


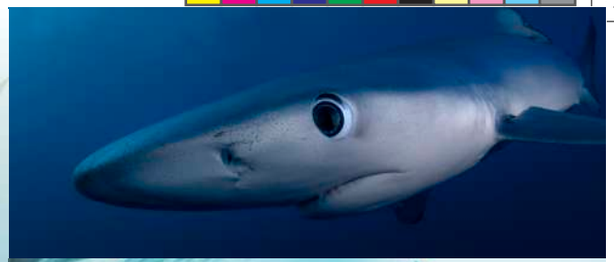


COMPLIANCE AND LAW ENFORCEMENT IDENTIFICATION GUIDE

CHONDRICHTHYANS OF SOUTH AFRICA

FOR THE EASY IDENTIFICATION OF SHARKS, SKATES, RAYS AND CHIMAERAS COMMONLY CAUGHT IN SOUTH AFRICAN WATERS





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"The global increase of shark and ray catches raises concern about the sustainability of these resources. Sharks and rays share life history characteristics that make them susceptible to overexploitation. Not only are they often caught as bycatch in fisheries that are managed for species that can sustain a higher fishing pressure, sharks and rays form a large part of the unwanted bycatch that is discarded at sea, much of which is unrecorded and unregulated, which complicates the management of these resources."

From South African National Plan of Action (NPOA) for Sharks, 2013.

Shark Conservation Fund

forestry, fisheries & the environment
Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

WILDOCEANS
A programme of the WILDTRUST

INTRODUCTION & PURPOSE OF THIS GUIDE
Identification of species by officials and observers needs to be improved upon to get an accurate idea of which species are impacted by fisheries in South Africa. This guide was created to assist officials and observers with chondrichthyan identification, in partnership with the Department of Forestry, Fisheries and the Environment. It includes species recorded and encountered by fisheries as in da Silva et al (2015). This guide especially focuses on endemic and "vulnerable, threatened and protected species". In addition, rare animals where either samples or entire animals are desperately needed, are indicated. However, it is acknowledged that some species have not been included here due to taxonomic uncertainty, or lack of information. In addition, some deep-sea species have been lumped together and examples are given due to lack of images and taxonomic uncertainty. Each species is briefly described, depicted with an illustration, and notes on its distribution, endemicity and the applicable legislation are highlighted, allowing for easy and accurate identification in the field.

SOUTH AFRICAN MARINE ENVIRONMENT
Mainland South Africa has a coastline of over 3 600 km and more than a million square kilometres of marine area within its 200 nautical mile Exclusive Economic Zone. The continental shelf is narrow on the east coast, intermediate on the west coast and extends to over 260 km offshore to form the Agulhas Bank in the south, with the greatest depth recorded at 5 700 m. South Africa is well-known for its extraordinary biodiversity, with almost 13 000 known marine species, thus making it the third most biologically diverse country in the world. Approximately a third of South African marine species are endemic with this high biodiversity and endemism being a by-product of rapid changes in temperature and nutrient availability, which effectively form barriers around the coastline.

SOUTH AFRICAN CHONDRICHTHYANS
The South African chondrichthyan fauna is currently represented by 113 sharks, 71 batoids (rays and skates) and 8 chimaeras, with 13 endemic to South African waters. Sharks, rays and chimaeras around the world are being affected both directly and indirectly by various human activities. As a result, some chondrichthyan populations are depleted with many being assessed as threatened with extinction. Chondrichthyans have life histories characterised by low fecundity, slow growth rates and late maturity. These life-history strategies make them vulnerable and susceptible to over-exploitation. The rapid economic growth in the fisheries sector on a global scale has effectively been unregulated and driven by unrestricted international trade in shark products. Also, the high levels of mortality from bycatch and the degradation of essential nursery grounds and other critical coastal, estuarine, and freshwater habitats from development and pollution are significant threats to chondrichthyans.

IUCN RED LIST
The International Union for Conservation of Nature (IUCN) Red List is an indicator of the health and status of biodiversity on a global scale. It is a tool to inform and initiate or mobilise action for biodiversity conservation and policy change. For many years, the Shark Specialist Group of the IUCN has been assessing the global and regional conservation status of chondrichthyans using the IUCN Red List categories and criteria. These criteria endeavour to provide an objective assessment of a species' extinction risk. The chondrichthyan fauna in South Africa have been assessed on global populations, and 8 Critically Endangered, 20 Endangered and 37 Vulnerable chondrichthyan species occur in South African waters.

SOUTH AFRICAN LEGISLATION RELEVANT TO CHONDRICHTHYANS
In 1996, Section 24 of the South African Constitution preserved fundamental environmental rights with a strong emphasis on equitable access to resources. In 1998, NEMA, the National Environmental Management Act (No. 107 of 1998) was enacted, becoming the framework for Environmental legislation in South Africa. In the marine realm, and specifically related to sharks and rays, critical pieces of legislation (and related regulations) are applicable, including the Marine Living Resources Act No. 18 of 1998 (MLRA), National Environmental Management: Biodiversity Act No. 10 of 2004 (NEMBA) and the National Environmental Management: Protected Areas Act No. 57 of 2003 (NEMPAA). Also, South Africa is a signatory to the international Convention of Migratory Species (CMS), including the Sharks MOU and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

FISHERIES WITHIN SOUTH AFRICA

Below is a summary of the various fisheries impacting chondrichthyans within South African waters. Excluded from these fisheries are spearfishing and marine aquarium fish capture, where chondrichthyans are generally not caught (although increasing in live aquaria). An explanation and permit conditions of the various fisheries are outlined below. Apart from the prohibited species of white shark (*Carcharodon carcharias*), basking shark (*Cetorhinus maximus*), whale shark (*Rhincodon typus*) and sawfish (family Pristidae), there is a bag limit of one shark/ray per day for leopard catshark (*Poroderma pantherinum*), striped catshark (*Poroderma africanum*), raggedtooth shark (*Carcharias taurus*) and spotted gully shark (*Triakis megalopterus*). No chondrichthyans may be caught in the cast-net fishery.

DEMERSAL SHARK LONGLINE FISHERY

- Heads and fins attached.
- Slot limit for all sharks is 70-130cm.
- Fishing prohibited north of the Kei River due to an increase in shark biodiversity.
- ***Prohibited species:*** *catsharks* (*Poroderma* spp; *Haploblepharus* spp); broadnose sevengill cow shark (*Notorynchus cepedianus*); oceanic sharks (*mako: Isurus oxyrinchus, Isurus paucus and blue: Prionace glauca*); hammerhead sharks (*Sphyrna zygaena, S. lewini and S. mokarran*); thresher sharks (*Alopias vulpinus, A. superciliosus and A. pelagicus*); oceanic whitetip (*Carcharhinus longimanus*); silky shark (*Carcharhinus falciformis*); white shark (*Carcharodon carcharias*); sawfish family Pristidae; raggedtooth shark (*Carcharias taurus*) and bull shark (*Carcharhinus leucas*).

HAKE LONGLINE FISHERY (BYCATCH)

- Sharks captured alive must be released alive wherever possible, with hooks removed.
- Bycatch that cannot be released must be landed and recorded.

COMMERCIAL BEACH SEINE AND COMMERCIAL SMALLNET FISHERIES (GILLNETS / DRIFTNETS AND SETNETS)

- No elasmobranchs (i.e. excluding chimaeras) to be caught and traded, must be released alive; or if dead handed over to Department of Forestry, Fisheries and the Environment (DFFE), except in False Bay where seine-net fishers may retain the same species as those caught by the traditional linefishery.

KZN BATHER PROTECTION PROGRAMME (KZN SHARKS BOARD)

- Exempted to catch all marine species regardless of prohibited status.
- Encouraged to release all live catches & tag if possible.
- Required to retain and record details of all species caught.

PELAGIC LONGLINE FISHERY

- ***Species prohibited and if caught must be retained on board the vessel, unless released alive:*** hammerhead sharks (*Sphyrna zygaena, S. lewini and S. mokarran*); thresher sharks (*Alopias vulpinus, A. superciliosus and A. pelagicus*); oceanic whitetip (*Carcharhinus longimanus*); silky shark (*Carcharhinus falciformis*); white shark (*Carcharodon carcharias*); sawfish family (Pristidae); basking shark (*Cetorhinus maximus*); porbeagle (*Lamna nasus*); manta rays (*Manta* spp *and Mobula* spp); whale shark (*Rhincodon typus*); wedgefish (Rhinidae) and dusky shark (*Carcharhinus obscurus*).
- All other chondrichthyans are designated as secondary species, which may not be discarded at sea, only live animals may be returned to sea.
- Stainless steel hooks prohibited.
- Wire traces prohibited.
- No shark targeting allowed: If a vessel catches >60% sharks in a quarter it is required to take observers the next quarter.
- Precautionary Upper Catch Limit (PUCL) set at 2000 tonnes per annum (dressed weight).
- Fins may not be removed from shark trunks (kept attached to the specific trunk either through a partial cut and folded over or tethered to the trunk via a cord).
- Observers are required to report capture and release of all species, including information on release condition.
- 100% observers on foreign fleets.

INSHORE AND OFFSHORE DEMERSAL, SMALL-PELAGIC, MIDWATER & PRAWN TRAWLING FISHERIES

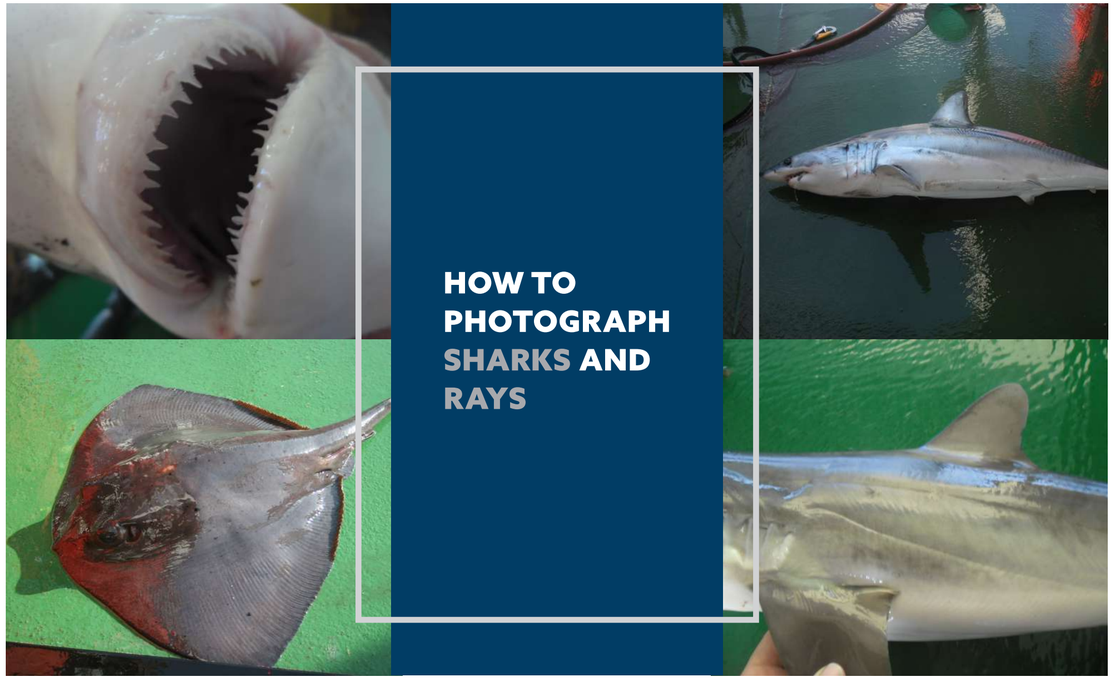
- No bycatch restrictions but move-on rules apply to avoid high chondrichthyan catches.
- No squalene production permitted on board vessels.
- Closed season applicable to KZN prawn trawl fishery from 1 September to last day of February.
- 100% observers on foreign fleets.

RECREATIONAL LINEFISHERY

- No more than 10 hooks per line or connected lines are permitted.
- ***Only a single individual of each shark species per day may be retained in both the commercial and recreational line fishery except the following which are prohibited:*** White shark (*Carcharodon carcharias*); basking shark (*Cetorhinus maximus*); whale shark (*Rhincodon typus*) and sawfishes (*Pristis* spp).

COMMERCIAL LINEFISHERY

- Slot limit for all shark species of 70 – 130cm.
- ***Additional prohibited species include:*** Leopard catshark (*Poroderma pantherinum*); striped catshark (*Poroderma africanum*); raggedtooth shark (*Carcharias taurus*), white shark (*Carcharodon carcharias*) and spotted gully shark (*Triakis megalopterus*).



HOW TO PHOTOGRAPH SHARKS AND RAYS

HOW TO PHOTOGRAPH SHARKS AND RAYS

Due to South Africa's unique placement in two oceans, our knowledge of chondrichthyans is forever increasing and the discovery of new species to science or in South African waters is still very likely. Identification can be difficult, even for the most experienced scientist as many species look very similar.

Reports of sharks, rays, skates and chimaeras not found in this guide are critical to improving the knowledge of scientists and fisheries researchers. Therefore, if readers encounter specimens that are rare, not identifiable or are unsure of their identifications, it is important that photographs are taken to enable and facilitate identification.

When taking photographs:

- Try place the specimen on a plain/uniform background so the shape and details of head, fins and tail can be clearly seen.
- Have a label in the photo to help distinguish different animals, like a label with a unique identifier, such as a number, place or date.
- If possible place an object with a known length (coin, matchbox, ruler etc) in the photo so size can be determined.

The more images the better and all images are useful. Additional photos can include close-ups of the top of the head, underneath the head, including pectoral fins, a close-up between dorsal fins, caudal fins, mouth, nostrils and the teeth.

RAYS & SKATES

Take photos from above looking directly down, capturing the whole animal as well as the details of various parts of the animal, such as the tail, spines, wings, head, area around eyes and mouth. Photos of the underside of the animal are also important.

SHARKS

Photos should be taken of the animals' side, top and bottom. Also take close-up shots of the characteristics which are unfamiliar and/or different.

HOW TO USE THIS GUIDE

The format of this guide is designed to simplify the process of identifying South African chondrichthyans. The following pages will guide the reader on how to interpret the information and how to identify featured sharks, rays and chimaeras.

SYMBOLOGY

Below is the key to the symbols used in this guide for fishery types. Inclusion of a fishery symbol on a species identification page indicates that it may be caught by this gear type but is not an indication that they are caught in large numbers.

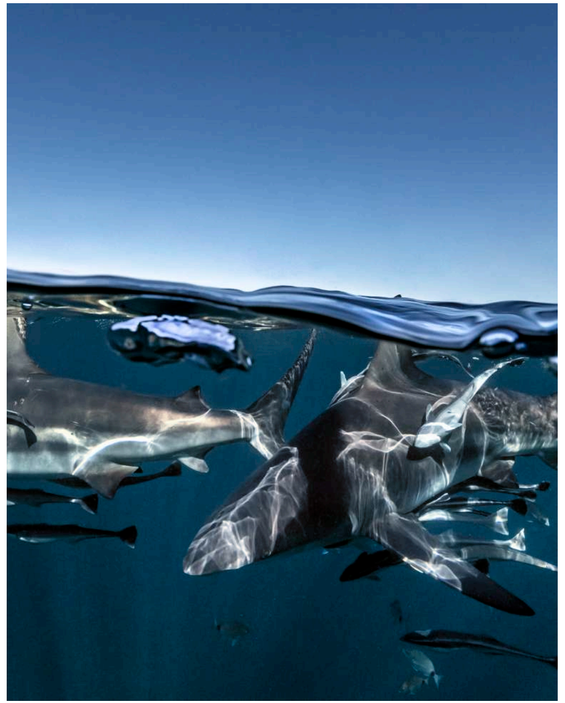
SYMBOL	FISHERY GROUP	TYPES OF FISHERY
	Hook and Line	• Recreational Linefishery • Commercial Linefishery
	Longlines	• Demersal Shark Longline Fishery • Hake Longline Fishery (bycatch) • Pelagic longline fishery
	Gillnets and Nets	• Commercial Beach Seine Net Fisheries • Commercial Small nets (Gillnets; Driftnets and Setnets Fisheries) • KZN Bather Protection Programme (KZN Sharks Board)
	Trawls and Trawling	• Inshore and offshore Demersal Trawl Fisheries • Small-pelagic Trawl Fisheries • Midwater Trawl Fisheries • Prawn Trawl Fisheries

USE OF DISTRIBUTION TERMS

The species distributions represented in the guide have been listed according to three biogeographical areas, the East coast, South coast and West coast of mainland South Africa. Species beyond the political boundaries into Mozambique and Namibia, have also been indicated.

The areas are defined as follows:

- **East coast (E):** Mozambique border / Kosi Bay to Cape Recife (Algoa Bay)
- **South coast (S):** Cape Recife to Cape Point
- **West coast (W):** Cape Point to Namibia border
- **Nam+:** Extends into and/or beyond Namibia
- **Moz+:** Indicates distribution extends into and/or beyond Mozambique



HOW TO USE THIS GUIDE

As a first step, the individual should be assigned to a family, based on the key features common to all members of that family (see illustrations of families: Sharks: Pages 14-22; Batoids: Pages 97-102; Chimaeras: Page 153-154. In appearance, some of the less common or rare species, can be easily separated from most other species by following the family key.

Species in some shark genera such as *Alopias, Carcharhinus and Sphyrna*, some of the deepwater sharks and the ray genera such as *Mobula* can be a little more difficult to identify since many species are very similar in appearance. The shark genera can be identified to species by focusing on characteristics, such as general body shape, colour, the position of the fins, and tooth shape. While in the rays, the shape of the disc, the wings, location and number of dorsal fins, colour and general body shape, are important characters.

Once assigned to a family, the reader should consult the appropriate page for that family. The species can then be identified by checking the physical description. If the specimen appears similar to a few, use a process of elimination by looking at the information available, such as the location of where the specimen was found, which should be compared to the distribution of the species; and in the case for a fisheries species, use the fishing method as another way to choose between possible species.

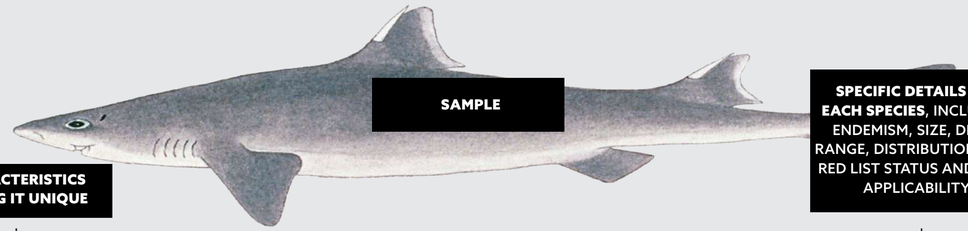
SQUALIDAE ← **FAMILY NAME**

CIRRHIGALEUS ASPER ← **LATIN NAME**

Roughskin spurdog ← **COMMON NAME/S**

CAUGHT IN:

FISHING PRACTICES WHICH CATCH THIS SPECIES (SEE PAGE 8) →



SAMPLE

SPECIFIC DETAILS FOR EACH SPECIES, INCLUDING ENDEMISM, SIZE, DEPTH RANGE, DISTRIBUTION, IUCN RED LIST STATUS AND CITES APPLICABILITY.

CHARACTERISTICS MAKING IT UNIQUE

Physical Description

- Slender, medium size body with narrow snout
- Small dorsal fins; 1st located well behind pectoral fins; no anal fin
- Small 1st dorsal spine, much shorter than fin height; larger 2nd dorsal spine
- Upper precaudal pit present; no subterminal notch to upper caudal
- Body bluish grey, with irregular array of moderately-large white spots; whiteish below

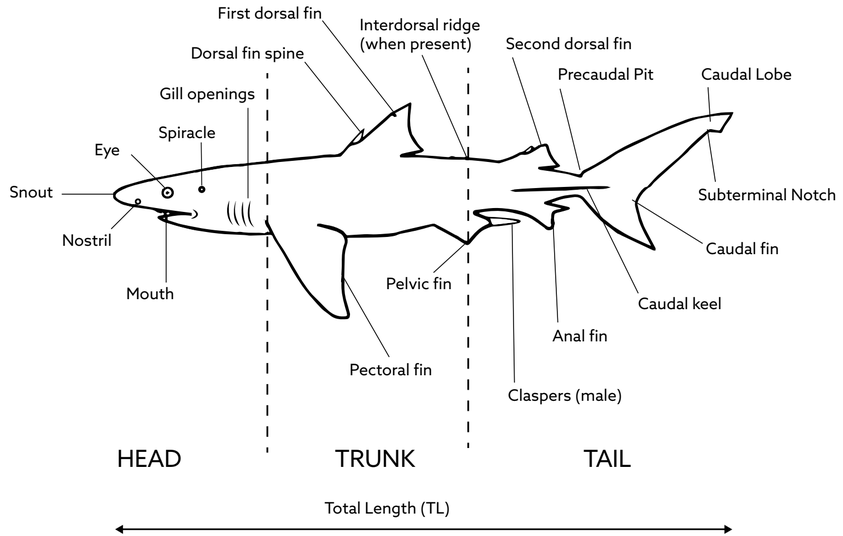
Endemic	No
Size range (cm)	25 - 120
Depth range (m)	70 - 600
Distribution	E, Moz
IUCN Red Listing	Data Deficient 2006
CITES regs	Nil

SHARKS

KEY FEATURES OF SHARKS:

- Almost all have cylindrical body shape (angelsharks are flattened)
- 5-7 pairs of gill slits on side of body
- Pectoral fins not fused to head
- Propelled by caudal fin

SHARK MORPHOLOGY



SHARK FAMILIES

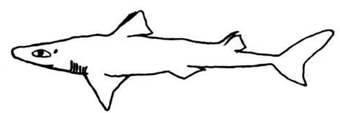
GROUP NO.1 | 5 FAMILIES **No anal fin; 2 dorsal fins; spine on each dorsal fin; large eyes and spiracles; all deepwater.**

01 | PAGE 23

Squalidae (Dogfish)

Deepwater; small to medium-sized body; dorsal fin spines not grooved; upper precaudal pit usually present (may be weak); **strong lateral caudal keels; no sub-terminal notch in upper caudal.**

SQUALIDAE



02 | PAGE 27

Etmopteridae (Lanternsharks)

Deepwater; dwarf to small body; dorsal fin spines grooved; **dense black/dark markings and light organs (photophores) on flanks and below**; 2nd dorsal fin and spine usually larger than 1st; no precaudal pits; no lateral caudal keels; sub-terminal notch in upper caudal.

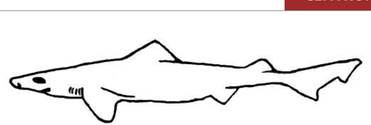
ETMOPTERIDAE

03 | PAGE 29

Centrophoridae (Gulper Sharks)

Deepwater; small body; dorsal fin spines grooved; no dark markings on flanks and belly; **1st dorsal fin larger or equal to 2nd**; no precaudal pits or lateral keels; subterminal notch in upper caudal.

CENTROPHORIDAE

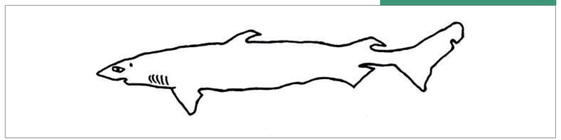


04 | PAGE 31

Somniosidae (Sleeper Sharks)

Generally deepwater; generally small body; dorsal fin spines (if present) very small; 1st dorsal well behind pectoral fins; **lateral caudal keels**; no precaudal pits; subterminal notch in upper caudal.

SOMNIOSIDAE

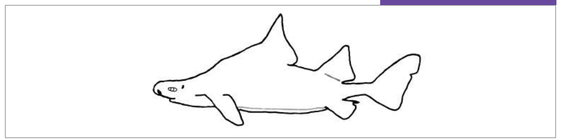


05 | PAGE 32

Oxynotidae (Rough Sharks)

Deepwater; small body with extremely rough skin; dorsal spines present in both large, sail-like dorsal fins; 1st dorsal fin over pectoral fins.

OXYNOTIDAE



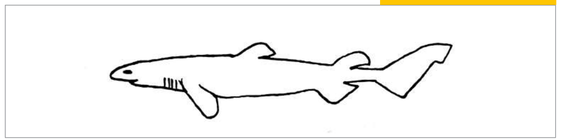
GROUP NO.2 | 3 FAMILIES **No anal fin, 2 dorsal fins; no dorsal spines, large spiracles.**

01 | PAGE 33

Daliatiidae (Kitefin Sharks)

Deepwater or oceanic; generally small body; conical snout; **prominent lower jaw teeth**; some species have light organs (photophores).

DALIATIIDAE

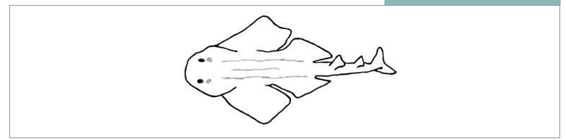


02 | PAGE 35

Squatinidae (Angelsharks)

Coastal and deepwater; small body; **mouth in front**; flattened body; gills hidden on sides.

SQUATINIDAE

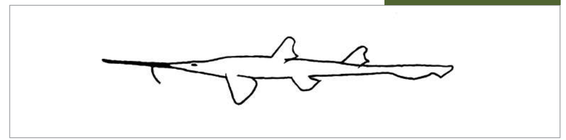


03 | PAGE 36

Pristiophoridae (Sawsharks)

Deepwater; medium sized body; **long flattened sawlike snout,** edged with teeth; 6 pairs of gill slits in local species.

PRISTIOPHORIDAE



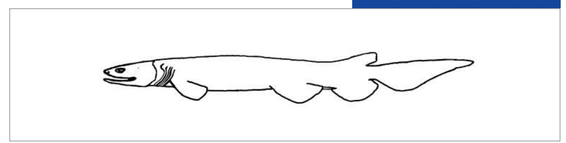
GROUP NO.3 | 2 FAMILIES **Anal fin present; 1 dorsal fin (no spine); more than 5 pairs of gill slits.**

01 | PAGE 37

Chlamydoselachidae (Frilled Sharks)

Deepwater; medium size, eel-like body; **mouth in front**; 6 pairs of gill slits extending to underside of throat; 1st pair joined under throat; no subterminal notch in upper caudal.

CHLAMYDOSELACHIDAE

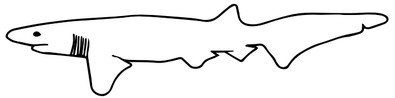


02 | PAGE 38

HEXANCHIDAE

Hexanchidae (Cow Sharks)

Deepwater or coastal; medium to large body; **mouth below**; 6 or 7 pairs of gill slits extending on to underside of throat; subterminal notch in upper caudal.



GROUP NO.4 | 3 FAMILIES **Anal fin present, 2 dorsal fins (no spines), 5 pairs of gill slits; eyes behind mouth; most coastal.**

01 | PAGE 41

STEGOSTOMATIDAE

Stegostomatidae (Zebra Sharks)

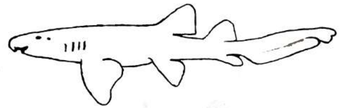
Coastal; medium size body; **ridges along flanks** extending into extremely long upper caudal.

02 | PAGE 42

GINGLYMOSTOMATIDAE

Ginglymostomatidae (Nurse Sharks)

Coastal; medium size body; flattened head; pig-like snout, **very small eye and prominent nasal barbels**; 2 large dorsal fins of similar size far back on body.

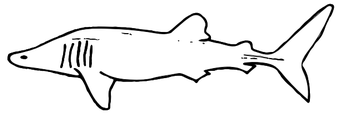


03 | PAGE 43

RHINCODONTIDAE

Rhincodontidae (Whale Sharks)

Coastal and oceanic; extremely large body, with broad, flat, square snout and **mouth in front**; no subterminal notch in upper caudal.



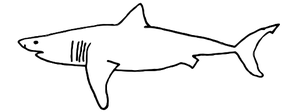
GROUP NO.5 | 3 FAMILIES **Anal fin present; 2 dorsal fins (no spines); eyes over mouth; unusual caudal fin shape.**

01 | PAGE 44

LAMNIDAE

Lamnidae (Mackerel Sharks)

Coastal or oceanic; large body; long gill slits; very small 2nd dorsal and anal fins; strong lateral keels; **crescent-shaped (lunate) caudal fin.**



02 | PAGE 48

ALOPIIDAE

Alopiidae (Thresher Sharks)

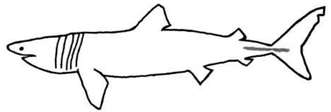
Coastal or oceanic; large body; long pectoral fins; **upper caudal fin same length as the body.**

03 | PAGE 51

Cetorhinidae (Basking Sharks)

Coastal and oceanic; large body with huge conical, bulbous snout and gill slits.

CETORHINIDAE



GROUP NO.6 | 3 FAMILIES Anal fin present; 2 dorsal fins (no spines); eyes over mouth; all 5 gill slits in front of pectoral fins.

01 | PAGE 52-53

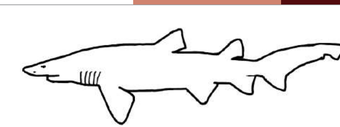
Carchariidae (Sand Tiger Sharks)

Coastal; large body; small eyes; long gill slits; no lower precaudal pit.

Odontaspididae (Deepsea Sand Tiger Sharks)

Deep water; large body; small eyes; long gill slits; no lower precaudal pit.

CARCHARIIDAE ODONTASPIDIDAE

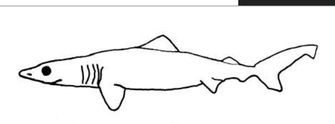


02 | PAGE 54

Pseudocarcharidae (Crocodile Sharks)

Oceanic; small body; large eyes; long gill slits; small 2nd dorsal; upper and lower precaudal pits.

PSEUDOCARCHARIDAE



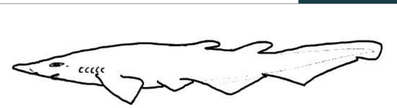
GROUP NO.7 | 7 FAMILIES Anal fin present; 2 dorsal fins (no spines); eyes over mouth; rear 1-2 gill slits over pectoral fin bases.

01 | PAGE 55

Pentanchidae (Deepsea Catsharks)

Coastal and deepwater; small body; slit-like eyes; noticeable spiracles; same-sized dorsal fins, with 1st over or behind pelvic fins; no precaudal pits; poorly developed lower caudal fin.
The lack of a supraorbital ridge, a cartilage ridge above the eyes, is the only morphological feature that distinguishes this family from the scyliorhinid catsharks.

PENTANCHIDAE



02 | PAGE 66

Scyliorhinidae (Catsharks)

Coastal and deepwater; small body; slit-like eyes; noticeable spiracles; same-sized dorsal fins, with 1st over or behind pelvic fins; no precaudal pits; very poorly developed lower caudal fin.

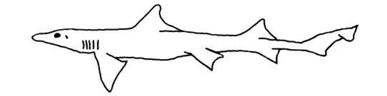
SCYLIORHINIDAE

03 | PAGE 69

Triakidae (Houndsharks)

Coastal and deepwater; small to medium sized body; **oval eyes**; small spiracles; 1st dorsal fin well ahead of pelvic fins; **no precaudal pits; lacks strong lower caudal fin.**

TRIAKIDAE

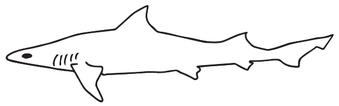


04 | PAGE 75

Hemigaleidae (Weasel Sharks)

Coastal; slender, small body; **oval eyes**, small spiracles; 1st dorsal fin well ahead of pelvic fins; **precaudal pits; strong lower caudal fin.**

HEMIGALEIDAE

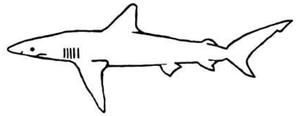


05 | PAGE 76

Carcharhinidae (Requiem Sharks)

Coastal and oceanic; mostly large body; eyes usually round; no spiracles; generally small 2nd dorsal fin; precaudal pits; strong lower caudal (1/3-1/2 upper caudal fin).

CARCHARHINIDAE

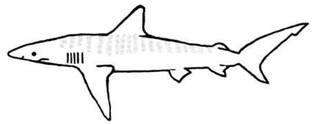


06 | PAGE 92

Galeocerdidae (Tiger Sharks)

Coastal and offshore; large eyes and spiracle, weak lateral keels; precaudal pit; strong lower caudal fin.

GALEOCERDIDAE



07 | PAGE 93

Sphyrnidae (Hammerhead Sharks)

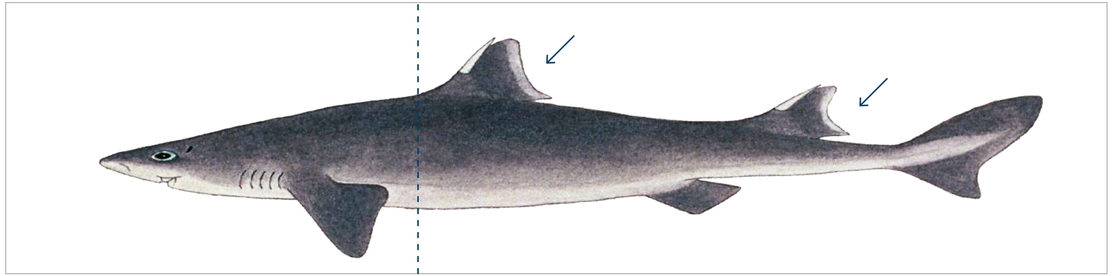
Coastal and oceanic; large body; prominent **hammer-shaped head.**

SPHYRNIDAE

SQUALIDAE (DOGFISH)

Cirrhigaleus asper
Roughskin spurdog

CAUGHT IN:



Physical Description

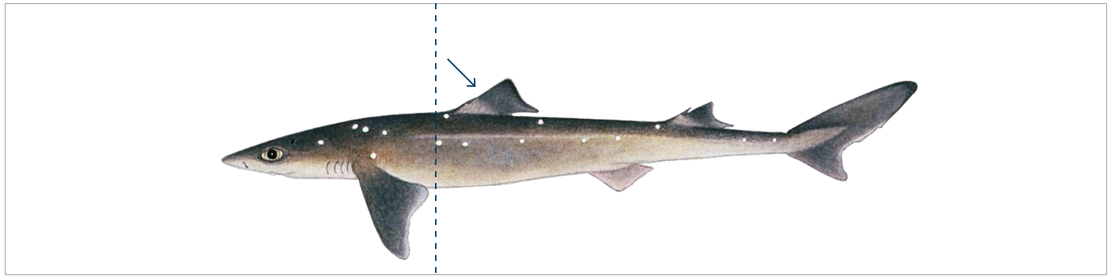
- Stout body with rounded snout and relatively large eyes
- Large denticles and noticeably rough skin; no anal fin
- Spines on both dorsal fins, both of similar size
- Origin of 1st dorsal fin behind pectoral fins; no or weak upper caudal pit
- Dark grey or brown above; lighter below; white edges on fins; no spots

Endemic	No
Size range (cm)	25 - 120
Depth range (m)	70 - 600
Distribution	E, Moz
IUCN Red Listing	Data Deficient 2019
CITES regs	Nil

SQUALIDAE (DOGFISH)

Squalus acanthias
Spiny dogfish / piked spurdog

CAUGHT IN:



Physical Description

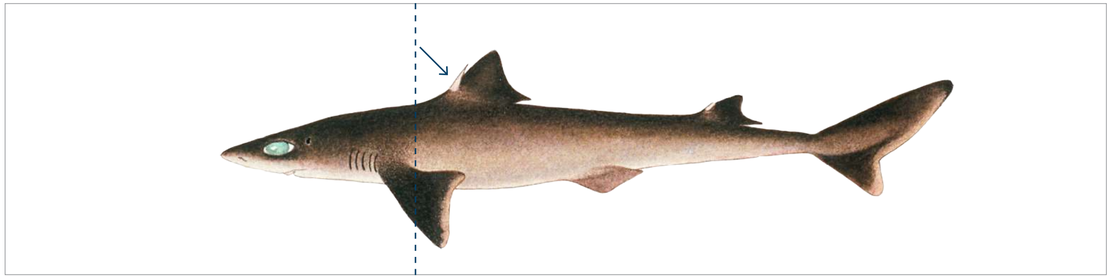
- Slender, medium size body with narrow snout
- Small dorsal fins; 1st located well behind pectoral fins; no anal fin
- Small 1st dorsal spine, much shorter than fin height; larger 2nd dorsal spine
- Upper precaudal pit present; no subterminal notch to upper caudal
- Body bluish grey, with irregular array of moderately-large white spots; whiteish below

Endemic	No
Size range (cm)	20-200
Depth range (m)	30-440
Distribution	S, W, Nam
IUCN Red Listing	Vulnerable 2019
CITES regs	Nil

SQUALIDAE (DOGFISH)

Squalus acutipinnis (Formerly *S. megalops*)
Shortnose spurdog / bluntnose dogfish

CAUGHT IN:



Physical Description

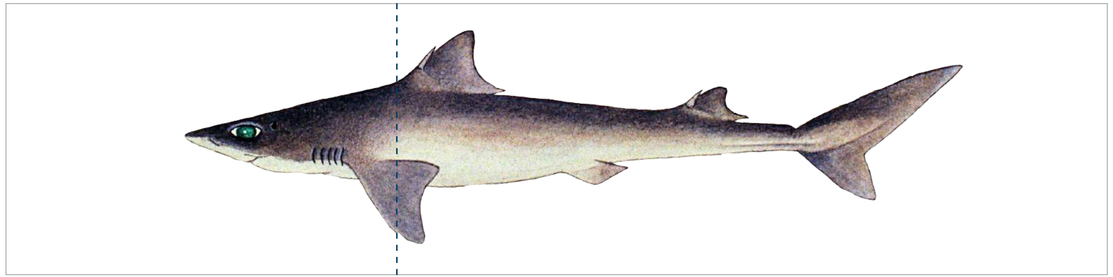
- Small, slender body; angular snout; very large eyes
- 1st dorsal fin over pectoral fins; no anal fin
- 2nd dorsal spine larger than 1st; upper precaudal pit present; no subterminal notch to upper caudal fin
- Bronze-grey above, white below; dorsal fins with black tips and white edges only in juveniles; no spots; KZN and Mozambique individuals are greyer than the west coast and Namibian individuals.

Endemic	No
Size range (cm)	20-70
Depth range (m)	30-750
Distribution	E, S, W, Moz+, Nam
IUCN Red Listing	Near Threatened 2019
CITES regs	Nil

SQUALIDAE (DOGFISH)

Squalus bassi (Formerly *S. mitsukurii*)
Shortspine / African longnose spurdog

CAUGHT IN:



Physical Description

- Slender, small body with narrow, elongated snout
- Relatively large 1st dorsal fin, with spine located over pectoral fins
- No anal fin; no subterminal notch to upper caudal fin
- Grey brown above, no spots; white tips on fins; whiteish below

Endemic	Regional
Size range (cm)	20-110
Depth range (m)	160-600
Distribution	E, S, W, Moz, Nam
IUCN Red Listing	Least Concern 2019
CITES regs	Nil

ETMOPTERIDAE (LANTERNSHARKS)

Centroscyllium fabricii
Black dogfish

CAUGHT IN:

Physical Description

- Small, slender body; very short, blunt snout
- Large, green oval eyes; lower teeth erect
- Spines on both dorsal fins, 2nd fin and spine much larger; no anal fin
- Skin easily scuffed during trawling, creating bare, white patches
- Black above and below; juveniles may have white edged fins

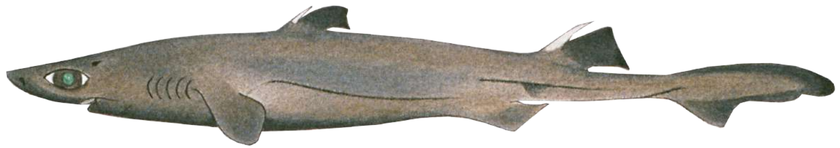
Endemic	No
Size range (cm)	15-105
Depth range (m)	180-1600+
Distribution	S, W, Nam
IUCN Red Listing	Least Concern 2019
CITES regs	Nil

ETMOPTERIDAE (LANTERNSHARKS)

Etmopterus spp
Lanternsharks

CAUGHT IN:

(*Etmopterus sculptus* illustrated here)



Physical Description

- Very small to small, slender body
- Very large, oval eyes and spiracles; lower teeth angled outwards
- Prominent spines on both dorsal fins with 2nd generally larger; no anal fin
- Black to brown all over; some with prominent black below
- Dense black markings on body and tail due to light organs (photophores)

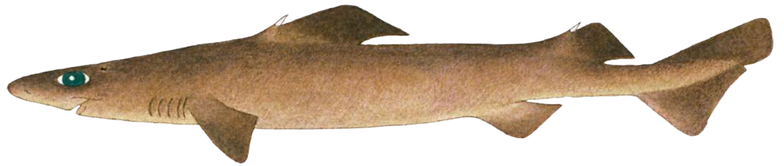
Endemic	No
Size range (cm)	10-80
Depth range (m)	200+
Distribution	Species dependent
IUCN Red Listing	Least Concern
CITES regs	Nil

CENTROPHORIDAE (GULPER SHARKS)

Centrophorus spp
Gulper sharks

CAUGHT IN:

(*Centrophorus squamosus* illustrated here)



Physical Description

- Small to medium-size body; snout not particularly long and flattened
- Large green oval eyes; strong spines on both dorsal fins; no anal fin
- 1st dorsal fin long and low with long free rear tip and similar in size to 2nd dorsal
- Grey to brown above and below; some species white below

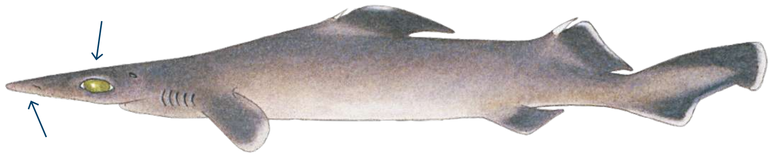
Endemic	No
Size range (cm)	30-160
Depth range (m)	250-1000
Distribution	Species dependent
IUCN Red Listing	Species include: Vulnerable: 2; Endangered: 2; Not Evaluated: 1.
CITES regs	Nil

CENTROPHORIDAE (GULPER SHARKS)

Deania spp
Longnose dogfishes

CAUGHT IN:

(*Deania calcea* illustrated here)



Physical Description

- Small body; extremely long flattened snout
- Large, oval, yellow eyes; no anal fin
- Skin rough with erect denticles shaped like 3-pronged fork
- Generally small spines on both dorsal fins, 2nd larger than 1st; 1st dorsal fin long and low
- Short and compressed caudal fin
- Grey to dark brown above and below

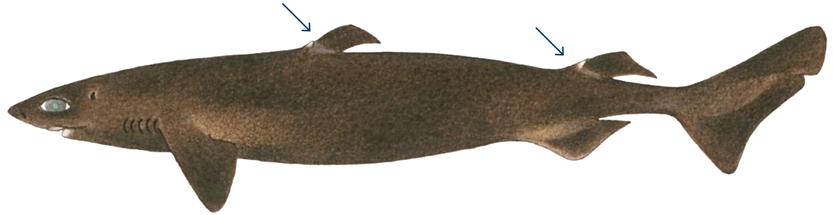
Endemic	No
Size range (cm)	30-110
Depth range (m)	200-800
Distribution	Species dependent
IUCN Red Listing	Most species Data Deficient or Not Evaluated; while others Vulnerable.
CITES regs	Nil

SOMNIOSIDAE (SLEEPER SHARKS)

Centroscymnus / Centroselachus spp
Velvet dogfishes

CAUGHT IN:

(*Centroscymnus coelolepis* illustrated here)



Physical Description

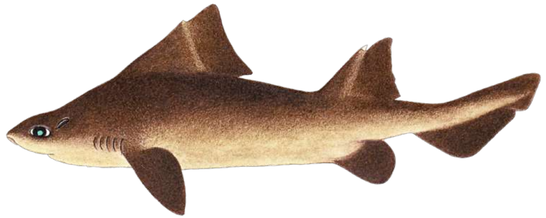
- Small slender body with large oval green eyes; rough skin
- Similar sized dorsal fins with tiny spines; no anal fin
- Pelvic fins close to caudal fin
- Snout length varies with species
- Entire body black-dark brown, except *C. coelolepis*, which varies from golden brown to black

Endemic	No
Size range (cm)	25-120
Depth range (m)	150-1500+
Distribution	Species dependent
IUCN Red Listing	Species dependent
CITES regs	Nil

OXYNOTIDAE (ROUGH SHARKS)

Oxynotus centrina
Angular rough shark

CAUGHT IN:



Physical Description

- Small, stout body; 2 large sail-like dorsal fins, each with spine
- Extremely rough skin; strong pair of lateral keels; no anal fin
- Uniform grey to brown above; paler below
- Rare; samples or images with location details required

Endemic	No
Size range (cm)	<25-150
Depth range (m)	60-660
Distribution	W, Nam
IUCN Red Listing	Endangered 2020
CITES regs	Nil

DALIATIIDAE (KITEFIN SHARKS)

Dalatias licha
Kitefin shark / seal shark

CAUGHT IN:

Physical Description

- Medium size body; short and blunt snout; thick fringed lips
- Prominent teeth in lower jaw
- Dorsal fins similar in size; no anal fin
- Lower caudal fin poorly developed
- Dark grey-brown to black above and below; trailing edges of fins translucent

Endemic	No
Size range (cm)	30-180
Depth range (m)	40-1800
Distribution	E, S, Moz+
IUCN Red Listing	Vulnerable 2017
CITES regs	Nil

DALIATIIDAE (KITEFIN SHARKS)

Isistius brasiliensis
Cookiecutter shark

CAUGHT IN:

Physical Description

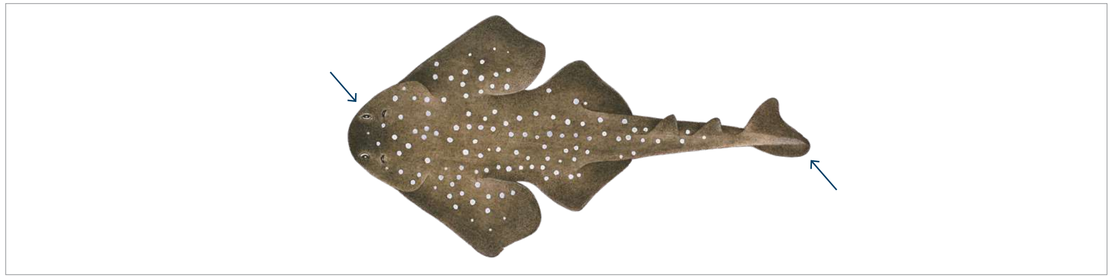
- Very small, cigar-shaped body; short bulbous snout
- Prominent, triangular teeth in lower jaw; no anal fin
- Mid-grey or grey-brown above and below; prominent dark collar around gill area
- Luminescent organs glow bright green below
- Samples or images with location details required

Endemic	No
Size range (cm)	15-50
Depth range (m)	85-3500
Distribution	E, S, W
IUCN Red Listing	Least Concern 2017
CITES regs	Nil

SQUATINIDAE (ANGELSHARKS)

Squatina africana
African angelshark

CAUGHT IN:



Physical Description

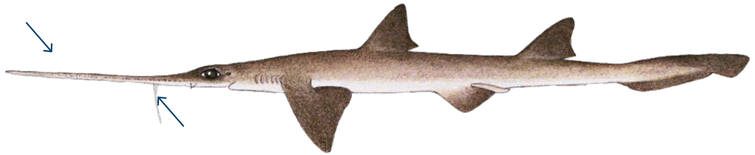
- Flattened body, mouth in front but gills on sides
- Pectoral fins separated from head
- Caudal fin has larger lower lobe; no anal fin
- Brown above with reticulated pattern of light spots, white below

Endemic	No
Size range (cm)	30-120
Depth range (m)	10-500
Distribution	E, S, Moz+
IUCN Red Listing	Near Threatened 2017
CITES regs	Nil

PRISTIOPHORIDAE (SAWSHARKS)

Pliotrema warreni
Sixgill sawshark

CAUGHT IN:



Physical Description

- Small to medium sized, cylindrical body with long flat snout edged with sharp teeth and pair of barbels
- 6 pairs of lateral gill slits; no anal fin
- Pale brown above, white below
- Samples or images with location details required

Endemic	Regional
Size range (cm)	35-135
Depth range (m)	35-500
Distribution	E, S, W, Moz, Nam
IUCN Red Listing	Least Concern 2020
CITES regs	Nil

CHLAMYDOSELACHIDAE (FRILLED SHARKS)

Chlamydoselachus africana
Southern African frilled shark

CAUGHT IN:

Physical Description

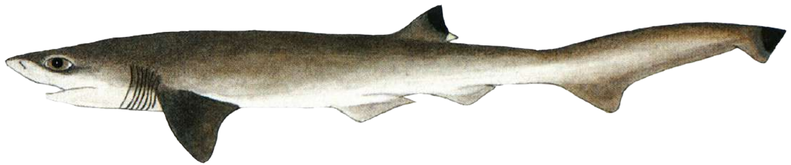
- Medium size, slender body with snake-like form
- Small, single dorsal fin set far back
- 6 pairs of gill slits; 1st pair joined under throat
- Dark brown or grey above and below
- Samples or images with location details required

Endemic	Regional
Size range (cm)	50-120+
Depth range (m)	300-1400
Distribution	E, S, W, Nam+
IUCN Red Listing	Least Concern 2019
CITES regs	Nil

HEXANCHIDAE (COW SHARKS)

Heptranchias perlo
Sharpnose sevengill shark

CAUGHT IN:



Physical Description

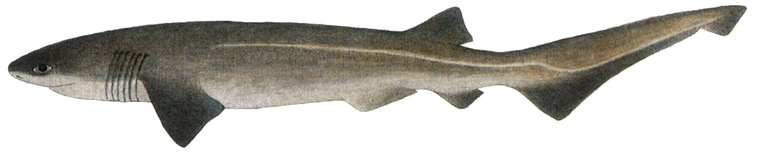
- Small, slim body; sharply pointed snout; large oval green eyes
- 7 pairs of gill slits; single dorsal fin
- Brown-grey above, paler below; juveniles with dark-tipped dorsal and upper caudal fins, fading with age
- Rare; samples or images with location details required

Endemic	No
Size range (cm)	25-140
Depth range (m)	27-700+
Distribution	E, S, Moz
IUCN Red Listing	Near Threatened 2019
CITES regs	Nil

HEXANCHIDAE (COW SHARKS)

Hexanchus griseus
Bluntnose sixgill shark

CAUGHT IN:



Physical Description

- Large, heavy body with short, blunt snout and glowing green eyes
- 6 pairs of gill slits; single dorsal fin
- Brown or grey above, with light-coloured lateral line extending into upper caudal; paler below
- Rare; samples or images with location details required

Endemic	No
Size range (cm)	60-480+
Depth range (m)	200-1100+
Distribution	E, S, W, Nam+, Moz+
IUCN Red Listing	Near Threatened 2019
CITES regs	Nil

HEXANCHIDAE (COW SHARKS)

Notorynchus cepedianus
Broadnose sevengill shark

CAUGHT IN:

Physical Description

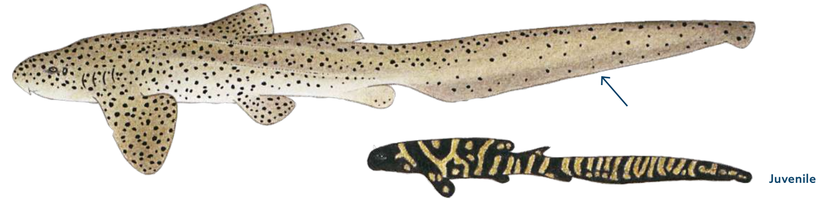
- Large body with very short, blunt snout and small eyes; 7 pairs of gill slits; single dorsal fin
- Red to olive brown or silver-grey, with numerous small black spots, cream below
- Unknown pupping and nursery ground
- Samples of very small juveniles or images with location details needed

Endemic	No
Size range (cm)	35-300
Depth range (m)	0-150
Distribution	E, S, W, Nam+
IUCN Red Listing	Vulnerable 2015
CITES regs	Nil

STEGOSTOMATIDAE (ZEBRA SHARKS)

Stegostoma tigrinum
Zebra shark

CAUGHT IN:



Physical Description

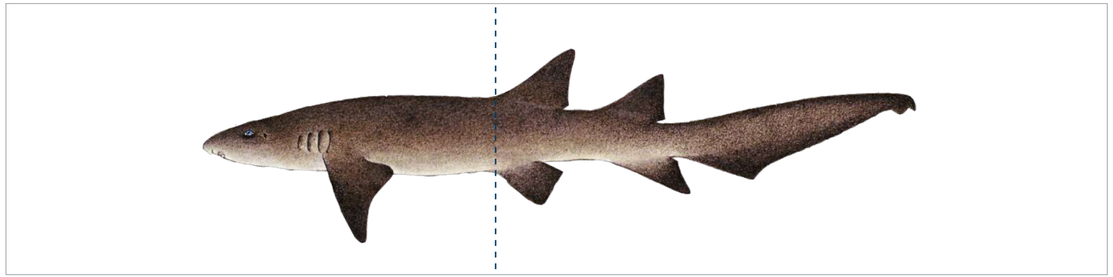
- Stocky, medium sized body, blunt, bulbous snout; nasal barbels and small oval eyes
- Ridges along body; body same length as upper caudal fin
- Yellow-brown with black spots above (adults) or dark brown with yellow bands (young); pale yellow below

Endemic	No
Size range (cm)	20-235
Depth range (m)	0-70
Distribution	E, S, Moz+
IUCN Red Listing	Endangered 2015
CITES regs	Nil

GINGLYMOSTOMATIDAE (NURSE SHARKS)

Nebrius ferrugineus
Tawny nurse shark

CAUGHT IN:



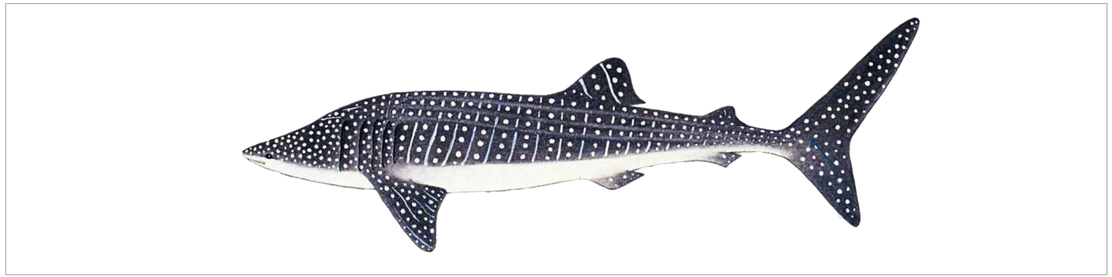
Physical Description

- Large, stocky body, with blunt, flattened, pig-like snout and long nasal barbels
- Large 1st dorsal fin over pelvic fins; 2nd dorsal, anal and pelvic fins also large
- Long upper caudal fin
- Dark to light shades of brown; slightly paler below

Endemic	No
Size range (cm)	40-320
Depth range (m)	0-70
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2020
CITES regs	Nil

RHINCODONTIDAE (WHALE SHARKS)

Rhincodon typus
Whale shark



Physical Description

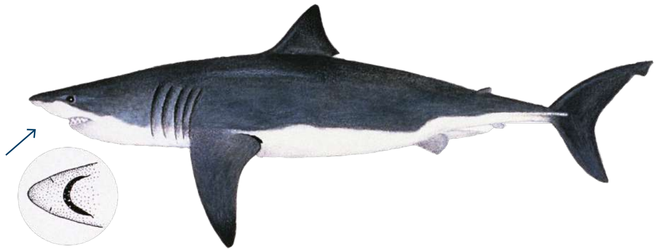
- Stout, extremely large body; broad, flat, square snout, with wide, terminal mouth
- Prominent ridges along flanks
- Upper caudal fin lacks subterminal lobe
- Purple to blue grey above with checkerboard pattern of white stripes and spots; white below

Endemic	No
Size range (cm)	55-1700+
Depth range (m)	0-1000
Distribution	E, S, W, Moz+
IUCN Red Listing	Endangered 2016
CITES regs	Appendix II

LAMNIDAE (MACKEREL SHARKS)

Carcharodon carcharias
(Great) White shark

CAUGHT IN:



Physical Description

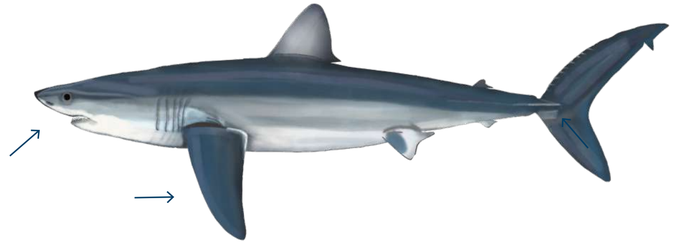
- Very large, heavy-body with conical, blunt snout and very large jaws
- Black, circular eyes, serrated v-shaped teeth in both jaws
- Very small 2nd dorsal and anal fins; prominent lateral keels; lunate caudal fin
- Lead-grey to brown or black above, lighter on sides, and abruptly white below

Endemic	No
Size range (cm)	110-600+
Depth range (m)	0-1300, often surface
Distribution	E, S, W, Nam+, Moz+
IUCN Red Listing	Vulnerable 2018
CITES regs	Appendix II

LAMNIDAE (MACKEREL SHARKS)

Isurus oxyrinchus
Shortfin mako

CAUGHT IN:



Physical Description

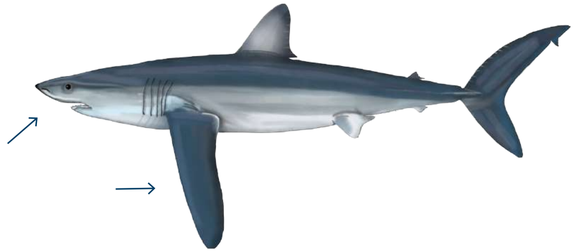
- Large, slender body with sharp snout
- Large black, circular eyes, strong, hooked, non-serrated teeth prominent
- Very small 2nd dorsal and anal fins, tall 1st dorsal fin
- Pectoral fins shorter than head; prominent lateral keels; lunate caudal fin
- Brilliant blue above, abruptly white below

Endemic	No
Size range (cm)	60-400
Depth range (m)	0-600
Distribution	E, S, W, Nam+, Moz+
IUCN Red Listing	Endangered 2018
CITES regs	Appendix II

LAMNIDAE (MACKEREL SHARKS)

Isurus paucus
Longfin mako

CAUGHT IN:



Physical Description

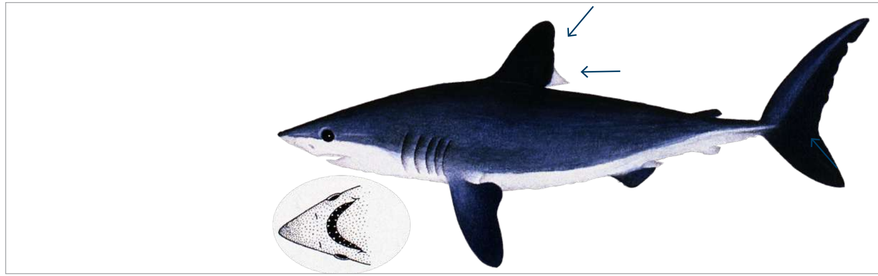
- Large body with sharp snout
- Large black, circular eyes, strong, hooked, non-serrated teeth prominent
- Very small 2nd dorsal and anal fins, tall 1st dorsal fin
- Pectoral fins longer than head; prominent lateral keels; lunate caudal fin
- Dark blue above, white below with dusky snout and mouth in adults

Endemic	No
Size range (cm)	95-430
Depth range (m)	50-600
Distribution	E (?), S, W(?), oceanic
IUCN Red Listing	Endangered 2018
CITES regs	Appendix II

LAMNIDAE (MACKEREL SHARKS)

Lamna nasus
Porbeagle shark

CAUGHT IN:



Physical Description

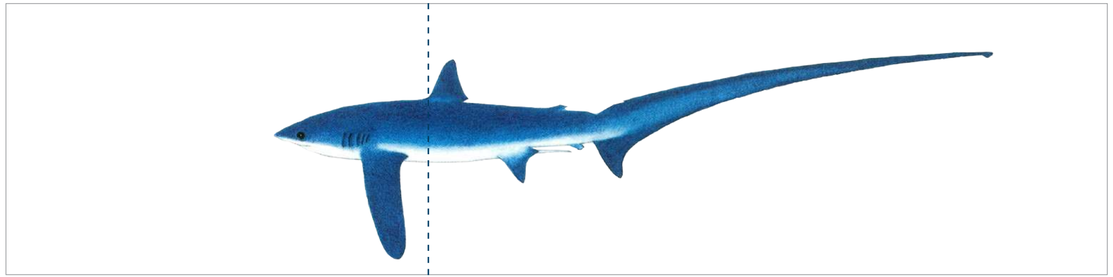
- Large, stout body, with sharp conical snout
- Large black, circular eyes and gill slits
- Rounded tip of 1st dorsal fin
- Prominent lateral keels with secondary lateral keel on the caudal fin below the main keel; lunate caudal fin
- Dark grey above, white below, without blotches; rear tip of 1st dorsal abruptly white

Endemic	No
Size range (cm)	60-350
Depth range (m)	0-700
Distribution	S, W, oceanic
IUCN Red Listing	Vulnerable 2018
CITES regs	Appendix II

ALOPIIDAE (THRESHER SHARKS)

Alopias pelagicus
Pelagic thresher

CAUGHT IN:



Physical Description

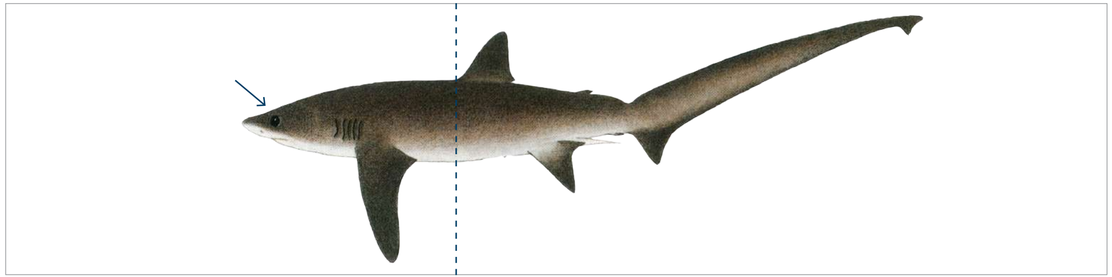
- Large body, with moderately large eyes; 1st dorsal behind pectoral fins
- Upper caudal fin same length as body
- Dark blue above and sides, underside white; no white patch over base of pectoral fins

Endemic	No
Size range (cm)	130-370
Depth range (m)	0-700, oceanic
Distribution	E, Moz+
IUCN Red Listing	Endangered 2018
CITES regs	Appendix II

ALOPIIDAE (THRESHER SHARKS)

Alopias superciliosus
Bigeye thresher

CAUGHT IN:



Physical Description

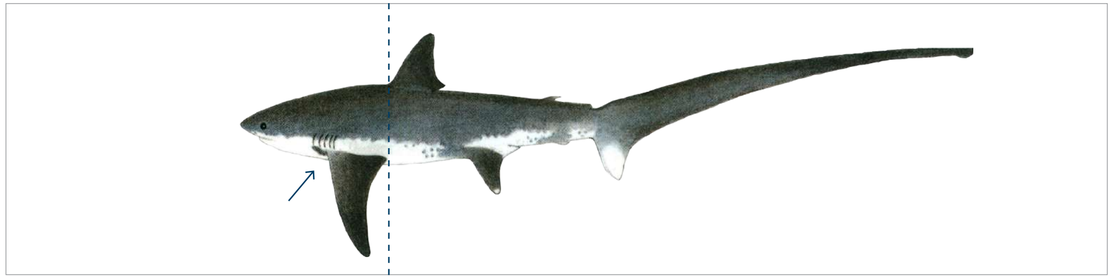
- Large body with enormous eyes extending onto top of head
- 1st dorsal fin set well behind pectoral fins
- Upper caudal fin same length as body
- Purple grey/brown above; lighter below
- Deep horizontal head groove above eye and gills

Endemic	No
Size range (cm)	100-480
Depth range (m)	0-730, oceanic and coastal
Distribution	E, S, Moz+
IUCN Red Listing	Vulnerable 2018
CITES regs	Appendix II

ALOPIIDAE (THRESHER SHARKS)

Alopias vulpinus
Common thresher

CAUGHT IN:



Physical Description

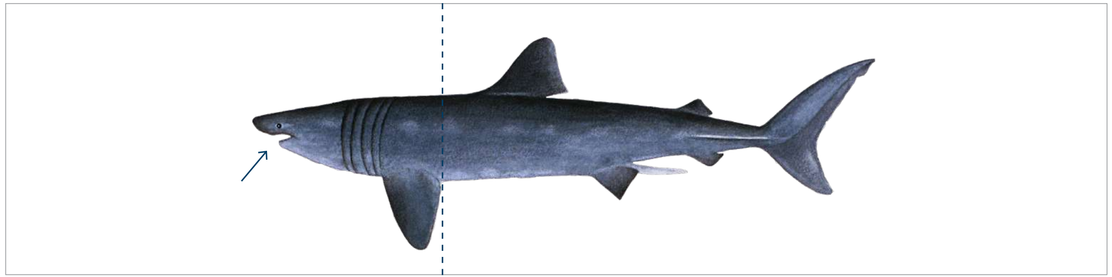
- Large body, relatively small eyes
- 1st dorsal fin set forward, with origin close to pectoral fins
- Upper caudal fin same length as body
- Blue-grey to dark grey above; white below; distinct, irregular colour demarcation on lower flanks

Endemic	No
Size range (cm)	120-600
Depth range (m)	0-550, oceanic and coastal
Distribution	E, S, W, Nam+, Moz+
IUCN Red Listing	Vulnerable 2018
CITES regs	Appendix II

CETORHINIDAE (BASKING SHARKS)

Cetorhinus maximus
Basking shark

CAUGHT IN:



Physical Description

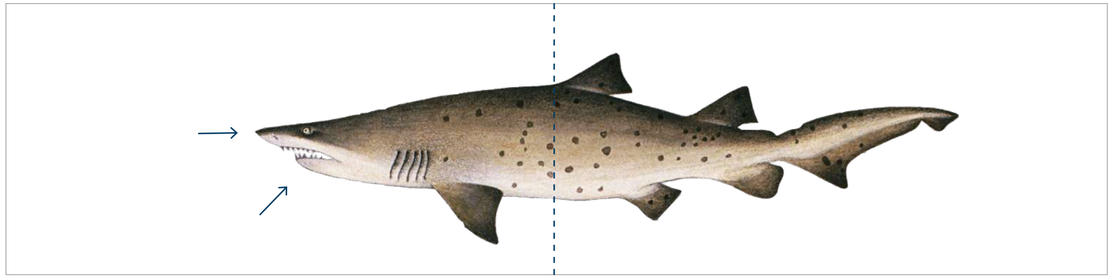
- Very large, stout body with bulbous snout and enormous gill slits
- Strong lateral keels and lunate caudal fin
- Blue-grey to brown above; slightly lighter below with irregular white blotches

Endemic	No
Size range (cm)	150-1000+
Depth range (m)	0-1200
Distribution	E, S, W, Nam+
IUCN Red Listing	Endangered 2018
CITES regs	Appendix II

CARCHARIIDAE (BASKING SHARKS)

Carcharias taurus
Spotted raggedtooth shark

CAUGHT IN:



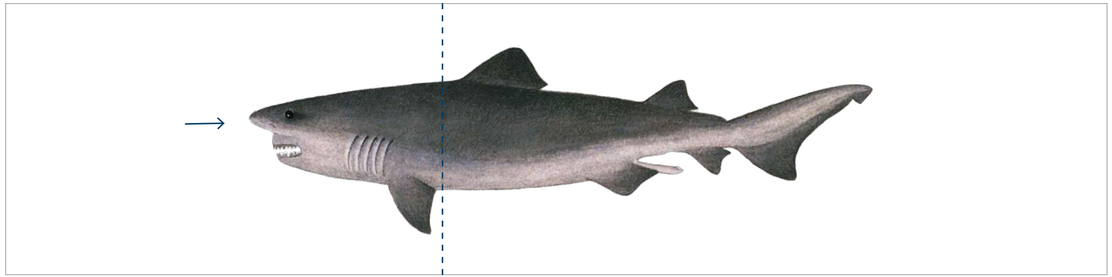
Physical Description

- Large, stout body with very pointed snout, small eyes and protruding, spike-like teeth
- Similar-sized dorsal and anal fins; 1st dorsal well behind pectorals
- Only an upper precaudal pit
- Pale brown or light grey, with irregular dark spots that fade in adults

Endemic	No
Size range (cm)	85-320
Depth range (m)	0-200
Distribution	E, S, W, Moz+, Nam+
IUCN Red Listing	Critically Endangered 2020
CITES regs	Nil

ODONTASPIDIDAE (DEEPSEA SAND TIGER SHARKS)

Odontaspis ferox
Smalltooth sand tiger



Physical Description

- Large, stout body; long bulbous snout
- Moderately large eyes and protruding teeth
- 2nd dorsal and anal fins slightly larger than 1st dorsal which is just behind pectorals
- Only an upper precaudal pit
- Grey above and lighter grey below
- Rare; samples or images with location details required

Endemic	No
Size range (cm)	100-450
Depth range (m)	10-800
Distribution	E
IUCN Red Listing	Vulnerable 2015
CITES regs	Nil

PSEUDOCARCHARIDAE (CROCODILE SHARKS)

Pseudocarcharias kamoharai
Crocodile shark

CAUGHT IN:

Physical Description

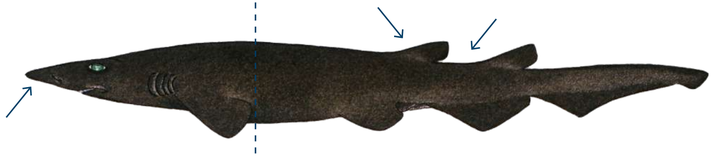
- Small slender body, very large eyes; long spike-like teeth
- Small dorsal fins and small, rounded pectoral fins
- Light or dark grey above, paler below, fins white-edged, some with small white spots or blotches

Endemic	No
Size range (cm)	up to 90
Depth range (m)	0-500 oceanic
Distribution	E, S, W, Moz+
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

PENTANCHIDAE (DEEPSEA CATSHARKS)

Apristurus microps
Smalleye catshark

CAUGHT IN:



Physical Description

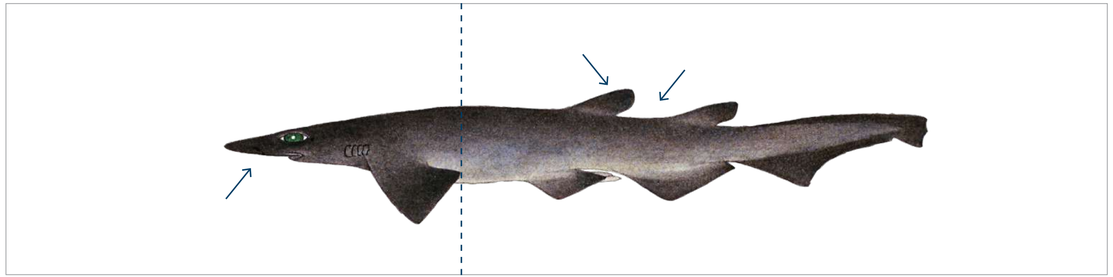
- Small slender body with long, laterally expanded snout
- Slit-like eyes
- Small, spineless dorsal fins of similar size set far back
- Gap between 1st and 2nd dorsal fins about equal to length of 1st dorsal fin base
- Anal fin large and elongated and very close to lower caudal fin
- Dark grey-brown to black above and below
- Samples or images with location details required for unique-looking Apristurus with high anal fin and inter-dorsal space greater than length of 1st dorsal base

Endemic	No
Size range (cm)	61
Depth range (m)	700-2200
Distribution	S, W
IUCN Red Listing	Least Concern 2019
CITES regs	Nil

PENTANCHIDAE (DEEPSEA CATSHARKS)

Apristurus saldanha
Saldanha catshark

CAUGHT IN:



Physical Description

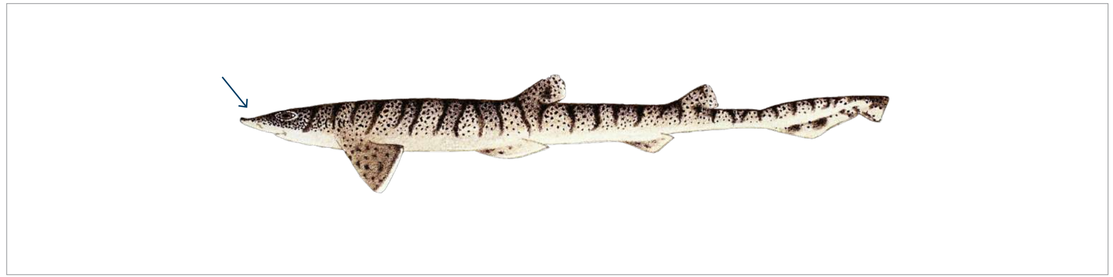
- Small slender body with long, laterally expanded snout
- Slit-like eyes
- Small, spineless dorsal fins of similar size set far back
- Gap between 1st and 2nd dorsal fins about twice 1st dorsal fin base
- Anal fin long and low and very close to lower caudal fin
- Dark grey-brown to black above and below

Endemic	Yes
Size range (cm)	?-90
Depth range (m)	350-1000
Distribution	S, W
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

PENTANCHIDAE (DEEPSEA CATSHARKS)

Halaelurus lineatus
Lined (banded) catshark

CAUGHT IN:



Physical Description

- Very small, elongated body with upturned knob on snout
- Slit-like eyes raised above the head; no precaudal pits
- Pale brown with about 13 pairs of narrow, vertical, dark brown stripes, outlining dusky saddles, many small dark spots, cream below

Endemic	Regional
Size range (cm)	8-56
Depth range (m)	0-290
Distribution	E, Moz
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

PENTANCHIDAE (DEEPSEA CATSHARKS)

Halaelurus natalensis
Tiger catshark

CAUGHT IN:

Physical Description

- Very small, elongated body with upturned knob on snout
- Eyes raised above head; no precaudal pits
- Yellow-brown above, with 10 pairs of broad, vertical, dark brown stripes outlining dusky saddles, cream below

Endemic	Yes
Size range (cm)	8-50
Depth range (m)	0-170
Distribution	E, S
IUCN Red Listing	Vulnerable 2019
CITES regs	Nil

PENTANCHIDAE (DEEPSEA CATSHARKS)

Haploblepharus edwardsii
Puffadder shyshark

CAUGHT IN:

Physical Description

- Very small, stocky body with broad snout; very large nostrils with nasal flaps extending back to mouth
- Sandy brown with 7 reddish-brown saddles bordered by black, and numerous small, dark brown and white spots between saddles; white below
- Called shyshark because this genus, when caught, curls its tail to cover eyes

Endemic	Yes
Size range (cm)	10-60
Depth range (m)	0-130
Distribution	E, S, W
IUCN Red Listing	Endangered 2019
CITES regs	Nil

PENTANCHIDAE (DEEPSEA CATSHARKS)

Haploblepharus fuscus
Brown shyshark

CAUGHT IN:

Physical Description

- Small, stocky body with broad snout; very large nostrils with nasal flaps extending back to mouth
- Plain yellowish-brown above, yellowish below; small light spots and indistinct brown saddles in some
- Called shyshark because this genus, when caught, curls its tail to cover eyes

Endemic	Yes
Size range (cm)	10-70
Depth range (m)	0-35
Distribution	E, S
IUCN Red Listing	Vulnerable 2019
CITES regs	Nil

PENTANCHIDAE (DEEPSEA CATSHARKS)

Haploblepharus kistnasamyi
Natal / eastern shyshark

CAUGHT IN:

Physical Description

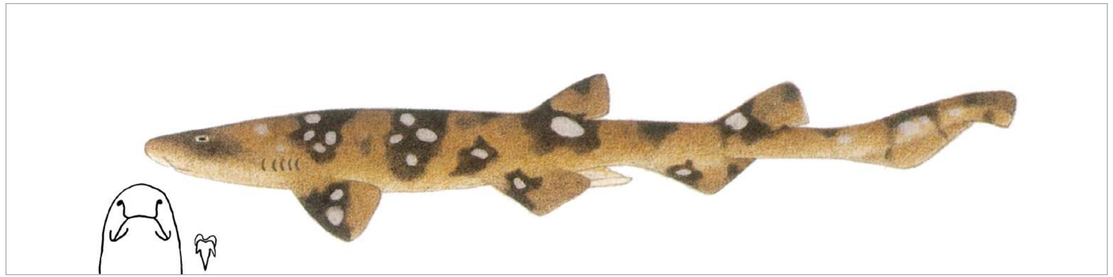
- Very small, stout body with broad snout; very large nostrils with nasal flaps extending back to mouth
- Sandy brown above with ‘H’ shaped dark brown saddles and irregular white spots; white below
- Called shyshark because this genus, when caught, curls its tail to cover eyes

Endemic	Regional
Size range (cm)	up to 50
Depth range (m)	0-130
Distribution	E, S
IUCN Red Listing	Vulnerable 2018
CITES regs	Nil

PENTANCHIDAE (DEEPSEA CATSHARKS)

Haploblepharus pictus
Dark shyshark

CAUGHT IN:



Physical Description

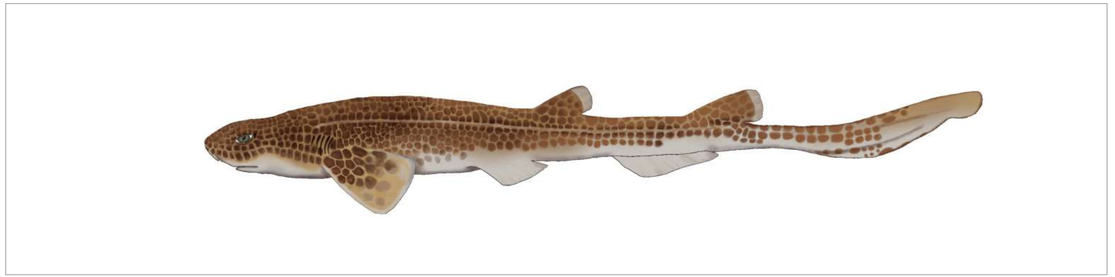
- Very small, stout body with broad snout; very large nostrils with nasal flaps extending back to mouth
- Several dark brown, dorsal saddles sparsely dotted with large white spots; white below
- Called shyshark because this genus, when caught, curls its tail to cover eyes

Endemic	Regional
Size range (cm)	10-60
Depth range (m)	0-35
Distribution	S, W, Nam
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

PENTANCHIDAE (DEEPSEA CATSHARKS)

Holohalaelurus favus
Honeycomb Izak catshark

CAUGHT IN:



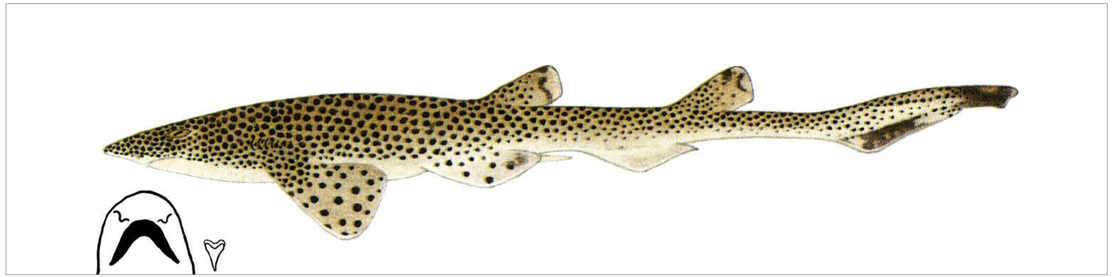
Physical Description

- Very small body with broad, short snout.
- Above light-coloured irregular spots and reticulations on brown background, resembling a honeycomb pattern; grey-brown below

Endemic	Regional
Size range (cm)	8-52
Depth range (m)	200-770
Distribution	E, Moz
IUCN Red Listing	Endangered 2019
CITES regs	Nil

PENTANCHIDAE (DEEPSEA CATSHARKS)

Holohalaelurus punctatus
African spotted catshark



Physical Description

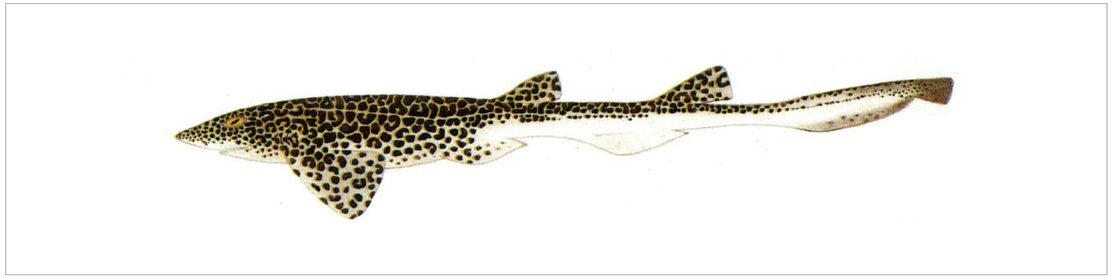
- Very small body; broad head
- Yellow-orange-brown above with small, closely set dark brown spots
- Small black pores on underside of head and body

Endemic	Regional
Size range (cm)	up to 34
Depth range (m)	220-420
Distribution	E, Moz
IUCN Red Listing	Endangered 2019
CITES regs	Nil

PENTANCHIDAE (DEEPSEA CATSHARKS)

Holohalaelurus regani
Izak catshark

CAUGHT IN:



Physical Description

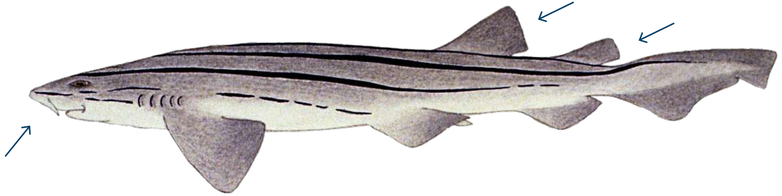
- Very small body with broad, short snout.
- Above light-coloured irregular spots and reticulations on brown background, resembling a honeycomb pattern; grey-brown below

Endemic	No
Size range (cm)	11-69
Depth range (m)	40-300
Distribution	E, S, W, Nam
IUCN Red Listing	Least Concern 2020
CITES regs	Nil

SCYLIORHINIDAE (CATSHARKS)

Poroderma africanum
Pyjama shark / striped catshark

CAUGHT IN:



Physical Description

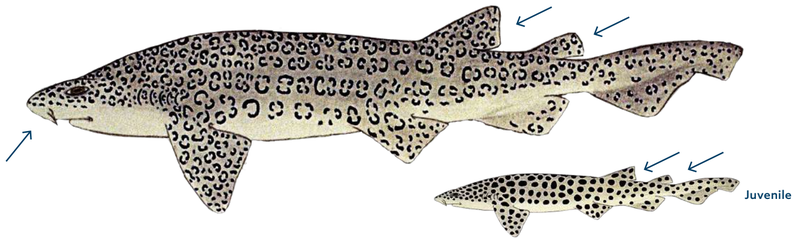
- Small, stout body
- Short but conspicuous nasal barbels
- Dorsal fins set closer together than in other catshark species
- Above light grey with long horizontal black stripes

Endemic	Yes
Size range (cm)	15-100
Depth range (m)	0-100
Distribution	E, S, W
IUCN Red Listing	Least Concern 2019
CITES regs	Nil

SCYLIORHINIDAE (CATSHARKS)

Poroderma pantherinum
Leopard catshark

CAUGHT IN:



Physical Description

- Small, stout body
- Long nasal barbels
- Highly variable colour pattern, with leopard-like rosettes and broken lines; sometimes large, round spots or, densely packed dots or, completely black above, with irregular spots and/or stripes, light below

Endemic	Yes
Size range (cm)	7-80
Depth range (m)	0-250
Distribution	E, S, W
IUCN Red Listing	Least Concern 2019
CITES regs	Nil

SCYLIORHINIDAE (CATSHARKS)

Scyliorhinus capensis
Yellowspotted catshark

CAUGHT IN:

Physical Description

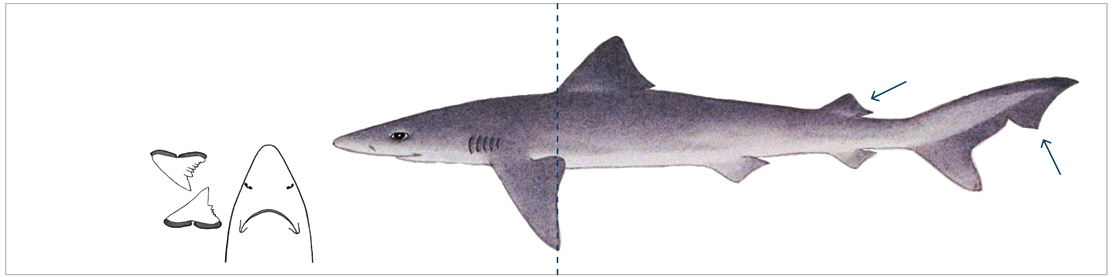
- Small, slender body, with pointed snout
- Very small nasal flaps
- Dark grey above with bright yellow or golden spots and irregular lighter grey blotches and saddles; cream below

Endemic	Regional
Size range (cm)	20-120
Depth range (m)	25-400+
Distribution	E, S, W , Nam
IUCN Red Listing	Near Threatened 2019
CITES regs	Nil

TRIAKIDAE (HOUNDSHARKS)

Galeorhinus galeus
Soupfin shark / tope

CAUGHT IN:



Physical Description

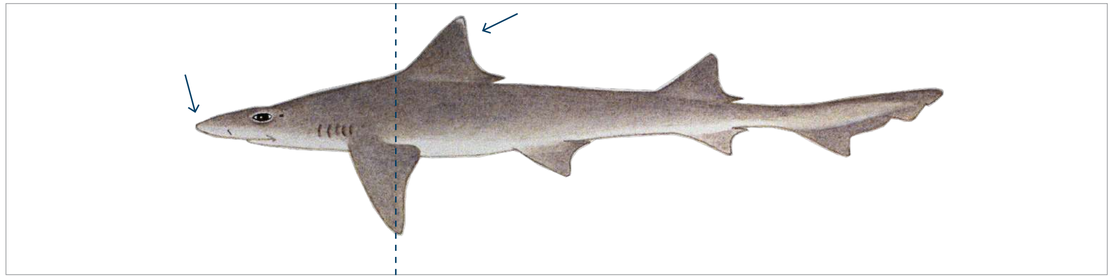
- Medium sized, slender body, with long pointed snout and small, oval eyes
- Teeth sharp, unlike Mustelus houndsharks.
- 1st dorsal fin just over pectoral fins; 2nd dorsal small; no precaudal pits
- Large terminal lobe of upper caudal as long as remainder of this fin
- Greyish above, white below; young with black markings on fins

Endemic	No
Size range (cm)	30-195
Depth range (m)	2-500
Distribution	E, S, W, Nam+
IUCN Red Listing	Critically Endangered 2020
CITES regs	Nil

TRIAKIDAE (HOUNDSHARKS)

Mustelus mosis
Hardnose smoothhound / houndshark

CAUGHT IN:



Physical Description

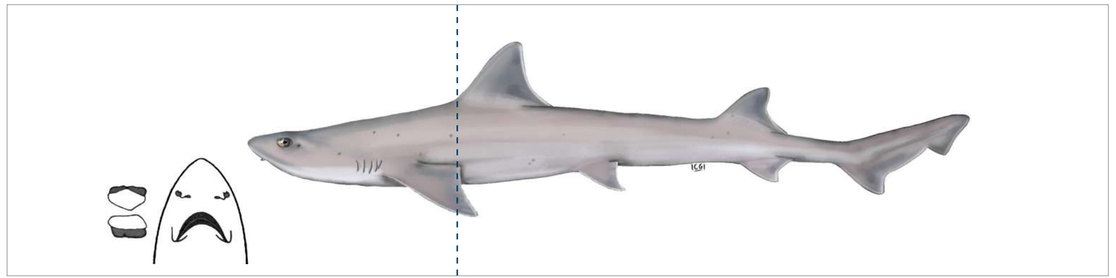
- Medium-sized slender body; adults with a hard, bone-like growth in snout, easily felt
- Teeth flattish or rounded (not sharp)
- Small oval eyes, large dorsal fins of similar size
- 1st dorsal fin over pectoral fins, both with white tips; no precaudal pits; weak lower caudal
- Grey or grey-brown above, no spots; white below

Endemic	No
Size range (cm)	25-150
Depth range (m)	2-100+
Distribution	E, Moz+
IUCN Red Listing	Near Threatened 2018
CITES regs	Nil

TRIAKIDAE (HOUNDSHARKS)

Mustelus mustelus
Common smoothhound / houndshark

CAUGHT IN:



Physical Description

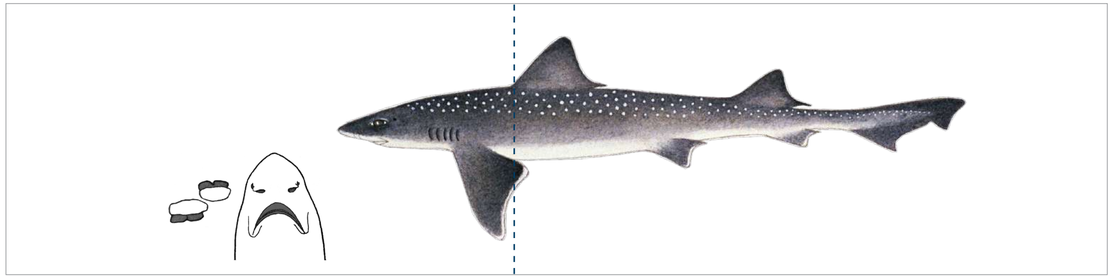
- Medium-sized, slender body with small oval eyes
- Teeth flattish or rounded (not sharp)
- Large dorsal fins of similar size; 1st dorsal fin just over pectoral fins
- No precaudal pits, weak lower caudal fin
- Grey or grey-brown above, occasionally with a few scattered dark spots, light below

Endemic	No
Size range (cm)	40-160
Depth range (m)	2-350
Distribution	E, S, W, Nam+
IUCN Red Listing	Endangered 2020
CITES regs	Nil

TRIAKIDAE (HOUNDSHARKS)

Mustelus palumbes
Whitespotted smoothhound / houndshark

CAUGHT IN:



Physical Description

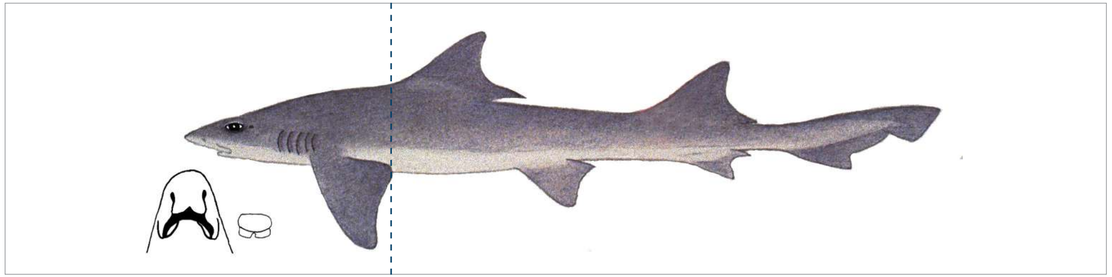
- Small, slender body with small oval eyes
- Teeth flattish or rounded (not sharp)
- 1st dorsal fin over pectoral fins and slightly larger than 2nd
- No precaudal pits; weak lower caudal fin
- Grey above with lines or scatterings of white spots, spots sometimes very small and difficult to see; white below

Endemic	Regional
Size range (cm)	30-120
Depth range (m)	2-350+
Distribution	E, S, W, Nam+, Moz
IUCN Red Listing	Least Concern 2019
CITES regs	Nil

TRIAKIDAE (HOUNDSHARKS)

Scylliogaleus quecketti
Flapnose houndshark

CAUGHT IN:



Physical Description

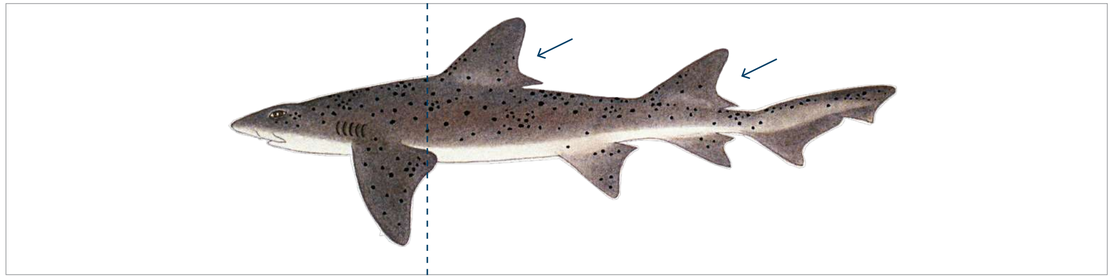
- Small body with blunt snout and pronounced nasal flaps in front of mouth
- Teeth flattish or rounded (not sharp)
- 2 similar-sized dorsal fins
- 1st dorsal fin immediately behind pectoral fins; no precaudal pits; weak lower caudal fin
- Grey above; newborn with white edges to caudal, anal and dorsal fins, cream below
- Rare; genetic samples and images with location details required

Endemic	Yes
Size range (cm)	35-100
Depth range (m)	0-70
Distribution	E
IUCN Red Listing	Vulnerable 2018
CITES regs	Nil

TRIAKIDAE (HOUNDSHARKS)

Triakis megalopterus
Spotted gully shark / sharptooth houndshark

CAUGHT IN:



Physical Description

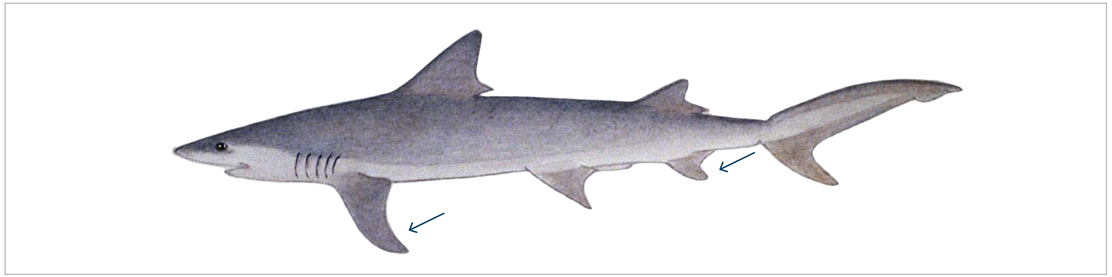
- Robust, medium-sized body with blunt snout and oval eyes
- Large mouth and dorsal fins, 2nd not much smaller than 1st
- No precaudal pits; poorly developed lower caudal fin
- Grey or bronze above, some with numerous black spots, scarce or absent in others, especially juveniles, white below.

Endemic	Regional
Size range (cm)	40-170+
Depth range (m)	2-50
Distribution	E, S, W, Nam+
IUCN Red Listing	Least Concern 2019
CITES regs	Nil

HEMIGALEIDAE (WEASEL SHARKS)

Hemipristis elongata
Snaggletooth shark

CAUGHT IN:

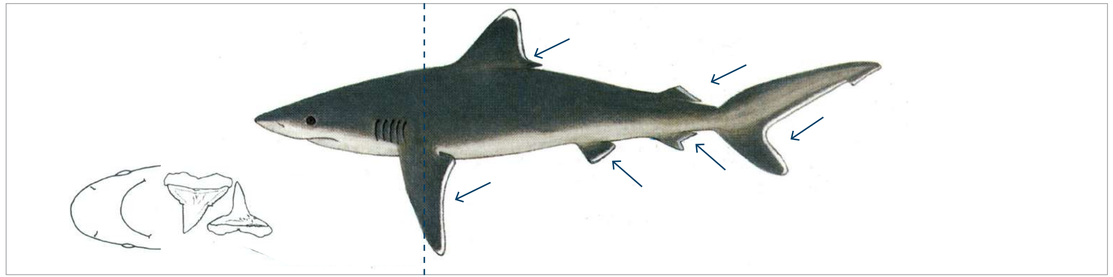


Physical Description

- Slender, medium-sized body; long rounded snout; oval eyes
- Prominent teeth; upper serrated, lower hooked
- Strongly curved, sickle-shaped fins; precaudal pits present
- Light grey above with no prominent markings; white below

Endemic	No
Size range (cm)	45-240
Depth range (m)	0-130
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2015
CITES regs	Nil

Carcharhinus albimarginatus
Silvertip shark



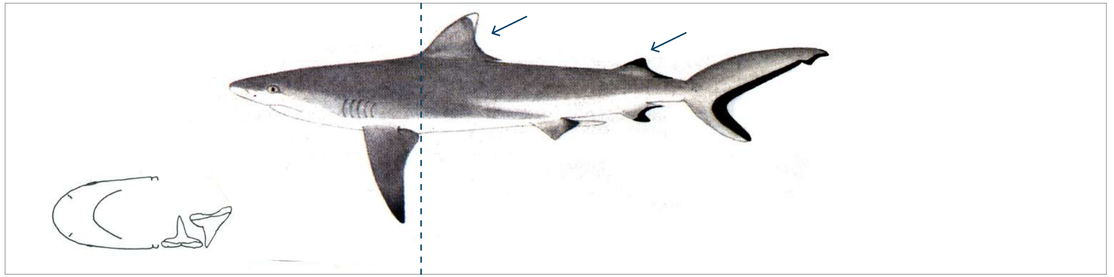
Physical Description

- Large, slender body; rounded snout; interdorsal ridge present
- Dark grey above with striking white tips and rear margins of all fins, white below

Endemic	No
Size range (cm)	70-300
Depth range (m)	0-600
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2015
CITES regs	Nil

Carcharhinus amblyrhynchos
Grey reef shark

CAUGHT IN:



Physical Description

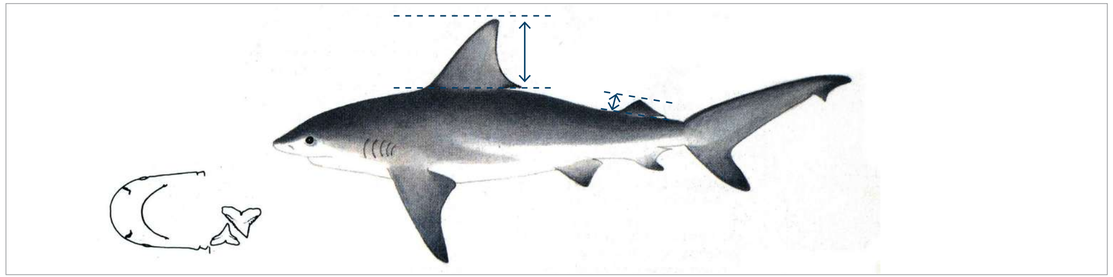
- Large, robust body; rounded snout; no interdorsal ridge
- 1st dorsal fin origin just behind pectoral fins and much larger than 2nd dorsal fin
- Grey above, white below; trailing edge of entire caudal fin black; tips of 1st dorsal white or plain, anal and 2nd dorsal fin black

Endemic	No
Size range (cm)	45-255
Depth range (m)	0-140
Distribution	E, Moz+
IUCN Red Listing	Endangered 2020
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Carcharhinus amboinensis
Pigeye shark / Java shark

CAUGHT IN:



Physical Description

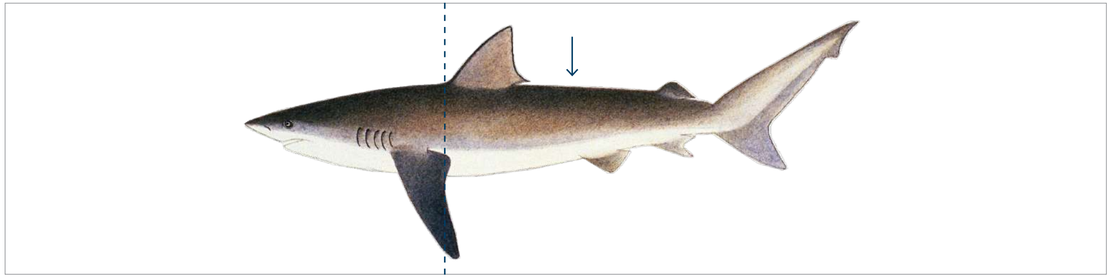
- Large, stocky body with short, blunt snout; no interdorsal ridge
- 1st dorsal fin tall, at least 3 times height of 2nd dorsal fin
- Grey above, white below, fins with dusky tips

Endemic	No
Size range (cm)	60-280
Depth range (m)	0-60
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2020
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Carcharhinus brachyurus
Copper shark / bronze whaler

CAUGHT IN:



Physical Description

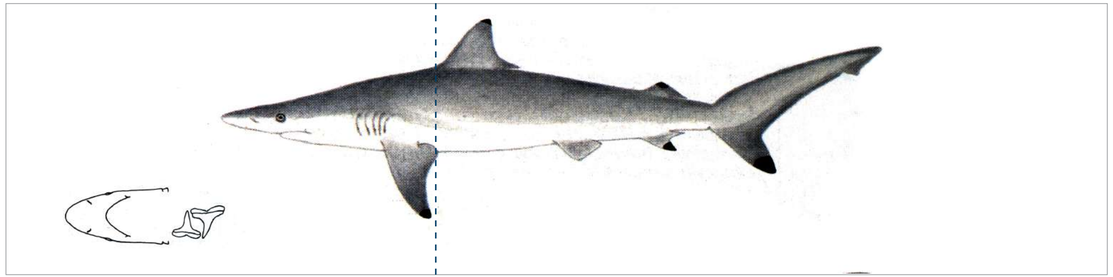
- Large, fairly slender body with bluntly pointed snout
- 1st dorsal fin overlaps slightly with pectoral fins
- Most lack an interdorsal ridge; faint if present
- Grey to bronze above (hence the name), dusky tips on most fins; white below

Endemic	No
Size range (cm)	60-290
Depth range (m)	0-100
Distribution	E, S, W, Nam
IUCN Red Listing	Vulnerable 2020
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Carcharhinus brevipinna
Spinner shark

CAUGHT IN:



Physical Description

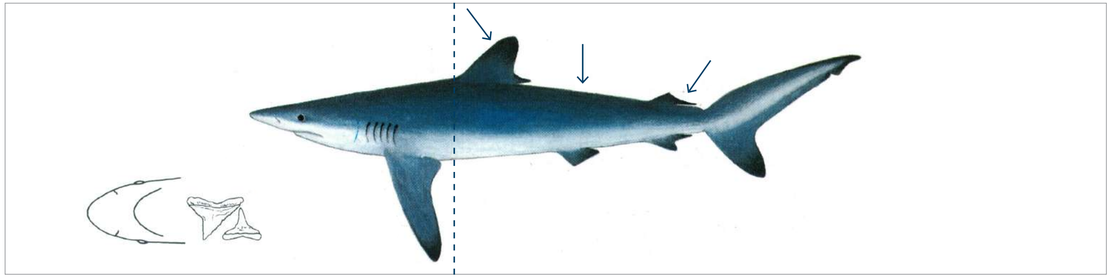
- Large, slender body with very long, pointed snout
- 1st dorsal fin relatively low and behind pectoral fins; no interdorsal ridge
- Newborn lack any black fin pigmentation, which becomes prominent with age, especially anal and lower caudal fins
- Grey above; white below

Endemic	No
Size range (cm)	60-280
Depth range (m)	0-75
Distribution	E, S, Moz+
IUCN Red Listing	Vulnerable 2020
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Carcharhinus falciformis
Silky shark

CAUGHT IN:



Physical Description

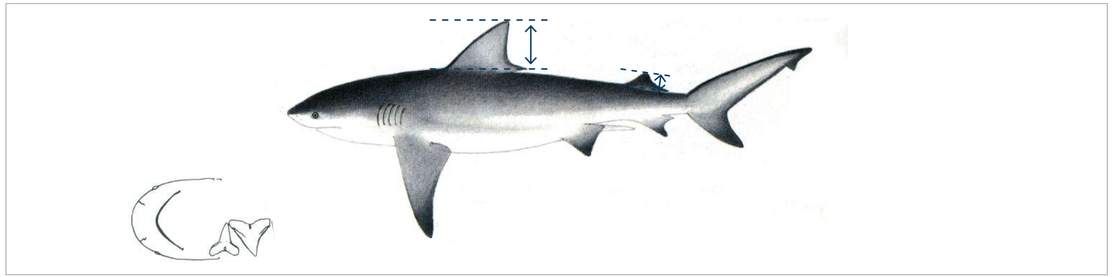
- Large, slender body with rounded snout; interdorsal ridge present
- Relatively low, rounded 1st first dorsal fin with origin behind pectoral fins
- 2nd dorsal fin low with long rear tip
- Grey to blue-grey above, white below; no obvious fin markings

Endemic	No
Size range (cm)	70-330
Depth range (m)	20-500 oceanic
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2017
CITES regs	Appendix II

CARCHARHINIDAE (REQUIEM SHARKS)

Carcharhinus leucas
Zambezi shark / bull shark

CAUGHT IN:



Physical Description

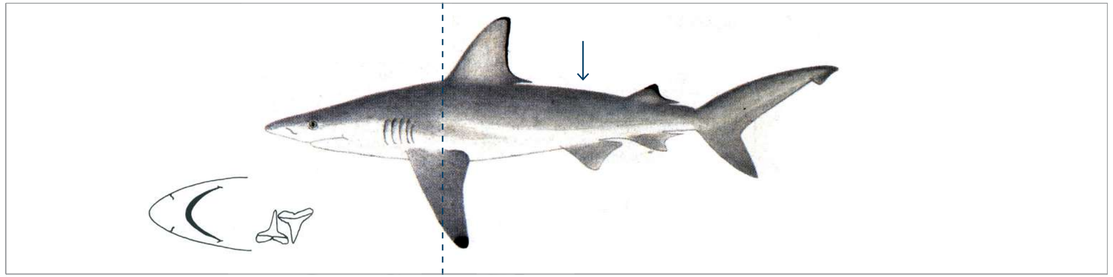
- Large, stocky body with short, blunt snout; no interdorsal ridge
- 1st dorsal fin less than 3 times height of 2nd dorsal fin
- Inhabits estuaries which are used as nursery areas
- Grey above, white below, fins of juveniles with dusky tips

Endemic	No
Size range (cm)	55-340
Depth range (m)	0-150
Distribution	E, S, Moz+
IUCN Red Listing	Vulnerable 2020
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Carcharhinus limbatus
Blacktip shark

CAUGHT IN:



Physical Description

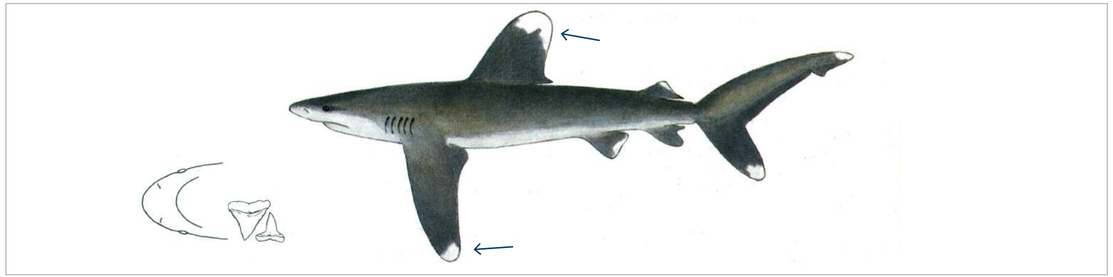
- Large, slender body with pointed snout
- Tall 1st dorsal fin over pectoral fins, no interdorsal ridge
- Pelvic fins with persistent black tips; black tips on other fins in young only, fading with age; anal fin usually plain or slightly dusky tip
- Bronze-grey above; white below; conspicuous white band on the mid flanks

Endemic	No
Size range (cm)	50-260
Depth range (m)	0-30+
Distribution	E, S, Moz+
IUCN Red Listing	Vulnerable 2020
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Carcharhinus longimanus
Oceanic whitetip shark

CAUGHT IN:



Physical Description

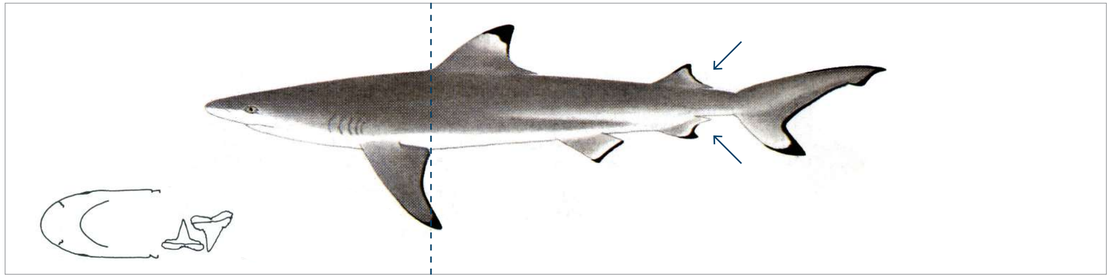
- Large robust body, with blunt snout; interdorsal ridge present
- Prominent long, rounded pectoral and 1st dorsal fins
- Grey-brown above with mottled white tips on most fins; black tips in juveniles; white below

Endemic	No
Size range (cm)	55-395
Depth range (m)	40-150+
Distribution	E, S, Moz+ oceanic
IUCN Red Listing	Critically Endangered 2018
CITES regs	Appendix II

CARCHARHINIDAE (REQUIEM SHARKS)

Carcharhinus melanopterus
Blacktip reef shark

CAUGHT IN:



Physical Description

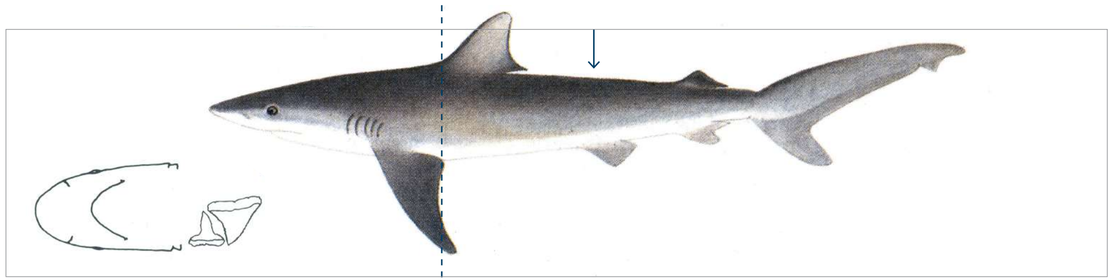
- Medium-sized, slender body; rounded snout; no interdorsal ridge
- 1st dorsal fin origin just behind pectoral fins; 2nd dorsal and anal fins relatively large
- Lemon brown to grey-brown above, white below; all fins with distinct black tips and edging

Endemic	No
Size range (cm)	30-200
Depth range (m)	0-140
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2020
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Carcharhinus obscurus
Dusky shark

CAUGHT IN:



Physical Description

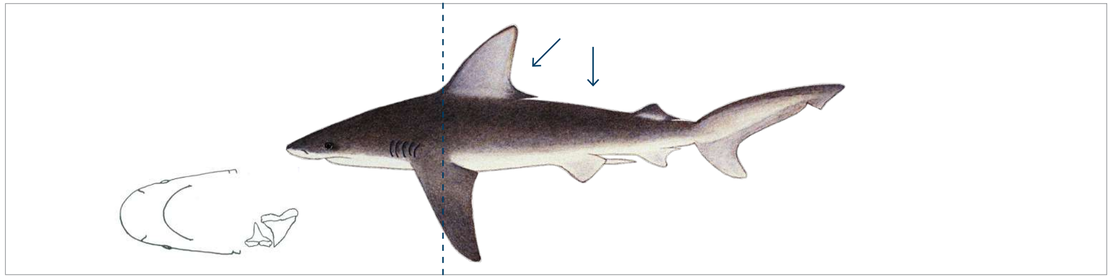
- Very large body with broadly rounded snout; interdorsal ridge present
- 1st dorsal fin just behind pectoral fins;
- Dusky fin tips, especially young sharks
- Grey-brown or bronzy above, white below

Endemic	No
Size range (cm)	70-400
Depth range (m)	0-400
Distribution	E, S, Moz+
IUCN Red Listing	Endangered 2018
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Carcharhinus plumbeus
Sandbar shark

CAUGHT IN:



Physical Description

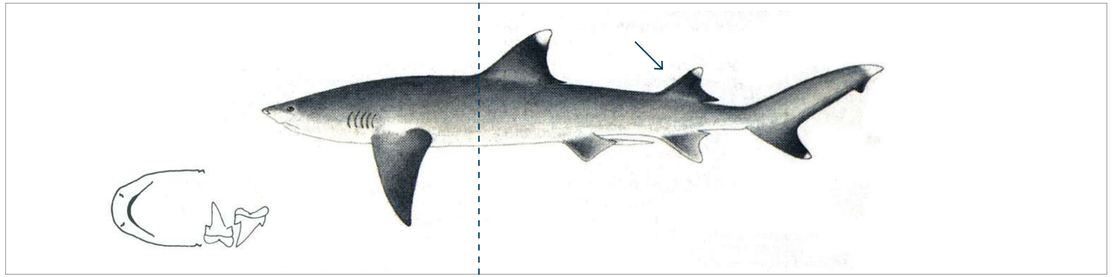
- Stout, medium-sized body with rounded snout; interdorsal ridge present
- Very tall 1st dorsal fin over pectoral fins
- Fin tips plain, or slightly dusky tips
- Grey brown or bronzy above, white below

Endemic	No
Size range (cm)	60-300
Depth range (m)	0-280
Distribution	E, Moz+
IUCN Red Listing	Endangered 2020
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Triaenodon obesus
Whitetip reef shark

CAUGHT IN:



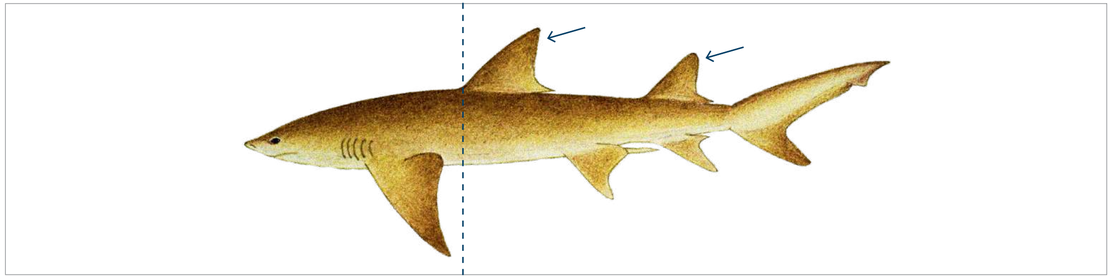
Physical Description

- Medium-sized, slender body; extremely short, blunt snout; oval eyes
- 1st dorsal fin origin well behind pectoral fins; 2nd dorsal nearly as large
- Grey above lighter below; white tips to 1st dorsal and upper caudal, sometimes 2nd dorsal

Endemic	No
Size range (cm)	50-210
Depth range (m)	8-40, sometimes up to 330
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2020
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Negaprion acutidens
Sicklefin / sharptooth lemon shark



Physical Description

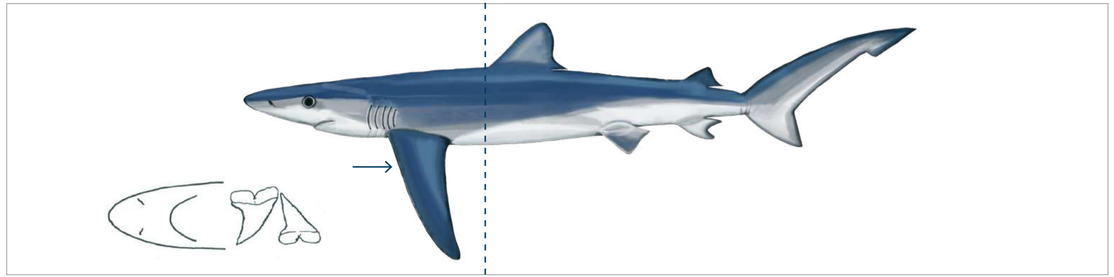
- Large, stocky body; broad blunt snout
- Two dorsal fins of similar size
- Yellow-brown above, white below

Endemic	No
Size range (cm)	50-310
Depth range (m)	0-40
Distribution	E, Moz+
IUCN Red Listing	Endangered 2020
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Prionace glauca
Blue shark

CAUGHT IN:



Physical Description

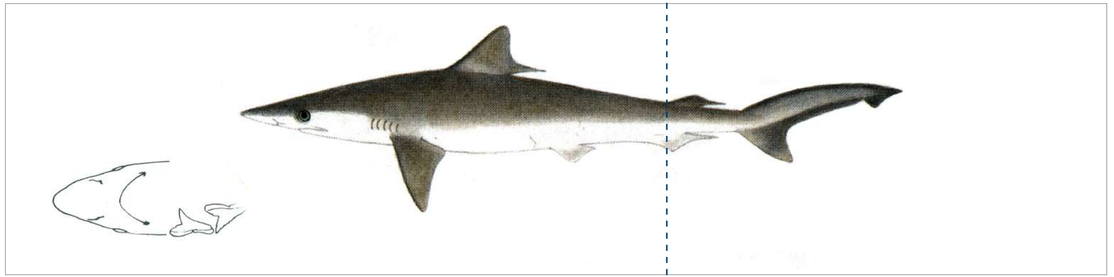
- Large, slender body with long, conical snout; no interdorsal ridge
- Large eyes; first dorsal fin relatively small and set well back
- Long, narrow pectoral fins
- Dark blue above with sharp demarcation on sides to white below

Endemic	No
Size range (cm)	40-380
Depth range (m)	0-350
Distribution	E, S, W, Moz+, Nam+, oceanic
IUCN Red Listing	Near Threatened 2018
CITES regs	Nil

CARCHARHINIDAE (REQUIEM SHARKS)

Rhizoprionodon acutus
Milk shark

CAUGHT IN:



Physical Description

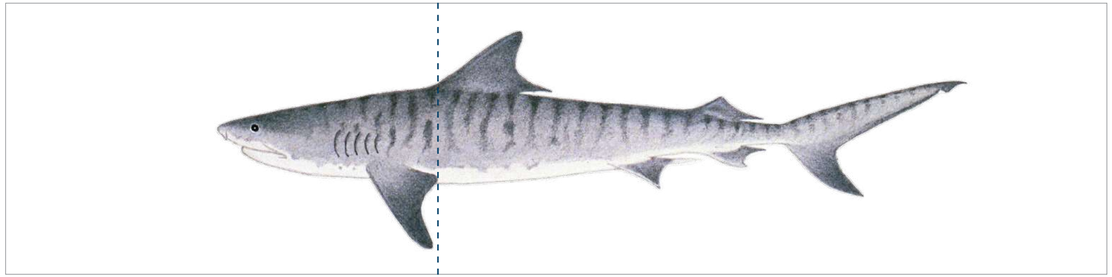
- Small, slender body with very long narrow snout and large eyes; no interdorsal ridge
- 2nd dorsal fin small, with origin behind larger anal fin
- Grey or grey-brown above, white below; no fin markings

Endemic	No
Size range (cm)	25-110 W
Depth range (m)	0-200
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2020
CITES regs	Nil

GALEOCERDIDAE (TIGER SHARKS)

Galeocerdo cuvier
Tiger shark

CAUGHT IN:



Physical Description

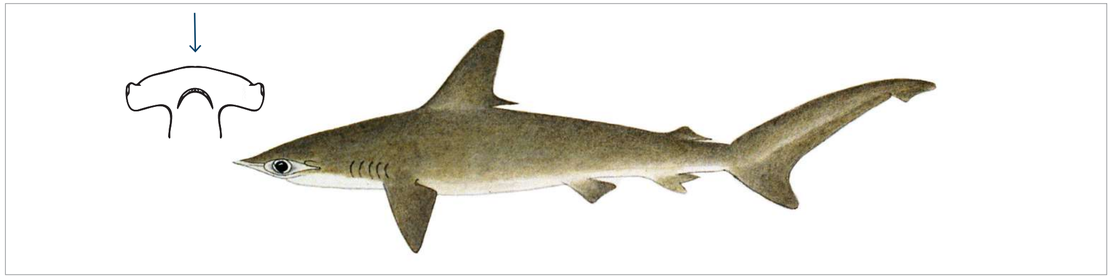
- Very large shark with blunt snout and large mouth
- Large, saw-edged, cockscomb-shaped teeth in both jaws
- Black vertical bars that fade to dark grey with age

Endemic	No
Size range (cm)	50—550
Depth range (m)	0-200
Distribution	E, Moz+
IUCN Red Listing	Near Threatened 2018
CITES regs	Nil

SPHYRNIDAE (HAMMERHEAD SHARKS)

Sphyrna zygaena
Smooth hammerhead shark

CAUGHT IN:



Physical Description

- Large, robust body with slightly curved hammer, which lacks central notch
- Moderately tall 1st dorsal fin and very short 2nd dorsal and anal fins
- Olive-grey or dark grey above (anglers call it black hammerhead); white below; juveniles much lighter.

Endemic	No
Size range (cm)	50-400
Depth range (m)	0-200
Distribution	E, S, W
IUCN Red Listing	Vulnerable 2018
CITES regs	Appendix II

SPHYRNIDAE (HAMMERHEAD SHARKS)

Sphyrna lewini
Scalloped hammerhead shark

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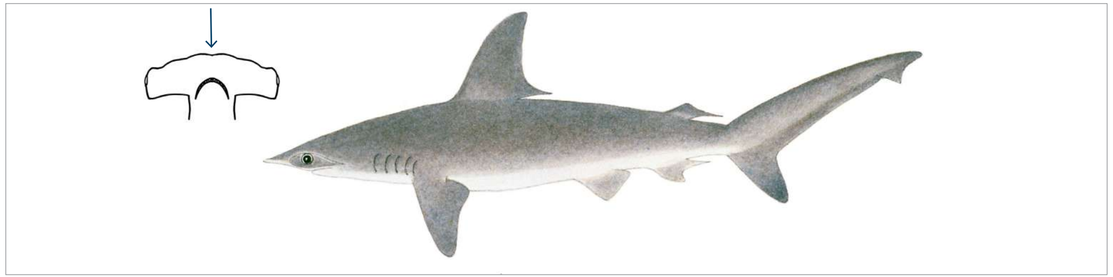

Physical Description

- Large body; front of hammer slightly curved and with central notch
- Moderately tall 1st dorsal fin and very small 2nd dorsal
- Pectoral fins and lower caudal may be dusky-tipped
- Uniform grey to bronze above (anglers call it bronze hammerhead); white below

Endemic	No
Size range (cm)	40-420
Depth range (m)	0-1000
Distribution	E, Moz+
IUCN Red Listing	Critically Endangered 2018
CITES regs	Appendix II

SPHYRNIDAE (HAMMERHEAD SHARKS)

Sphyrna mokarran
Great hammerhead shark

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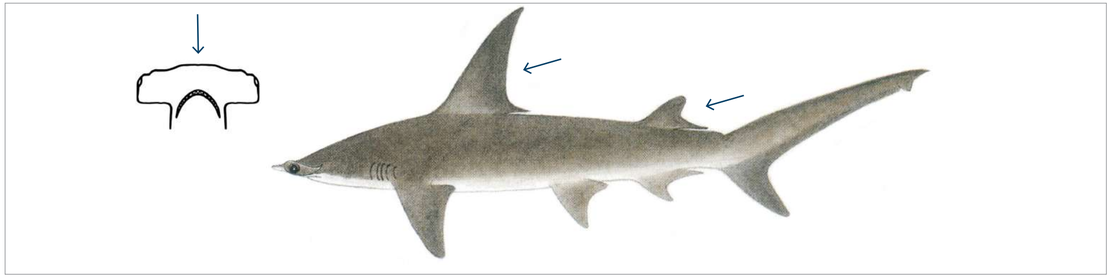


Physical Description

- Large body, front of hammer straight with central notch
- Extremely tall, curved 1st dorsal fin
- 2nd dorsal fin, pelvic and anal fins relatively large, with concave rear edges
- Light grey or grey-brown above; unmarked fin tips; white below

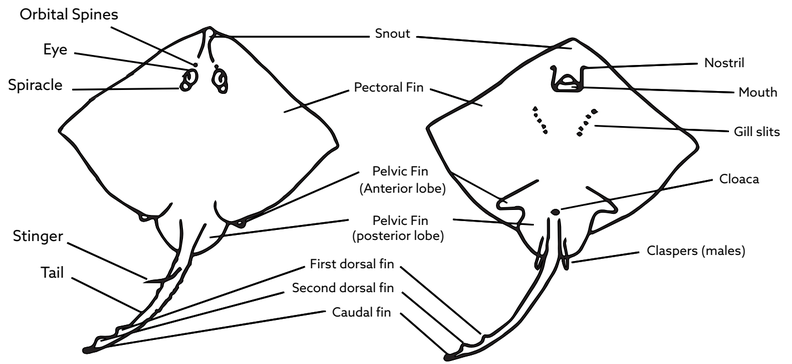
Endemic	No
Size range (cm)	50-610
Depth range (m)	1-80+
Distribution	E, Moz+
IUCN Red Listing	Critically Endangered 2018
CITES regs	Nil

SKATES & RAYS
(BATOIDS)

KEY FEATURES OF SKATES & RAYS:

- Flattened body
- 5-6 pairs of gill slits on underside of body
- Pectoral fins fused to head
- Most propelled by pectoral fins (wings) with thin tail
- Others propelled by prominent caudal fin

SKATE & RAY (BATOID) MORPHOLOGY



Skates

- Two lobed pelvic fin (bilobate)
- Tail fleshly, generally with 2 small dorsal fins near the tip
- Mature males have enlarged spines near the eyes and wingtips
- Mature males may be more bell-shaped
- Lays eggs

Rays

- One lobed pelvic fin
- Tail generally thin and whip-like, generally with a stinging spine (exception: sleeper & electric rays)
- Mature males do not have enlarged spines
- Gives birth to live young

SKATE & RAY (BATOID) FAMILIES

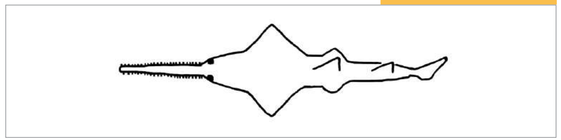
GROUP NO.1 | 1 FAMILY **Body flattened but shark-like; greatly elongated snout with lateral teeth; coastal.**

PRISTIDAE

01 | PAGE 103

Pristidae (Sawfishes)

Coastal, large flattened body with shark-like tail; **prominent elongated snout with many pairs of lateral, saw-like teeth**



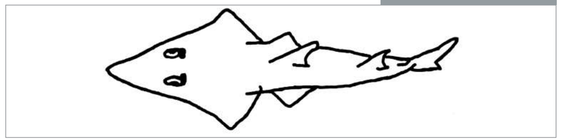
GROUP NO.2 | 2 FAMILIES **Body flattened but shark-like; snout not greatly elongated; pronounced tail, coastal.**

RHINIDAE

01 | PAGE 105

Rhinidae (Wedgefishes)

1st dorsal fin over pelvic fins; **caudal fin with prominent lower lobe**



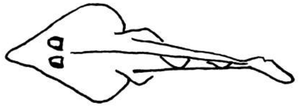
SKATE & RAY (BATOID) FAMILIES (CONTINUED)

RHINOBATIDAE

02 | PAGE 107

Rhinobatidae (Guitarfishes)

1st dorsal fin behind pelvic fins; **caudal fin lacks lower lobe**



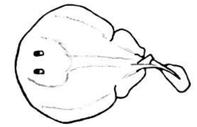
GROUP NO.3 | 2 FAMILIES **Body soft; rounded pectoral disc; 1-2 large dorsal fins and very short shark-like tail; body entirely naked (no denticles, thorns or sting above); coastal and deepwater.**

NARKIDAE

01 | PAGE 111

Narkidae (Sleeper rays)

Coastal and deepwater; very small body; **tiny transverse mouth; 1-2 dorsal fins smaller than distinct caudal fin which is almost symmetrical**

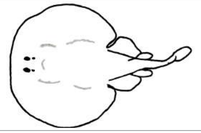


TORPEDINIDAE

02 | PAGE 114

Torpedinidae (Electric rays)

Coastal and deepwater; small body; **broad, arched mouth;** 1st dorsal fin larger than 2nd; **caudal fin larger than 2 dorsal fins and almost symmetrical**



SKATE & RAY (BATOID) FAMILIES (CONTINUED)

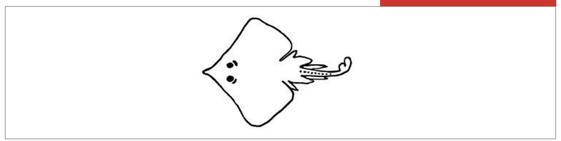
GROUP NO.4 | 3 FAMILIES **Head not demarcated from prominent pectoral disc; pointed snout; usually bilobed pelvic fins; usually 2 very small dorsal fins and very small caudal fin near tip of firm, slender tail, sting absent; many species with thorns above; mainly deepwater.**

01 | PAGE 117

Rajidae (Hardnose skates)

Deepwater; small to large body; **rigid, pointed snout; notched pelvic fins with two lobes;** heavy thorns on shoulders and in 1 or more rows along midline on to firm, slender tail; 2 small dorsal fins near tail tip and very small caudal fin; thorns usually present on tail

RAJIDAE

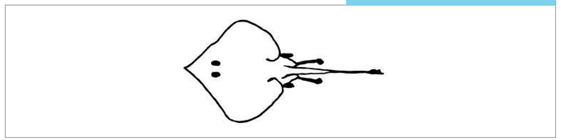


02 | PAGE 130

Arhynchobatidae (Softnose skates)

Deepwater; small to large body; **soft, flexible, pointed snout;** 2 small dorsal fins and minute caudal fin near the tail tip; thorns usually present on firm, slender tail but not well developed on disc

ARHYNCHOBATIDAE

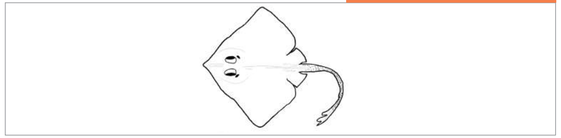


03 | PAGE 131

Gurgesiellidae (Pygmy skates)

Deepwater but some coastal; very small to small body; deeply notched pelvic fins with long finger-like front lobes; usually 2 dorsal fins on long, slender tail; thorns around eyes and down midline on to tail in single or multiple rows

GURGESIELLIDAE



SKATE & RAY (BATOID) FAMILIES (CONTINUED)

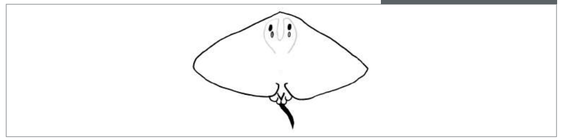
GROUP NO.5 | 2 FAMILIES **Head not demarcated from prominent, rounded pectoral disc; no dorsal or caudal fins; 1-2 stings on very thin tail; mainly coastal.**

01 | PAGE 132

Gymnuridae (Butterfly rays)

Coastal; large body; diamond-shaped disc far wider than long; sting at base of very short tail

GYMNURIDAE

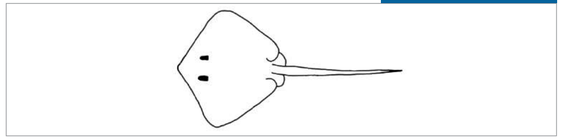


02 | PAGE 133

Dasyatidae (Stingrays)

Generally coastal; small to large body; **rounded disc slightly longer than wide;** long whip-like tail (if intact) with 1-2 stings; skin varies from entirely smooth to covered to varying extents with small denticles, thorns and/or tubercles

DASYATIDAE



SKATE & RAY (BATOID) FAMILIES (CONTINUED)

GROUP NO.6 | 3 FAMILIES **Head with prominent fleshy snout or cephalic fins, pointed pectoral disc; 1 dorsal fin at base of very thin tail; coastal and oceanic.**

01 | PAGE 141

Myliobatidae (Eagle rays)

Coastal and oceanic; medium to large body; raised head with elongated fleshy snout; 1 small dorsal fin followed by sting at base of thin tail; **tooth bands in multiple rows**

02 | PAGE 144

Aetobatidae (Pelagic eagle rays)

Coastal and oceanic; large body, raised head with elongated fleshy snout; 1 small dorsal fin followed by sting at base of thin tail; **tooth band as single row**

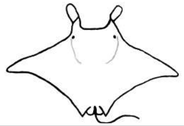
MYLIOBATIDAE AND AETOBATIDAE

03 | PAGE 145

Mobulidae (Devilrays)

Coastal and oceanic; small to very large body; **1 cephalic fin on either side of mouth,** 1 small dorsal fin at base of thin tail, most species lack sting

MOBULIDAE



PRISTIDAE (SAWFISHES)

Pristis pristis
Largetooth sawfish

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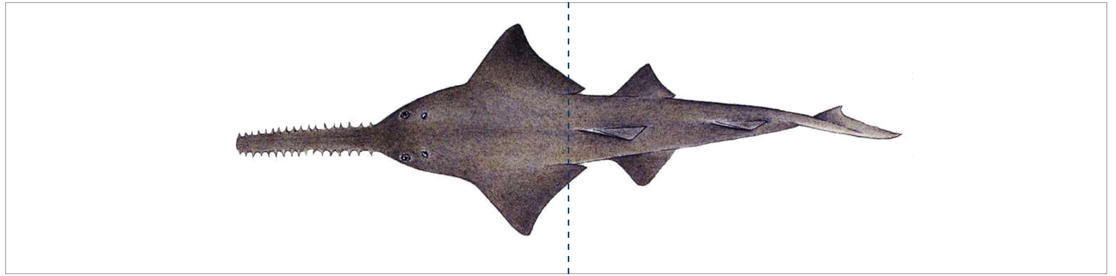


Physical Description

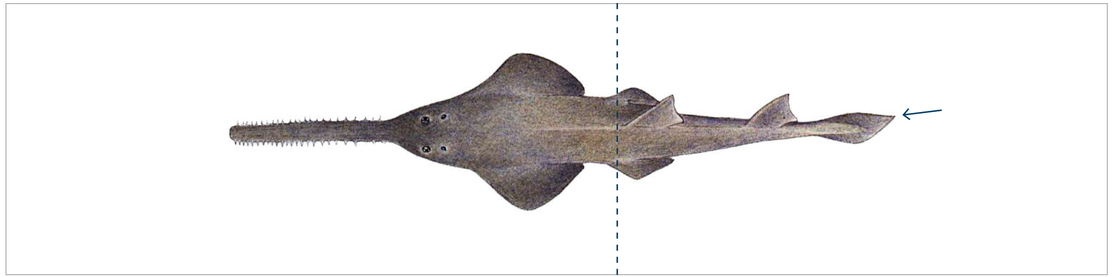
- 14-24 pairs of white rostral teeth, gill-slits on ventral surface
- Wide, angular pectoral fins
- 1st dorsal fin well forward of pelvic fins; pronounced lower caudal lobe
- Yellow-brown above, white-cream below
- Last seen in 1990s and suspected to be extinct in SA, sightings or catches must be reported

Endemic	No
Size range (cm)	70-650+ TL
Depth range (m)	0-30
Distribution	Moz+; locally extinct in SA
IUCN Red Listing	Critically Endangered 2013
CITES regs	Appendix I

PRISTIDAE (SAWFISHES)

Pristis zijsron
Green sawfish

CAUGHT IN:



Physical Description

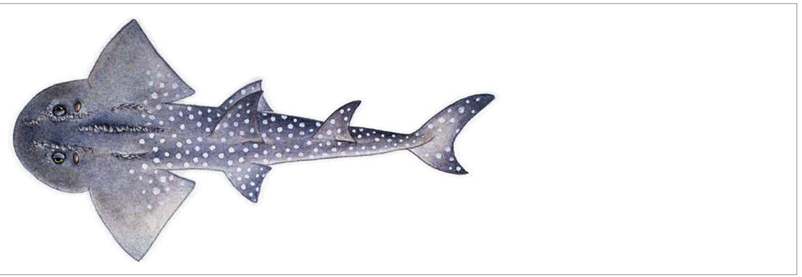
- 24-31 pairs of white rostral teeth, gill-slits on ventral surface
- Narrow, rounded pectoral fins
- Weak lower caudal lobe
- Olive to green-brown above, white-cream below
- Last seen in 1990s and suspected to be extinct in SA, sightings or catches must be reported

Endemic	No
Size range (cm)	80-730+ TL
Depth range (m)	0-70+
Distribution	Moz+; locally extinct in SA
IUCN Red Listing	Critically Endangered 2012
CITES regs	Appendix I

RHINIDAE (WEDGEFISHES)

Rhina ancylostoma
Bowmouth guitarfish / shark ray

CAUGHT IN:



Physical Description

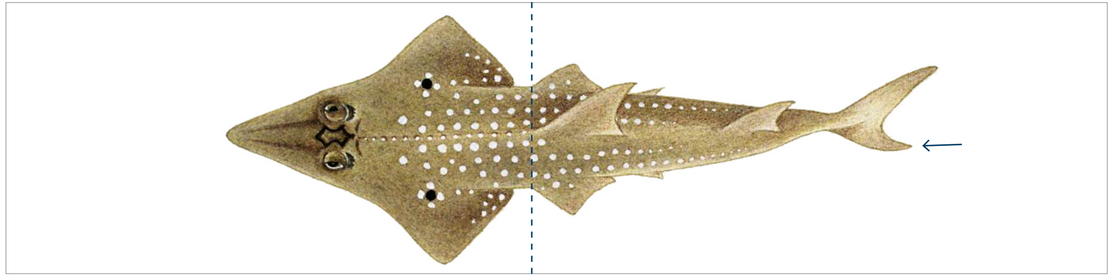
- Round snout; wide, angular pectoral fins and thickset body
- 1st dorsal fin over pelvic fins; well developed lower caudal fin
- Heavy ridges of spiky thorns over eyes, on back and shoulders
- Grey to brown above with large, white spots; white below

Endemic	No
Size range (cm)	45-270 TL
Depth range (m)	0-70+
Distribution	E, Moz+
IUCN Red Listing	Critically Endangered 2018
CITES regs	Appendix II

RHINIDAE (WEDGEFISHES)

Rhynchobatus djiddensis
Whitespotted wedgefish / giant guitarfish

CAUGHT IN:



Physical Description

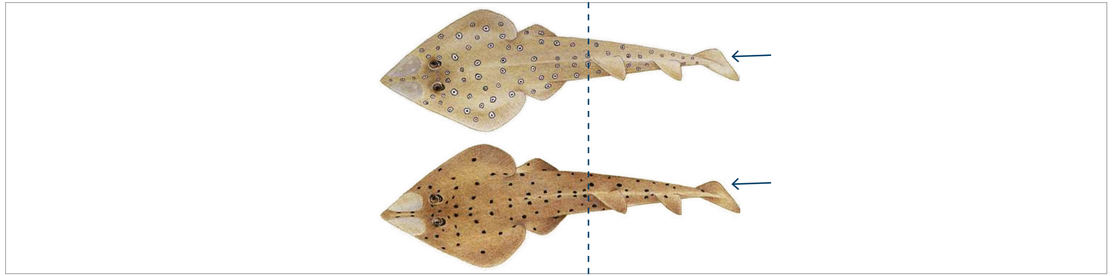
- Long, pointed snout and angular pectoral fins
- Large dorsal fins; origin of 1st dorsal over pelvic fins
- Large caudal fin with well-developed lower lobe
- Brown to olive-green above, with numerous white spots; two round black pectoral eye-like blotches fade with age; white below

Endemic	No
Size range (cm)	60-310 TL
Depth range (m)	0-70
Distribution	E, S, Moz+
IUCN Red Listing	Critically Endangered 2018
CITES regs	Appendix II

RHINOBATIDAE (GUITARFISHES)

Acroteriobatus annulatus
Lesser guitarfish

CAUGHT IN:



Physical Description

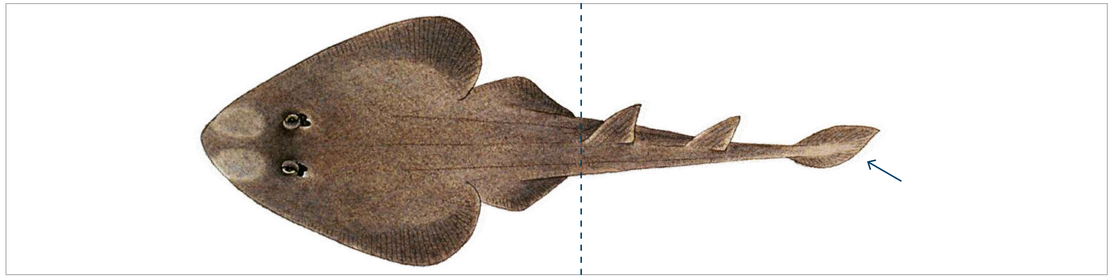
- Wedge-shaped snout and rounded pectoral fins
- Origin of 1st dorsal well behind pelvic fins; no lower caudal lobe
- Numerous, small, dark-brown spots inside white rings with dark brown margin

Endemic	Regional
Size range (cm)	23-140 TL
Depth range (m)	0-75
Distribution	E, S, W, Nam+
IUCN Red Listing	Vulnerable 2020
CITES regs	Nil

RHINOBATIDAE (GUITARFISHES)

Acroteriobatus blochii
Bluntnose guitarfish

CAUGHT IN:



Physical Description

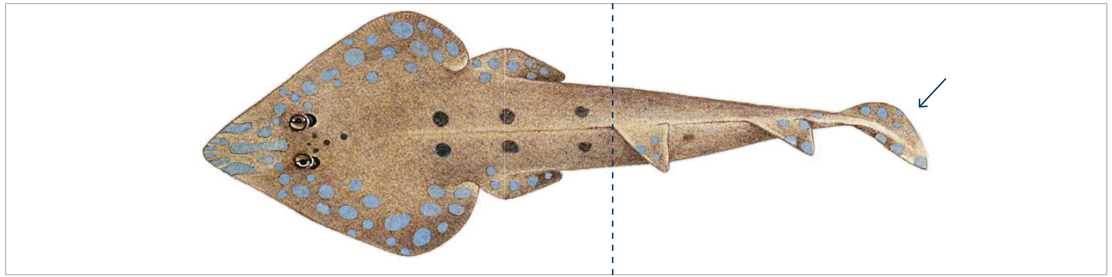
- Rounded snout and pectoral fins
- Origin of 1st dorsal fin well behind pelvic fins; no lower caudal lobe
- Adults uniform brown above; young with symmetrical pattern of ocelli with light centres and dark edges which fade with age; white below

Endemic	No
Size range (cm)	20-100 TL
Depth range (m)	0-50
Distribution	W, Nam
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

RHINOBATIDAE (GUITARFISHES)

Acroteriobatus leucospilus
Greyspot guitarfish

CAUGHT IN:



Physical Description

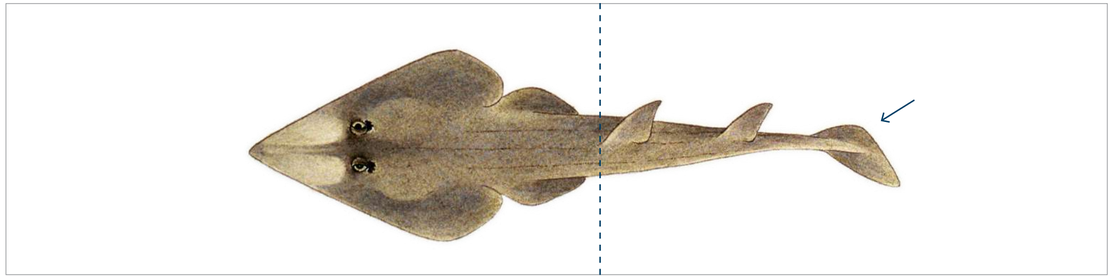
- Broad, wedge-shaped snout and rounded pectoral fins
- Origin of 1st dorsal fin well behind pelvic fins; no lower caudal lobe
- Brown above with blue-grey bands (snout) and dots (rest of body); some dark brown spots on back

Endemic	No
Size range (cm)	25-120 TL
Depth range (m)	0-100
Distribution	E, Moz+
IUCN Red Listing	Endangered 2018
CITES regs	Nil

RHINOBATIDAE (GUITARFISHES)

Rhinobatos holcorhynchus
Slender guitarfish

CAUGHT IN:



Physical Description

- Sharply pointed snout, slender body
- Origin of 1st dorsal fin well behind pelvic fins; no lower caudal lobe
- Olive-green to brown and no spots above; black blotch on underside of snout

Endemic	No
Size range (cm)	25-130 TL
Depth range (m)	75-250
Distribution	E, Moz+
IUCN Red Listing	Data Deficient 2018
CITES regs	Nil

NARKIDAE (SLEEPER RAYS)

Electrolux addisoni
Ornate sleeper ray

CAUGHT IN:

Physical Description

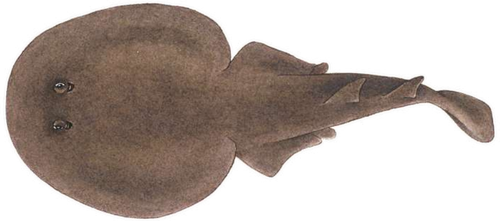
- Almost circular disc; naked (no denticles); body soft
- 2 dorsal fins of similar size; round caudal fin
- Dark brown above with ornate pattern of pale spots and streaks and concentric black lines; below creamy white with dark green-brown margins covered with pale spots
- Rare; samples or images with location details required

Endemic	Yes
Size range (cm)	up to 50 DW
Depth range (m)	2-50
Distribution	E
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

NARKIDAE (SLEEPER RAYS)

Heteronarce garmani
Natal sleeper ray

CAUGHT IN:



Physical Description

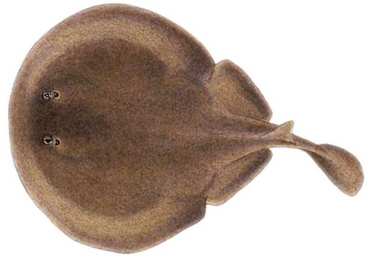
- Elongated, shovel-shaped disc; naked (no denticles); body soft
- Elongated tail; symmetrical caudal fin larger than both dorsal fins
- Plain brown above, white below

Endemic	Regional
Size range (cm)	up to 25 DW
Depth range (m)	70-330
Distribution	E, Moz
IUCN Red Listing	Near Threatened 2019
CITES regs	Nil

NARKIDAE (SLEEPER RAYS)

Narke capensis
Onefin / Cape sleeper ray

CAUGHT IN:



Physical Description

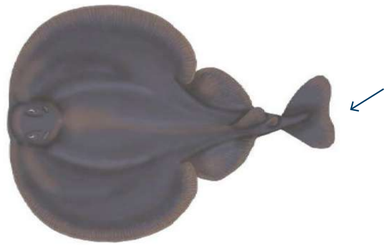
- Almost circular disc; naked (no denticles); body soft
- Single dorsal fin, smaller than rounded caudal fin
- Yellowish-brown above, creamy yellow below with brown margin

Endemic	Regional
Size range (cm)	up to 40 DW
Depth range (m)	20-115+
Distribution	E, S, Nam
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

TORPEDINIDAE (ELECTRIC RAYS)

Tetronarce cowleyi
South African / Cowley's torpedo ray

CAUGHT IN:



Physical Description

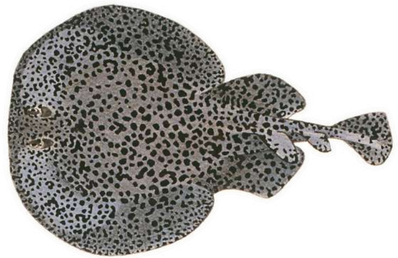
- Almost circular disc; naked (no denticles); body soft
- 1st dorsal fin about twice as large as 2nd
- Large, paddle-like caudal fin, with upper and lower lobes about equal in size
- Uniform shiny black to dark grey above, white below

Endemic	Regional
Size range (cm)	<19-115 DW
Depth range (m)	110-455
Distribution	S, W, Nam
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

TORPEDINIDAE (ELECTRIC RAYS)

Torpedo fuscomaculata
Blackspotted electric ray

CAUGHT IN:



Physical Description

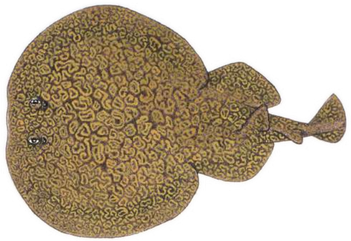
- Almost circular disc; naked (no denticles); body soft
- 1st dorsal fin slightly larger than 2nd which is close to the caudal fin
- Dull grey above, some with dark spots, others with blotches/speckles which may form reticulate pattern; white below

Endemic	No
Size range (cm)	10-65 DW
Depth range (m)	0-440
Distribution	W, S, E, Moz+
IUCN Red Listing	Data Deficient 2018
CITES regs	Nil

TORPEDINIDAE (ELECTRIC RAYS)

Torpedo sinuspersici
Marbled electric ray

CAUGHT IN:



Physical Description

- Almost circular disc; naked (no denticles); body soft
- 1st dorsal slightly larger than 2nd which is close to the caudal fin
- Variable colour pattern, dark brown above with elaborate pale reticulation

Endemic	No
Size range (cm)	10-130 DW
Depth range (m)	5-130
Distribution	E, Moz+
IUCN Red Listing	Data Deficient 2017
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Dipturus pullopunctatus
Slime skate

CAUGHT IN:

Physical Description

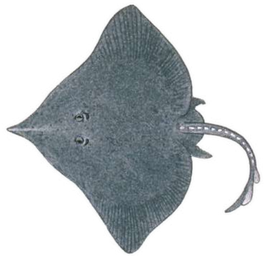
- Firm, sharply pointed snout; 2 very small, closely spaced dorsal fins; tail similar in length to rest of body
- Long thorns around eye and along tail; skin of females and young smooth
- Mid-brown above with single, large, irregular, dark brown blotch on each pectoral fin.
- Black spots on juveniles; greyish-white below with grey-black sensory pores

Endemic	Regional
Size range (cm)	20-95 DW
Depth range (m)	30-390
Distribution	S, W, Nam
IUCN Red Listing	Least Concern 2019
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Dipturus springeri
Roughbelly skate

CAUGHT IN:



Physical Description

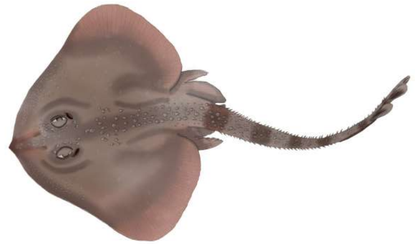
- Firm, sharp snout; 2 very small, closely spaced dorsal fins; tail shorter than body
- Smooth skin above, with denticles only on snout and head margins
- Below denticles cover entire disc (feels like sandpaper)
- Weak rosette of thorns around eyes, absent on mid disc, 1 row on slender tail
- Dark grey to blackish above; dark with black sensory pores below

Endemic	No
Size range (cm)	20-130 DW
Depth range (m)	50-970
Distribution	E, S, W, Nam, Moz+
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Leucoraja compagnoi
Tigertail skate

CAUGHT IN:



Physical Description

- Firm, short, bluntly pointed snout; 2 very small, closely spaced dorsal fins on short, broad tail which is similar in length to body
- Disc spiny above, with clusters of small thorns along front of snout and 3 rows along midline and tail; smooth below
- Brown above with dark bands on tail; white below with dusky posterior edge - known only from immature females - adult colouration may be different.
- Samples, especially larger individuals, with location details required

Endemic	Yes
Size range (cm)	8-30 DW
Depth range (m)	480-625
Distribution	E, S, W
IUCN Red Listing	Data Deficient 2018
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Leucoraja wallacei
Yellowspot skate

CAUGHT IN:

Physical Description

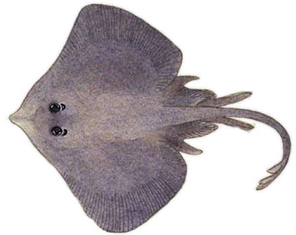
- Short, broad, blunt, firm snout with distinctive shape to leading edge of disc
- Disc width similar to length; 2 small, closely-spaced dorsal fins on tip of tail
- Disc very rough above with thorns around eyes and 2-4 rows along midline and tail
- Yellow-brown above with bright yellow spots, often in clusters (some have white spots on grey-brown), white and smooth below

Endemic	Regional
Size range (cm)	9-55 DW
Depth range (m)	70-500
Distribution	E, S, W, Nam, Moz
IUCN Red Listing	Vulnerable 2019
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Malacoraja spinacidermis
Roughskin / prickle skate

CAUGHT IN:



Physical Description

- Snout bluntly pointed with flexible tip; 2 small, closely spaced dorsal fins
- Disc covered with fine denticles (velvet texture) above, smooth below
- Adults lack thorns, only present in juveniles around eyes and on shoulders
- Slate-grey or grey-brown above; dark brown or grey below, some with light blotches

Endemic	No
Size range (cm)	7-45 DW
Depth range (m)	450-1600
Distribution	W, Nam
IUCN Red Listing	Least Concern 2019
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Neoraja stehmanni
South African dwarf skate / African pygmy skate

CAUGHT IN:

Physical Description

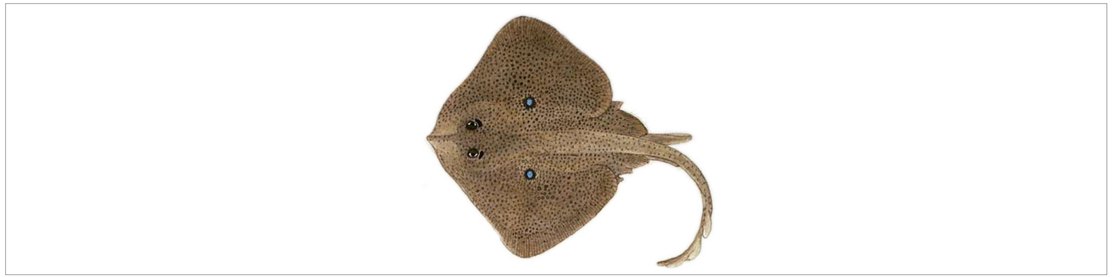
- Short, blunt snout on very small, wide rounded disc; very large, close-set eyes; 2 very small, closely spaced dorsal fins at tip of long, slender tail which is greater than body length
- Disc with fine denticles above; thorns around eyes and shoulders and single row along mid-line on to tail; smooth below
- Uniform brown-grey above, 6-7 crossbars on tail; pale below with dark brown areas on disc edges

Endemic	Yes
Size range (cm)	8-22 DW
Depth range (m)	100-1025
Distribution	E, S, W
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Raja ocellifera (formerly *R. miraletus*)
Twineye skate

CAUGHT IN:



Physical Description

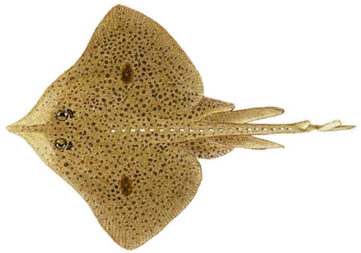
- Broadly angular, stiff snout with slightly pronounced tip; 2 small, closely spaced dorsal fins
- Skin smooth above in adults, some thorns on shoulders and midline, prominent on tail
- Reddish-brown above with many small, darker spots and two bright blue eyespots ringed in brown and then yellow; white below

Endemic	Yes
Size range (cm)	up to 40 DW
Depth range (m)	15-105+
Distribution	E, S
IUCN Red Listing	Endangered 2019
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Raja straeleni
Biscuit skate

CAUGHT IN:



Physical Description

- Blunt, angular, stiff snout; 2 very small, closely spaced dorsal fins
- Strong thorns above, extending down midline as single row on to tail
- Some large individuals may have thorns on underside of tail
- Brown above with various-sized black spots forming whorls and blotches; many with two gold and black eyespots ; white below with no dark pores but dark margins and blotches

Endemic	No
Size range (cm)	15-70 DW
Depth range (m)	1-690
Distribution	E, S, W, Nam+
IUCN Red Listing	Near Threatened 2020
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Rajella barnardi (formerly *Rajella confudens*)
Bigthorn skate

CAUGHT IN:

Physical Description

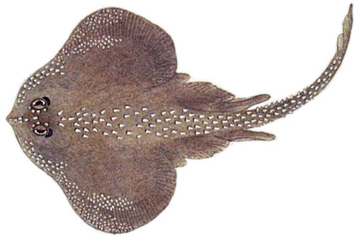
- Short, firm, pointed snout; 2 small, closely spaced dorsal fins
- Large eyes and thick disc; tail as long as body
- Large white thorns on snout, around eyes and in bands along midline onto tail
- Light grey above; grey or white below with darker patches on rear of disc and underside of tail

Endemic	No
Size range (cm)	8-45 DW
Depth range (m)	100-1700
Distribution	S, W, Nam+
IUCN Red Listing	Least Concern 2020
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Rajella caudaspinosa
Munchkin skate

CAUGHT IN:



Physical Description

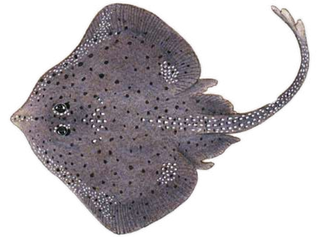
- Small body with very short, obtusely pointed, firm snout; 2 small, closely spaced dorsal fins
- Large, close-set, bulging eyes
- Tail thick and much longer than body
- Leading edges of disc and tail very rough with light thorns
- Light grey to brown above, with or without darker spots, young with white reticulated pattern above; white below

Endemic	Regional
Size range (cm)	5-32 DW
Depth range (m)	100-1100
Distribution	E, S, W, Nam
IUCN Red Listing	Least Concern 2020
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Rajella leoparda
Leopard skate

CAUGHT IN:



Physical Description

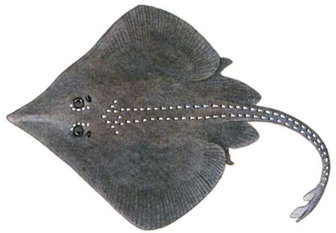
- Moderately long, firm snout with pronounced tip; 2 rounded, closely spaced dorsal fins
- Small eyes, thin flat disc; skin largely smooth above and below, prickly below in juveniles
- Small, inconspicuous light thorns along leading edge of disc; several rows of larger thorns on midline on to tail which is as long as body
- Medium grey to brown above, juveniles with numerous small closely spaced black spots; adults with larger scattered dark spots, spots fading with age; white or mottled grey below

Endemic	No
Size range (cm)	10-65 DW
Depth range (m)	130-1900
Distribution	S, W, Nam+
IUCN Red Listing	Least Concern 2020
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Rajella ravidula
Smoothback skate

CAUGHT IN:



Physical Description

- Long, firm snout; 2 small, closely spaced dorsal fins
- Widely spaced denticles above, smooth skin below
- Thorns around eyes and in 2 prominent rows from shoulders to 1st dorsal fin
- Medium to pale grey to purplish-brown above, white below with dusky margins

Endemic	No
Size range (cm)	up to 40 DW
Depth range (m)	500-1500
Distribution	W, Nam+
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

RAJIDAE (HARDNOSE SKATES)

Rostroraja alba
Spearnose skate / white skate

CAUGHT IN:

Physical Description

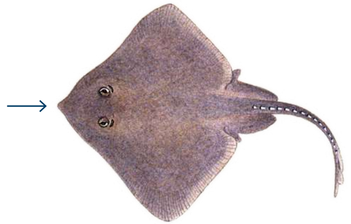
- Narrow-tipped, firm snout; very large, angular disc; 2 small closely spaced dorsal fins
- Skin rough above and below in adults; thorns on snout
- 3 rows of large thorns on tail which is slightly shorter than body
- Grey above with numerous small white spots (red-brown in young), white below with no black pores; juveniles often have small brownish eye-spots on the wings similar to Raja straeleni

Endemic	No
Size range (cm)	15-160 DW
Depth range (m)	5-500
Distribution	E, S, W, Nam+, Moz
IUCN Red Listing	Endangered 2006
CITES regs	Nil

ARHYNCHOBATIDAE (SOFTNOSE SKATES)

Bathyraja smithii
African softnose skate

CAUGHT IN:



Physical Description

- Broadly triangular, bluntly pointed, soft snout
- Disc without thorns, but present in juveniles; 2 small, closely spaced dorsal fins
- Single row of evenly-spaced, large thorns on tail which is shorter than body
- Uniform grey above, may have white spots; white below with dark grey blotches around gill slits, cloaca and along tail

Endemic	Regional
Size range (cm)	10-85 DW
Depth range (m)	440-1020
Distribution	S, W, Namibia
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

GURGESIELLIDAE (PYGMY SKATES)

Cruriraja hulleyi
Roughnose legskate

CAUGHT IN:

Physical Description

- Pointed snout, deeply lobed pelvic fins with fingerlike anterior lobes
- Skin above largely smooth, without denticles; disc slightly wider than long
- Large thorns on snout, around eyes, shoulders and down midline in multiple rows on to long, slender tail which is longer than body
- Light brown above with scattered large dark spots in juveniles, fading with age; spots absent in adults; white below

Endemic	No
Size range (cm)	<10-45 DW
Depth range (m)	40-550
Distribution	E, S, W
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

GYMNURIDAE (BUTTERFLY RAYS)

Gymnura natalensis
Diamond ray / (Backwater) butterfly ray

CAUGHT IN:

Physical Description

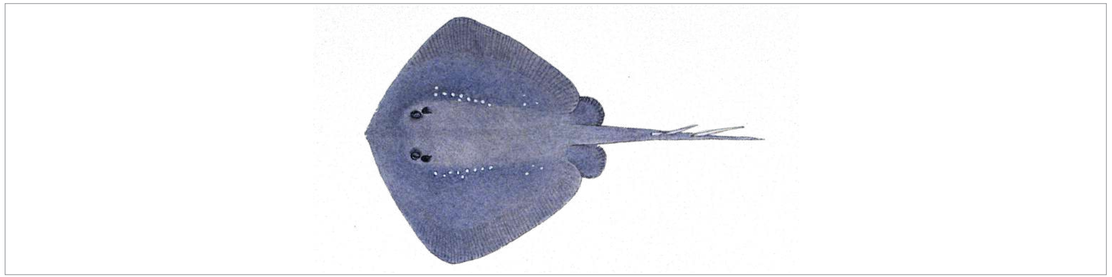
- Broad, smooth (no denticles) diamond-shaped pectoral disc, twice as wide as long
- Very short tail with small sting, no dorsal or caudal fin
- Grey, green or brown above, often with darker mottling

Endemic	Regional
Size range (cm)	40-250 DW
Depth range (m)	0-75
Distribution	E, S, W, Nam
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

DASYATIDAE (STINGRAYS)

Bathytoshia brevicaudata
Shorttail stingray

CAUGHT IN:



Physical Description

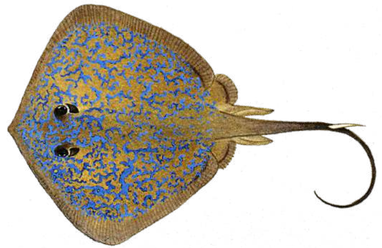
- Moderately pointed snout; large, thick disc; no dorsal or caudal fins
- Smooth skin; single, large thorn in front of 1-2 long stings on short, tapering tail
- Grey-brown or grey-blue above with row of small, pale blue spots at each pectoral fin base; white below but margins and underside of tail usually dusky

Endemic	No
Size range (cm)	32-210 DW
Depth range (m)	0-480
Distribution	E, S, W, Moz
IUCN Red Listing	Least Concern 2020
CITES regs	Nil

DASYATIDAE (STINGRAYS)

Dasyatis chrysonota
Blue stingray

CAUGHT IN:



Physical Description

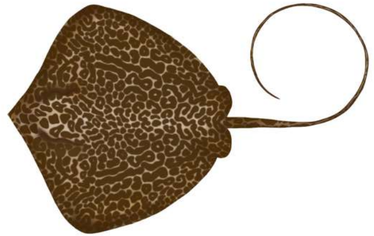
- Moderately pointed snout; smooth skin except for sparse denticles on adults
- No dorsal or caudal fins; long tail, less than twice body length, usually with 1 sting
- Uniform golden-brown above, overlain with slate-blue marbling

Endemic	No
Size range (cm)	17-75 DW
Depth range (m)	0-110
Distribution	E, S, W, Moz, Nam
IUCN Red Listing	Near Threatened 2019
CITES regs	Nil

DASYATIDAE (STINGRAYS)

Himantura leoparda
Leopard whipray

CAUGHT IN:



Physical Description

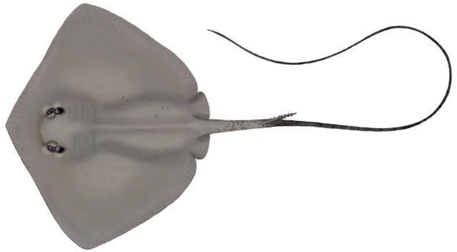
- Broadly pointed snout; smooth skin except for band of flattened denticles down midline in adults
- Single sting near base of thin tail, up to 3 times body length; no dorsal or caudal fins
- Yellow-brown above with dense pattern of dark rings or spots in a reticulated pattern; tail banded; white below

Endemic	No
Size range (cm)	20-140 DW
Depth range (m)	0-70
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2015
CITES regs	Nil

DASYATIDAE (STINGRAYS)

Pateobatis fai
Pink stingray

CAUGHT IN:



Physical Description

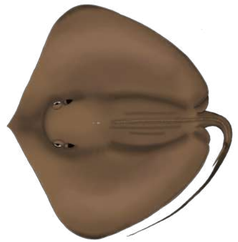
- Broadly pointed snout; smooth skin except for a short band of tubercles along midline
- Long, whiptail tail (when intact) with 1-2 stings near base; no dorsal or caudal fins
- Uniformly light pinkish-brown above, occasionally white blotch on midline in front of eyes; white below

Endemic	No
Size range (cm)	30-150 DW
Depth range (m)	0-70
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2015
CITES regs	Nil

DASYATIDAE (STINGRAYS)

Pateobatis jenkinsii
Jenkins whipray

CAUGHT IN:



Physical Description

- Broadly pointed snout; disc with broadly rounded tips
- Row of enlarged thorns along midline of disc; smooth skin except for a short band of tubercles along midline
- Long, whiptail tail (when intact) with 1-2 stings near base; no dorsal or caudal fins
- Light brown above, tail darker; white below

Endemic	No
Size range (cm)	23-150 DW
Depth range (m)	0-90
Distribution	E, Moz
IUCN Red Listing	Vulnerable 2015
CITES regs	Nil

DASYATIDAE (STINGRAYS)

Pteroplatytrygon violacea
Pelagic stingray

CAUGHT IN:

Physical Description

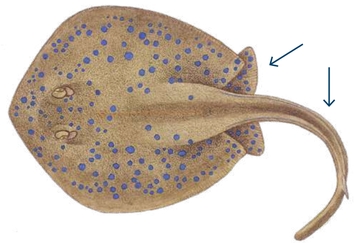
- Broadly rounded snout, angular disc; no dorsal or caudal fins
- Smooth skin (no denticles), small thorns in a ridge along the midline down to 1-2 large stings
- Uniform dark violet, blue-green or black both above and below

Endemic	No
Size range (cm)	314-80 DW
Depth range (m)	5-380; open water
Distribution	E, S, W, Nam+ Moz+
IUCN Red Listing	Least Concern 2018
CITES regs	Nil

DASYATIDAE (STINGRAYS)

Taeniura lymma
Bluespotted ribbontail / fantail ray

CAUGHT IN:



Physical Description

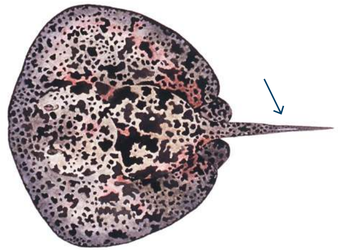
- Oval disc, longer than wide; rounded snout
- Smooth skin except for single line of denticles along midline; no dorsal or caudal fins
- Tail stout and tapering, about 1,5 times disc width
- Sting closer to tail tip than most stingrays
- Various shades of brown above, with blue spots; a pair of blue stripes down base of tail to sting

Endemic	No
Size range (cm)	13-35 DW
Depth range (m)	0-20
Distribution	E, Moz+
IUCN Red Listing	Least Concern 2020
CITES regs	Nil

DASYATIDAE (STINGRAYS)

Taeniurops meyeni *(formerly Taeniura melanospilus)*

Blotched fantail ray / blotched stingray



Physical Description

- Large, almost circular disc covered with small, star-shaped denticles, no thorns
- No dorsal or caudal fins; very short, stout tapering tail with 1-2 stings
- Blue-grey to black above with light blotches and spots; white below

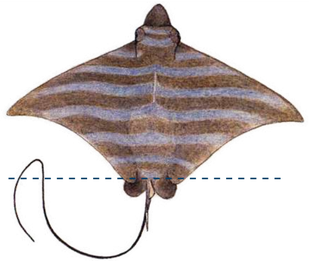
Endemic	No
Size range (cm)	30-180 DW
Depth range (m)	1-400
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2015
CITES regs	Nil

MYLIOBATIDAE (EAGLE RAYS)

Aetomylaeus bovinus

Bullray / duckbill ray

CAUGHT IN:



Physical Description

- Prominent, raised head with highly elongated snout and angular wings; rough skin (denticles) in older individuals
- Single dorsal fin over pelvic fins; 1-2 large stings at base of long, whip tail; no caudal fin
- Several rows of flattened, plate-like teeth
- Light brown with several pale blue-grey stripes which may fade after death, white below.

Endemic	No
Size range (cm)	25-220 DW
Depth range (m)	0-150
Distribution	E, S, W, Nam+, Moz+
IUCN Red Listing	Critically Endangered 2020
CITES regs	Nil

MYLIOBATIDAE (EAGLE RAYS)

Aetomylaeus vespertilio
Ornate eagle ray

CAUGHT IN:

Physical Description

- Prominent, raised head with highly elongated snout and angular wings; narrow band of rough skin (denticles) on midline in older individuals
- Single dorsal fin behind pelvic fins; no stings; long, whip tail; no caudal fin
- Several rows of flattened, plate-like teeth
- Brown to blue-grey with many transverse black lines which form a reticulate pattern near the tail, white below

Endemic	No
Size range (cm)	up to 300 DW
Depth range (m)	0-110
Distribution	E, Moz+
IUCN Red Listing	Endangered 2015
CITES regs	Nil

MYLIOBATIDAE (EAGLE RAYS)

Myliobatis aquila
Common eagle ray

CAUGHT IN:

Physical Description

- Raised head with short, rounded snout; smooth skin (no denticles)
- Single dorsal fin well behind pelvic fins; 1-2 large stings at base of long, whip tail, no caudal fin
- Several rows of flattened, plate-like teeth
- Uniformly dark brown to blackish above, white below

Endemic	No
Size range (cm)	<20-180 DW
Depth range (m)	0-100
Distribution	E, S, W, Nam+
IUCN Red Listing	Critically Endangered 2020
CITES regs	Nil

AETOBATIDAE (PELAGIC EAGLE RAYS)

Aetobatus ocellatus
Spotted eagle ray

CAUGHT IN:

Physical Description

- Prominent, raised head with highly elongated snout and angular wings; smooth skin (no denticles)
- Single dorsal fin over pelvic fins; 1-2 large stings at base of long, whip tail; no caudal fin
- Single row of flat, chevron-shaped teeth
- Uniform dark purple, brown to black above, with numerous white spots; white below

Endemic	No
Size range (cm)	18-300 DW
Depth range (m)	1-50+
Distribution	E, S, Moz+
IUCN Red Listing	Vulnerable 2015
CITES regs	Nil

MOBULIDAE (DEVILRAYS)

Mobula alfredi
Reef manta ray

CAUGHT IN:

Physical Description

- Pair of large, manipulative cephalic fins on either side of wide, terminal mouth
- No calcified lump or tail sting behind small dorsal fin
- White shoulder markings form a black Y-shape above
- White below, including inside of mouth and cephalic fins
- Dark spots and patches below, especially between gill openings

Endemic	No
Size range (cm)	130-550 DW
Depth range (m)	0-430, pelagic
Distribution	E, Moz+
IUCN Red Listing	Vulnerable 2018
CITES regs	Appendix II

MOBULIDAE (DEVILRAYS)

Mobula birostris
Giant manta ray

CAUGHT IN:

Physical Description

- Pair of large, manipulative cephalic fins on either side of wide, terminal mouth
- Serrated tail sting mostly encased in calcified lump behind small dorsal fin
- White shoulder markings form a black T-shape above
- White below, inside mouth and cephalic fins and posterior margin charcoal
- Dark spots and patches below confined to abdomen, not gill area

Endemic	No
Size range (cm)	120-730 DW
Depth range (m)	0-1000, pelagic
Distribution	E, S, Moz+
IUCN Red Listing	Endangered 2019
CITES regs	Appendix II

MOBULIDAE (DEVILRAYS)

Mobula kuhlii
Shorthorn pygmy devilray

CAUGHT IN:

Physical Description

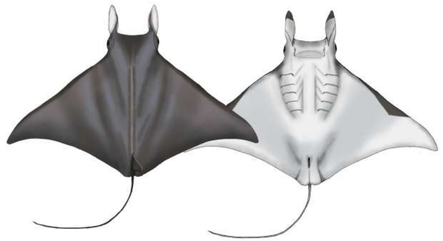
- Pair of short, narrow, rigid cephalic fins on either side of ventral mouth
- Skin generally smooth (few denticles)
- Small white-tipped dorsal fin at base of short (less than disc width), whiplike tail; no sting
- Uniform dark grey-brown to blue-black above, white below

Endemic	No
Size range (cm)	30-135 DW
Depth range (m)	0-50, pelagic
Distribution	E, Moz+
IUCN Red Listing	Endangered 2020
CITES regs	Appendix II

MOBULIDAE (DEVILRAYS)

Mobula eregoodoo
Longhorn pygmy devilray

CAUGHT IN:



Physical Description

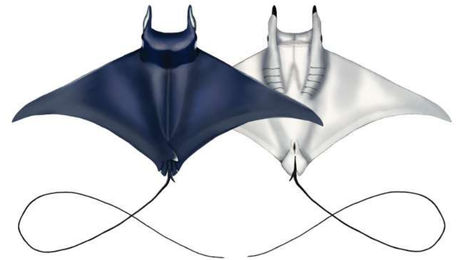
- Pair of long, narrow, rigid cephalic fins on either side of ventral mouth
- Skin generally smooth (few denticles)
- Small, often white-tipped dorsal fin at base of short (less than disc width), whiplike tail; no sting
- Uniform dark grey-brown to blue-black above, white below

Endemic	No
Size range (cm)	43-130 DW
Depth range (m)	0-50, pelagic
Distribution	E, Moz?
IUCN Red Listing	Endangered 2020
CITES regs	Appendix II

MOBULIDAE (DEVILRAYS)

Mobula mobular
Giant devilray / spinetail devilray

CAUGHT IN:



Physical Description

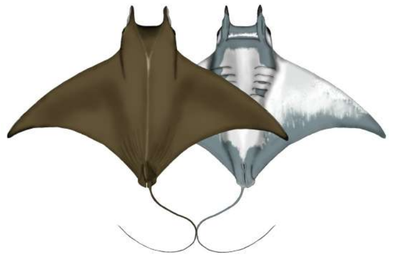
- Pair of short, rigid cephalic fins on either side of ventral mouth
- Skin rough, very sharply pointed wings
- Small white-tipped dorsal fin at base of long (greater than disc width), whiplike tail; only species with a sting
- Black-blue above with two faint crescentic white patches on shoulders, uniform white below

Endemic	No
Size range (cm)	60-520 DW
Depth range (m)	0-1100, pelagic
Distribution	E, Moz+
IUCN Red Listing	Endangered 2018
CITES regs	Appendix II

MOBULIDAE (DEVILRAYS)

Mobula tarapacana
Sicklefin devilray

CAUGHT IN:



Physical Description

- Pair of short, rigid cephalic fins on either side of ventral mouth
- Skin rough; wings strongly curved back
- Small, plain dorsal fin at base of short (less than disc width), thick tail; no sting
- Uniform olive-brown above, white below with blue-grey around mouth and rear margin

Endemic	No
Size range (cm)	120-370 DW
Depth range (m)	0-2000 pelagic
Distribution	E, Moz
IUCN Red Listing	Endangered 2018
CITES regs	Appendix II

MOBULIDAE (DEVILRAYS)

Mobula thurstoni
Bentfin devilray

CAUGHT IN:

Physical Description

- Pair of short, rigid cephalic fins on either side of ventral mouth
- Slight indentation in front of wings; denticles very sparse
- Small, white-tipped dorsal fin at base of whiplike tail which is as long as disc width; no sting
- Uniform dark blue to black above, white below with silver-bronze wing tips and trailing

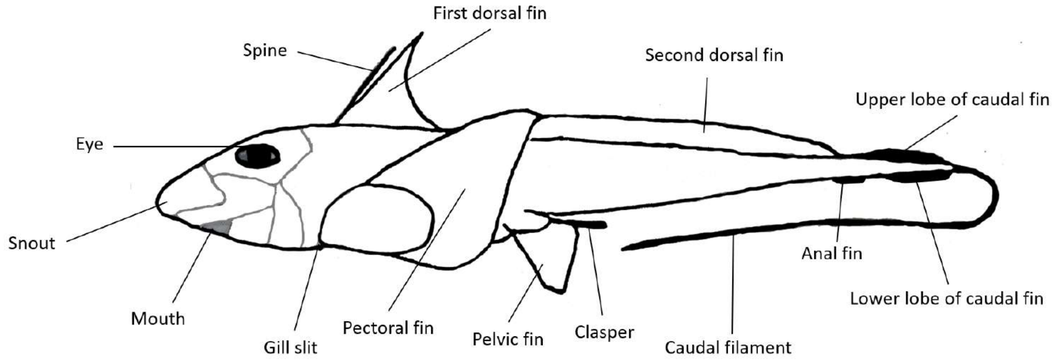
Endemic	No
Size range (cm)	70-200 DW
Depth range (m)	0-100 pelagic
Distribution	E
IUCN Red Listing	Endangered 2018
CITES regs	Appendix II

CHIMAERAS

KEY FEATURES OF CHIMAERAS:

- Naked skin (no denticles)
- Single pair of external gill slits
- Body not flattened
- Long caudal fin

CHIMAERA MORPHOLOGY



CHIMAERA FAMILIES

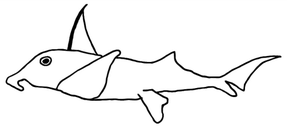
3 FAMILIES **Single gill slit/cover, skin smooth (no denticles), 1st of 2 dorsal fins erect with a long spine, long caudal fin.**

01 | PAGE 155

Callorhinchidae (Elephant fishes)

Hoe-shaped snout; short, high 2nd dorsal and anal fins

CALLORHINCHIDAE

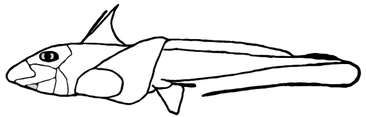


02 | PAGE 156

Chimaeridae (Shortnose chimaeras)

Short, fleshy, blunt snout; body tapering to whip-like tail

CHIMAERIDAE



03 | PAGE 157

Rhinochimaeridae (Longnose chimaeras)

Long, spear-shaped snout, low 2nd dorsal fin

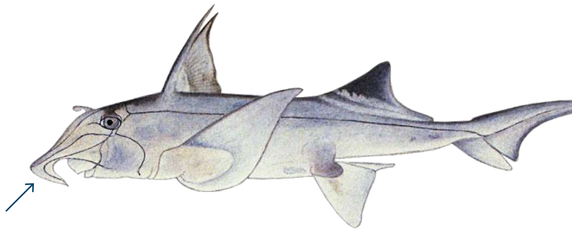
RHINOCHIMAERIDAE

CALLORHINCHIDAE (ELEPHANT FISHES)

Callorhinchus capensis

St. Joseph shark, Cape elephantfish

CAUGHT IN:



Physical Description

- Hoe-like projection on snout
- Both dorsal and anal fins tall, with single large spine on 1st dorsal
- Greatly elongated upper caudal fin
- Silver-bronze with brown markings on flanks and head; fin webs brown

Endemic	Regional
Size range (cm)	13-120
Depth range (m)	10-370
Distribution	E, S, W, Nam
IUCN Red Listing	Least Concern 2019
CITES regs	Nil

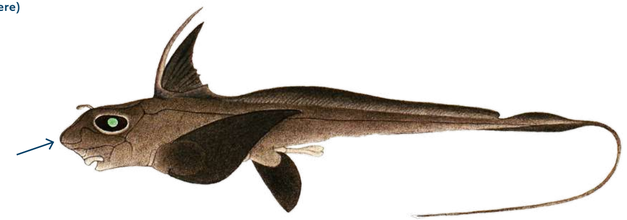
CHIMAERIDAE (SHORTNOSE CHIMAERAS)

Chimaera / Hydrolagus spp

Shortnose chimaeras / ghostsharks

CAUGHT IN:

(*Hydrolagus africanus* illustrated here)



Physical Description

- Bluntly pointed or rounded snout
- First dorsal fin with strong spine; low, very long 2nd dorsal fin
- Anal fin absent (*Hydrolagus*) or low and long (*Chimaera*) but presence of anal fin difficult to determine
- Caudal fin not raised above body axis and with or without long terminal filament

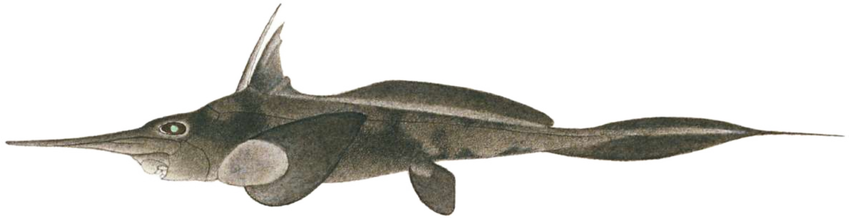
Endemic	No
Size range (cm)	Up to 100
Depth range (m)	400-1000
Distribution	Species dependent
IUCN Red Listing	Species dependent, Least Concern or Data Deficient
CITES regs	Nil

RHINOCHIMAERIDAE (LONGNOSE CHIMAERAS)

Harriotta raleighana

Narrownose chimaera / narrownose ghostshark

CAUGHT IN:



Physical Description

- Long, thin snout, broad at base, front half abruptly narrowing to a point
- No separate anal fin
- Caudal fin with long terminal filament
- Dark brown or blackish

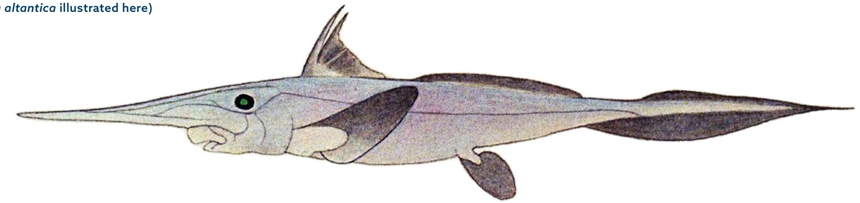
Endemic	No
Size range (cm)	14-100
Depth range (m)	200->2000
Distribution	W, Nam?
IUCN Red Listing	Least Concern 2015
CITES regs	Nil

RHINOCHIMAERIDAE (LONGNOSE CHIMAERAS)

Rhinochimaera spp
Longnose chimaeras

CAUGHT IN:

(*Rhinochimaera altantica* illustrated here)



Physical Description

- Long, narrow snout gradually tapering to a point (R. atlantica) or Long, pointed paddle-shaped snout (R. africana)
- No anal fin
- Caudal fin with short terminal filament
- Blackish-brown (*R. africana*) to pinkish-white (*R. atlantica*)

Endemic	No
Size range (cm)	Up to 160
Depth range (m)	500-1500
Distribution	Species dependent
IUCN Red Listing	Species dependent, Least Concern or Data Deficient
CITES regs	Nil

GLOSSARY:

Angular: having sharp corners.

Anterior: relating to front of or head end of the animal.

Barbel: a slender sensory skin projection on the snout.

Base: part of a projection / fin connected to the body.

Bilobate: having or consisting of two lobes.

Bycatch: a fish or other marine species caught unintentionally while catching certain target species.

Caudal peduncle: posterior part of the body, behind the anal fin, connecting the body to the caudal fin.

Cephalic fins: broad lobe on forehead of devil rays.

Chondrichthyan: class that contains the cartilaginous fishes, divided into two subclasses: Elasmobranchii (sharks, rays, skates) and Holocephali (chimaeras).

Claspers: the paired copulatory organs present on the pelvic fins of male sharks and rays, used for the purpose of internal fertilization of eggs.

Cloaca: a posterior orifice that serves as the only opening for the digestive, reproductive, and urinary tract.

Closed season: a prescribed period when it is illegal to target a certain species.

Coastal: near the coast.

Cockscomb-shape: flattened fan shape, topped by a series of convoluted ridges, like the crest / comb of a male chicken.

Denticle: a small tooth-like scale found on sharks and rays; may be rough to the touch on some species.

Disc (batoids): combined head, trunk and enlarged pectoral fins of species with depressed bodies.

Disc Width (DW): measurement from wing tip to wing tip. It is a straight-line measure.

Dorsal: refers to the upper surface/side.

Dorsal spine: a spine located in front of the dorsal fin/s.

Elongated: extended in length in relation to another structure.

Endemic: a species with a restricted geographic distribution.

Filament on fins: threadlike projection trailing from fin/s.

Fin insertion: point of attachment of the fin to the body.

GLOSSARY (CONTINUED):

Fin origin: forward-most/anterior point of attachment of a fin, closest to the front of the animal.

Fin webs: the thinner material between structures on fins.

Flanks: side of the body.

Head: the area from the snout tip to the last gill opening.

Interdorsal ridge: raised narrow ridge of skin between the first and second dorsal fins.

Keel: longitudinal fleshy ridges. Caudal keel: keel along each side of the caudal peduncle and that may extend onto the base of the caudal fin; body keel: keel extending forwards from the caudal region to the side of the trunk.

Lateral: side of the animal.

Leading edge (of fin): forward-facing edge.

Lunate: crescent or moon-shaped.

Margin: referring to an edge.

Move-on rules: an event-triggered, targeted or temporary closure of part of a fishery when a catch or bycatch threshold is reached.

Nasal flaps: structures covering or partially covering nasal openings.

Nostril: external opening of the nasal organs.

Oceanic: in the open sea.

Orbital spines: spines occurring in the vicinity of the eye orbits.

Origin: anterior or front end of the fin base in all fins.

Pelagic: free swimming marine organisms that are not dependent on the bottom.

Photophores: organs able to produce visible light as a result of a chemical reaction.

Posterior: relating to hind of or rear end of an object.

Precaudal fins: all fins in front of the caudal fin.

Precaudal pit: depression at the upper and sometimes lower origin of the caudal fin where it joins the caudal peduncle.

Precautionary Upper Catch Limit (PUCL): limit set because the stocks are known to be dwindling but not necessary to close the fishery yet.

GLOSSARY (CONTINUED):

Rostral teeth: tooth-like projection on the side of the snout of sawfishes and sawsharks.

Saddle: a blotch extending across dorsal surface from one side to another.

Slot limit: a prescribed size range where a shark within a certain length range must be returned to the water, i.e. a slot limit of 70-130 cm would be where a shark that is shorter than 70 cm or longer than 130 cm must be returned to the water.

Snout: portion in front of mouth and eyes, including nostrils.

Spiracle: a respiratory opening behind the eyes.

Squalene: natural organic compound originally obtained for commercial purposes primarily from shark liver oil.

Sting / stinger: located in the mid-area of the tail and can secrete venom.

Subterminal: positioned near but not at the end of an animal / structure.

Supraorbital ridge: a dermal ridge above each eye.

Terminal: located at or forming the end of something.

Total Length (TL): length measured from the tip of the snout to the tip of the longer lobe of the caudal fin. It is a straight-line measure.

Transverse: directed crosswise or across the width, opposite of longitudinal.

Trunk: section of body excluding the head and tail.

Ventral: refers to the under surface.

REFERENCES:

- **Compagno, L.J.V.; Ebert, D.A. & Smale, M.J.** 1989. Guide to the sharks and rays of southern Africa. Struik Publishers Ltd, Cape Town, South Africa. 160pp.
- **da Silva, C., Booth, A.J., Dudley, S.F.J., Kerwath, S.E., Lamberth, S.J., Leslie, R.W., McCord, M.E., Sauer, W.H.H. & Zweig, T.** 2015. The current status and management of South Africa's chondrichthyan fisheries. African Journal of Marine Science 37(2): 233-248.
- **Ebert, D.A.** 2013. Deep-sea cartilaginous fishes of the Indian Ocean. Volume 1. Sharks. FAO, Rome, Italy. 268pp.
- **Ebert, D.A.** 2014. Deep-sea cartilaginous fishes of the Indian Ocean. Volume 2. Batoids and Chimaeras. FAO, Rome, Italy. 138pp.
- **Ebert, D.A.** 2014. On Board Guide for the Identification of Pelagic Sharks and Rays of the Western Indian Ocean. FAO, Rome, Italy, 120 pp.
- **Ebert, D.A., Wintner, S.P. & Kyne, P.M.** 2021. An annotated checklist of the Chondrichthyans of South Africa. Zootaxa 4947: 1-127.
- **Heemstra, P.C. and Heemstra, E.** 2004. Coastal fishes of southern Africa. South African Institute of Aquatic Biodiversity, Grahamstown, South Africa. 512pp.
- **IUCN** 2021. The IUCN Red List of Threatened Species. https://www.iucnredlist.org.
- **Last, P.R., White, W.T., de Carvalho, M.R. , Séret, B., Stehmann, M.F.W. & Naylor, G.J.P. (Eds.)** 2016. Rays of the World. CSIRO Publishing, Melbourne, Australia. 800pp.
- **Smith, M. M. and Heemstra, P.** 2003. Smiths' sea fishes. South African Institute for Aquatic Biodiversity, Struik Publishers Ltd, Cape Town, South Africa. 1047pp.
- **van der Elst, R.P.** 1993. A Guide to the Common Sea Fishes of Southern Africa (3rd Edition). Struik Publishers Ltd. Cape Town, South Africa, 398pp.

INDEX

COMPLIANCE AND LAW ENFORCEMENT IDENTIFICATION GUIDE

CHONDRICHTHYANS OF SOUTH AFRICA