GOOD PRACTICE GUIDES FOR THE HANDLING OF ANIMALS CAUGHT INCIDENTALLY IN MEDITERRANEAN FISHERIES

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GOOD PRACTICE GUIDES FOR THE HANDLING OF ANIMALS CAUGHT INCIDENTALLY IN MEDITERRANEAN FISHERIES

Note of the Secretariat:

Within the framework of the ACCOBAMS-GFCM Project on mitigating the negative interactions between endangered marine species and fishing activities, four guides on good practices to handle vulnerable marine species incidentally caught during fishing operations were produced in French and English:

- Good practice guide for the handling of cetaceans caught incidentally in Mediterranean fisheries
- Good practice guide for the handling of sea turtles caught incidentally in Mediterranean fisheries
- Good practice guide for the handling of seabirds caught incidentally in Mediterranean pelagic longline fisheries
- Good practice guide for the handling of sharks and rays caught incidentally in Mediterranean pelagic longline fisheries

These guides were also produced in Arabic by the SPA/RAC. Translation in Spanish and Turkish are foreseen.
GOOD PRACTICE GUIDE FOR THE HANDLING OF CETACEANS CAUGHT INCIDENTALLY IN MEDITERRANEAN FISHERIES
Corps massif et trapu.
Peau ridée, surtout sur les 2/3 arrières du corps.
Coloration grise-foncée à marron avec les contours de la gueule blancs et des tâches claires variables sur le ventre.

**TECHNICAL SHEET N° 1 - CETACEANS' SPECIES MOST AFFECTED BY MEDITERRANEAN FISHERIES (1/2)**

**Striped dolphin**
*Stenella coeruleoalba*

- Slim, slender and fusiform body
- Flame-shaped pattern on the flanks, going from the eye towards the dorsal fin
- Large, dark, curved dorsal fin in the middle of the back

**Short-beaked common dolphin**
*Delphinus delphis*

- Prominent beak standing out from the melon
- White, gray, yellow and black hourglass pattern on the flanks
- Black, falcate dorsal fin, with a lighter patch in the center

**Sperm whale**
*Physeter macrocephalus*

- Solid body, stocky, dark gray to brown with light spots on the belly
- Wrinkled skin especially on the rear two-thirds of the body
- Mouth with white contours

*The illustrations are not drawn to scale*
TECHNICAL SHEET N° 1 - SPECIES OF CETACEANS MOST AFFECTED BY MEDITERRANEAN FISHERIES (2/2)

Risso's dolphin
*Grampus griseus*
- Robust, stocky body, immediately recognizable by its white stripes
- Bulbous forehead, sloping vertically towards the mouth
- Tall, pointed, falcate dorsal fin

Rough-toothed dolphin
*Steno bredanensis*
- Conical head, slightly-domed forehead with a long narrow beak
- Robust body ahead of the dorsal fin, becoming more slender towards the rear
- Dorsal fin located mid-back, with a wide base, a pointed tip and sometimes a vertical rear margin

Bottlenose dolphin
*Tursiops truncatus*
- Relatively short, stubby beak
- Slightly-rounded melon
- Dark gray, gray-blue or gray-brown back, lighter flanks, white, light gray or pink belly
- Prominent falcate dorsal fin

1The illustrations are not drawn to scale
With the engine in neutral, gently pull the net up.

Pass two ropes around the net, one in front of and one behind the dolphin. Leave some slack in the net.

Using the ropes, slowly bring the dolphin alongside the vessel.

If the dolphin is small, slowly lift it on board and follow the guidelines in Technical Sheet 5.

If the dolphin is too big to be lifted on board, create an opening in the net wide enough to allow it to slide into the water, taking care not to wound it.
TECHNICAL SHEET N° 3 - RELEASING DOLPHINS CAUGHT INCIDENTALLY IN TRAWL FISHERIES

1. With the engine in neutral, gently haul in the trawl net.

2. Identify where in the net the dolphin has become entangled. Use a rope to avoid any harmful contact between the dolphin and the vessel.
   
   2a. The dolphin is entangled in the front end of the trawl: pass two ropes around the net, one in front of and one behind the dolphin, to hoist it on board more easily.

   2b. The dolphin is entangled in the cod end of the trawl.

3. Hoist the dolphin, slowly bring it on board and follow the guidelines in Technical Sheet 5.
Bring the dolphin as close to the vessel as possible without pulling on the line to avoid wounding it.

Cut the line as close as possible to the dolphin’s beak with a cutting tool (wire-cutters or with a blade attached to a long handle for large longliners)

Do not:

pull the line

use the boathook
Using a knife or wire cutters, gently release the dolphin from the net taking care not to wound it.

Whatever the condition of the dolphin, place it in the shade, in a quiet and safe place and put a wet cloth over its body, covering its eyes to avoid any additional stress.

Keep it under observation and follow the guidelines in Technical Sheet 7.
Attracted by pelagic fish, dolphins may become trapped in the net during encirclement.

Trying to escape, they may dive and become entangled in the seine netting.
To avoid this situation, wait until the dolphins are on the opposite side of the vessel. They will tend to move away spontaneously from the vessel due to the engine noise.

Using a skiff, attach a rope to a net float (point A) and stretch this rope through a point B to create a U-shaped passage; then reduce the net tension to sink the floatline and allow the dolphins to pass over the net. If necessary, use a boathook to help lower the net.
The information above is extremely important! Please submit it, as soon as possible, to the relevant national authorities. If in doubt, ask for their help.
This guide was developed within the framework of a project which aimed to mitigate the negative interactions between endangered marine species and fishing activities. This project was implemented by the Secretariat of the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS) and by the Secretariat of the General Fisheries Commission for the Mediterranean (GFCM), in collaboration with the Specially Protected Areas Regional Activity Centre (SPA/RAC). The main objective of the project was to enhance the conservation of endangered marine species (cetaceans, sea turtles and seabirds, etc.) by promoting responsible fishing practices in the Mediterranean.

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Main bibliographic references

Claro F., Poisson F., Sacchi J. Guides pratiques pour la libération des tortues marines capturées lors des activités de pêches dans la mer Méditerranée.


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GOOD PRACTICE GUIDE FOR THE HANDLING OF SEA TURTLES CAUGHT INCIDENTALLY IN MEDITERRANEAN FISHERIES
TECHNICAL SHEET N° 1 - IDENTIFICATION OF MEDITERRANEAN SEA TURTLE SPECIES

Identification key 1
General observation of the sea turtle: scales (present or not present)

Identification key 2
Observation of the head: number of prefrontal scales

Identification key 3
Observation of the carapace: number of scutes on the carapace and location of the nuchal scute

Identification key 4
Observation of the plastron: number of marginal scutes

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1. Loggerhead sea turtle (Caretta caretta)
   - Head with 2 pairs of prefrontal scales
   - Carapace comprising 5 pairs of costal scutes with the 1st pair touching the nuchal scute
   - Plastron comprising 3 pairs of marginal scutes

2. Leatherback sea turtle (Dermochelys coriacea)
   - Beak with 2 cusps
   - Leather-like carapace with 5 longitudinal ridges

3. Green sea turtle (Chelonia mydas)
   - Head with a single pair of prefrontal scales
   - Carapace comprising 4 pairs of costal scutes with no contact between 1st pair and the nuchal scute
   - Plastron comprising 4 pairs of marginal scutes

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Prefrontal scales (p)
Nuchal scute (n)
Costal scutes (c)
Vertebral scutes (v)
Marginal scutes (m)
TECHNICAL SHEET N° 2 - RELEASING SEA TURTLES CAUGHT INCIDENTALLY IN SET NET FISHERIES

1. With the engine in neutral, gently pull the net up to hoist the sea turtle on board.

2. Pass a rope around the net, in front of the sea turtle.

3. Pass a second rope around the net, behind the sea turtle. Leave some slack in the net.

4. Using the ropes, slowly bring the sea turtle alongside the vessel.

5. Slowly lift the sea turtle on board. Free it from the net using a knife or wire cutters and follow the guidelines in Technical Sheet 5.
With the engine in neutral, gently haul in the trawl net.

Use a rope to avoid any harmful contact between the sea turtle and the vessel. Identify where in the net the sea turtle has become entangled.

Hoist the sea turtle, slowly bring it on board. Free the sea turtle from the net using a knife or wire cutters and follow the guidelines in Technical Sheet 5.
If the sea turtle is small, lift it on board using both hands.

With the engine in neutral, lift the sea turtle on board.

If the sea turtle is large, lift it on board with the help of a net and a rope.

If the hook is visible and can be removed, place a piece of wood or pipe in the sea turtle's mouth to avoid being bitten when removing the hook. Use the wire cutters to cut the hook into two and remove both parts.

If hook removal is not possible, cut the line as close as possible to the mouth of the sea turtle. Do not pull the line.

Do not:

If the sea turtle is too large to be lifted on board, bring it as close as possible to the vessel without pulling the line to avoid any injury.

Cut the line as close as possible to the sea turtle with a cutting tool (wire cutters or with a blade attached to a long stick for large longliners).

Pull the line

Grab the sea turtle by its flippers
The sea turtle moves: the sea turtle is alive. Follow the guidelines in Technical Sheet 6.

The sea turtle does not move: the sea turtle is either dead, or unconscious. Follow steps 2 and 3.

Slowly move your fingers towards the sea turtle’s eyes.

The sea turtle closes its eyelids. The sea turtle is not dead; it could be unconscious with water in its lungs. Start reviving.

If possible, raise the rear of the sea turtle about 20 cm (using a box or a tire, for example) to help drain the water from its lungs.

Keep it under observation in order to detect any sign of life. Follow the guidelines in Technical Sheet 6.
**DATE**
**GPS Position**
**Geographical subregion**
**Type of vessel (Fleet segment)**
**Fishing gear**
**Species caught**
**Total number of specimens caught**
**Number of specimens released alive**
**Number of dead specimens**
**Number of specimens in unknown status**

**And if possible...**

*Take photos of the sea turtle(s), head and carapace*

The information above is extremely important! Please submit it, as soon as possible, to the relevant national authorities. If in doubt, ask for their help.

Contact the relevant national authorities to report each incidental sea turtle catch.

Describe the sea turtle’s condition, especially whether it is alive and in good shape, or is injured, or shows no sign of life/is dead.

Organise with the authorities any follow-up care that will be necessary on return to port.
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GOOD PRACTICE GUIDE FOR THE HANDLING OF SEABIRDS CAUGHT INCIDENTALLY IN MEDITERRANEAN PELAGIC LONGLINE FISHERIES
TECHNICAL SHEET N°1 - SEABIRD SPECIES MOST AFFECTED BY MEDITERRANEAN PELAGIC LONGLINE FISHERIES (1/2)

European shag (Phalacrocorax aristotelis)
- Short crest
- Slightly-hooked beak
- Black plumage with a green tinge

Audouin's gull (Larus audouini)
- Dark red beak with a black bar near the tip
- Dark gray-green legs

Yelkouan shearwater (Puffinus yelkouan)
- Wings with pale-gray edging
- Legs protrude from the tail in flight
- White breast and darker belly

Mediterranean gull (Larus melanocephalus)
- Black hood
- Uniformly-gray wings
Balearic shearwater
(*Puffinus mauretanicus*)
- Long thin beak
- Brown underwing covert
- Grayish-beige belly and pink legs

Scopoli’s shearwater
(*Calonectris diomedea*)
- Yellowish, hooked beak
- Pure white underwing covert with darker edging
- White chest and throat

European storm petrel
(*Hydrobates pelagicus*)
- Black plumage
- White rump
- Small dark beak
Have the correct equipment:

- A towel/blanket
- A knife
- A net
- A box/tray with a lid
- Pliers/bolt cutters
- Gloves
- Protective glasses

With the engine in neutral, use the net to lift the seabird on board.

Alternatively, grab the bird with both hands, keeping its wings pressed against its body to avoid damaging its feathers.

Do not:

- Pull the line
- Grab the seabird by the neck
**Restraining the bird**

If the hook is visible and can be removed:

Slowly bring the bird on board and gently fold its wings against its body. Wrap it in a towel/blanket (not too tightly) and, if possible, cover its eyes. Hold its beak gently shut but do not cover its nostrils. Make sure that it does not come into contact with oil on the deck.

Cut the hook using the pliers (or the bolt cutters for thicker hooks) and extract separately the two parts of the hook. Do not pull the hook in the opposite direction as the barb could further injure the bird. If you can see it, flatten the barb first with the pliers.

If hook removal is not possible:

Because removing the hook might further injure the bird or the hook has been ingested, cut the line as close to the beak as possible and leave the hook in the bird. Follow the guidelines provided in Technical Sheet 3.

**Holding the bird firmly**

Hold the bird firmly between your legs without squeezing. Keep its wings against its body to avoid any risk of dislocation or fracture.
LET THE BIRD REST

Place the bird in a ventilated box or tray in a quiet, dry, shaded place. Make sure that it is kept away from oil. Do not try to feed it. Wait for an hour or two.

If the bird has ingested the hook or is in bad shape, keep it on board and contact the relevant national authorities as indicated in Technical Sheet 4.

If the hook has been removed, the bird’s feathers are dry, and the bird is alert and able to stand, it can be released.

RELEASING THE BIRD

Small vessels

Slowly lower the bird onto the water. The bird may remain on the water for some time after release.

Large vessels

Lift the bird and release it into the wind from the vessel deck.
Contact the relevant national authorities to report each incidental seabird catch.

Describe the seabird’s condition, especially whether it is in good shape and has been released or it has swallowed the hook and/or is in poor shape and has been kept on board.

Organise with the authorities any follow-up care that will be necessary on return to port.

The information above is extremely important! Please submit it, as soon as possible, to the relevant national authorities. If in doubt, ask for their help.

Date
GPS Position
Geographical subregion
Type of vessel (Fleet segment)
Fishing gear
Species caught
Total number of specimens caught
Number of specimens released alive
Number of dead specimens
Number of specimens in unknown status

And if possible...

Take photos of the seabird(s). If a bird is ringed, note the ring number.
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LPO. Comment manipuler un oiseau ? Programme Oiseaux en Détresse de la LPO, France.
GOOD PRACTICE GUIDE FOR
THE HANDLING OF SHARKS AND
RAYS CAUGHT INCIDENTALLY
IN MEDITERRANEAN PELAGIC
LONGLINE FISHERIES
Corps massif et trapu.
Peau ridée, surtout sur les 2/3 arrières du corps.
Coloration grise-foncée à marron avec les contours de la gueule blancs et des tâches claires variables sur le ventre.

TECHNICAL SHEET N° 1 - SHARK AND RAY SPECIES MOST AFFECTED BY MEDITERRANEAN PELAGIC LONGLINE FISHERIES (1/3)

Porbeagle (Lamna nasus)
- Dorsal fin level with the pectoral fins
- White patch at the rear of the dorsal fin
- Pointed snout

Shortfin mako shark (Isurus oxyrinchus)
- Head longer than the pectoral fins
- Wide mouth
- Dorsal fin further back than the pectoral fins

Protected species, fishing is prohibited in the Mediterranean Sea. The reporting of any incidental catch is mandatory (see Technical Sheet 6)
Great white shark *(Carcharodon carcharias)*
- Wide mouth
- Long gill slits
- Large dorsal fin
- Long caudal keel

Common thresher *(Alopias vulpinus)*
- Conical snout
- Small eyes
- White belly
- Dark brown and slate gray back becoming slate gray to dark blue on the flanks

Blue shark *(Prionace glauca)*
- Very slender body shape
- Dark blue back and white belly
- Long and pointed pectoral fins

Protected species, fishing is prohibited in the Mediterranean Sea. The reporting of any incidental catch is mandatory (see Technical Sheet 6)

Fishing of this species is allowed in the Mediterranean Sea, but the reporting of any catch is mandatory (see Technical Sheet 6)
TECHNICAL SHEET N° 1 - SHARK AND RAY SPECIES MOST AFFECTED BY MEDITERRANEAN PELAGIC LONGLINE FISHERIES (3/3)

**Pelagic stingray**
*Pteroplatytrygon violacea*
- Rounded snout
- Back without spines
- Pelvic fins protruding from the disc

**Bigeye thresher**
*Alopias superciliosus*
- Deep frontal furrow
- Purple gray back
- Big eyes
- White belly

**Bluntnose sixgill shark**
*Hexanchus griseus*
- Small fluorescent green eyes
- Six gill slits
- Dorsal fin close to the tail
TECHNICAL SHEET N° 2 - PRECAUTIONS TO TAKE WHEN RELEASING SHARKS AND RAYS CAUGHT IN PELAGIC LONGLINE FISHERIES

ALWAYS WATCH OUT FOR BITES, BLOWS AND STINGS!

HAVE THE CORRECT EQUIPMENT:

- Hook remover
- Pincers / Bolt cutters
- Long-handled pruning shears
- Gloves
- Protective glasses
TECHNICAL SHEET N° 3 - RELEASING SHARKS CAUGHT IN PELAGIC LONGLINE FISHERIES

1. Removing the hook from the shark

   **If the shark is in the water**
   Cut the line as close as possible to the shark’s mouth

   **If the shark is on board**
   Cut the hook if possible or cut the line as close as possible to the hook ring

   _N.B. In order to release the shark as quickly as possible, it is best not to bring it on board._

2. Releasing the shark

   Handle the shark holding a pectoral fin with one hand and the tail with the other.

   Return the shark to the water, head first, without throwing it. Let the animal slide.
TECHNICAL SHEET N° 4 - RELEASING RAYS CAUGHT IN PELAGIC LONGLINE FISHERIES

Removing the hook from the ray

Rays rarely survive after release due to jaw damage. Although these animals are potentially dangerous, there are simple handling procedures that increase their chances of survival after release.

If the hook is lodged in the corner of the mouth

Cut the hook if possible or cut the line as close as possible to the hook ring.

If the ray is deep-hooked

Tie the end of line to a fixed point so as to have both hands free. Use a hook remover or a pair of pliers to grab hold of the tip of the hook and then rotate it in order to extract it. Cut the line to allow the ray to drop back into the water.
Do not lift the shark by the tail or by the head.

Do not incise the flesh or cut the jaw of the ray to remove the hook.

Do not carry the shark by its gill slits.

Do not put your hands in the shark's mouth to remove the hook.

Do not carry the shark by inserting the boathook or other sharp objects into its body (jaws or gills).

Do not cause any trauma that might damage the shark's internal organs (for example, do not put pieces of wood into its mouth or cut its flesh).

Do not expose the shark to the sun.
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GFOM, 2012. Recommandation CGPM/36/2012/3 concernant des mesures de gestion des pêches pour la conservation des requins et des raies dans la zone d’application la CGPM.


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