Set Net - Protected Species Risk Management Plan

FV (ID)		Port		Date	
Owner		Skipper(s)			

Purpose: This PSRMP documents agreed procedures and actions that skippers will follow to reduce risk of protected species captures and includes implementation of best practice Mitigation Standards. Skipper(s) and crew are also to read and understand the supporting Operational Procedures. Information in this plan will be provided to MPI and SNZ for reporting and management.

Regulations: Observe all spatial restrictions for operating in your area. All protected species captures must be reported using the electronic NFPS Catch Report.

MS Alignment: ☐ 1.1, ☐ 1.2, ☐ 2.1, ☐ 2.2, ☐ 3.1, ☐ 3.2, ☐ 3.3, ☐ 3.4, ☐ 3.5, ☐ 4.1, ☐ 4.2, ☐ 4.3

Additional Resources

Vessel's Practices – Health and Safety of crew comes first	
Discharge management	- Setting: No discharge immediately before or during - Hauling: fish waste is held or batched at intervals *(select one or indicate if both)* - Storage & discharge point: *E.g. Stored in fish bins and dumped from stern while steaming or opposite side to the hauling station* - All practicable stickers are removed from the net before each shot.
Net	- Nets are not stalled - Spatial placement of nets don't pose unnecessary risk to protected species - Consider depth, soak time, and time-of-day with respect to protected species - Minimise time net is at/near surface to reduce risk of seabird interactions - Fishing gear/equipment is regularly inspected and maintained, and repairs occur while net is onboard or when low-risk to seabirds
High-risk periods/areas	*- E.g. avoid fishing around high seabird abundance or over full moon* - Some high-risk periods/areas include: *(include areas and times discussed with LO)* - Areas avoided when using external lights at night: x
Acoustic deterrents	*- Number, make, model, intensity, spacing, battery change schedule, performance checks and indicate where/when in use*
Light management	- Lighting reduced to minimum requirements and intensity for operations and safety - Essential lights are shielded, angled, and/or positioned to only light required areas
Other	- Skipper and crew follow safe protected species handling and release procedures - Dead captures are shown to camera for independent ID; report bands to your LO *- E.g. – visual/LED deterrent*

Contact your Liaison Officer when a TRIGGER POINT is reached

24 hr	(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	(Alive or Dead) 10 protected seabirds of any type or 5 fur seals		
Contact:		**Ph:**	**Email:**

TEN GOLDEN RULES

FOR SET NET FISHING TO SAVE PROTECTED SPECIES

1. **Ensure your vessel has onboard the current Coastal Setnet Operational Procedures (OPs), a Protected Species Risk Management Plan (PSRMP), a map of setnet prohibition areas and that you and your crew are familiar with the regulations and reporting requirements.**
2. **Avoid setting nets in the vicinity of significant seabird colonies and foraging areas (consider time and season) for the region you fish, and where seabird and/or marine mammal activity is particularly high.**
3. **Ensure that stalling does not occur while the nets are set (i.e. minimise the time the net sits at the surface).**
4. **Avoid excessive soak time (only soak as long as needed to maximise catch value) and ensure you are aware of maximum soak time outlined in the regulations.**
5. **Ensure your setnets do not cover more than one quarter of a channel, bay, inlet, etc, as required by the regulations.**
6. **No discharging of offal or fish waste immediately before or during setting and remove all stickers as practicable from the net prior to each shot.**
7. **While hauling, either hold or batch discharge offal and fish waste. Return live fish (meeting the legal requirements) to the sea as quickly as practicably possible.**
8. **While ensuring safe operating standards, minimise and contain lighting so as not to attract or disorientate seabirds, especially while sheltering or at anchor or steaming past colonies**
9. **Ensure you and your crew are familiar with and follow safe animal handling procedures and protocol. Record and report any bird band numbers to you Liaison Officer.**
10. **Report all protected species captures by ERS and notify your local Liaison Officer (same day) and if possible implement further risk reduction.**

For support phone your local Liaison Officer.

DOC CSP Protected Species Liaison Programme set net 10GRs (Version 5 Dec 2025)

SEAFOOD NEW ZEALAND

New Zealand Coastal Setnet Operational Procedures

Protected Species Risk Management

Version 4.0 December 2025

***Disclaimer**: These Operational Procedures do not replace or override any fisheries legislation or other regulations, including but not limited to 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 and requirements that are relevant to the fisheries and environment that they are operating in, whilst always maintaining crew and vessel safety.*

1. PURPOSE

The purpose of the Operational Procedures (OPs) is to provide a structured approach to the mitigation of risk to protected species.

The New Zealand fishing fleets, both inshore and deepwater, experience some level of monitored capture.

Many protected species are of great importance to the wider community and have tourism value in some regions. All protected species have biodiversity value to New Zealand and varying levels of population and threat status, with government and relevant agencies monitoring and managing impacts on their populations.

There are legal frameworks and guidelines in place for specific protected species groups. Seafood New Zealand (SNZ) Operational Procedures (OPs) aim to summarise key information on risk and mitigation options for inshore fisheries.

The OPs align with the 'Mitigation Standards to Reduce the Incidental Captures of Seabirds in New Zealand Commercial Fisheries' (Toolbox of Measures) developed by the Department of Conservation (DOC) and Fisheries New Zealand (FNZ). These standards, based on international best practice and statutory requirements, provide bycatch mitigation options that are above and beyond minimum legal requirements.

The OPs sit alongside vessel-specific Protected Species Risk Management Plans (PSRMPs). The PSRMPs document each vessel's individual approach to minimising risk to protected species and how they implement the OPs, legal requirements, and mitigation standards.

Fishers are legally required to reduce any undue impact on protected species and report all interactions with protected species using an electronic Non-Fish Protected Species (NFPS) capture form.

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

The ultimate mitigation practice is to **LOOK – THINK – ACT**

2. LEGLISLATION AND GUIDING POLICY DOCUMENTS

The Wildlife Act and Marine Mammals Protection Act

The Department of Conservation (DOC) are responsible for the Wildlife Act 1953 and Marine Mammals Protection Act 1972. The Acts protect various species, and it is an offence to hunt, kill, take, disturb, possess, buy, sell or destroy any protected species or any part of one without a permit. For some species (e.g. Antipodean albatrosses, Hector's dolphins) you may receive an authorisation from DOC to retain these for analysis ashore.

It's not an offence to accidentally catch any of these species if they are released immediately and the capture is reported accurately as soon as possible to DOC and MPI, via your electronic logbook.

Crew must observe safe handling practices for themselves and protected species when dealing with captured animals. Handle animals with care to minimise any further stress, harm or injury, and to maximise the chances of post-release survival. Refer to the DOC Handling and Release Guide for further diagrams and instructions.

The Fisheries Act

The Fisheries Act 1996 regulates fishing and is administered by Fisheries New Zealand (FNZ). They produce the mitigation and reporting circulars which describe the legal requirements. See the Reporting Requirements (Section 3) and Mitigation Measures (Section 8) of this OP for more information.

Beyond this, FNZ have only reasonably blunt tools to regulate impacts on protected species – for example closed areas/seasons and setting fisheries related mortality limits (FRMLs). The goal of this OP and the support you receive from DOC Liaison Officers and Seafood New Zealand aims to keep captures sufficiently low to avoid such measures.

Department of Conservation, Conservation Services Programme (CSP)

There are provisions under the Fisheries Act 1996 for both fisheries services (which largely sit with FNZ) and conservation services (which largely sit with DOC). Conservation services are outputs produced to mitigate the adverse effects of commercial fishing on protected species, as agreed between the Minister for Conservation and the Director-General of the Department of Conservation. Following consultation, industry is levied to provide services to undertake research relating to the effects of fishing on protected species and research into measures to mitigate the adverse effects of commercial fishing on protected species.

The DOC Liaison Programme is one such output enabled through CSP, and Liaison Officers are your primary contact to utilise for mitigation advice and protected species capture responses.

National Plan of Action - Seabirds

The National Plan of Action – Seabirds (NPOA) is part of an international management framework that guides seabird risk management. It is a requirement of the Agreement on the Conservation of Albatrosses and Petrels (ACAP) of which New Zealand is a signatory. It is also linked to United Nations Food and Agriculture Organisation (FAO) processes and guidelines.

The NPOA guides assessment and management of risk to seabirds in New Zealand fisheries. This management comes mostly from Fisheries New Zealand (FNZ) and Department of Conservation (DOC) with support from fishing industry bodies such as Seafood New Zealand (SNZ).

The Risk Assessment referred to in the NPOA assesses the impact of potential fisheries mortalities on 70 of the seabird species that breed in New Zealand. Risk for each seabird species is estimated as the ratio between the estimated annual deaths from fishing and the number that the population can withstand. The risk ratios are assessed on a fishery-by-fishery basis where data is sufficient to allow this.

A key NPOA objective is to move seabird species to lower risk categories, so the populations are not threatened, and a long-term objective is to have negligible impact on all 70 seabird populations.

DOC and FNZ have published mitigation standards which specify ‘best practice’ seabird bycatch mitigation methods for each fleet to support the NPOA.

Species specific approaches

Species specific approaches are in place for some particularly at-risk species including hoiho (yellow-eyed penguin) which are managed in line with the Te Kaweka Takohaka mō te Hoiho. This is a high-level strategy which aims to restore hoiho populations in the face of pressures from human activities.

More detailed threat management plans are in place for New Zealand sealions and Hector’s dolphins which are managed with area specific fisheries related mortality limits (FRMLs).

Te Mana O Te Taiao Aotearoa New Zealand Biodiversity Strategy 2020

The Government also administers the Biodiversity Strategy which includes the objective (12.2.1):

The number of fishing-related deaths of protected marine species is decreasing towards zero for all species.

3. REPORTING REQUIREMENTS

All protected species captures must be reported. Protected species are considered caught if they have become fixed, entangled, or trapped in such a way that they cannot move freely or free themselves. Deck strikes must also be reported and are defined as: where a bird collides with, or lands on a vessel or its superstructure, and is unable to leave the vessel of its own accord because it is injured or disoriented.

Instructions for completing E-logbooks, including species codes can be found here:

https://www.mpi.govt.nz/dmsdocument/70593-Fisheries-E-logbook-Users-Instructions-and-Codes-Circular-2025

If you are 100% sure of the identification of a protected species you have captured, use the individual species codes supplied by FNZ and available in the identification guides supplied by your Liaison Officer. If you are not 100% sure of the species identification, take a photo and send it to your Liaison Officer who may help you identify the protected species. You can use a more general group code if you are unsure (e.g. XMA - 'Smaller albatross – unidentified').

Seabirds

All seabirds, except black-backed gulls, are protected.

DO NOT USE CODE XAL (unidentified albatross). If you use this code, your Liaison Officer will be in touch to confirm ID. Please take photos and confirm with LO if you are uncertain.

Albatrosses should, as a minimum, be split into **XGA – Great albatrosses** (wandering and royals) and **XMA – Smaller albatrosses** (mollymawks). Split mollymawks to species level if you are confident – this just takes a bit of practice.

Record any leg band numbers, take a photo and send it to your LO. These are important for scientific assessment purposes.

If dead birds have a recorder attached remove this and inform your Liaison Officer

For dead birds show them to the camera including views of the head (side on), feet, upper and lower side of wings. This is important for identification confirmation.

Marine Mammals

All marine mammals are protected including NZ fur seal, NZ sea lion, dolphins and whales. Please make sure your crew are aware of the differences between seals and sea lions and are checking all individuals as juveniles can be misidentified.

Fur seals have a pointy nose, long whiskers and a thick double layer of fur. The maximum size is 2.5 m and 150 kg (females 1.5 m, 50 kg) use code **FUR**

Sea lions have a flat nose, shorter whiskers, and 'velvety' fur. The maximum size is 3.5 m and 400 kg (females are smaller and lighter in colour 2.0 m, 160 kg) use code **HSL**

SEA is the general code for seals and sealions. If you use this code, your Liaison Officer will be in touch to confirm ID. Please take photos and confirm with your LO if you are uncertain.

Any dead marine mammals should preferably be marked before returning them to the sea, with twine or cable ties around the jaw. This avoids them being double-counted if recaptured in a trawl.

Marine Reptiles

All marine reptiles, including sea turtles, sea snakes, and kraits are protected.

Three species of sea snake are present in New Zealand, and all are protected. The group code is **SSN** but they are relatively easily identifiable to species based on colour.

Although turtles breed in the tropics and subtropics, there are five species that are seen in New Zealand waters, with green and leatherback being the most common**.**

Leatherback Turtles **(LBT)** are easy to identify due to their size and ridged leathery looking back.

Hard-shelled turtles will be harder to split to species level – use the identification guides and the following codes:

- Green turtle **GNT**
- Hawksbill turtle **HBT**
- Loggerhead turtle **LHT**
- LHT Olive Ridley turtle **ORT**

The group code for turtles is **TLE.** If you use this code, your Liaison Officer will be in touch to confirm ID. Please take photos and confirm with your LO if you are uncertain.

Protected Fish

There are two bony fish species that are protected species:

- Giant grouper **GGP**
- Spotted black grouper **SBG**

Similar to seabirds, NZ's shark species are managed under a 'NPOA -Sharks' that documents the planned actions for conservation and management of those species. Several sharks and ray species are protected under NZ legislation including:

- Oceanic whitetip shark **OWS**
- Basking shark **BSK**
- Deepwater nurse shark **ODO**
- White pointer shark **WPS**
- Whale shark **WSH**
- Manta ray **RMB**
- Spinetail devil ray **MJA**

Benthic Species

A number of benthic species (things that live on the seafloor) are protected, including:

- Black corals **COB**
- Gorgonian corals **GOC**
- Stony corals **SIA**
- Hydrocorals **COR**

In addition to corals, it is a requirement under the Fisheries Act to report captures of sponges and bryozoans and record the weight of each species. These must be reported with a weight, whether they are alive or dead. For weights above a kilogram round to the nearest kilogram and use the following codes:

- Unidentified corals use **COU**
- Bryozoans use **COZ**
- Sponges use **ONG**

Identification can be difficult - if you are unsure use **CSB** which covers all three groups. However, if you use this code, your Liaison Officer will be in touch to confirm ID as not all corals are protected. Please take photos and confirm with your LO if you are uncertain.

Handling and release guide

Species ID guides

DOC Liaison Programme

4. NON-FISH PROTECTED SPECIES IDENTIFICATION AND HANDLING RESOURCES

- DOC protected species identification guides are available at: https://www.doc.govt.nz/our-work/conservation-services-programme/csp-resources-for-fishers/protected-species-identification-guides/
- A detailed set of invertebrate NFPS material is available at: https://fs.fish.govt.nz/Doc/23020/AEBR_86.pdf.ashx
- Earth Sciences NZ invertebrate guides are available at: https://niwa.co.nz/oceans/identification-guides
- Handling and Release Guide – For protected species interactions within New Zealand fisheries: https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/marine-conservation-services/resources/protected-species-handling-guide-2022.pdf

Fishers can request hard copies of these documents in both English and Indonesian to keep onboard, via their Liaison Officer.

5. PROTECTED SPECIES RISK MANAGEMENT PLANS (PSRMPs)

Your Liaison Officer will help with the development of your Protected Species Risk Management Plan (PSRMP). This will detail your vessel's specific approach to mitigating protected species interactions. It will summarise the legal requirements and also include a comprehensive list of non-regulated measures that reduce risk.

This is your plan – ensure that it accurately represents what is happening on your vessel.

Do not write anything into the PSRMP that you do not intend on doing.

Trigger points are included in your PSRMP to help you proactively manage NFPS interactions and tell you when to act – they are our real time reporting "threshold" system and first line of defense to escalating risks on the water.

The goal of a trigger point is to trigger a response by the skipper - to stop and think about the capture and how to avoid it happening again.

If you hit a trigger, you need to think very carefully before shooting again and aim to change something to reduce the chances of it happening again.

Report all trigger points to your Liaison Officer within 24 hours so that any follow-up can be discussed and carried out immediately.

When a trigger point is reached, the Liaison Officer and the operator/owner and skipper (noting these might be the same person at times) will work together to review the situation.

If interactions continue to escalate, or the interaction is a species of concern, the Liaison Officer, your licensed fish receiver, and Seafood NZ can support the response and ensure fleet-wide communication of high-risk times and areas.

Audit and review

The Government will audit the implementation of your PSRMP via Electronic Monitoring and port-based visits. Information collected will be provided to DOC, FNZ and the Liaison Officer.

If your NFPS interactions are continuous or significant, 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.

Camera footage will be reviewed for all protected species interactions.

6. RESPONSIBILITIES

Operator and Skipper Responsibilities

- Ensure all crew are briefed on the OP and the vessel's PSRMP and fully understand their responsibilities.
- Display a copy of the PSRMP on the bridge.
- Manage fishing operations in time and place based on experience and the information provided in this OP to minimise overlap with protected species.
- Be aware of protected species activity around the vessel and in the area; take actions to minimise risk. (See Section 8)
- Ensure correct protected species reporting to FNZ and DOC. (See Section 3)
- Ensure the Liaison Programme trigger points are reported promptly to your local Liaison Officer and work with them to review the effectiveness and implementation of content in the PSRMP. (See Section 5)
- Reach out if you need support, including for protected species ID.

Crew Responsibilities

- Know the PSRMP contents – this is your approach to minimising risk.
- Maintain a watch of seabird and marine mammal activity around the vessel and advise the skipper when there is risk that requires action.
- Advise skipper if any animal is seen caught and ensure its immediate release if alive.
- Check and maintain any mitigation equipment (e.g. Hookpods, tori lines, bafflers).

7. MITIGATION MEASURES

Legal requirements

There are a number of regulatory requirements for the use of set nets including mesh sizes, soak times and net lengths. The overarching requirements can be found in the *Fisheries (Commercial Fishing) Regulations 2001* https://www.legislation.govt.nz/regulation/public/2001/0253/latest/whole.html.

Set net bans to protect Hector's and Maui dolphins are available on separate sheets and at:

https://www.mpi.govt.nz/fishing-aquaculture/sustainable-fisheries/managing-the-impact-of-fishing-on-protected-species/protecting-hectors-and-maui-dolphins#fish-related-threats

Further restrictions to protect hoiho (yellow-eyed penguins) are available at:

.https://www.mpi.govt.nz/fishing-aquaculture/sustainable-fisheries/managing-the-impact-of-fishing-on-protected-species/reducing-deaths-of-seabirds

Fishers should also check with the Liaison Officer or Seafood NZ for any voluntary measures that have been adopted by region, these will be appended to this OP.

Protected Species Risk Management Plans (PSRMP)

Your Liaison Officer will help with the development of your Protected Species Risk Management Plan (PSRMP). This will detail your vessel's specific approach to mitigating protected species interactions. It will be updated regularly and include a comprehensive list of measures that reduce risk.

This is your plan – ensure that it accurately represents what is happening on your vessel.

Important mitigation measures beyond those in the regulations that should form part of your plan include:

- Offal and discards management and control
- Reducing the amount of time gear is at the surface
- Use of acoustic devices and/or lights
- Light control – including when at anchor
- How you choose where and when to fish to minimise risk

If you catch a Hector's or Maui dolphin or yellow-eyed penguin, and you have authorisation from DOC, retain the carcass for necropsy. The information necropsies provide are invaluable for learning more about these dolphins, particularly about disease.

8. RISK MANAGEMENT

Vessel operators need to be aware of all factors of your operation that can influence the risk posed to protected species.

RISK ITEM	RISK FOR	WAYS TO MANAGE RISK
All risks	All species	• Consider overlap with protected species when choosing where and when to fish. • Contain and minimise vessel lighting.
Set capture	Seabirds	• Sink nets rapidly • Shoot only clean nets • Remove attractants – no dumping of fish waste / offal immediately before or during setting.
Soak capture	Seabirds Marine mammals	• Considered soak time and location to minimise overlap • Acoustic devices • Lights
Haul capture	Seabirds	• Recovering gear quickly • Hold or, if necessary, batch discard offal and fish waste
Deck strike	Seabirds	• Minimise light spill, especially when at anchor and steaming close to colonies • Keep deck clean

MAIN SPECIES AT RISK – SOUTH ISLAND

Species at Risk	Species Code	Main Risk Area	Place, Time, Risk Profile
Yellow-eyed penguin	XYP	Otago, Catlins, Stewart Island	• Typically found within 25 km of the coast, but may travel up to 50 km offshore • Mostly feed on the seabed during the day at depths up to 150 m • Juveniles migrate north after they fledge in February towards Kaikoura and are often sighted around the Canterbury Bight • The mainland population is small and declining due to a number of threats and impacts (including, but not just, fishing). Little population data for sub-Antarctic populations
Fiordland crested penguin	XFC	Fiordland, Stewart Island, Foveaux Strait	• Most frequently caught nearshore e.g. overlapping with butterfish fisheries • Intensive feeding period post chick-rearing (late Nov-early Feb) and post-moult (late Feb-early July) • Multiple threats including ocean change (food issues) and land-based predators; fishing impacts may add to these threats
Little blue penguin	XLB	All Areas	• Strongly impacted by adverse climate and oceanic events • Present year-round on entire NZ coastline • Most frequently caught nearshore but may range up to 25 km • Daylight forager, often rafts, return to land at night
Foveaux shag and Otago shag (previously Stewart Island shag)	XHG	Foveaux Strait, Stewart Island, Otago	• Present in Oamaru south to Stewart Island, have been identified as far north as Banks Peninsula • Fly in flocks to or from feeding grounds and forage up to 50 km offshore • Seabed forager (down to 30 m) also forage in murky water e.g. Otago Harbour
King shag	XHG	Marlborough Sounds and western D'Urville	• About 85% of all existing birds are located at five colonies: Rahuinui Island, Duffers Reef, Trio Islands, Sentinel Rock, and White Rocks • Forage up to 25 km from their colony • Seabed forager (down to 50m) during daylight hours
Spotted shags	XPP (spotted)		• Summer breeders, ranging further from colonies outside of breeding season • Can raft and feed in large numbers • Hot spots –Banks Peninsula, Otago

Species at risk	Species Code	Main Risk Area	Place, Time, Risk Profile
Hector's dolphin	HDO	ECSI, WCSI	• Most abundant off the ECSI and WCSI but also found on the north coast (Golden/Tasman Bay and Marlborough Sounds) and south coast (Te Waewae Bay) • Patchy distribution, often in shallow water and off river mouths but can extend range 20 nm offshore • Are thought to move further offshore at night • Not know to feed from nets • Use sonar to detect prey, but not 100% of the time – making them susceptible to captures • NCSI, ECSI and SCSI: Closures regulated as of June 2020. See supplemental material for maps
Dusky dolphin	DDO	All areas, Kaikoura	• Found all around the coastline of New Zealand
NZ Sea lion	HSL	Otago to Stewart Island	• Re-establishing on Mainland NZ • Present year-round in southern coastal waters
NZ Fur seal	FUR	All areas	• Present year-round on entire NZ coastline, usually haul out on rocky shores • Main SI colonies in Kaikoura, D'Urville Island Separation Point, Cape Foulwind, Banks Peninsula, Otago, Stewart Island, Ruapuke, Fiordland, the Solander Islands
Great white shark (White pointer)	WPS	Particularly Stewart Island and Foveaux Strait	• Most common over summer, particularly Nov-Mar • Trans-Tasman population (range between NZ, Australia and the South Pacific islands – highly migratory species

MAIN SPECIES AT RISK – NORTH ISLAND

Species at risk	Species Code	Main Risk Area	Place, Time, Risk Profile
Maui dolphin	MDO	WCNI, particularly between Manganui Bluffs and Mokau	• Patchy distribution, often in shallow water and off river mouths but can extend range 20nm offshore • Not know to feed from nets, use sonar to detect prey, but not 100% of the time – making them susceptible to captures • WCNI: Closure regulated as of June 2020. See supplemental material for maps
Dusky dolphin	DDO	All areas, Particularly ECNI	• Found all around the coastline of New Zealand, but more so on the East coast north island
NZ Fur Seal	FUR	All areas	• Present year-round on entire NZ coastline, mainly rocky shores • Main SI colonies in Kaikoura, D'Urville Island Separation Point, Cape Foulwind, Banks Peninsula, Otago, Stewart Island, Ruapuke, Fiordland, the Solander Islands
Great white shark (White pointer)	WPS	Northern east coast	• Most common over summer, particularly Nov-Mar • Trans-Tasman population (range between NZ, Australia and the South Pacific islands – highly migratory species
Little Blue Penguin	XLB	All areas	• Strongly impacted by adverse climate and oceanic events • Present year-round on entire NZ coastline • Most frequently caught nearshore but may range up to 25km • Daylight forager, often rafts, return to land at night
Spotted shags	XPP	All areas	• Summer breeders, ranging further from colonies outside of breeding season • Can raft and feed in large numbers • Hot spots – Very small population in Firth of Thames
Black petrel	XBP	East coast	• Summer breeder on Great and Little Barrier (migrate to South America) • Aggressive feeding on arrival into NZ and before departure • Good diver
Flesh-footed shearwater	XFS	East coast	• Summer breeder on several Islands on East Coast to Marlborough Sounds and Sugarloaf Islands off Taranaki (migrate to N. Pacific). • Aggressive feeding on arrival into NZ and before departure. • More inshore distribution than black petrel • Even better diver than black petrel

Fisheries New Zealand
Tini a Tangaroa

Department of Conservation
Te Papa Atawhai

Seabird Bycatch Mitigation Standards Guide
Set net

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 the majority of vessels 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

1. **Set net vessels must meet all regulations pertaining to size of mesh, the maximum soak times, maximum lengths and net prohibition areas and restrictions.**
2. **Commercial fishers must ensure that stalling does not occur while the nets are set.**

'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 any risk due to the spatial placement of set nets**
   - Nets are not set in the vicinity of known or observed bird colonies or foraging areas (consider time of year).
   - Nets are not set in an area when there is high bird activity, such as feeding/diving. Avoid fishing in known areas where seabirds have recently been caught.

3. **Minimise any attractions or access to the set net itself**
   - All practicable stickers are removed from the net before each shot.
   - Minimise the time the net is at or near the surface of the water. Shoot and haul as quickly as practicable.
   - Ensure net is set in a way that does not risk stalling.
   - Regularly inspect and maintain gear and equipment to reduce the risk of gear failure.
   - Where possible, conduct maintenance during periods of low risk to seabirds and with the net on board.

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.

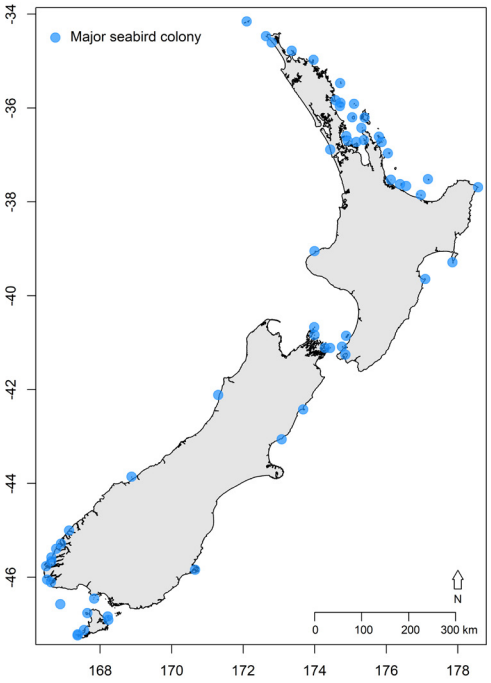
What can you do to help seabirds?

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.




Sooty Shearwater


Antarctic Prion

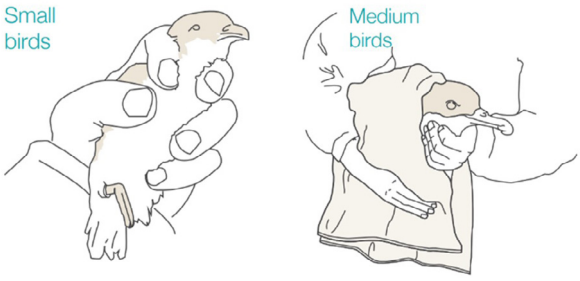

Black-bellied Storm Petrel


Common Diving Petrel

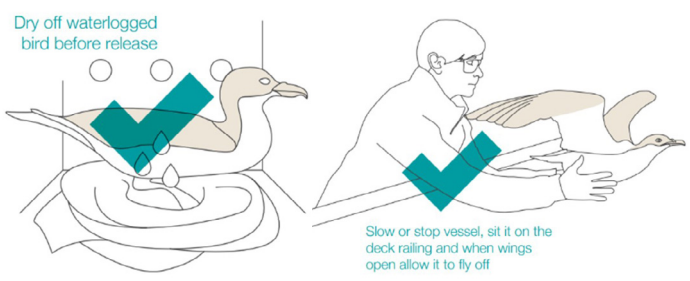
Shearwaters and petrels (including diving petrels, storm petrels and prions) are particularly susceptible to vessel strikes. *Photos: Oscar Thomas*

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

Safe seabird handling techniques



Safe release techniques



Department of Conservation *Te Papa Atawhai*

Nō te rere moana Aotearoa MARITIME NEWZEALAND

Te Kāwanatanga o Aotearoa New Zealand Government

Identifying New Zealand Mollymawks

SMALLER ALBATROSSES

The *Thalassarche* albatrosses, sometimes known as mollymawks, are considerably smaller than the great albatrosses. The following guide is to help you identify any mollymawks you may encounter.

Average wingspan of Great albatrosses
350 cm

Average wingspan of Mollymawks
220 cm

Department of Conservation
Te Papa Atawhai

Blue/grey bill with yellow tip

New Zealand white-capped albatross

XWM

Distinguishing characteristics

- Larger-sized
- White head

Wingspan

180 – 256 cm

Yellow/grey bill with dark tip

Salvin's albatross

XSA

Distinguishing characteristics

- Larger-sized
- Mid-grey head and white crown

Wingspan

256 cm

Chrome yellow bill with dark tip

Chatham Island albatross

XCI

Distinguishing characteristics

- Medium-sized
- Darker grey head
- Most common around the Chatham Rise

Wingspan

220 cm

Image: © M. P. Pierre

Image: © M. P. Pierre

Image: Scott Brooks

Yellow/orange bill (XKM)

Campbell albatross

XCM

Distinguishing characteristics

- Larger-sized
- White head with black eyebrows
- More common in summer

Wingspan

250 cm


Image: Tui De Roy, Roving Tortoise Photos

Southern black-browed albatross

XSM

Distinguishing characteristics

- Larger-sized
- White head with black patch around eye
- More common in winter

Wingspan

210 – 250 cm

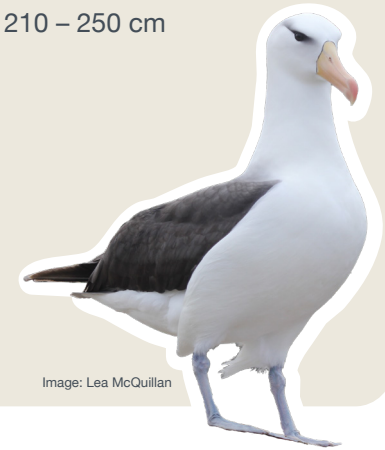


Image: Lea McQuillan

Black and yellow bill

Southern and Northern Buller's (Pacific) albatross

XPB

Distinguishing characteristics

- Medium-sized
- Grey head and neck with white-ish crown

Wingspan

213 cm


Image: Harold Stiver

Grey-headed albatross

XGM

Distinguishing characteristics

- Medium-sized
- Grey head and neck

Wingspan

220 cm


Image: © Ric Else

Dark bill with pale blue stripe

Light-mantled sooty albatross

XLM

Distinguishing characteristics

- Medium-sized
- Dark brown body and head with greyish neck and back
- White eye ring

Wingspan

220 cm


Image: Ian Parker

ACOUSTIC PINGERS FOR SETNET FISHING GEAR

Acoustic deterrents, or 'pingers', alert dolphins to the presence of fishing nets. The following are two examples of acoustic pingers readily available in the Australisian market. For more product information and to assess the best option for your fishing operation contact the relevant distributor.

Ben Sullivan
Level 2, 11 Morrison St
Hobart, Tasmania
Australia, 7000

m. +61 (0) 418518080
e. ben.sullivan@fishtek.co.uk
w. http://www.fishtekmarine.com
skpe: benjosul

Porpoise & dolphin deterrent pinger (50-120kHz)

For use globally. Seal safe.

Battery life	12 months with average use (50% immersion time)
Frequency	50kHz – 120kHz with harmonics
Advanced acoustics	randomised pings with harmonics, prohibits habituation
Transmits outside the audible range of seals (Source).	
Dimensions	185mm x 52mm x 42mm
Weight (with battery)	229 grams
Space the pinger every 200m	
Sound level	145dB +/- 3dB @ 1m
Compliant with	European legislation: EC 812/2004

Porpoise deterrent pinger (10kHz)

For use globally

Battery life	12 months with average use (50% immersion time)
Frequency	10kHz with harmonics
Dimensions	185mm x 52mm x 42mm
Weight (with battery)	229 grams
Space the pinger every 100m	
Sound level	132dB +/- 3dB @ 1m
Compliant with	European legislation: EC 812/2004
Compliant with	NMFS Harbour Porpoise Take Reduction Plan
Compliant with	NMFS Pacific Offshore Cetacean Take Reduction Plan

Dolphin Anti-Depredation Pinger (40kHz)

Frequency –	40kHz
Battery Life –	175 hours
Dimensions –	185mm x 52mm x 42mm
Weight (with battery) –	229 grams
Space the pinger	every 75-100m
Sound level	175dB +/- 3dB @ 1m

Future Oceans

– Global Headquarters

Australia
Registered Office
1/80 Sixth Avenue
Maroochydore 4558
Queensland
Email: contact@futureoceans.com

NETGUARD

FIND OUT MORE / BUY NOW

Dolphin Pinger 70kHz

- "Seal Safe" Dolphin Pinger.
- Reduce interactions with Dolphins.
- Meets European 812/2004 Pinger regulations.

NETGUARD

FIND OUT MORE / BUY NOW

Porpoise & Dolphin Pinger 10kHz

- Avoid expensive net repairs caused by Porpoise and Dolphin interactions.
- Avoid non-compliance with European and US Pinger regulations.

NETSHIELD

FIND OUT MORE / BUY NOW

Anti-Depredation Pinger 70kHz

- Stop Dolphins taking your fish!
- Reduce expensive damage to your gear caused by Dolphin attacks.
- Over 1000 times louder than 132 decibel Pingers.

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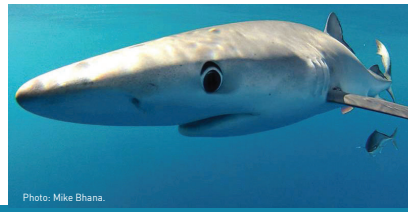


Photo: Mike Bhana.

Fact Sheet 1/4

Conservation and management of New Zealand sharks

1

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

SHARK FINNING BAN

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

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

The management of individual shark species depends on the scale of catch, as well as other factors such as how vulnerable they are to fishing. You are likely to come across the following categories –

Note that you are not required to land any fins.

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

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

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

- **NON-QUOTA SPECIES**

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

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

FOR MORE INFORMATION

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

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

Conservation and management of New Zealand sharks

- **PROTECTED SPECIES** – catches of these species both in the EEZ and on the high seas cannot be retained by law, but all catches must be reported on the "non-fish species or protected fish species catch reports":
  - Basking shark BSK
  - Great white shark (White pointer shark) WPS
  - Oceanic whitetip shark OWS
  - Deepwater nurse shark ODO
  - Whale shark WSH
- **CITES-LISTED SPECIES NOT OTHERWISE PROTECTED:**
  - Porbeagle shark POS
  - Smooth, scalloped and great hammerhead sharks HHS
  - Shortfin mako shark MAK

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

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

New Zealand Government

February 2020

Fisheries New Zealand
Tini a Tangaroa

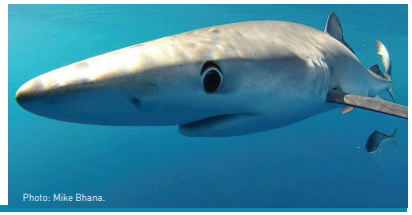


Photo: Mike Bhana.

Fact Sheet 2/4

Landing sharks with fins attached

2

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

Blue shark

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

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

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

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

Spiny dogfish and all non-QMS species

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

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

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

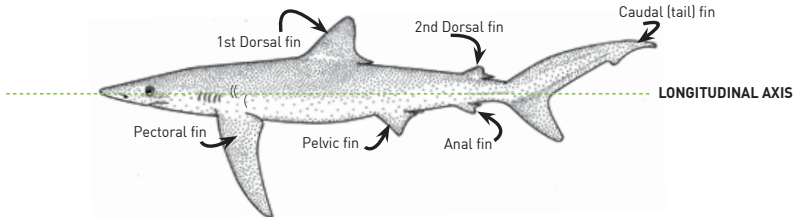
Non-QMS species can also be legally returned to the sea (dead or alive) if you don't wish to retain them (reported on disposal reports under disposal code "D"). Spiny dogfish can be returned (dead or alive) and reported on disposal reports under disposal code "M".

FOR MORE INFORMATION

Fact sheet 1 – Conservation and management of New Zealand sharks
Fact sheet 3 – Landing shark fins subject to a ratio
Fact sheet 4 – Requirements for returning sharks to the sea (Schedule 6)

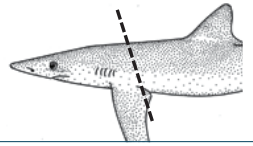
A copy of the regulations is available at: http://legislation.govt.nz

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



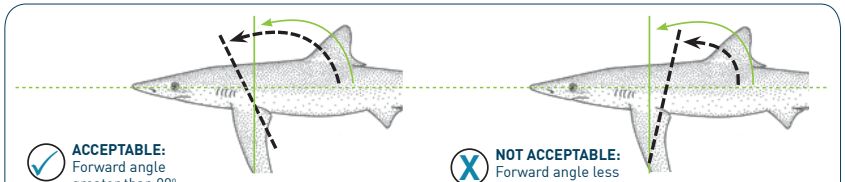
The body of a fish from which the head, gut and fins have been removed with:

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

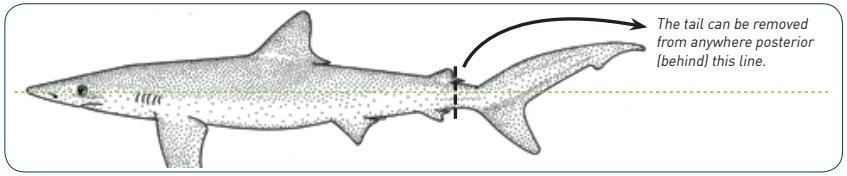


(The posterior insertion of the pectoral fin means the point along the body of a fish at which the rear (posterior) edge of the pectoral fin emerges.)

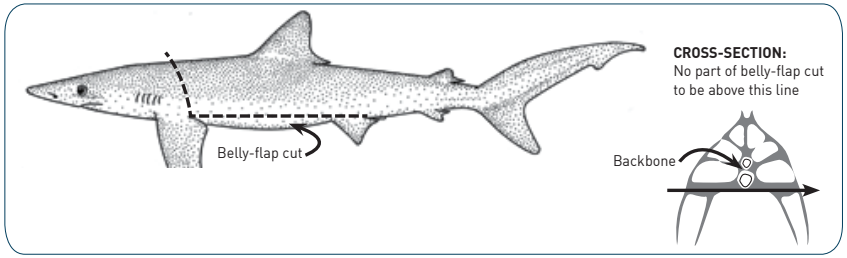
2) the forward angle of the anterior cut not less than 90 degrees in relation to the longitudinal axis of the fish.



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



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



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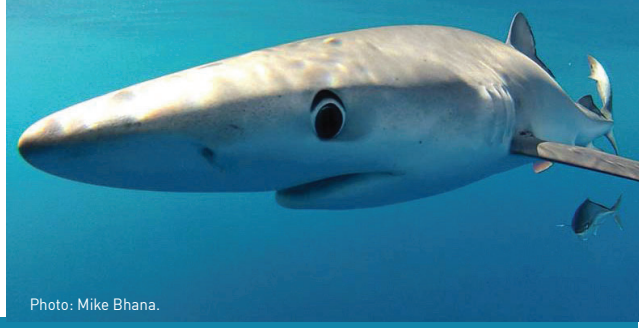

Photo: Mike Bhana.

Fact Sheet 3/4

Landing shark fins subject to a ratio

3

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

These seven QMS species are:

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

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

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

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

How will the ratio work?

For species where you normally process the catch at sea and keep both a trunk (for example, dressed) and also the fins, not a lot should change, but you will need to **STORE AND LAND THE FINS SEPARATELY BY SPECIES**. Fins must be landed wet. This will be a legal requirement from 1 October 2014, and will allow monitoring to make sure you are not retaining any more shark fins than the trunks they come from.

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

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

FOR MAKO AND PORBEAGLE, there are some differences in cut and which of the fins are retained across different fleets. **THE RATIO IS SET BASED ON RETAINING THE WHOLE TAIL (CAUDAL) FIN.** This has been done to try and avoid any accidental non-compliance (which could occur if the ratio was set lower), but you will still need to monitor your landings more closely to ensure you don't exceed it, especially if your vessel normally lands the whole tail. You can choose to land just the lower tail lobe. Close monitoring will occur to make sure no high-grading is occurring within the ratio.

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

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

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

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

FOR MORE INFORMATION

Fact sheet 1 – Conservation and management of New Zealand sharks

Fact sheet 2 – Landing sharks with fins attached

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

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

Fisheries New Zealand
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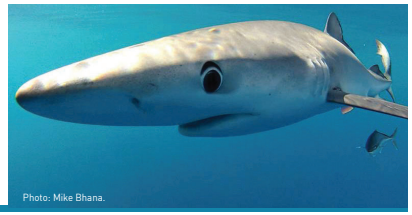


Photo: Mike Bhana.

Fact Sheet 4/4

Requirements for returning sharks to the sea (Schedule 6)

4

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

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

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

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

Live release only

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

- Rig SPO
- School shark SCH

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

Live or dead – pelagic sharks

For the following species:

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

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

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

Live or dead – spiny dogfish

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

FOR MORE INFORMATION

Fact sheet 1 – Conservation and management of New Zealand sharks
Fact sheet 2 – Landing sharks with fins attached
Fact sheet 3 – Landing shark fins subject to a ratio
A copy of the regulations is available at: http://legislation.govt.nz

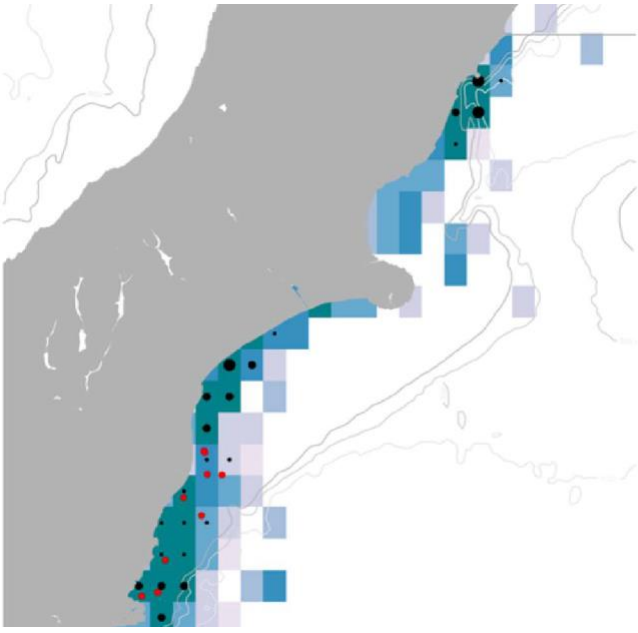
Requirements for returning sharks to the sea (Schedule 6)

SUMMARY OF OPTIONS BY SPECIES OF SHARK

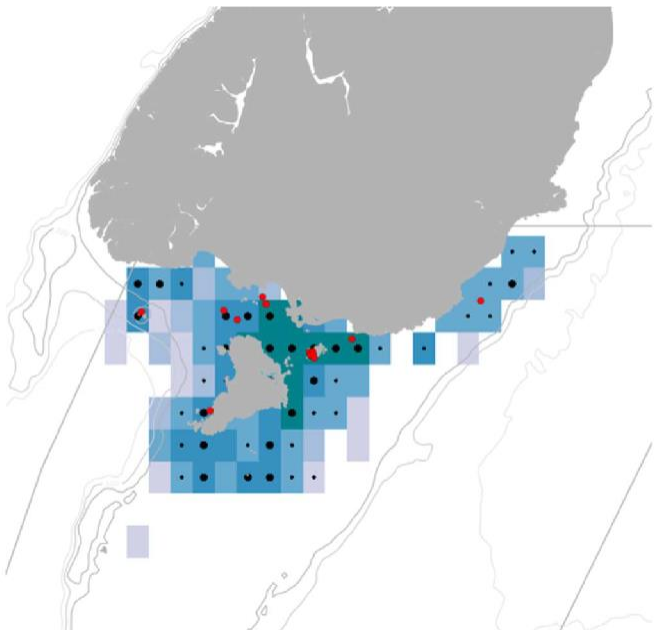
SPECIES		LIVE RETURN	Destination Code	Balanced with ACE	DEAD RETURN	Destination Code	Balanced with ACE
School shark	SCH	Yes	X	No	Only observer-authorised discards	J	Yes
Rig	SPO	Yes	X	No	Only observer-authorised discards	J	Yes
Mako shark	MAK	Yes	X	No	Yes	Z	Yes
Porbeagle shark	POS	Yes	X	No	Yes	Z	Yes
Blue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

Yellow-eyed Penguin Information (XYP)

- It is suspected that yellow-eyed penguins / hoiho are at risk of capture because fishers and penguins are both fishing in the same spot; it is not because they are feeding on fish in the gear. XYP are not "following" you or deliberately engaging with your fishing event (unlike albatross and trawlers).
- They are visual hunters and mostly feed at the seabed (benthic feeder) which means that they only fish during daylight hours. They can however remain at sea at night and away from their nest for a couple days.
- They can travel up to 50 km from shore (although typically less than 25km) and dive to surprising depths (e.g. 160m).
- Most XYP captures occur in shark setnet fishing but are also known in moki and butterfish setnets.
- Tracking data show that different colonies and individuals have different fishing grounds, and some may travel significant distances offshore while others operate closer to the coast.
- The penguins appear to habitually use the same areas throughout and between years. If you have fished consistently in an area without capturing one, the prospects are that you aren't in one of their feeding grounds and are less likely to catch one compared to fishing somewhere new.
- Diet studies suggest that hoiho eat small fish (less than about 25cm) of several species (including blue cod, red cod, opalfish, ahuru, sprat and arrow squid).
- Fishing and observer data for last 18 years as shown in the following maps show that there are places of relatively high effort and observer coverage where XYP have not been caught but also a few places that appear to be higher risk.
- High risk areas include off Glenavy in South Canterbury and northwest of Stewart Island (where birds may be travelling and foraging towards Te Wae Wae Bay). In these areas fishermen should consider every option to reduce risk including night fishing when possible or avoiding fishing in that area.



South Island (FMA 3) shark setnet effort (coloured squares with dark squares = more effort) observer coverage (black dots with bigger dot = more observer coverage) and yellow eyed penguin captures (red dots) from 2003-2018. Data from Fisheries NZ and Dragonfly.



Southland (FMA 5) shark setnet effort (coloured squares with dark squares = more effort) observer coverage (black dots with bigger dot = more observer coverage) and yellow eyed penguin captures (red dots) from 2003-2018. Data from Fisheries NZ and Dragonfly.

8 December 2022

These voluntary closed areas commenced on 1 November 2022 and will be in place year-round to mitigate risk from set netting operations to yellow-eyed penguins foraging in those areas. The closures will be monitored by Fisheries New Zealand and any breaches will be notified to Fisheries Inshore New Zealand in a timely manner for follow up.

The closures will be reviewed by Fisheries Inshore with support from FNZ after the completed Hoiho Multi-Threat Risk Assessment is available to determine the risks and appropriate conservation measures for yellow-eyed penguins.

Table 1. Latitude and Longitude of the proposed set net suspension boundaries.

Closure	Latitude	Longitude
a	4 nautical mile radius around Whenua Hou/Codfish Islands	
b1	-46.880426	168.149972
b2	-46.881081	168.283824
b3	-46.993798	168.214797
c1	-47.189556	167.834135
c2	-47.263723	167.645157

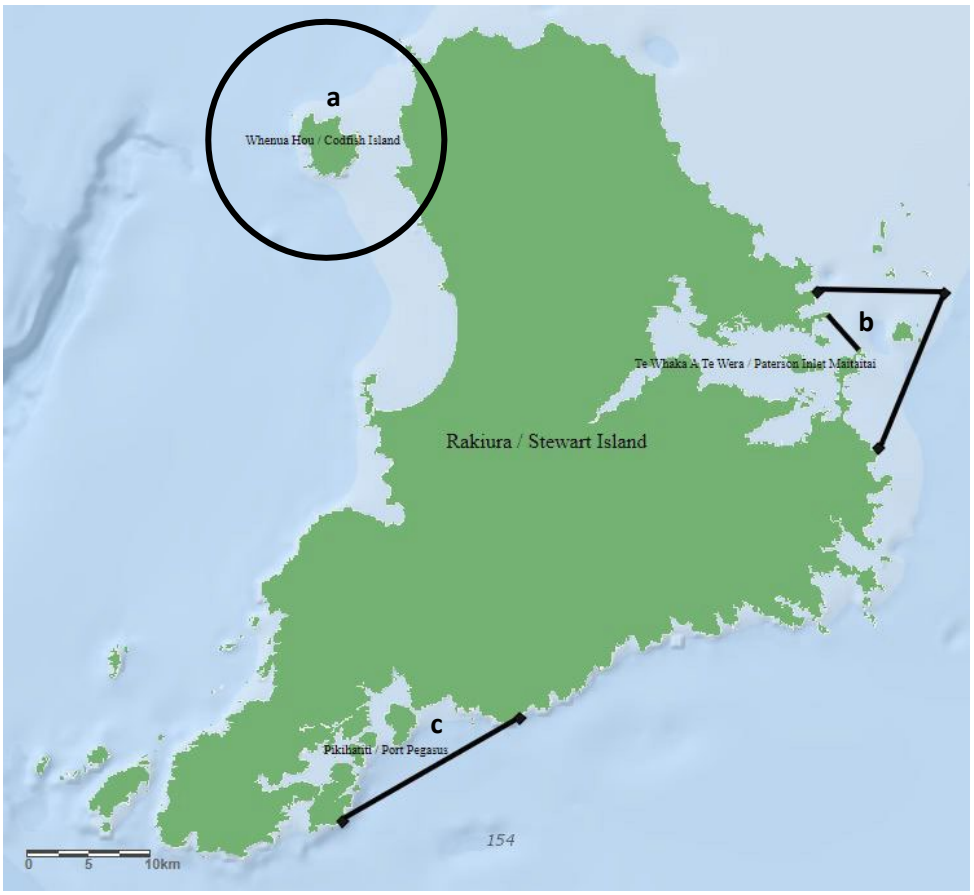


Figure 1. Location of the three voluntary commercial set net suspension areas around the Rakiura coastline. The internal boundary in closure (a) indicates the outer boundary of the Te Whaka ā Te Wera mātaitai that has excluded commercial fishing since 2004. These boundary lines are approximate, please refer to the latitude and longitudes in Table 1 for the true coordinates.

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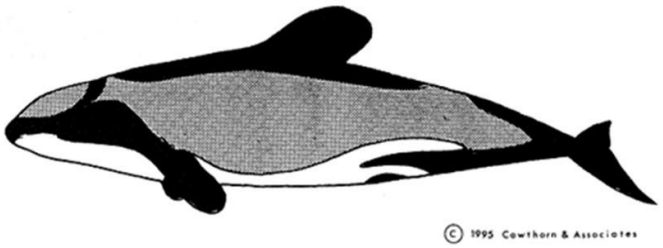
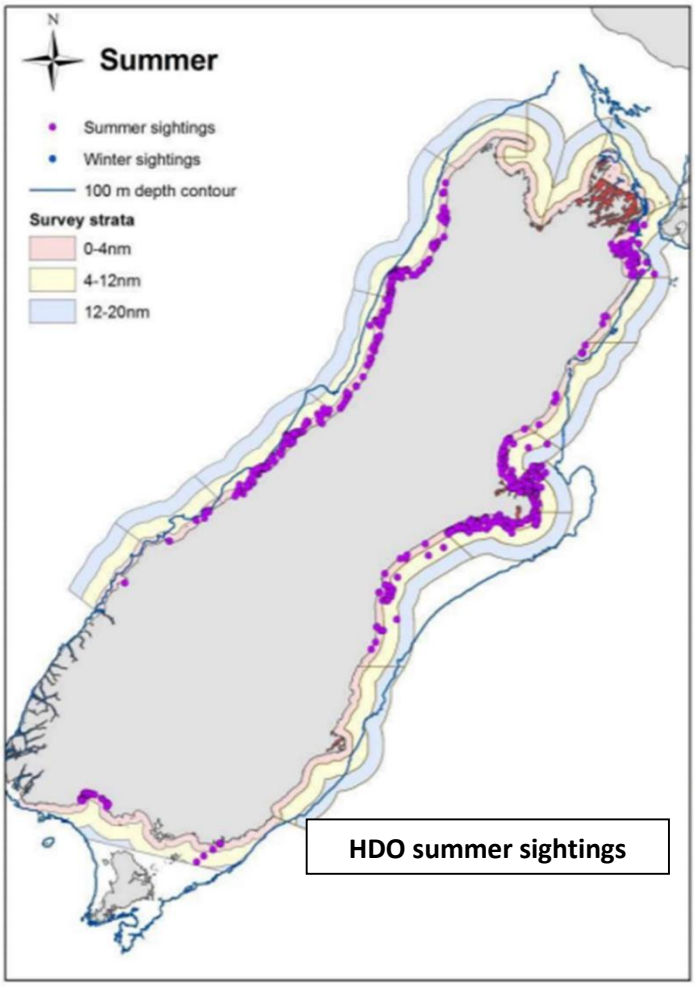
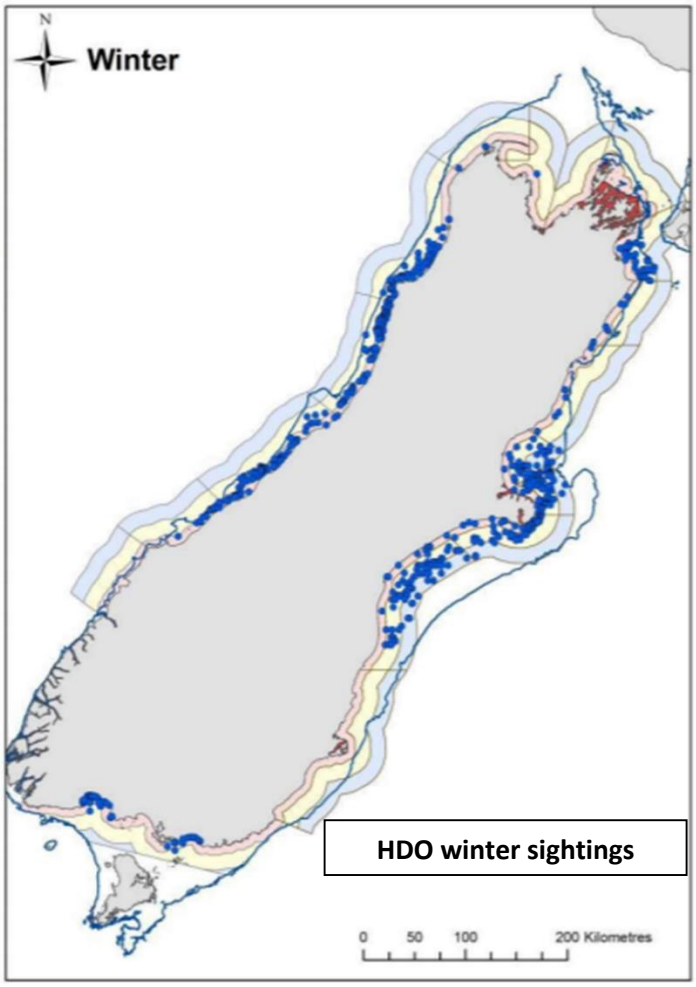
South Island Hector's Dolphin (HDO) Factsheet







Observed captures of Hector's dolphins occurred of the East Coast of the South Island in setnet fisheries.

Additional Closures for the South Island setnet fisheries were implemented in 2020, including additional closures north and south of Banks Peninsula, near Te Waewae Bay, and between Farewell Spit and Cape Soucis. Please see the attached maps provided from FNZ for a detailed description of key GPS points.

In addition to avoiding areas with high abundance of hector's dolphins, use dolphin pingers (see factsheet provided by FINZ) or other dolphin acoustic deterrent device, and monitor gear.

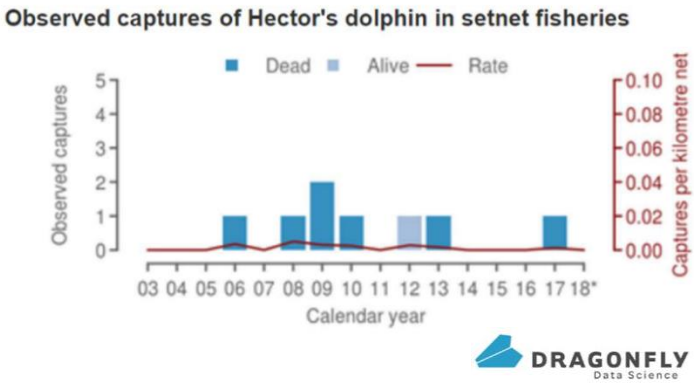


Figure of sightings from MacKenzie, D.I.; Clement, D.M. (2016). Abundance and distribution of WCSI Hector's dolphin. New Zealand Aquatic Environment and Biodiversity Report No. 168. 67 p + supplemental material.

Hector's and Māui dolphins Threat Management Plan

South Island fisheries measures

Below is a summary of the new fisheries measures to support the Threat Management Plan for Hector's and Māui dolphins, which come into effect on **1 October 2020**.

Hector's and Māui dolphins are only found in New Zealand waters and together are one of the world's rarest dolphin species.

Extensive measures are already in place to reduce fishing-related threats to Hector's and Māui dolphins and more is needed to be done to protect them.

The Government is extending and creating new areas that will prohibit the use of commercial and recreational set-nets in both the North Island and South Island.

What does this mean for the South Island?

The South Island will see new measures introduced on the north, east and south coasts.

- New commercial and recreational set-net closures out to 4 nautical miles offshore will be created within Golden and Tasman Bay, from Farewell Spit to Cape Soucis (Raetihi).
- Commercial set-net closures off Kaikōura will be extended as per the community proposed boundaries; no change to the current 4 nautical miles recreational closure.
- Commercial and recreational set-net closures will be extended off the east coast to encompass Pegasus Bay, approximately 19 nautical miles offshore southeast from the headland east of Motunau Beach offshore and then southwest to a point 7 nautical miles offshore from Goat Point.
- Commercial and recreational set-net closures will be extended off the east coast from Snuffle Nose southwest to 12 nautical miles offshore across the Canterbury Bight to just south of Timaru to the existing 4 nautical miles offshore boundary.
- Commercial and recreational set-net closures will be extended within Te Waewae Bay (between Sand Hill Point and Wakaputa Point) to 10 nautical miles offshore.
- Commercial and recreational drift netting will be banned in its entirety in all New Zealand waters.

How do the measures affect commercial fishers?

The measures will prevent commercial set-net fishing in the areas outlined above, with notable impact on the north coast South Island where there are currently few or no commercial restrictions on the use of set-net.

Off the east coast South Island, the changes are significant due to the scale of the offshore extensions in Pegasus Bay and Canterbury Bight to Timaru.

Other commercial fishing methods including drag netting and beach seining may continue to be used unless otherwise prohibited.

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Will the new measures impact customary fishing?

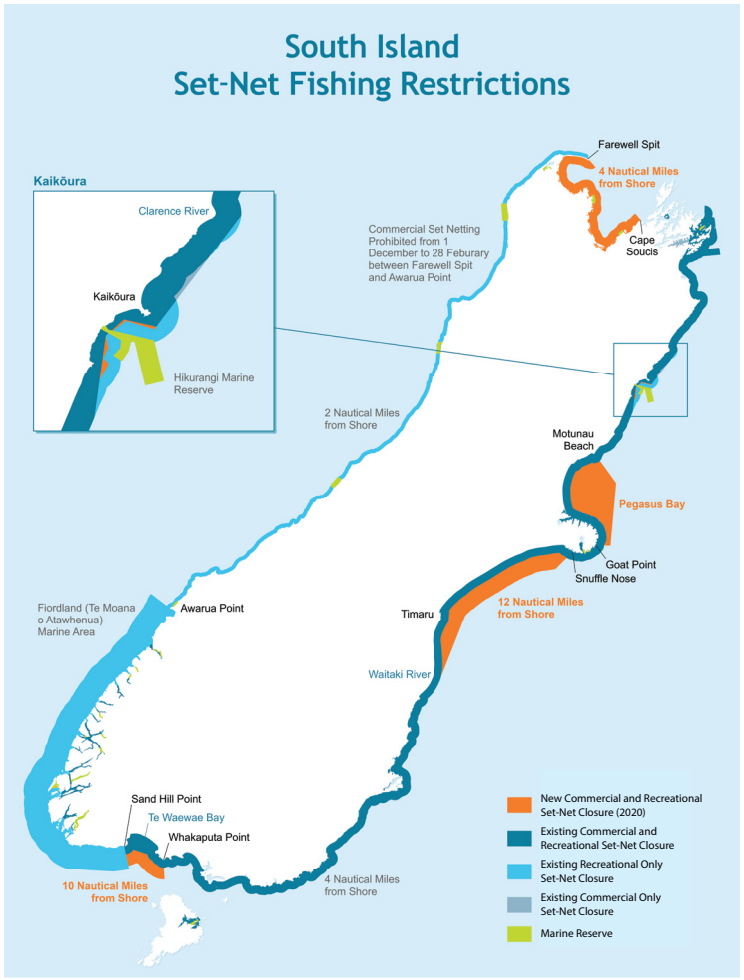
Tangata whenua may still authorise customary fishing to be carried out by non-commercial or commercial fishers, with or without a fishing vessel, using any type of gear or method.

What do the measures mean for recreational fishers?

Recreational fishers will no longer be able fish using the set-net method in the areas outlined above. The set-net changes will be notable on the north coast of the South Island where there are currently few or no restrictions on the use of set-net.

Other recreational fishing methods including drag netting and beach seining may continue to be used unless otherwise prohibited.

What does this look like in your area?



Further consultation

The new set-net restrictions address most of the fisheries risk to Hector's dolphins in the South Island. In response to public feedback, further consultation on commercial and recreational set-net closures between the north and south of Banks Peninsula is intended. Consultation on an alternative way to manage risk from fishing in the South Island, beyond the blunt use of area closures, will also be undertaken. This would include development of a framework that is more collaborative with industry to achieve reductions in dolphin captures, and increased monitoring through Crown-owned cameras on vessels across South Island Hector's dolphin habitat.

For more information, please visit www.fisheries.govt.nz/dolphintmp or contact dolphintmp@mpi.govt.nz

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Protecting South Island Hector's Dolphins

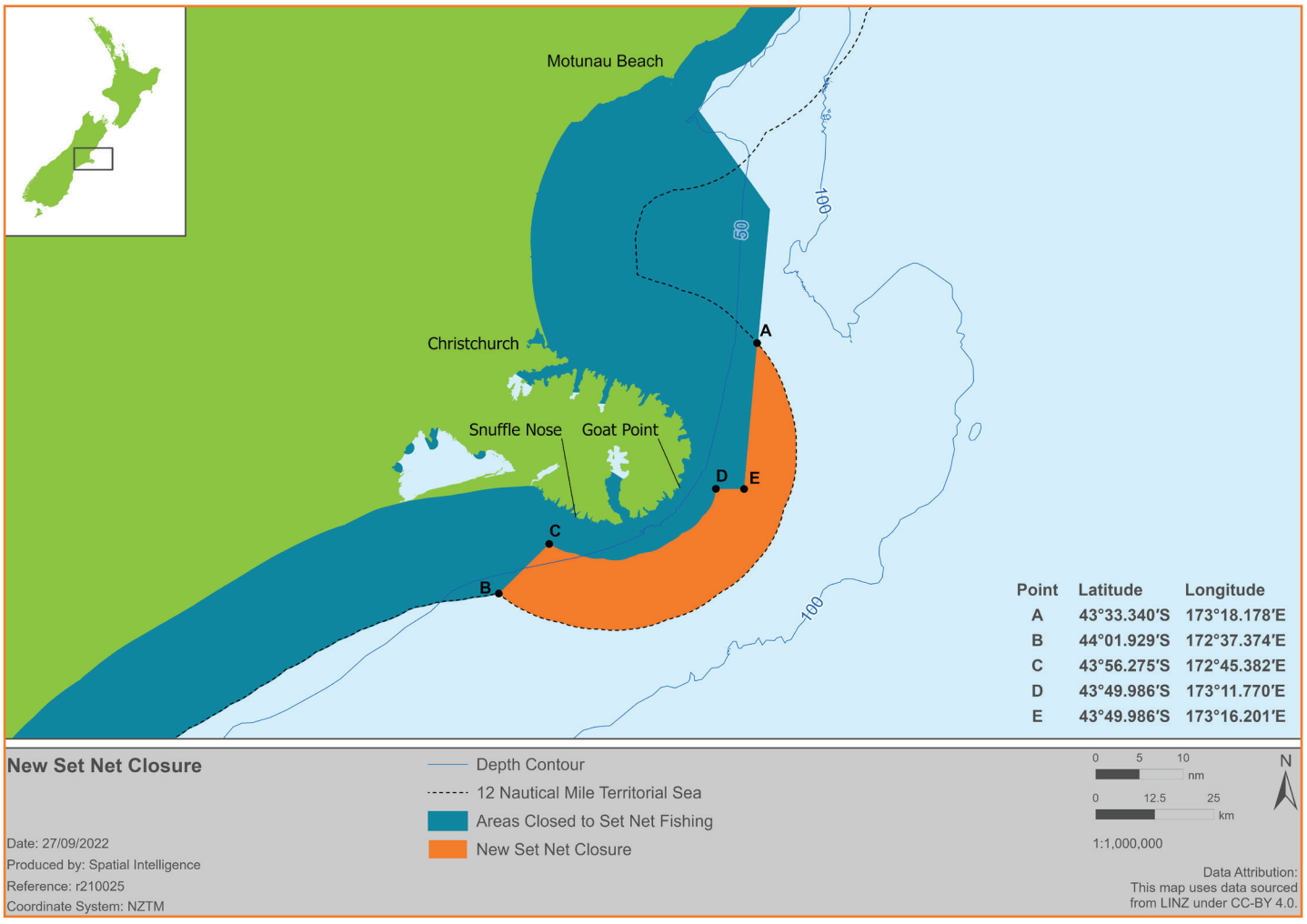
New fishing measures to protect South Island Hector's dolphins will take effect by the end of 2022. These changes are in addition to the extensive closures that were put in place in 2020 as part of the Hector's and Māui Dolphin Threat Management Plan[1] to protect these precious taonga from fishing-related threats.

In summary, this will extend the areas where commercial and recreational set net fishing is prohibited and introduce a new Bycatch Reduction Plan. These new regulatory and voluntary measures will help reduce the risk of fishing-related deaths of Hector's dolphins.

What are the new rules?

Set net fishing closures

New commercial and recreational set net fishing closures will extend the existing closures around Banks Peninsula out to 12 nautical miles offshore.



1 https://www.doc.govt.nz/our-work/protecting-species/protecting-marine-species/our-work-with-maui-dolphin/hectors-and-maui-dolphin-threat-management-plan/

Bycatch Reduction Plan

The Bycatch Reduction Plan includes a suite of voluntary and regulatory measures to incentivise and support fishers to reduce Hector's dolphin bycatch towards zero. Voluntary measures would be applied to all the South Island Hector's dolphin subpopulations and include:

- Protected Species Risk Management Plans on every commercial set net and trawl vessel that set out the mitigation measures each vessel will use.
- Detailed reporting of circumstances surrounding Hector's dolphin captures to help identify common factors that can inform techniques or tools to avoid future captures.
- Escalating vessel-based capture responses. Fisheries New Zealand, the Department of Conservation Liaison Programme, and industry will work with individual vessel operators that capture a Hector's dolphin to identify and implement vessel-specific techniques to reduce the likelihood of further captures by that vessel.
- Escalating area-based responses. Agencies and industry will work with the relevant commercial fishers in an area if Hector's dolphin captures are occurring to ensure they collectively take voluntary measures to avoid further captures.
- Supporting development of new mitigation techniques (informed by mātauranga and tikanga) through our research planning processes and applications to access existing funds.
- Public quarterly reporting on the performance of the plan (captures and responses) with an annual review and report on performance to Ministers from Fisheries New Zealand and the Department of Conservation.

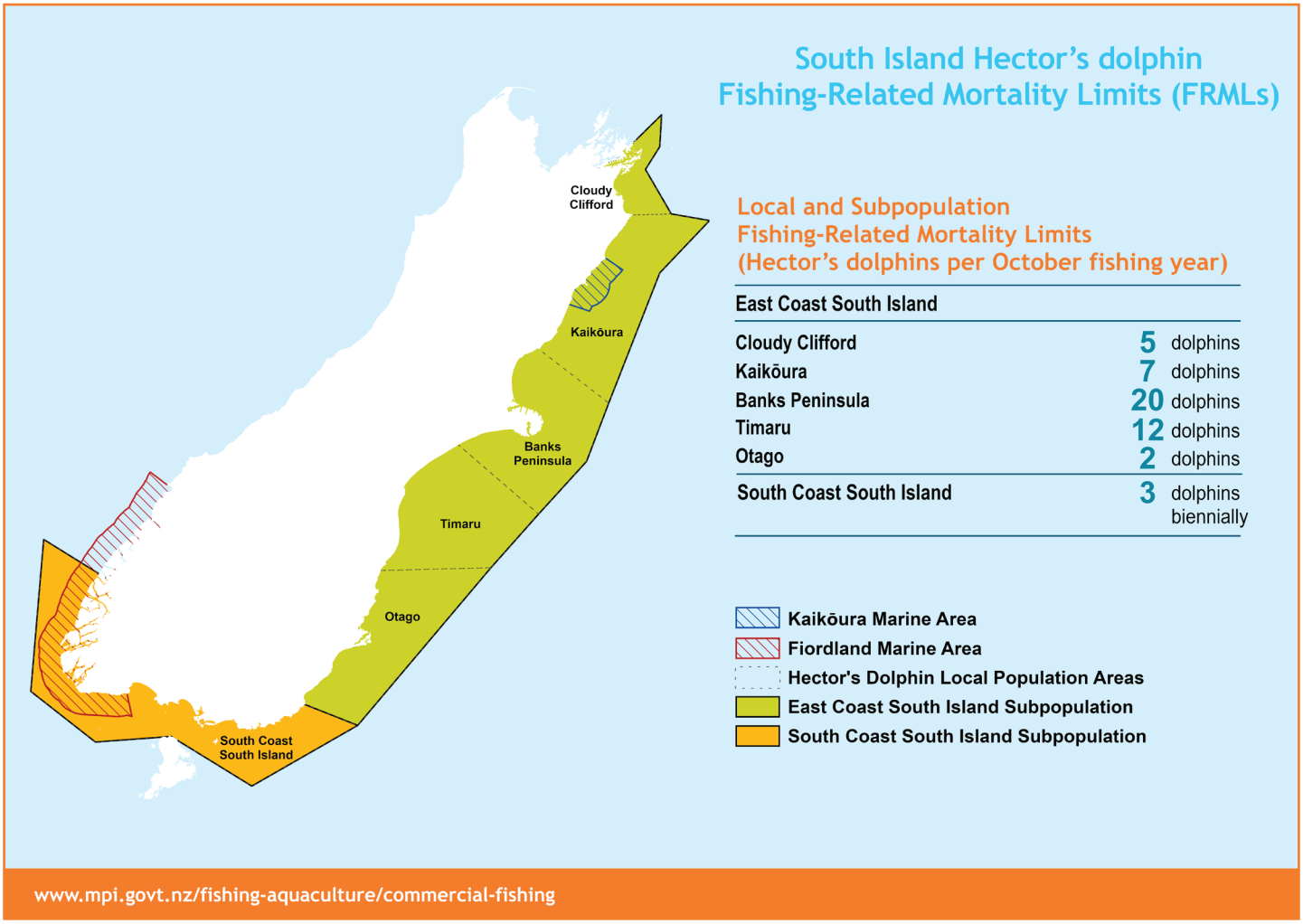
Regulatory measures include:

- Setting **fishing-related mortality limits** for the south coast subpopulation and each of the five local populations within the east coast subpopulation.
- The plan will be supported by the rollout of on-board cameras, which will allow independent monitoring of interactions between fishing and Hector's dolphins and verification of fisher reporting. On-board cameras will be operating on trawl vessels (⩽32 m overall length) and set net vessel (⩾8m overall length) on the north, east, and south coasts of the South Island, from mid-2023.

What is a Fishing-Related Mortality Limit?

A fishing-related mortality limit can be set by the Minister for Oceans and Fisheries (pursuant to section 15 of the Fisheries Act 1996). While the limit defines a maximum number of fishing-related deaths that could occur for a protected species in an area, it also enables the Minister to respond more quickly with additional regulatory measures to ensure the limit is not exceeded. Any additional measures would be via Gazette notice in the Gazette rather than secondary legislation.

The fishing-related mortality limits for South Island Hector's dolphins are informed by scientific estimates of the maximum number annual human-induced deaths that could occur while still allowing the Threat Management Plan fisheries objectives to be met.



Where can I find more information about the Bycatch Reduction Plan?

Detailed information on the Bycatch Reduction Plan can be found on the Fisheries New Zealand website: https://www.mpi.govt.nz/fishing-aquaculture/sustainable-fisheries/managing-the-impact-of-fishing-on-protected-species/protecting-hectors-and-maui-dolphins/