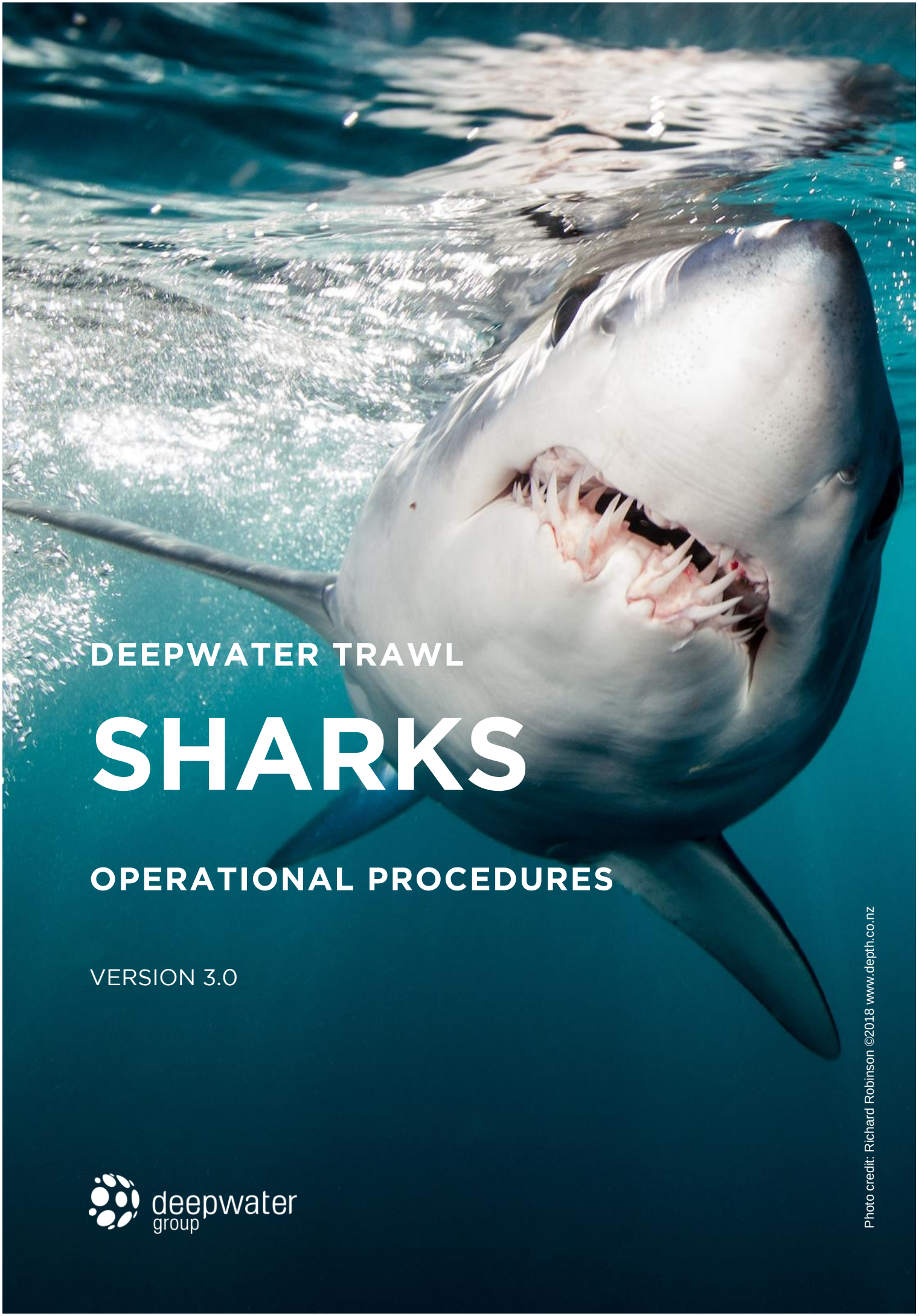


DEEPWATER TRAWL

SHARKS

OPERATIONAL PROCEDURES

VERSION 3.0

deepwater group

Photo credit: Richard Robinson ©2018 www.depth.co.nz

TABLE OF CONTENTS

PART 1: INTRODUCTION

The following Operational Procedures (OPs) stipulate the management measures for the identification, handling and disposal of sharks as required by various laws and other as agreed by Deepwater Group Ltd (DWG) shareholders and administered by DWG. Any references to "sharks" within these OPs refer specifically to sharks in the narrower sense (not all species in the entire class of *Chondrichthyes,* which includes sharks, skates, rays, and chimaeras, as referenced in the New Zealand National Plan of Action for the Conservation and Management of Sharks (NPOA-Sharks).

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

Background to these procedures

There are global concerns over the management of sharks. Sharks require careful management due to their biological vulnerability (e.g. slow growth and low reproductive rates). New Zealand has a number of sharks listed as **Protected Species** and deepwater fisheries interact with some of these. New Zealand has a responsibility to ensure sustainable management and conservation of sharks and, as such, have specific management measures in place both within the QMS and other regulatory frameworks (e.g. Protected Species legislation and Convention on International Trade in Endangered Species (CITES) https://www.cites.org/eng/prog/shark. Management of sharks in New Zealand is guided by the NPOA-Sharks https://www.mpi.govt.nz/protection-and-response/sustainable-fisheries/managing-our-impact-on-marine-life/sharks/.

Purpose of these procedures

The purpose of these OPs is to support the NPOA-Sharks and provide a guide to Government and DWG requirements with regard to sharks.

Objectives of these procedures

The objectives of these Shark OPs are to:

- Ensure the safe, humane, and proper handling of live and dead sharks, as appropriate
- Enable the proper collection of data and reporting of shark catch
- Support the NPOA-Sharks and reference relevant regulations.

Application of these procedures

These OPs apply to all trawlers over 28 m targeting stocks represented by DWG.

Legislative framework

Key legislation that underpins the management of sharks in New Zealand includes:

- **Fisheries Act 1996** requires:
  - All catch be reported
  - All QMS-species be landed if taken, except where **Schedule 6** applies and provides for their return to the sea (e.g. blue, mako, porbeagle, rig, school shark and spiny dogfish)

- Adherence to the prohibition of Shark Finning

- **Wildlife Act 1953** states it is an offence to deliberately take, or attempt to take, harass, injure, mutilate or retain all or any part of any Protected Species
- Other relevant legislation includes the **Animal Welfare Act 1999**

See Appendix 1 for further information.

PART 2: SAFE SHARK HANDLING AND RELEASE

The following outlines how to implement these OPs and what is expected of you.

Responsibilities of vessel owner, operator or manager

All vessel owners, operators and managers must:

- Ensure key crew are briefed on these OPs and fully understand the actions required
- Ensure the current OPs are on board and easily available
- Advise DWG of need for any LO review, refresher or briefing of new captains or managers
- Ensure any handover to new or relief managers or captains includes refresher on DWG OPs
- Have oversight of protected species reports
- Respond to Observer audit reports via DWG
- Promptly pass on trigger reports to DWG.

Responsibilities of captain and crew

The vessel's captain and crew must:

- Have full knowledge of the OPs requirements, ensure they are on board and accessible
- Undertake to adhere to the requirements of these OPs
- Respond to emerging events based on the principles and actions set out in these OPs
- Report correctly and always advise trigger events promptly to DWG
- Seek support from shore management or DWG when needed
- Captain, senior crew, and vessel manager maintain and participate with the DWG environmental risk management information and training programmes as required.

Protected shark species

Unless instructed otherwise by a Fisheries New Zealand Observer, all protected sharks captured must be returned to the sea (dead or alive) as carefully and as soon as possible:

- **If dead**, it is illegal to cut, remove or unnecessarily interfere with any part of the shark
- **If alive**, it is returned to the sea taking all reasonable care to prevent injury and maximise its chances of survival.

Sharks protected under the Wildlife Act

- **Basking shark**
- **White pointer (great white) shark**
- Deepwater nurse shark
- Oceanic whitetip
- Whale shark

Steps to take when a shark capture occurs

- Use safe handling and release procedures to remove the shark from fishing gear.
- Handle all captures with care to minimise harm to the shark and to increase their survivability, while maintaining the safety of the vessel and crew.
- Return the whole shark to the sea without removing any body part, unless a Fisheries New Zealand Observer formally requires the vessel to hold all or part of the shark or other formal and current documents or permits allow for it (e.g. genetic samples).
- **For basking and white pointer sharks**, identify and record sex (male or female) and take a photo(s) if possible (see Figure 1, page 7), and if dead, mark the animal before returning to sea using light rope or twine around the narrow part of the trunk before the tail so if its re-captured again this is recognised.
- Report all captures as legally required via the Fisheries New Zealand Electronic Reporting System (ERS) and report BSK triggers to DWG (see Part 3 page 9).

Guidance on handling sharks (alive or dead)

Where the release of a live shark is being undertaken, crew safety is paramount, and the captain and crew must use their utmost discretion. However, it is important to remember that mortality of sharks can be reduced by releasing a shark as quickly as possible with minimum handling. **Minimal careful handling is safer for both crew and shark**.

Exactly how a shark should be handled will depend, amongst other things, on the size of the shark, how it is caught, sea state and the size of the vessel. Obviously, some of the points below will apply only to smaller sharks. Every capture event and the response must be considered on its own merit's by the crew noting the principles of care for crew and shark made above.

Some general points that should be considered are:

- Sharks are cartilaginous (no hard bones) and their internal organs rely on water pressure for support. The lack of support from a bony ribcage means dragging the animal over rigid objects (e.g. ship's stern ramp or roller) may cause fatal injury.
- Ensure crew stand well away from the side of the head where they could be seen by the shark. Even when close to, or apparently dead, sharks are known to bite at objects that they sense close to their mouths. Most sharks are flexible and can reach their own tail with their mouth (and therefore potentially any person holding them or nearby).

Basking sharks (BSK)

To increase the shark's chances of survival and to promote crew safety the following practices should be considered and where appropriate followed:

- These are very large animals weighing many tonnes. Crew have to be vigilant not to get between the animal and any other large, fixed object where shark or vessel movement may trap them.
- Even when a shark appears inactive on deck it is still capable of rapid movements and tail flicks, so crew should be very careful whenever attaching strops.
- Never use a wire or small diameter strop, this may cut the tail from the animal, or otherwise injure the animal.
- Always use wide diameter non-wire rope strops or a section of trawl netting. These are best placed further up the tail away from the narrowest part near the tailfin.

Two general methods are used for returning live basking sharks to sea successfully (these may also apply to white pointer sharks depending on circumstances):

Removing basking shark from the trawl/codend onto deck, then move down the stern ramp**:**

- Use a wide diameter rope strop (e.g. samson rope strop) placed well up the tail (i.e. towards the head end). Carefully drag animal tail-first down the deck, then - when over the stern ramp - remove the strop and refit open strop (i.e. with no locking-turns), so once the shark is in the water the strop falls off, or
- Use a very wide diameter rope strop (e.g. samson rope strop) placed well up the tail. Carefully lift the tail up, then using a section of netting or old lengthener material a few metres long, tie this around the tail-shaft, then carefully drag the animal tail-first down the stern ramp (this places the 'load' along a much longer area, decreasing the risk of injuring the tail with a strop).

Two other methods of returning live basking sharks or other large to sea:

Releasing a live basking shark directly from codend down the stern ramp:

- This method is ideally used when catch volumes are low and the shark can be removed without the loss of much of the catch. Open the seam of the lengthener or codend, remove as much fish as can be done safely from around the shark (crew may secure tail for safety), drag codend to stern ramp and slide the shark directly out.
  - Any associated loss of fish should be quantified and agreed by Observer and skipper at the time. (Note, this is not Accidental Loss (ACC) but Observer Authorised Discard.)
  - This method will require a Fisheries New Zealand Observer onboard to approve the discarding of any quota species not listed in Schedule 6
- Releasing a live basking shark directly from codend from a trawl fitted with a SLED**:**
  - With the SLED/grid separating fish from the shark, tip fish into fish pounds, remove codend and SLED lengthener, drag net (bag end) to stern ramp and slide shark directly out.

Marking dead basking sharks and white pointer sharks

- Mark dead basking sharks and white pointer sharks with a durable tie, rope, or twine around the base of the tail before returning to the sea.
- Carefully marking dead sharks ensures that if they are caught again in a trawl, that this fact is reported
- ***Note:*** *if you recapture a dead marked shark it must still be reported in your ERS, but the comments section should be used to note it was previously caught and marked*.

Sex identification and length recording - basking sharks and white pointer sharks

- Identify and record sex (male or female) and take a photo(s) if possible.
- Measure (if dead) or estimate (if alive) the overall length before returning the shark to the sea.
- If possible take photo(s) to help identify the sex, and species if in doubt

To carry out sex identification look for claspers (Figure 1). Only male sharks have modified pelvic fins called claspers. These claspers are located on the shark's underside adjacent to its anus, within the shark's two pelvic fins.

Figure 1: Image showing male shark's claspers

CITES requirements and fisheries regulations regarding, finning of sharks and the return of QMS sharks to the sea (Schedule 6) - this information is a guide only

Fisheries New Zealand factsheets for sharks

Fisheries New Zealand has produced four factsheets regarding the regulatory environment for sharks which you must be familiar with:

1. Conservation and management of New Zealand sharks – information on CITES requirements **including mako and porbeagle sharks to fishmeal**
2. Landing sharks with fins attached
3. Landing shark fins subject to a ratio
4. Requirements for returning sharks to the sea (Schedule 6)

These factsheets can be found below in Appendix 1 or accessed on the Fisheries New Zealand website: https://www.fisheries.govt.nz/protection-and-response/sustainable-fisheries/managing-our-impact-on-marine-life/sharks/

CITES - porbeagle, mako and hammerhead sharks (Factsheet 1)

Porbeagle (POS), mako (MAK) and hammerhead (HHS) sharks have been listed with CITES, which means that special documentation is required for export and trade by the Department of Conservation (DOC). **This requirement also includes any fishmeal containing such sharks.**

Further information regarding CITES requirements is available from DOC at: www.doc.govt.nz/Documents/about-doc/role/international/ties-application-form.pdf

Finning (Factsheets 2 & 3)

Finning (i.e. the removal of fins and disposal of the body to the sea) of any shark species is prohibited by law and the use of the processed state FIN (or states of dry or wet fins) is therefore no longer legal either. Any fins landed must always be as a by-product state and with the associated trunk also landed. This applies to all QMS and non-QMS sharks.

Requirements for returning QMS sharks to the sea under Schedule 6 (Factsheet 4)

As a general rule, all QMS species must be landed if taken. However, Schedule 6 provides for exceptions to this rule by listing QMS species which may be returned to the sea, so long as the specified conditions are met.

Shark species listed in Schedule 6:

- Rig (SPO) and School shark (SCH) – may be returned **alive** only
- Blue shark (BWS), mako shark (MAK) and porbeagle shark (POS) – may be returned **alive or dead** and if dead, balanced against ACE.
- Spiny dogfish (SPD) – may be returned **alive or dead** and must always be balanced against ACE regardless of life status.

Identification

Identification of non-QMS species

The NPOA-Sharks has noted the need for better identification of landed shark species, especially non-QMS shark species.

It explains that many sharks are of low economic value compared to other species and therefore tend to be non-target and non-QMS species.

While the reporting system is comprehensive, accurate information is important to its success and is dependent on the crews' ability to identify shark species. Crews must be competent to identify species that they are processing for landing.

Refer to Appendix 2 for examples of some commonly caught non-QMS and non-protected shark species and how to identify them when reporting. Note, this is a limited selection of shark species.

PART 3: REPORTING

Fisheries New Zealand mandatory reporting requirements

It is not illegal to accidentally capture any Protected Species, **but it is illegal to fail to report the capture.** Report all captures as legally required in your ERS and use the correct species codes.

Table 1: Some important Fisheries New Zealand shark species codes

COMMON NAME	SPECIES CODE
Basking shark	BSK
Blue shark	BWS
Deepwater nurse shark	ODO
Ocean whitetip shark	OWS
Porbeagle shark	POS
Rig	SPO
School shark	SCH
Shortfin mako shark	MAK
Smooth, scalloped, and great hammerhead sharks	HHS
Spiny dogfish	SPD
Whale shark	WSH
White pointer (or great white shark)	WPS

DWG reporting requirements

Protected shark trigger point – basking shark

Report trigger points immediately to the DWG Liaison Officer and management at admin@deepwatergroup.org.

Table 2: Trigger point and actions

SPECIES	CAPTURES PER 24 HR	TRIGGER ACTION
Basking shark	1	• Advise your vessel manager • Promptly report capture to DWG either directly or via shore management

Sex identification and length recording - basking shark and white pointer shark

- Identify and record sex (male or female)
- Measure (if dead) or estimate (if alive) the overall length before returning the shark to sea
- If possible take photo(s) to help identify the sex and species if in doubt

Report capture information immediately to the DWG Liaison Officer and management at admin@deepwatergroup.org.

APPENDIX 1: FISHERIES NEW ZEALAND FACTSHEETS FOR SHARKS

Fisheries New Zealand
Tini a Tangaroa


Photo: Mike Bhana.

Fact Sheet 1/4

1 Conservation and management of New Zealand sharks

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

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

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 –

- **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

1

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

January 2020

Fisheries New Zealand
Tini a Tangaroa

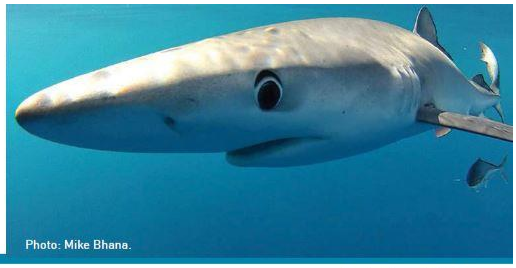


Photo: Mike Bhana.

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

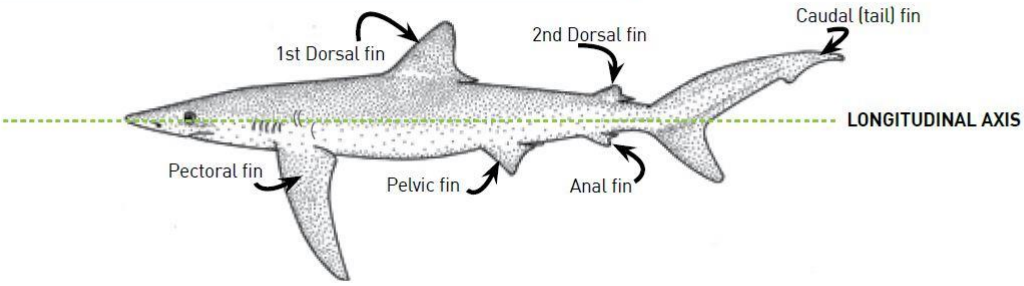
Fact sheet 3 – Landing shark fins subject to a ratio

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

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

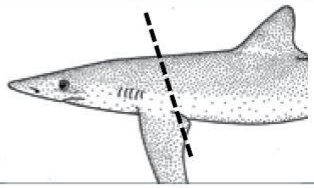
1

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



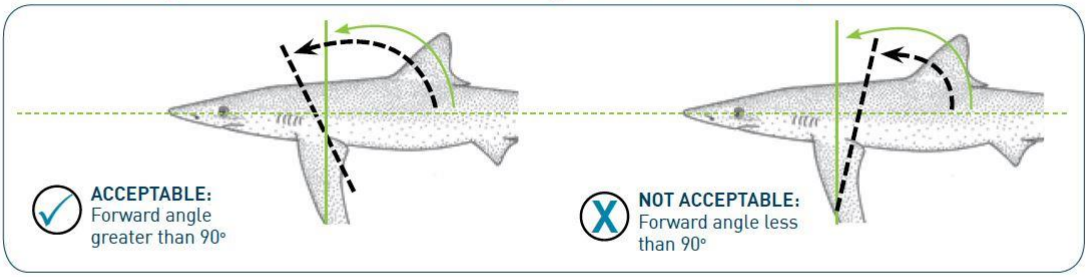
The body of a fish from which the head, gut and fins have been removed with:

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

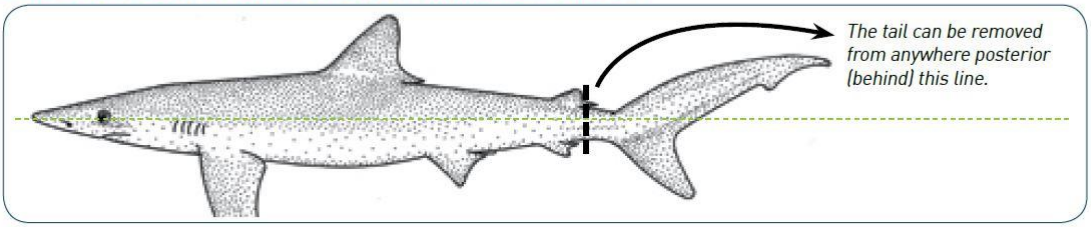


(The posterior insertion of the pectoral fin means the point along the body of a fish at which the rear (posterior) edge of the pectoral fin emerges.)

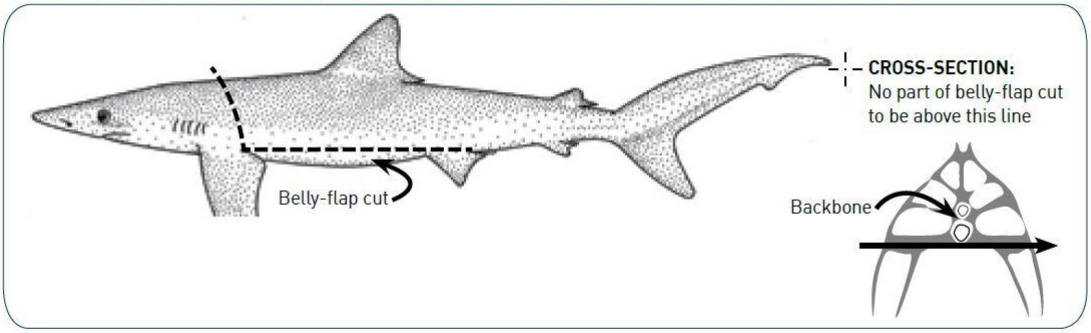
2) the forward angle of the anterior cut not less than 90 degrees in relation to the longitudinal axis of the fish.



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.



New Zealand Government

February 2020

Fisheries New Zealand
Tini a Tangaroa


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**

New Zealand Government

February 2020

Fisheries New Zealand
Tini a Tangaroa

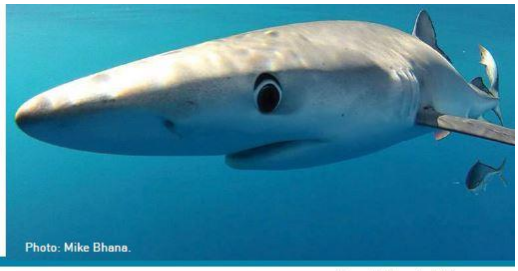


Photo: Mike Bhana.

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

New Zealand Government

February 2020

APPENDIX 2: IDENTIFICATION OF KEY NON-QMS SHARK SPECIES

The following outlines some commonly caught non-QMS and non-protected shark species and how to identify them when reporting fish catch.

Baxter's lantern dogfish (ETB)

Scientific name: Etmopterus baxteri

Other names: Giant lanternshark, New Zealand lanternshark, Southern lanternshark

Ministry reporting code: ETB

Distinguishing features:

- Stout-bodied, uniformly dark and with randomly spaced dermal denticles giving a slightly roughened skin.
- Bases of first and second dorsal fins naked (no denticles).

Colour: Dark brown to blackish, belly darker. Darker but inconspicuous pelvic and caudal fin marks.

Size: To about 85 cm TL.

Leafscale gulper shark (CSQ)

Scientific name: Centrophorus squamosus

Other names: N/A

Ministry reporting code: CSQ

Distinguishing features:

- Moderate sized with a short snout
- Long low first dorsal fin and triangular second dorsal
- Strong fin spines
- Rough skin with leaf-shaped denticles
- Inner rear corner of pectoral fin angular or pointed (not rounded) but not elongated

Colour: Uniformly greyish-brown

Size: To about 160 cm TL

Seal shark (BSH)

Scientific name: *Dalatias licha*

Other names: Black shark

Ministry reporting code: BSH

Distinguishing features:

- Moderate-sized with a short blunt snout giving the head a seal-like appearance
- First dorsal fin rounded; second more pointed, slightly larger; both without fin spines
- Thick lips
- Teeth in lower jaw large, triangular, and serrated

Colour: Uniformly dark grey-brown to black, occasionally lighter

Size: To about 160 cm TL

Shovelnose dogfish (SND)

Scientific name: *Deania calcea*

Other names: Brier shark (Aus.)

Ministry reporting code: SND

Distinguishing features:

- Slender-bodied with an elongated, flattened snout
- First dorsal fin is longer and lower than the second dorsal fin
- Skin is soft and patches are often lost on trawl-caught fish

Colour: Usually uniform mid grey-brown but may be darker or lighter. Slightly darker fins.

Size: To about 120 cm TL