring the dolphin on board and it is small enough to lift using the sling, maintain the animal at all times in a horizontal position.
- Under no circumstances hang the dolphin up by the tail as this may cause spinal injury and may result in death.
- As bottlenose dolphins can weigh anywhere between 45 and 300 kilos, care must be taken not to put crew at physical risk of injury.

Rays

- Smaller rays can be picked up by the spiracle or snout. For larger rays, use at least two people and hold by the wings. Take care to avoid the spine at the base of the tail. Large rays should be released directly from the brailer where possible, or alternatively by using a tarp, canvas or other large piece of material which is lifted by the ship's crane. Ideally, the animals should be released using the crane rather than manual handling.
- If possible, try and remove animal from net 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 etc.
- Watch carefully for signs of aggression in the animal. Do not allow crew to handle in a manner that needlessly exposes them to risk of a bite or other injury.
- Procedures when dealing with large rays should be consistent with [WCPFC Guidelines](#) for the safe release of sharks and rays (other than whale sharks).

Sharks

- Where sharks have become entangled in the net during the reeling process, reduce the speed of the net reel and try to disentangle the animal.
- Lifting the shark up towards the power block is dangerous for both the shark and the crew. Sharks should be disentangled in the water, as this results in increased probability of survival for the shark and a lower risk of harm to crew members.
- If the shark must be brought on board, release it as soon as is safely possible. Lie the shark on its side to prevent crushing of the internal organs and cover the head with a dark cloth but be wary while working near the head.
- Never pick up or hang sharks by the tail, as this has a high probability of causing spinal or tail damage and is dangerous for the crew. Never hold sharks more than halfway down the body as they are very flexible, and most species can reach their own tails with their mouths.

- Treat all sharks as if they are alive, as even sharks which appear to be dead may suddenly lash out and cause injury.
- Larger sharks should only be manoeuvred using a sling or brailer. Release headfirst, close to the water.

Whale shark

- Whale sharks should only ever be dealt with in the water. Do not tow the animals or hoist by the tail.
- They can be released from the net while it is still in the water by cutting a hole a few metres in diameter and allowing the fish to swim through.
- Alternatively, it may be possible to roll the animals over the top of the net. A rope can be tied on to the cork line, run under the animal and then slowly and gently hoisted to roll the shark over the cork line.
- Procedures when dealing with whale sharks should be consistent with [WCPFC Guidelines](#) for the safe release of encircled whale sharks

Turtles

- If a sea turtle is sighted in the purse seine, all reasonable efforts should be made to rescue the turtle before it becomes entangled in the net.
- If entangled in the net, hauling should stop as soon as the turtle comes out of the water and should not start again until the turtle has been disentangled and released.
- Once brought aboard all appropriate efforts to assist in the recovery of the turtle should be made before returning it to the water.⁵
- When handling turtles this should be consistent with [WCPFC Guidelines for the Handling of Sea Turtles](#).
- Turtles should be held by the front and back edges of the shell and do not carry by the flippers. Avoid carrying them in a way which is likely to inflict cuts or any other injuries, as this can lead to infection and subsequent death after release.
- Leatherback turtles are too large to be held and should be lifted using the brail or crane, taking care to avoid injury.
- Prevent the animal from drying out by spraying with water periodically, avoiding the face.
- When returning turtles to the water, release them headfirst just above the water. Do not drop or throw them from height.
- Inactive or unresponsive turtles aren't necessarily dead and recovery may be possible. If an inactive captured turtle can be brought on board, do so, keeping it in the shade for at least four hours. An old tyre makes a good platform to set turtles on while they recover.
- Lie the turtle on its belly with the tail end elevated by 20 cm to drain any water that may have entered the lungs.

⁵ [Food and Agriculture Organization, "Guidelines to Reduce Sea Turtle Mortality in Fishing Operations."](#)

Returning Dead Seabirds, Marine Mammals and Protected Sharks to the Sea

- The entire body of any dead protected species must be returned to the sea, unless a FNZ observer onboard the vessel directs the skipper to (or they themselves keep it) or the skipper has been advised otherwise or permitted by DOC or FNZ. Usually they only keep seabirds but may take parts of marine mammals or sharks.
- **Taking any part and keeping it without a DOC permit, or cutting or mutilating the body of a protected species is an offence.**
- If a bird has a leg band, record any number on leg band before returning any bird to sea and send to bandingoffice@doc.govt.nz

Handling and Crew Safety Issues

- Seals (and sea lions) can carry a number of infectious diseases which can infect humans. Live marine mammals can also be potentially dangerous to humans particularly when they are in stressful situations. Handling marine mammals should always be kept to a minimum and should only occur if and when needed.
- When attending to animals landed on deck the following steps should be followed to ensure crew safety:
 - Whenever handling bodies of drowned sea lions, fur seals, or any other marine mammals, wear waterproof gloves and waterproof protective clothing.
 - Where possible, 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.
 - After handling any marine mammal, crew should wash their hands and forearms with antibacterial soap and their protective clothing by hose down.
- Details of tagged protected species should be sent to the following people:
 - Rays tag information should be sent both to MPI (comms@fish.govt.nz) and NIWA (enquiries@niwa.co.nz). Any tags should be returned to DOC along with the following details: disc width, sex, date, location, tag number.
 - Turtle tag information should be reported to comms@fish.govt.nz, or posted to Fisheries Manager HMS, PO box 19747, Auckland.
 - Tagged sharks (length, sex, date, location, tag number) should be reported to the Department of Conservation (marine@doc.govt.nz), along with photos. Any tags should be returned to DOC.
 - Any other tagged protected species information should be sent to csp@doc.govt.nz.

Report all captures to skipper and record in the Electronic Reporting System (ERS).

Part 5: MPI Mandatory Reporting

It is not illegal to accidentally capture protected species while commercially fishing, but it is illegal to fail to report the capture.

All protected species captures or deck strikes (see below), dead or alive (then returned to the sea) must be recorded in the Non-Fish Protected Species Catch Return form (NFPSCR) or the Electronic Reporting System (ERS) equivalent and then furnished to MPI as required under the regulations. FNZ observers may decide to keep some protected species caught for formal identification autopsy. They are permitted to do so. The vessel may only keep a body if it holds a current DOC permit.

It is important that all captures and mortalities are reported accurately.

Reporting requirements include all non-fish protected species.

NFPSCR codes

View species codes in Tables 1, 2, 3, and 4 of this document, and in supplementary material.

It is very useful to take a picture of the head, whole body and any distinguishing marks on a marine mammal. Do this without any crew or vessel features in the picture. FINZ can get these pictures identified for you.

Record any leg band or flipper tag numbers on the form, and take a photo if you can and send to the Liaison Officer Programme and FINZ. You may also come across other recording equipment attached to seabirds, large rays or marine mammals. If the animal is dead, keep the recording device and send to DOC.

Definitions

Capture: 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, unable to leave vessel of its own accord; are reported as 'deck-strikes' (not reported if alive and leaves the vessel unassisted, i.e. landed on vessel)

Always meet your legal requirements. Record all captures whether dead or released alive and furnish to FNZ for paper logbook forms or FishServe ERS as required under the fisheries reporting regulations.

Part 6: Reporting Triggers

Trigger limits are based on the Coastal Purse seine Liaison Programme real-time reporting 'threshold' system. Once a trigger is reached, it requires the skipper to communicate with the Liaison Programme, and the operator/owner and skipper (noting these might be the same person at times) will review the situation. Whenever appropriate, the vessel crew may need to take additional steps to mitigate risk of further capture events.

Purse Seine Liaison Programme Triggers & Reporting Requirements

A trigger has been reached if, in **any 24 hour period**, the vessel captures and lands on deck:

- 5 or more small seabirds (petrels, shearwaters, prions, shags)
- 5 or more of seabirds (any species)
- 3 large seabirds (albatross, giant petrel)
- 1 greater albatross (Antipodean, royal)
- 1 black petrel
- 1 flesh-footed shearwater
- 1 penguin
- 1 Hector's or Maui dolphin
- 1 dolphin or toothed whale
- 1 other whale including orca
- 1 sea lion
- 2 fur seals
- 1 white pointer shark (great white shark)
- 1 oceanic whitetip shark
- 1 whale shark
- 1 basking shark
- 2 turtles (any species)
- 1 manta ray
- 3 spinetail devil rays

or if, in any **7 day period** the vessel captures and lands on deck:

- 10 or more dead seabirds (all types of seabird)
- 5 or more (dead or alive) fur seals.

Purse Seine Triggers Breach & Reporting Contact 24/7

The vessel must directly (or via the onshore Vessel Manager), notify the Liaison Officer responsible for the purse seine programme and FINZ **within 24 hours** of any trigger breach so that any follow-up deemed necessary can be discussed and carried out. Emails from Sat-C or texts are OK.

Contact person and details are at the back of this OP and on this vessel's PSRMP.

Part 7: Audit and Review

FNZ Observer Review Form

During any voyage with a FNZ Observer present, the Observer will review the vessel equipment and performance against this OP and the vessel-specific Protected Species Risk Mitigation Plan (PSRMP). The Observer Audit form (attached) will be used to document the assessment of vessel and crews' performance.

The review form is completed by the Observer at the end of the voyage and submitted to FNZ. A copy is also sent to the Liaison Programme Coordinator for oversight and review, who forwards this to the vessel operator.

Any issues or events noted by the Observer against the vessel or crew performance regarding the OPs will be followed up and addressed with the vessel operator by the Liaison Officer. Good performance will also be noted.

If your PSRMP is not being implemented effectively and practices onboard need to be improved or the PSRMP needs to be amended, your Liaison Officer will work this through with you and update your PSRMP if necessary.

Plan Review

Your PSRMP may also need updating 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.

If there are any changes to regulated mitigation measures or new mitigation options preferred, your PSRMP may be amended.

Public Reporting

Aggregated outcomes of these audits, and the number of issues that arise each fishing year, are publicly reported by FNZ in its Annual Review Report and by DOC in its summary of the LO programme. Note that individual vessel details are confidential to the operator, DOC and FNZ and cannot be disclosed publicly.