

## JAWLESS FISHES

The hagfishes and their relatives, the lampreys (Order Petromyzontiformes, not found in Namibia), are different from all other living fishes because they lack true jaws. Their internal skeleton is cartilaginous, and they lack true teeth and true vertebrae. These jawless fishes are included in the Superclass Agnatha and are commonly referred to as cyclostomes. All other living fishes (sharks, rays, chimeras, and bony fishes) possess true jaws derived from gill arches and are placed in the Superclass Gnathostomata. Cyclostomes are considered primitive compared to other vertebrates that possess jaws.

Hagfishes are easily recognized from their eel-like body form, apparent lack of eyes (they are small and covered with skin), lack of paired fins, a single nostril surrounded by 2 pairs of barbels, and a mouth with horny teeth and a barbel on each side. They are of no commercial interest but can be a nuisance to fishermen; when caught on hooks they profusely secrete a slime that acts as a fish repellent. The hagfishes comprise a single family, with 2 species reported from Namibia.

### Order MYXINIFORMES - Hagfishes

#### *Eptatretus hexatrema* (Müller, 1834)

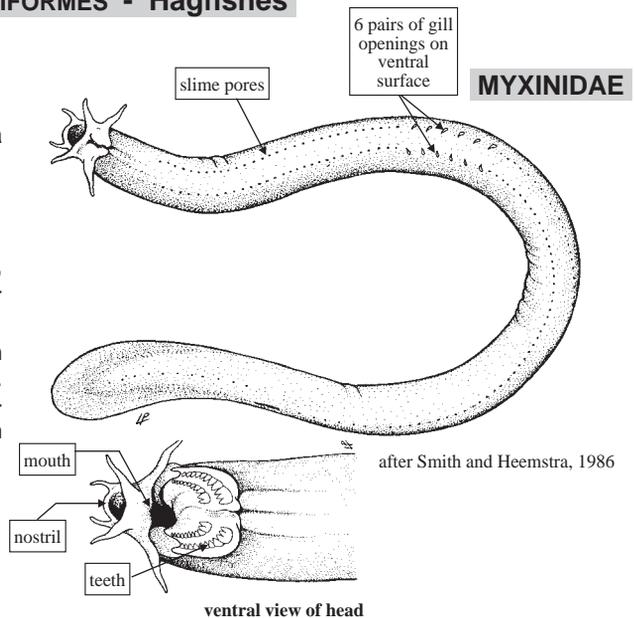
**FAO names:** **En** - Sixgill hagfish; **Fr** - Myxine à six trous; **Sp** - Pez moco de seis agallas.

**Local names:** Seskief-slymslang (Ak).

**Size:** To 80 cm.

**Fisheries:** Incidentally caught by baited traps, baited hooks, and occasionally caught in bottom trawls.

**Habitat and biology:** Commonly burrows in muddy bottoms at depths from 20 to 400 m. Feeds mostly by scavenging on dead or disabled fish. Egg capsules with hooks on both ends.



#### *Myxine capensis* Regan, 1913

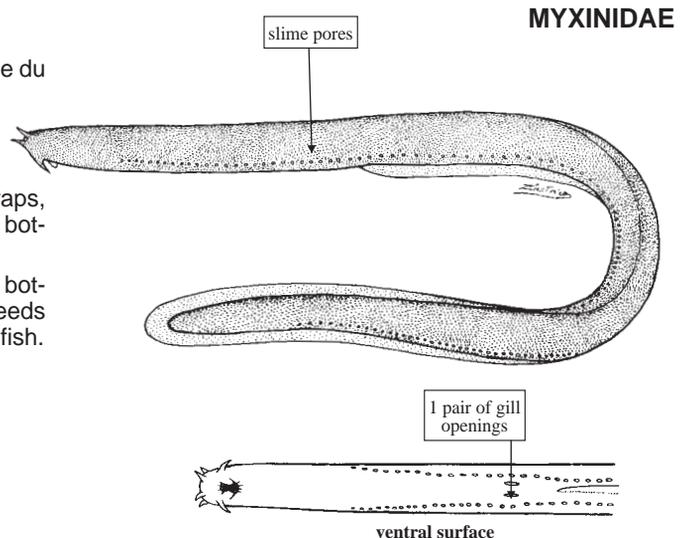
**FAO names:** **En** - Cape hagfish; **Fr** - Myxine du Cap; **Sp** - Pez moco del Cabo.

**Local names:**

**Size:** To 40 cm.

**Fisheries:** Incidentally caught by baited traps, baited hooks, and occasionally caught in bottom trawls.

**Habitat and biology:** Burrows in muddy bottoms at depths from 175 to 460 m. Feeds mostly by scavenging on dead or disabled fish.

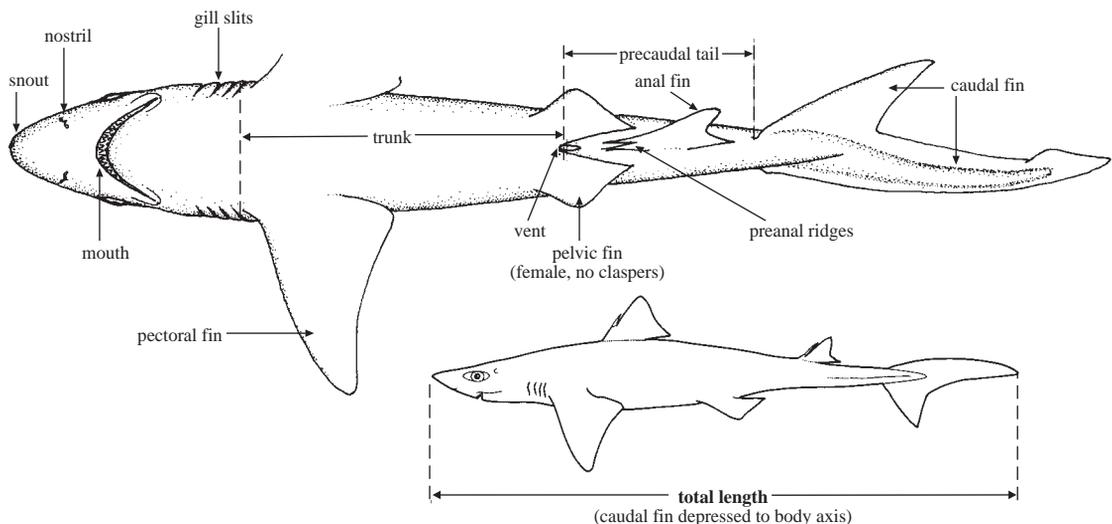
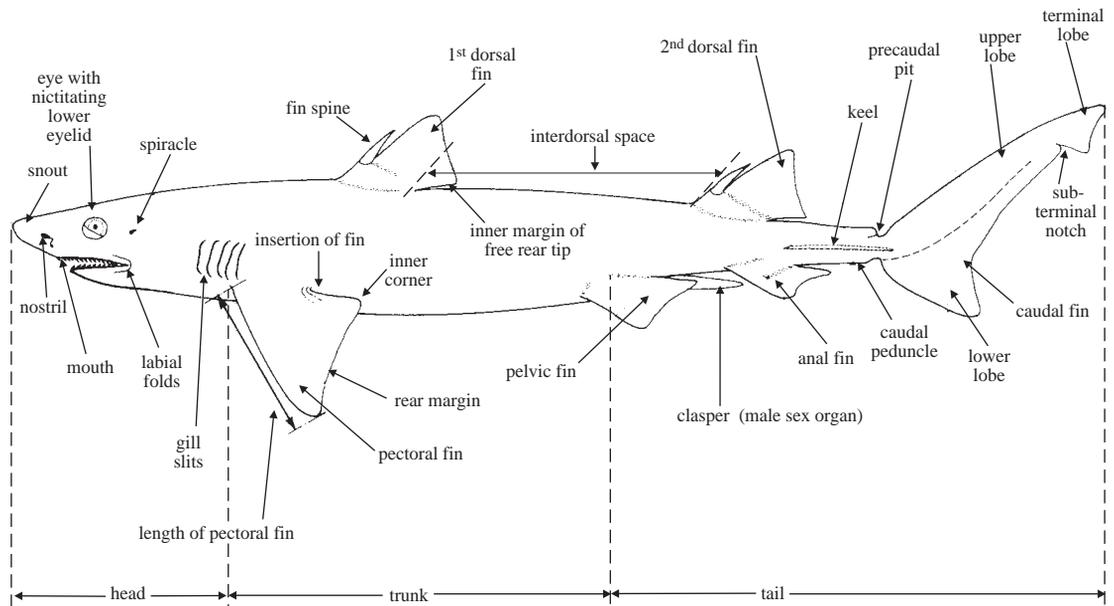


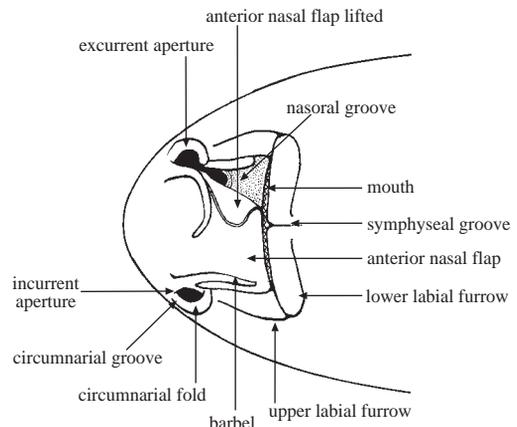
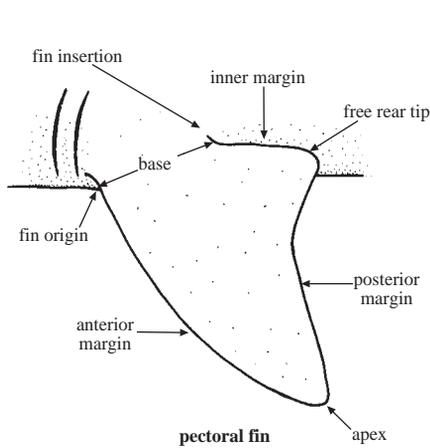
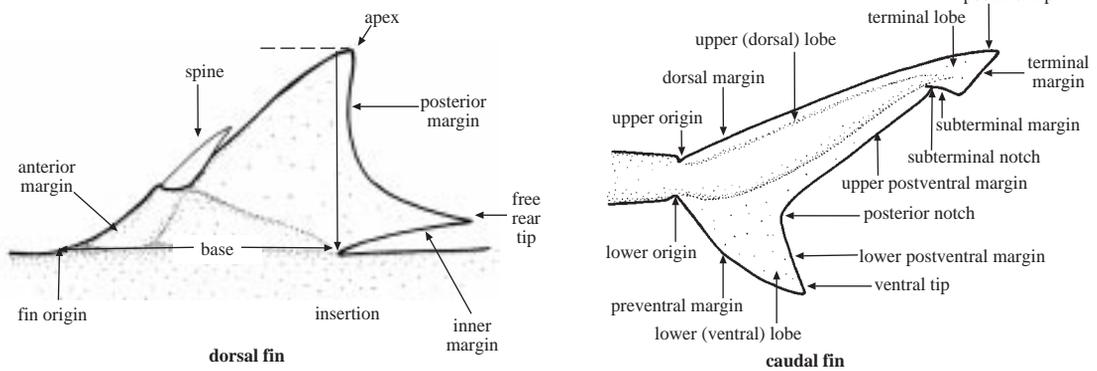
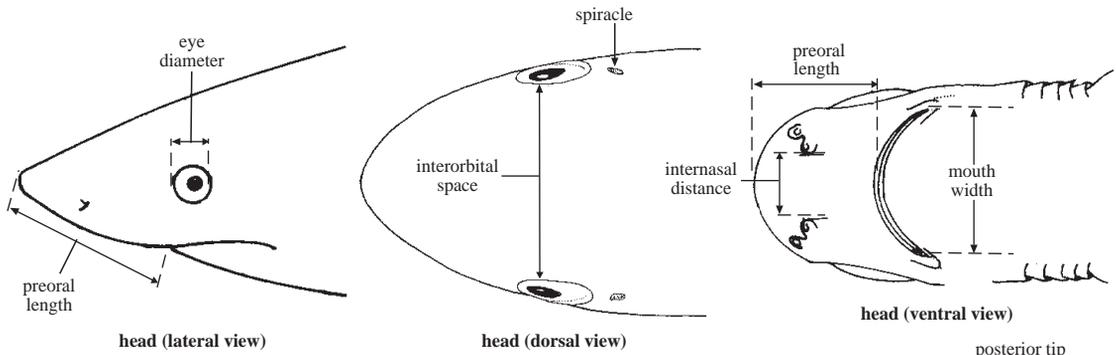
# SHARKS

Based mostly on the work of Compagno (1984, 1985, 1989, and 1991), about 46 species in 15 families of sharks are reported from Namibia. All these sharks are likely to be encountered in 1 or more of the bottom trawl, purse seine, longline, line, and pole-and-line fisheries of Namibia. We include all species in the "Guide to Species," except those of questionable records. In addition, we include in the Appendix a checklist of species that includes a list of our sources for species records. This checklist is intended as a working list from which researchers in Namibia may more accurately assess and study their shark resources. All families that are likely to occur are also treated in the "Guide to Orders and Families" and it is recommended that this preliminary guide be consulted before attempting to determine the species, since many important characters listed in the family guide are not repeated in the "Guide to Species."

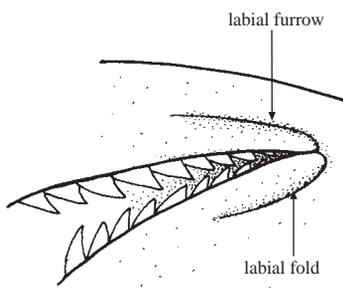
## TECHNICAL TERMS AND MEASUREMENTS

(Straight-line distances)

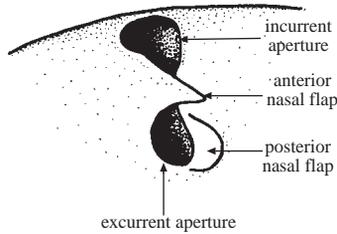




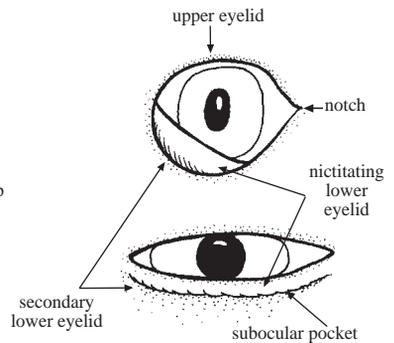
head of an orectoloboid shark (ventral view)



mouth corner



nostril



eye



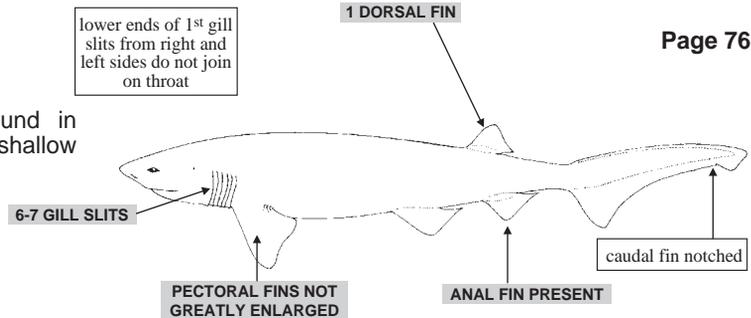
Order **HEXANCHIFORMES - Cow and Frill Sharks**  
 Six or 7 pairs of gill slits and a single dorsal fin; anal fin present. Two families found in Namibia.

**HEXANCHIDAE**

Page 76

**Cow sharks**

Three species in 3 genera found in Namibia. Mostly demersal, from shallow depths to 1 800 m. Size to 4.8 m.

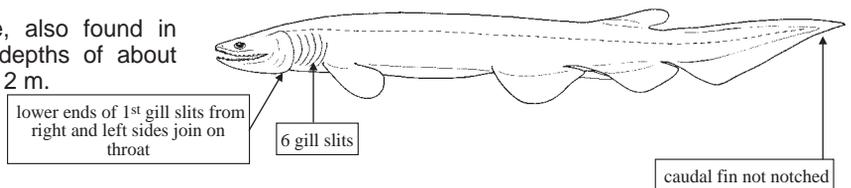


**CHLAMYDOSELACHIDAE**

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**Frill sharks**

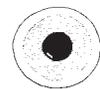
One species worldwide, also found in Namibia. Demersal to depths of about 1 300 m. Size to almost 2 m.



*Chlamydoselachus anguineus*

Order **LAMNIFORMES - Mackerel Sharks**  
 Five pairs of gill slits; 2 dorsal fins without spines; anal fin present; no movable nictitating eyelid. Four families reported from Namibia.

NO MOVABLE  
 NICHTITATING  
 EYELID

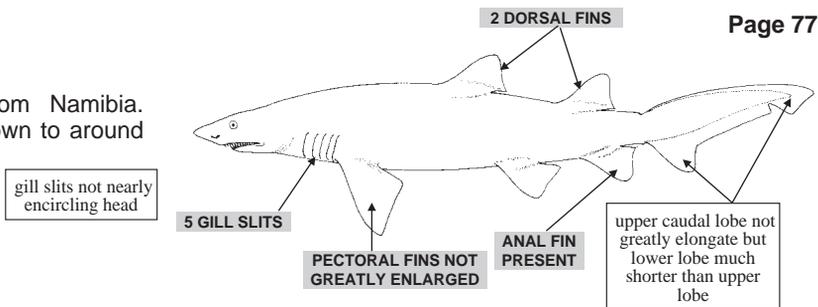


**ODONTASPIDIDAE**

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**Ragged-tooth sharks**

One species reported from Namibia. Neritic, in shallow water down to around 200 m. Size to 3.2 m.



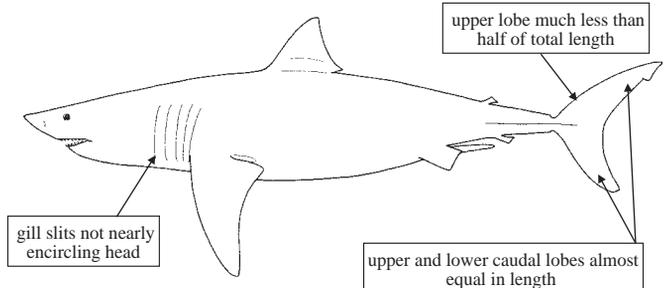
*Carcharias taurus*

**LAMNIDAE**

Page 77

**Mackerel sharks**

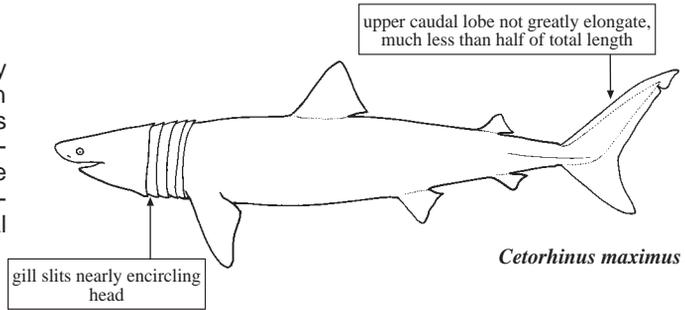
At least 2 species in 2 genera likely to occur in Namibia. Coastal and epipelagic, from the surface to depths of around 1 200 m. Size to 7.1 m.



**CETORHINIDAE**

**Basking sharks**

One species worldwide, not yet officially reported from Namibia and not included in the "Guide to Species." However, there is an unofficial report of a specimen entangled in a gillnet in Lüderitz lagoon in the late 1950's (A. Kronitz, personal communication). Coastal and on the continental shelf. A filter feeder. Size to 15 m.

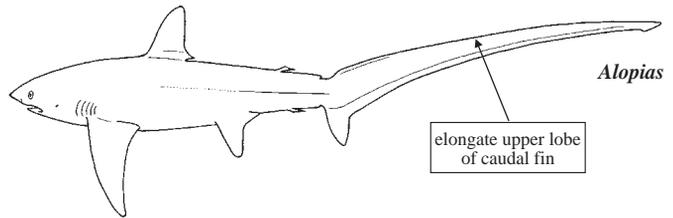


*Cetorhinus maximus*

**ALOPIIDAE**

**Thresher sharks**

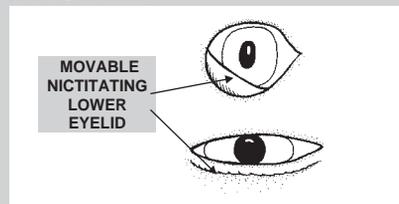
One species reported from Namibia and included in the "Guide to Species." Another species, *Alopias superciliosus*, (Lowe, 1839) is reported from Angola and strays may eventually be found in northern Namibia. Oceanic and coastal, to depths of 500 m. Size to 6.1 m.



*Alopias*

Order **CARCHARHINIFORMES - Ground Sharks**

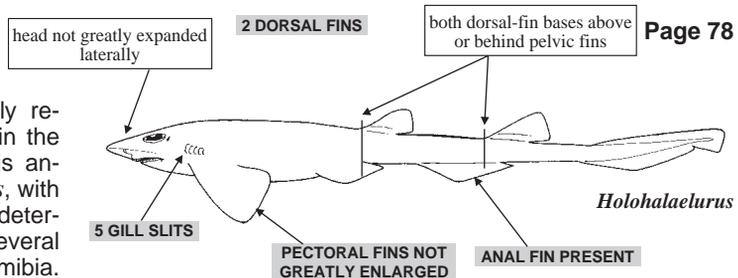
Five pairs of gill slits; 2 dorsal fins without spines; anal fin present; a movable nictitating eyelid. Four or possibly 5 families found in Namibia.



**SCYLIORHINIDAE**

**Catsharks**

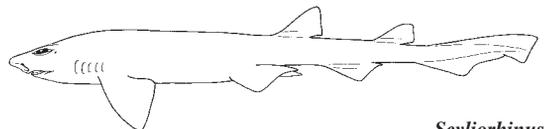
Four species and genera definitely reported from Namibia, all included in the "Guide to Species"; not included is another genus shown here, *Apristurus*, with reports of 2 specimens of an undetermined species off Lüderitz and several other species occurring south of Namibia. Mostly demersal from shallow inshore waters to depths of 700 m. Size to 1.2 m.



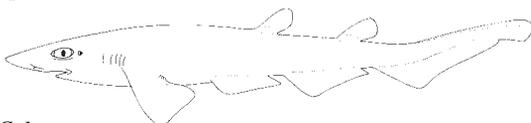
*Holohalaelurus*



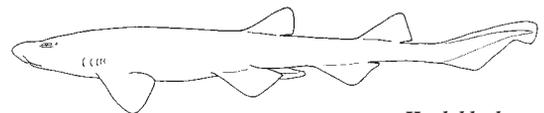
*Apristurus*



*Scyliorhinus*



*Galeus*

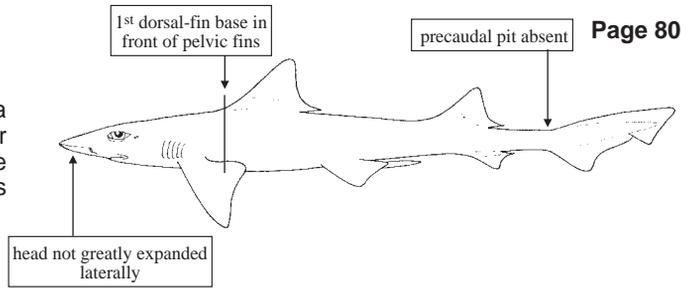


*Haploblepharus*

**TRIAKIDAE**

**Hound sharks**

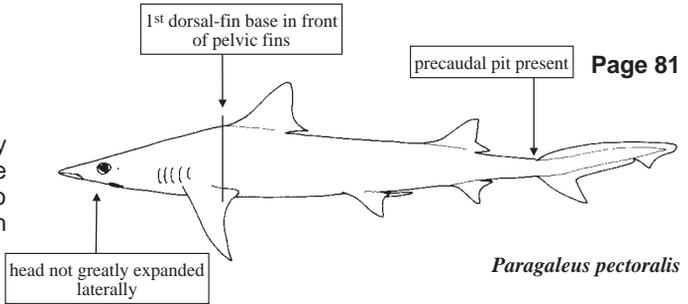
Four species in 3 genera found in Namibia (this family sometimes included under Carcharhinidae), all included in the "Guide to Species." From inshore shallow depths to around 400 m. Size to about 2 m.



**HEMIGALEIDAE**

**Weasel sharks**

One species found in Namibia (this family sometimes included as a subfamily in the Carcharhinidae), included in the "Guide to Species." On continental shelf to a depth of 100 m. Size to 1.4 m.



*Paragaleus pectoralis*

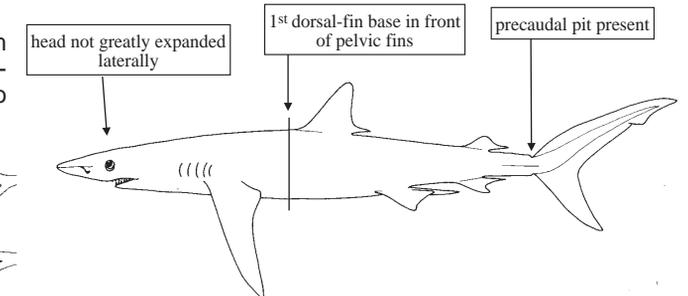


spiral type intestinal valve

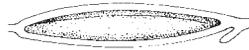
**CARCHARHINIDAE**

**Requiem sharks**

Three species in 2 genera listed from Namibia, all included in the "Guide to Species." Neritic and oceanic pelagic to depths of 600 m. Size to 4 m.



rolled



unrolled

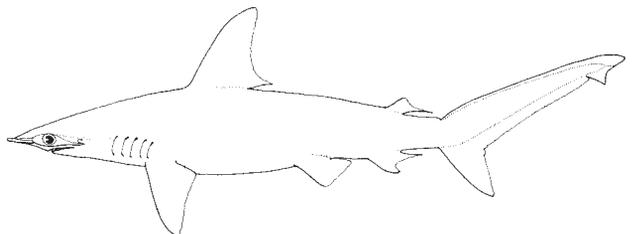
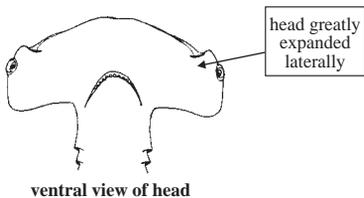


scroll type intestinal valve

**SPHYRNIDAE**

**Hammerhead sharks**

Mostly tropical, not yet officially reported from Namibia, but some individuals sighted in Namibia; not included in the "Guide to Species." Neritic and on continental shelf from the surface to depths of 275 m.



*Sphyrna lewini*

Order **SQUALIFORMES - Dogfish Sharks**  
 Five pairs of gill slits; 2 dorsal fins, usually with spines in front of each fin; pectoral fins not greatly expanded; anal fin absent. Three families found in Namibia.

**SQUALIDAE**

denticles not conspicuously enlarged

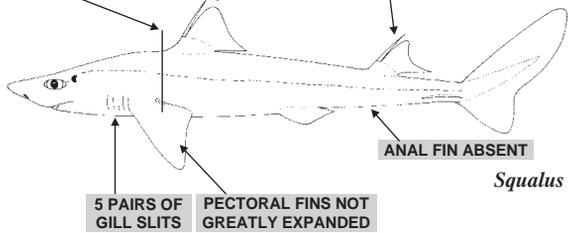
origin of 1<sup>st</sup> dorsal fin behind front of pectoral fin but in front of pelvic fin

2 DORSAL FIN, USUALLY WITH SPINES IN FRONT OF EACH FIN

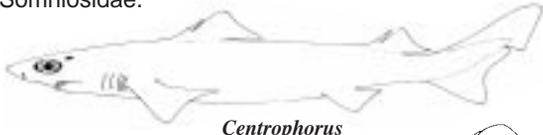
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**Dogfishes**

Seven genera and around 21 species reported from Namibia, 3 questionable species not included in the "Guide to Species." Demersal and pelagic, to depths of over 2 000 m. Size to 1.6 m. Genera in this family may eventually be recognized in different families as follows: *Centrophorus* and *Deania* in Centrophoridae; *Centroscyllium* and *Etmopterus* in Etmopteridae; and *Scymnodon* in Somniosidae.



*Squalus*



*Centrophorus*



*Etmopterus*



*Deania*

**OXYNOTIDAE**

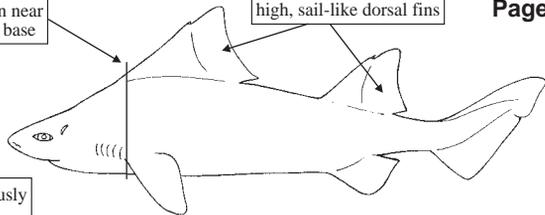
origin of 1<sup>st</sup> dorsal fin near front of pectoral-fin base

high, sail-like dorsal fins

Page 88

**Rough sharks**

One species in Namibia, included in the "Guide to Species." Demersal from depths of 60 to 660 m. Size to 1.5 m.



*Oxynotus centrina*

skin denticles not conspicuously enlarged



**ECHINORHINIDAE**

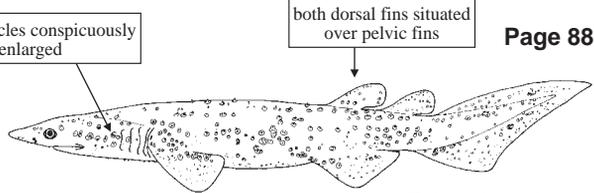
skin denticles conspicuously enlarged

both dorsal fins situated over pelvic fins

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**Bramble sharks**

One genus with 1 species in Namibia, included in the "Guide to Species." Demersal from shallow depths to 900 m. Size to 3.1 m.



*Echinorhinus brucus*

Order **SQUATINIFORMES - Angel Sharks**  
 Five pairs of gill slits; 2 spineless dorsal fins; anal fins absent; pectoral fins greatly expanded along sides of head as a free triangular lobe. One family and genus found in Namibia.

**SQUATINIDAE**

anterior edge of pectoral fin not attached

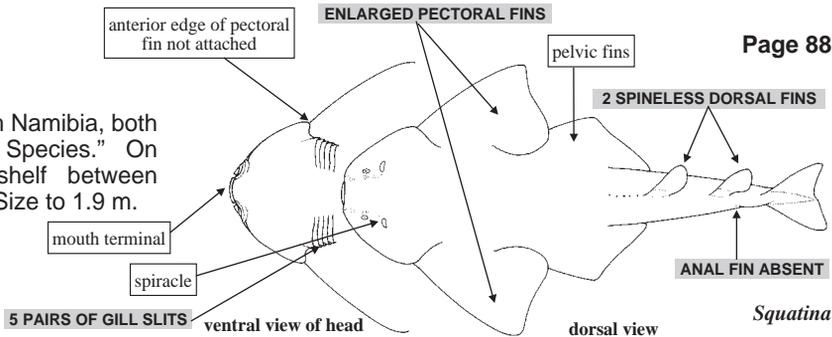
ENLARGED PECTORAL FIN

pelvic fins

Page 88

**Angel sharks**

Two species reported from Namibia, both included in the "Guide to Species." On continental slope and shelf between depths of 30 and 500 m. Size to 1.9 m.



*Squatina*

***Heptranchias perlo*** Rafinesque, 1810

(plate IX, 69)

**HEXANCHIDAE**

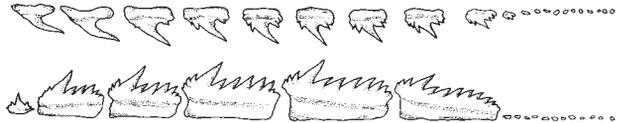
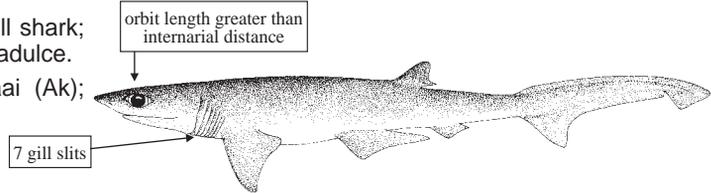
**FAO names:** **En** - Sharpnose sevengill shark; **Fr** - Requin perlon; **Sp** - Cañabota bocadulce.

**Local names:** Skerpneus-sewekiefhaai (Ak); Perlon, Spitzkopfsiebenkiemer (Gr).

**Size:** To about 1.4 m.

**Fisheries:** None at present.

**Habitat and biology:** Benthic, from depths of 50 to at least 1 000 m. Feeds on small fishes, squid, and other benthic invertebrates.



upper and lower teeth of left side

***Hexanchus griseus*** (Bonnaterre, 1788)

(plate II, 9)

**HEXANCHIDAE**

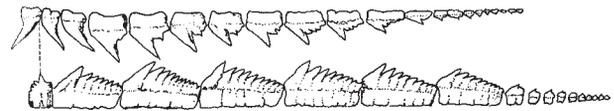
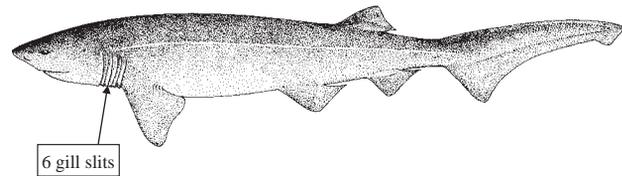
**FAO names:** **En** - Bluntnose sixgill shark; **Fr** - Requin griset; **Sp** - Cañabota gris.

**Local names:** Sixgill shark; Seskiefhaai (Ak); Grauhai, Sechskiemer (Gr).

**Size:** To about 4.8 m.

**Fisheries:** Taken occasionally with line gear and bottom trawls.

**Habitat and biology:** Found close to the bottom or pelagic, in the deeper part of the shelf and upper slope to at least 1 800 m. A voracious shark feeding on other sharks, rays, and bony fishes such as hake and pilchard.



upper and lower teeth of left side

***Notorynchus cepedianus*** Garman, 1884**HEXANCHIDAE**

**Synonyms:** *Notorynchus pectorosus* (Garman, 1884).

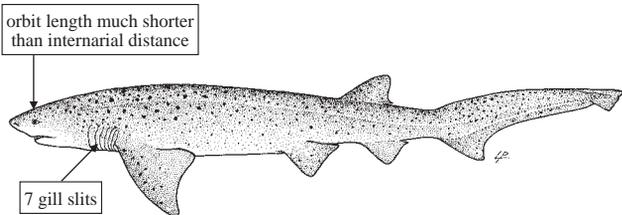
**FAO names:** **En** - Broadnose sevengill shark; **Fr** - Platnez; **Sp** - Cañabota gata.

**Local names:** Platneus-sewekiefhaai (Ak).

**Size:** To at least 2.9 m.

**Fisheries:** Caught with line gear and by sport anglers.

**Habitat and biology:** A benthic, neritic species, found from near the shore to about a depth of 50 m. Sexual maturity is attained at 150 to 180 cm for males and 190 to 210 cm for females. Feeds on a wide variety of sharks, rays, and bony fishes. Aggressive, reported as dangerous to people.



upper and lower teeth of right side

***Chlamydoselachus anguineus* Garman, 1884**

(plate IX, 70)

**CHLAMYDOSELACHIDAE**

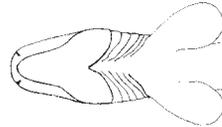
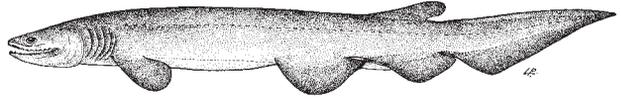
**FAO names:** **En** - Frilled shark; **Fr** - Requin lezard; **Sp** - Tiburón anguila.

**Local names:** Frill shark; Frilletjieshaai (Ak); Kragenhai, Kraushai (Gr).

**Size:** To about 2 m.

**Fisheries:** Taken incidentally in bottom trawls and bottom longlines.

**Habitat and biology:** Benthic, on the outer continental shelves and upper slopes, at depths between 120 and 1 300 m.



ventral view of head



upper and lower tooth

***Carcharias taurus* Rafinesque, 1810**

**ODONTASPIDIDAE**

**Synonyms:** *Eugomphodus taurus* (Rafinesque, 1810).

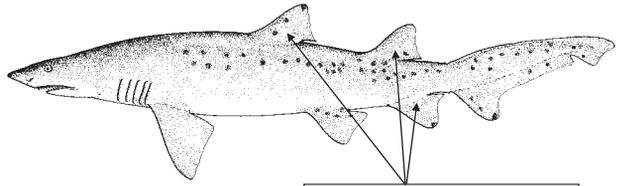
**FAO names:** **En** - Sandtiger shark; **Fr** - Requin taureau; **Sp** - Toro bacota.

**Local names:**

**Size:** Up to 3.2 m.

**Fisheries:** Caught occasionally by sport anglers. Flesh highly appreciated in Japan.

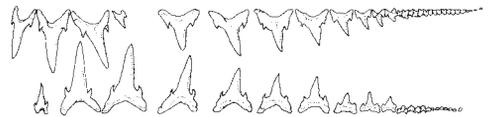
**Habitat and biology:** Coastal, from the surf zone and shallow bays to the deeper continental shelf, near the bottom, in midwater or at the surface. Feeds on various bony fishes, sharks, rays, squid, crabs, and lobsters. Considered as harmless for man.



both dorsal fins and anal fin equally large and broad-based



ventral view of head



upper and lower teeth from left side

***Carcharodon carcharias* (Linnaeus, 1758)**

**LAMNIDAE**

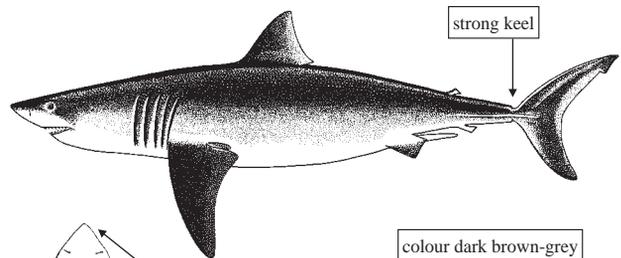
**FAO names:** **En** - Great white shark; **Fr** - Grand requin blanc; **Sp** - Jaquetón blanco.

**Local names:** Witdoodshaai (Ak); Menschenhai, Weißhai (Gr).

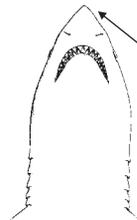
**Size:** To 7.1 m total length.

**Fisheries:** So far not caught in Namibia.

**Habitat and biology:** Primarily coastal, off continental as well as insular shelves, from the surface to depths of more than 1 200 m; often close inshore, penetrating into shallow bays. A very active, swift, and powerful shark, usually feared as the most dangerous of living sharks. Feeds on bony fishes, sharks, rays, seals, dolphins, porpoises, sea birds, carrion, and a number of invertebrates such as squid, octopus, and crabs. Ovoviviparous, bears 7 to 9 young. Worldwide it is considered rare, and in Namibia it is classified as a "Specially Protected Animal."



strong keel



ventral view of head

colour dark brown-grey to black on back, abruptly white on belly

snout short and conical



upper and lower teeth from left side

***Isurus oxyrinchus* Rafinesque, 1809** (plate II, 10)

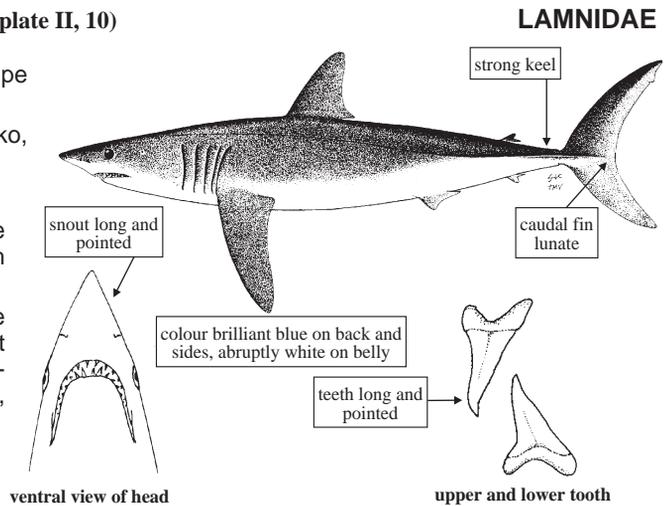
**FAO names:** En - Shortfin mako; Fr - Taupe bleu; Sp - Marrajo dientuso.

**Local names:** Kortvin-mako (Ak); Mako, Makrelenhai (Gr).

**Size:** To at least 4 m.

**Fisheries:** Caught mainly in tuna longline fisheries and occasionally by the swordfish fishery.

**Habitat and biology:** An extremely active species, mainly epipelagic but also found at depths of 100 to 150 m. Feeds on a wide variety of prey, including scombrids, carangids, sharks, and cephalopods.

***Alopias vulpinus* (Bonnaterre, 1788)****ALOPIIDAE**

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

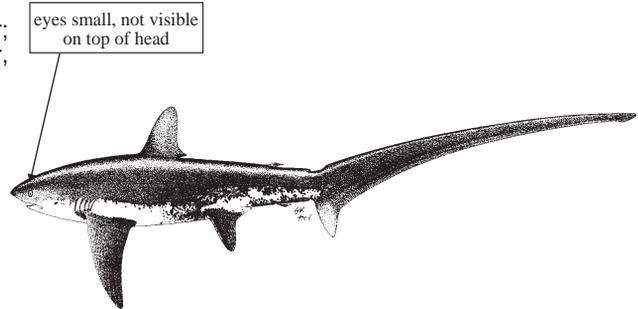
**Local names:** Thintail thresher; Fynstert-sambokhaai (Ak); Drescher, Drescherhai, Fuchshai (Gr).

**Size:** To at least 6 m.

**Fisheries:** Tuna longlines. Caught occasionally in midwater trawls.

**Habitat and biology:** On the continental shelf, in inshore waters, as well as far from the coast, from the surface to a depth of 350 m. Feeds on schooling fish, squid, and pelagic crustaceans herded by the tail.

**Remarks:** *Alopias superciliosus* occurs in Angola and may also eventually be reported from Namibia. It can be distinguished from *A. vulpinus* by the eyes which are larger and extend onto the dorsal surface of the head.

***Galeus polli* Cadenat, 1959** (plate II, 11)**SCYLIORHINIDAE**

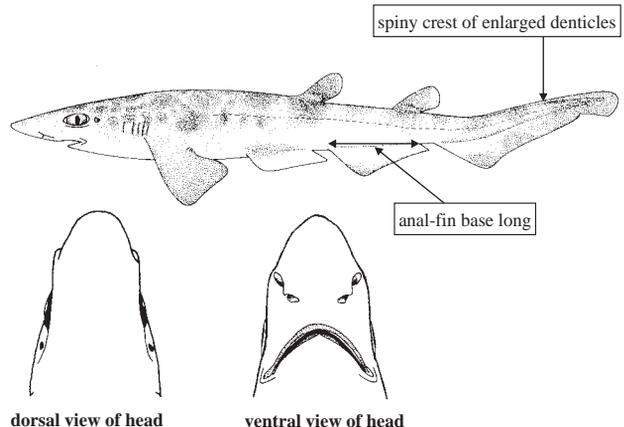
**FAO names:** En - African sawtail catshark; Fr - Chien rape; Sp - Pintarroja africana.

**Local names:**

**Size:** To about 40 cm.

**Fisheries:** Caught frequently in bottom trawls.

**Habitat and biology:** A bottom dwelling shark, found on the upper continental shelf from depths of 200 to 700 m, associated with hakes, grenadiers, rockfish, and squid.



***Haploblepharus pictus* (Müller and Henle, 1838)**

**FAO names:** **En** - Dark shyshark; **Fr** - Roussette sombre; **Sp** - Alitán obscuro.

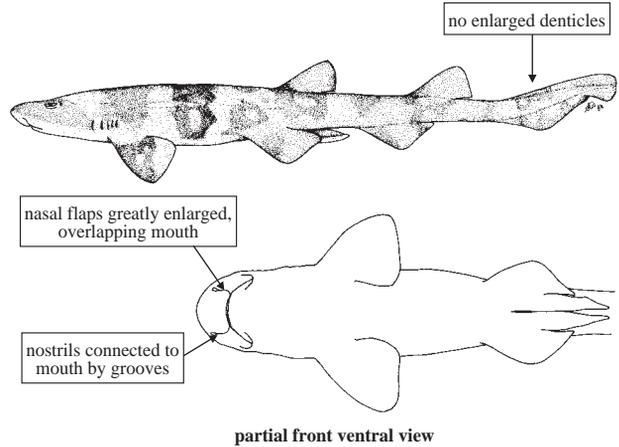
**Local names:** Donker skaamoog (Ak).

**Size:** To about 55 cm.

**Fisheries:** Occasionally caught by shore anglers.

**Habitat and biology:** An inshore, bottom-dwelling shark, most common in sandy areas but also in rocky areas. Feeds on small bottom-dwelling fish, crustaceans, and cephalopods.

**SCYLIORHINIDAE**



***Holohalaelurus regani* (Gilchrist, 1922)**

**FAO names:** **En** - Izak catshark; **Fr** - Holbiche isard; **Sp** - Pejegato reticulado.

**Local names:** Izak; Izak (Ak).

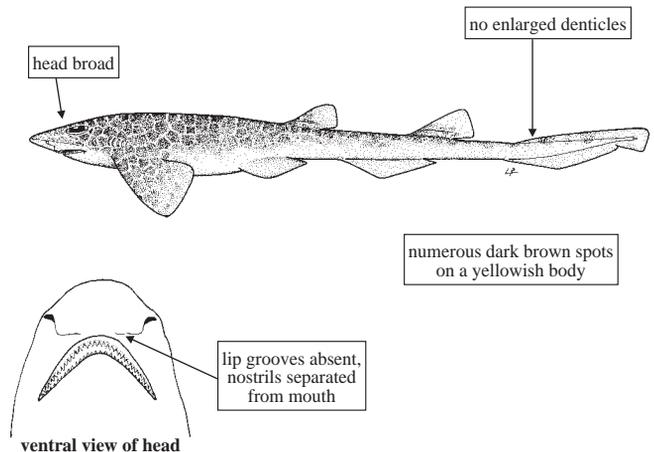
**Size:** To about 60 cm.

**Fisheries:** Occasionally taken in commercial bottom trawlers as bycatch.

**Habitat and biology:** A bottom-dwelling shark of the deeper continental shelf and upper slope, recorded from depths of about 150 to over 700 m but mostly south of Lüderitz. Feeds on small bony fish, crustaceans, and cephalopods. Scavenges on carrion.

(plate II, 12)

**SCYLIORHINIDAE**



***Scyliorhinus capensis* (Smith, 1838)**

**FAO names:** **En** - Yellowspotted catshark; **Fr** - Roussette à taches jaunes; **Sp** - Alitán de manchas amarillas.

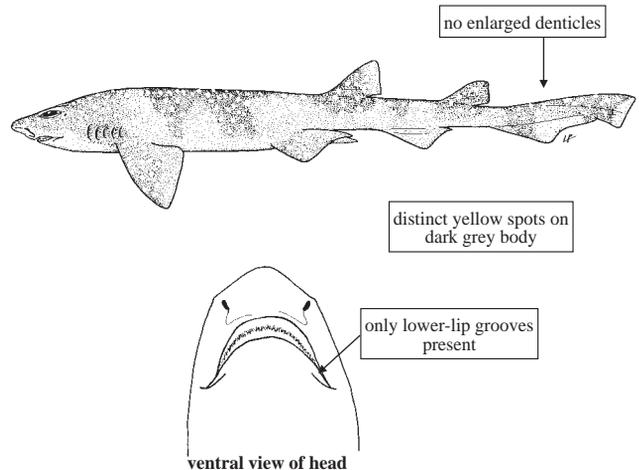
**Local names:** Geelspikkel-kathaai (Ak).

**Size:** To 1.2 m.

**Fisheries:** Rarely caught in bottom trawls.

**Habitat and biology:** A demersal species, found between depths of 30 and 420 m mostly south of Lüderitz. Feeds commonly on small bony fishes, crustaceans, and cephalopods.

**SCYLIORHINIDAE**



***Galeorhinus galeus*** (Linnaeus, 1758)

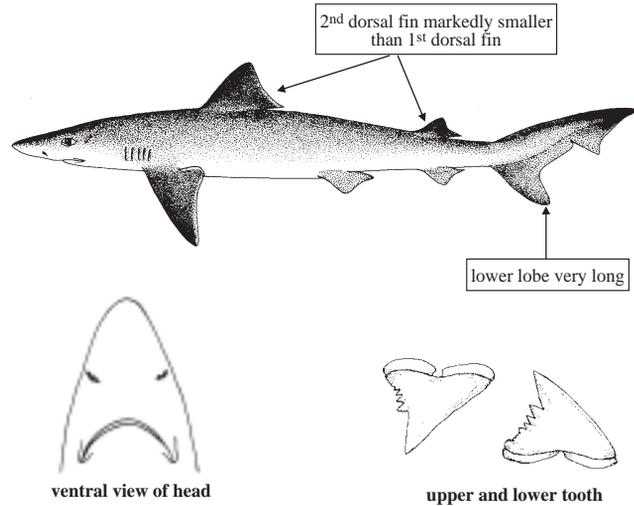
**FAO names:** En - Tope shark; Fr - Requin-hâ; Sp - Cazón.

**Local names:** Soupfin shark; Sopvinhaai (Ak); Biethai, Hundshai (Gr).

**Size:** To about 2 m.

**Fisheries:** Caught in bottom and pelagic trawls as well as with longlines.

**Habitat and biology:** A pelagic species of the continental shelf and upper slope, also occurring near the bottom at depths of 2 to 470 m. Feeds on a wide variety of pelagic and demersal bony fishes such as pilchards, anchovies, croakers, and breams, and bottom invertebrates such as crabs, shrimps, lobsters, annelid worms, and sea snails. Sexual maturity is reached at about 10 years and at about 130 cm.

**TRIAKIDAE*****Mustelus mustelus*** (Linnaeus, 1758)

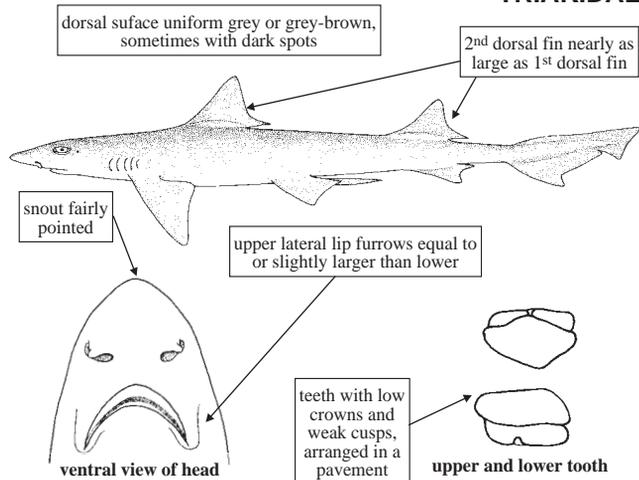
**FAO names:** En - Smooth-hound; Fr - Emissole lisse; Sp - Musola.

**Local names:** Hondhaai (Ak); Südlicher Glatthai, Mittelmeer-Glatthai (Gr).

**Size:** To about 1.7 m.

**Fisheries:** Caught in bottom trawls. Commonly taken by shore anglers.

**Habitat and biology:** A bottom-living species, sometimes also found in midwaters, mainly on the continental shelf but ranging to depths of at least 350 m, mostly in waters shallower than 50 m. Feeds mainly on crustaceans but also on cephalopods, bony fishes, and carrion.

**TRIAKIDAE*****Mustelus palumbes*** Smith, 1957**(plate II, 13)**

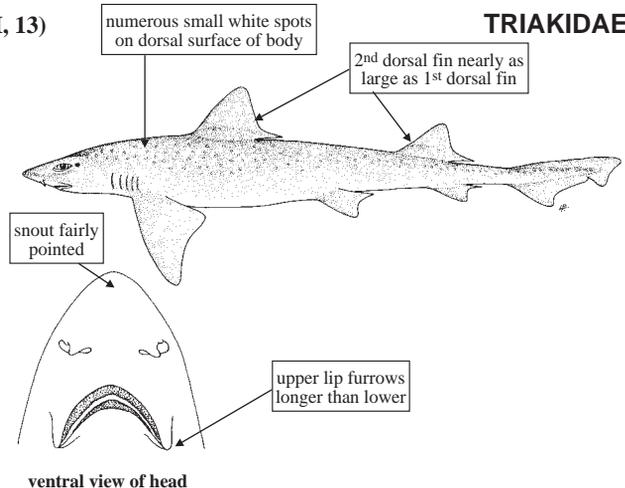
**FAO names:** En - Whitespotted smooth-hound; Fr - Emissole palombe; Sp - Musola paloma.

**Local names:** Witkol-houndhaai (Ak).

**Size:** To 1.2 m.

**Fisheries:** Occasionally caught by bottom trawlers.

**Habitat and biology:** A demersal shark, occurring from the intertidal region to at least a depth of 360 m, on sand and gravel bottoms. Feeds on crabs and other invertebrates.

**TRIAKIDAE**

***Triakis megalopterus* (Smith, 1849)**

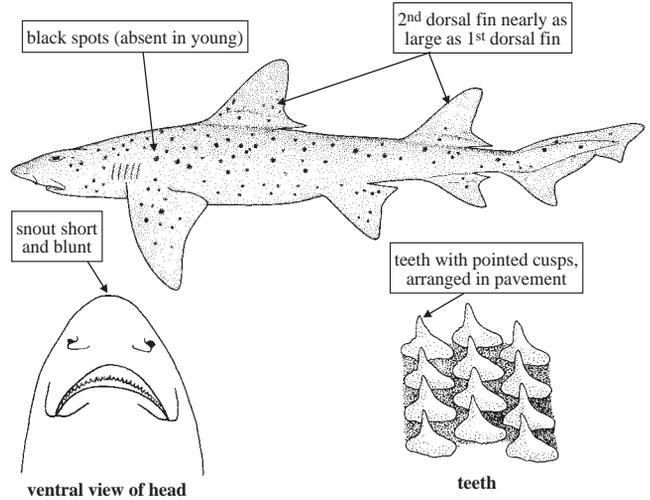
**FAO names:** **En** - Sharptooth houndshark; **Fr** - Virli dentu; **Sp** - Tollo dentudo.

**Local names:** Spotted gullyshark; Gespikkelde sloothaai (Ak).

**Size:** Attains 1.6 m.

**Fisheries:** Commonly caught by shore anglers.

**Habitat and biology:** An inshore, bottom-dwelling shark, mainly on sandy and rock bottoms to a depth of about 50 m. Feeds on crabs, fishes, and small sharks.



**TRIAKIDAE**

***Paragaleus pectoralis* (Garman, 1906)**

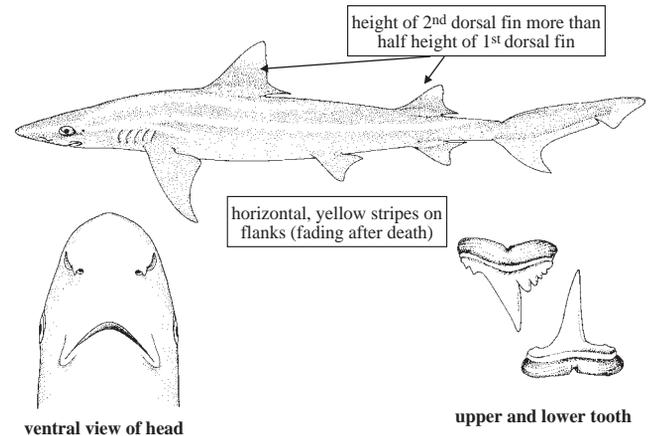
**FAO names:** **En** - Atlantic weasel shark; **Fr** - Milandre jaune; **Sp** - Tiburón comadiza.

**Local names:** Atlantiëse weselhaai (Ak).

**Size:** To about 1.4 m.

**Fisheries:** A common catch of the industrial and artisanal fisheries of the Central Eastern Atlantic, probably occurring in northern Namibia. Caught in bottom trawls, with longlines, and hook-and-line.

**Habitat and biology:** On the continental shelf, to a depth of 100 m. Apparently specialized in feeding on cephalopods.



**HEMIGALEIDAE**

***Carcharhinus brachyurus* (Günther, 1870)**

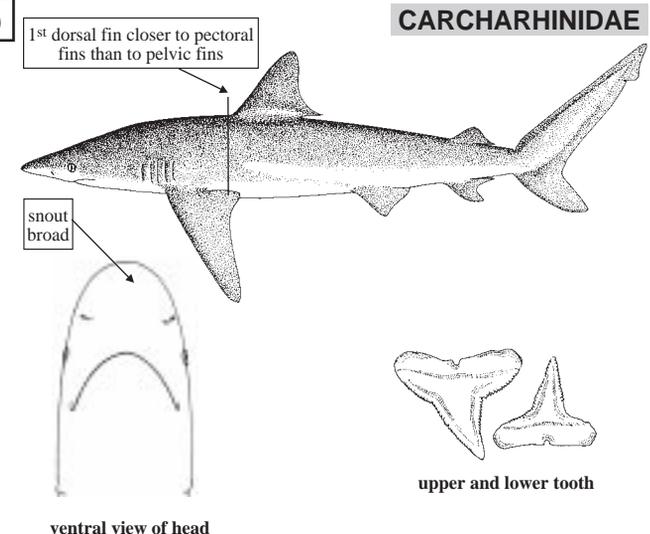
**FAO names:** **En** - Copper shark; **Fr** - Requin cuivre; **Sp** - Tiburón cobrizo.

**Local names:** Koperhaai (Ak), Kupferhai (Gr).

**Size:** To about 3 m.

**Fisheries:** Taken in bottom trawls and by line gear. Also commonly taken by shore anglers and occasionally by purse seiners.

**Habitat and biology:** Inhabits the continental shelf from the surfline to a depth of at least 100 m. Feeds on a variety of bony fishes, as well as on other elasmobranchs and invertebrates. Sexual maturity is reached at the age of 5 years and a length of approximately 2.3 m. Although potentially dangerous to people, no attacks have been recorded in Namibia.



**CARCHARHINIDAE**



***Carcharhinus signatus* (Poey, 1868)**

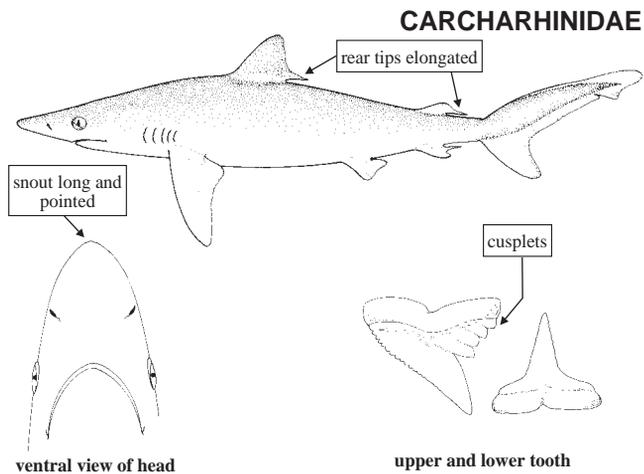
**FAO names:** **En** - Night shark; **Fr** - Requin de nuit; **Sp** - Tiburón nocturno.

**Local names:**

**Size:** To about 2.8 m.

**Fisheries:** Caught with longlines and occasionally in pelagic trawls.

**Habitat and biology:** Coastal to semioceanic, prefers warm waters and therefore mostly occurs in northern Namibia near the shelf edge, and occurs from the surface to a depth of 600 m. Feeds on bony fishes such as mackerels, flying fishes, butterfishes, and seabasses.

***Prionace glauca* (Linnaeus, 1758)****(plate II, 14)****CARCHARHINIDAE**

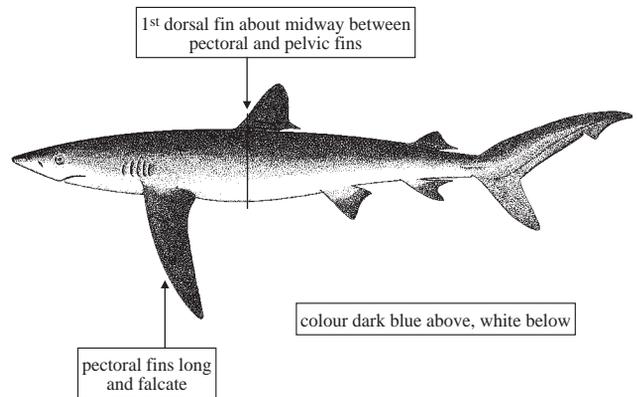
**FAO names:** **En** - Blue shark; **Fr** - Peau bleue; **Sp** - Tiburón azul.

**Local names:** Blouhaai (Ak); Blauhai, Großer Blauhai (Gr).

**Size:** To at least 4 m.

**Fisheries:** A common oceanic shark, caught mainly with pelagic longlines but also on hook-and-line, pelagic trawls, and bottom trawls. A frequent bycatch of the swordfish fishery. Occasionally caught by purse seiners.

**Habitat and biology:** A wide ranging, circumglobal oceanic shark, also occurring near the coast, from the surface to a depth of about 150 m. Feeds on smaller bony fishes, cephalopods, small sharks, cetacean carrion, garbage, and seabirds.

***Centrophorus granulosus* (Bloch and Schneider, 1801)****(plate II, 15)****SQUALIDAE**

**FAO names:** **En** - Gulper shark; **Fr** - Squalechagrin commun; **Sp** - Quelvacho.

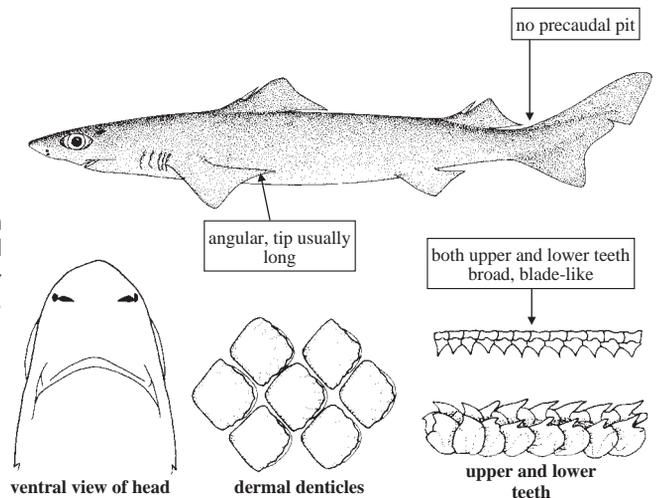
**Local names:** Rauher Dornhai (Gr).

**Size:** To about 1.5 m.

**Fisheries:** Commonly caught with bottom trawls.

**Habitat and biology:** A large, fairly common deep-water shark of the outer continental shelf and upper slope, usually near the bottom, between depths of 100 and 1 200 m. Feeds on hake, epigonids, and lantern fishes.

**Remarks:** Reports of *Centrophorus uyato* in Namibia are attributable to this species. May be placed in a separate family, the Centrophoridae.



***Centrophorus squamosus* (Bonnaterre, 1788)**

(plate II, 16)

**SQUALIDAE**

**FAO names:** **En** - Leafscale gulper shark; **Fr** - Squale-chagrin de l'Atlantique; **Sp** - Quelvacho negro.

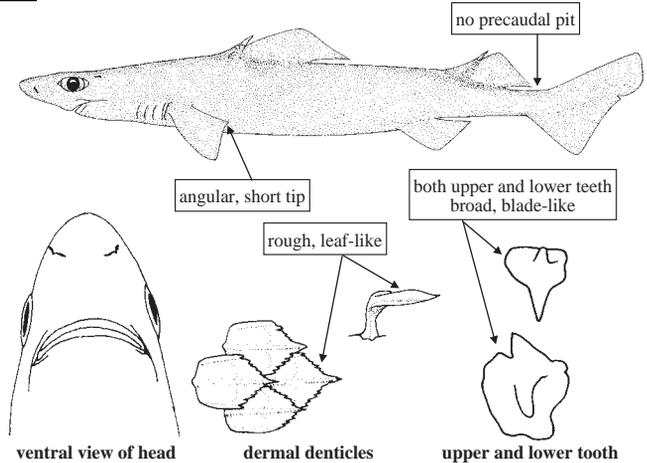
**Local names:** Düstere Dornhai (Gr).

**Size:** To about 1.6 m.

**Fisheries:** Caught with line gear and common in bottom trawls. A bycatch of the deep-water fishery.

**Habitat and biology:** Found both pelagic and near the bottom on the continental slope from depths of about 200 to over 2 000 m.

**Remarks:** May be placed in the Centrophoridae



***Centroscyllium fabricii* (Reinhardt, 1825)**

**SQUALIDAE**

**FAO names:** **En** - Black dogfish; **Fr** - Aiguillat noir; **Sp** - Tollo negro merga.

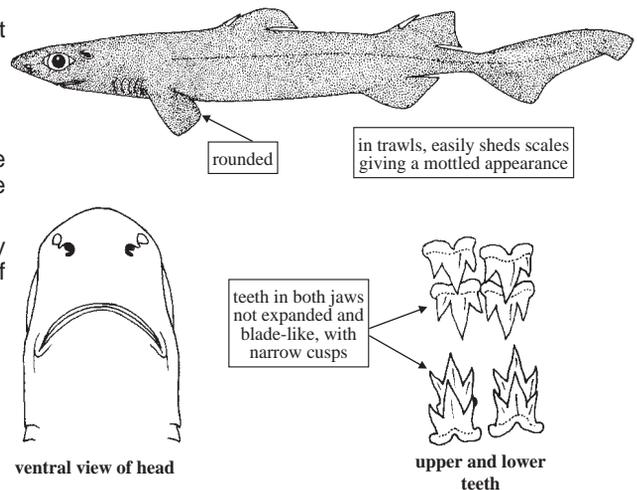
**Local names:**

**Size:** Probably to 1 m.

**Fisheries:** Taken in bottom trawls and with line gear. A bycatch of the deep-water orange roughy fishery.

**Habitat and biology:** A schooling shark, fairly abundant from the edge of the continental shelf to depths of 1 600 m.

**Remarks:** May be placed in the Etmopteridae.



***Centroscymnus coelolepis* Bocage and Capello, 1864**

**SQUALIDAE**

**FAO names:** **En** - Portuguese dogfish; **Fr** - Pailona commun; **Sp** - Pailona.

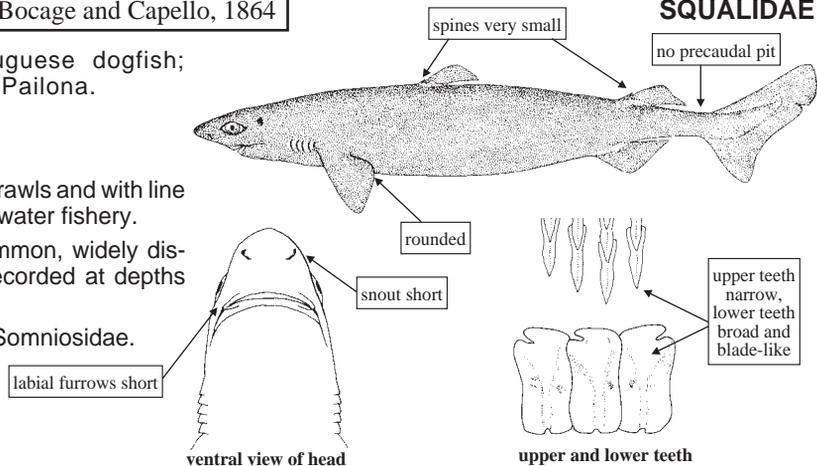
**Local names:**

**Size:** To about 1.2 m.

**Fisheries:** Caught in bottom trawls and with line gear. A bycatch of the deep-water fishery.

**Habitat and biology:** A common, widely distributed deep-water shark, recorded at depths from 270 to over 3 000 m.

**Remarks:** May be placed in Somniosidae.



***Centroscyrnus crepidater* (Bocage and Capello, 1864)**

**FAO names:** **En** - Longnose velvet dogfish; **Fr** - Pailona à long nez; **Sp** - Sapata negra.

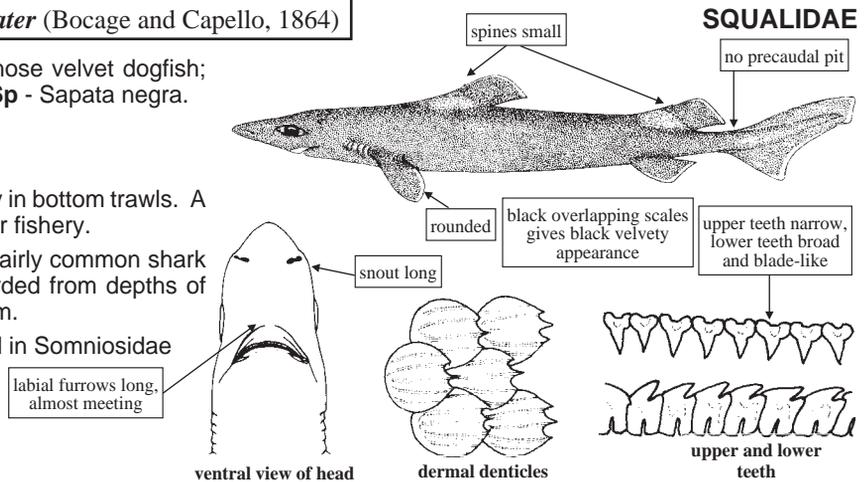
**Local names:**

**Size:** To 90 cm.

**Fisheries:** Caught mainly in bottom trawls. A bycatch of the deep-water fishery.

**Habitat and biology:** A fairly common shark of the upper slope, recorded from depths of about 250 to over 1 000 m.

**Remarks:** May be placed in Somniosidae

***Deania calcea* (Lowe, 1839)** (plate III, 17)

**FAO names:** **En** - Birdbeak dogfish; **Fr** - Squalé savate; **Sp** - Tollo pajarito.

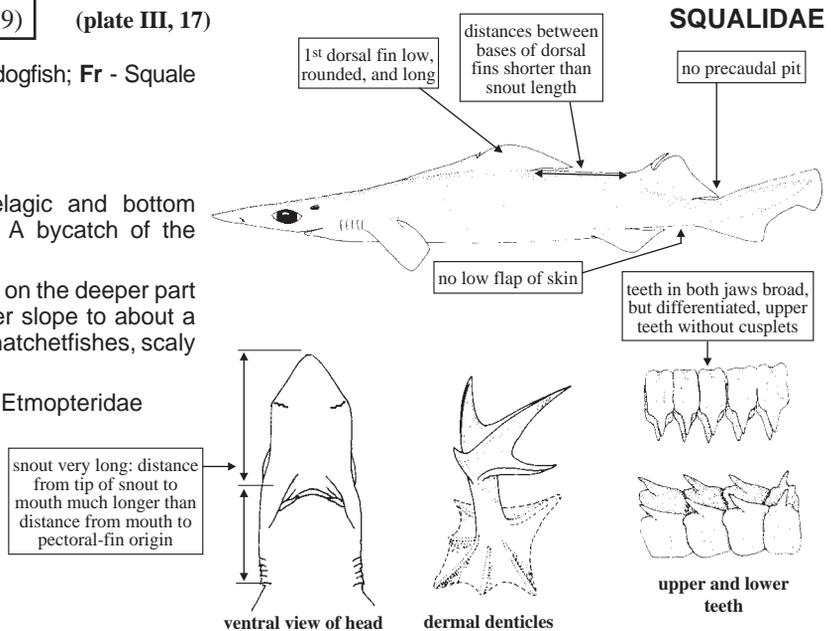
**Local names:**

**Size:** To 1.1 m.

**Fisheries:** Caught with pelagic and bottom trawls and with line gear. A bycatch of the deep-water fishery

**Habitat and biology:** Found on the deeper part of the shelf and on the upper slope to about a depth of 1 500 m. Feeds on hatchetfishes, scaly dragonfishes, and shrimps.

**Remarks:** May be placed in Etmopteridae

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

**FAO names:** **En** - Arrowhead dogfish; **Fr** - Squalé savate lutin; **Sp** - Tollo flecha.

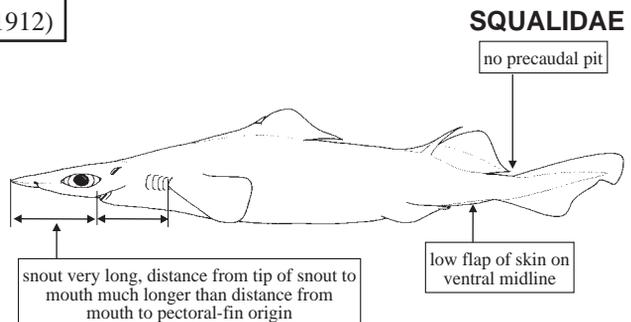
**Local names:**

**Size:** To about 70 cm.

**Fisheries:** Commonly caught in bottom trawls. A bycatch of the deep-water fishery

**Habitat and biology:** Inhabiting the upper continental slope, from depths of about 250 to 1800 m. Feeds on midwater fishes (myctophids), cephalopods, and crustaceans.

**Remarks:** May be placed in Centrophoridae.



***Deania quadrispinosum* (McCulloch, 1915)**

**FAO names:** **En** - Longsnout dogfish; **Fr** - Squalé-savate à long nez; **Sp** - Tollo trompalarga.

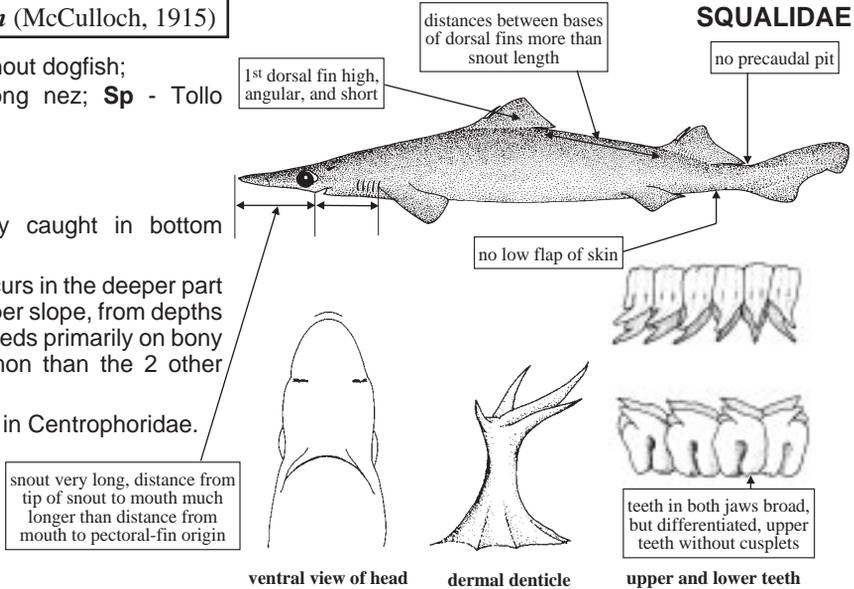
**Local names:**

**Size:** To about 1.15 m.

**Fisheries:** Occasionally caught in bottom trawls.

**Habitat and biology:** Occurs in the deeper part of the shelf and on the upper slope, from depths of about 150 to 750 m. Feeds primarily on bony fishes. Much less common than the 2 other species of *Deania*.

**Remarks:** May be placed in Centrophoridae.



**SQUALIDAE**

***Etmopterus cf. brachyurus* Smith and Radcliffe, 1912**

(plate IX, 71)

**SQUALIDAE**

**FAO names:** **En** - Shorttail lanternshark; **Fr** - Sagre porte-feu à queue courte; **Sp** - Tollo lucero mocho.

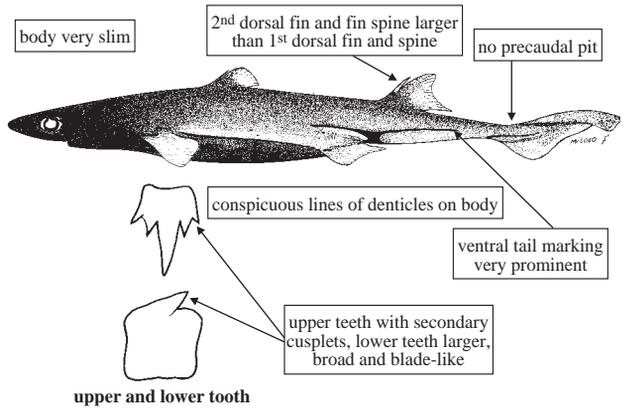
**Local names:**

**Size:** To about 42 cm.

**Fisheries:** Caught occasionally in bottom trawls.

**Habitat and biology:** Found near the bottom in depths between 400 and 900 m.

**Remarks:** Reports of *E. lucifer* are attributable to this species since *E. lucifer* probably does not occur in Southern Africa. May be placed in Etmopteridae.



***Etmopterus "gracilispinis"* Krefft, 1968**

**SQUALIDAE**

**FAO names:** **En** - Broadbanded lanternshark; **Fr** - Sagre rubane; **Sp** - Tollo lucero bandoneado.

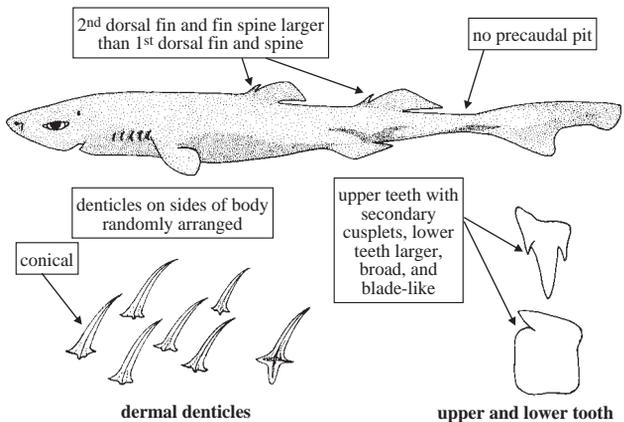
**Local names:**

**Size:** To about 35 cm.

**Fisheries:** Caught incidentally in bottom trawls.

**Habitat and biology:** Bottom living, at depths generally exceeding 600 m.

**Remarks:** Reports of this species off South Africa are most likely attributable to the recently described *E. compagno* Fricke and Koch, 1990. So far this species has been recorded from just south of Namibia, but its occurrence in Namibia is probable. May be placed in Etmopteridae.



***Etmopterus pusillus* (Lowe, 1839)**

**FAO names:** **En** - Smooth lanternshark; **Fr** - Sagre nain; **Sp** - Tollo lucero liso.

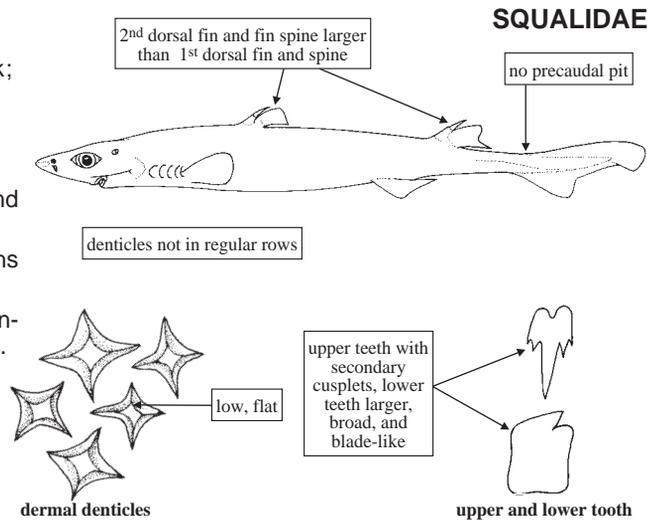
**Local names:**

**Size:** To about 50 cm.

**Fisheries:** Caught occasionally in bottom and midwater trawls.

**Habitat and biology:** Benthopelagic at depths between around 400 and 700 m.

**Remarks:** Probably 2 species are lumped under this name. May be placed in Etmopteridae.

***Scymnodon squamulosus* (Günther, 1877)**

**FAO names:** **En** - Velvet dogfish; **Fr** - Squale-grogneur veloute; **Sp** - Bruja terciopelo.

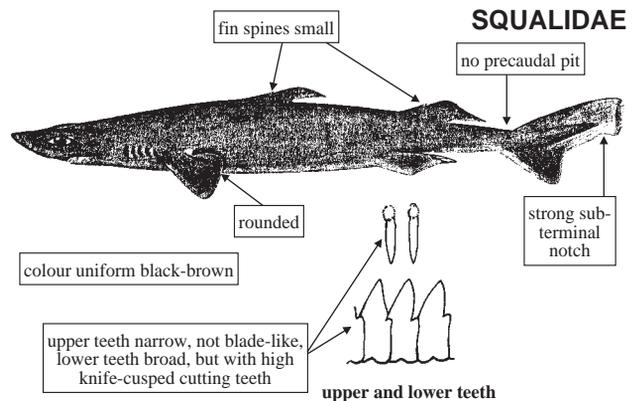
**Local names:**

**Size:** To about 70 cm.

**Fisheries:** Occasionally caught in deep-water bottom trawls.

**Habitat and biology:** Found on the upper continental slope from depths of 430 to 900 m. A little known shark.

**Remarks:** May be placed in Somniosidae.

***Squalus acanthias* Smith and Radcliffe, 1912**

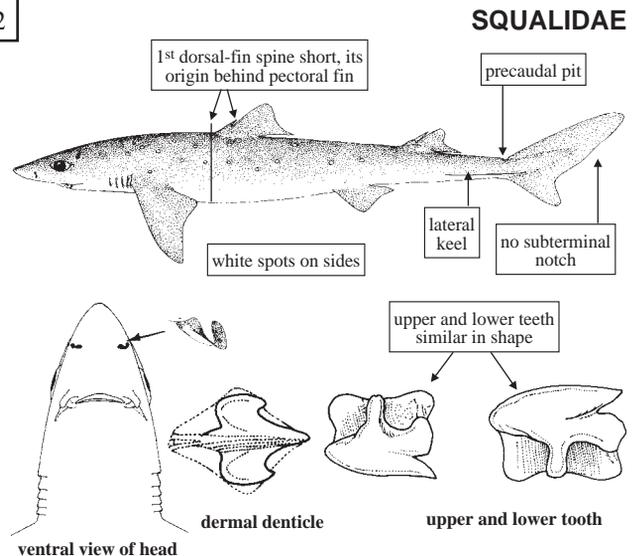
**FAO names:** **En** - Spotted spiny dogfish; **Fr** - Aiguillat commun; **Sp** - Mielga.

**Local names:** Spikkel-penhaai (Ak); Grundhai (Gr).

**Size:** To about 1 m.

**Fisheries:** Incidentally caught in bottom trawls and longlines. This species is heavily fished in the eastern North Atlantic.

**Habitat and biology:** Found from near the shore to at least a depth of 900 m, able to tolerate brackish water, usually near the bottom but often also appearing at the surface. Feeds on all bony fishes smaller than itself and a wide variety of invertebrates. Males attain sexual maturity at 50 cm, females at 60 cm. Gestation period is 2 years. Probably one of the most abundant living sharks.



***Squalus blainvillei* (Risso, 1826)**

**FAO names:** **En** - Longnose spurdog; **Fr** - Aiguillat coq; **Sp** - Galludo.

**Local names:** Blainvilles Dornhai (Gr).

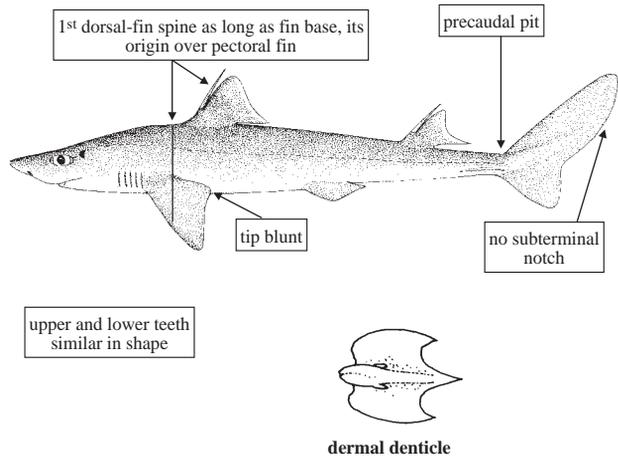
**Size:** To about 1 m.

**Fisheries:** Caught incidentally in bottom trawls and on line gear.

**Habitat and biology:** Prefers muddy bottoms, from shallow inshore waters to at least a depth of 450 m. Feeds on bony fishes such as seabreams, mackerel, and percichthyids, and invertebrates such as crabs, lobsters, and cephalopods.

**Remarks:** There is some question concerning the validity of the name *blainvillei* for this species (Muños-Chapuli and Ramos, 1989), and reports of this species may be attributable to *S. mitsukurii*.

**SQUALIDAE**



***Squalus megalops* (Macleay, 1881)**

(plate III, 18)

**FAO names:** **En** - Shortnose spurdog; **Fr** - Aiguillat nez court; **Sp** - Galludo ñato.

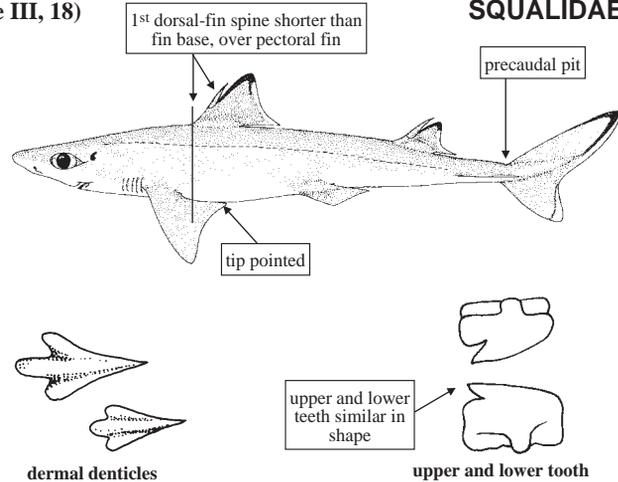
**Local names:** Bluntnose spiny dogfish; Stompneus-penhaai (Ak).

**Size:** To 70 cm.

**Fisheries:** Commonly caught with bottom trawls.

**Habitat and biology:** A common and abundant dogfish forming dense and large schools, found on the outer continental shelf and upper slope at depths between 50 and 750 m. Feeds on bony fishes, cephalopods, crustaceans, and other elasmobranchs. Sexual maturity is attained at 42 cm in males and 55 cm in females; gestation period is 2 years.

**SQUALIDAE**



***Squalus mitsukurii* Jordan and Snyder, 1903**

**FAO names:** **En** - Shortspine spurdog; **Fr** - Aiguillat épinette; **Sp** - Galludo espinilla.

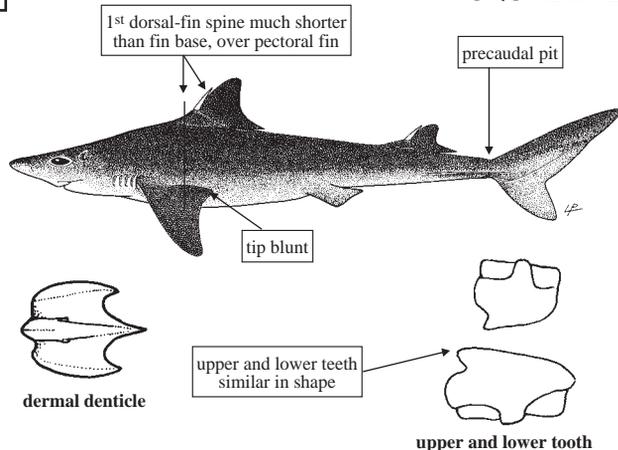
**Local names:** Longnose spiny dogfish; Langneus-penhaai (Ak);

**Size:** To 1.1 m.

**Fisheries:** Caught in large numbers by trawlers and by kingclip longliners.

**Habitat and biology:** Moderately common offshore. Feeds on bony fishes, including hake, snoek, conger eels, and lantern fishes, and invertebrates such as squid, octopus, and crustaceans.

**SQUALIDAE**



***Oxynotus centrina*** (Linnaeus, 1758)**OXYNOTIDAE**

**FAO names:** **En** - Flatiron shark; **Fr** - Centrine du Cap; **Sp** - Cerdo marino del Cabo.

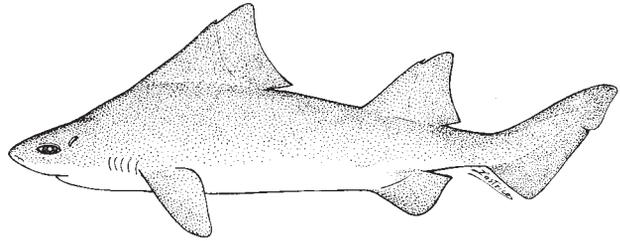
**Local names:** Strykysterhaai (Ak); Meersau, SchweinHai (Gr).

**Size:** To 1.5 m.

**Fishing gear:** Rarely caught by large offshore-trawling fleets.

**Habitat and biology:** Found from depths of 60 to 660 m. Feeds on polychaetes.

**Remarks:** Formerly *O. shubnikovi* which was thought to be distinct from this species, also occurring in the eastern North Atlantic and Mediterranean.



trunk triangular in cross-section

***Echinorhinus brucus*** Garman, 1884

(plate III, 19)

**ECHINORHINIDAE**

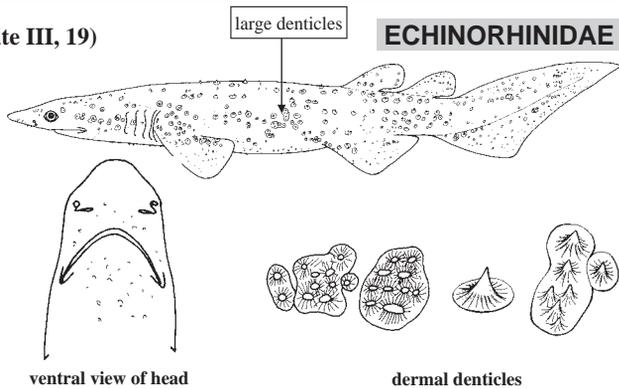
**FAO names:** **En** - Bramble shark; **Fr** - Squale bouclé; **Sp** - Tiburón de clavos.

**Local names:** Braamhaai (Ak); Alligatorhai, Nagelhai, Stachelhai (Gr).

**Size:** To about 3.1 m.

**Fisheries:** Occasionally caught in bottom trawls and line gear, rarely by shore anglers.

**Habitat and biology:** A bottom-living species, found from shallow waters to a depth of about 900 m. Feeds on smaller sharks (spiny dogfish), bony fishes, and crabs.



ventral view of head

dermal denticles

***Squatina aculeata*** Dumeril, 1829**SQUATINIDAE**

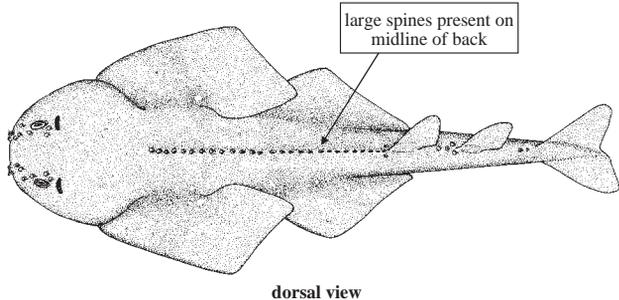
**FAO names:** **En** - Sawback angelshark; **Fr** - Ange de mer épineux; **Sp** - Angelote espinudo.

**Local names:** Engelhaai (Ak).

**Size:** To 1.9 m.

**Fisheries:** Taken in bottom trawls and on line gear.

**Habitat and biology:** On the continental shelf and upper slope, between depths of 30 and 500 m, usually near the bottom. Feeds on small sharks and carangids.



dorsal view

***Squatina oculata*** Bonaparte, 1840**SQUATINIDAE**

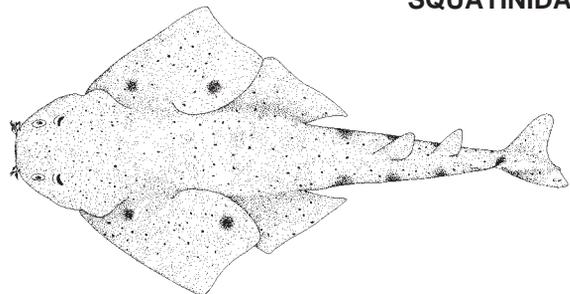
**FAO names:** **En** - Smoothback angelshark; **Fr** - Ange de mer ocellé; **Sp** - Pez ángel.

**Local names:** Engelhaai (Ak).

**Size:** To 1.6 m.

**Fisheries:** Occasionally caught in bottom trawls.

**Habitat and biology:** Found on the continental shelf and upper slope, but mainly between 50 and 100 m. Feeds on small fishes.



dorsal view