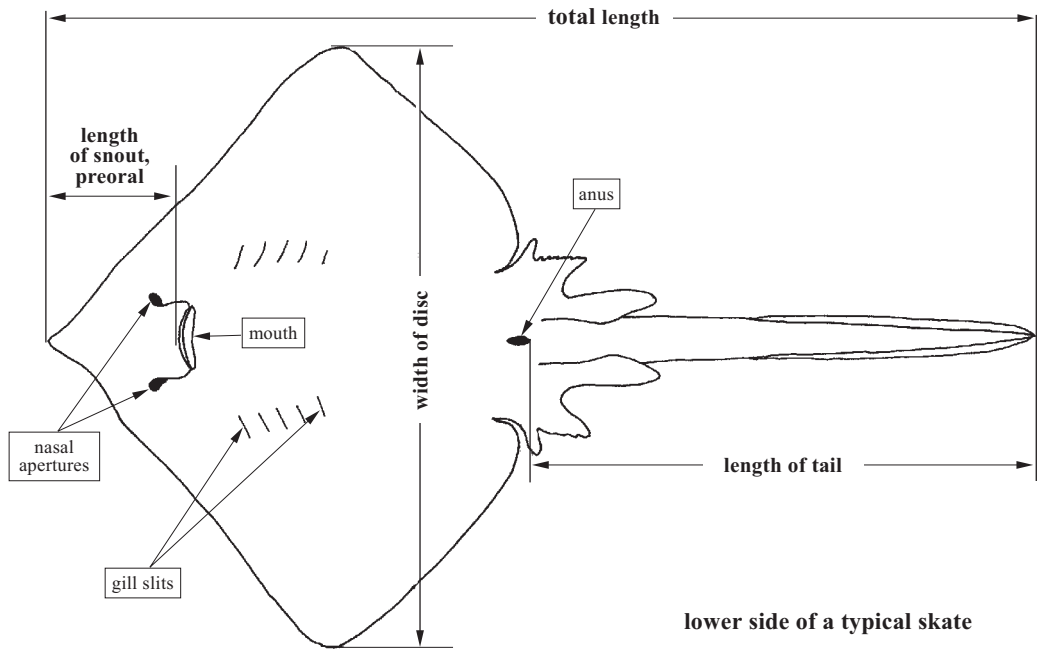
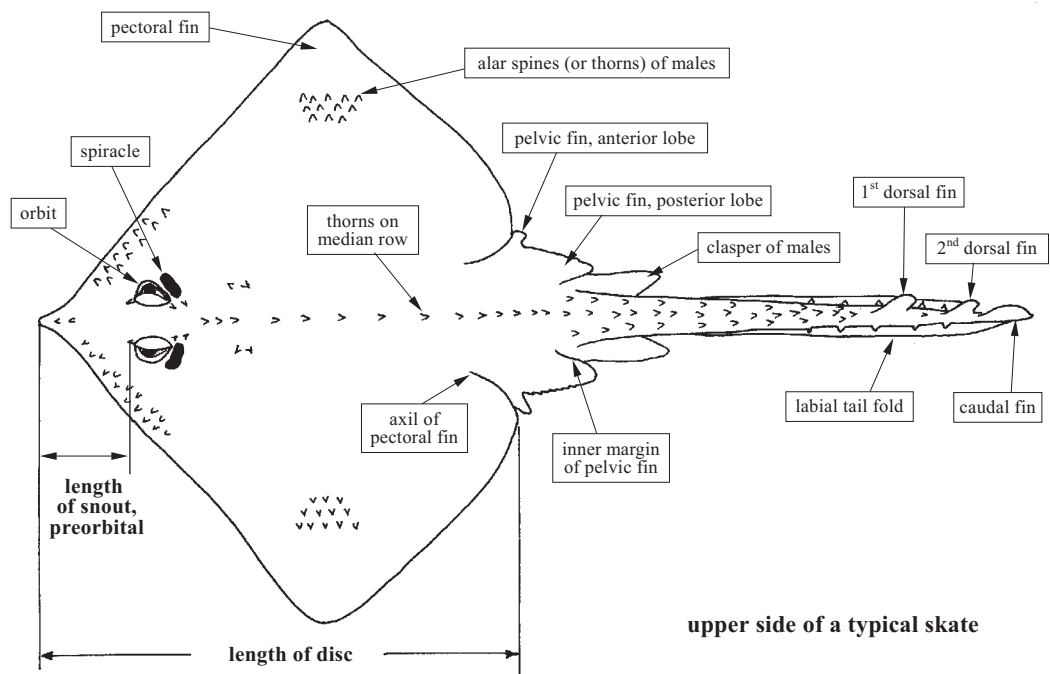


BATOID FISHES

Rays, Skates, Guitarfishes and Mantas

TECHNICAL TERMS AND MEASUREMENTS



LIST OF FAMILIES AND SPECIES OCCURRING IN THE AREA

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

Order **Pristiformes**

Family **PRISTIDAE**

- * *Anoxypristis cuspidata*
- * *Pristis pectinata*
- * *Pristis zijsron*

Order **Torpediniformes**

Family **TORPEDINIDAE**

- * *Torpedo panthera*
- * *Torpedo sinuspersici*

Family **NARCINIDAE**

- Narcine oculifera*

Family **NARKIDAE**

- * *Heteronarce bentuviai*
- Heteronarce mollis*

Order **Rhinobatiformes**

Family **RHINOBATIDAE**

- ? *Rhinobatos cemiculus*
- ?* *Rhinobatos granulatus*
- * *Rhinobatos halavi*
- ? *Rhinobatos obtusus*
- * *Rhinobatos punctifer*
- ?* *Rhinobatos salalah*
- ?* *Rhinobatos schlegelii*
- ?* *Rhinobatos thoun*

Family **RHYNCHOBATIDAE**

- * *Rhina ancylostoma*
- ? *Rhynchobatus australiae?*
- * *Rhynchobatus djiddensis*

Order **Myliobatiformes**

Family **Dasyatidae**

- * *Dasyatis kuhlii*
- ? *Dasyatis pastinaca*
- Dasyatis* sp.
- * *Himantura fai*
- * *Himantura gerrardi*
- * *Himantura imbricata*
- * *Himantura uarnak*
- * *Pastinachus sephen*
- ? *Taeniura grabata*
- * *Taeniura lymma*
- * *Taeniura meyeri*
- * *Urogymnus asperrimus*

Family **GYMNURIDAE**

- ? *Aetoplatea tentaculata*
- * *Gymnura poecilura*

Family **MYLIOBATIDAE**

- * *Aetobatus flagellum*
- * *Aetobatus narinari*
- ? *Aetobatus ocellatus*
- * *Aetomylaeus milvus*
- * *Aetomylaeus vespertilio*

Family **RHINOPTERIDAE**

- * *Rhinoptera javanica*
- ? *Rhinoptera jayakari?*

Family **MOBULIDAE**

- * *Manta birostris*
- * *Mobula eregoodootenkee*
- * *Mobula japanica*
- ? *Mobula kuhlii*
- * *Mobula tarapacana*

GUIDE TO THE ORDERS AND FAMILIES OF BATOID FISHES 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 region. 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 on 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.

Order PRISTIFORMES – Sawfishes

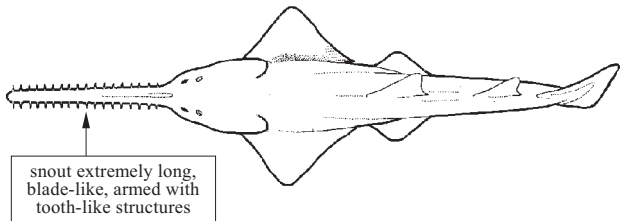
Body shark-like with a saw-like elongated snout bearing a row of strong lateral teeth on each side, gill slits on the underside of the head.

PRISTIDAE

Page 43

Sawfishes

To 7.3 m total length. Demersal in shallow marine waters and estuaries, entering fresh water. Three species in the area, all under threat from overexploitation.



Order TORPEDINIFORMES – Electric rays

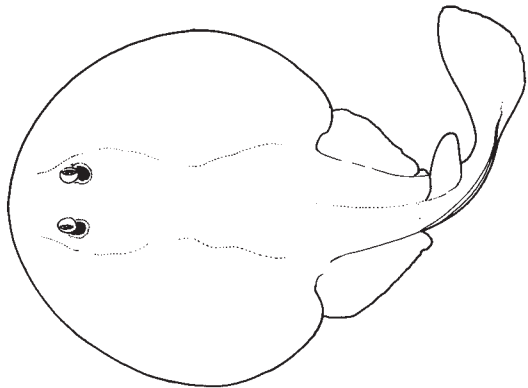
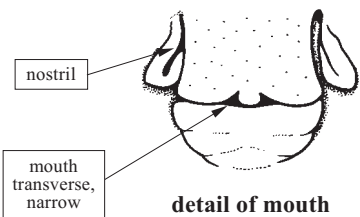
Pectoral fins greatly expanded and fused with head and trunk, forming a large oval disc; tail stout and shark-like, without any spines, a large electric organ on each side of head, usually visible through the skin as a pattern of hexagonal markings.

NARKIDAE

Page 44

Sleeper rays

To at least 46 cm total length. Demersal, from the intertidal to a depth of at least 330 m; unable to penetrate fresh water. Two species in the area.

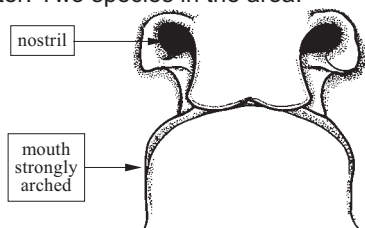


TORPEDINIDAE

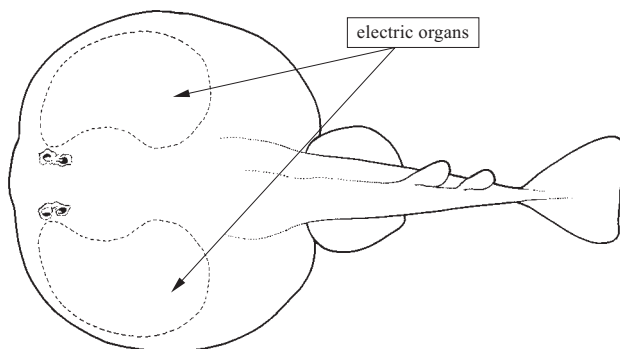
Page 44

Torpedoes

To at least 1.8 m total length. Demersal, from shallow waters to a depth of 1 100 m; they can occur off river mouths and in estuaries, but do not penetrate fresh water. Two species in the area.



detail of mouth

**Order RHINOBATIFORMES – Guitarfishes, wedgefishes and shark-rays**

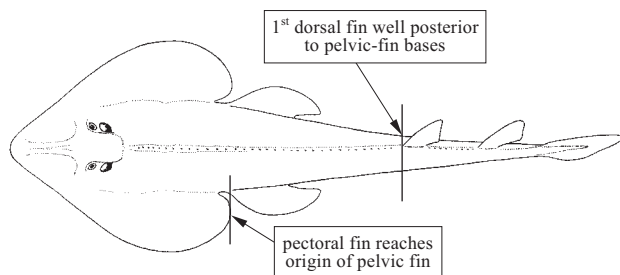
Body elongated and shark-like with pectoral fins expanded and fused with head and trunk; two subequal and well separated dorsal fins; no saw-like snout.

RHINOBATIDAE

Page 45

Guitarfishes

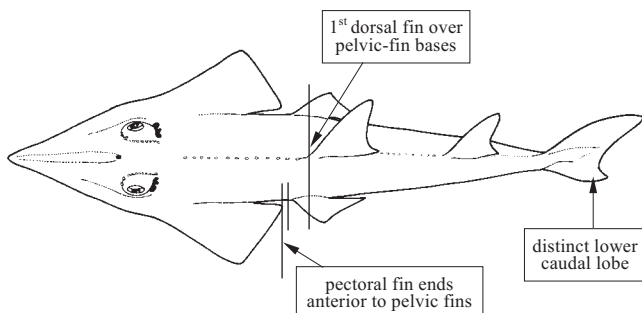
To 3 m total length. Demersal, in inshore waters and sometimes in deeper waters of the upper slope; off sandy beaches, muddy bays, estuaries, and off river mouths. From the intertidal down to 366 m. Possibly 6 species in the region.

**RHYNCHOBATIDAE**

Page 47

Wedgefishes and shark-rays

To 3 m total length. Demersal, in inshore waters, muddy bays, estuaries and river mouths, and coral reefs; from the intertidal to at least 64 m. Possibly two species in the area.



Order MYLIOBATIFORMES - Stingrays, butterfly rays, eagle rays and mantas

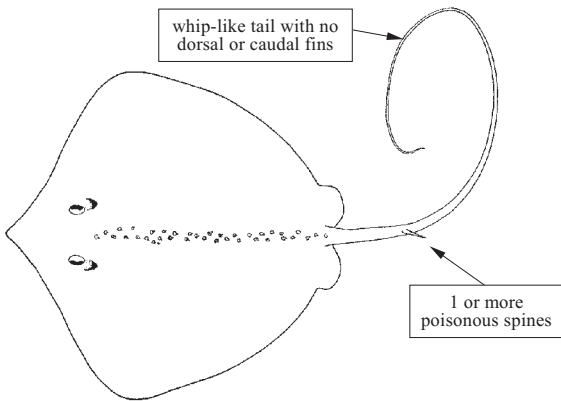
Body flattened with pectoral fins greatly expanded and fused with head and trunk; tail slender or whip-like, usually with one or several spines; usually with a single dorsal fin, but no caudal fin. No electric organ.

DASYATIDAE

Page 48

Stingrays

To 2 m disc width. Mostly demersal, with one species pelagic. In marine, estuarine and fresh-water habitats, down to a depth of 480 m. At least nine species in the area.

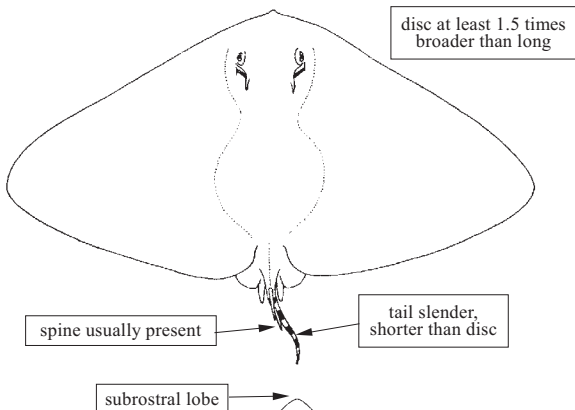


GYMNURIDAE

Page 52

Butterfly rays

To 2.5 m disc width. Demersal, inshore waters off sandy beaches, estuaries, enclosed bays and lagoons, and offshore banks down to a depth of 110 m. A single species in the area.

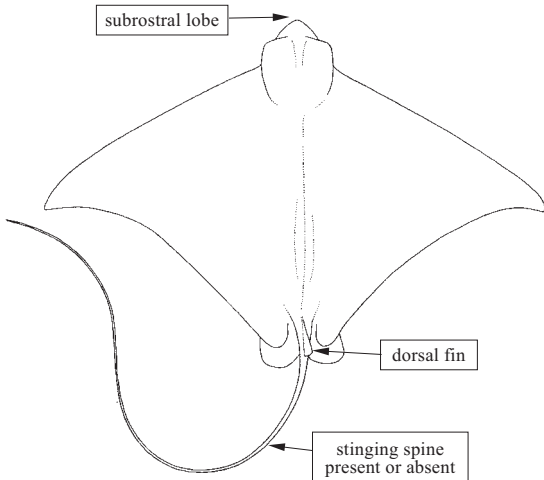


MYLIOBATIDAE

Page 53

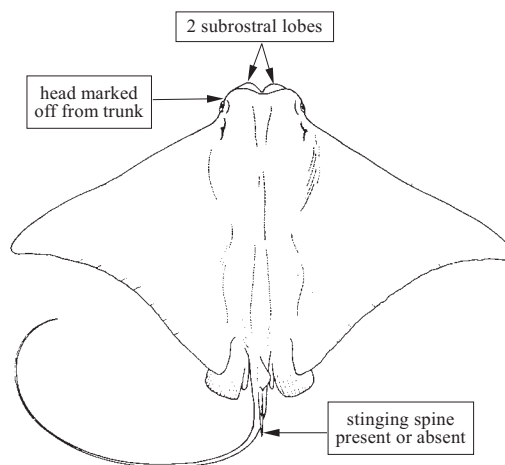
Eagle rays

To 3 m disc width. Semi-pelagic in inshore waters, around coral or rocky reefs, kelp beds, estuaries and enclosed bays and lagoons, but often found also in the epipelagic zone. From the intertidal to a depth of 527 m. Four species in the area.

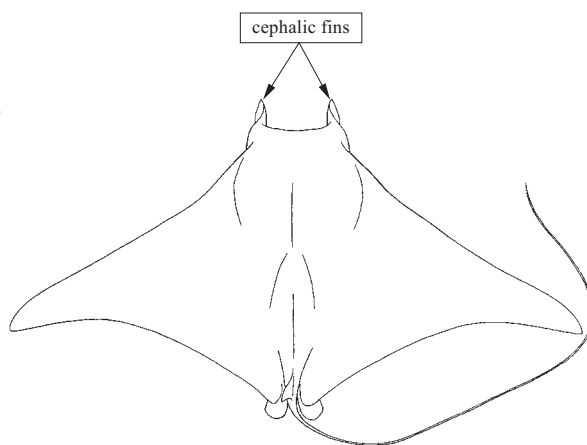


RHINOPTERIDAE**Page 55****Cownose rays**

To 1.5 m disc width. Semi-pelagic inshore and offshore, off sandy beaches, estuaries, enclosed bays and lagoons, and offshore banks; from the intertidal to a depth of at least 26 m. One species in the area, possibly two.

**MOBULIDAE****Page 55****Mantas and devil rays**

To at least 6.7 m disc width. Pelagic, in coastal and oceanic waters from the intertidal to the epipelagic zone; around coral and rocky reefs, in lagoons and enclosed and open bays. Possibly four species in the area.



PRISTIDAE

***Anoxypristis cuspidata* (Latham, 1794)**

Frequent synonyms / misidentifications:
None / *Pristis pectinata* Latham, 1794;
P. zijsron Bleeker, 1851.

FAO names: En - Narrow sawfish.

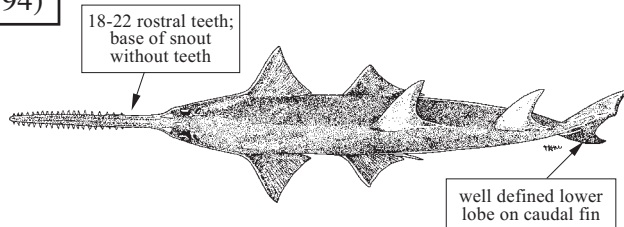
Local names: Abu minshaar; Shuqrah.

Size: To at least 4.7 m total length.

Habitat and biology: Found close inshore in the intertidal to a depth of 40 m, frequents river deltas and estuaries, and may go upstream in rivers. Ovoviviparous; litters from 6 to 23 young. Feeds on small fish and cuttlefish.

Importance to fisheries: Caught in bottom trawls, in fixed bottom gillnets, and probably with line gear. Meat utilized for human consumption. Severely depleted throughout its range. In need of strong conservation measures.

Distribution: Confined to the Indo-West Pacific, from the Red Sea to southern Japan, New Guinea and tropical Australia.

***Pristis pectinata* Latham, 1794**

Frequent synonyms / misidentifications:
None / *Anoxypristis cuspidata* (Latham, 1794); *Pristis zijsron* Bleeker, 1851.

FAO names: En - Smalltooth sawfish;
Fr - Poisson-scie commun; Sp - Pez sierra comun.

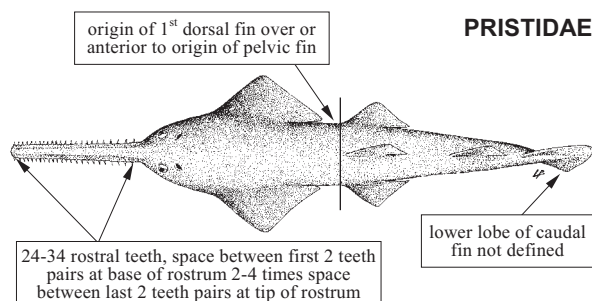
Local names: Libaax-Miinshaar; Zaraacimo.

Size: Probably to 7.6 m total length, common to 5.5 m.

Habitat and biology: In shallow bays, lagoons and estuaries, also enters fresh water.

Importance to fisheries: Caught with line gear and bottom trawls. Flesh of good quality. Severely depleted throughout its range. In need of strong conservation measures.

Distribution: Possibly found in all warm-temperate and tropical seas of the world, but status of nominal records uncertain. Presence in the Red Sea needs confirmation.



PRISTIDAE

***Pristis zijsron* Bleeker, 1851**

Frequent synonyms / misidentifications:
None / *Anoxypristis cuspidata* (Latham, 1794); *Pristis pectinata* Latham, 1794.

FAO names: En - Longcomb sawfish.

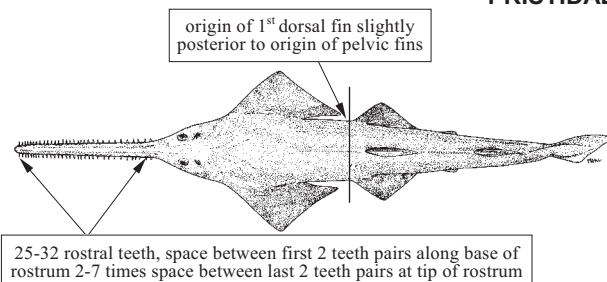
Local names:

Size: Reported to reach 7.3 m total length.

Habitat and biology: In shallow waters, also enters fresh water.

Importance to fisheries: Caught with line gear and bottom trawls. Flesh of good quality. Severely depleted throughout its range. In need of strong conservation measures.

Distribution: Confined to the Indian and western Pacific oceans. From South Africa north to the Red Sea and eastward to southern China, New Guinea and Australia.



PRISTIDAE

NARKIDAE

Heteronarce bentuviai (Baranes and Randall, 1989)

(Plate X, 67)

Frequent synonyms / misidentifications:

None / None.

FAO names: **En** - Elat electric ray; **Sp** - Raya eléctrica de Elat.

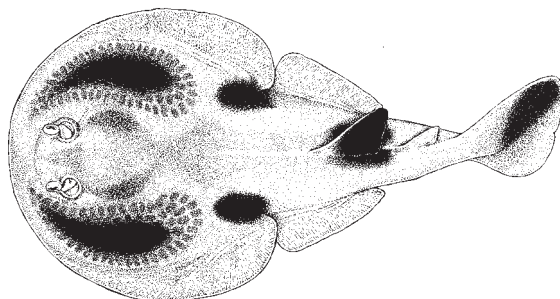
Local names:

Size: To at least 19 cm total length.

Habitat and biology: On sandy and possibly muddy bottoms, from depths of 80 to 200 m.

Importance to fisheries: Caught as bycatch with gillnets and trawl nets.

Distribution: Known only from the Gulf of Aqaba.



TORPEDINIDAE

Torpedo panthera Olfers, 1831

(Plate X, 68)

Frequent synonyms / misidentifications: None / *Torpedo sinuspersici* Olfers, 1831.

FAO names: **En** - Panther electric ray.

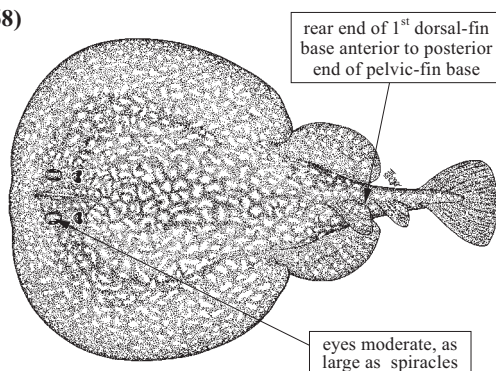
Local names: Raash; Fattarah; Khaddala ramlya; Ruketa kahrabaeia.

Size: To 1 m total length.

Habitat and biology: On mud or sandy bottoms, from shallow water to a depth of 110 m. Can deliver a strong electric shock.

Importance to fisheries: Caught with bottom trawls and hook-and-line.

Distribution: Red Sea. Reports from other areas probably refer to a different species.



Torpedo sinuspersici Olfers, 1831

Frequent synonyms / misidentifications: None / *Torpedo panthera* Olfers, 1831.

FAO names: **En** - Marbled electric ray.

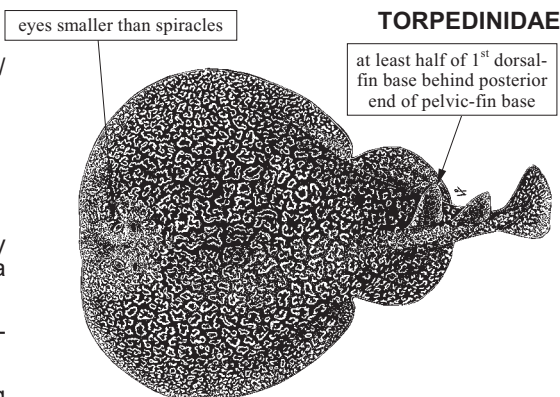
Local names:

Size: To 1.3 m total length, 90 cm disc width.

Habitat and biology: Inshore waters over sandy bottoms, down to a depth of 200 m. Can deliver a strong electric shock.

Importance to fisheries: Caught with hook-and-line and bottom trawls. Flesh edible.

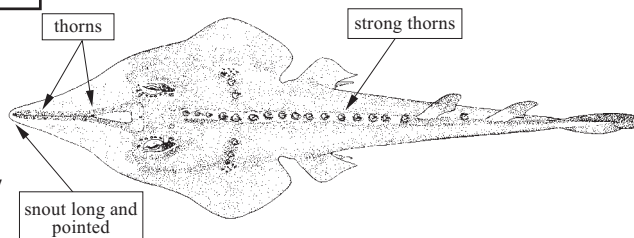
Distribution: From South Africa to India, including the Red Sea.



RHINOBATIDAE

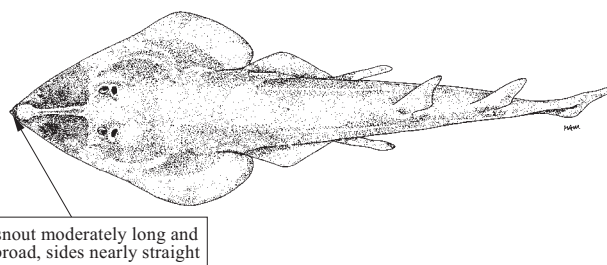
Rhinobatos granulatus* Cuvier, 1829*Frequent synonyms / misidentifications:**

None / None.

FAO names: En - Sharpnose guitarfish.**Local names:** Shippeen.**Size:** To at least 1.8 m total length, possibly to 2.15 m.**Habitat and biology:** Found inshore and offshore from the intertidal to the outer continental shelves down to 119 m. Biology little known.**Importance to fisheries:** Utilized where it occurs, but details lacking.**Distribution:** Occurs in the Indo-West Pacific from the Persian Gulf and off India east to Viet Nam and New Guinea. Presence in the region needs to be confirmed.***Rhinobatos halavi* (Forsskål, 1775)**

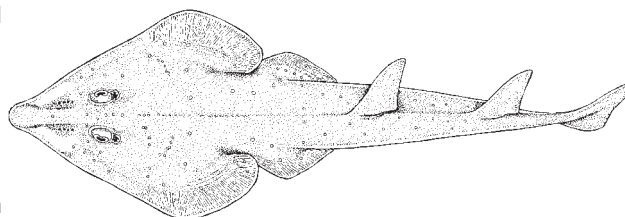
(Plate X, 69)

RHINOBATIDAE

Frequent synonyms / misidentifications: None / None.**FAO names:** En - Halavi guitarfish.**Local names:** Halwani khshen; Archetah.**Size:** To 150 cm total length.**Habitat and biology:** An inshore species of sandy bottoms. Up to 10 young per litter. Feeds on prawns and other crustaceans.**Importance to fisheries:** Utilized where it occurs, but details lacking.**Distribution:** Occurs in the Indo-West Pacific from the Red Sea to the Gulf of Oman. Possibly east to the Persian Gulf, India, Myanmar, the Philippines, Viet Nam and China.***Rhinobatos punctifer* Compagno and Randall, 1987**

(Plate X, 70)

RHINOBATIDAE

Frequent synonyms / misidentifications:None / *Rhinobatos schlegelii* Müller and Henle, 1841.**FAO names:** En - Spotted guitarfish.**Local names:** Salfooh.**Size:** To at least 88 cm total length.**Habitat and biology:** Presumably a bottom dwelling species like other guitarfishes, but details of its biology unknown.**Importance to fisheries:** Caught incidentally with bottom trawls in the northern Red Sea; utilized fresh for human consumption.**Distribution:** From the northern Red Sea to Oman.

Rhinobatos salalah Randall and Compagno, 1995

(Plate X, 71)

RHINOBATIDAE

Frequent synonyms / misidentifications:

None / *Rhinobatos obtusus* Müller and Henle, 1841.

FAO names: En - Salalah guitarfish.

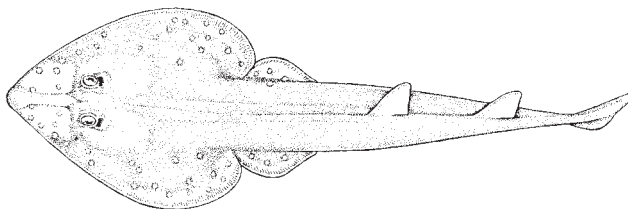
Local names: Shippeen.

Size: To at least 88 cm total length.

Habitat and biology: Presumably a bottom dwelling species like other guitarfishes, but details of its biology unknown.

Importance to fisheries: Little known, the only specimen collected at a fish market in Oman.

Distribution: Currently known only from the coast of Oman (Salalah).

***Rhinobatos schlegelii*** Müller and Henle, 1841

RHINOBATIDAE

Frequent synonyms / misidentifications:

None / None.

FAO names: En - Brown guitarfish.

Local names: Halwani naeim.

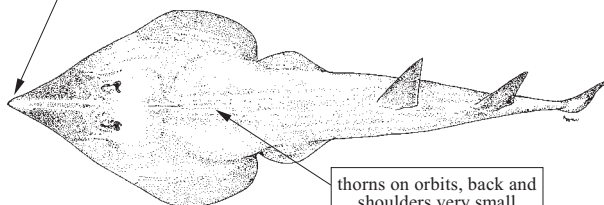
Size: To at least 75 cm total length.

Habitat and biology: An inshore species. Biology little known.

Importance to fisheries: Probably utilized where it occurs, but details lacking.

Distribution: Occurs in the western Pacific off China, Korea and Japan, also Viet Nam and the Philippines; westward records from India and Oman may not be this species.

snout moderately long,
sides anteriorly concave



thorns on orbits, back and
shoulders very small

Rhinobatos thouin (Anonymous, in Lacepède, 1798)

(Plate X, 72)

RHINOBATIDAE

Frequent synonyms / misidentifications:

None / None.

FAO names: En - Clubnose guitarfish.

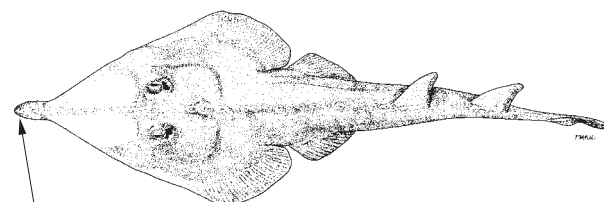
Local names: Shippeen.

Size: To 2.5 and possibly 3.0 m total length.

Habitat and biology: Found inshore. Biology little known.

Importance to fisheries: Caught in inshore and offshore fisheries in trawls and probably gillnets and line gear. Utilized for human consumption fresh and probably salt-dried.

Distribution: Occurs in the Indo-West Pacific from the Red Sea, Malaysia, Singapore, Thailand, Viet Nam, Indonesia, New Guinea and Japan.



knob on tip of snout

RHYNCHOBATIDAE

Rhina ancylostoma Bloch and Schneider, 1801

(Plate X, 73)

Frequent synonyms / misidentifications:

None / None.

FAO names: En - Bowmouth guitarfish;
Fr - Angelot.

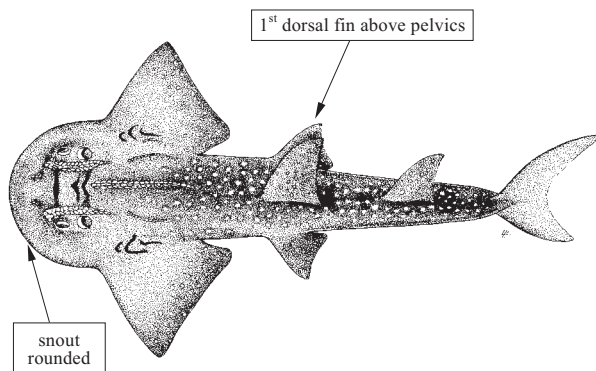
Local names: Oolo-Oolo; Tuurey Haloul;
Al-Bahloul.

Size: Reported to reach 2.7 m total length.

Habitat and biology: A bottom living species that occurs close inshore and on offshore reefs, from depths of 3 to 90 m. Feeds on crabs and shellfish.

Importance to fisheries: Caught with bottom trawl. Commercially caught off Asia.

Distribution: Confined to the Indian and western Pacific oceans. From South Africa north to the Red Sea and eastward to Japan, New Guinea and Australia.



Rhynchobatus djiddensis (Forsskål, 1775)

(Plate X, 74)

RHYNCHOBATIDAE

Frequent synonyms / misidentifications:

None / None.

FAO names: En - Giant guitarfish;
Fr - Poisson paille à pois; Sp - Pez cuña manchado.

Local names: Oolo-Oolo; Shabeelley;
Aurab.

Size: To at least 3 m total length.

Habitat and biology: Occurs in shallow inshore waters, on sandy bottoms, from depths of 2 to 50 m. Feeds on benthic invertebrates.

Importance to fisheries: Caught with line gear gillnets and bottom trawls. An important species in small-scale fisheries throughout its range. Meat used for human consumption; fins highly appreciated in the oriental shark-fin soup market.

Distribution: Known from the western Indian Ocean including the Red Sea and Gulf of Aden. Possibly also in the eastern Indian and western Pacific Oceans but records need confirmation.

Remarks: Another species of *Rhynchobatus* is reported from the area. Similar or identical to *R. australiae* Whitley, 1939, its status and distribution needs further study.

