



Food and Agriculture  
Organization of the  
United Nations



SPC  
Secretariat  
of the Pacific  
Community

# MARINE TURTLE IDENTIFICATION CARDS



for Indian Ocean fisheries

# Flatback turtle

(*Natator depressus*)



**Mean length:** 90 cm

**Mean weight:** 70 kg

**Colour:** grey to olive-green carapace; underside of flippers and tail yellow or cream colour.

**Diet:** sea cucumbers, crustaceans and other invertebrates.

**Status:** IUCN: Data Deficient , CITES: Appendix I (international trade and transport prohibited)

FR: tortue à dos plat

ESP: tortuga plana de Australia

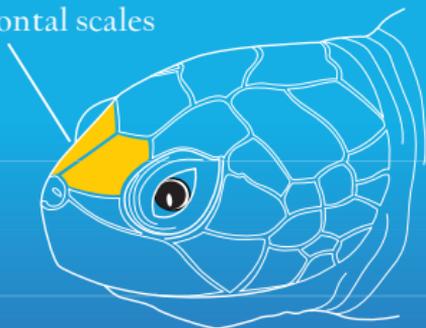


Photo: Dr Colin Limpus

# Flatback turtle

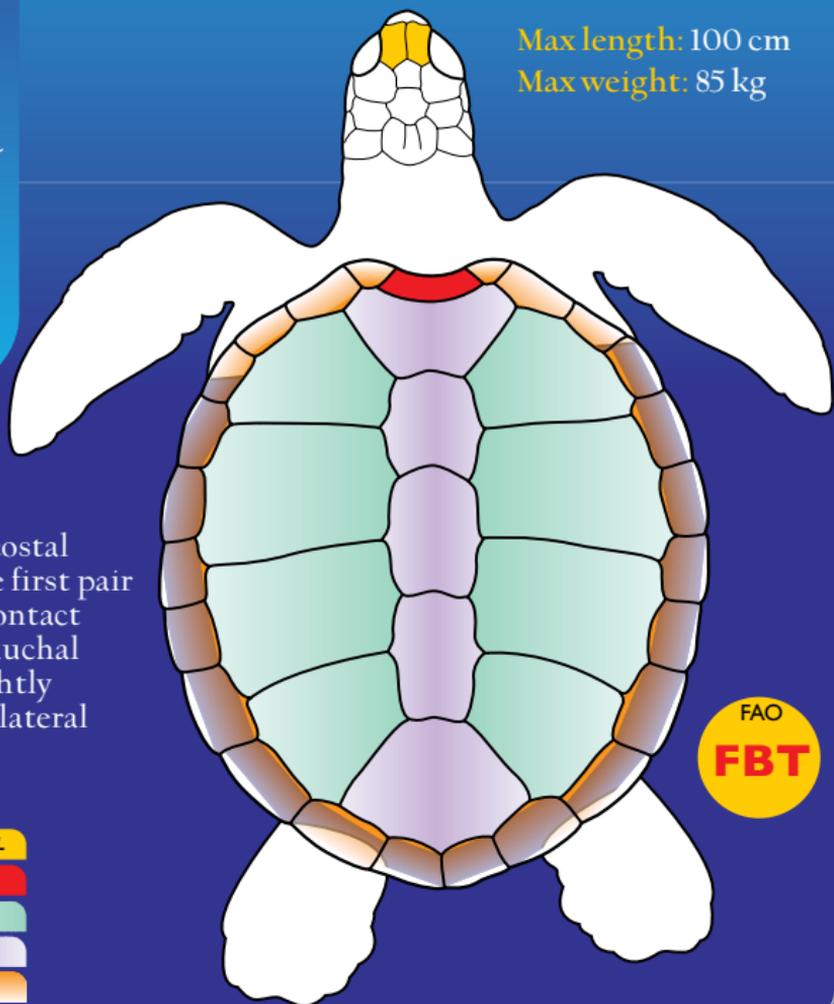
(*Natator depressus*)

1 pair of prefrontal scales



Max length: 100 cm

Max weight: 85 kg



## Carapace:

4 pairs of costal scutes, the first pair is not in contact with the nuchal scute; slightly upturned lateral margins.

PREFRONTAL

NUCHAL

COSTAL

VERTEBRAL

LATERAL

FAO  
**FBT**

# Loggerhead turtle

(*Caretta caretta*)



**Mean length:** 100 cm

**Mean weight:** 110 kg

**Colour:** reddish-brown to orange-brown carapace.

**Diet:** crustaceans, molluscs, fish and echinoderms.

**Status:** IUCN: Endangered, CITES: Appendix I (international trade and transport prohibited).

FR: tortue caouanne

ESP: caguama

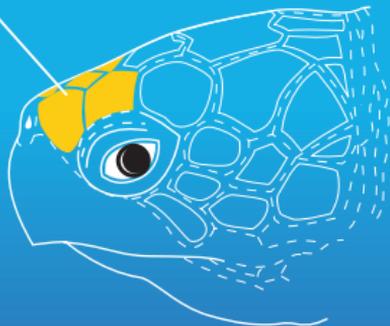


Photo: World Wildlife Fund

# Loggerhead turtle

(*Caretta caretta*)

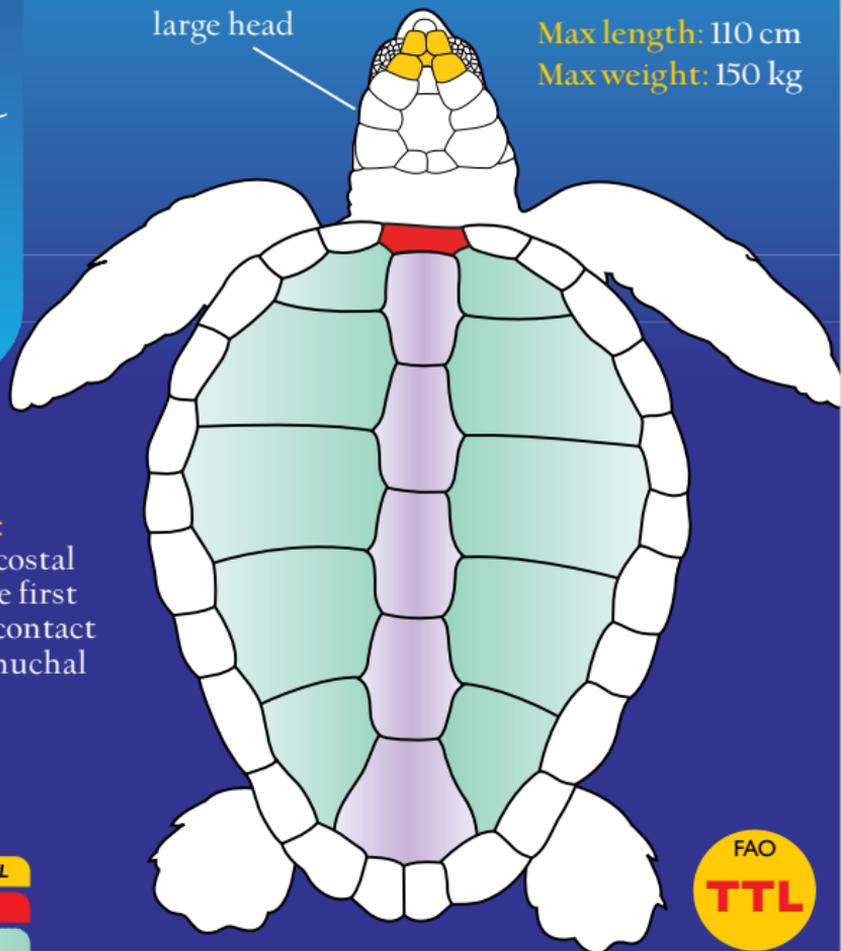
5 prefrontal scales



large head

Max length: 110 cm

Max weight: 150 kg



**Carapace:**

5 pairs of costal scutes, the first pair is in contact with the nuchal scute.

PREFRONTAL

NUCHAL

COSTAL

VERTEBRAL

FAO

TTL

# Hawksbill turtle

(*Eretmochelys imbricata*)



**Mean length:** 90 cm

**Mean weight:** 60 kg

**Colour:** reddish-brown to orange carapace with dark brown to black markings; darkish head scales and flippers, separated by light-colour bands; undersides of flippers and tail very pale yellow.

**Diet:** soft coral, sponges, crustaceans and cephalopods.

**Status:** IUCN: Critically Endangered ; CITES: Appendix I (international trade and transport prohibited).

FR: tortue imbriquée

ESP: tortuga de Carey



Photo: Dr Colin Limpus

# Hawksbill turtle

(*Eretmochelys imbricata*)

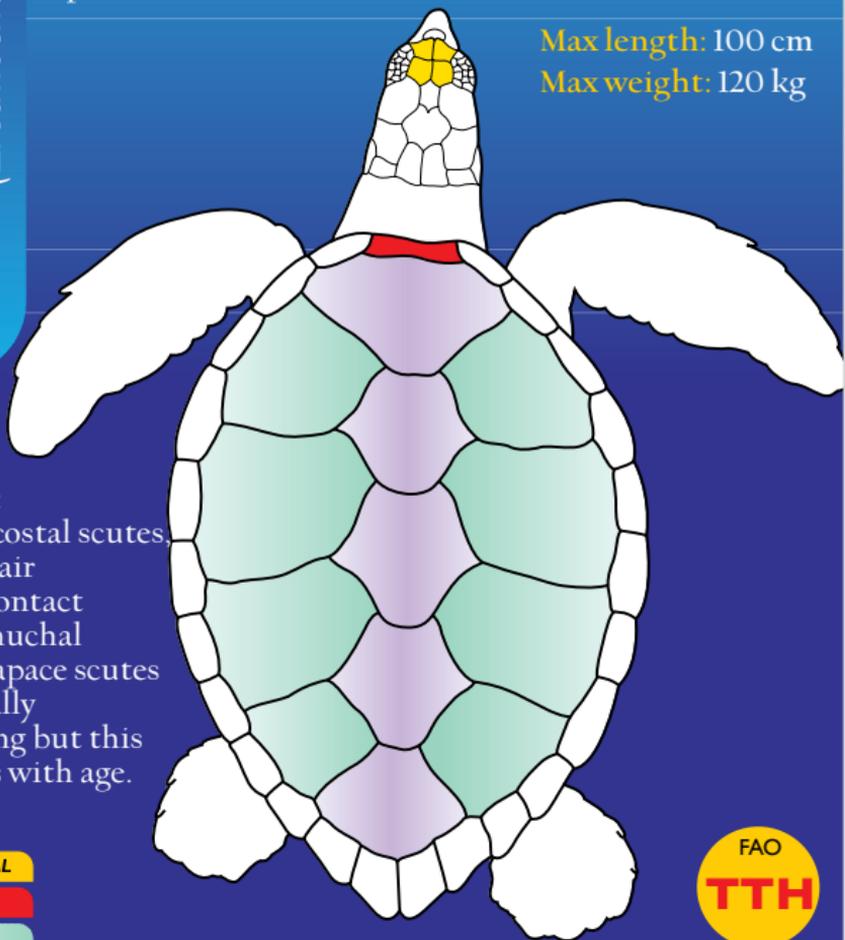
2 pairs of prefrontal scales



pointed hooked beak

Max length: 100 cm

Max weight: 120 kg



## Carapace:

4 pairs of costal scutes, the first pair is not in contact with the nuchal scute; carapace scutes are generally overlapping but this trait fades with age.

PREFRONTAL

NUCHAL

COSTAL

VERTEBRAL

FAO

TTH

# Leatherback turtle

(*Dermochelys coriacea*)



**Mean length:** 170 cm

**Mean weight:** 450 kg (record at 918 kg)

**Colour:** back (pseudocarapace) and entire body: deep bluish-black with white spots. This animal does not have any scales.

**Diet:** mainly jellyfish but also molluscs, seaweed or plants.

**Status:** IUCN: Critically Endangered ; CITES: Appendix I (international trade and transport prohibited)

FR: tortue luth

ESP: tortuga laud

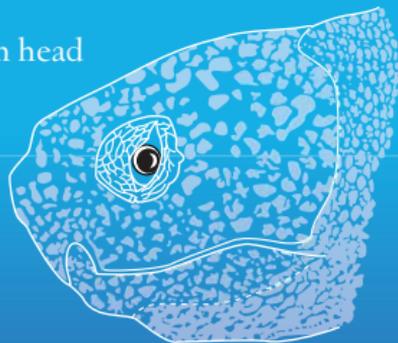


Photo: Vincent Liardet

# Leatherback turtle

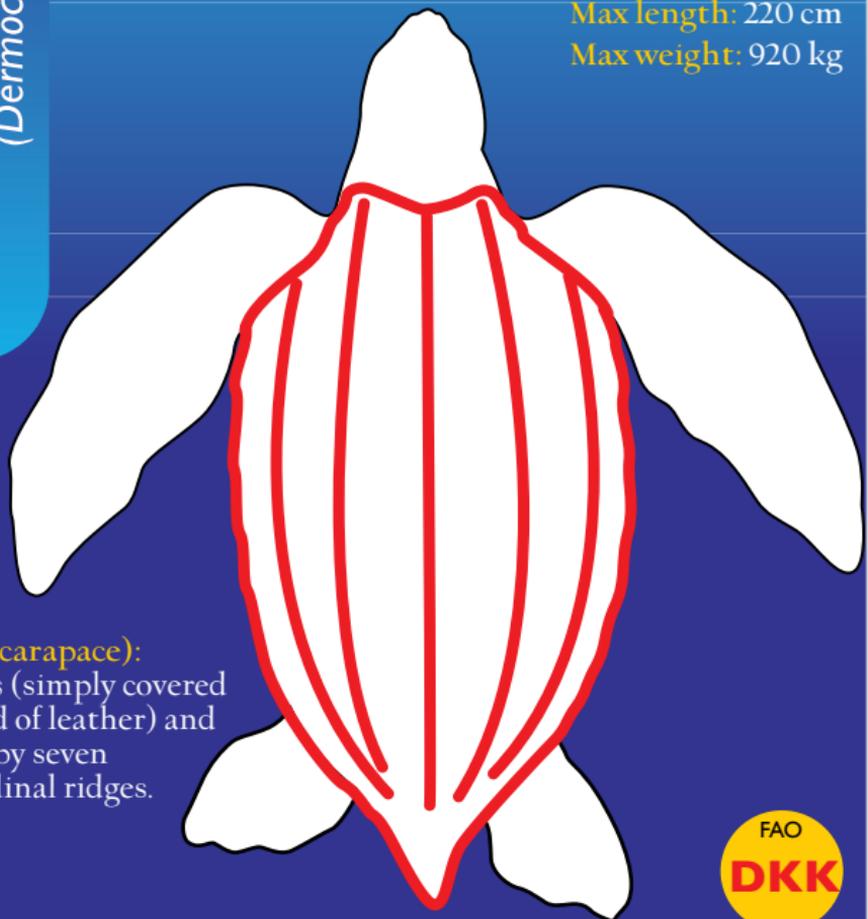
(*Dermochelys coriacea*)

no scales on head



Max length: 220 cm

Max weight: 920 kg



Back

(pseudocarapace):

no scales (simply covered by a kind of leather) and divided by seven longitudinal ridges.

# Olive ridley turtle

(*Lepidochelys olivacea*)



**Mean length:** 70 cm

**Mean weight:** 45 kg

**Colour:** carapace and underside of flippers green to dark brownish-green; top of flippers and neck greyish-green. Carapace almost as large as long.

**Diet:** crustaceans, molluscs, jellyfish, less frequently seaweed and plants.

**Status:** IUCN: Vulnerable ; CITES: Appendix I (international trade and transport prohibited)

FR: tortue olivâtre

ESP: tortuga golfina

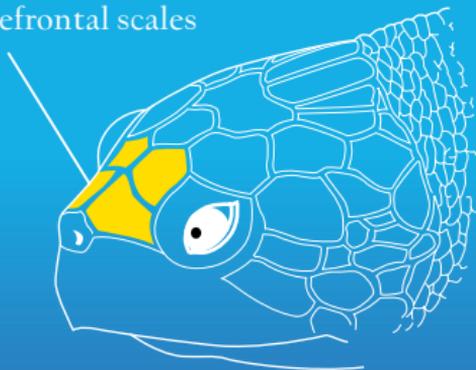


Photo: Dr Colin Limpus

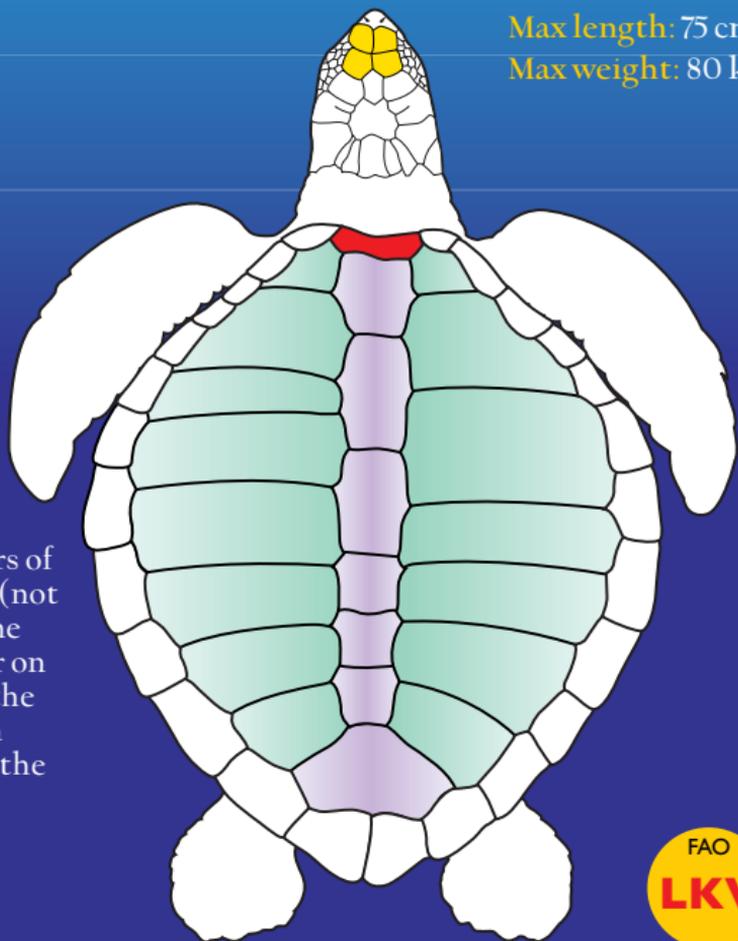
# Olive ridley turtle

(*Lepidochelys olivacea*)

2 pairs of prefrontal scales



Max length: 75 cm  
Max weight: 80 kg



**Carapace:**  
5 or more pairs of costal scutes (not necessarily the same number on either side), the first pair is in contact with the nuchal scute.

PREFRONTAL

NUCHAL

COSTAL

VERTEBRAL

FAO

LKV



# Green turtle

(*Chelonia mydas*)

**Mean length:** 110 cm

**Mean weight:** 145 kg

**Colour:** olive-green carapace with black spots in adults (> 90 cm); brick red with a few streaks in sub-adults (15–90 cm); bluish-black with a white edge bordering the carapace and flippers at birth.

**Diet:** adults: herbivores; juveniles: mainly carnivores (small crustaceans, molluscs and other invertebrates).

**Status:** IUCN: Endangered ; CITES: Appendix I (international trade and transport prohibited)

FR: tortue verte

ESP: tortuga verde

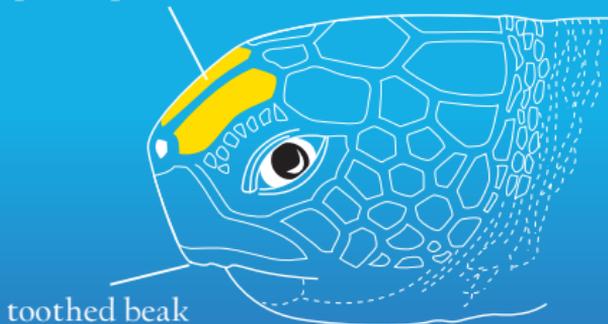


Photo: Vincent Liardet

# Green turtle

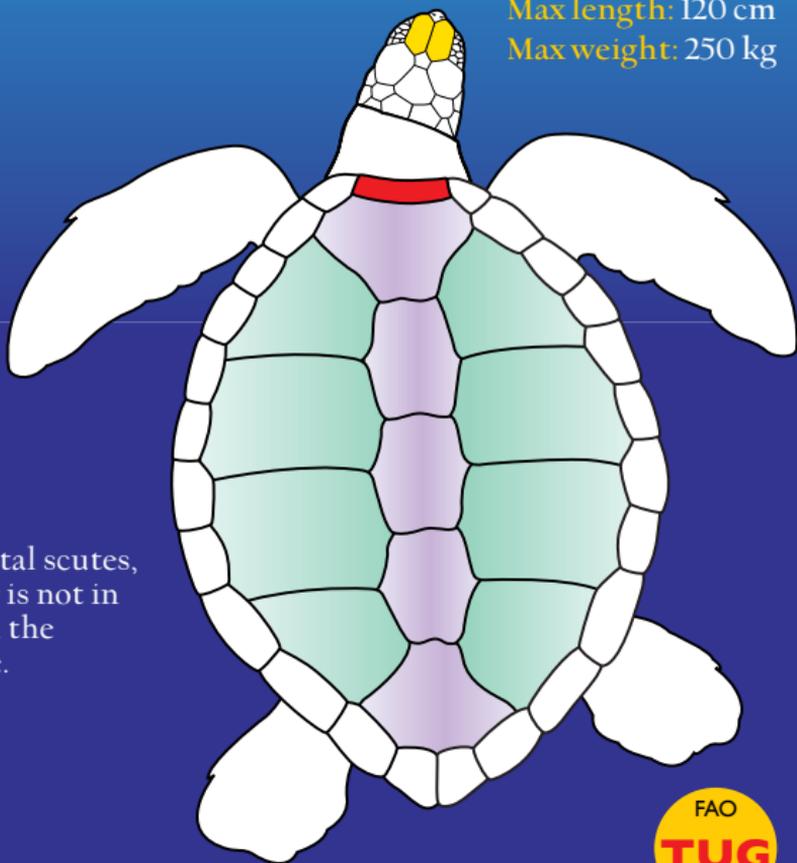
(*Chelonia mydas*)

1 pair of prefrontal scales



Max length: 120 cm

Max weight: 250 kg



## Carapace:

4 pairs of costal scutes, the first pair is not in contact with the nuchal scute.

PREFRONTAL

NUCHAL

COSTAL

VERTEBRAL

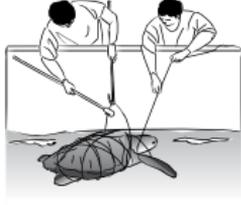
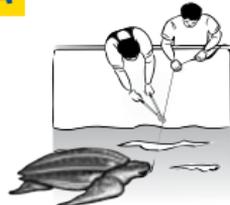
FAO

TUG

# Releasing hooked turtles

If a turtle is caught, the following steps should be taken to give it the best possible chance of survival:

## A Assess the turtle's size,



*if large, release it or entangle it using cutter and gaff to cut tangled lines*

*if small, bring it on board with dip net*

## B Place a piece of wood in the turtle's mouth so it cannot bite,



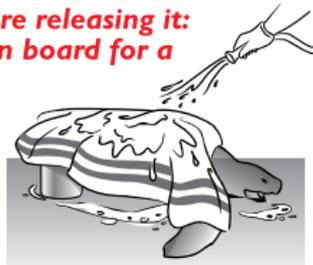
*if hook is visible, cut off barb and remove hook, or use de-hooker to remove hook*

*if hook is not visible, cut line close to mouth*

## C Assess the condition of the turtle before releasing it: depending on how lively it is, keep it on board for a minimum of 4 hours, and up to 24 hours



Raise rear flippers 20 cm off deck to drain water from lungs



Place turtle in shaded location, covered with wet towels

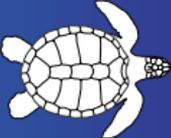
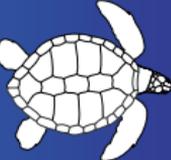
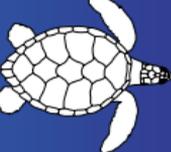
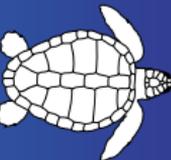
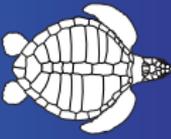
## D Identify the turtle's species name then carefully return it to the water



## E Record the interaction on your logbook and inform your fisheries department



# MARINE TURTLE ASIAN NAMES

	<b>Flatback turtle</b>		<b>Green turtle</b>		<b>Hawksbill turtle</b>		<b>Leatherback turtle</b>		<b>Loggerhead turtle</b>		<b>Olive ridley turtle</b>
平背游龟		绿海龟		玳瑁		棱皮龟		蠍龟		丽龟	
남작등 바다 거북	Penyu punggung rata	녹색 바다 거북	Penyu hijau	메뚜리 바다 거북	Penyu sisik	장수 바다 거북	Penyu belimbing	붉은 바다 거북	Penyu anjing, penyu kepala besar, penyu kakaktua	꼬마 바다 거북	Penyu lumpur
ヒラタウミガメ	アオウミガメ	アオウミガメ	Bihlog, katuran, Payukan, Puhno, Tabugon, Iortuga, Iuod.	タヌキ	Karahan, Sisik, Sisikan, Ulnaban.	オサガメ	Abi labi, Balimbing, Benerecan, Kantuhan, Kulod Manahaga	アカウミガメ	Bulawon, Garanga.	ヒメウミガメ	Kakady, Lambangan, Latun, Lunok, Mukoy.
平背龜	綠蠍龜	玳瑁	革龜	赤蠍龜	欖蠍龜						

# Marine Turtles are Endangered Species

## **Ecology:**

- Marine turtles have inhabited the oceans for over 100 million years.
- Six of the seven recognised species of marine turtles can be found in the Indian Ocean.
- After spending decades at sea, females return to the beach near to where they were born to lay many dozens of eggs in 3 to 4 successive "crawls".
- Hatchlings break out of the nest chamber and enter the sea after 45 - 90 days of incubation, depending on the species.
- Only one out of a thousand hatchlings will reach adulthood. The very high natural mortality rate makes the conservation of every individual encountered at sea important.
- At sea, turtles have a varied diet, depending on the species, which may include jellyfish, seagrass, sponges, coral, invertebrates and fish.

## **Threats to marine turtles:**

- Accidental death in commercial fishing gear, including gillnets, surface longlines and drifting FADs.
- Swallowing deadly waste, including plastics, polystyrene, cigarette filters, etc...
- Illegal poaching for meat, eggs and shell.
- Degradation and loss of nesting habitat due to development.

## Play a Part in their Conservation!

### ***If you are on a commercial fishing vessel:***

- Follow expert advice to reduce accidental capture of marine turtles.
- If you do capture a marine turtle accidentally, use the best techniques to increase its chance of survival once returned to the sea.
- Use these cards to identify the turtle species, record the capture in your logbook and notify your fisheries authority in order to assist in important data collection exercises.
- Check for any tags on the turtles' flippers. Record the tag number, date and location of capture. If possible, take a photograph of the animal before release and send the information to the address shown on the tag.

### ***If you are on a nesting site:***

- Do not disturb adult turtles as they come ashore to lay eggs. Stay in the distance and do not shine lights on them. Otherwise, they may abort their nesting attempt. If you wish to take a photograph, do so *without flash* only after the animal has begun laying eggs.
- Do not touch the turtles or their eggs.
- If you see turtle hatchlings on the beach, do not handle them as they move towards the sea.
- Keep dogs away, as they are potential predators.

## **International and national conservation measures:**

- The Convention on International Trade in Endangered Species (CITES) strictly regulates international trade in any of the seven species of marine turtles.
- The Convention on Migratory Species (CMS) and its Indian Ocean Marine Turtle MoU (IOSEA) require member countries to put in place domestic conservation measures and to cooperate in common conservation programmes.
- Many countries also prohibit turtles from being hunted and sold or consumed locally, through their regulations.

## **IOTC Requirements Regarding Marine Turtles**

*The following are among the actions that fishers/observers are expected to take in relation to marine turtles, in line with IOTC Conservation and Management Measures.*

- Observers/fishers should record any interaction with a marine turtle noting the species involved, the date and location and report to the flag state authority.
- Observers/fishers should take all the necessary steps to release the turtle alive and in good condition.
- On longliner, observers/fishers should ensure that a line-cutter and a de-hooker are available onboard.
- Purse-seine vessels shall avoid encirclement of marine turtles and are encouraged to adopt FAD designs which reduce entanglement of marine turtles.

### **For more information on marine turtles:**

- IOSEA Marine Turtle MoU: [www.ioseaturtles.org](http://www.ioseaturtles.org)
- KELONIA observatory of marine turtles: [www.kelonia.org](http://www.kelonia.org)
- IUCN: [www.iucnredlist.org](http://www.iucnredlist.org) / [www.iucn-mtsg.org](http://www.iucn-mtsg.org)

# MARINE TURTLE IDENTIFICATION KEY

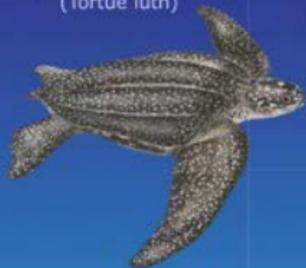
## Carapace

- no scute
- 5 distinct ridges

No claw



*Dermochelys coriacea*  
(Leatherback turtle)  
(Tortue luth)



## Carapace

- large scutes
  - no continuous ridge
- Claws on flippers

4 pairs of costal scutes



5 pairs of costal scutes

- angular carapace with truncated back
- colour red brown to brown



*Caretta caretta*  
(Loggerhead turtle)  
(Tortue caouanne)



6 pairs of costal scutes

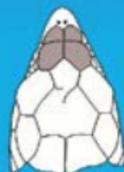
- carapace +/- circular
- colour grey green



*Lepidochelys olivacea*  
(Olive ridley turtle)  
(Tortue olivâtre)



2 pairs of prefrontal scales  
Overlapping scutes  
2 claws on each flipper



*Eretmochelys imbricata*  
(Hawksbill turtle)  
(Tortue imbriquée)



1 pair of prefrontal scales  
No overlapping scutes  
1 claw on each flipper



*Chelonia mydas*  
(Green turtle)  
(Tortue verte)



These turtle identification cards are produced as part of a series of awareness materials developed by the Indian Ocean Tuna Commission and the Secretariat of the Pacific Community in order to improve the reporting of interactions between vessels targeting species under the management mandate of IOTC and marine turtles.



**SPC**  
Secretariat  
of the Pacific  
Community

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**IOTC version: Julien Million**