



SPSG

Scottish Pelagic Sustainability Group

Standard Operating Practices

Fleet Issue

Contents:

- 1. Standard Shoal Identification**
- 2. Communicating unsuitable catch composition.**
- 3. Lost gear and ghost gear practice and reporting**
- 4. Recording interactions with Endangered, Threatened or Protected (ETP) species.**
- 5. Annexes**
 - Identification and classification of cetaceans**
 - UK Turtle Code**
 - Identification and classification of sharks and rays**
 - Seabird Identification**

This manual has been produced by the Scottish Pelagic Sustainability Group (SPSG) to assist the fleet in operations and procedures in accordance with their sustainable policy which supports best practice in environmental, ethical and sustainable fishing.

1. Standard Shoal Identification.

Pelagic fishing vessels shall take all reasonable precautions to ensure that their fishing activity is only directed towards stocks of the species for which they intend to catch and for which they have the necessary licenses and entitlements.

Acoustic Detection

The Scottish pelagic fleet has heavily invested in highly sophisticated electronic fish finding and sounding equipment.

Significant technological advances in this field have been made, and all SPSPG vessels are now equipped with highly advanced fish detection equipment. The vessel skipper/master can now establish what species is being seen on echo sounders by using multiple frequency scans. Importantly, this equipment also enables fish size within shoals to be accurately assessed.

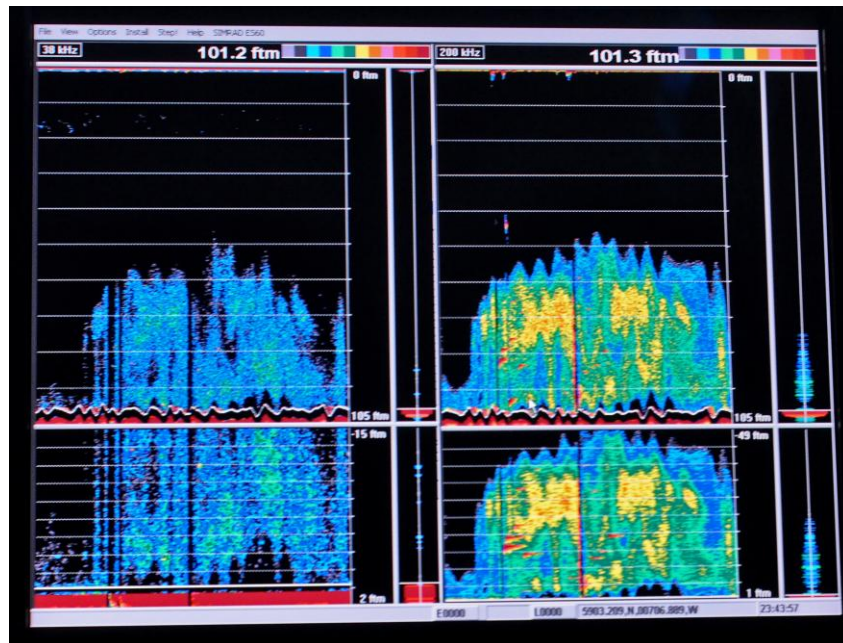


Fig. 1.0: Example of mackerel acoustic plot.

SPSPG vessels shall operate as standard practice, a full acoustic assessment to base their decision to engage fishing activity towards a mark of fish. The skipper/master will:

- Obtain suitable acoustic scans of the target shoal
- Fully analyse the scan data to ascertain and confirm the fish species and size range of fish in the shoal.

- Use findings of this assessment to decide if the shoal comprises an appropriate fishing target.

Full use of this technology coupled with the following additional spatial and temporal factors will determine the decision to fish.

- Known pelagic seasonal migratory routes and patterns
- The time of year and geographical position
- The historical experience of the skipper/master of the vessel.
- Real-time communications with other vessels fishing in the vicinity.
- Using any other appropriate sampling techniques

SPSG vessels will ensure that:

- Fishing gear will only be deployed if there is a high level of confidence that the acoustic assessment indicates a valid biological and commercial target.
- Only appropriately trained personnel undertake acoustic assessments and interpret findings in making decisions to fish.
- If a resulting haul of fish does yield small/juvenile fish or a catch of mixed composition every effort is made to investigate and modify the interpretation of assessment data to improve decision making processes.

2. Communicating unsuitable catch composition.

Where a catch occurs, which contains a high level of mixed species, unsuitable size composition or other factors which make ongoing fishing of the shoal commercially undesirable, vessels will communicate this to all other pelagic vessels in the vicinity.

Such communication is intended to reduce the probability of a reoccurrence of this mortality and will contribute to an overall reduction in poor yielding catches.

When an unwanted haul of this nature occurs; the skipper/master shall:

1. Communicate information and relevant circumstances of the event to all other pelagic vessels in the vicinity.
2. Communicate the event as soon as practically possible to prevent other vessels in the vicinity from experiencing similar adverse catches.

3. Lost gear and ghost gear practice and reporting

Lost Gear Retrieval

In the event of the loss of part or all of fishing gear; vessels will take appropriate action to secure the retrieval of the gear as soon as possible.

If the gear is not retrievable: vessels will inform the UK fisheries authorities within 24 hours of the following:

- PLN and name of fishing vessel
- type of gear lost
- time when the gear was lost
- position where the gear was lost
- measures taken to retrieve the gear

Lost gear should be reported using the electronic logbook. Use the lost gear declaration (GLS) when submitting the daily fishing activity report (FAR).

Alternatively, contact the UK Fisheries Monitoring Centre (UKFMC).

Telephone: +44(0)131 271 9700 Fax: +44(0)131 244 6471 Email: UKFMC@gov.scot

If gear was lost in another member state's waters the UK authorities will inform their competent authority.

Ghost Gear

Vessel operators shall be aware of, and so far as possible adopt the Principles of Best Practice to prevent, mitigate and recover abandoned, lost, discarded fishing gear (ALDFG).

See Annex V

4. Recording interactions with Endangered, Threatened or Protected (ETP) species.

The SPSG fleet will undertake to record any interactions during fishing activities and fishing trips with Endangered, Threatened or Protected (ETP) species.

The fleet is committed to make every effort to minimise unselective fishing practice and minimise interactions resulting with incidental by-catch. In relation to ETP species, concerns have been raised in certain pelagic fisheries of interactions between cetaceans and fishing gear.

The SPSG fleet has co-operated fully with cetacean observer programmes over many years with no observed incidental by-catch. As a measure of additional best practice however, vessels undertake to record any interactions, should they occur.

For the purposes of this manual and operating code an 'interaction' is defined as the incidental capture of ETP species within the fishing gear during fishing and also the sightings of animals exhibiting modified behaviour to the presence of the vessel, fishing gear and/or fishing activity.

Vessels will apply this voluntary code for interactions with the following species:

Whales: *Humpback, Fin, Sei, Minke, Sperm, Northern Bottlenose, Killer and Long-Finned Pilot.*

Dolphins: *Risso's, Atlantic White-Sided, White-Beaked, Common, Striped and Bottlenose.*

Porpoises: *Harbour*

Turtles: *Leatherback, Green, Hawksbill, Loggerhead, and Kemps-Ridley.*

Sharks: *Basking, Porbeagle, White, Spurdog, Threshers and Giant Manta*

Seabirds *Any unintended incidental seabird by-catch will also be recorded*

To comply with all SPSG vessels are issued with Exceptional/Unusual Event Logs supplied through the Scottish Pelagic Fishermen's Association (SPFA) for the recording of such interactions.

To assist the fleet with the identification of these species, useful links and factsheets on these Endangered, Threatened or Protected species are provided in the Annexes.

Logging ETP Interactions:

The completion and submission of such records by skippers and/or masters will be carried out as below using the Exceptional/Unusual Event Log sheet supplied through the SPFA.

- i) If during the course of the fishing season, an interaction with an endangered, threatened or protected species occurs, this interaction should be recorded in the Exceptional/Unusual Event Log.
- ii) All vessel details, trip dates and skipper details should be completed at the head of the form.
- iii) All such events shall be recorded and all related fields in the record sheet should be completed.
- iv) The skipper/master should endeavour to record all details including the species as accurately as possible. Where a degree of uncertainty exists, comments should reflect this.
- v) To assist in cetacean identification; all vessels should carry a species identification guide onboard.
- vi) At the end of the season, all interaction forms should be returned to:

Scottish Pelagic Sustainability Group
Heritage House,
135-139 Shore St,
Fraserburgh. AB43 9BP

The records generated from these procedures will then be forwarded to the appropriate contact within the SMRU which is the recognised scientific institute responsible for observation, third party information gathering and collation of cetacean data for Scotland.

Annexes: Identification and classification guides

Annex I Cetaceans

The Sea Watch Foundation produces extensive information on 30 species of whale dolphin and porpoise which have been recorded in British and Irish waters.

Summaries of the status of each species in England, Wales, Scotland and Northern Ireland can be found on their website.

Detailed information on individual species can be found on the Species Fact Sheets including:

- Species photos

- Identification descriptors

- Dimensions

- Geographic distribution

- Habitat

- Abundance assessments

- Common behaviour

- Life history

- Conservation threats

- International Union for Conservation of Nature (IUCN) Status

Access this information here: [Sea Watch Foundation – Species Info & Fact Sheets](#)



Annex II Turtles

The UK turtle code interactive guide can be found here: [UK Turtle Code](#)



The United Kingdom Turtle Code

Advice for sea users on how to deal with marine turtle encounters

As a sea user, you can help in the effort to protect endangered marine turtles by providing information about your encounters with these spectacular creatures in UK waters.

MARINE TURTLES ARE LEGALLY PROTECTED

There is no offence if turtles are caught accidentally in fishing gear. Nor is it an offence to help turtles if entangled or stranded, or temporarily to hold dead turtles for later examination by experts.

However, marine turtles are protected in Britain.

This means that:

- turtles may not be deliberately killed or caught
- live turtles may not be landed unless for the purpose of tending them or enabling their subsequent release
- dead turtles or shells obtained from turtles in UK waters may not be possessed unless the animal was lawfully acquired
- turtles and their derivatives may not be sold or offered for sale without UK government permission, unless they are antiques acquired before 1st June 1947 (with documented proof)
- turtles and their derivatives may not be imported or exported without UK government permission.

The following legislation pertains to marine turtles:

- Wildlife and Countryside Act 1981 (as amended), in England and Wales.
- Conservation of Habitats and Species Regulations 2010, in England and Wales.
- Conservation (Natural Habitats, &c) Regulations 1994 as amended, in Scotland.
- Conservation (Natural Habitats etc.) (Amendment) Regulations (Northern Ireland) 2007.
- Control of Trade in Endangered Species (Enforcement) Regulations (1997) as amended, in the UK.
- Customs and Excise Management Act 1979.
- Isle of Man Wildlife Act 1990.

PLEASE REPORT ALL TURTLE ENCOUNTERS

ENGLAND/WALES

ALL RECORDS

Rod Penrose, Marine Environmental Monitoring
01239 683033 (24hrs)
www.strandings.com

LIVE STRANDINGS/ ENTANGLEMENTS

RSPCA 0300 1234999
BDMLR 01825 765546

ISLE OF MAN

Dr Fiona Gell/Laura Hanley
DEFA - Isle of Man Government
01624 685835 (main)
Marine Operations Centre
01624 686628 (24hrs)

SCOTLAND

ALL RECORDS

Laura Clark,
Marine Monitoring Officer,
Scottish Natural Heritage
01463 725237

DEAD STRANDINGS

Nick Davison, Scottish
Agricultural College
01463 243030
07979 245893
strandings@sruc.ac.uk

LIVE STRANDINGS/ ENTANGLEMENTS

SSPCA 03000 999999

NORTHERN IRELAND

ALL RECORDS

The Coastal Zone Centre
at Portrush (DOENI)
028 7082 3600

REPUBLIC OF IRELAND

ALL RECORDS

Dr Thomas Doyle
Coastal & Marine Research
Centre, University College
Cork
00353 (0) 21 4703119 (Direct)
00353 (0) 87 1354938 (24hrs)

Report online at: www.euroturtle.org/turtlecode & www.mcsuk.org

RECORD THE FOLLOWING DETAILS

All information is valuable, but the following details are particularly useful:

- A description** of the turtle (alive or dead), identification of species (at least to leatherback/hard-shelled level) and overall straight length. Note any damage (e.g. cuts, scars) and **take photographs** when possible.
- Location** (longitude & latitude/ OS grid reference), **date** and **time** of sighting.
- Other observations**, such as turtle's behaviour, whether caught in fishing gear (including exact nature of entanglement, gear involved) etc.
- Presence of tags**. Many conservation projects place plastic or metal tags on turtles' flippers, which display identification numbers and a return address. Record any tag details if this can be done without causing disturbance to the turtle.

Please report all dead turtles, even if they have to be discarded at sea. Records from diaries or logbooks, however old, are also of interest.

WHAT TO DO IF YOU FIND A SICK OR ENTANGLED TURTLE

Immediately report the turtle to the relevant contact. Marine turtles will drown if trapped underwater, but prompt action can save them. A turtle that is entangled or trapped is likely to be stressed. Large turtles deliver a serious bite and a blow from a flipper can be painful, so be careful. Due to possible health risks involved in handling turtles, always wear rubber gloves.

TURTLES ENTANGLED AT SEA

Approach calmly and cautiously and ensure first of all that the turtle's head is above water so that it can breathe if it is alive.

ALIVE: AVOID TOWING TURTLES TO SHORE. They should be disentangled and released at sea whenever possible.

If alert & active

- Do not use a gaff to pull the turtle alongside and do not haul leatherbacks aboard.
- Avoid pulling hard on the turtle's flippers as they may dislocate or break.
- Carefully disentangle the turtle, making sure that as much net and line as possible has been removed before the animal is released.
- Make sure that the vessel is stopped and out of gear before carefully sliding the turtle back into the water.
- Ensure that the turtle is clear of the vessel before moving away.

ONLY if disentanglement at sea is impossible should the turtle be brought ashore.

Tow leatherbacks very slowly and make sure the animal's head is above water so that it can breathe. Release leatherbacks in shallow water, not on land. Other species should be retained and reported.

If traumatised/inactive (no or slight movement, limbs flexible and limp, no decomposition)

Severely traumatised hard-shelled turtles can be saved if they are small enough to fit on your boat.

- Wrap the turtle in a towel soaked in seawater. Do not cover the nostrils.
- Place the animal in a sheltered and secure place on its belly. To drain the lungs, raise the back end of the shell so the turtle is resting at approximately 30°. Keep it in this position until you return to shore.
- Leatherbacks should **not** be hauled aboard. If inactive, they can be towed to shore very slowly, ensuring they are able to breathe at all times.

DEAD: There may be serious health risks involved in handling dead turtles.

Inexperienced individuals are advised not to touch them. Where possible, record the details listed above and, only if the specimen is fresh, bring it back to shore and place in cold storage. Always wear rubber gloves when handling turtles.

TURTLES STRANDED ON LAND

Leatherback turtles

Leatherbacks found stranded on beaches are usually very weak, dead or dying, but might still be saved.

If apparently uninjured:

- Carefully drag the turtle back to the sea and release it (enlist the help of several people and pull the shell rather than the flippers).
- Do not drag the animal over rocks, as this will cause severe damage.
- If stranded on rocks, it may be better to wait for the incoming tide to provide some buoyancy before dragging the turtle back to sea.

Other species (hard-shelled)

Loggerhead, Kemp's ridley, green and hawksbill turtles encountered on UK shores are usually cold stunned juveniles and should not be placed back in the sea.

- Wrap the turtle in a towel soaked in seawater, do not cover the nostrils
- Place the animal in a sheltered and secure place on its belly. If inactive, raise the back end of the shell so the turtle is resting at approximately 30° to drain the lungs. Report the turtle as soon as possible.

Dead turtles of all species are valuable for research and should be reported as soon as possible. Fresh specimens should be preserved in a cold store where possible. These animals will undergo a full post-mortem examination within the DEFRA-funded UK Cetacean Strandings Investigation Project (CSIP).

For copies of this code and information about turtles in UK waters, contact MCS on 01989 566017 or info@mcsuk.org



Marine Turtles in the UK

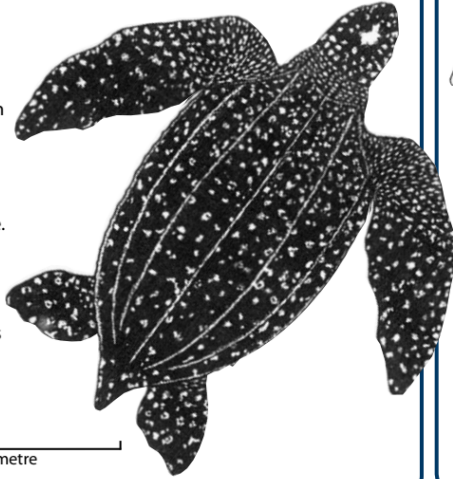
Endorsed by:



Of the world's seven marine turtle species, five have been recorded in UK waters. They are the leatherback, loggerhead, Kemp's ridley, green and hawksbill turtles. The leatherback, the largest marine turtle, is the species most frequently recorded in UK waters. Leatherbacks have a flexible, leathery shell and are unique among reptiles in that they are able to metabolically raise their body temperature above that of their immediate environment, allowing them to survive in colder waters. Each summer leatherbacks migrate to UK waters where they feed on jellyfish. The other four species have hard shells and are less frequently encountered in UK waters, where they usually occur as stray juveniles carried by currents from warmer seas.

LEATHERBACK TURTLE

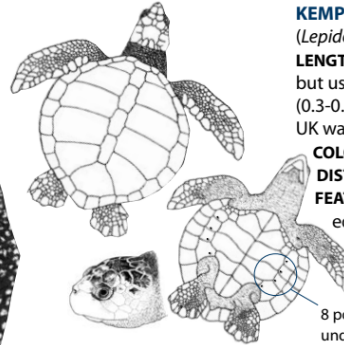
(Dermochelys coriacea)
Most frequently recorded species in UK waters.
LENGTH: up to 2.91 metres.
COLOUR: black, spotted with white.
DISTINCTIVE FEATURES: large, up to 916 kg, pronounced longitudinal ridges on shell, which tapers to a blunt spike.



SCALE 1 metre

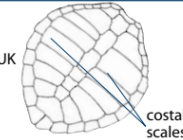
KEMP'S RIDLEY TURTLE

(Lepidochelys kempii)
LENGTH: up to 1 metre, but usually juveniles (0.3-0.5 metres) occur in UK waters.
COLOUR: grey/olive.
DISTINCTIVE FEATURES: shell width equal to or greater than shell length.



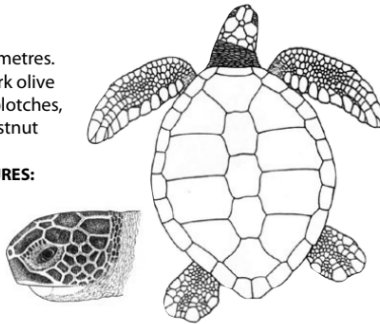
8 pores visible on underside (4 either side)

NB: The olive ridley turtle (*Lepidochelys olivacea*) occurs in the Atlantic, but has not been recorded in UK waters to date. Similar to Kemp's ridley with 8 pores on underside, but has 5-9 pairs of costal scales on shell.



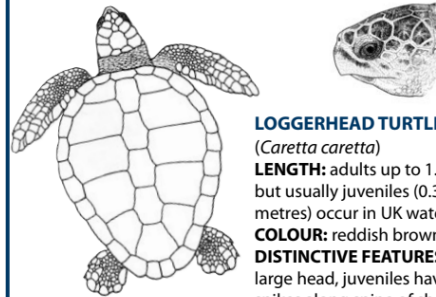
GREEN TURTLE

(Chelonia mydas)
LENGTH: up to 1.5 metres.
COLOUR: adults dark olive or grey with dark blotches, juveniles have chestnut coloured shell.
DISTINCTIVE FEATURES: smooth shell, rounded facial profile (not angular).



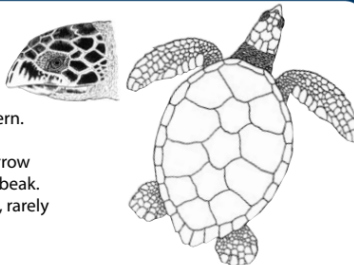
LOGGERHEAD TURTLE

(Caretta caretta)
LENGTH: adults up to 1.5 metres, but usually juveniles (0.3-0.5 metres) occur in UK waters.
COLOUR: reddish brown.
DISTINCTIVE FEATURES: large head, juveniles have small spikes along spine of shell.



HAWKBILL TURTLE

(Eretmochelys imbricata)
LENGTH: up to 1.2 metres.
COLOUR: brown, amber and black tortoiseshell pattern.
DISTINCTIVE FEATURES: shell scales overlapping, narrow tapered head with bird-like beak. Largely tropical distribution, rarely encountered in UK waters.



MARINE TURTLES ARE THREATENED

In UK waters threats include:

- **Accidental entanglement in fishing gear.** Although turtles can dive to great depths, they become stressed and drown when trapped underwater by fishing gear. Fishing gear discarded at sea may also entangle and kill turtles.
 - **Marine litter,** especially plastic, which turtles mistake for jellyfish. Once ingested, plastic can block a turtle's gut leading to starvation.
 - **Boat collisions.** Turtles often bask and must surface regularly to breathe, leaving them vulnerable to boat strike.
- PLEASE BE VIGILANT, AND DO NOT DISCARD FISHING GEAR OR LITTER AT SEA.**



Queen's University Belfast

353-2015



Illustrations are taken, with permission, from: Eckert, K.L., K.A. Bjorndal, F.A. Abreu-Grobois, and M. Donnelly (Editors), 1999. *Research and Management Techniques for the Conservation of Sea Turtles*. IUCN/SSC Marine Turtle Specialist Group Publication No. 4. THIS DOCUMENT WAS PRODUCED BY THE MARINE CONSERVATION SOCIETY (MCS) IN 2011 WITH SUPPORT FROM NATURAL ENGLAND AND SCOTTISH NATURAL HERITAGE AND IN COLLABORATION WITH THE TURTLE IMPLEMENTATION GROUP OF THE UK MARINE TURTLES GROUPED SPECIES ACTION PLAN.

Annex III Elasmobranchs

The Shark Trust produces a range of ID materials. These provide an extensive and useful online resource for the commercial fishing industry.

Please see:

[Shark ID Guides](#)



These guides provide clear information for the identification of over 40 different species of shark found in the NE Atlantic.

[Skate and Ray ID Guides](#)

These guides provide clear information for the identification of over 20 different species of skate and ray found in the NE Atlantic.



[Fisheries Advisories](#)



These provide rapid and easy access to the current legislative status of sharks, skates and rays in UK, EU and international waters. Also included are guidance notes for the best practice handling and recording of these by-caught species.

Annex IV Seabirds

Online seabird identification guides:

[RSPB Bird Identification](#)



[Birdspot Identification](#)



Annex V Abandoned, Lost, and Discarded Fishing Gear (ALDG)

Global Ghost Gear Initiative – Principles of Best Practice for fishing vessel operators

Approach	Principles
Prevention	<ul style="list-style-type: none">• Reduce risk of gear loss or abandonment through the avoidance of high-risk areas/situations, the use of well-maintained and set fishing gear, and minimizing the amount of gear set.• Adjust fishing methods to prevailing conditions to reduce the risk of gear loss, e.g., shorter soak time, etc.• Training and awareness-building of crew in good practice and responsible fishing.• The clear marking and identification of fishing gear and its main components.• The responsible disposal of end-of-life fishing gear and other potential aquatic litter.
Mitigation	<ul style="list-style-type: none">• Use of fishing gear designed to stop fishing after control is irretrievably lost, e.g., through the use of biodegradable materials.• Reporting of lost or abandoned fishing gear.
Remediation	<ul style="list-style-type: none">• Recovery and subsequent reporting of ALDFG, its transport to shore and its subsequent responsible disposal.• Best practical recovery of fishing gear after it has been lost or abandoned.

Reference: [Global Ghost Gear Initiative – Best Practice Framework for the management of fishing gear.](#) Section 4.4 Fishers and vessel operators

