Industry Code of Practice to Minimise Interactions with Seals

SOUTH-EAST TRAWL FISHING INDUSTRY ASSOCIATION
INTRODUCTION

Over the last decade, fur seal populations around south eastern Australia have increased significantly. This has resulted in increased levels of interactions with fishing vessels and higher levels of incidental capture of seals. To address this issue, industry has initiated collaborative projects with researchers to reduce seal bycatch in this fishery, which included the development of this document, the “Industry Code of Practice to Minimise Interactions with Seals”, which is a companion document to a general “Industry Code of Practice for Responsible Fishing”.

The Code of Practice for Responsible Fishing sets out voluntary guidelines and standards of behaviour for responsible practices with a view to ensuring the effective conservation, management and development of resources, with due respect for the ecosystem and biodiversity. It recognises the interests of all those concerned with fisheries and takes into account the economic, social, institutional and cultural conditions, the biological characteristics of the resources and their environment and the interests of consumers and other stakeholders. In addition to this general code, the “Industry Code of Practice to Minimise Interactions with Seals” contains specific guidelines to minimise incidental bycatch of seals in the SETF, and should be read

East Trawl Fishery: Seal Bycatch – Guidelines for reporting and data collection”.

The Codes will be distributed to all operators in the SETF as booklets and CDs. The booklets are designed to be kept in the wheelhouse of each vessel in the fishery to ensure that all crew have access to this information. The Codes will also be accessible for downloading from the SETFIA website www.setfia.org.au. SEANET will be used to promote the understanding of the Codes and to encourage their adoption within the fishery.

The Codes are “living documents” that will be regularly updated as fishing practices and regulatory standards evolve. Operators will be contacted from time to time to determine the level of uptake and the effectiveness of the Codes. The monitoring of the Codes will be conducted under an agreed process between AFMA and SETFIA and operators are asked to cooperate with such surveys.

Although adherence to the Code is voluntary, there are legal requirements for reporting interactions with all marine mammals under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999.
OBJECTIVES

The overall objective of this Code is to provide specific guidelines to assist SET fishers minimise the incidental bycatch of seals. More specifically, this includes:

- Making fishers aware of relevant legislation and policies governing fisheries, bycatch and protected species;
- Providing clear guidelines on best available fishing practices to help SET fishers minimise the accidental bycatch of seals;
- Providing clear advice on the conditions of use of available technologies to help SET fishers minimise the accidental bycatch of seals;
- Providing clear guidelines on how to safely handle seals when brought onto the vessel and how to release seals caught in nets; and,
- Encouraging SETF fishers to assist, where practical, in research to progress further mitigation of seal bycatch (e.g., the collection of data on fishing grounds, fishing practices, catch and bycatch).

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RELEVANT LEGISLATION AND POLICIES

Environment Protection and Biodiversity Conservation (EPBC) Act 1999

All seals are protected in Commonwealth waters under the EPBC Act 1999 (they are also protected in State coastal waters under relevant State legislation). Under this Act it is the responsibility of fishers to “take all reasonable steps to ensure that all protected species are not killed or injured as a result of fishing”. All incidents involving seals (alive or dead) must be reported to the Department of Environment and Water Resources (DEW). However, AFMA has entered into a Memorandum of Understanding with DEW to allow fishers to report interactions to AFMA on wildlife interaction reports in their logbooks. AFMA will then pass the information onto DEW.

Fisheries Management Act 1991

The Fisheries Management Act requires that the exploitation of fisheries resources and performing of any related activities are conducted in a manner consistent with the principles of ecologically sustainable development and the exercise of the precautionary principle, in particular the need to have regard to the impact of fishing activities on non-target species and the long term sustainability of the marine environment.

National policies

There is an array of national policies stating that wildlife bycatch needs to be addressed in all Australian fisheries, eg, the National Policy on Fisheries Bycatch (1999), Commonwealth Policy on Fisheries Bycatch (2000) and FAO Code of Conduct for Responsible Fisheries (1995).
REPORTING REQUIREMENTS – EPBC ACT

Interactions with species listed under the EPBC Act 1999 must be reported. “Interaction” means any physical contact an individual has with a protected species. This includes all catching (hooked, netted, entangled) and collisions with an individual of these species. In the context of this definition “protected species” means all listed threatened, migratory and marine species under the EPBC Act and all cetaceans. The EPBC Act provides legislation guiding national environmental protection in Australia, and strongly influences the conservation and management of marine species, including protected species and bycatch.

Under the EPBC Act, operators must report interactions with “listed species” including seals. The most common interactions in the SETF are with Australian and New Zealand fur seals. According to the SESSF Management Plan, “any operator that interacts with a protected species as listed in Part 13 of the EPBC Act, and is acting in accordance with the SESSF Plan 2003, will not commit an offence if their operations are consistent with the Plan. Failure to report an interaction with a protected species will be an offence under the EPBC Act” (SESSF, “A guide to the 2007 Management Arrangements”, p.29).

All interactions with protected species must be reported, whether the animals are injured or not. Operators should record the details of the interaction on the appropriate form in the EFT01 logbook and send it to AFMA with their EFT01 sheet. Reporting of an interaction is required within 7 days to the Secretary of the Department of Environment and Heritage (DEH) and is mandatory in all circumstances. However, AFMA has entered into a Memorandum of Understanding with DEW that allows fishers to report interactions to AFMA on wildlife interaction reports in their logbooks. AFMA will then pass the information onto DEW.

Complete instructions on reporting are provided in the booklet “South East Trawl Fishery: Seal Bycatch Guidelines for reporting and data collection.”
REDUCING SEAL INTERACTIONS

Experience over recent years has demonstrated that changes to fishing gear and fishing practices are the most successful measures to minimise interactions with seals. A co-operative approach between industry and government is needed to reduce interactions with seals but still retain a safe and viable industry. A number of measures will apply to all vessels in the SETF, while others may be more applicable depending on the size of the boat, trawl method and area of operation.

**Basic measures include:**

**Modification of fishing practices**

- Deployment and hauling of gear must be carried out as rapidly as possible to minimise the time that gear is in the upper 150 m or so of the water column where seals are most likely to be encountered, i.e., the normal diving range of the species usually encountered in fishing areas. This has been found to be one of the most effective methods of avoiding the accidental capture of seals;

- Standard watchkeeping practices will be observed;

- If seals are sighted adjacent to the stern of the vessel when gear deployment is about to occur, deployment should be delayed until the animals have dispersed of their own accord;

- Whenever seals are brought on board in fishing gear, all reasonable steps must be taken to ensure they are released alive and unharmed;

- Fishing masters and skippers should adopt whatever techniques are available to close the trawl opening during recovery to minimise the opportunities for seals to enter the net. These manoeuvres may include turning at the end of the haul to collapse the net mouth and/or slackening off one warp when hauling. None of these manoeuvres should be executed in a manner which could jeopardise the safety of the vessel or the crew;

- Where any difficulties arise, the headline and ground-rope should be hauled on board as quickly as possible. If this cannot be done, the net should be kept as deep as possible, to reduce the likelihood of seal capture, and towed to a location some distance from the fishing area where the problem can be rectified;

- During the course of any trawl shot, the vessel must not execute turns or changes of direction with the doors deployed and the net mouth open near the surface. If fishing long defined courses, such as a narrow shelf edge, the net should be recovered at the end of each line and deployed again after the turn has been made;

- Watch-keepers should be posted during deployment and recovery of trawls, day and night, to detect any seals which become enfolded or caught at the surface, so the animals can be rapidly and humanely released;

- During night trawling, the after-gantry lights should be switched off when not required for shooting and hauling, although other lights may be left on for safety. Lights attract bait, squids, small fish and birds to the vessel. These are followed by seals which may use the vessel lights as a final cue to the location of the vessel.

- Seals are often attracted to fishing boats and will feed on fish scraps, offal and bycatch dumped from vessels. In factory vessels, wherever possible, all fish offal and waste should be converted to meal or incinerated. On wet boats or where this is not possible, bycatch and offal can be dumped while the vessel is moving, but NOT when engaged in deploying or hauling gear. Preferably, offal should be dumped away from trawl grounds.
Use of Seal Exclusion Devices (SEDs)

- Trials of the use of SEDs such as the “top hatch” SED used in the winter blue grenadier fishery have proven beneficial and must be used in the trawl nets of all vessels capable of freezing or processing at sea, as per AFMA legislation.

SEALS ON BOARD

If a seal is observed coming aboard trapped in folds of netting:

- Stop hauling as soon as it is heaved on deck past the stern ramp roller. Release the animal as quickly as possible. If a swell is running or the net is full and tight, secure the strop around the net below the animal to take the weight of the net, slack off and release the animal;

- Animals trapped inside the forepart of the net should be freed as soon as they arrive on deck;

- If the catch of fish is large and the seal is visible it should be cut free immediately. If the catch is small, a seal can be placed carefully onto the deck with the fish.

Seals on deck should be restricted to an area close to where they are most likely to escape, and prevented from gaining access to other parts of the vessel. Seals can be moved around the deck using fire hoses, sheets of plywood or nets. Details of how this can be done are included below.

Extreme care should be taken at all times when handling frightened active seals on deck or below. Their bites can be very severe. In particular, all safety aspects including prevailing conditions such as sea state, should be considered in dealing with live seals.

Extra information on handling of protected species can be found in Ocean Watch Australia’s Protected Species Handling Manual.
MANIPULATION OF SEALS ON FISHING VESSELS

Remember, seals are fast and agile on slippery surfaces. When cornered they may attack and can deliver powerful slashing bites.

A. PLYWOOD SHEET BARRIERS

Sheets of plywood can be used as a moving barrier to herd a seal along the deck.

B. FIRE & DECK HOSES

A jet from a high pressure hose can force an animal to move without causing it any injury.

C. NETS

Circular nets which can be ‘pursed’ using closing lines are the best method to remove large seals from enclosed areas, e.g. fish bins.

D. HANDLING VERY SMALL ANIMALS

Grasp a hindflipper in one hand, lift the seal’s hindquarters to reach under and across to grasp the base of the outer foreflipper in the other hand. Lift, taking the seal’s weight on the forearm while keeping a firm grip and your arm extended to hold the seal’s body straight and it’s head well forward.
IDENTIFICATION OF SEAL SPECIES

Wherever possible, live seals that are released, and dead seals that are discarded at sea, should be identified to species. Comprehensive descriptions are provided in the booklet (and DVD/video) "South East Trawl Fishery: Seal Bycatch Guidelines for reporting and data collection", and also in the poster “Seals of Australia”.

Seal species found in the Australian waters.

FAMILY OTARIIDAE (EARED SEALS)

- **Australian fur seal**
- **New Zealand fur seal**
- **Australian sea lion**
- **Southern elephant seal**
- **Subantarctic fur seal**
- **Antarctic fur seal**
- **Leopard seal**
- **Crab-eater seal**
- **Weddell seal**
- **Ross seal**

FAMILY PHOCIDAE (TRUE SEALS)

- **Southern elephant seal**
- **Subantarctic seal**
- **Antarctic seal**
- **Antarctic fur seal**
- **Ross seal**

Key distinguishing features of male Australian and New Zealand fur seals. Adult females are drawn in front of the males to show that the males are much larger than females.


SEAL MARKING

To prevent multiple recording of dead seals that have previously been caught, animals to be discarded should be marked so they are not recorded twice. Before animals are discarded:

- Identify the seal to species and record the interaction in the logbook;
- Mark the seal by removal of an ear;

This simple technique allows crew to determine whether a seal has already been taken and discarded by another vessel;

- Biological samples may be collected, stored and recorded in line with any current research projects. All information should be recorded with a waterproof marker and kept with the sample.

Please note: To meet public health requirements and prevent contamination, all biological samples should be fully enclosed in an airtight container and stored away from the vessel’s catch.
ASSISTING IN SCIENTIFIC RESEARCH

SET fishers agree to assist in scientific research to progress further mitigation of entrapment and entanglement of seals, where this is possible. This may include the collection of data on fishing grounds, fishing practices, catch and bycatch.

As well as reporting all seal interactions, occasionally research projects may require fishers to collect various biological samples from dead seals captured during trawling. Currently there is such a project running that encourages fishers to report all interactions and collect and store small samples from dead seals in alcohol with details of the date, time and position of the shot with information on the length and sex of the seal. SETFIA should be notified when the samples need to be collected from a vessel and sent to the relevant researcher. Details of this project and the procedures for the collection of biological material from dead seals drowned in trawl nets are documented in:


ANATOMY AND MEASUREMENT

STANDARD MEASUREMENTS

A. Total length, taken in straight line from tip of snout to end of tail.

B. Axillary girth

C. Foreflipper length

D. Hindflipper length

E. Blubber thickness over sternum, by making two parallel cuts 2.5 cm apart through skin to sternum, then measure on inner cut from base of blubber to surface of skin.

SEX DETERMINATION

ANATOMY

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EDUCATIONAL RESOURCES ON SEAL BYCATCH

Publications

Poster

DVD/Video


This Code of Practice was developed by the South East Trawl Fishing Industry Association Ltd (SETFIA), the peak industry body in the South East Trawl Fishery (SETF). SETFIA represents the interests of all SETF trawl operators.

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