



SHARKS & RAYS

TUBARÕES & RAIAS

Rhett Bennett & Dave van Beuningen



© Sharks & Rays cover photo: Morne Hardenberg

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Symbols and their meaning

Símbolos e seus significados

Body Size

Tamanho do corpo

 in centimeters (cm)
em centímetros (cm)

Observation Method

Métodos de observação

 SCUBA diving
Mergulho SCUBA

 Snorkelling
Mergulho livre

Frequency

Frequência

 Dominant
Dominante

 Frequent
Frequente

 Occasional
Ocasional

 Rare
Raro

Habitats


Hábitats

 Coral reefs
Recifes de corais

 Mangroves / estuaries
Manguezais / estuários

 Seagrasses
Ervas marinhas

 Tidal reefs
Recifes de maré

 Pelagics / water column
Pelágicos / coluna de água


 Sand
Areia


 Mud
Lama

 Submerged rocky reefs
Recifes rochosos submersos

Risks to humans

Riscos ao seres humanos

 Harmless (no risk to humans, however may contain toxin against predators)
Inofensivo (sem risco para humanos, porém pode conter toxina contra predadores)

 Sharp teeth (may bite when molested)
Dentes afiados (podem morder quando molestados)

 Sting (may sting or cause allergy when touched or disturbed)
Pica (pode picar ou causar alergia quando tocado ou perturbado)








 Shock (electric discharge when touched or disturbed)
Schock (descarga elétrica quando tocado ou perturbado)

Species protected by Mozambican Law Decreto n 89/2020 REPMAR
Espécies protegidas pela Lei Moçambicana Decreto n 89/2020 REPMAR

 Capture banned
Captura proibida

 Minimum capture size regulated
Tamanho mínimo de captura regulado

IUCN Red List Data (version 2017)
Lista Vermelha IUCN (versão 2017)

-  Not Evaluated
Não Avaliado
-  Data Deficient
Dados Deficientes
-  Least Concern
Menor preocupação
-  Near Threatened
Quase ameaçada
-  Vulnerable
Vulnerável
-  Endangered
Ameaçadas de extinção
-  Critically Endangered
Criticamente em perigo

Photographers

AM Andrea Marshall (Marine Megafauna Foundation)

DK Dennis King

DM David Morgan

JK Jennifer Keeping

JN John Nevill

MH Mome Hardenberg

RB Rainer von Brandis

RD Ryan Daly


SD Stella Diamant

SM Sunny Mart


SP Simon Pierce (Marine Megafauna Foundation)

WCS Wildlife Conservation Society

Distribution in Mozambique
Distribuição em Moçambique

 Marked in blue when occurrence is confirmed and divided into: north, central and south.
Marcada em azul quando a ocorrência é confirmada e dividida em: norte, centro e sul.

Depth range
Faixa de profundidade

 known depth range or where species is commonly found in meters (m)
Faixa de profundidade conhecida ou na qual a espécie é comumente encontrada em metros (m)



Rhincodon typus



Sharks & Rays

Sharks and rays belong to the Chondrichthyes, a group of fishes with skeletons composed of cartilage. They are among the oldest living vertebrates, having first appeared in the fossil record over 400 million years ago. Over 1,280 shark and ray species roam the oceans, occupying almost all marine and coastal habitats, from the open ocean and the deep sea to coral reefs, estuaries and even rivers. In Mozambique, at least 130 shark and ray species have been confirmed, including large charismatic species, such as whale sharks, tiger sharks, bull sharks, hammerhead sharks and manta rays. There are also many lesser-known species, such as thresher sharks, hound sharks, cat sharks, skates, stingrays, electric rays, wedgefishes, guitarfishes and sawfishes. However, due to overfishing, some of these species are now rare. Sawfishes in particular are now thought to have been depleted entirely. In some areas, however, sharks and rays remain abundant, with several species such as hammerhead sharks, grey reef sharks, whale sharks and manta rays aggregating in great numbers. Mozambique forms part of a global hotspot for sharks and rays and is a truly spectacular shark and ray location.

Tubarões & Raias

As raias e os tubarões pertence ao Chondrichthyes, um grupo de peixes com esqueleto composto de cartilagem. Eles são um dos vertebrados mais antigo, os primeiros récorde são de fósseis de mais de 400 milhões de anos atrás. Mais de 1.280 espécies de tubarões e raias percorrem os oceanos, ocupando quase todos os habitats marinhos e costeiros, desde o oceano aberto e o mar profundo até os recifes de coral, estuários e até rios. Em Moçambique foram confirmadas pelo menos 130 espécies de tubarões e raias, incluindo grandes espécies carismáticas, como tubarões-baleia, tubarões-tigre, tubarões-touro, tubarões-martelo e raias manta. Existem também muitas espécies menos conhecidas, como tubarões debulhador, tubarões de caça, tubarões-gato, patins, arraiais elétricas, peixes-cunha, peixes-violão e peixes-serra. No entanto, devido à sobrepesca, algumas dessas espécies são agora raras. Atualmente, acredita-se que os peixes-serra, em particular, foram totalmente extintos regionalmente. Em algumas áreas, no entanto, os tubarões e raias continuam abundantes, com várias espécies, como tubarões-martelo, tubarões-cinzentos de recife, tubarões-baleia e raias-manta, agregando-se em grande número. Moçambique faz parte de um 'hotspot' global para tubarões e raias e é um local verdadeiramente espetacular para observação desses animais.

Sharks & Rays

Mobulidae



Mobula alfredi
Reef Manta Ray

370-550cm



Mobula birostris
Giant Manta Ray

400-910cm



Mobula kuhlii
Shortfin Devil Ray

115-135cm



Mobula mobular
Spinetail Devil Ray

200-520cm

Gymnuridae



Gymnura natalensis
Diamond Ray

100-250cm

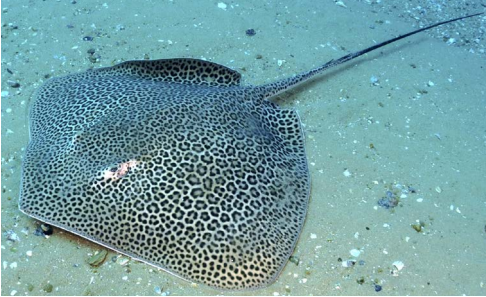
Rhinoptera



Rhinoptera jayakari
Shorttail Cownose Ray

80-90cm

Dasyatidae



Himantura cf. leoparda

Leopard Whipray

70–140cm



0–70m



DK

VU



Himantura cf. uarnak

Honeycomb Stingray

80–200cm

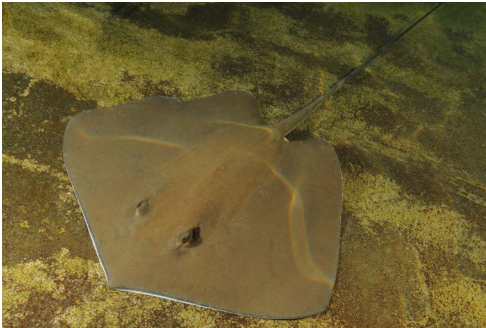


0–50m



AM

EN



Maculabatis cf. ambigua

Baraka's Whipray

55–110cm



0–100m



DK

NT



Pastinachus ater

Broad Cowtail Ray

100–200cm



0–60m



AM

VU



Pateobatis fai

Pink Whipray

110–180cm



0–200m



AM

VU



Pateobatis jenkinsii

Jenkins Whipray

75–150cm



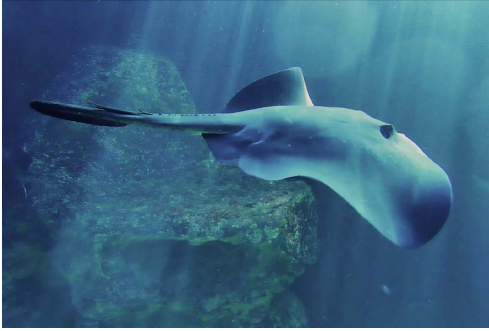
0–90m



DK

VU

Sharks & Rays



Bathytoshia brevicaudata
Shorttail Stingray

120–430cm 0–470m

WCS



Megatrygon microps
Smalleye Stingray

150–220cm 0–200m

JK



Neotrygon caeruleopunctata
Bluespotted Maskray

30–45cm 0–100m

JK



Taeniura lymna
Bluespotted Ribbon-Tailed Stingray

20–35cm 0–20m

AM



Taeniurops meyeri
Blotched Stingray

100–180cm 0–450m

AM



Urogymnus asperrimus
Porcupine Ray

90–115cm 0–85m

AM

Aetobatidae



Aetobatus ocellatus

Indian Eagle Ray



130-300cm



Aetomylaeus bovinus

Duckbill ray or Bullray



100-220cm



Torpedinidae



Torpedo fuscomaculata

Blackspotted Electric Ray



50-65cm



Myliobatidae



Aetomylaeus vespertilio

Ornate Eagle Ray



170-300cm



Myliobatis aquila

Common Eagle Ray



40-150cm



Torpedo sinuspersici

Marbled Electric Ray



30-180cm



Sharks & Rays

Pristidae



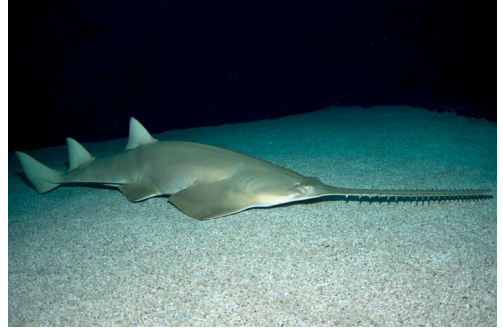
Pristis pristis

Largetooth Sawfish

300-650cm



0-25(?)m



Pristis zijsron

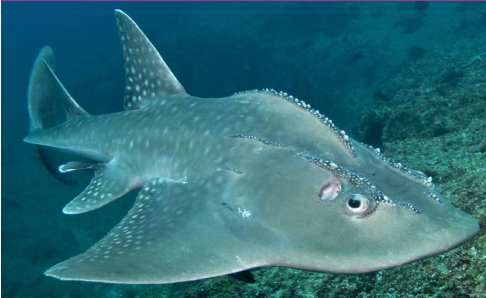
Green Sawfish

340-700cm



0-70m

Rhinidae



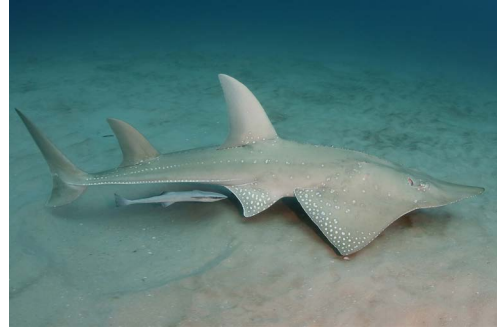
Rhina ancylostomus

Bowmouth Guitarfish or Shark Ray

150-270cm



0-70m



Rhynchobatus australiae

Bottlenose Wedgefish

125-300cm



0-60m



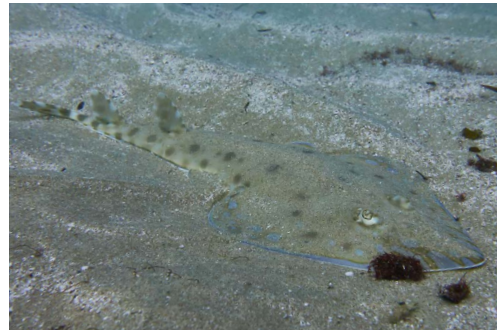
Rhynchobatus djiddensis

Whitespotted Wedgefish

150-310cm



0-85m



Acroteriobatus cf. leucospilus

Greyspot Guitarfish

55-120cm



0-100m

Carcharhinidae



Carcharhinus albimarginatus
Silvertip Shark

📷 AM
VU

160-300cm

 0-800m

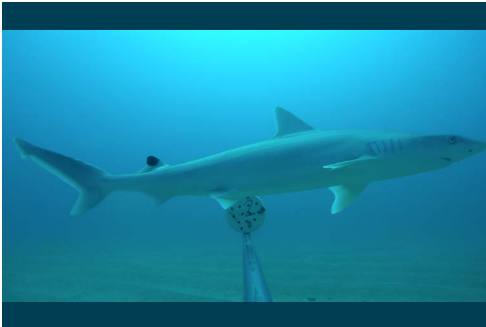


Carcharhinus brevipinna
Spinner Shark

📷 DK
VU

170-300cm

 0-200m



Carcharhinus humani
Human's Whaler Shark

📷 SL
DD

70-85cm

 0-40m



Carcharhinus amblyrhynchus
Grey Reef Shark

📷 AM
EN

110-250cm

 0-280m



Carcharhinus falciformis
Silky Shark

📷 AM
VU

180-370cm

 0-500m



Carcharhinus leucas
Bull Shark

📷 RD
VU

150-360cm

 0-150m

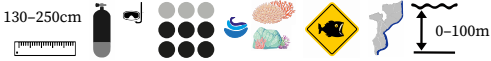
Sharks & Rays



Carcharhinus limbatus

Blacktip Shark

130-250cm



📷 RD

🇺🇸 VU



Carcharhinus longimanus

Oceanic Whitetip Shark

170-390cm



📷 MH

🇺🇸 CR



Carcharhinus melanopterus

Blacktip Reef Shark

90-200cm



📷 RD

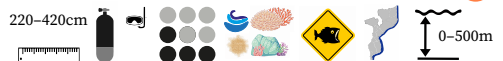
🇺🇸 VU



Carcharhinus obscurus

Dusky Shark

220-420cm



📷 DK

🇺🇸 EN



Carcharhinus plumbeus

Sandbar Shark

130-240cm



📷 JB

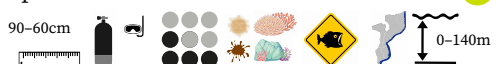
🇺🇸 EN



Carcharhinus sorrah

Spottail Shark

90-60cm



📷 JN

🇺🇸 NT



Loxodon macrorhinus

Sliteye Shark



NT

60-100cm



Negaprion acutidens

Sicklefin Lemon Shark



EN

220-300cm



Rhizoprionodon acutus

Milk Shark



VU

50-175cm



Triaenodon obesus

Whitetip Reef Shark



VU

105-200cm



Galeoceridae



Galeocerdo cuvier

Tiger Shark



NT

250-740cm



Hemigaleidae



Hemipristis elongata

Snaggletooth Shark



VU

100-240cm



Sharks & Rays

Sphyrnidae



Sphyrna lewini

Scalloped Hammerhead Shark

140–430cm



SP



Sphyrna mokarran

Great Hammerhead Shark

250–610cm



CB



Sphyrna zygaena

Smooth Hammerhead Shark

265–400cm



DK



Alopiidae

Alopias pelagicus

Pelagic Thresher Shark

250–365cm



TA



Lamnidae



Carcharodon carcharias

Great White Shark

310–640cm



MH



Isurus oxyrinchus

Shortfin Mako Shark

170–440cm



MH



Ginglymostomatidae



Nebrius ferrugineus

Tawny Nurse Shark

230–320cm



📷 DK

VU



Pseudoginglymostoma brevicaudatum

Shorttail Nurse Shark

55–75cm



📷 AC

CR

Rhincodontidae



Rhincodon typus

Whale Shark

8–20m



📷 SD

EN

Stegostomatidae



Stegostoma tigrinum

Zebra Shark

170–250cm



📷 AM

EN

Squatinaidae



Squatina africana

African Angelshark

80–120cm



📷 GC

NT

Carchariidae



Carcharias taurus

Ragged-Tooth Shark

0–200cm



📷 AM

CR

Common Name	Nome Comum
African Angelshark	Tubarão-Anjo Africano
Baraka's Whipray	
Blackspotted Electric Ray	Raia Elétrica Pintada
Blacktip Reef Shark	Marracho Tinteiro de Coral
Blacktip Shark	Marracho Macuira
Blotched Stingray	Ratão Cauda Redonda
Bluespotted Maskray	Ratão de Pinta Azul Máscarado
Bluespotted Ribbon-Tailed Stingray	Ratão Pintalgado
Bottlenose Wedgefish	
Bowmouth Guitarfish or Shark Ray	Peixe guitarra
Broad Cowtail Ray	
Bull Shark	Marracho Touro, Tubarão da Zambézia
Common Eagle Ray	Raia Chita
Diamond Ray	Raia Borboleta
Duckbill ray or Bullray	Ratão Bovino
Dusky Shark	Marracho Areneiro, Faqueta
Giant Manta Ray	Manta Gigante
Great Hammerhead Shark	Tubarão Martelo Gigante
Great White Shark	Tubarão Branco
Green Sawfish	Peixe Serra Verde
Grey Reef Shark	Marracho Enlutado, Tubarão Cinzento
Greyspot Guitarfish	Tubarão-Guitarra Pintado
Honeycomb Stingray	Burá Alveolado
Human's Whaler Shark	
Indian Eagle Ray	Raia Chita Indiana
Jenkins Whipray	
Large-tooth Sawfish	Peixe-Serra Dente Grande
Leopard Whipray	Raia Leopardo
Marbled Electric Ray	Raia Elétrica
Milk Shark	Marracho Branco
Oceanic Whitetip Shark	Tubarão Marracho Oceânico
Ornate Eagle Ray	Raia Chita Ornamentada
Pelagic Thresher Shark	Zorro Pelágico
Pink Whipray	Raia Rosada
Porcupine Ray	Raia Pungente Africana
Ragged-Tooth Shark	Tubarão de Areia

Common Name	Nome Comum
Reef Manta Ray	Raia Manta de Recife
Sandbar Shark	Marracho de Milberto
Scalloped Hammerhead Shark	Tubarão Martelo Comum
Shortfin Devil Ray	Raia do Diabo
Shortfin Mako Shark	Anequim Barbatana Curta
Shorttail Cownose Ray	Raia Boi de Cauda Curta
Shorttail Nurse Shark	Peixe Anjo de Cauda Curta
Shorttail Stingray	Uge Cauda Curta
Sicklefin Lemon Shark	Limão foiçador
Silky Shark	Tubarão-Luzidio, Tubarão Marracho Oceânico
Silvertip Shark	Marracho de Pontas
Sliteye Shark	Marracho Agudo
Smalleye Stingray	Raia de Olhos Pequenos
Smooth Hammerhead Shark	Tubarão Martelo Liso
Snaggletooth Shark	Tubarão Doninha
Spinetail Devil Ray	Diabo-do-Mar
Spinner Shark	Marracho Barbatana Negra
Spottail Shark	Marracho Rabo Manchado
Tawny Nurse Shark	Tubarão-de-Leite Tostado
Tiger Shark	Tubarão Tigre
Whale Shark	Tubarão Baleia
Whitespotted Wedgefish	Cunha Branca
Whitetip Reef Shark	Marracho de Covas, Galha Branca de Recife
Zebra Shark	Tubarão-Zebra

Species List

A

<i>Acroteriobatus cf. leucospilus</i>	10
<i>Aetobatus ocellatus</i>	9
<i>Aetomylaeus bovinus</i>	9
<i>Aetomylaeus vespertilio</i>	9
<i>Alopias pelagicus</i>	14

B

<i>Bathytoshia brevicaudata</i>	8
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C

<i>Carcharhinus amblyrhynchos</i>	11
<i>Carcharhinus brevipinna</i>	11
<i>Carcharhinus falciformis</i>	11
<i>Carcharhinus humani</i>	11
<i>Carcharhinus leucas</i>	11
<i>Carcharhinus limbatus</i>	12
<i>Carcharhinus longimanus</i>	12
<i>Carcharhinus melanopterus</i>	12
<i>Carcharhinus obscurus</i>	12
<i>Carcharhinus plumbeus</i>	12
<i>Carcharhinus sorrah</i>	12
<i>Carcharias taurus</i>	15
<i>Carcharodon carcharias</i>	14

G

<i>Galeocerdo cuvier</i>	13
<i>Gymnura natalensis</i>	6

H

<i>Hemipristis elongata</i>	13
<i>Himantura cf. leoparda</i>	7
<i>Himantura cf. uarnak</i>	7

I

<i>Isurus oxyrinchus</i>	14
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L

<i>Loxodon macrorhinus</i>	13
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M

<i>Maculabatis cf. ambigua</i>	7
<i>Megatrygon microps</i>	8
<i>Mobula alfredi</i>	6
<i>Mobula birostris</i>	6
<i>Mobula kuhlii</i>	6
<i>Mobula mobular</i>	6
<i>Myliobatis aquila</i>	9

N

<i>Nebrius ferrugineus</i>	15
<i>Negaprion acutidens</i>	13
<i>Neotrygon caeruleopunctata</i>	8

P

<i>Pastinachus ater</i>	7
<i>Pateobatis fai</i>	7
<i>Pateobatis jenkinsii</i>	7
<i>Pristis pristis</i>	10
<i>Pristis zijsron</i>	10
<i>Pseudoginglymostoma brevicaudatum</i>	15

R

<i>Rhina ancylostomus</i>	10
<i>Rhincodon typus</i>	15
<i>Rhinoptera jayakari</i>	6
<i>Rhizoprionodon acutus</i>	13
<i>Rhynchobatus australiae</i>	10
<i>Rhynchobatus djiddensis</i>	10

S

<i>Sphyrna lewini</i>	14
<i>Sphyrna mokarran</i>	14
<i>Sphyrna zygaena</i>	14
<i>Squatina africana</i>	15
<i>Stegostoma tigrinum</i>	15

T

<i>Taeniura lymma</i>	8
<i>Taeniurops meyeri</i>	8
<i>Torpedo fuscomaculata</i>	9
<i>Torpedo sinuspersici</i>	9
<i>Triaenodon obesus</i>	13

U

<i>Urogymnus asperrimus</i>	8
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