

FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

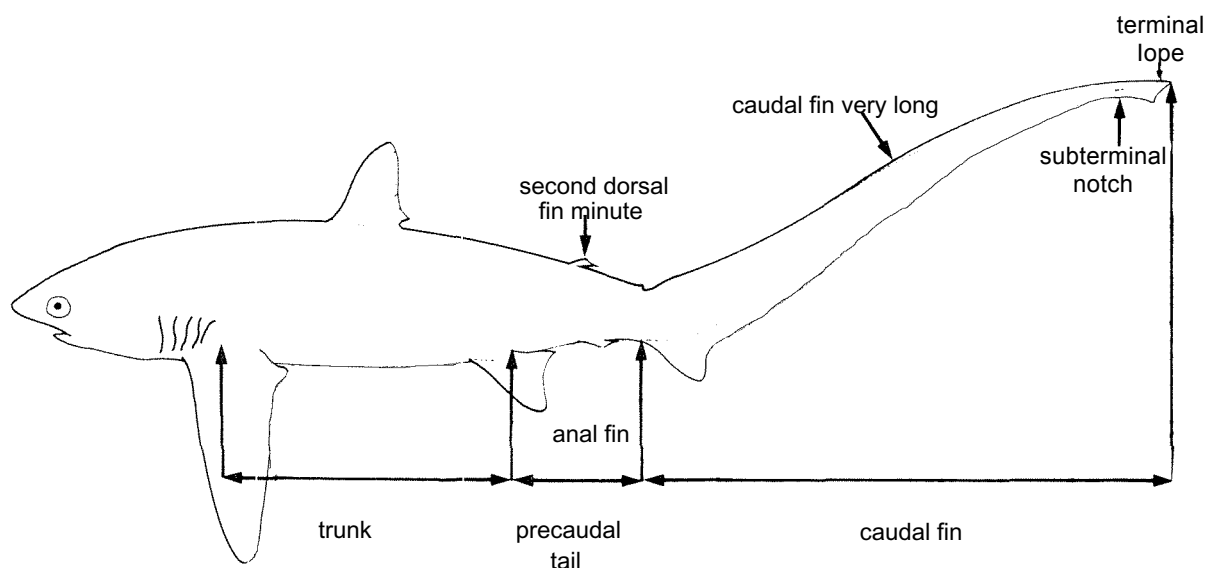
ALOPIIDAE

Thresher sharks

Large sharks. Trunk and precaudal tail cylindrical, not depressed and without lateral ridges; precaudal tail much shorter than trunk. Head not expanded laterally, not depressed; 5 small to medium-sized gill slits present, the last 2 behind pectoral fin origins, their ripper ends not expanded onto upper surface of head; no gillrakers or sieves on internal gill slits; spiracles present and minute; nostrils without barbels, nasoral grooves, or circumnarial grooves, well separated from mouth; eyes on sides of head, without nictitating lower eyelids; snout moderately long, bluntly conical, not flattened and without lateral teeth or barbels; mouth small but arched and elongated, extending well behind eyes; labial furrows present on lower jaw only or absent, when present not reaching front of mouth; teeth small, bladelike and compressed, with erect to oblique cusps and cusplets very small or absent; anterior teeth in upper jaw slightly larger than lateral teeth and sometimes separated from them by a row of smaller intermediate teeth on each side. Two dorsal fins, without spines, the first moderately large, high and angular, much shorter than the caudal fin, and with its base located over the interspace between pelvic and pectoral fin bases; second dorsal fin low, minute, and less than one-tenth the size of the first dorsal; anal fin present, very small, with its origin under or behind the second dorsal fin insertion; caudal fin strongly asymmetrical, the upper lobe enormously enlarged, about half the total length and with a subterminal notch, and an undulated or rippled dorsal margin, the lower lobe short but strong; vertebral axis of caudal fin raised above body axis. Caudal peduncle not depressed, without keels; precaudal pits present. Intestinal valve of ring type.

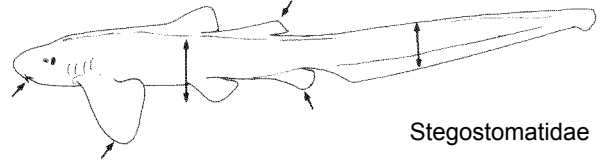
Colour: bluish, blackish, grey or brown above, shading to white or grey below.

These are active, strong-swimming, pelagic, coastal and deepwater sharks, with the young of one species occurring close inshore and inside bays. They feed mainly on small to moderately large schooling fishes and squid, which may be herded and stunned by the long, straplike tail. The 3 species in Fishing Area 51 have been reported from South Africa, Tanzania, Somalia, Madagascar, Pakistan, and from the Red Sea, Gulf of Aden, Arabian Sea, and the Maldiv Islands and Chagos Archipelago, but are probably wide-ranging in the area. Threshers are circumtemperate and tropical in all warm oceans. In the area they are fished for meat (fresh, dried salted and processed for canning), primarily by offshore longline fisheries.



SIMILAR FAMILIES OCCURRING IN THE AREA:

Stegostomatidae: this is the only other family of sharks with the caudal fin about as long as the body; it differs from Alopiidae in numerous characters, including its striped or barred colour pattern, nasal barbels, transverse mouth in front of eyes, small tricuspid teeth, broad rounded pectoral fins, first dorsal fin over pelvic bases, larger second dorsal and anal fins, broad upper lobe on caudal fin, no ventral caudal fin lobe, and axis of caudal fin not raised.



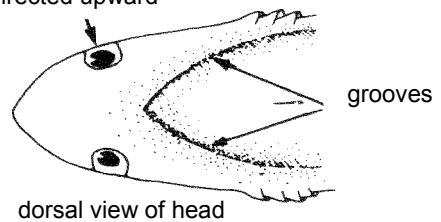
Stegostomatidae

No other sharks have the caudal fin about as long as the body.

KEY TO SPECIES OCCURRING IN THE AREA:

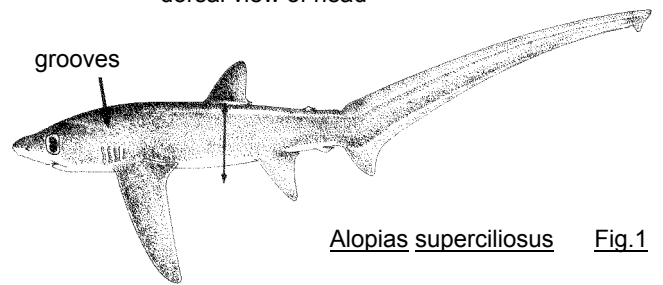
1a. Eyes very large, with orbits expanded onto dorsal surface of head; teeth larger, less than 25 in each jaw; dorsal surface of head between eyes nearly flat; first dorsal fin closer to pelvic fins than to pectoral fins; a deep horizontal groove on nape on each side above gills (Fig.1) Alopias superciliosus

eyes directed upward



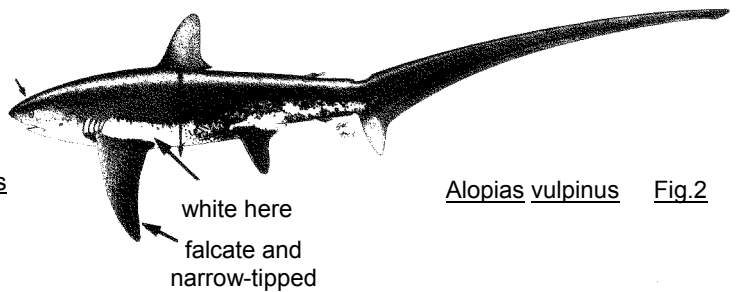
dorsal view of head

1b. Eyes smaller, with orbits not expanded onto dorsal surface of head; teeth smaller, 29 or more in each jaw; dorsal surface of head between eyes strongly arched; first dorsal fin closer to pectoral fins than to pelvic fins; either no groove on nape or a weak one (Figs 2,3)



Alopias superciliosus Fig.1

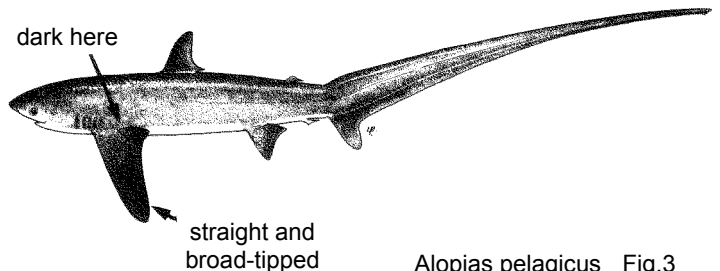
2a. Forehead broadly arched in lateral view, head broad; snout short; pectoral fins falcate, with narrow, pointed apices; white colour from belly expanded over pectoral fin bases (Fig.2) Alopias vulpinus



Alopias vulpinus Fig.2

white here
falcate and narrow-tipped

2b. Forehead nearly straight in lateral view, head narrow; snout more elongated pectoral fins nearly straight, with broad, rounded apices; white colour from belly not expanded over pectoral fin bases (Fig.3) Alopias pelagicus



Alopias pelagicus Fig.3

dark here
straight and broad-tipped

LIST OF SPECIES OCCURRING IN THE AREA:

Code numbers are given for those species for which Identification Sheets are included

Alopias pelagicus Nakamura, 1936

ALOP Alop 3

Alopias superciliosus (Lowe, 1839)

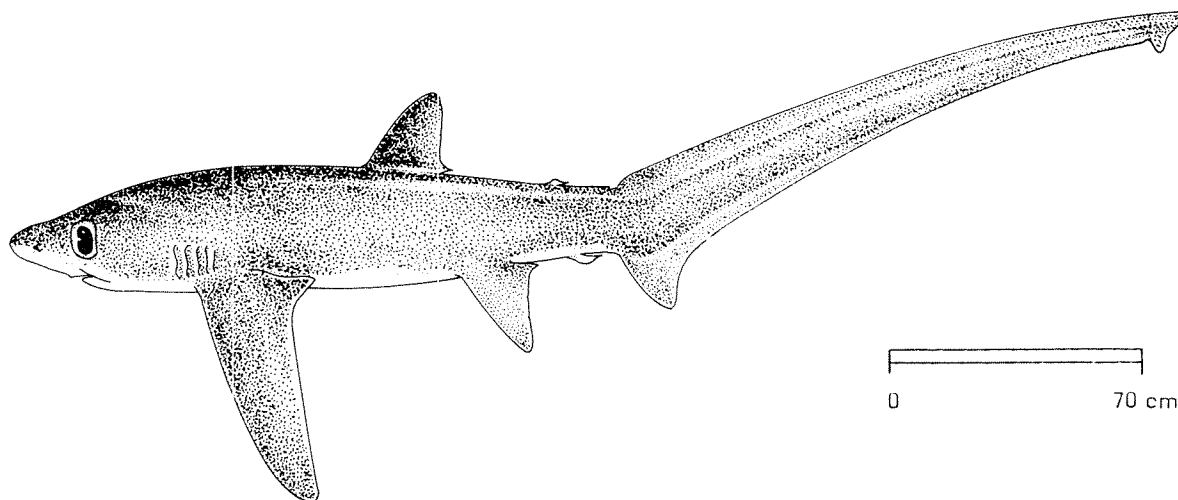
ALOP Alop 1

Alopias vulpinus Bonnaterre, 1788)

ALOP Alop 2

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ALOPIIDAE

FISHING AREA 51
(W. Indian Ocean)*Alopias superciliosus* (Lowe, 1839)OTHER SCIENTIFIC NAMES STILL IN USE : *Alopias profundus* Nakamura, 1935

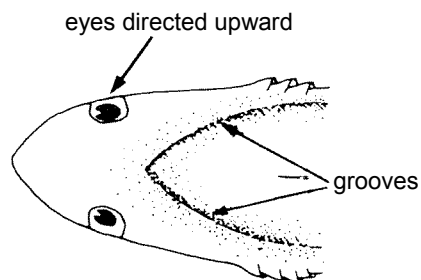
VERNACULAR NAMES:

FAO : En - Bigeye thresher
 Fr - Renard à gros yeux
 Sp - Zorro oñón

NATIONAL:

DISTINCTIVE CHARACTERS:

A large shark. Head with 5 medium-sized gill slits, the last 2 above pectoral fin bases; a deep horizontal groove on nape on each side from the level of mouth to pectoral fins; no nasal barbels or nasoral grooves on nostrils; snout moderately long and conical; profile of forehead distinctly indented over eyes; interorbital space nearly flat; no nictitating eyelids; eyes very large, expanding onto dorsal surface of head, permitting upward vision; mouth moderately long and semicircular, placed below the eyes, with rudimentary labial furrows; teeth moderately large, less than 25 rows in upper or lower jaws, sharp-edged, with a single, broad, straight or posteriorly curved cusp and no cusplets; anterior teeth not greatly enlarged, uppers not separated from the large laterals by smaller intermediate teeth. Two dorsal fins, the first moderately large and located just in front of the pelvic fin origins, closer to the pelvis than to the pectorals; second dorsal fin minute and positioned well ahead of the small anal fin; pectoral fins very narrow, long and falcate, broad-tipped; upper lobe of caudal fin very long and straplike, almost or quite equal to the length of rest of shark; lower lobe short but well-developed. Upper precaudal pit present but caudal keels absent. Intestinal valve of ring type.



dorsal view of head

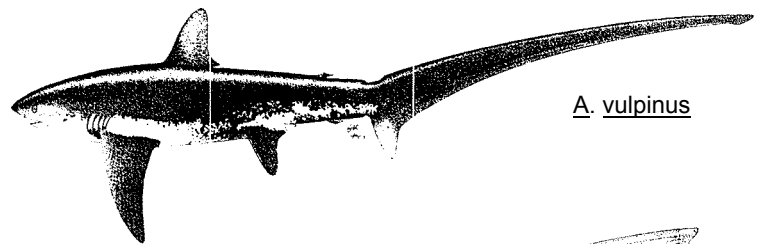
Colour: purplish-grey above, cream below, posterior edges of pectorals, pelvis and sometimes first dorsal fin dusky; light colour of abdomen not expanded over pectoral fin bases.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

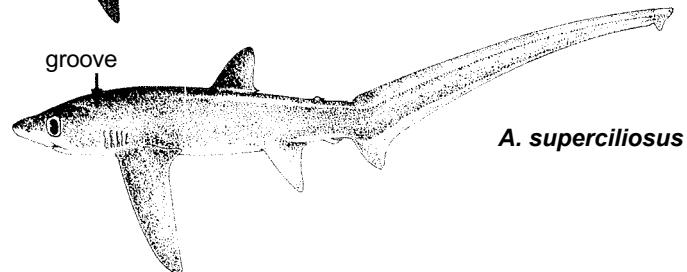
Alopias pelagicus and *A. vulpinus*: grooves on nape either poorly developed or absent; forehead broadly arched between eyes in anterior view; eyes not expanded onto dorsal surface of head; forehead not set off from nape by an indentation or notch; teeth smaller, over 29 rows in each jaw, usually with intermediate teeth between upper anteriors and laterals; first dorsal fin equidistant between pectoral and pelvic fins or closer to pectoral fins.

SIZE:

Maximum: about 460 to 470 cm; most adults between about 300 to 400 cm.



A. vulpinus



A. superciliosus

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Found in the area off South and East Africa, Madagascar, and the Arabian Sea, and probably more wide-ranging than known records indicate. Elsewhere widely distributed in the warm-temperate to tropical Atlantic, and the West, Central and Eastern Pacific.

An oceanic species that may come close to the coast and occurs near the bottom and offshore at depths from 475 to 500 m. Ovoviviparous, usually with only 2 young, but possibly up to 4; size at birth probably about 100 to 130 cm.

Feeds on pelagic fishes (alepisaurids, clupeoids, scombrids, and small istiophorids), bottom-fishes (hake), and squid (the latter an important food for the species). Probably uses its tail to herd and stun prey as does *A. vulpinus*, as some individuals have been hooked on longlines by their tails. Apparently harmless to people.

PRESENT FISHING GROUNDS:

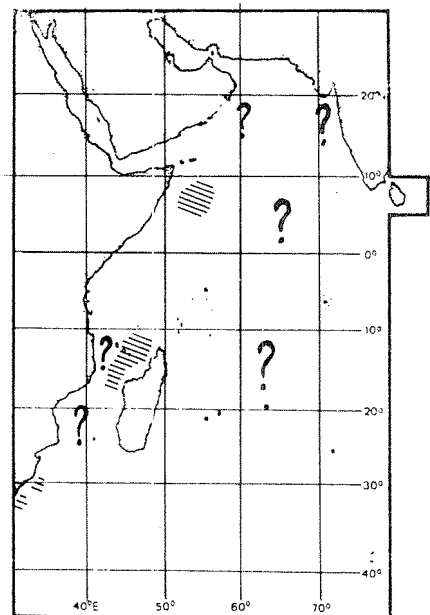
Offshore in the area, primarily off the southeastern coast of Somalia.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Taken with pelagic longlines.

Utilization uncertain, presumably frozen or canned.

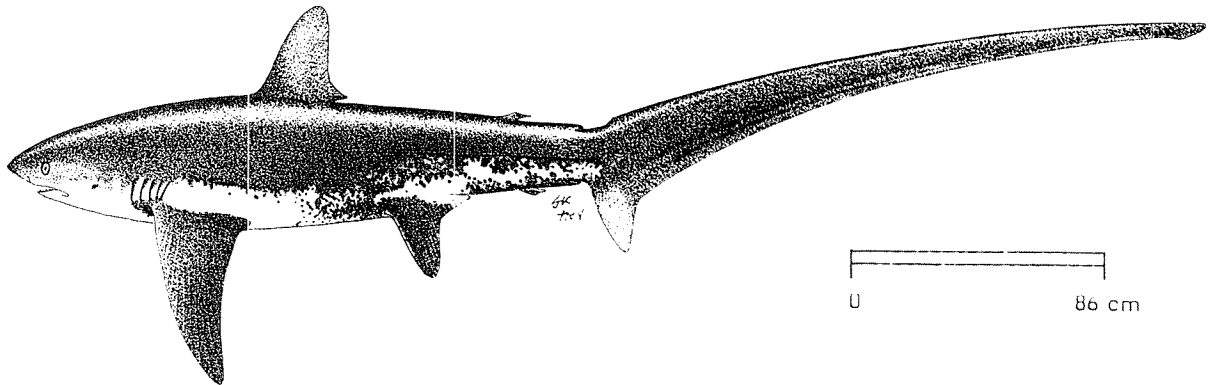


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ALOPIIDAE

FISHING AREA 51
(W. Indian Ocean)*Alopias vulpinus* (Bonnaterre, 1788)

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO : En - Thresher shark
 Fr - Renard
 Sp - Zorro

NATIONAL:

DISTINCTIVE CHARACTERS:

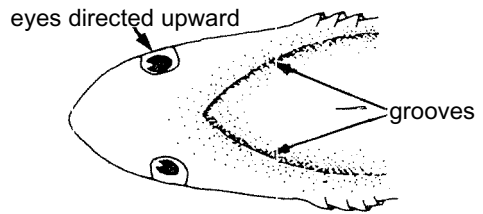
A large shark. Head with 5 medium-sized gill slits, the last two above pectoral fin bases; no grooves on nape; no gillrakers; no nasal barbels or nasoral grooves on nostrils; snout short and conical; forehead broadly convex in lateral view, not indented at nape; no nictitating eyelids; eyes moderately large, not expanding unto the dorsal surface of head; mouth short and semicircular, below eyes, with short lower labial furrows; teeth small, usually over 29 rows in upper and lower jaws, sharp-edged, with a single, broad, straight or posteriorly curved cusp and usually no cusplets; anterior teeth not greatly enlarged, uppers usually separated from the laterals by a small intermediate tooth. Two dorsal fins, the first moderately large, with its base well ahead of the pelvic fin bases and farther from them than from the pectoral fin bases; second dorsal fin minute and positioned just in front of the small anal fin; pectoral fins very long and falcate, with narrowly rounded (small juveniles) to acutely pointed, narrow tips; upper lobe of caudal fin very long and straplike, about as long as, or longer than, rest of shark; lower lobe short but well-developed. Upper precaudal pit present but caudal keels absent. Intestinal valve of ring type.

Colour: brown, grey, blue-grey or blackish on back and underside of snout, lighter on sides, and abruptly white below; a white area extends from the abdomen over the pectoral fin bases; pectoral, pelvic and dorsal fins blackish, white dots sometimes present on pectoral, pelvic and caudal fin tips.

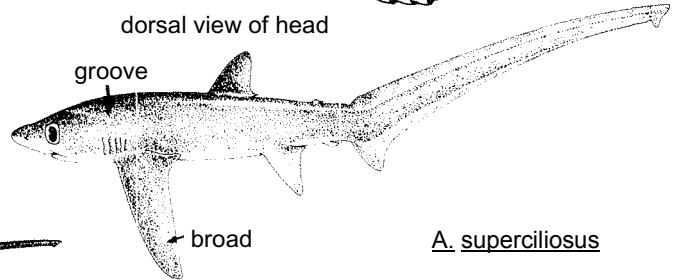
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Alopias superciliosus: snout longer, forehead indented in lateral view, nearly flat between eyes in anterior view; head narrower; eyes much larger, expanded onto dorsal surface of head; mouth without well-developed lower labial furrows; teeth larger, in 20 to 24 rows in each jaw, without intermediate teeth between upper anteriors and laterals; first dorsal fin closer to pelvic fins than to pectorals; pectoral fins broad-tipped; white or light colour of abdomen not extending over pectoral bases.

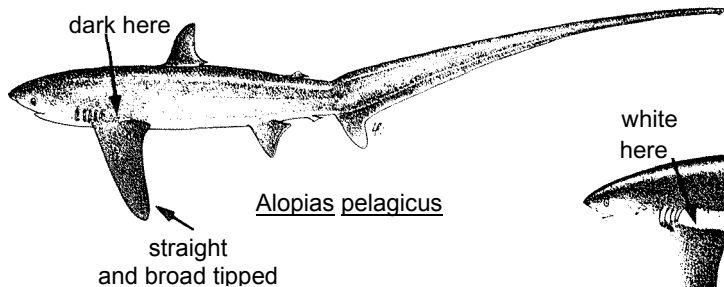
Alopias pelagicus: snout longer, forehead flatter in lateral view; head narrower; mouth without well-developed lower labial furrows; lateral teeth often with cusplets; pectoral fins nearly straight, not falcate, and broad-tipped; white of abdomen not extending over pectoral bases.



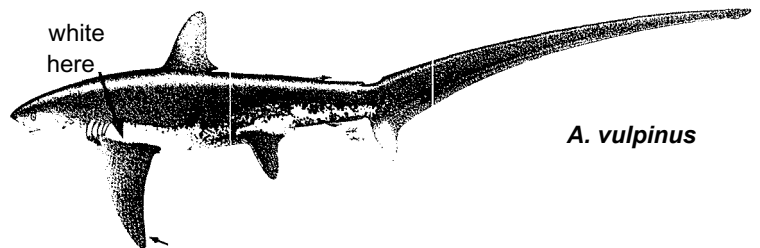
dorsal view of head



A. superciliosus



Alopias pelagicus



A. vulpinus

SIZE:

Maximum: between 500 and 609 cm; common between 430 and 490 cm; apparently larger than A. superciliosus and A. pelagicus.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the area, from South Africa, Tanzania, Somalia, the "Gulf"; Maldives, Chagos Archipelago, Gulf of Aden, India and Sri Lanka. Elsewhere, wide-ranging in the Atlantic, Indian Ocean and Pacific. Some Western Pacific and Indian Ocean records of this species may be based on A. pelagicus.

A cold-temperate to tropical, oceanic and coastal shark, the young of which are often found close inshore and in shallow bays. Apparently common off Somalia, the Maldives and Chagos Archipelago, where it is caught at depths from 180 to 265 m in waters 1 000 to 5 150 m deep. Oviviparous, number of young 2 to 4 (usually 2); size at birth about 120 to 152 cm.

This shark feeds mostly on small schooling fishes, including mackerel, bluefish, clupeids, needlefishes, lancetfishes and lanternfishes; also squids, octopi and pelagic crustaceans. Definitely recorded as herding and stunning fishes with its long tail, and in the area often caught by being tail-hooked, presumably after hitting the baited hook with its tail. A few attacks on boats are attributed to this species, but it otherwise is not known to be dangerous.

PRESENT FISHING GROUNDS:

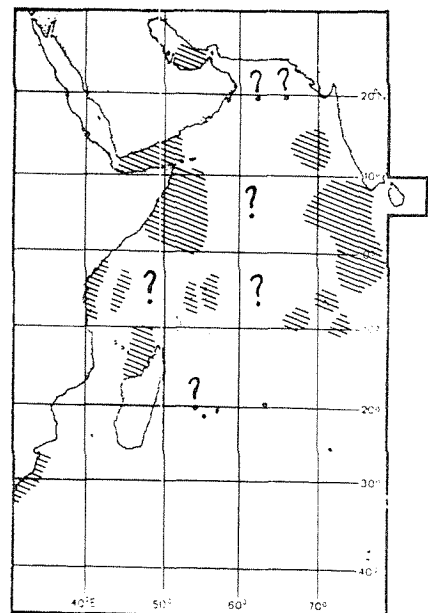
Offshore in the area, particularly off Somalia.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Captured on pelagic longline.

Utilization uncertain, presumably frozen or canned.

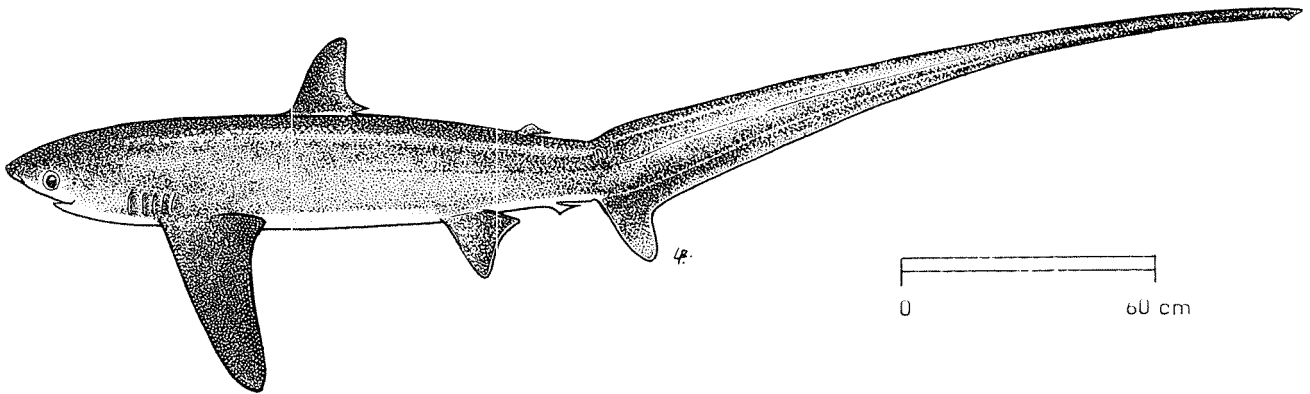


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ALOPIIDAE

FISHING AREA 51
(W. Indian Ocean)*Alopias pelagicus* Nakamura, 1936

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO : En - Pelagic thresher
 Fr - Renard pélagique
 Sp - Zorro pelágico

NATIONAL:

DISTINCTIVE CHARACTERS:

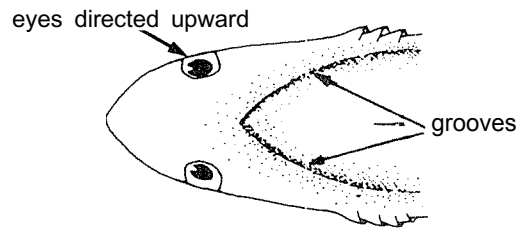
A large shark. Head with 5 medium-sized gill slits, the last 2 above pectoral fin bases; a weak horizontal groove on nape on each side from level of mouth to pectoral fins; no nasal barbels or nasoral grooves on nostrils; snout moderately long and conical; forehead nearly straight in lateral view; broadly arched between eyes; head narrow; no nictitating eyelids; eyes moderately enlarged in adults and subadults but greatly enlarged in young, not expanded onto dorsal surface of head; mouth moderately long and semicircular, placed below eyes, with labial furrows rudimentary or absent; teeth small, more than 29 rows in each jaw, sharp-edged, with a single, narrow, nearly erect or distally oblique cusp and often a distal cusplet; anterior teeth not greatly enlarged, uppers separated from the large laterals by smaller intermediate teeth. Two dorsal fins, the first moderately large and located about equidistant between the pectoral and pelvic fin bases or slightly closer to the pectoral bases; second dorsal fin minute and positioned well ahead of the small anal fin; pectoral fins narrow, long and nearly straight, broad-tipped, and not falcate; upper lobe of caudal fin very long and straplike, about as long as the rest of the shark; lower lobe short but strong; terminal lobe very small. Upper precaudal pit present but caudal keels absent. Intestinal valve of ring type.

Colour: bluish or grey above, white below, with a silvery sheen in gill region; white colour from belly not handed over pectoral fin bases.

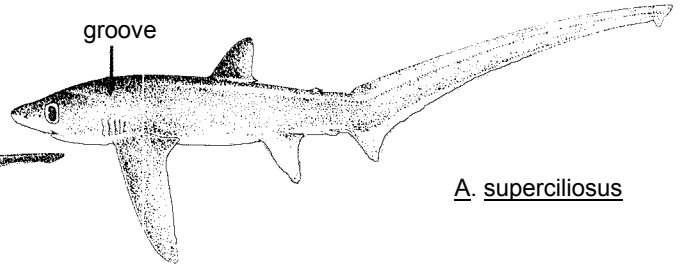
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Alopias superciliosus: deep grooves on nape, forehead flat between eyes, set off from nape by a distinct indentation or notch; eyes larger in adults and subadults, in all sizes expanded onto dorsal surface of head; teeth larger, less than 25 rows in each jaw; no intermediate teeth; first dorsal fin closer to pelvic fins than to pectorals; pectoral fins falcate.

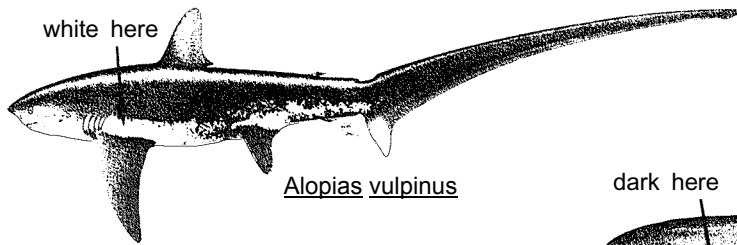
Alopias vulpinus: grooves absent from nape; snout shorter; head broader, forehead broadly arched in lateral view; labial furrows well-developed on lower jaw; teeth with more erect cusps; cusplets usually absent; pectoral fins falcate, with narrow, pointed tips; white colour of abdomen extending to above pectoral fin bases.



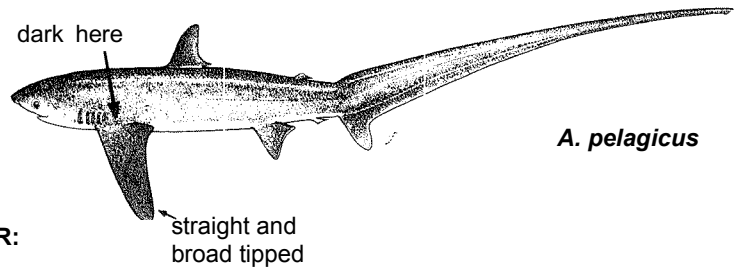
dorsal view of head



A. superciliosus



Alopias vulpinus



A. pelagicus

SIZE:

Maximum: at least 330 cm (adult females).

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Found in the area, off South Africa, in the Red Sea off Egypt, in the Arabian Sea between India and Somalia, and off Karachi, Pakistan. Elsewhere, known from the Western Pacific off China, Taiwan Island, Japan, and New Caledonia; the Central Pacific off the Hawaiian Islands; and the Eastern Pacific from the mouth of the Gulf of California to the Galapagos Islands.

A little-known oceanic species occurring at depths from 49 to 152 m, sometimes found near shore. Ovoviviparous, with at least 2 young, born at a length greater than 96 cm.

Presumably feeds on small fishes and pelagic invertebrates, but details unknown. Apparently harmless to people.

PRESENT FISHING GROUNDS:

Mostly offshore waters, particularly in the Arabian Sea between Somalia and India.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION :

Separate statistics are not reported for this species.

Captured with longlines and on hook and line gear.

Probably utilized dried-salted, fresh and canned.

