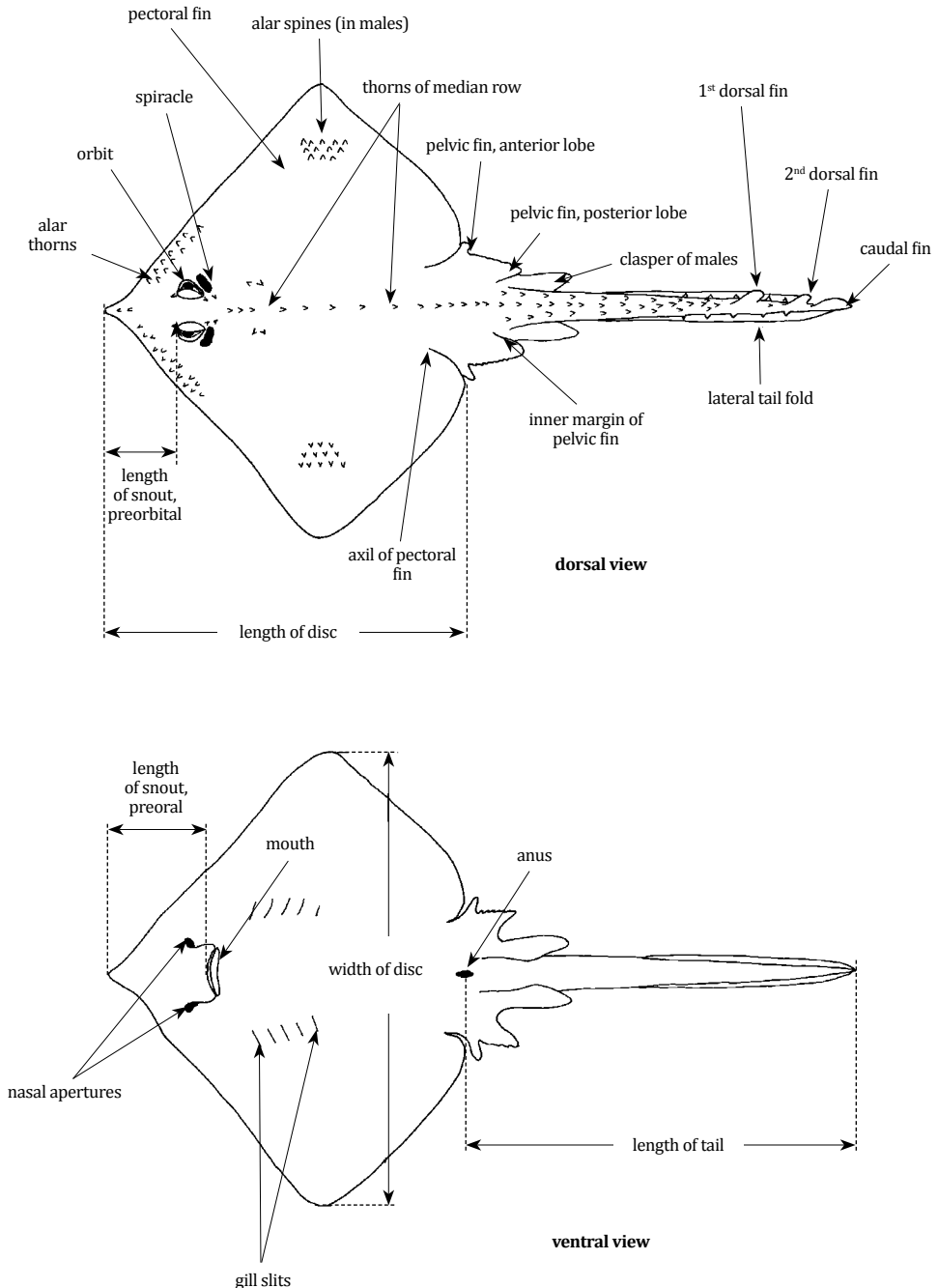


BATOID FISHES

The "Guide to Orders and Families", includes a total of 4 Orders and 7 Families. The latter are arranged by order using the classification adopted by Eschmeyer & Fricke (2011) which best reflects current use. Page numbers refer to those families that are treated in more detail in the species identification guide. The "Guide to Species", includes 19 species belonging to 7 families.

TECHNICAL TERMS AND MEASUREMENTS



GUIDE TO ORDERS AND FAMILIES

Order PRISTIFORMES – Sawfishes

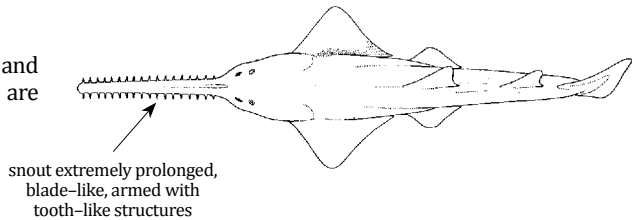
Body shark-like with a saw-like elongated snout bearing a row of strong lateral teeth on each side.

PRISTIDAE

Page 72

Sawfishes

To 7.3 m. Demersal in shallow marine waters and estuaries, enters freshwaters. Two species are included in the Guide to Species.



Order TORPEDINIFORMES – Electric rays

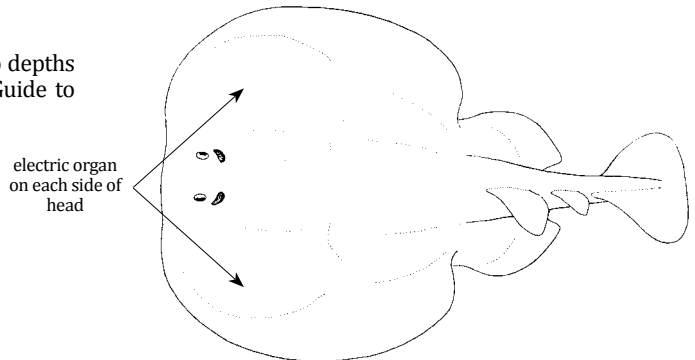
Pectoral fins greatly expanded and fused with head and trunk, forming a large oval disc; tail stout, without a spine. A large electric organ on each side of head, usually visible through the skin as a pattern of hexagonal markings.

TORPEDINIDAE

Page 72

Electric rays

To 1.3 m. Demersal, from shallow waters to depths of 200 m. One species is included in the Guide to Species.



Order RAJIFORMES – Guitarfishes and Skates

Body elongate and shark-like with pectoral fins expanded and fused with head and trunk; tail stout not marked off from body, and without a spine.

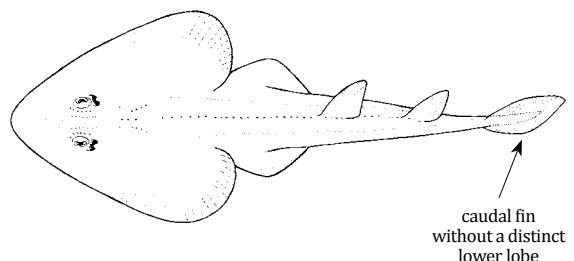
RHINOBATIDAE

Page 73

Guitarfishes

To 3 m. Demersal, in shallow coastal waters. Two species are included in the Guide to Species.

body elongate and shark-like



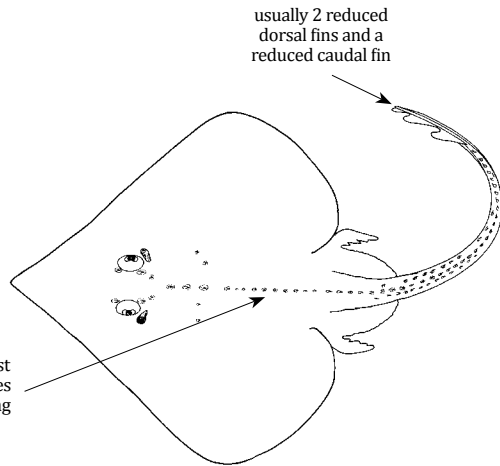
RAJIDAE

Skates

To 65 cm TL. Demersal, rare in tropical shallow waters or near coral reefs. One species is included in the Guide to Species.

disc quadrangular to rhomboidal; mouth transverse to arched, with numerous teeth; 5 pairs of ventral gill slits

skin prickly in most species, the prickles often in a row along midline of back



Order MYLIOBATIFORMES – Stingrays – Butterfly rays – Manta rays

Pectoral disc rhomboid, oval, or triangular in outline, elaborated into shaped wings in some forms; tail moderately stout to very slender; most species have one or more saw-edged spines or stings on the dorsal surface of the tail.

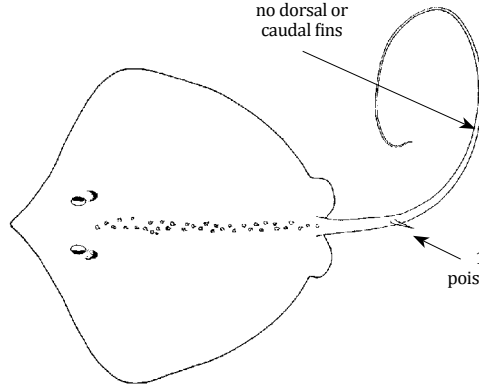
DASYATIDAE

Stingrays

To 2 m disc width. Demersal, in coastal marine waters, enters freshwaters. Seven species are included in the Guide to Species.

no dorsal or caudal fins

1 or more poisonous spines



GYMNURIDAE

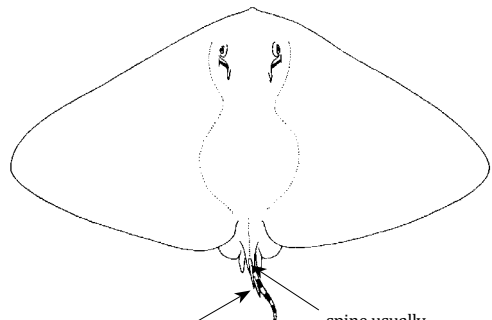
Butterfly rays

To 2.5 m disc width. Demersal, inshore waters and offshore banks. One species is included in the Guide to Species.

disc at least 1.5 times broader than long

tail slender shorter than disc

spine usually present

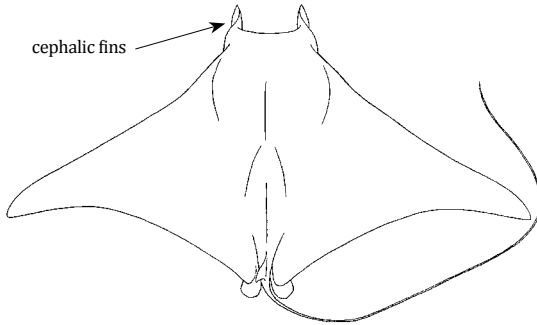


MYLIOBATIDAE

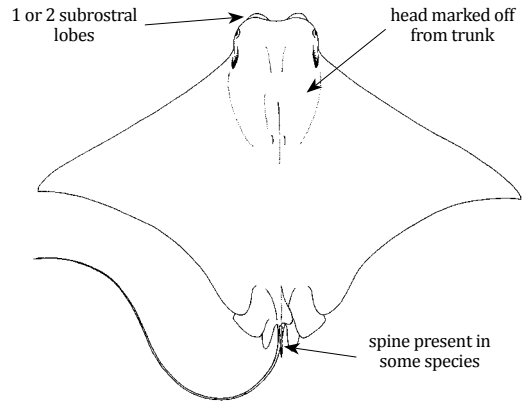
Eagle rays - Cownose rays - Manta rays - Devil rays

Myliobatinae: to 2.3 m disc width; demersal, but often swim above the bottom in coastal waters. Two species are included in the Guide to Species.

Mobulinae: at least 6.7 m disc width; pelagic, in coastal and oceanic waters. Three species are included in the Guide to Species.



Mobulinae



Myliobatinae

PRISTIDAE

Sawfishes

Pristis pectinata Latham, 1794

Local name(s): N: Papa busefu, Papa upanga; S: Papa upanga (M/K).

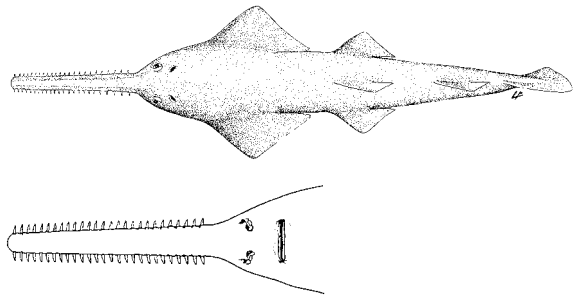
Habitat: Shallow bays, lagoons and estuaries; enters freshwater.

Fisheries: Bottom trawls, Lines.

Distinctive Characters: Long, flat, blade-like rostrum with 24 to 32 pairs of evenly spaced teeth along edges; caudal fin large and oblique with no lower lobe.

Colour: Dark grey to blackish above, white to yellowish below.

FAO names: Smalltooth sawfish (En)
Poisson-scie tident (Fr)



Underside of head

Size: To 760 cm

Pristis zijsron Bleeker, 1851

Local name(s): N: Papa busefu, Papa upanga; S: Papa upanga (M/K).

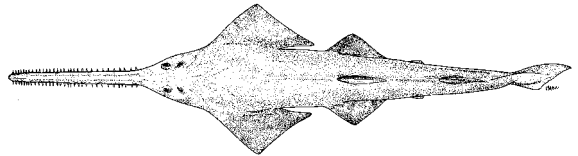
Habitat: Shallow waters; enters freshwater.

Fisheries: Bottom trawls, Lines.

Distinctive Characters: Rostral teeth of basal pairs distinctly more spaced than anterior pairs; sub-caudal lobe absent.

Colour: Greenish-grey above, white below.

FAO names: Longcomb sawfish (En)



Size: To 730 cm

TORPEDINIDAE

Electric rays

Torpedo sinuspersici Olfers, 1831

Local name(s): N: Shepwa kifiza mkono; S: Taa (M), Taa (K).

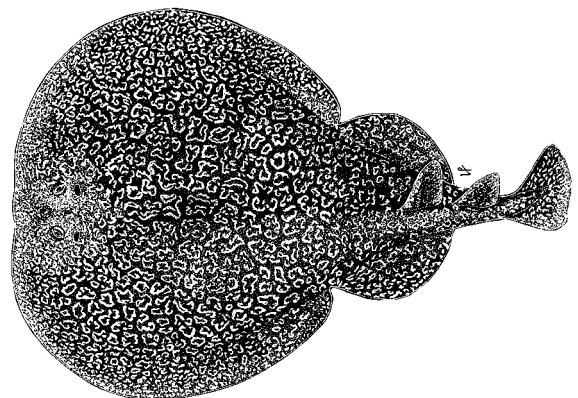
Habitat: Inshore waters over sandy bottoms down to 200 m.

Fisheries: Bottom trawls, Hooks and Line.

Distinctive Characters: Eyes smaller than spiracles; at least half of the 1st dorsal fin behind posterior end of pelvic-fin base; small caudal fin; papillae around the spiracles.

Colour: Bright colour pattern of cream or golden circles and irregular marks on dark red, brown or blackish background dorsally.

FAO names: Variable torpedo ray (En)



Size: To 90 cm (DW), 130 cm (TL)

RHINOBATIDAE

Guitarfishes– Shovelnose rays

Rhina ancylostoma Bloch & Schneider, 1801

Local name(s): N: Papa kiharere; S: Papa wame (M), Papa usingizi (K).

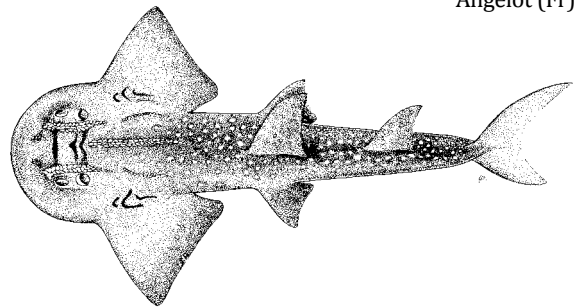
Habitat: Inhabits coastal areas and on coral reefs, close inshore from 3 m to 90 m.

Fisheries: Bottom trawls.

Distinctive Characters: Snout rounded; heavy ridges with greatly enlarged denticles on back, over eyes and spiracles.

Colour: Grey above, white below; numerous white spots dorsally on fins, body and tail; black spots on head and shoulders but no eyespots or ocelli.

FAO names: Bowmouth guitarfish (En)
Angelot (Fr)



Size: To 270 cm (TL)

Rhynchobatus djiddensis (Forsskål, 1775)

Local name(s): N: Papa kiharere/Simbe; S: Papa wame (M), Papa usingizi (K).

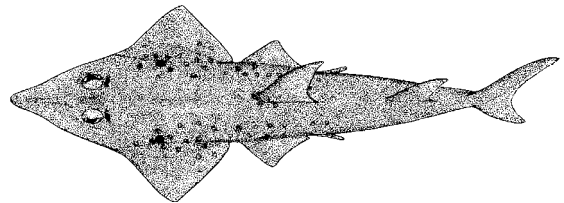
Habitat: Coral reefs, close inshore down to 50 m.

Fisheries: Bottom trawls.

Distinctive Characters: Snout pointed and lower caudal lobe short; mouth small and containing flattened, pavement-like teeth.

Colour: Olive-green above, white below; large black eyespots on pectoral-fin bases; a distinctive black cross between the eyes, and rows of small white spots on upper body.

FAO names: Giant guitarfish (En)
Poisson paille à pois (Fr)



Size: To 300 cm (TL)

RAJIDAE

Skates

Raja miraletus Linnaeus, 1758

Local name(s): N & S: No information.

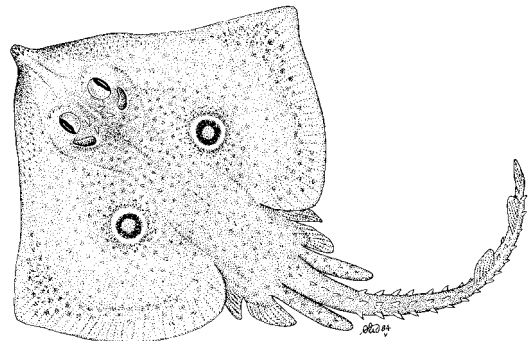
Habitat: Soft bottoms of the shelf and the uppermost slope from 17 to 300 m.

Fisheries: Bottom trawls.

Distinctive Characters: Snout short and bluntly pointed; disc angular; upper surface prickly only in young, nearly smooth in adults; underside smooth.

Colour: Upper surface ochre to reddish-brown with scattered dark spots, underside white; two bright blue eye-spots centered on the pectoral bases; may have a small dark spot on tip of snout.

FAO names: Brown ray (En)
Raie miroir (Fr)



Size: To 64 cm (TL)

DASYATIDAE

Stingrays

Himantura gerrardi (Gray, 1851)

FAO names: Sharpnose stingray (En)

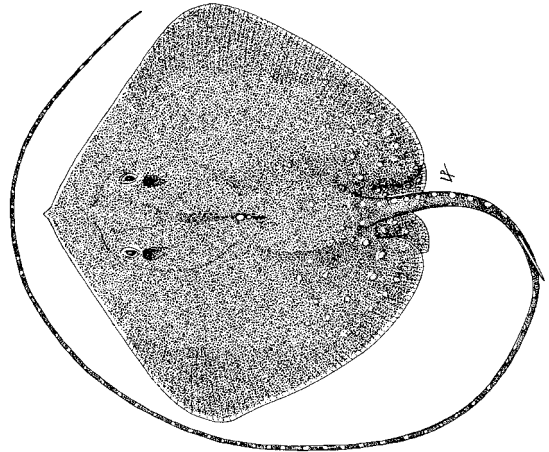
Local name(s): N: Shepwa yedatuvi; S: Taa nyenga, Taa karuwe (K).

Habitat: Shallow inshore waters over sandy and muddy bottoms down to 50 m.

Fisheries: Lines, Seines, Bottom trawls.

Distinctive Characters: Disc slightly wider than long, mostly naked, with a mid-dorsal band of small flattened denticles in adults, extending on to tail base; tail several times longer than disc without upper or lower folds.

Colour: Light brown above, white below; numerous transverse bands of dark and light brown on tail (may be obscure on large individuals).



Size: To 200 cm (TL)

Himantura uarnak (Gmelin, 1789)

FAO names: Honeycomb stingray (En)

Pastenague léopard (Fr)

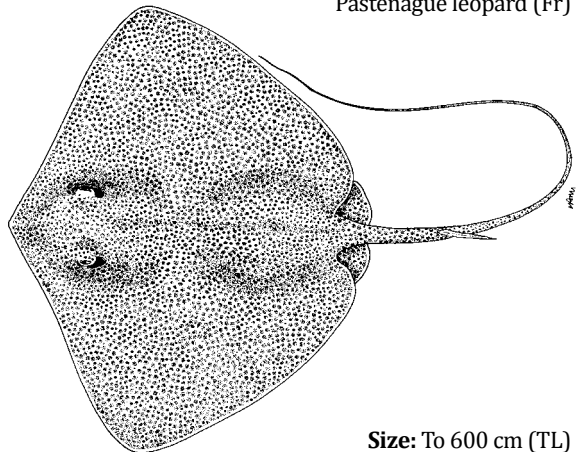
Local name(s): N: Shepwa tuvi; S: Taa chui (M), Taa karuwe(K).

Habitat: Coastal environments down to 50 m.

Fisheries: Lines.

Distinctive Characters: Snout sharply pointed; disc with narrowly rounded outer corners; tail long, slender and nearly 3 times body length when intact, with no caudal finfolds; disc slightly wider than long, without thorns but with band of flat denticles along midback (in adults); usually 1 medium-sized sting on tail.

Colour: Conspicuous dark spots on a light brown disc; spots well-spaced in young but crowded to form a reticulated pattern in adults, white ventrally; tail marked with bands of black and white.



Size: To 600 cm (TL)

Neotrygon kuhlii (Müller & Henle, 1841)

FAO names: Blue-spotted stingray (En)

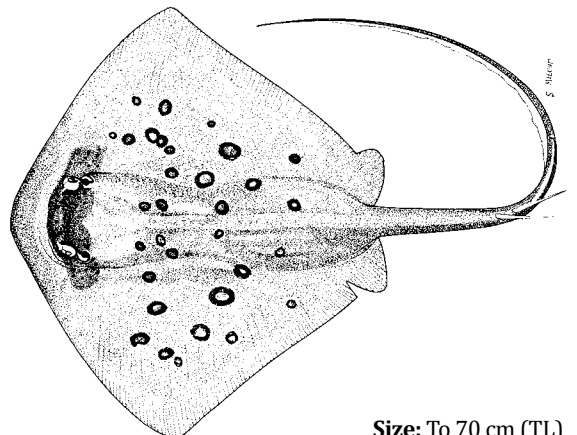
Local name(s): N: Shepwa yeda; S: Taa nyenga, Taa karuwe (K).

Habitat: Rather deep coastal waters down to 90 m.

Fisheries: Lines, Bottom trawls.

Distinctive Characters: Snout very short and broadly angular; disc slightly wider than long, largely naked; tail naked, length equal to, or slightly greater than disc; a small dorsal finfold above the ventral fold; lower tail fold slender.

Colour: Disc reddish-brown with blue centered bright ocelli and scattered black spots dorsally, white ventrally; tail with conspicuous black and white rings.



Size: To 70 cm (TL)

Pastinachus sephen (Forsskål, 1775)

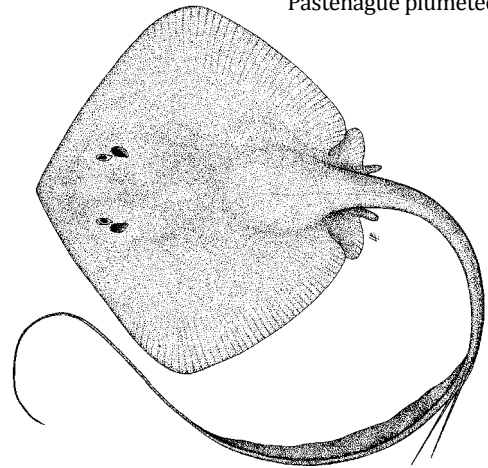
Local name(s): N: Shepwa shepwekuti; S: Taa (M), Taa maji (K).

Habitat: Coastal waters in lagoons, reef flats, and reef faces and estuaries down to 60 m.

Fisheries: Bottom trawls.

Distinctive Characters: A large, plain, dark stingray with an angular snout and pectoral disc; tail long and broad-based, less than twice body length, and with no upper caudal finfold but with high lower caudal finfold, 2 to 3 times of tail depth but not reaching tail tip; no large thorns; 1 or 2 long stings on tail, further behind tail base than in most stingrays.

Colour: Disc dark-brown or black above, white below; tail black with no conspicuous markings.



Size: To 180 cm (DW), 300 cm (TL)

Taeniura lymma (Forsskål, 1775)

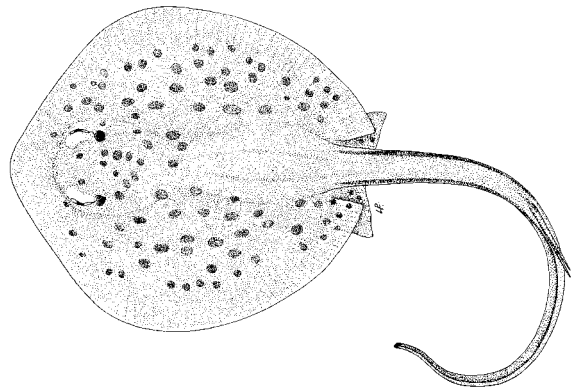
Local name(s): N: Shepwa nundwi, Shepwa mawe; S: Taa (M), Taa maji (K).

Habitat: Sandy bottoms of coastal waters down to 20 m.

Fisheries: Lines.

Distinctive Characters: Snout rounded and angular, disc with broadly rounded outer corners; tail stout, tapering and less than twice body length when intact, with a broad lower caudal finfold reaching the tail tip; disc with no large thorns but with small, flat denticles along midback (in adults); usually 1 medium-sized sting on tail further behind base than in most stingrays.

Colour: Golden-brown with blue spots on disc and 2 broad blue bands on tail.



Size: To 30 cm (DW), 70 cm (TL)

Taeniura meyeni Müller & Henle, 1841

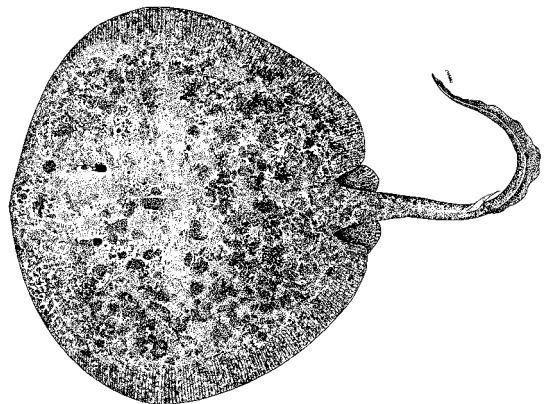
Local name(s): N: Shepwa kuti; S: Taa (M), Taa maji (K).

Habitat: Benthic around coral reef habitats and on sand substrates from the surf zone to 439 m.

Fisheries: Lines, Bottom trawls.

Distinctive Characters: Body flattened into round disc; small mouth with pavement-like teeth; venomous barbs near base of tail, which is hardly longer than disc; lower tail-fold prominent extending to tail tip.

Colour: Golden-brown with blue spots on disc and 2 bands on tail.

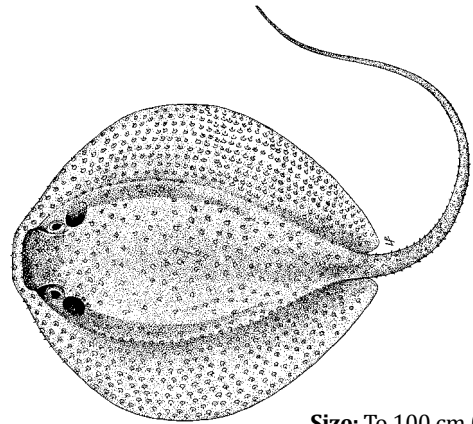


Size: To 180 cm (DW), 330 cm (TL)

Size: To 180 cm (DW), 330 cm (TL)

Urogymnus asperrimus (Bloch & Schneider, 1801)

FAO names: Porcupine ray (En)

Local name(s): N: Shepwa; S: Taa (M/K).**Habitat:** Demersal, in inshore waters.**Fisheries:** Lines, Bottom trawls.**Distinctive Characters:** A heavily armored stingray lacking a venomous barb; young with large, flat denticles on upper surface, and large juveniles and adults with additional sharp conical thorns and small pointed denticles; very thick elongated disc with broadly rounded outer corners; snout broadly rounded and tail slender, about as long as body and without finfolds.**Colour:** Disc light grey or whitish above, white below; tail tip blackish.

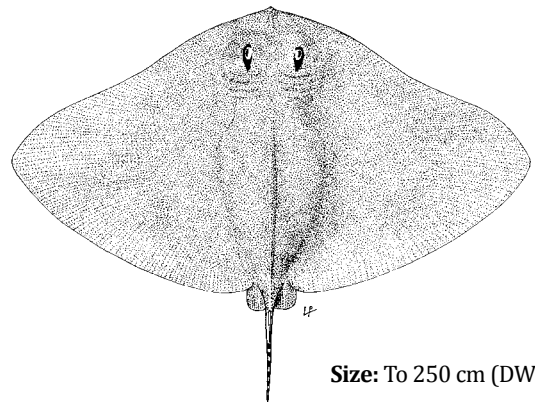
Size: To 100 cm (DW)

GYMNURIDAE

Butterfly rays

Gymnura poecilura (Shaw, 1804)

FAO names: Long-tailed butterfly ray (En)

Local name(s): N: Shepwa ngozi; S: Taa (M/K).**Habitat:** Offshore waters, on sandy bottoms and banks.**Fisheries:** Bottom trawls, Trammel nets.**Distinctive Characters:** No tentacles at rear angle of spiracle; tail spine usually present; tail relatively short.**Colour:** Tail distinctly cross-banded.

Size: To 250 cm (DW)

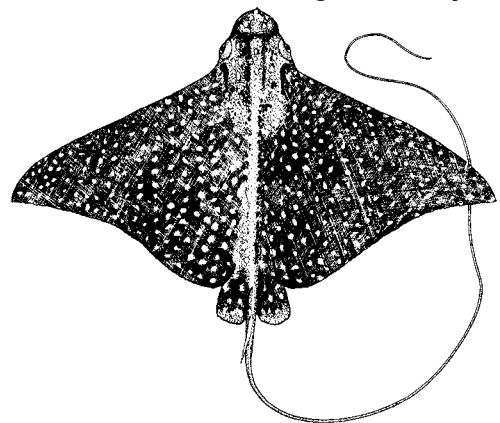
MYLIOBATIDAE

Eagle rays – Cownose rays – Manta rays – Devil rays

Aetobatus narinari (Euphrasen, 1790)

FAO names: Spotted eagle ray (En)

Aigle de mer léopard (Fr)

Local name(s): N: Shepwa chenga/Kipungu/Kipungu ndege/Shitezi; S: Kipungu (M/K).**Habitat:** Coastal waters, down to 60 m.**Fisheries:** Hooks and Line, Harpoons.**Distinctive Characters:** Snout flat and rounded like a duck's bill; a thick head, and a pectoral disc with sharply curved, angular corners, and no caudal fin; jaws usually with a single row of flat, chevron-shaped teeth; each tooth a crescent-shaped plate joined into a band.**Colour:** Disc blue or black above with numerous white spots or rings on a dark background; white below.

Size: To 300 cm (DW), 880 cm (TL)

Manta birostris (Walbaum, 1792)

Local name(s): N: Shepwa chenga; S: Taa tenga (M), Taa pinjo (K).

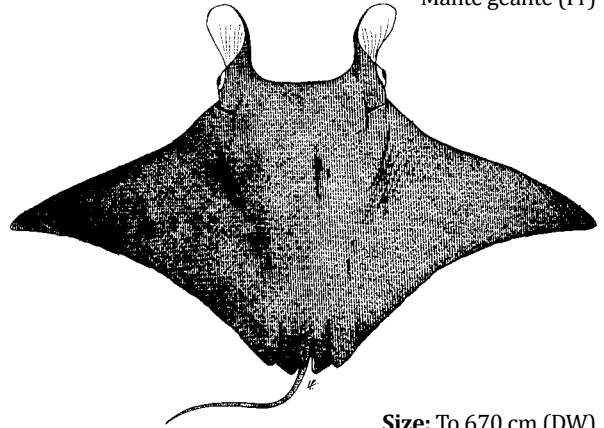
Habitat: Pelagic, in coastal and oceanic waters.

Fisheries: Lines.

Distinctive Characters: A giant ray having an extremely broad head with long head fins and a terminal mouth; upper surface of disc covered with denticles, and tail usually without a spine.

Colour: Reddish or greenish-brown to black above, often with white patches on shoulders; underside white, edged with grey.

FAO names: Giant manta (En)
Mante géante (Fr)



Size: To 670 cm (DW)

Mobula eregoodootenkee (Bleeker, 1859)

Local name(s): N: Shepwa; S: Taa tenga (M), Taa pinjo (K).

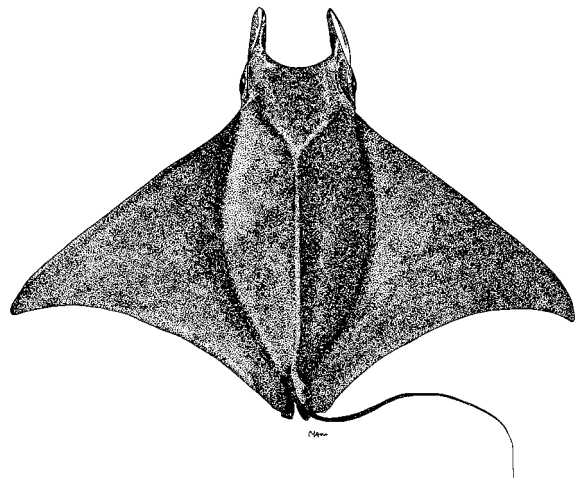
Habitat: Pelagic, in coastal and oceanic waters.

Fisheries: Lines, Gillnets, Harpoons.

Distinctive Characters: Large protruding flaps in front of mouth; disc wide and wing-like; small dorsal fin at base of tail which has rudimentary or no spines; mouth on lower surface of head, teeth minute; head and cephalic fins elongate; cephalic fin length more than 16% of disc width.

Colour: Brownish-grey above, whitish below; underside of pectorals with semicircular black blotch along middle of anterior edge.

FAO names: Longhorned mobula (En)



Size: To 100 cm (DW)

Mobula kuhlii (Müller & Henle, 1841)

Local name(s): N: Shepwa chenga; S: Taa tenga (M), Taa pinjo mweuzi (K).

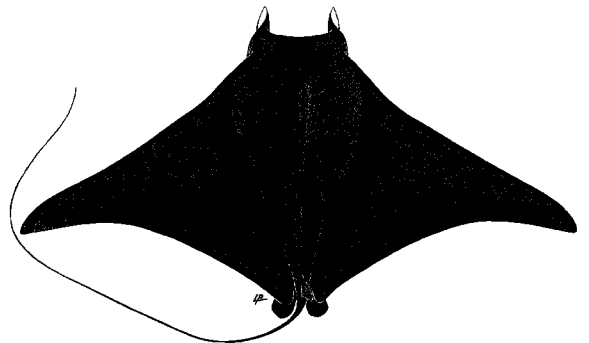
Habitat: Pelagic, occurs in coastal and oceanic waters.

Fisheries: Lines, Gillnets, Harpoons.

Distinctive Character: Large protruding flaps in front of mouth; disc wide and wing-like; small dorsal fin at base of a slender tail with or without rudimentary spines; mouth on lower surface of head; teeth minute; cephalic fin length less than 16% of disc width.

Colour: Grey-brown to blue black above, white below.

FAO names: Lesser devilray (En)
Petit diable (Fr)



Size: To 100 cm (DW)

***Rhinoptera javanica* Müller & Henle, 1841**

Local name(s): N: Chenga, Kipungu, Kedu; S: Kipungu (M/K).

Habitat: Occurs in coastal waters, gregarious, often occurring in large numbers.

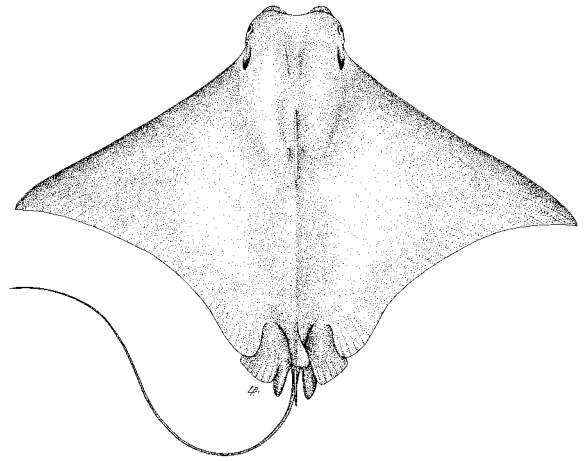
Fisheries: Hooks and Line, Shore Seines, Set nets, Bottom trawls.

Distinctive Characters: Apices of disc strongly falcate; tail about length of disc, tail spine present; subrostral lobes present.

Colour: Disc plain brown above, white below; no conspicuous markings.

FAO names: Flapnose ray (En)

Mourine javanaise (Fr)



Size: To 150 cm (DW)