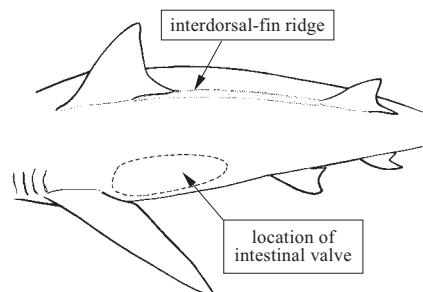
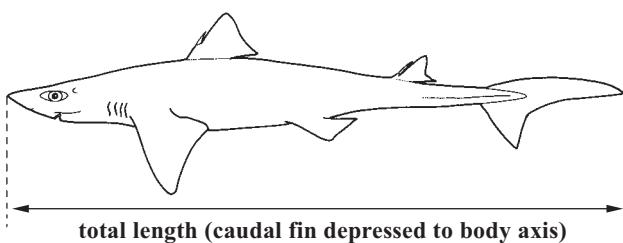
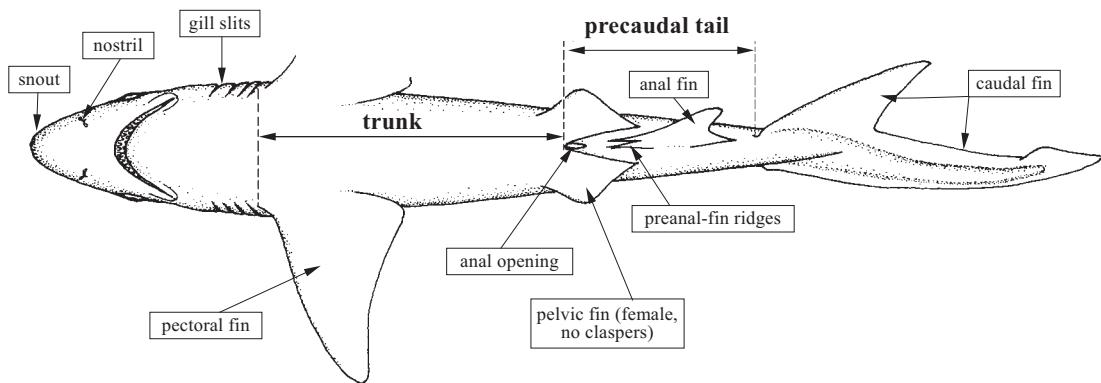
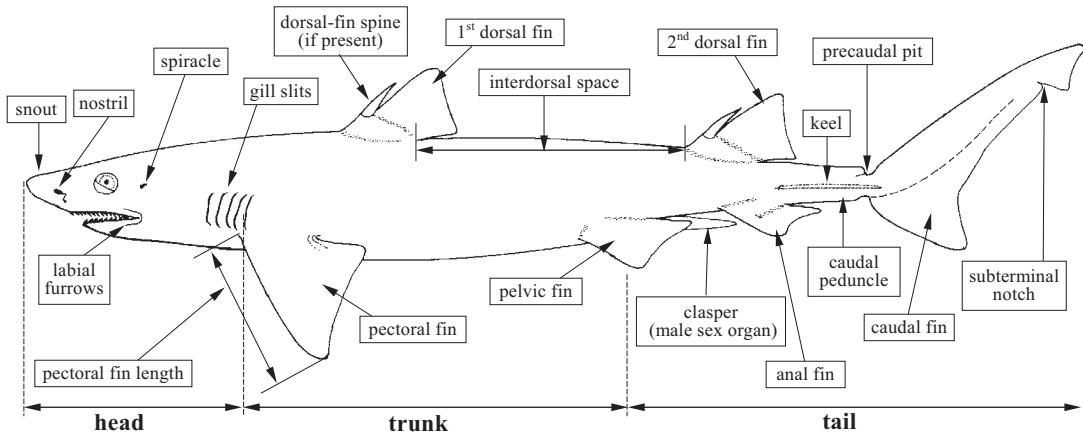
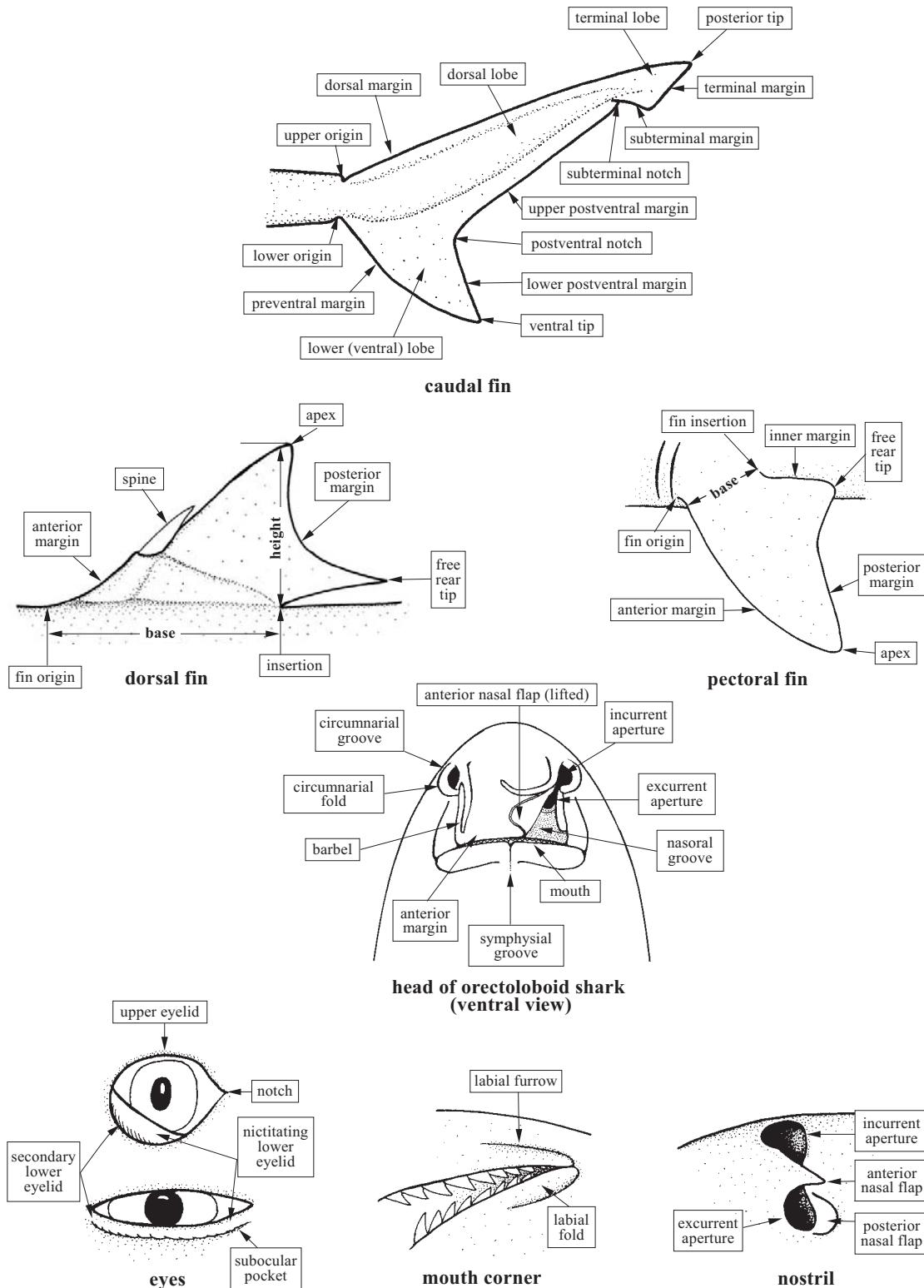


SHARKS

TECHNICAL TERMS AND MEASUREMENTS





LIST OF FAMILIES AND SPECIES OCCURRING IN THE AREA

An asterix (*) is given when species accounts are included. A question mark (?) before the scientific name indicates that presence in the area needs confirmation.

Order Squaliformes

Family ECHINORHINIDAE

- * *Echinorhinus brucus*

Family CENTROPHORIDAE

- * *Centrophorus atromarginatus*
- * *Centrophorus granulosus*
- * *Centrophorus tessellatus*
- * *Deania profundorum*

? Order Squatiniformes

? Family SQUATINIDAE

- ? *Squatina africana*
- ? *Squatina squatina*

Order Heterodontiformes

Family HETERODONTIDAE

- * *Heterodontus ramalheira*
- * *Heterodontus* sp A

Order Lamniformes

Family ODONTASPIDIDAE

- * *Carcharias taurus*

Family ALOPIIDAE

- * *Alopias pelagicus*
- * *Alopias superciliosus*
- ?* *Alopias vulpinus*

Family LAMNIDAE

- ? *Carcharodon carcharias*
- * *Isurus oxyrinchus*

Order Orectolobiformes

Family STEGOSTOMATIDAE

- * *Stegostoma fasciatum*

Family GINGLYMOSMATIDAE

- * *Nebrius ferrugineus*

Family RHINCODONTIDAE

- * *Rhincodon typus*

Order Carcharhiniformes

Family SCYLIORHINIDAE

- * *Apristurus indicus*
- * *Haelaeurus boesemani*

Family PROSCYLLIDAE

- * *Eridacnis radcliffei*

Family TRIAKIDAE

- * *Iago omanensis*
- * *Mustelus mosis*

Family HEMIGALEIDAE

- * *Hemigaleus microstoma*
- * *Hemipristis elongatus*

Family CARCHARHINIDAE

- * *Carcharhinus albimarginatus*
- * *Carcharhinus altimus*
- * *Carcharhinus amblyrhynchoides*
- * *Carcharhinus amblyrhynchos*
- * *Carcharhinus amboinensis*
- * *Carcharhinus brevipinna*
- * *Carcharhinus duossumieri*
- * *Carcharhinus falciformis*
- * *Carcharhinus leucas*
- * *Carcharhinus limbatus*
- * *Carcharhinus longimanus*
- ? *Carcharhinus maculoti*
- * *Carcharhinus melanopterus*
- ? *Carcharhinus obscurus*
- * *Carcharhinus plumbeus*
- * *Carcharhinus sealei*
- * *Carcharhinus sorrah*
- * *Galeocerdo cuvier*
- * *Loxodon macrorhinus*
- * *Negaprion acutidens*
- * *Triaenodon obesus*
- * *Rhizoprionodon acutus*

Family SPHYRNIDAE

- * *Sphyrna lewini*
- * *Sphyrna mokarran*

GUIDE TO THE ORDERS AND FAMILIES OF SHARKS OCCURRING IN THE AREA

How to use this guide

Readers are strongly advised to follow these simple steps in order to successfully identify any shark or batoid found in the area. First, read carefully through the description of key characters listed under each Order. Use the illustrations of the Families under each Order only as a secondary aid in making certain that the right Order has been found. Once the right Order has been identified, proceed to narrow down the Family of the specimen using the illustration for the Family and key characters annotated in each illustration; make use of the size data included for each Family. Once the Family has been identified, move to the corresponding pages where the species for that Family are illustrated. These illustrations and the key characters marked on them should allow proper identification of all sharks and batoids known from the area. To facilitate comparisons and identification, after the taxonomical arrangement of species, they are presented by similarity rather than by the traditional alphabetical order.

Order SQUALIFORMES – Dogfish sharks

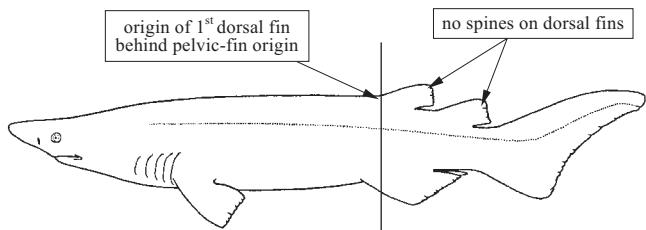
No anal fin; body cylindrical; two dorsal fins often with spines in the anterior margins; mouth extending behind front of eyes.

ECHINORHINIDAE

Page 15

Bramble sharks

To 4 m. Demersal sluggish sharks, mostly in cold and deep waters to at least 1 100 m, occasionally found in the intertidal. A single species occurring in the area.

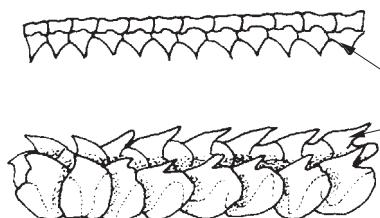
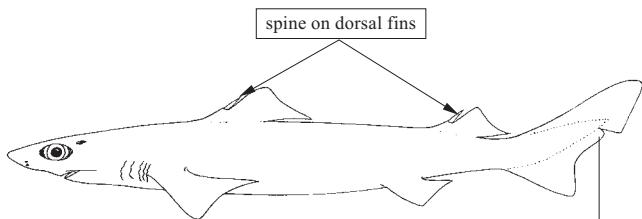


CENTROPHORIDAE

Page 15

Gulper sharks

To 1.7 m. Primarily demersal deep-water sharks from 200 to at least 2 400 m. Four species occurring in the area, but probably more to be discovered.



upper and lower teeth

upper teeth small,
broad and blade-like,
lower larger,
low and wide

a notch on postventral
margin of caudal fin

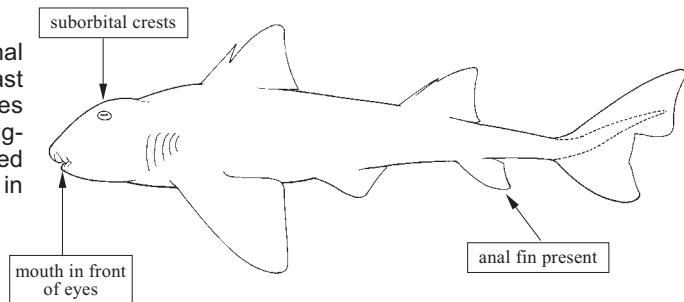
Order HETERODONTIFORMES – Bullhead sharks

Anal fin present; two dorsal fins with spines in the anterior margins; small mouth in front of eyes; head elevated and with supraorbital crests.

HETERODONTIDAE Page 17

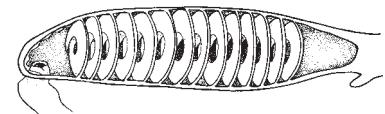
Bullhead sharks

To 1.62 m. Demersal, sluggish, nocturnal sharks, from the intertidal to at least 275 m. Some species like rocky crevices and caves. Egg-laying species, egg-cases have peculiar spiral-flanged shapes. Possibly two species occurring in the area.



Order LAMNIFORMES – Mackerel sharks and allies

No spines on dorsal fins; mouth strongly arched and extending behind front of eyes; no movable nictitating eyelid; intestinal valve of ring type.

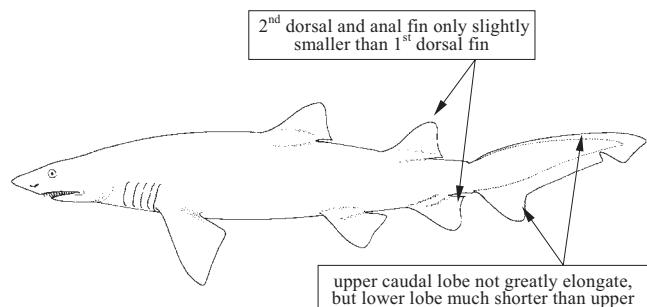


ring type intestinal valve

ODONTASPIDIDAE Page 18

Sand tiger sharks

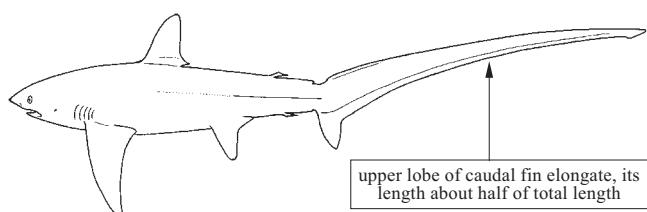
To 3.2 m. Usually demersal, but sometimes pelagic, from the surface to a depth of 191 m. A single species occurring in the area.



ALOPIIDAE Page 19

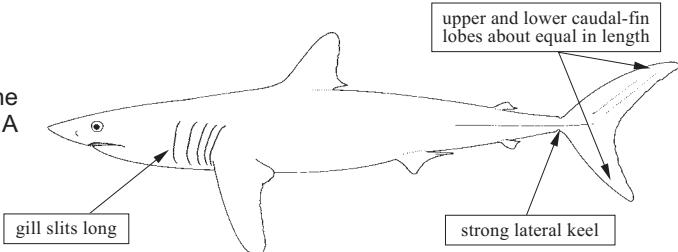
Thresher sharks

To 5.5 m. Pelagic in coastal and oceanic waters, from the surface to at least 500 m. Three species occurring in the area.



LAMNIDAE**Page 20****Mackerel sharks**

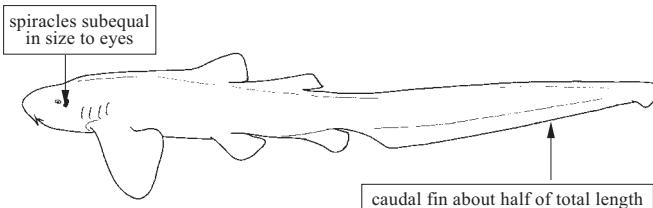
To 6 m. Mainly epipelagic, from the surface to a depth of at least 1 280 m. A single species occurring in the area.

**Order ORECTOLOBIFORMES – Nurse, carpet and whale sharks**

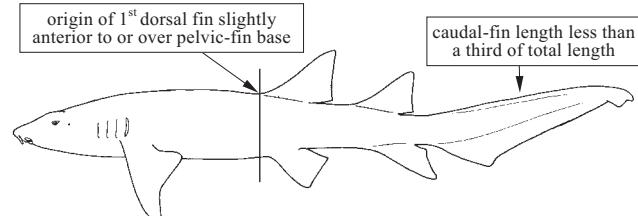
Mouth in front of eyes; five gill slits on each side of the head, the 4th usually overlapping the 5th; nostrils with barbels.

STEGOSTOMATIDAE**Page 21****Zebra sharks**

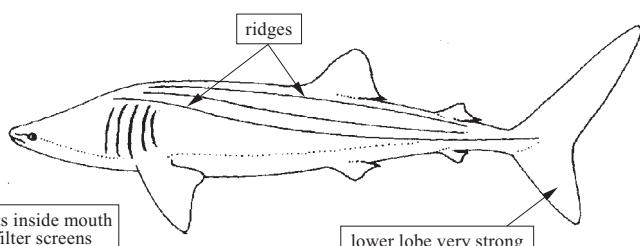
Possibly to 3.54 m. Inshore demersal sharks of coral reefs and sandy bottoms, from the intertidal down to 62 m. A single species occurring in the region.

**GINGLYMOSMATIDAE****Page 21****Nurse sharks**

To 3.0 m. Demersal, from the intertidal to a depth of at least 70 m. A single species occurring in the area.

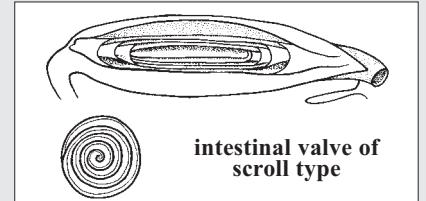
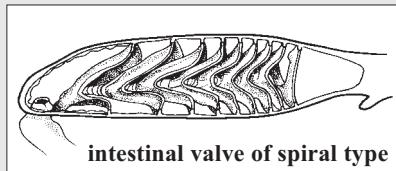
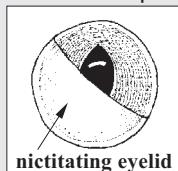
**RHINCODONTIDAE****Page 22****Whale sharks**

Possibly to 18 m. Pelagic, in inshore and offshore waters, from the surface to at least 700 m. A single species occurring in the area.



Order CARCHARHINIFORMES – Ground sharks and allies

Mouth arched and extending behind anterior end of eyes; a movable nictitating eyelid; intestinal valve of scroll or spiral type.

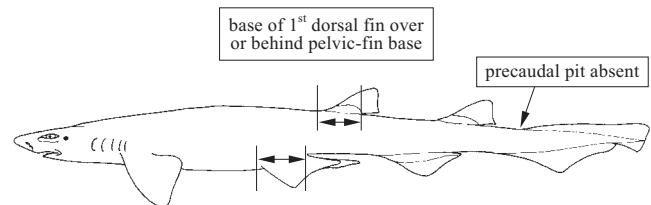


SCYLIORHINIDAE

Page 22

Catsharks

To 1 m. Demersal, from depths of 37 to 1 840 m. Two species occurring in the area. Spiral type intestinal valve.

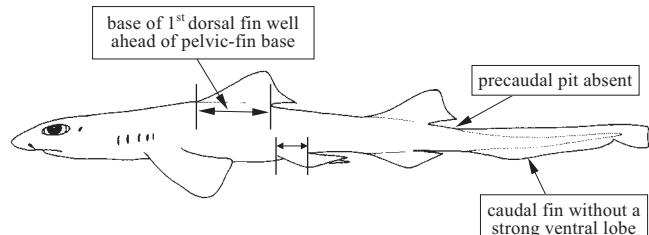


PROSCYLLIIDAE

Page 23

Finback catsharks

To 46 cm. Demersal, from depths of 70 to 766 m. One species occurring in the area. Spiral type intestinal valve.

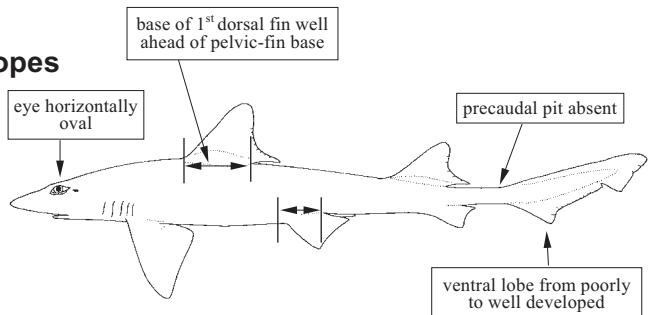


TRIAKIDAE

Page 24

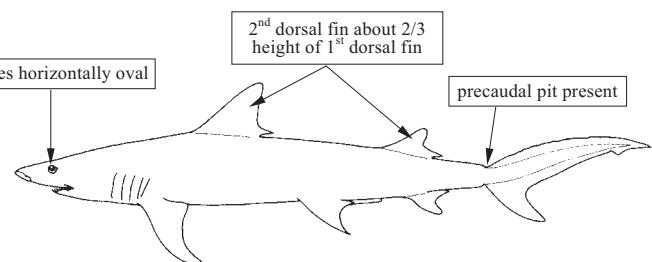
Houndsharks, smoothhounds, topes

To 1.5 m. Demersal, from the intertidal to a depth of at least 1 000 m. Two species occurring in the area. Spiral type intestinal valve.

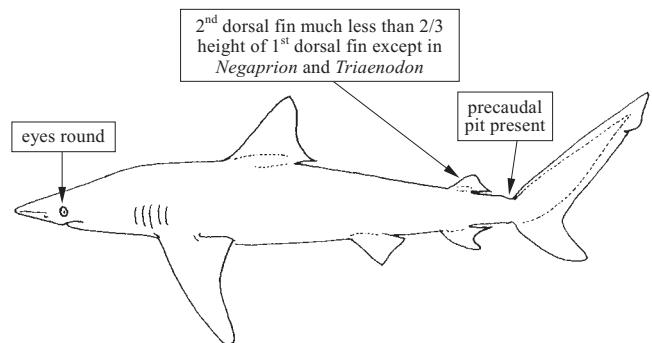


HEMIGALEIDAE**Page 25****Weasel sharks**

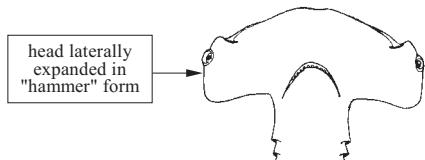
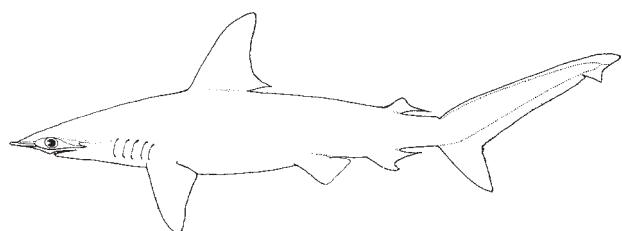
To 2.4 m. Demersal, from depths of 1 to 30 m. Two species in the region, but possibly up to 5 species occurring in the area. Spiral type intestinal valve.

**CARCHARHINIDAE****Page 26****Requiem sharks**

To 5.5 m. Demersal to epipelagic, from intertidal and surface waters to a depth of at least 800 m. At least 19 species but possibly up to 24 occur in the area. Scroll type intestinal valve.

**SPHYRNIDAE****Page 36****Hammerhead sharks**

To 6 m. Coastal and oceanic, from the intertidal and surface waters to a depth of at least 260 m. Two species occurring in the area. Scroll type intestinal valve.

**underside of head**

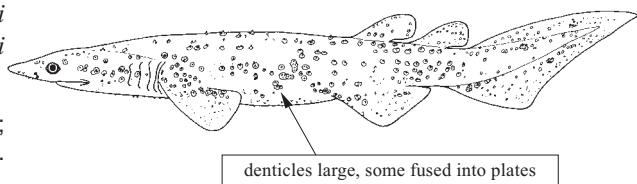
ECHINORHINIDAE

Echinorhinus brucus (Bonnaterre, 1788)

Frequent synonyms / misidentifications:

Echinorhinus (Rubusqualus) mccoyi
Whitley, 1931 / *Echinorhinus cookei*
Pietschmann, 1928.

FAO names: En - Bramble shark;
Fr - Squale boucle; Sp - Tiburón de clavos.



Local names:

Size: To 310 cm.

Habitat and biology: Mostly deep water between 200 and 900 m, occasionally found inshore in cold-temperate areas. Ovoviparous with 15 to 26 young. Feeds on bony fishes, smaller sharks and crustaceans (including crabs).

Importance to fisheries: Of little interest to fisheries but frequently caught as bycatch with bottom trawls and line gear in the northeast Atlantic; used for fishmeal and oil.

Distribution: Found in the Atlantic, Indian (including Gulf of Aden), and western Pacific oceans.

CENTROPHORIDAE

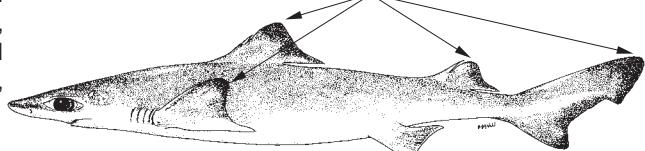
Centrophorus atromarginatus Garman, 1913

Frequent synonyms / misidentifications:

Centrophorus armatus barbatus Teng, 1962 / *Centrophorus granulosus* (Bloch and Schneider, 1801); *C. moluccensis* Bleeker, 1860.

FAO names: En - Blackfin gulper shark;
Sp - Quelvacho de márgenes negros.

black margins and tips in most fins



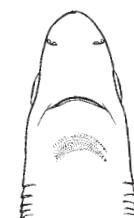
Local names:

Size: To at least 94 cm.

Habitat and biology: In outer continental and insular shelves and upper slopes, between 150 and 450 m. Feeds on shrimps.

Importance to fisheries: Caught in Japan, and off Taiwan (Province of China). Used for production of squalene from the liver oil.

Distribution: Off Somalia (Gulf of Aden), India, Sri Lanka, Japan, Taiwan (Province of China) and northern Papua-New Guinea.



underside of head

***Centrophorus granulosus* (Bloch and Schneider, 1801)**

(Plate I, 1 & 2) CENTROPHORIDAE

Frequent synonyms / misidentifications:

None / *Centrophorus atromarginatus* Garman, 1913; *C. harrissoni* McCulloch, 1915; *C. lusitanicus* Bocage and Capello, 1864; *C. niaukang* Teng, 1959.

FAO names: En - Gulper shark; Fr - Squale-chagrin commun; Sp - Quelvacho.

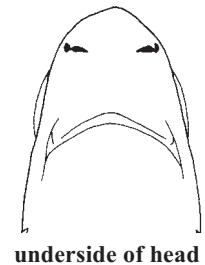
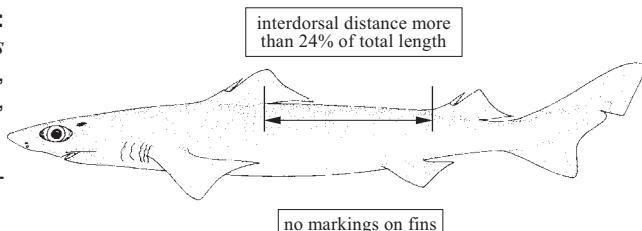
Local names:

Size: To 105 cm or possibly 110 cm.

Habitat and biology: Found usually on or near the bottom in outer continental shelves and upper slopes between 50 and 1 440 m. Ovoviparous with one or two young. Feeds on herring, smelts, hake, cods, rattails, epigonids, lanternfish, squid and crabs.

Importance to fisheries: Caught in the eastern Atlantic with various gears. Consumed smoked or dried-salted; valuable for the high squalene content in the liver oil. It is listed as Vulnerable on the 2000 IUCN Red List of Threatened Species.

Distribution: Found in the Atlantic, western Indian (including the Gulf of Aden) and western Pacific oceans.



underside of head

***Centrophorus tessellatus* Garman, 1906**

CENTROPHORIDAE

Frequent synonyms / misidentifications:

None / None.

FAO names: En - Mosaic gulper shark; Fr - Squale-chagrin mosaïque; Sp - Quelvacho mosaico.

Local names:

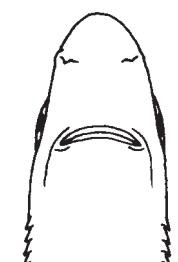
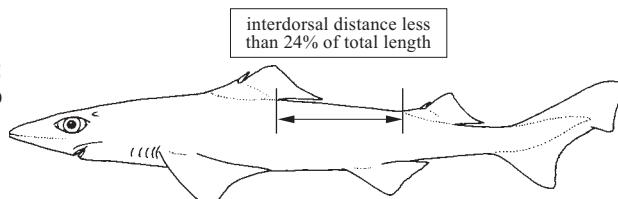
Size: To at least 89 cm.

Habitat and biology: A little-known gulper shark of the insular slopes near or on the bottom at depths from 260 to 732 m.

Importance to fisheries: Of little or no importance to fisheries.

Distribution: Known from the western North Atlantic, Indian (including seamount off the Gulf of Aden), western and Central Pacific oceans.

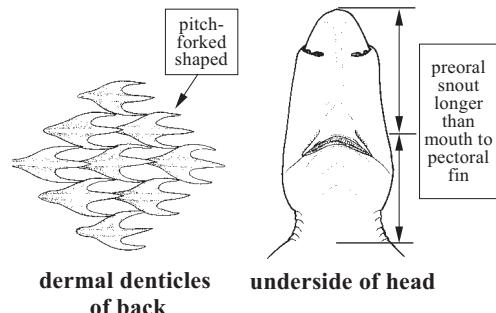
Remarks: Status of this species uncertain, might be synonymous with *C. granulosus*. Except for the type locality, records of this species are provisional.



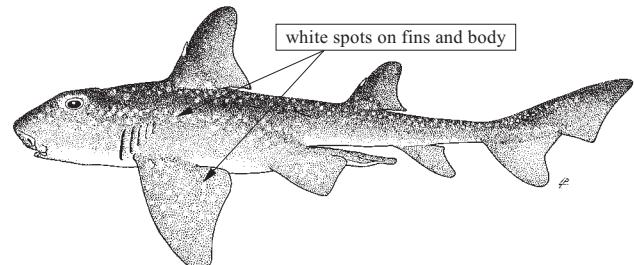
underside of head

***Deania profundorum* (Smith and Radcliffe, 1912)**

(Plate I, 3)

CENTROPHORIDAE**Frequent synonyms / misidentifications:***Deania elegans* Springer, 1959; *D. cremouxi* Cadenat, 1960 / None.**FAO names:** En - Arrowhead dogfish;
Fr - Squale-savate lutin; Sp - Tollo flecha.**Local names:****Size:** To 97 cm.**Habitat and biology:** Lives on or near the bottom in deep waters of continental and insular slopes between 275 and 1 785 m. Sometimes forms large schools. Ovoviparous with 5 to 7 young. Feeds on small bony fishes, squids and crustaceans.**Importance to fisheries:** Of little interest to fisheries. Utilized for liver oil and meat where caught (mostly as bycatch).**Distribution:** Known from the western North Atlantic, eastern Atlantic, western Indian (including the Gulf of Aden) and western Pacific oceans.**HETERODONTIDAE*****Heterodontus ramalheira* (Smith, 1949)****Frequent synonyms / misidentifications:**

None / None.

FAO names: En - Whitespotted bullhead shark; Fr - Requin dormeur chabot; Sp - Dormilón boquigrande.**Local names:** Al-Qirsh Al-Omani abu nokkat bidaa.**Size:** To about 83 cm.**Habitat and biology:** A rare benthic species of the outer shelf and upper slope; in depths from 40 to 274 m. Presumably ovoviparous but eggs unknown. Recently hatched young have been found at a depth of 110 m. Known to feed on crabs.**Importance to fisheries:** Occasionally caught by bottom trawlers in deep waters (over 100 m) but of no commercial use.**Distribution:** Known only from South Africa, Mozambique, Somalia and southern Oman.**Remarks:** Newborns with thin curved lines on body.

Heterodontus sp. A

Frequent synonyms / misidentifications:
None / None.

FAO names: En - Oman bullhead shark;
Fr - Requin dormeur d'Oman; Sp - Dormilón de Omán.

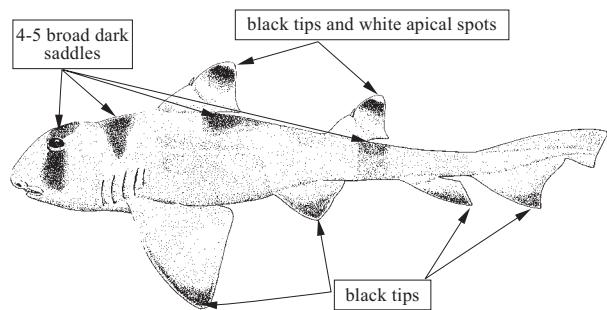
Local names: Al-Qirsh Al-Omani azrak al-raas.

Size: To 61 cm.

Habitat and biology: A rare species known only from one specimen caught off Oman by a commercial trawler at a depth of 80 m.

Importance to fisheries: Of no importance to fisheries at present. Caught with bottom trawls.

Distribution: Known only from the coast of Oman. Likely to occur in the Gulf of Aden and other parts of the northern Indian Ocean.



ODONTASPIDIDAE

***Carcharias taurus* (Rafinesque, 1810)**

Frequent synonyms / misidentifications:
Odontaspis taurus Rafinesque, 1810;
Eugomphodus taurus (Rafinesque, 1810) /
Odontaspis ferox (Risso, 1810).

FAO names: En - Sand tiger shark;
Fr - Requin taureau; Sp - Toro bacota.

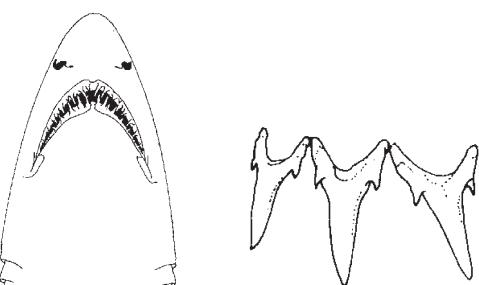
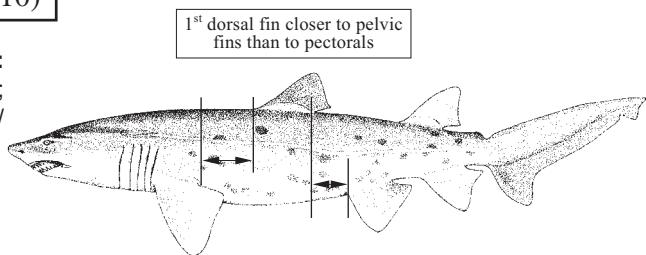
Local names: Al-nemer Al-ramli.

Size: Possibly up to 4.3 m, known to reach 3.2 m and common between 2.2 and 2.8 m.

Habitat and biology: Littoral, inshore and offshore, usually near the bottom; migratory. Ovoviparous with uterine cannibalism. Feeds on small bony fishes, small sharks and rays, and occasionally on crabs and lobsters.

Importance to fisheries: Caught with line gear and gillnets and utilized for human consumption; its meat is highly prized in some places. Caught also by sport fishermen across its range. Lives well in aquaria.

Distribution: Warm-temperate and tropical coastal waters of all oceans of the world except the central and eastern Pacific.



underside of head

upper anterior teeth

ALOPIIDAE

Alopias pelagicus (Nakamura, 1935)

Frequent synonyms / misidentifications:
None / *Alopias superciliatus* (Lowe, 1839);
A. vulpinus (Bonaterre, 1788).

FAO names: En - Pelagic thresher;
Fr - Renard pelagique; Sp - Zorro pelágico.

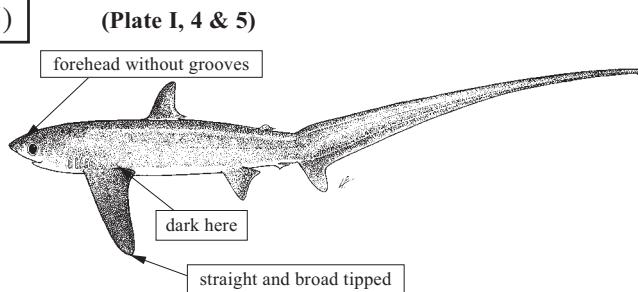
Local names: Hussemi; Qoutt Al-Bahar.

Size: To 3.7 m.

Habitat and biology: Oceanic, epipelagic, caught near shore where shelf is narrow, from the surface to a depth of at least 152 m. Ovoviparous and oophagous; two embryos per litter. Presumably feeding on pelagic fish and possibly squid. Thought to use its long tail to herd and stunt prey.

Importance to fisheries: Caught with longlines and driftnets; meat used for human consumption, liver for oil extraction, hide for leather production, and the fins for the oriental soup market.

Distribution: Poorly known due to confusion with other threshers. Absent from the Atlantic Ocean, but known from South Africa, the Red Sea and Gulf of Aden, and several areas of the Pacific Ocean.



Alopias superciliatus (Lowe, 1839)

Frequent synonyms / misidentifications:
Alopias profundus Nakamura, 1935 / *Alopias pelagicus* Nakamura, 1935; *A. vulpinus* (Bonaterre, 1788).

FAO names: En - Bigeye thresher;
Fr - Renard à gros yeux; Sp - Zorro ojón.

Local names: Al-Thaalab Abu-aien kabeerah.

Size: To 4.6 m.

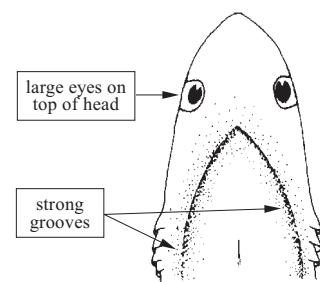
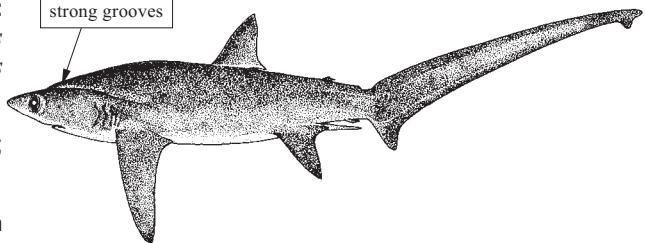
Habitat and biology: Oceanic and coastal, in depths to 500 m. Ovoviparous and oophagous with litters of 2 to 4 embryos. Feeds mostly on pelagic fishes such as herring, mackerel and small billfishes, but also on demersal fishes such as hake, and on squids. It probably stunts its prey with its long caudal fin.

Importance to fisheries: Caught with longlines, fixed bottom and pelagic gillnets, and trawls, and occasionally by sport fishermen. Meat used fresh, smoked and salt-dried for human consumption, its liver, fins and hide are also utilized.

Distribution: Found in all tropical and warm temperate seas of the world.

(Plate I, 6 & 7)

ALOPIIDAE



dorsal view of head

Alopias vulpinus* (Bonaterre, 1788)*ALOPIIDAE****Frequent synonyms / misidentifications:**

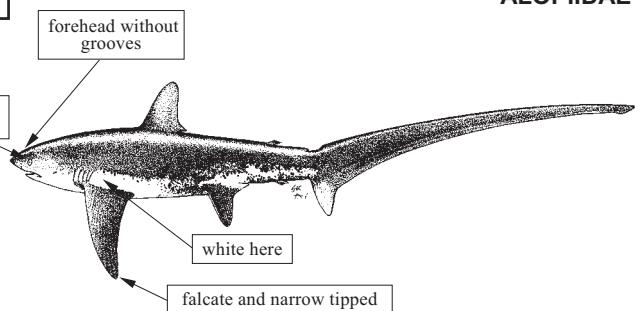
None / *Alopias pelagicus* Nakamura, 1935;

A. superciliosus (Lowe, 1839).

FAO names: En - Thresher shark; Fr - Renard; Sp - Zorro.

Local names: Al-Qirsh Al-Thaalab.

Size: Known to reach 5.7 m and possible up to 6.1 m.



Habitat and biology: Coastal on continental and insular shelves, and epipelagic far from land; young often close inshore and in shallow bays. Migratory. Ovoviparous and possibly oophagous, with litters of 2 to 7 embryos. Feeds mainly on small schooling fishes, but also on cephalopods and pelagic crustaceans; known to herd and stun its prey with its tail.

Importance to fisheries: Caught with pelagic longlines and drift nets, often hooked by its tail. An important target of some fisheries for the high quality of its meat. Fins, hides and livers also utilized. An important target for sport fishermen.

Distribution: Circumglobal in cold temperature and tropical waters.

LAMNIDAE***Isurus oxyrinchus* (Rafinesque, 1810)**

(Plate II, 8)

Frequent synonyms / misidentifications:

Isurus glaucus (Müller and Henle, 1839) /

Isurus paucus Guitart-Manday, 1966.

FAO names: En - Shortfin mako; Fr - Taupe bleu; Sp - Marajo dientuso.

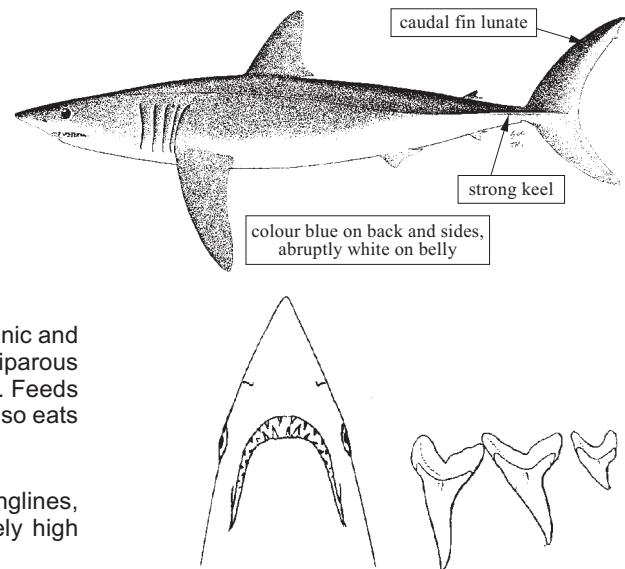
Local names: Cawar; Qirsh Al-sieb; Deebah.

Size: To 4.0 m, common to 2.0 m.

Habitat and biology: Highly migratory, oceanic and coastal, usually in surface waters. Ovoviparous and oophagous with 10 to 25 young per litter. Feeds mainly on pelagic and demersal fishes, but also eats cephalopods and other sharks and rays.

Importance to fisheries: Caught with longlines, hook-and-line and gillnets; meat of extremely high quality. Very important for sport fisheries.

Distribution: Worldwide in all temperate and tropical waters.



Remarks: Considered dangerous, responsible for unprovoked attacks on swimmers and boats.

STEGOSTOMATIDAE

Stegostoma fasciatum (Hermann, 1783)

(Plate II, 9)

Frequent synonyms / misidentifications:

Stegostoma varium (Seba, 1758);
S. tygrinus (Bonaterre, 1788) / None.

FAO names: En - Zebra shark; Fr - Requin zebre; Sp - Tiburón acebrado.

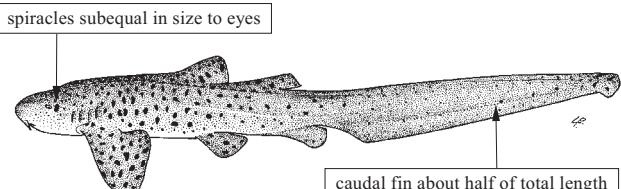
Local names: Farluuq Shabeellow; Hayyasa; Frenkay mekhataatah.

Size: To possibly 3.5 m, commonly up to 2.5 m.

Habitat and biology: Inshore, very common on coral reefs. Oviparous. Feeds on molluscs, crustaceans and small bony fishes.

Importance to fisheries: Caught with bottom trawls, floating and fixed bottom gillnets, longlines.

Distribution: Tropical waters of Indian and Western Pacific oceans, from South Africa to the Red Sea, eastward to Japan, Palau, Australia and New Caledonia.



juvenile

Nebrius ferrugineus (Lesson, 1830)

(Plate II, 10 & 11)

Frequent synonyms / misidentifications:

Ginglymostoma ferrugineum (Lesson, 1830);
Nebrius concolor Rüppell, 1837; *N. doldi* Smith, 1953 / None.

FAO names: En - Tawny nurse shark;
Fr - Requin nourrice fauve; **Sp** - Gata nodriza atezada.

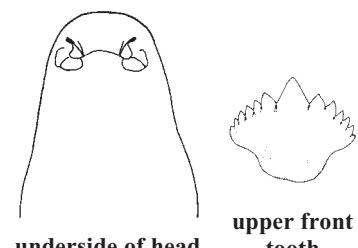
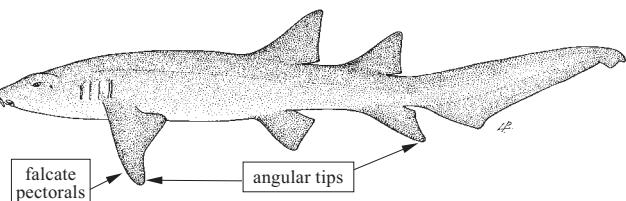
Local names: Frenkah adeiah; Massasah.

Size: Reported to 3.2 m, common to 2.5 m.

Habitat and biology: In shallow waters from the intertidal zone to a depth of at least 70 m. Demersal, on coral and rocky reefs, in lagoons and on sand flats. Ovoviviparous and oophagous. Feeds on a variety of cephalopods, crustaceans, sea urchins, corals, small fishes and occasionally sea snakes.

Importance to fisheries: Caught with gillnets and line gear and utilized for human consumption fresh or salt-dried. Fins used for the oriental trade. Target for sport fishing in Queensland, Australia.

Distribution: Tropical waters of the Indian and western Pacific oceans, from South Africa to the Red Sea, and eastward to China, southern Japan, Australia, New Caledonia, Palau, Marshall Islands and Tahiti.



underside of head

upper front tooth

RHINCODONTIDAE

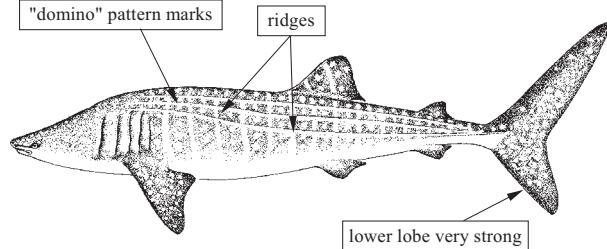
***Rhincodon typus* Smith, 1828**

Frequent synonyms / misidentifications:
Rhiniodon typus Smith, 1828 / None.

FAO names: En - Whale shark; Fr - Requin baleine; Sp - Tiburón ballena.

Local names: Qirsh al-hoot; Battan; Ballhaa.

Size: To at least 12 m, possibly to 21 m.



Habitat and biology: A highly migratory pelagic filter feeder, occurring singly or in schools, often near the surface but also down to 700 m. Ovoviviparous with up to 300 embryos per female. Feeds on zooplankton, schooling fishes and squids.

Importance to fisheries: Caught with floating gillnets and harpoons and incidentally in trawls; utilized for human consumption in Pakistan, India and Taiwan (Province of China). Probably more valuable as a focus of ecotourism.

Distribution: Found in all tropical and warm temperate oceans of the world; coastal and oceanic.

SCYLIORHINIDAE

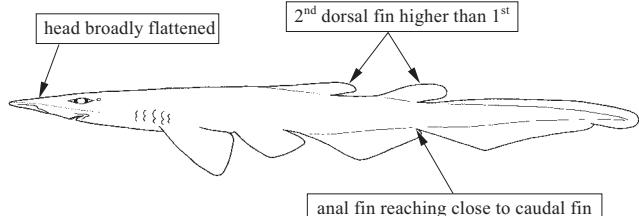
***Apristurus indicus* (Brauer, 1906)**

Frequent synonyms / misidentifications:
 None / None.

FAO names: En - Smallbelly catshark;
 Fr - Holbiche artouca; Sp - Pejegato índico.

Local names: Al-Qout abu kersh sagher.

Size: To at least 34 cm.



Habitat and biology: Poorly known; in deep waters from depths of 1 289 to 1 840 m.

Importance to fisheries: Caught probably with bottom trawls, presently of no interest to fisheries.

Distribution: Off Somalia, Gulf of Aden, and Oman; possibly in South East Atlantic off Namibia and South Africa.

Haelaelurus boesemani* (Springer and D'Aubrey, 1972)*SCYLIORHINIDAE****Frequent synonyms / misidentifications:**

None / None.

FAO names: En - Speckled catshark;
Fr - Holbiche mouchetée; **Sp** - Pejegato pintado.

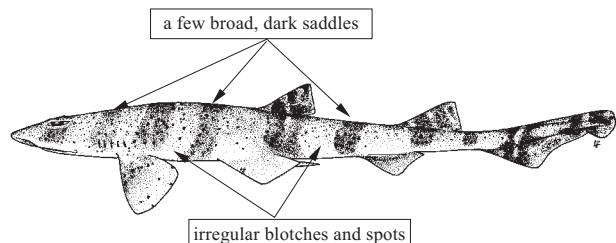
Local names: Al-Qout Al-Mubakaah.

Size: To 48 cm.

Habitat and biology: Bottom-dwelling on the continental and insular shelves, at depths from 37 to 91 m.

Importance to fisheries: Caught probably with bottom trawls, presently of no interest to fisheries.

Distribution: Somalia, Gulf of Aden, Western Australia, Indonesia, the Philippines and Viet Nam.

**PROSCYLLIIDAE*****Eridacnis radcliffei* Smith, 1913****Frequent synonyms / misidentifications:***Proscyllium alcocki* (Misra, 1950) / None.

FAO names: En - Pygmy ribbontail catshark; Fr - Requin chat pygme; Sp - Tollo coludo pigmeo.

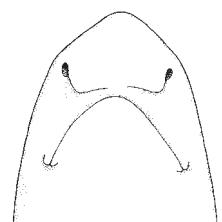
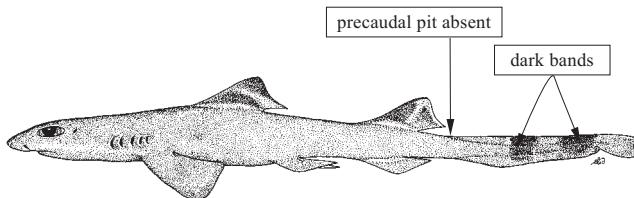
Local names: Al-Qout Abu Ziel shareti Mubakaa.

Size: To 24 cm.

Habitat and biology: An abundant deepwater benthic shark found on mud bottoms of the upper continental and insular slopes and the outer shelves at depths from 71 to 766 m. Ovoviparous, with 1 or 2 young per litter. Feeds primarily on small bony fishes and crustaceans and occasionally on squid.

Importance to fisheries: Caught with bottom trawls, presently of no interest to fisheries.

Distribution: Widespread but spottily distributed in the Indian and Western Pacific oceans: Tanzania, Gulf of Aden, India, Andaman Islands, Viet Nam, and the Philippines.



underside of head

TRIAKIDAE

Iago omanensis (Norman, 1939) (Plate II, 12 & 13)

Frequent synonyms / misidentifications:

None / *Galeorhinus omanensis* (Norman, 1939).

FAO names: En - Bigeye houndshark;
Fr - Requin-ha à gros yeux; Sp - Cazón
ojigrande.

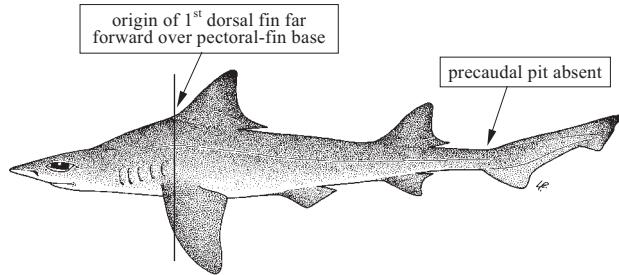
Local names: Al-Qirsh Al-qezm.

Size: To 59 cm.

Habitat and biology: Inhabits deep waters from 110 m or less to at least 1 000 m. Viviparous with 2 to 10 young. Feeds mainly on cephalopods and bony fishes, but also on shrimps, bivalves, gastropods and polychaetes.

Importance to fisheries: Caught with gillnets and handlines, utilized fresh for human consumption in India and Egypt.

Distribution: Red Sea, Gulf of Oman, Pakistan and western India.



Mustelus mosis (Hemprich and Ehrenberg, 1899) (Plate II, 14 & 15)

TRIAKIDAE

Frequent synonyms / misidentifications:

None / *Mustelus manazo* (not Bleeker, 1854).

FAO names: En - Arabian smooth-hound;
Fr - Emissole d'Arabie; Sp - Musola
arábiga.

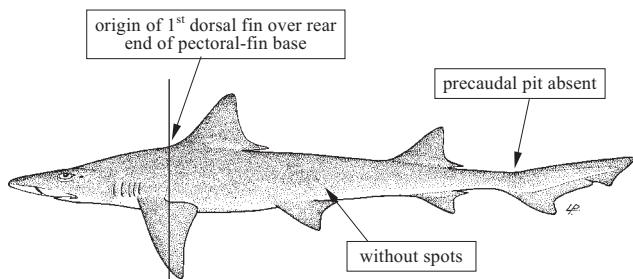
Local names: Mustoulah; Qirsh Al-kalb;
Mahmal.

Size: To 1.5 m.

Habitat and biology: Bottom-dwelling in inshore and offshore waters, also on coral reefs. Viviparous with 6 to 10 young per litter. Feeds on small bottom fishes, molluscs and crustaceans. Lives well in captivity.

Importance to fisheries: Caught with bottom trawls, fixed bottom and floating gillnets, and line gear. Utilized for human consumption in the Red Sea, Pakistan and India.

Distribution: Red Sea to India, also northern South Africa.



HEMIGALEIDAE

Hemigaleus microstoma Bleeker, 1852

(Plate III, 16 & 17)

Frequent synonyms / misidentifications:

Negogaleus microstoma (Bleeker, 1852) / *Chaenogaleus macrostoma* (Bleeker, 1852); *Hemipristis elongatus* (Klunzinger, 1871).

FAO names: En - Sicklefin weasel shark; Fr - Milandre fauille; Sp - Comadreja segadora.

Local names:

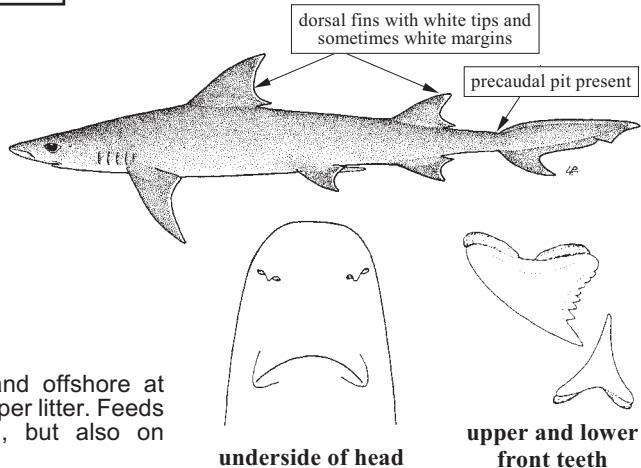
Size: To about 1.1 m.

Habitat and biology: Coastal, inshore and offshore at depths down to 170 m. Viviparous; 2 young per litter. Feeds mainly on octopus, cuttlefish and squid, but also on crustaceans and equinoderms.

Importance to fisheries: Caught with floating and bottom gillnets, longlines and hook-and-line. Utilized fresh for human consumption; offal used for fishmeal.

Distribution: Red Sea, southern India and Sri Lanka; from tropical China to northern Australia.

Remarks: Collected by the author at Gizan (KSA), Aden (Yemen) and Hurghada (Egypt).



Hemipristis elongatus (Klunzinger, 1871)

(Plate III, 18 & 19)

HEMIGALEIDAE

Frequent synonyms / misidentifications:

Hemipristis pingali Setna and Sarangdhar, 1946; *Paragaleus acutiventralis* Chu, 1960; *Heterogaleus ghardaquensis* Gohar and Mazar, 1964 / *Hemigaleus microstoma* Bleeker, 1852.

FAO names: En - Snaggletooth shark; Fr - Milandre chicor; Sp - Comadreja sobrediente.

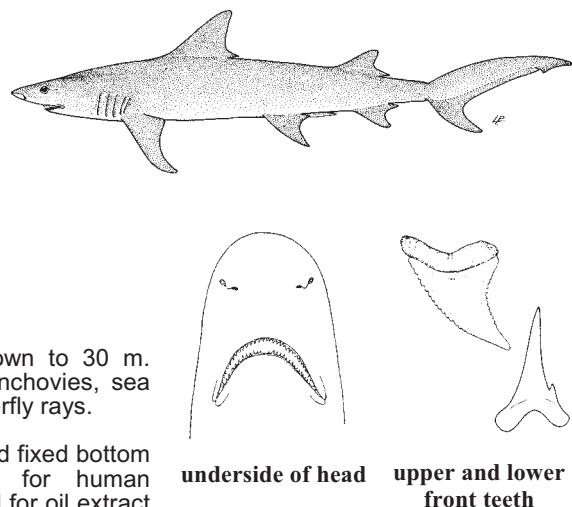
Local names:

Size: Between 1.2 and 2.0 m; reported to 2.4 m.

Habitat and biology: Inshore and offshore down to 30 m. Viviparous; 6 to 8 young per litter. Feeds on anchovies, sea catfish, mackerel, croakers, grey sharks and butterfly rays.

Importance to fisheries: Caught with floating and fixed bottom gillnets and floating longlines. Meat used for human consumption, very appreciated in India; liver used for oil extract and fins for the oriental shark-fin soup market.

Distribution: Indian and western Pacific oceans, from South Africa to China and Australia including the Red Sea and Gulf of Aden.



CARCHARHINIDAE

Carcharhinus albimarginatus (Rüppell, 1837)

Frequent synonyms / misidentifications:

Eulamia (*Platypodon*) *platyrhynchus* Gilbert 1892 / *Carcharhinus platyrhynchus* (Gilbert, 1892); *Triaenodon obesus* (Rüppell, 1837).

FAO names: En - Silvertip shark; Fr - Requin pointe blanche; Sp - Tiburón de puntas blancas.

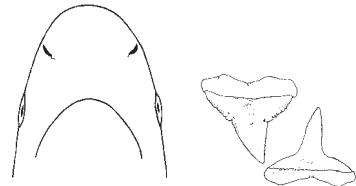
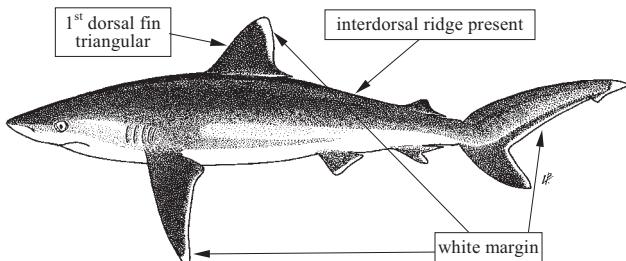
Local names: Al-Qirsh abiad al-haaphah.

Size: To 3.0 m.

Habitat and biology: Coastal and pelagic, from the surface to a depth of 800 m. Viviparous; 1 to 11 young per litter. Feeds on pelagic and bottom fish, including flyingfishes, tunas, soles, eagle rays and cephalopods.

Importance to fisheries: Caught by small-scale fisheries with longlines and gillnets, and also as bycatch in some tuna fisheries.

Distribution: From the western Indian Ocean (including the Red Sea) all the way to the eastern Pacific.



underside of head

upper and lower front teeth

Carcharhinus amblyrhynchos (Bleeker, 1856)

(Plate III, 22 & 23) CARCHARHINIDAE

Frequent synonyms / misidentifications:

Carcharhinus menisorrah (Valenciennes, 1839), *C. wheeleri* Garrick, 1982 / None.

FAO names: En - Grey reefshark; Fr - Requin dagsit; Sp - Tiburón de arrecifes.

Local names: Qirsh Al-bahah; Safteet.

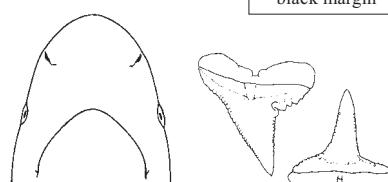
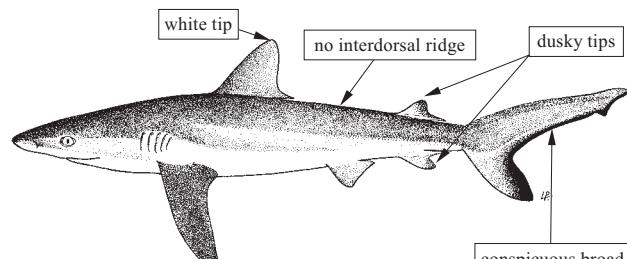
Size: To 2.33 and possibly 2.55 m.

Habitat and biology: A common coastal, inshore to offshore reef species; from the surface to a depth of 140 m. Viviparous; 1 to 6 young per litter; gestation about 12 months. Feeds on surface bottom, and reef fishes, cephalopods, crabs and shrimp.

Importance to fisheries: Caught with line gear and gillnets. Utilized for human consumption salt-dried or fresh; fins used for the oriental shark-fin soup market.

Distribution: Indian Ocean, including the Red Sea and western and Central Pacific.

Remarks: The blacktail reefshark *C. wheeleri* is considered to be a synonym of *C. amblyrhynchos* (L.J.V. Compagno pers.comm.). This shark can be very aggressive when cornered or confronted.



underside of head

upper and lower front teeth

***Carcharhinus altimus* (Springer, 1950)**

(Plate IV, 24 & 25)

CARCHARHINIDAE**Frequent synonyms / misidentifications:**

Carcharhinus radamae Fourmanoir, 1961 /
Carcharhinus galapagensis (Snodgrass
and Heller, 1905); *C. obscurus* (Lesueur,
1818); *C. plumbeus* (Nardo, 1827).

FAO names: En - Bignose shark;
Fr - Requin babaosse; Sp - Tiburón baboso.

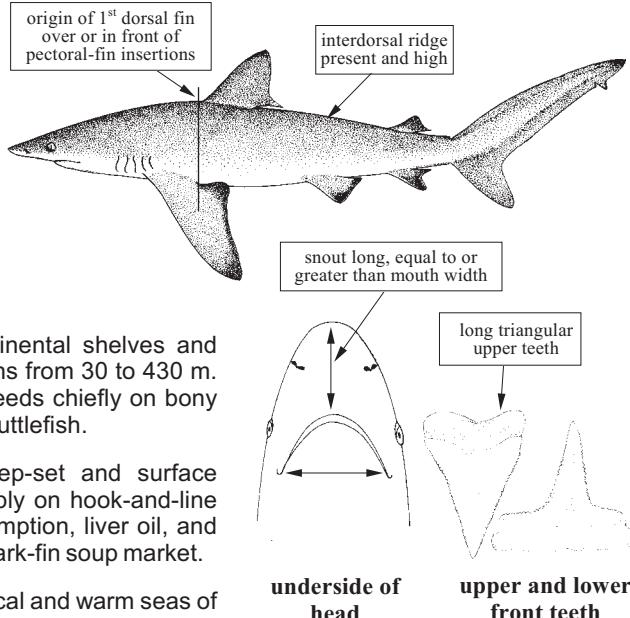
Local names: Qirsh Abu Bouz taweel.

Size: To about 3 m; commonly to 2.4 m.

Habitat and biology: Found off the continental shelves and uppermost slopes near the bottom, at depths from 30 to 430 m. Viviparous; with 3 to 15 young per litter. Feeds chiefly on bony fishes, but also on small sharks, rays and cuttlefish.

Importance to fisheries: Taken on deep-set and surface longlines, also in bottom trawls and probably on hook-and-line and with gillnets. Utilized for human consumption, liver oil, and shagreen; fins appreciated in the oriental shark-fin soup market.

Distribution: Patchily distributed in all tropical and warm seas of the world.

***Carcharhinus plumbeus* (Nardo, 1827)**

(Plate IV, 26-28)

CARCHARHINIDAE**Frequent synonyms / misidentifications:**

Carcharhinus milberti (Valenciennes,
1839) / *Carcharhinus altimus* (Springer,
1950).

FAO names: En - Sandbar shark;
Fr - Requin gris; Sp - Tiburón trozo.

Local names: Hawaash; Qirsh tarh; Qirsh Aghbar; Zefa.

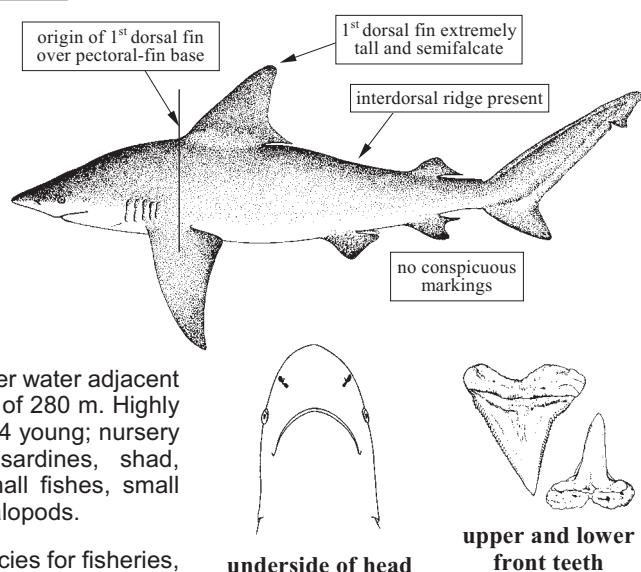
Size: To possibly 3.0 m, common to 2.4 m.

Habitat and biology: Coastal-pelagic, on continental and insular shelves and in deeper water adjacent to them; from the intertidal zone to a depth of 280 m. Highly migratory in some areas. Viviparous; 1 to 14 young; nursery areas in coastal lagoons. Feeds on sardines, shad, menhaden, mullets, flatfish, and other small fishes, small sharks and batoids, crustaceans and cephalopods.

Importance to fisheries: An important species for fisheries, caught with longlines, hook-and-line, and bottom gillnets.

Also sought by sport fishermen. Utilized fresh, frozen, smoked or salt-dried for human consumption. Highly appreciated for its fins in the oriental shark-fin soup market. Liver and hides also much appreciated.

Distribution: Found in all tropical and warm-temperate seas of the world with the possible exception of the eastern Pacific (unconfirmed records).



Carcharhinus amblyrhynchos* (Whitley, 1934)*CARCHARHINIDAE****Frequent synonyms / misidentifications:**

Carcharhinus pleurotaenia (Bleeker, 1852) /
Carcharhinus limbatus (Valenciennes, 1839); *C. brevipinna* (Müller and Henle, 1839).

FAO names: En - Graceful shark; Fr - Requin gracie; Sp - Tiburón grácil.

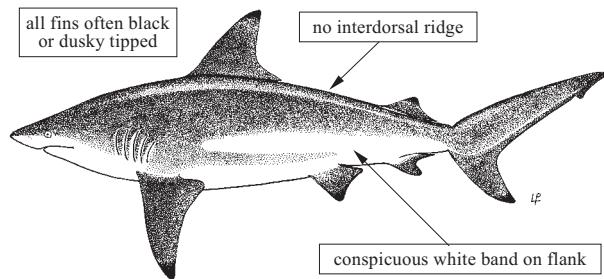
Local names:

Size: To at least 1.67 m.

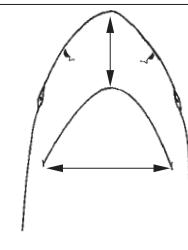
Habitat and biology: An inshore, coastal pelagic species. Viviparous; details on reproduction unknown. Feeds mainly on carangids and mugilids, but also on cephalopods and crabs.

Importance to fisheries: Caught with longlines and drifting gillnets in fisheries across its range. Utilized fresh and dried for human consumption, fins used in the oriental shark-fin soup market.

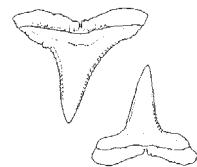
Distribution: Gulf of Aden, India, Gulf of Thailand, Viet Nam, the Philippines, Indonesia and northern Australia.



snout wedge-shaped, much shorter than mouth width



underside of head



upper and lower front teeth

Carcharhinus brevipinna* (Müller and Henle, 1839)*(Plate IV,
29 & 30)****CARCHARHINIDAE****Frequent synonyms / misidentifications:**

Carcharhinus johnsoni Smith, 1951 /
Carcharhinus limbatus (Valenciennes, 1839);
C. amblyrhynchos (Whitley, 1934);
C. melanopterus (Quoy and Gaimard, 1824);
C. sorrah (Valenciennes, 1839).

FAO names: En - Spinner shark; Fr - Requin tisserand; Sp - Tiburón aleta negra.

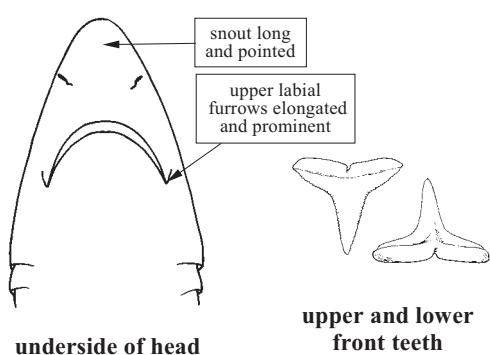
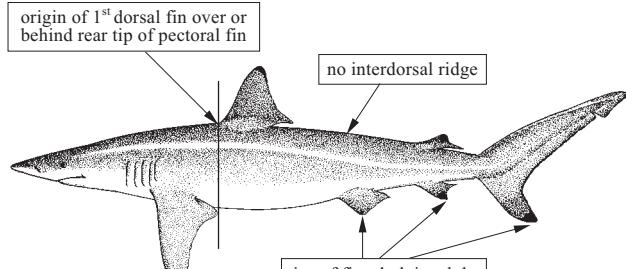
Local names: Al-Qirsh Al-Suezy.

Size: To 2.8 m, common to 2.5 m.

Habitat and biology: Pelagic in coastal waters; highly migratory, sometimes forming schools. A fast-swimming shark that sometimes leaps out of the water when feeding. Viviparous; with 6 to 20 embryos per litter. Feeds mainly on small schooling fishes and squids, but also on small sharks and rays.

Importance to fisheries: Caught with drifting gillnets and longlines; also targeted by sport fishermen. Utilized fresh and salt-dried for human consumption, fins used in the oriental shark-fin soup market.

Distribution: Tropical and temperate waters of Atlantic, Indian and western Pacific Oceans.



underside of head

upper and lower front teeth

Carcharhinus limbatus (Valenciennes, 1839)

Frequent synonyms / misidentifications:

None / *Carcharhinus brevipinna* (Müller and Henle, 1839); *C. amblyrhynchoides* (Whitley, 1934); *C. melanopterus* (Quoy and Gaimard, 1824); *C. sorrah* (Valenciennes, 1839).

FAO names: En - Blacktip shark; Fr - Requin borde; Sp - Tiburón macuira.

Local names: Al-Qirh al-akhdar; Qirsh al-sahel; Eisah.

Size: To 2.6 m, common to 1.5 m.

Habitat and biology: A coastal and offshore but not truly oceanic species. Highly migratory, sometimes forming large schools. Fast-moving, sometimes leaping out of the water. Viviparous; with 1 to 10 embryos per litter and a 10 to 12-month gestation period; nursery areas in coastal lagoons. Feeds mainly on schooling fishes but eats also cephalopods and crustaceans.

Importance to fisheries: Caught commercially with floating longlines and gillnets, and incidentally in trawl nets; an important species for sport fishermen. Sometimes an important bycatch of coastal tuna fisheries. Its meat is highly appreciated fresh for human consumption; its fins, hides and liver are also utilized.

Distribution: Widespread in all tropical and warm-temperate seas of the world.

Carcharhinus sorrah (Valenciennes, 1839)

Frequent synonyms / misidentifications:

Carcharhinus bleekeri (Dumeril, 1865) / *Carcharhinus brevipinna* (Müller and Henle, 1839); *C. limbatus* (Valenciennes, 1839)

FAO names: En - Spottail shark; Fr - Requin à queue tachetée; Sp - Tiburón rabo manchado.

Local names: Qirsh Al-sara.

Size: To 1.6 m.

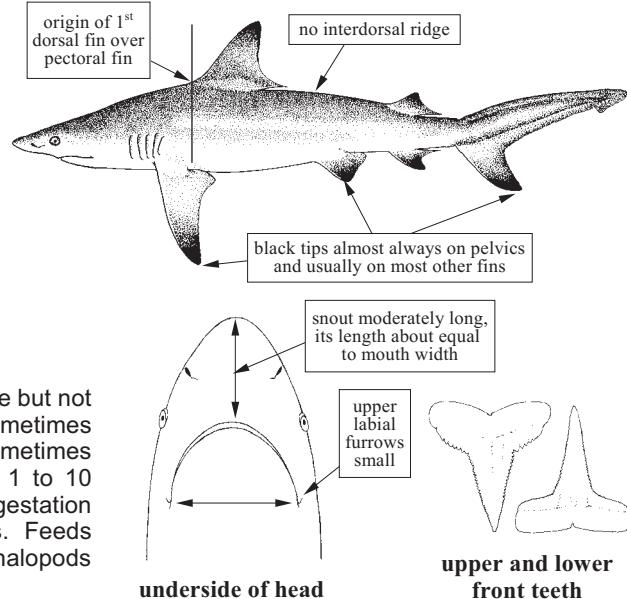
Habitat and biology: Common in inshore waters often around coral reefs, sometimes found also offshore; from the surface to a depth of 140 m. Viviparous; 2 to 6 young per litter. Feeds mainly on small bony fishes (e.g. mugilids, clupeoids, siganids, teraponids) but also on cephalopods, crabs and shrimps.

Importance to fisheries: Caught with floating gillnets and longlines. Sometimes locally important in small-scale fisheries. Its meat is utilized dried and fresh for human consumption.

Distribution: From Madagascar to the Red Sea, eastward to Japan, tropical Australia and the Solomon Islands.

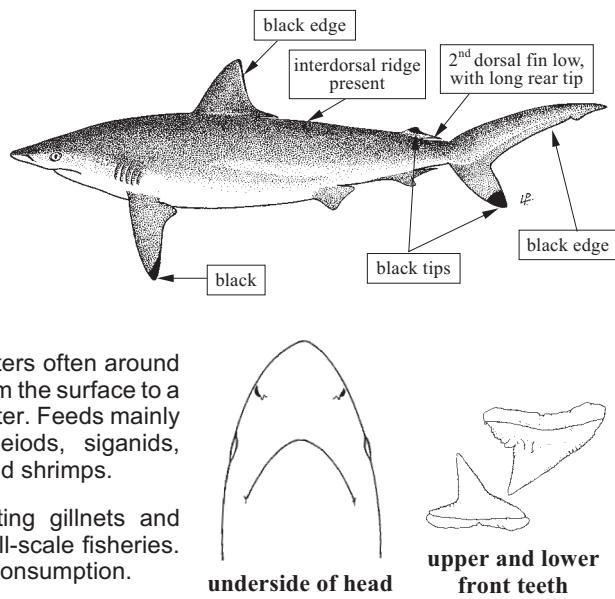
(Plate V, 31-34)

CARCHARHINIDAE



(Plate V, 35 & 36)

CARCHARHINIDAE



Carcharhinus melanopterus* (Quoy and Gaimard, 1824)**(Plate V, 37 & 38) **CARCHARHINIDAE*Frequent synonyms / misidentifications:**

Hypoprion playfari (Günther, 1870) /
Carcharhinus brevipinna (Müller and Henle, 1839); *C. limbatus* (Valenciennes, 1839).

FAO names: En - Blacktip reef shark;
Fr - Requin pointes noires; **Sp** - Tiburón de puntas negras.

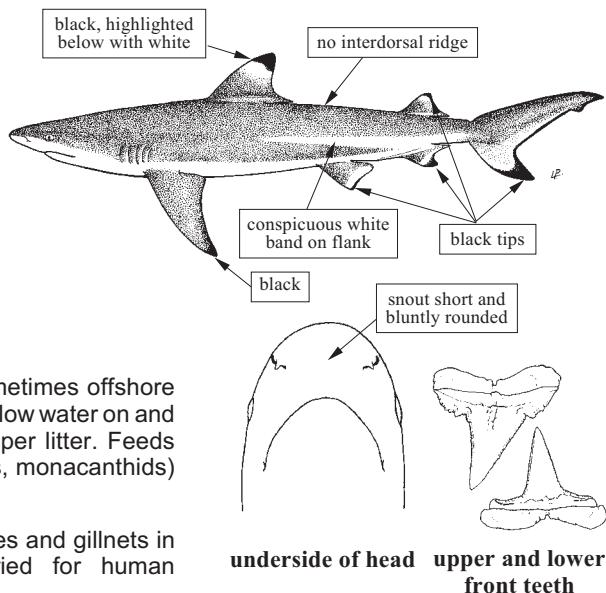
Local names: Abu rishah saudah; Abu sawadah; Noffari.

Size: To about 2 m, common to 1.6 m.

Habitat and biology: Found inshore and sometimes offshore on continental and insular shelves; prefers shallow water on and around coral reefs. Viviparous; with 4 young per litter. Feeds mainly on bony fishes (carangids, leiognathids, monacanthids) and cephalopods.

Importance to fisheries: Caught with longlines and gillnets in coastal fisheries. Utilized fresh or salt-dried for human consumption.

Distribution: Wide-ranging in all the Indian Ocean including the Red Sea, and the western and Central Pacific.



underside of head upper and lower
front teeth

Carcharhinus dussumieri* (Valenciennes, 1839)**(Plate VI, 39 & 40) **CARCHARHINIDAE*Frequent synonyms / misidentifications:**

Carcharhinus menisorrah (Valenciennes, 1839); *C. tjutjot* (Bleeker, 1852) /
Carcharhinus sealei (Pietschmann, 1916).

FAO names: En - Whitecheek shark;
Fr - Requin à joues blanches; **Sp** - Tiburón cariblanco.

Local names: Qirsh Al-aamaak.

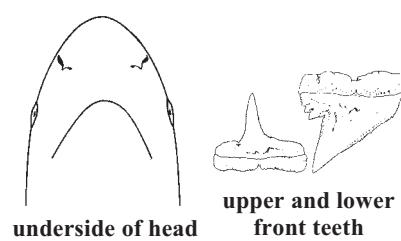
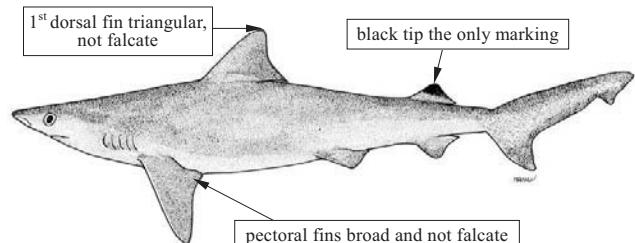
Size: To about 90 cm.

Habitat and biology: A common, but little-known shark of the continental and insular inshore waters. Viviparous; with 1 to 4 young per litter. Feeds primarily on crabs, shrimp and bony fishes, also on other crustaceans, cephalopods and other molluscs.

Importance to fisheries: Caught with gillnets and longlines in small-scale fisheries. Commonly marketed for its meat for human consumption.

Distribution: Occurs from the Red Sea eastward to Thailand, China, southern Japan, Java, Borneo, and probably New Guinea and northern Australia.

Remarks: This species differs from the blackspot shark, *Carcharhinus sealei* by its triangular rather than falcate first dorsal fin, more numerous upper teeth, a broader mouth, broader pectoral fins, and less numerous vertebrae. Observed by the author at the Jeddah (KSA) fish market in two different seasons, but fishing locality unknown.



underside of head upper and lower
front teeth

***Carcharhinus sealei* (Pietschmann, 1916)**

(Plate VI, 41 & 42)

CARCHARHINIDAE**Frequent synonyms / misidentifications:**

Carcharhinus menisorrah (Valenciennes, 1839) / *Carcharhinus dussumieri* (Valenciennes, 1839).

FAO names: En - Blackspot shark; Fr - Requin à taches noires; Sp - Tiburón alinegro.

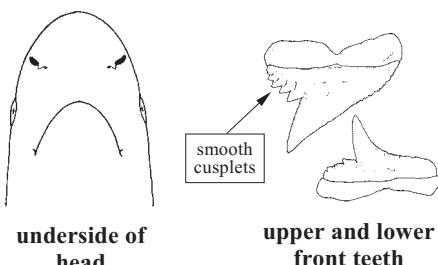
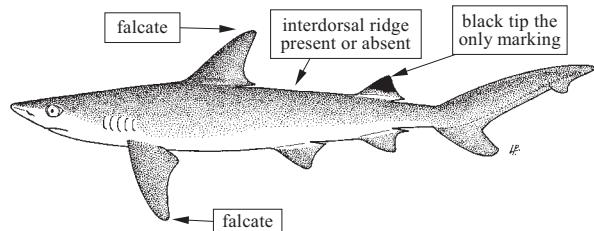
Local names: Qirsh Al-aamak.

Size: To 95 cm.

Habitat and biology: A coastal shark of the continental and insular shelves, from the surfline to a depth of 40 m. Viviparous; 2 young per litter; gestation period about 9 months. Feeds on small fishes, squids and prawns.

Importance to fisheries: Caught with line gear and gillnets. Sometimes locally important in small-scale fisheries. Its meat is utilized dried and fresh for human consumption.

Distribution: Found from South Africa northwards to the mouth of the Gulf of Aden (Socotra Archipelago); also known from Pakistan and Sri Lanka, and in the western Pacific from China to New Guinea and possibly northern Australia.

***Carcharhinus falciformis* (Bibron, 1839)**

(Plate VI, 43-45)

CARCHARHINIDAE**Frequent synonyms / misidentifications:**

None / *Carcharhinus obscurus* (Lesueur, 1818).

FAO names: En - Silky shark; Fr - Requin soyeux; Sp - Tiburón jaquetón.

Local names: Al-hariri.

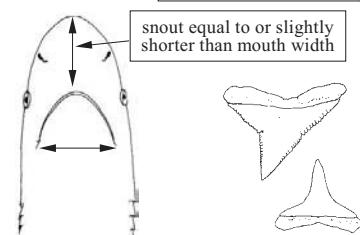
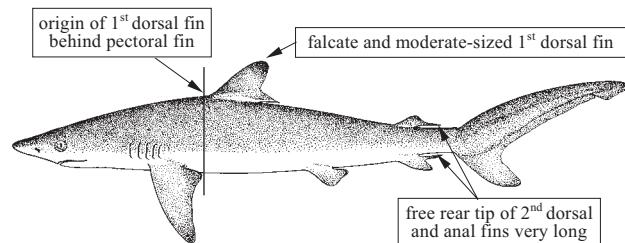
Size: To 3.3 m.

Habitat and biology: Coastal and oceanic, common near shelves and slopes, from the surface to a depth of 500 m. Late juveniles commonly associated with tuna schools. Viviparous; with 2 to 16 young per litter; nursery areas in the outer shelves. Feeds mainly on fish, including sea catfish, groupers and snappers, tunids and clupeoids, but also on squids, octopi and crustaceans.

Importance to fisheries: Very important in fisheries throughout its range, caught with longlines, handlines and gillnets. One of the most common bycatches of industrial tropical tuna fisheries with longlines and specially purse seines. Utilized fresh or salt-dried for human consumption, livers used for oil extraction (rich in Vitamin A), fins for the oriental shark-fin soup market, and hides for leather.

Distribution: Found in all tropical seas of the world, one of the most common sharks worldwide. Known from the Red Sea and Gulf of Aden.

Remarks: Reported to be dangerous to humans.



underside of head upper and lower front teeth

***Carcharhinus amboinensis* (Müller and Henle, 1839)**

(Plate VII, 46) CARCHARHINIDAE

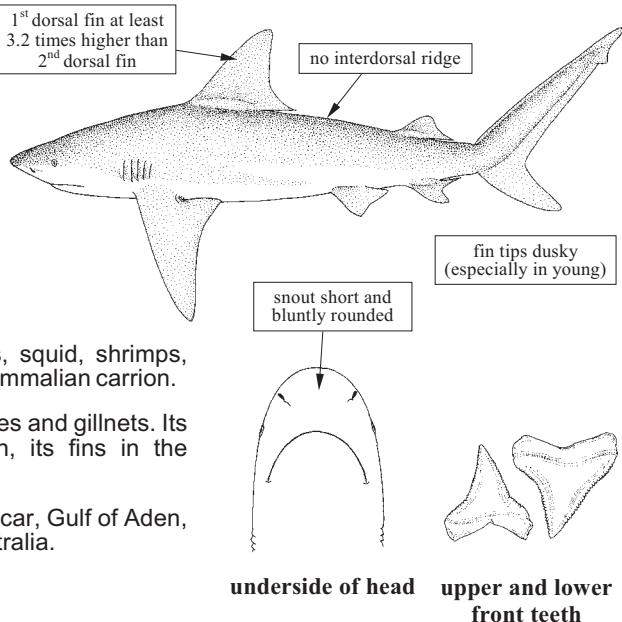
Frequent synonyms / misidentifications:*Triaenodon obtusus* Day, 1878 /
Carcharhinus leucas (Valenciennes, 1839).**FAO names:** En - Pigeye shark; Fr - Requin baistique; Sp - Tiburón baleta.**Local names:** Qirsh kabeer Al-aien.**Size:** To 2.8 m.

Habitat and biology: Occurs inshore and offshore, from the surfline to a depth of 60 m. Viviparous; 3 to 13 young per litter. A bottom-feeding shark, preying on pelagic and demersal bony fishes, sharks and rays, squid, shrimps, cuttlefish, octopi, lobsters, gastropods and mammalian carrion.

Importance to fisheries: Caught with longlines and gillnets. Its meat utilized fresh for human consumption, its fins in the oriental shark-fin soup market.

Distribution: Nigeria, South Africa, Madagascar, Gulf of Aden, Pakistan, Sri Lanka, Indonesia, northern Australia.

Remarks: Potentially dangerous to people.

***Carcharhinus leucas* (Valenciennes, 1839)**

(Plate VII, 47-49)

CARCHARHINIDAE

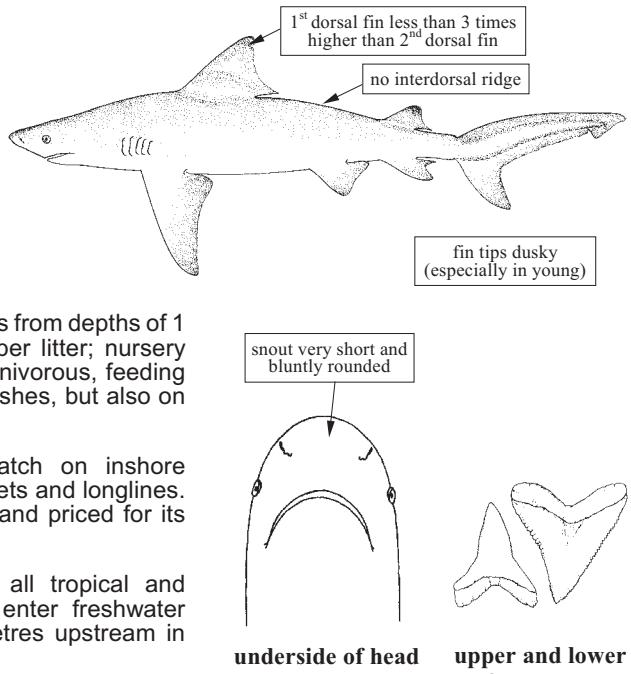
Frequent synonyms / misidentifications:*Carcharhinus zambezensis* (Peters, 1852);
C. vanrooyeni Smith, 1958 / *Carcharhinus amboinensis* (Müller and Henle, 1839).**FAO names:** En - Bull shark; Fr - Requin bouledogue; Sp - Tiburón sarda.**Local names:****Size:** To 3.5 m.

Habitat and biology: In coastal, estuarine, riverine and lacustrine waters, usually found close inshore in marine habitats; occurs from depths of 1 to 152 m. Viviparous; with 6 to 12 young per litter; nursery areas in estuaries and coastal lagoons. Omnivorous, feeding mainly on other sharks and rays and bony fishes, but also on crabs, shrimp, turtles, sea birds and carrion.

Importance to fisheries: A common catch on inshore small-scale shark fisheries, caught with gillnets and longlines. Used for its meat for human consumption, and priced for its fins, hides and livers.

Distribution: Found in coastal areas of all tropical and subtropical seas of the world. Known to enter freshwater systems and found several hundred kilometres upstream in rivers and lakes.

Remarks: One of the most dangerous sharks, known to attack and kill people.



Carcharhinus longimanus (Poey, 1861)

Frequent synonyms / misidentifications:
Carcharhinus maou (Lesson, 1830) / None.

FAO names: En - Oceanic whitetip shark; Fr - Requin océanique; Sp - Tiburón oceánico.

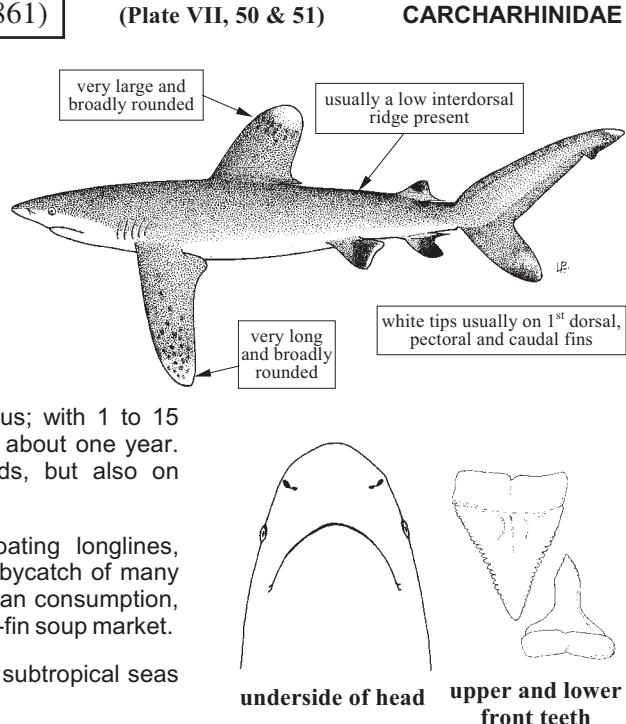
Local names: Abu rishah baidaa; Oush; Ekhtiemaiyah; Tarfei.

Size: To 3.5 m, common to 2.7 m.

Habitat and biology: An oceanic-epipelagic species found mostly far offshore but occasionally in coastal waters. Viviparous; with 1 to 15 embryos per litter and a gestation period of about one year. Feeds mainly on pelagic fishes and squids, but also on seabirds, turtles and crustaceans.

Importance to fisheries: Caught with floating longlines, drifting gillnets and handlines; an important bycatch of many tropical tuna fisheries. Utilized fresh for human consumption, its fins highly appreciated in the oriental shark-fin soup market.

Distribution: Widespread in all tropical and subtropical seas of the world.



Galeocerdo cuvier (Péron and Lesueur, 1822)

Frequent synonyms / misidentifications:
Galeocerdo arcticus (Faber, 1829) / None.

FAO names: En - Tiger shark; Fr - Requin tigre commun; Sp - Tiburón tigre.

Local names: Qirsh namrani; Al-Qirsh Al-Nemer.

Size: Exceptionally to 7.4 m, common to 4 m.

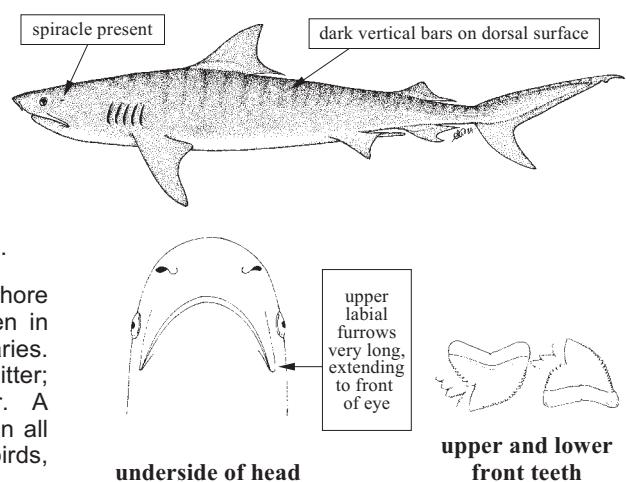
Habitat and biology: An inshore and offshore species, near the surface and bottom; often in shallow waters, including rivers and estuaries. Ovoviparous; with 10 to 82 young per litter; gestation possibly slightly over a year. A voracious, indiscriminate predator feeding on all kinds of fish, marine mammals, turtles, seabirds, sea snakes, squids, molluscs and crabs.

Importance to fisheries: Caught with floating and bottom gillnets and longlines. Also sought by sport fishermen. Its meat is utilized fresh, salt-dried, and smoked for human consumption, hide and fins of high quality, liver rich in oil and vitamin A.

Distribution: Worldwide in tropical and warm-temperate waters.

Remarks: One of the most dangerous sharks; attacks divers, swimmers and even boats.

(Plate VIII, 52 & 53) **CARCHARHINIDAE**

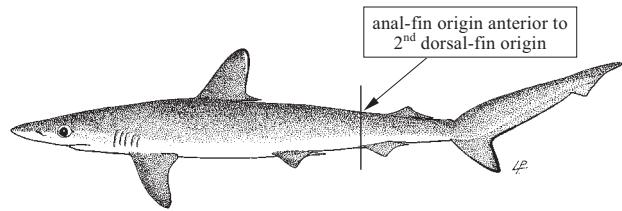


***Loxodon macrorhinus* Müller and Henle, 1839**

(Plate VIII, 54 & 55) CARCHARHINIDAE

Frequent synonyms / misidentifications:

Scoliodon acutus (Rüppell, 1837);
S. ceylonensis Setna and Sarangdhar, 1946 / *Scoliodon laticaudus* (Müller and Henle, 1838).



FAO names: En - Sliteye shark; Fr - Requin sagrin; Sp - Tiburón ojuelo.

Local names: Libax; Jeer-Jeer; Al-Qirsh Al-Hindi.

Size: To 90 cm.

Habitat and biology: Occurs in tropical, coastal, clear waters, near the surface and bottom; at depths from 7 to 80 m. Viviparous; with 2 to 4 young per litter. Feeds on anchovies, croakers, shrimp and cuttlefish.

Importance to fisheries: Caught with floating and bottom gillnets and line gear. Locally important for small-scale fisheries in parts of its range. Utilized fresh for human consumption.

Distribution: Indian Ocean and western Pacific Ocean; from South Africa to the Red Sea, eastward to Japan and eastern Australia.

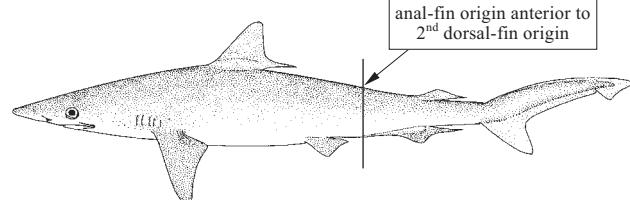
***Rhizoprionodon acutus* (Rüppell, 1837)**

(Plate VIII, 56 & 57)

CARCHARHINIDAE

Frequent synonyms / misidentifications:

Scoliodon acutus (Rüppell, 1837); *S. palsorra* (Bleeker, 1853); *S. walbeehmi* (Bleeker, 1856) / *Rhizoprionodon oligolinx* Springer, 1964; *Loxodon macrorhinus* Müller and Henle, 1839; *Scoliodon laticaudus* Müller and Henle, 1838.

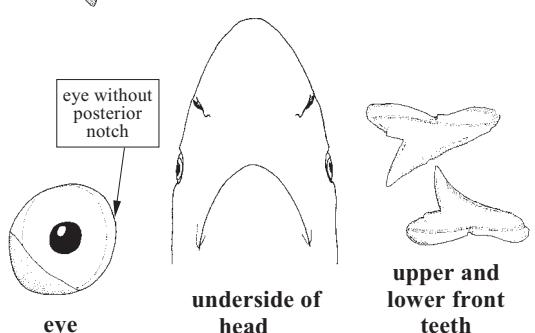


FAO names: En - Milk shark; Fr - Requin museau pointu; Sp - Tiburón lechoso.

Local name: Qirsh.

Size: Common to less than 1.1 m, exceptionally to 1.78 m.

Habitat and biology: An abundant inshore and offshore shark, from the surfline to depths of about 200 m. Viviparous: 2 to 8 young per litter; gestation period about 1 year. Feeds on small bony fishes (lizardfish, goatfish, threadfins, wrasses, hairtails, sardines, croakers, mojarras), squids, octopi, cuttlefish, shrimps, crabs and sea snails.



Importance to fisheries: An important species for inshore small-scale fisheries across its range. Caught with longlines, gillnets and trawls. Utilized fresh and salt-dried for human consumption.

Distribution: In tropical and subtropical waters of the south eastern Atlantic, the Indian (including the Red Sea and Gulf of Aden) and the western Pacific oceans.

***Negaprion acutidens* (Rüppell, 1837)**

(Plate VIII, 58)

CARCHARHINIDAE

Frequent synonyms / misidentifications:
None / *Lamiopsis temmincki* (Müller and Henle, 1839).

FAO names: En - Sicklefin lemon shark;
Fr - Requin limon fauille; Sp - Tiburón segador.

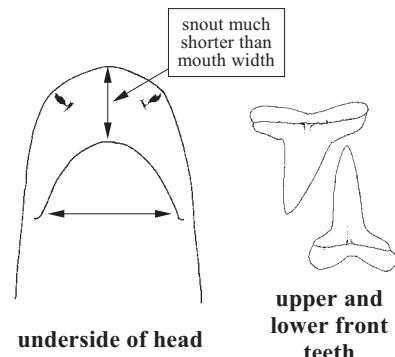
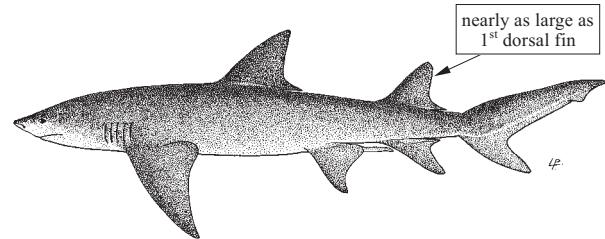
Local names: Libax; Farluuq; Qirsh Abu-bouse areed.

Size: To 3.1 m.

Habitat and biology: Demersal in shallow inshore and offshore waters; often around coral reefs and sandy plateaus near coral, at depths down to at least 23 m. Viviparous; 1 to 13 young per litter; gestation 10 or more months. Feeds on bottom fishes including porcupine fish and stingrays.

Importance to fisheries: Caught with floating and bottom gillnets and line gear. Its meat is utilized fresh or salt-dried for human consumption, fins highly appreciated in the oriental shark-fin soup market, and liver for oil and vitamin A extraction.

Distribution: Indian and Western Pacific oceans, from South Africa to the Red Sea, eastward to Cambodia, Papua-New Guinea, tropical Australia, and Palau, Marshall Islands and Tahiti.

***Triaenodon obesus* (Rüppell, 1837)**

(Plate IX, 59 & 60)

CARCHARHINIDAE

Frequent synonyms / misidentifications:
Triaenodon apicalis Whitley, 1939 /
Carcharhinus albimarginatus (Rüppell, 1837).

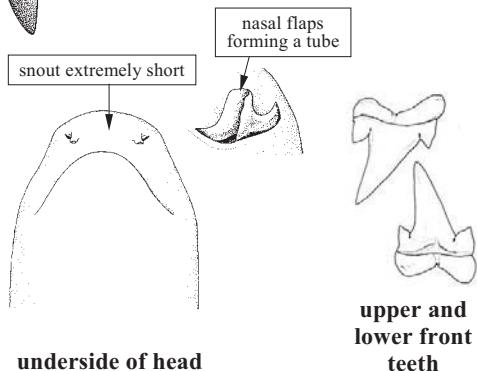
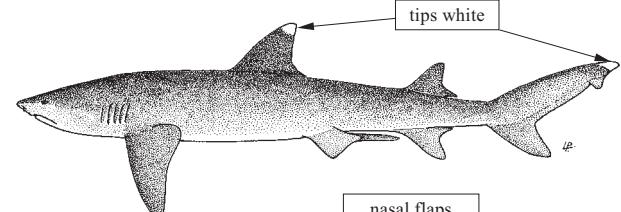
FAO names: En - Whitetip reef shark;
Fr - Requin corail; Sp - Cazón coralero ñato.

Local names: Libaax; Daaha; Abu-shaaf; Qirsh salmani.

Size: Common to 1.7 m; said to attain 2.13 m.

Habitat and biology: Occurs in coastal clear waters, very commonly associated with coral reefs, lying inside holes or crevices. Viviparous; 1 to 5 young per litter. Feeds on a wide variety of reef fishes (moray eels, parrot fishes, snappers, squirrelfishes, etc.), but also octopus, lobsters and crabs.

Importance to fisheries: Caught with floating and bottom gillnets, and line gear. Its meat utilized fresh or salt-dried for human consumption.



Distribution: Widely distributed in the Indian and Pacific Oceans, from eastern Africa and the Red Sea to the tropical Pacific Islands and some localities of western America.

SPHYRNIDAE

Sphyrna lewini (Griffith and Smith, 1834)

(Plate IX, 61-64)

Frequent synonyms / misidentifications:

Sphyrna diplana Springer, 1941 / *Sphyrna mokarran* (Rüppell, 1837).

FAO names: En - Scalloped hammerhead; Fr - Requin-marteau halicorne; Sp - Cornuda común.

Local names: Manyaaso; Kernat Al-diplana; Abu-mattrakah.

Size: Common to 3.7 m, exceptionally to 4.2 m.

Habitat and biology: From inshore to offshore and semi-oceanic waters. Newborns and juveniles common in estuaries and shallow bays; adults form large schools around offshore sea mounts. Viviparous; 15 to 31 young per litter. Feeds on a variety of pelagic and demersal fishes (sardines, anchovies, mackerel, jacks, flatfish, sea catfish, parrotfish, and others) as well as several sharks and rays, squid, lobsters and other crustaceans.

Importance to fisheries: An important species for small and large-scale fisheries throughout its range. Caught with most kinds of longlines and gillnets and particularly vulnerable to the latter around the seamounts where large schools of the species congregate. A common bycatch of tuna and billfish fisheries when operating in coastal waters. Its meat used fresh or salt-dried for human consumption; fins highly appreciated in the oriental shark-fin soup market; hides good for leather production.

Distribution: In all tropical and warm-temperate seas of the world.

Sphyrna mokarran (Rüppell, 1837)

(Plate IX, 65 & 66)

SPHYRNIDAE

Frequent synonyms / misidentifications:

None / *Sphyrna tudes* (Valenciennes, 1822); *S. lewini* (Griffith and Smith, 1834).

FAO names: En - Great hammerhead; Fr - Grand requin-marteau; Sp - Cornuda gigantea.

Local names: Cawar; Kerrnah; Mokarran.

Size: To 6 m.

Habitat and biology: Semi-oceanic, also in inshore waters, often found around and on coral reefs. Viviparous; 13 to 42 young per litter; gestation at least 7 months. Feeds mainly on skates, rays, groupers and sea catfishes, but takes also other bony fishes, small sharks, squids and lobsters.

Importance to fisheries: Caught with floating gillnets and floating longlines. Its meat used fresh, frozen or salt-dried for human consumption. Fins highly appreciated in the oriental shark-fin soup market. Livers and hides also utilized.

Distribution: In all tropical and warm-temperate seas of the world.

