

# IMPORTANT COASTAL FISHERY SPECIES OF LIBERIA



## A POCKET GUIDE by FAO FishFinder

*Species Identification and Data Programme*

Psomadakis, P.N. 2013. *Important coastal fishery species of Liberia. A pocket guide*. FAO FishFinder Programme. Rome, FAO. 44 cards + CD-ROM.

Programme Manager: Johanne Fischer

Colour illustrations, images, graphic design and cover: Emanuela D'Antoni

**Acknowledgements:** Produced with support of the West Africa Regional Fisheries Program in Liberia (WARFP-Liberia) funded by the World Bank under the Liberian Bureau of National Fisheries (BNF). Special thanks go to Lawrence Issah Braimah (WARFP-Liberia) for initiating and assisting the production of this pocket guide. Thanks also go to William Boeh, Momo Johnson, Mildred Morris and Nicholas Nipey (BNF) and all cooperating fishers in Liberia for assisting with the field work, testing the guide and sharing valuable information. This guide also benefited from the scientific advice and review by Johanne Fischer and Edoardo Mostarda.

**For feedback and questions contact:**

**FishFinder Programme**, Marine and Inland Fisheries Branch (FIRF). Food and Agriculture Organization of the United Nations, Rome, Italy.

**Website:** [www.fao.org/fishery/fishfinder/en](http://www.fao.org/fishery/fishfinder/en)

**Email:** [FishFinder@fao.org](mailto:FishFinder@fao.org)

## Important Note

This pocket guide is the first species identification tool for marine fishery resources in Liberia and was produced based on information collected by the author during a field trip to Liberia in January 2013. The 36 species included were selected because of primary importance for the coastal marine fisheries in the country. It should be noted that there are many more marine species exploited by coastal fisheries in Liberia than could not be included here.

The format of the pocket guide was developed for use by non-taxonomists and to facilitate communication with practitioners (fishers and marketers). For this purpose, the FishFinder Programme assigns great importance to species local names. Here, the most common local Liberian name of a species is prioritized; additional names in use are also listed by the location in which they were encountered. Users of this pocket guide should be aware that the same local name often applies to several species and that one species may be known by more than one local name (where known to the author, this is indicated on the cards).

To aid in quick identification, the pocket guide includes a colour-coded grouping of species based on simple morphological characteristics (fins) as well as symbols for maximum sizes, ecological preferences and catch methods.

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned. The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

ISBN 978-92-5-107826-6 (print)

E-ISBN 978-92-5-107827-3 (PDF)

© FAO, 2013

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way. All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via [www.fao.org/contact-us/licencerequest](http://www.fao.org/contact-us/licencerequest) or addressed to [copyright@fao.org](mailto:copyright@fao.org). FAO information products are available on the FAO website ([www.fao.org/publications](http://www.fao.org/publications)) and can be purchased through [publications-sales@fao.org](mailto:publications-sales@fao.org).

## **Liberia background information**

Liberia is located in the Eastern Central Atlantic region of the Gulf of Guinea between 4°34'N and 6°N, and 7°W and 9°26'W. It has a coastline of about 579 kilometres stretching from Grand Cape Mount County in the north (adjacent to Côte d'Ivoire) to Maryland County in the south (next to Sierra Leone). The continental shelf averages 34 kilometres in width and is generally wider in central-southern Liberia and narrower in the north.

Hydrographically, the Liberian marine waters are within the so-called "Guinea Surface Waters", which are characterized by a shallow and stagnant year-round thermocline of 12-14 m depth and 26-28°C surface temperature, low salinity (32‰) and low nutrient levels. As a consequence, there is a lack of renewal of water, low productivity and dominance of river influence as opposed to upwelling.

The Liberian fisheries comprise industrial (typically trawl fisheries) and diverse artisanal sectors. According to the FAO country profile of Liberia, there are about 11 250 persons involved in fisheries, including sport fishers, fish dealers and processors. About 60% of the total domestic fish catch is landed by the artisanal subsector composed of small Kru canoes (Liberian and Tongolese ancestry) and the larger Fanti canoes (Ghananian ancestry). Since the year 2000, Liberia has reported average annual marine catches of just over 8 000 tonnes to FAO.



Map of Liberia showing fishery landing sites at which data were collected for the compilation of this guide.

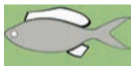
## Quick Access Keys:

The marine species indicated in this pocket guide have been grouped using easily identifiable morphological characteristics, i.e. the dorsal (and anal) fins. The grouping does not reflect taxonomic classification and is only intended to allow users to quickly find a species. Each group has been colour-coded for easy recognition within the card set.

### Bony Fishes



One short dorsal fin



One long dorsal fin, anal fin shorter than one-third of body length



Two dorsal fins



One long dorsal fin, anal fin at least one-third of body length



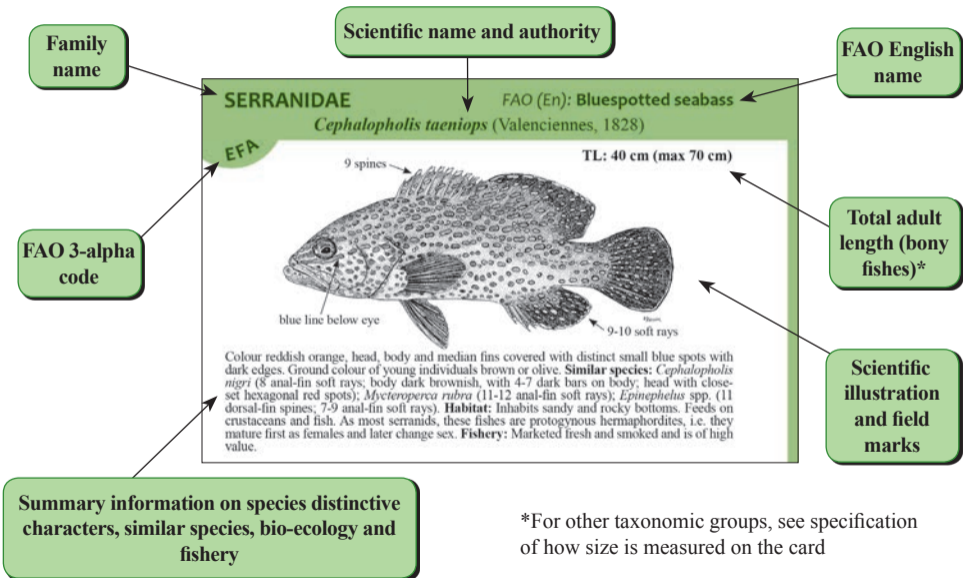
### Other Groups



All other species



# HOW TO USE THIS GUIDE





Local name most commonly in use in Liberia

Additional local names (by landing sites\*)

Bio-ecology and fishing methods

Local Name(s)  
**Chicken soup fish**  
Kru-Kru (Pi)

Photo collage

*Cephalopholis taeniopis*

Photo of the species in its natural environment or immediately after capture

Scientific name

Quick access key

\*Landing sites are represented by their first two letters (see map)

## Symbols used:

### Common Adult Size (Total Length)



$\leq 30$  cm



31–60 cm



61–90 cm



91–150 cm



$> 150$  cm

### Bio-ecology



hard substrates and reefs



schools, preferred locations



preferred locations

m

maximum depth reported

## Fishing Methods



bottom trawls



hooks and line, trolling



traps



purse seines / ring nets



by hand



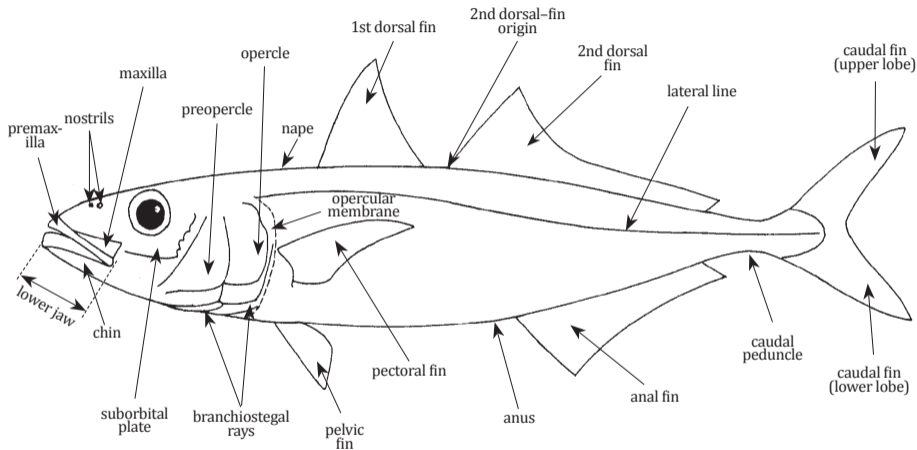
beach seine



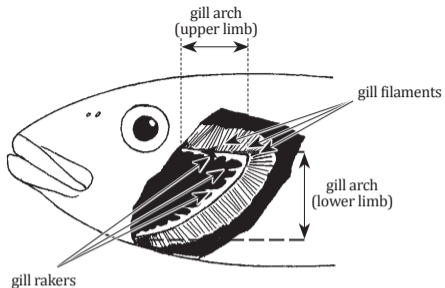
gill/shark nets



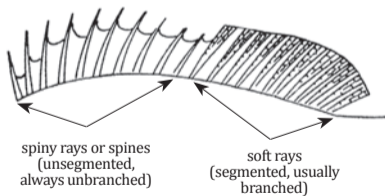
artisanal drift net



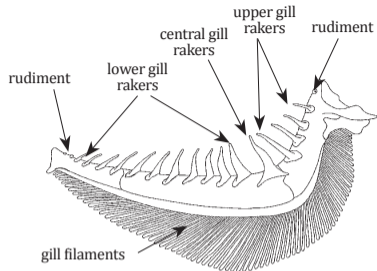
**General nomenclature of a bony fish external morphology**



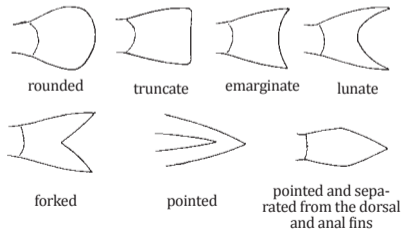
**Position of 1st left gill arch with gill cover removed**



**Example of a continuous dorsal fin of a spiny-rayed fish**



**Structures of 1st left gill**

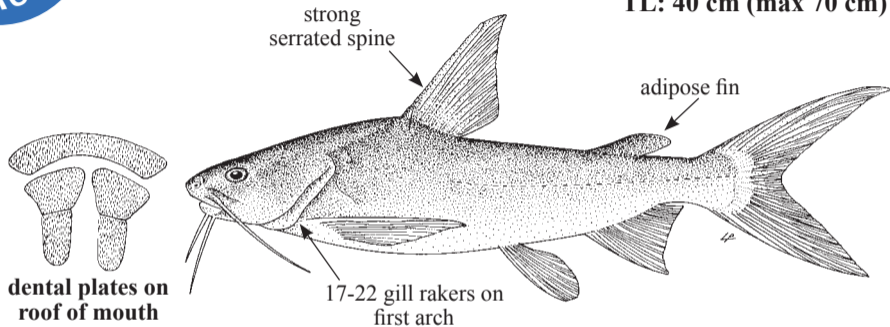


**Most common types of caudal fins**

*Arius latiscutatus* Günther, 1864

AUR

TL: 40 cm (max 70 cm)



Head rounded, slightly flattened above covered by a rugose bony shield. Dark brown to greenish above lighter on lower sides. **Similar species:** *Arius parkii* (11-14 gill rakers on first gill arch; dental plates in 2 large oval patches separated by their own diameter or less); *A. heudelotii* (dental plates absent or in 1 or 2 small oval patches, if present distance between patches much greater than diameter of patch). **Habitat:** Coastal marine and brackish waters. Feeds on fish, benthic invertebrates, zooplankton, and detritus. Reproduction is highly specialized; the males incubate the eggs and brood young in their mouths. **Fishery:** Marketed fresh and smoked and is of high value.

## Local Name(s)

# Catfish

**Note:** “Catfish” is used for all *Arius* species occurring in the area.

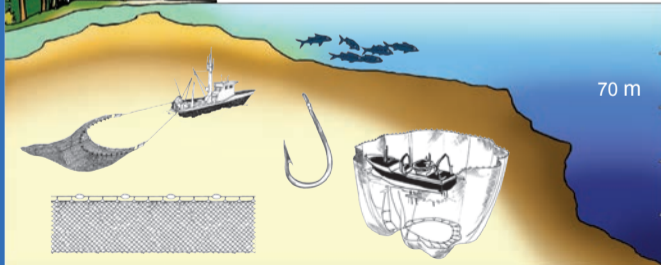


Photo: P.N. Psomadakis (FAO)

*Arius latiscutatus*



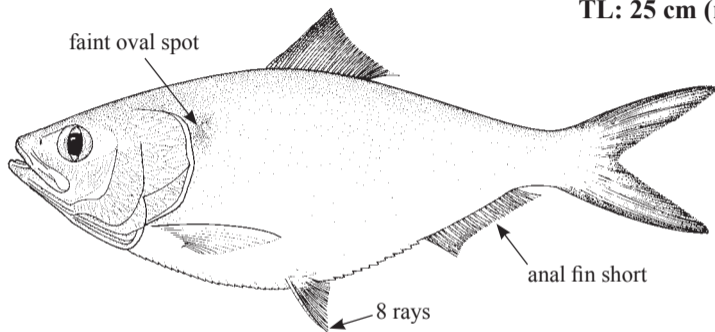
# CLUPEIDAE

FAO (En): Bonga shad

*Ethmalosa fimbriata* (Bowdich, 1825)

BOA

TL: 25 cm (max 45)



Body fairly deep and compressed. Dorsum blue-green, flanks silvery; golden areas on upper part of head; caudal fin deep chrome yellow, but upper and posterior margins grey. **Similar species:** *Ilisha africana* (anal fin long, its origin located at vertical through middle of dorsal-fin base; mouth directed upwards); *Sardinella maderensis* (9 pelvic-fin rays; caudal fin dark grey; posteriormost anal-fin rays enlarged). **Habitat:** Coastal marine waters, estuaries, lagoons and even rivers. Feeds mainly on phytoplankton filtered by very fine gill rakers. Undertakes seasonal reproductive migrations. **Fishery:** Fresh bonga is consumed in urban areas, while the smoked products have a large market in rural areas.



Local Name(s)

**Bonga**



*Ethmalosa fimbriata*

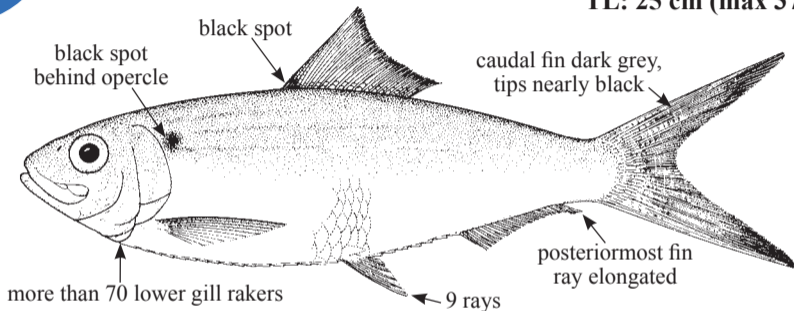
Photo: P.N. Psomadakis (FAO)



### *Sardinella maderensis* (Lowe, 1838)

SAE

TL: 25 cm (max 37 cm)



Body elongate, moderately compressed, variable in depth. Dorsum blue-green, lower flanks silvery, with faint gold midlateral line. Dorsal fin yellow with dusky margin. **Similar species:** *Sardinella aurita* (10 pelvic-fin rays; a black spot on posterior margin of opercle; no black spot at dorsal-fin origin); *S. rouxi* (8 pelvic-fin rays; 34-40 lower gill rakers; caudal fin pale yellow with a dusky posterior margin); *Pellonula* spp. (teeth on premaxillary and dentaries; flanks with silver stripe; posteriormost anal-fin rays not enlarged). **Habitat:** Pelagic, in coastal waters, schooling at the surface or near the bottom; highly migratory. Feeds on a variety of small planktonic organisms. **Fishery:** Marketed fresh and smoked. A very popular foodfish in the area.

## Local Name(s)

# Bonny

**Note:** “Bonny” is used for all *Sardinella* species occurring in the area.

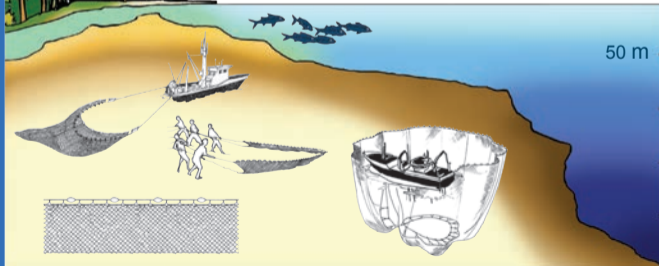


Photo: P.N. Psomadakis (FAO)

*Sardinella maderensis*



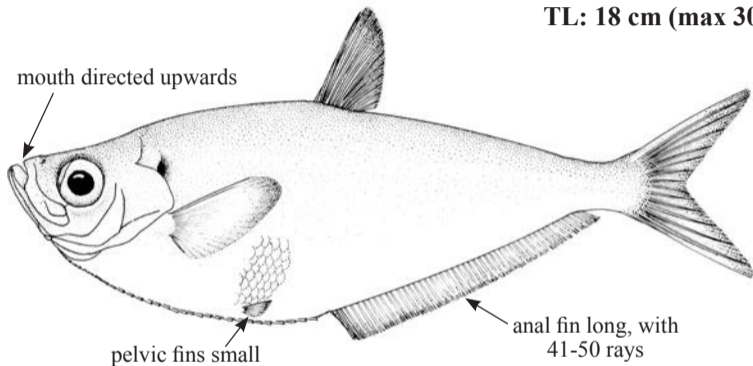
# PRISTIGASTERIDAE

FAO (En): West African Ilisha

*Ilisha africana* (Bloch, 1795)

ILI

TL: 18 cm (max 30 cm)



Body deep and compressed, with complete series of sharp and serrate scutes along abdomen from gill opening to anus. Dorsum grey, flanks pale grey or silver. **Similar species:** Clupeidae (anal-fin short, with less than 28 fin rays; pelvic fins inserting below dorsal-fin base; mouth terminal). **Habitat:** Occurs in inshore waters, along sandy beaches, in estuaries to nearly freshwater; caught near bottom or at the surface. Feeds on small planktonic animals. Until recently, the pristigasterid fishes were considered a subfamily of the Clupeidae. **Fishery:** Marketed fresh and smoked and is of low value.

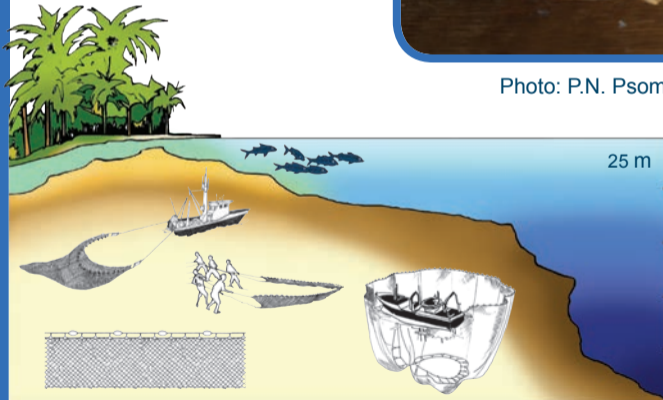
Local Name(s)

**Gblapleh**



*Ilisha africana*

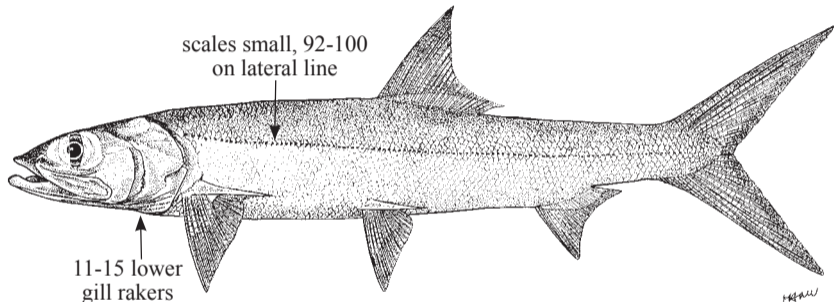
Photo: P.N. Psomadakis (FAO)



*Elops senegalensis* Regan, 1909

CEG

TL: 40 cm (max 90 cm)



Body elongate, fusiform, oval in cross-section. Mouth terminal, upper jaw reaching well beyond eye. Back blue-grey, sides bright silver, all fins with some pale yellow. **Similar species:** *Elops lacerta* (17-19 lower gillrakers; 74-83 scales in lateral line); *Albula* spp. (snout conical; maxilla not extending beyond level of eye); *Megalops atlanticus* (scales large; dorsal fin with a greatly prolonged final ray). **Habitat:** Inhabits shallow coastal waters. Feeds mainly on crustaceans and small fishes. **Fishery:** Eaten but not prized because of their numerous small bones. Marketed fresh and smoked.

Local Name(s)

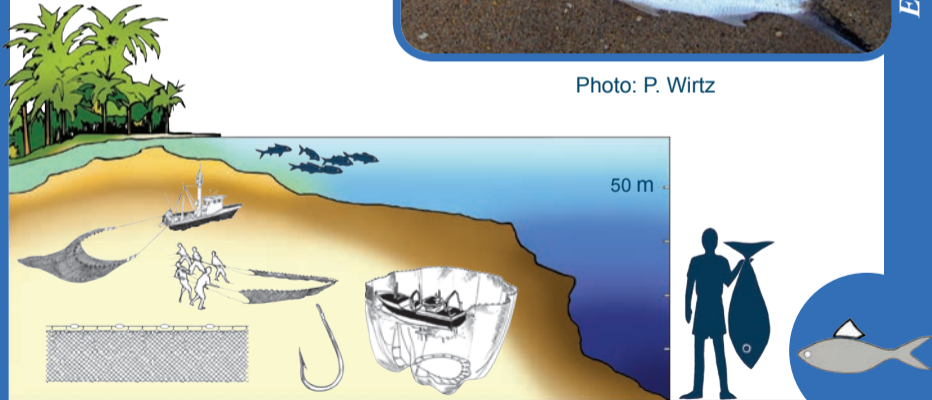
# Ten-pound

**Note:** “Ten-pound” is used for all *Elops* species occurring in the area.



*Elops senegalensis*

Photo: P. Wirtz



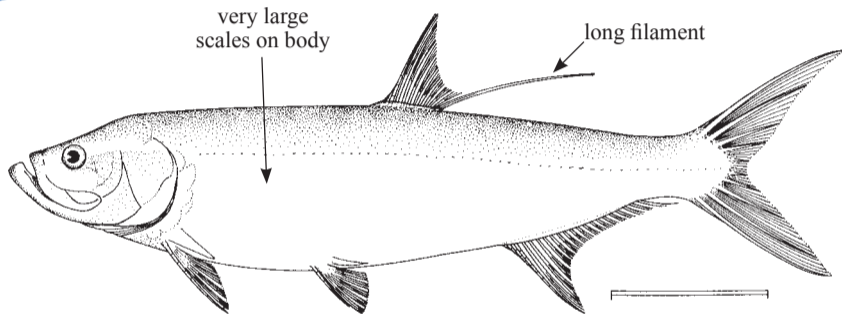
# MEGALOPIDAE

FAO (En): Tarpon

*Megalops atlanticus* Valenciennes, 1847

TAR

TL: 130 cm (max 250 cm)



Body moderately elongate and highly compressed. Mouth oblique, with lower jaw prominently projecting. **Similar species:** *Elops* spp. (last dorsal-fin ray not produced into a long filament; scales small). **Habitat:** Pelagic; the young are found in shallow brackish and fresh waters. Feeds mainly on small schooling fishes. Tarpon are relatively long-lived (> 50 years) and are among the most popular recreational fishes in the world. They are facultative air-breathers, have a leptocephalus larva (as in bonefishes and in eels) and spawn offshore. Swims in large groups. **Fishery:** Marketed mainly fresh. The flesh is fatty and highly esteemed.



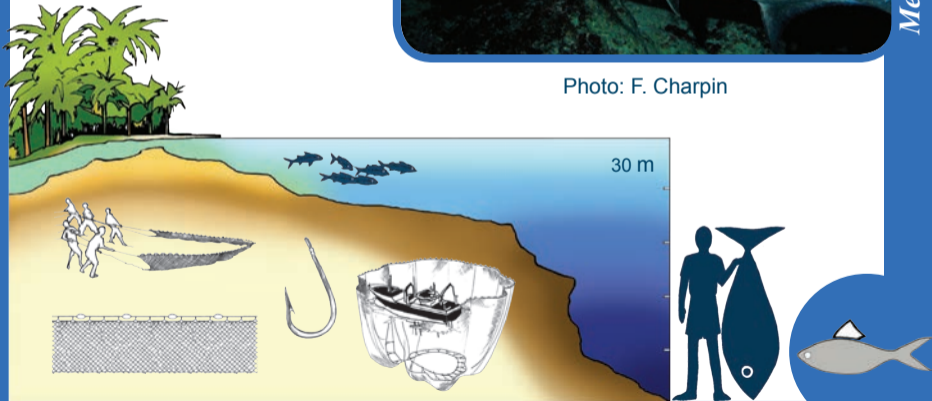
Local Name(s)

# Tarpon



*Megalops atlanticus*

Photo: F. Charpin



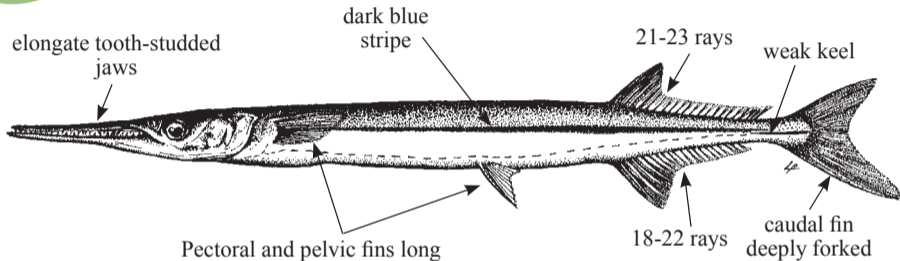
# BELONIDAE

FAO (En): Hound needlefish

*Tylosurus crocodilus crocodilus* (Péron and Lesueur, 1821)

BTS

TL: 90 cm (max 150)



Body rounded or squarish in cross-section. Colour dark bluish green above, silvery below. Juveniles have an elevated black lobe in the posterior part of the dorsal fin which is lost with growth. Pectoral and pelvic fins long (6.6-8.3 and 7.3-10.6 times in body length, respectively). **Similar species:** *Tylosurus acus* (pectoral and pelvic fins short (8.0-12.4 and 10.0-14.1 times in body length, respectively); *Ablennes hians* (body greatly compressed laterally with 12-14 dark spots along sides; 24-28 anal-fin rays); *Strongylura senegalensis* (13-16 dorsal-fin rays; caudal fin emarginate); Hemiramphidae (only lower jaw prolonged; no needle-sharp teeth in jaws). **Habitat:** Pelagic in nearshore surface waters. It tends to leap out of the water when chasing prey or escaping from a predator/s. **Fishery:** Consumed locally fresh and smoked. As for other needlefishes, flesh excellent.

Local Name(s)

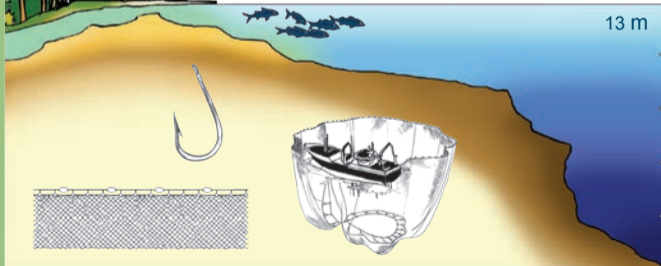
# Susuah

Gar fish (Gr; Ro)



Photo: O. Seycek

*Tylosurus c. crocodilus*



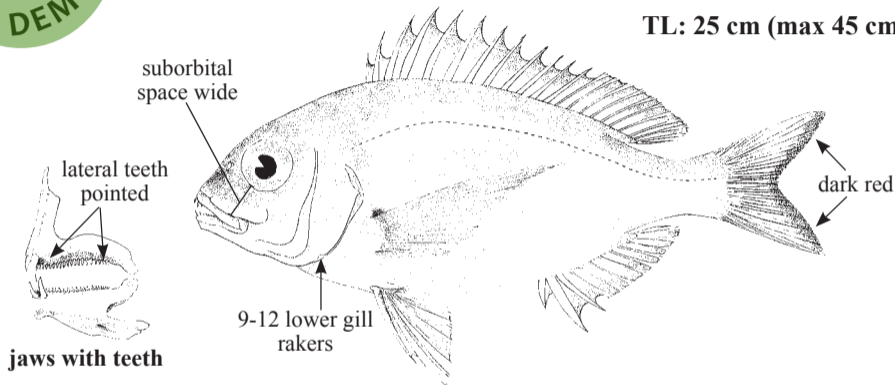
# SPARIDAE

FAO (En): Morocco dentex

*Dentex maroccanus* Valenciennes, 1830

DEM

TL: 25 cm (max 45 cm)

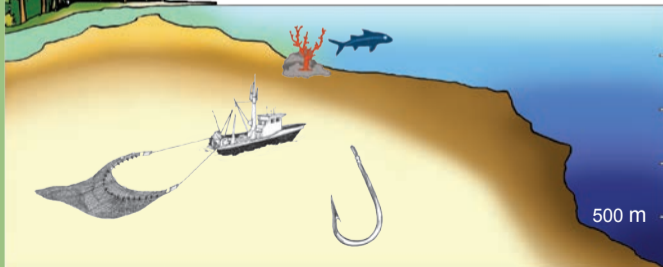


Body oval and compressed. Several rows of canine-like teeth, the uppers visible when mouth is closed. Colour light red with silvery reflections. Males display a more intense coloration during the spawning season. **Similar species:** *Dentex angolensis* (caudal fin uniform reddish; 9-10 lower gill rakers); *D. congoensis* (caudal fin uniform reddish; 12-14 lower gillrakers; suborbital space narrow); *Pagrus* spp. (molar-like teeth posteriorly). **Habitat:** Demersal, inhabiting various types of bottoms but preferring gravel or rubble. Feeds mainly on crustaceans and fish. **Fishery:** Highly esteemed food fish marketed fresh and smoked.

## Local Name(s)

# Snapper

**Note:** In Liberia “Snapper” is used for *Dentex*, *Pagellus* and *Pagrus*. FAO uses this name only for some lutjanid species.



*Dentex maroccanus*

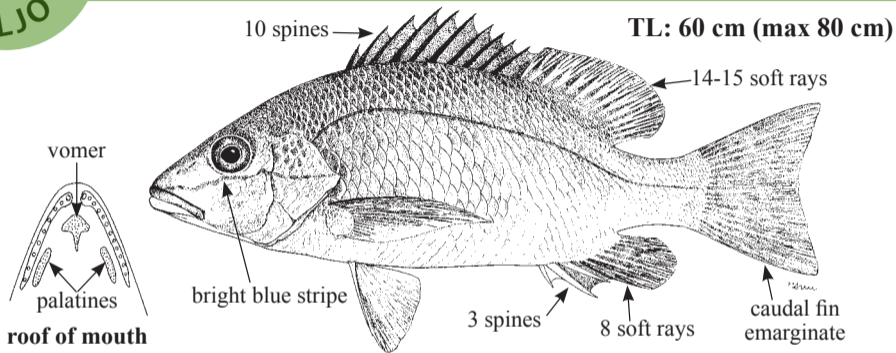
Photo: P.N. Psomadakis (FAO)

# LUTJANIDAE

FAO (En): Gorean snapper

*Lutjanus goreensis* (Valenciennes, 1830)

LJO



Body oblong in shape, moderately compressed. Jaw teeth conical and sharp with upper canines notably enlarged. Colour vivid pink grading to whitish on ventral portion. Small specimens from inshore areas are brownish. About 7-9 gill rakers on first gill arch. **Similar species:** *Apsilus fuscus* (10 dorsal-fin soft rays; caudal fin deeply forked); *L. fulgens* (snout short, much less than eye diameter; 12-15 gill rakers); Other *Lutjanus* spp. (vomer without posterior extension; no blue stripe on head). **Habitat:** Rocky and other hard bottoms near coral reefs; juveniles in estuaries and rivers. A predatory fish, usually active at night, dawn, and dusk. **Fishery:** Excellent food fish, marketed mainly fresh.

## Local Name(s)

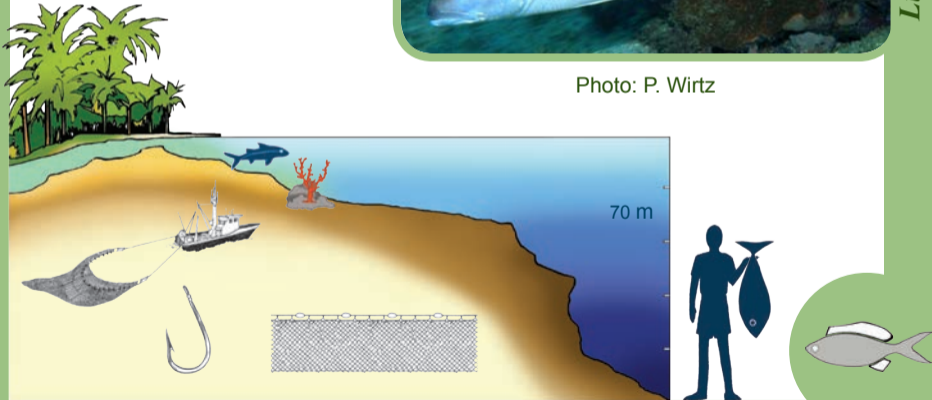
# Grouper

**Note:** In Liberia “Grouper” is used for *Lutjanus* species. FAO uses this name only for some serranid species.



*Lutjanus goreensis*

Photo: P. Wirtz

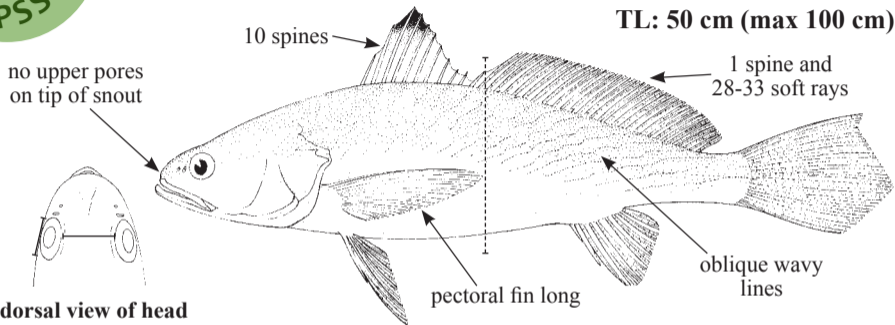


# SCIAENIDAE

FAO (En): Cassava croaker

*Pseudotolithus senegalensis* (Valenciennes, 1833)

PSS



Head and nape evenly arched; eye diameter less than the interorbital width. Silvery grey to yellowish on back and sides, withinsh ventrally. **Similar species:** *Argyrosomus* spp. (3-5 pores on tip of snout; no oblique lines on body); *Pseudotolithus typus* (head elongate, conical with concave nape; eye diameter greater than the interorbital width; 10 dorsal-fin spines); *P. senegallus* (25-27 dorsal-fin soft rays; pectoral fin short, its tip not reaching level of soft portion of dorsal fin).

**Habitat:** Inhabits muddy and sandy bottoms in coastal waters. They are called croakers for the repetitive croaking sounds they make. **Fishery:** Marketed fresh and smoked. A valuable foodfish, very much esteemed by Liberian people.



## Local Name(s)

# Cassava fish

**Note:** Fishers distinguish a “short neck” (*P. senegalensis*) and a “long neck” (*P. typus*) cassava fish.

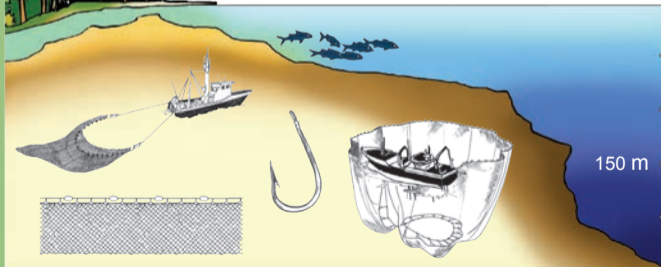


Photo: P.N. Psomadakis (FAO)

*Pseudotolithus senegalensis*

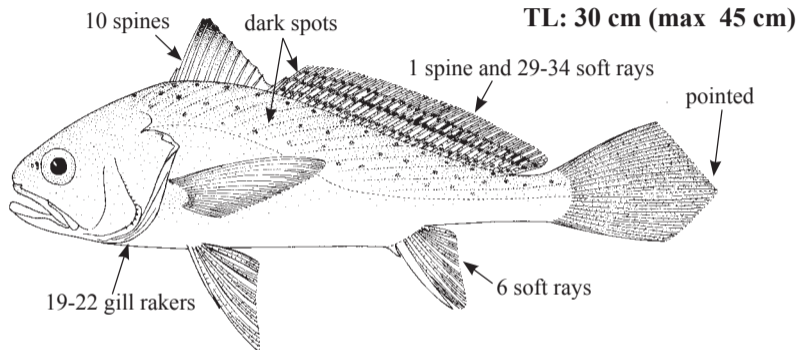


# SCIAENIDAE

FAO (En): Bobo croaker

*Pseudotolithus elongatus* (Bowdich, 1825)

PSE



Body rather elongate and compressed. Silvery grey with a reddish tint on back and sides. Belly, pelvic, anal and lower caudal fins pale. **Similar species:** *Pseudotolithus epipercus* (10 dorsal-fin spines; 35-39 dorsal-fin soft rays; body greyish dark with wavy lines); *P. moorii* (8-9 dorsal-fin spines; 25-27 dorsal-fin soft rays; body uniformly dark grey); *Pteroscion peli* (8-9 anal-fin soft rays; mouth strongly oblique). **Habitat:** Inhabits muddy bottoms in coastal waters. Found also in estuaries and coastal lagoons. Feeds mainly on shrimps and other crustaceans. **Fishery:** Marketed fresh and smoked and is of low value.

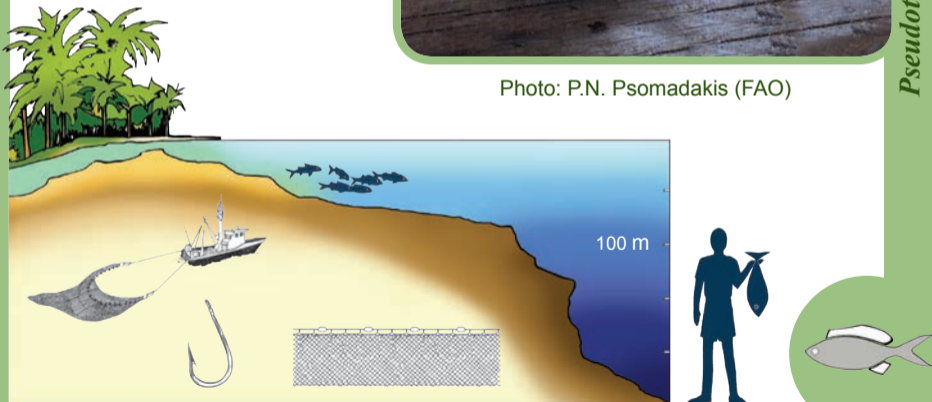
Local Name(s)

**White boy**



Photo: P.N. Psomadakis (FAO)

*Pseudotolithus elongatus*



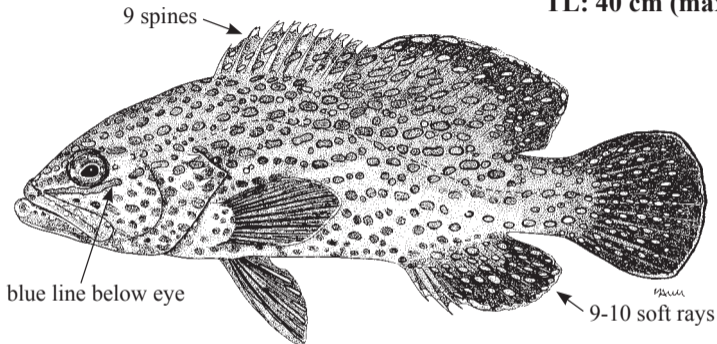
# SERRANIDAE

FAO (En): Bluespotted seabass

*Cephalopholis taeniops* (Valenciennes, 1828)

EFA

TL: 40 cm (max 70 cm)



Colour reddish orange, head, body and median fins covered with distinct small blue spots with dark edges. Ground colour of young individuals brown or olive. **Similar species:** *Cephalopholis nigri* (8 anal-fin soft rays; body dark brownish, with 4-7 dark bars on body; head with close-set hexagonal red spots); *Mycteroperca rubra* (11-12 anal-fin soft rays); *Epinephelus* spp. (11 dorsal-fin spines; 7-9 anal-fin soft rays). **Habitat:** Inhabits sandy and rocky bottoms. Feeds on crustaceans and fish. As most serranids, these fishes are protogynous hermaphrodites, i.e. they mature first as females and later change sex. **Fishery:** Marketed fresh and smoked and is of high value.

Local Name(s)

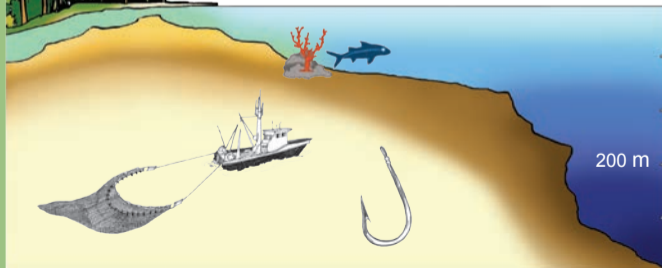
# Chicken soup fish

Kru-Kru (Pi)



Photo collage

*Cephalopholis taeniops*



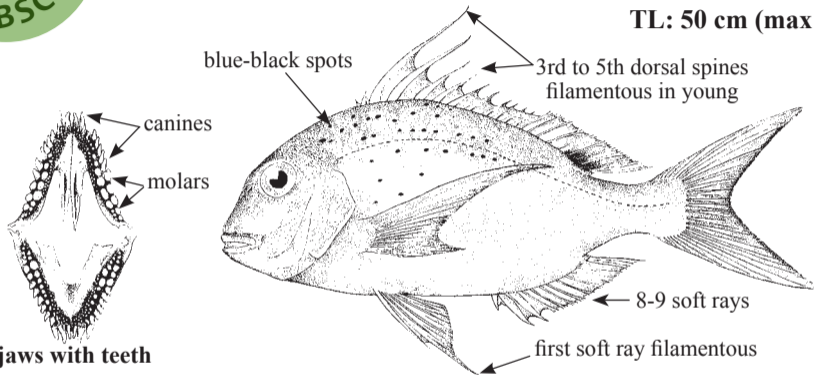
# SPARIDAE

FAO (En): **Bluespotted seabream**

*Pagrus caeruleostictus* (Valenciennes, 1830)

BSC

TL: 50 cm (max 72 cm)



Body oval, moderately deep and compressed. Colour pink with silvery reflections. **Similar species:** *Pagrus auriga* (4-5 dark red cross-bars on body [less visible in adults]; first soft ray of pelvic fins non-filamentous); *P. pagrus africanus* (dark red blotch at pectoral-fin axils; first soft ray of pelvic fins filamentous); *Pagellus bellottii* (10 anal-fin soft rays); *Dentex* spp. (no molar-like teeth in jaws). **Habitat:** Demersal, inhabiting hard bottoms (rocks and rubble). Older individuals in deeper waters, the young in inshore areas. Protogynous hermaphrodite, feeding on mussels and crabs, but also on fish. **Fishery:** Marketed fresh and smoked. Flesh is of high value.

## Local Name(s)

# Snapper

**Note:** In Liberia “Snapper” is used for *Dentex*, *Pagellus* and *Pagrus*. FAO uses this name only for some lutjanid species.

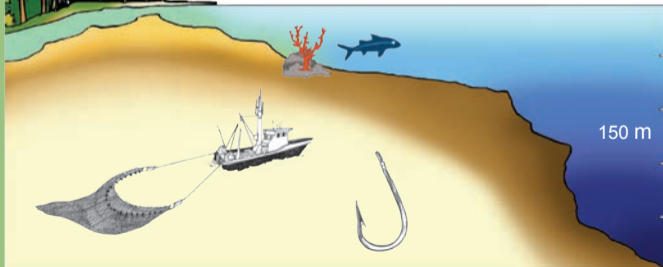


Photo: P.N. Psomadakis (FAO)

*Pagrus caeruleostictus*

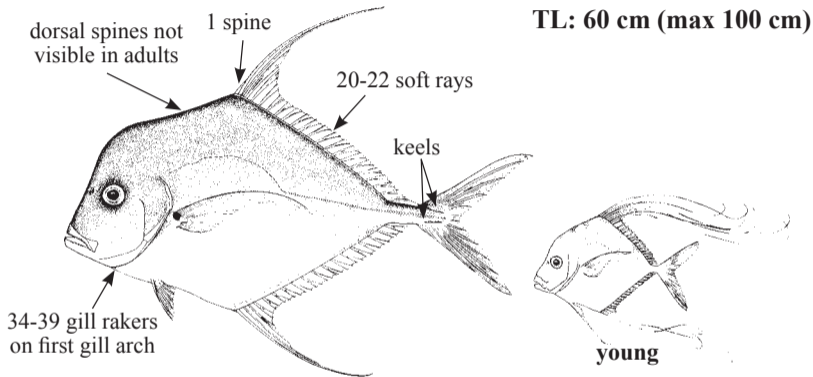


# CARANGIDAE

FAO (En): Alexandria pompano

*Alectis alexandrina* (Geoffroy Saint-Hilaire, 1817)

ALA



Body deep and very compressed. Mostly silvery with a light metallic bluish tinge on upper third of body and head. Young with 5 chevron-shaped bars on body. Body superficially naked, scales minute and embedded where present. **Similar species:** *Alectis ciliaris* (18-19 dorsal-fin soft rays; 18-22 total gill rakers on first arch); *Selene dorsalis* (23-24 dorsal-fin soft rays; second dorsal and anal-fin lobes not elongated). **Habitat:** Adults generally solitary and near the bottom; young usually pelagic and drifting. Feeds mainly on fish and squid. **Fishery:** Edibility good to excellent. Utilized fresh and smoked.



Local Name(s)

# Sand cavalla

Pojoe (Mo; Bu)

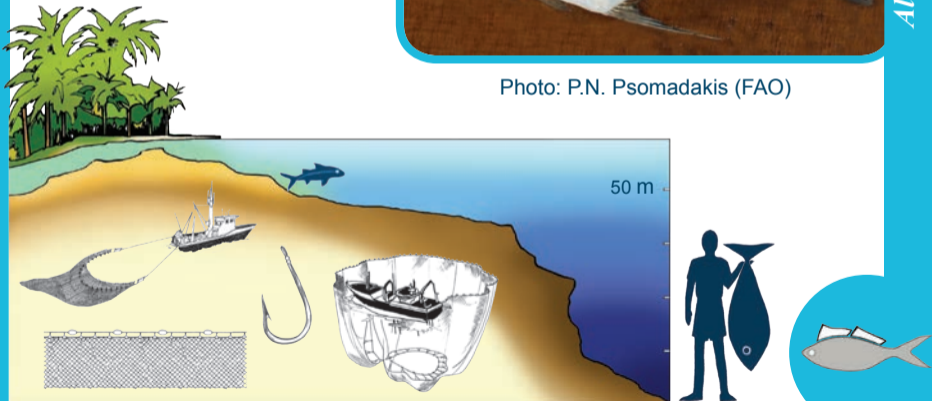
Bohead (Ro)

**Note:** "Pojoe" is also used for *Chloroscombrus chrysurus* and *Seriola carpenteri*.



*Alectis alexandrina*

Photo: P.N. Psomadakis (FAO)

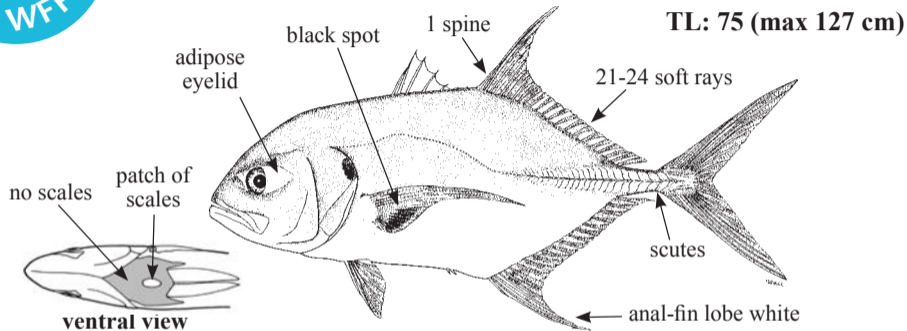


# CARANGIDAE

FAO (En): Longfin crevalle jack

*Caranx fischeri* Smith-Vaniz and Carpenter, 2007

WFF



Body elongate, deep, and moderately compressed. Upper jaw extending to below or beyond posterior margin of eye. Greenish to bluish or bluish black above and silvery white to yellowish below. Juveniles with about 5 dark bars on body. **Similar species:** *Caranx hippos* (19-20 dorsal-fin soft rays; anal-fin lobe yellow-orange); *C. crysos* (breast entirely scaled; upper jaw reaching to mid-eye); *C. senegallus* (breast entirely scaleless; upper jaw reaching to mid-eye; no black spot on pectoral fin). **Habitat:** Pelagic to demersal forming schools in coastal waters and estuaries. Feeds on fish, shrimp and other invertebrates. **Fishery:** Utilized fresh and smoked; bleeding upon landing improves taste.

Local Name(s)

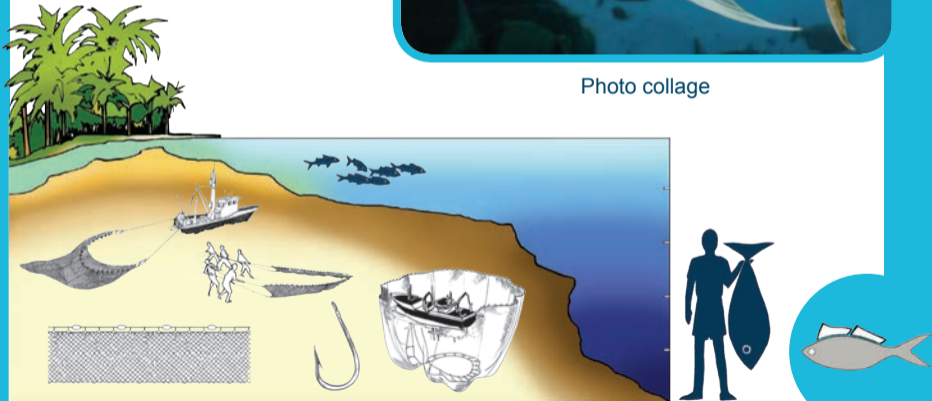
# Cavalla

**Note:** "Cavalla" is also used for *Caranx hippos*, *C. latus* and *Alectis alexandrina*.



*Caranx fischeri*

Photo collage



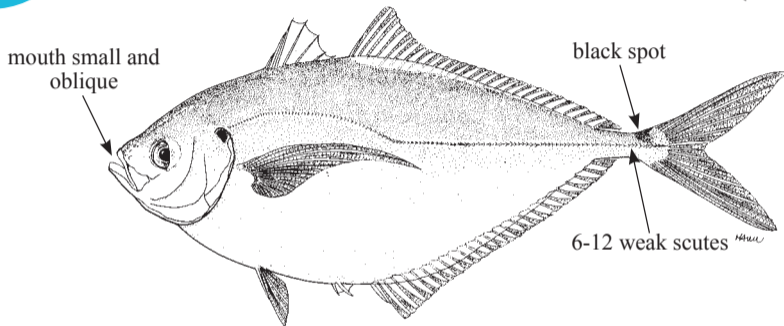
# CARANGIDAE

FAO (En): Atlantic bumper

*Chloroscombrus chrysurus* (Linnaeus, 1766)

BUA

TL: 25 cm (max 65 cm)



Body deep and very compressed with ventral side more convex than dorsal. Mouth small and oblique; upper jaw extending nearly to below anterior eye margin. Head and body dark above (metallic blue to iridescent green) and silvery on sides and belly. **Similar species:** None. **Habitat:** A schooling species, usually found in shallow water, both marine and estuarine, including mangrove-lined lagoons. Often gives a grunting sound when caught. The young occur at times far offshore. **Fishery:** Utilized fresh and smoked and is of low value.

## Local Name(s)

# Pojoe

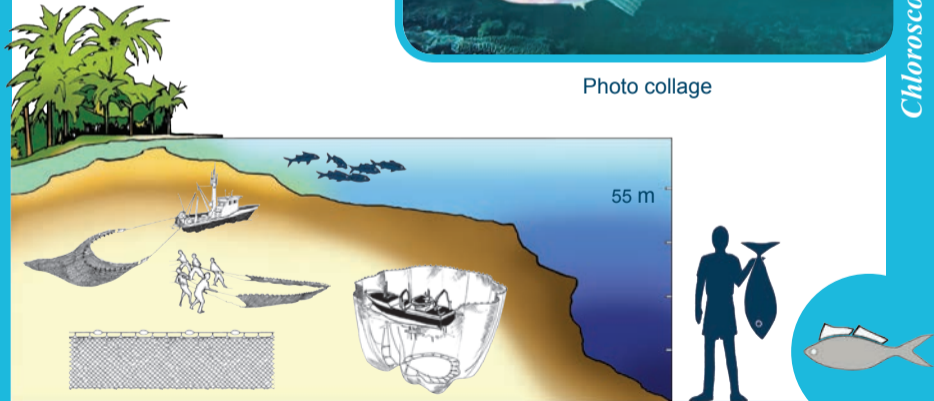
Petepe (Pi)

Yewon (Bu)

**Note:** "Pojoe" is also used for *Selene dorsalis* and other carangid species.



Photo collage



*Chloroscombrus chrysurus*

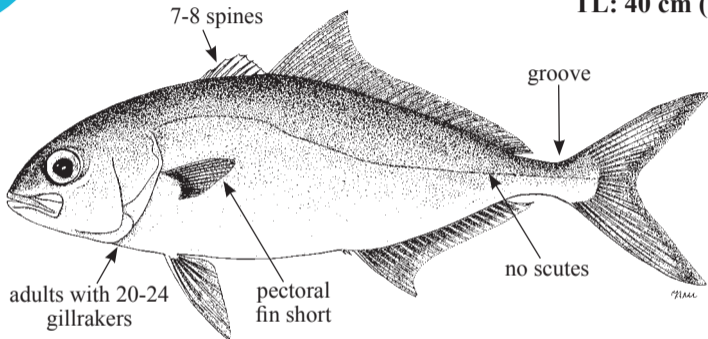
# CARANGIDAE

FAO (En): Guinean amberjack

*Seriola carpenteri* Mather, 1971

RLR

TL: 40 cm (max 75 cm)



Body elongate, moderately shallow and slightly compressed. Large adults reported to be “old rose” coloured. Juveniles (to about 25 cm fork length) with five black vertical bands on the sides and one dark nuchal bar extending from the eye to dorsal-fin origin. **Similar species:** *Seriola dumerili* (7 dorsal-fin spines; 11-19 gill rakers in adults); *Caranx* spp. (elongate pectoral fin; hardened scutes on lateral line). **Habitat:** Adults live in schools in open water or near the bottom. Feeds on squid and on fishes. The species is frequently confused with other *Seriola* species occurring in the same area, and its true distribution is still not well defined. **Fishery:** Marketed fresh and smoked; excellent taste.

## Local Name(s)

### Pojoe

Siayea (Ha)

Blaffo (Ri)

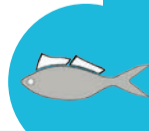
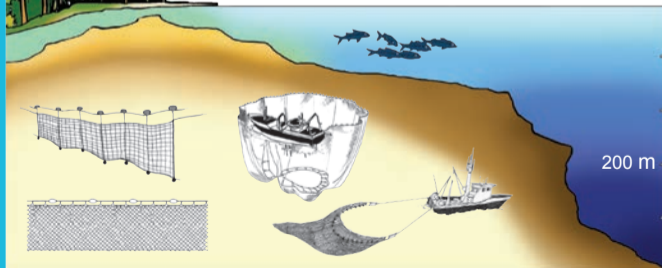
Tomleh (Ta)

**Note:** "Pojoe" is also used for *Cloroscombrus chrysurus* and other carangid species.



*Seriola carpenteri*

Photo: P.N. Psomadakis (FAO)



# CARANGIDAE

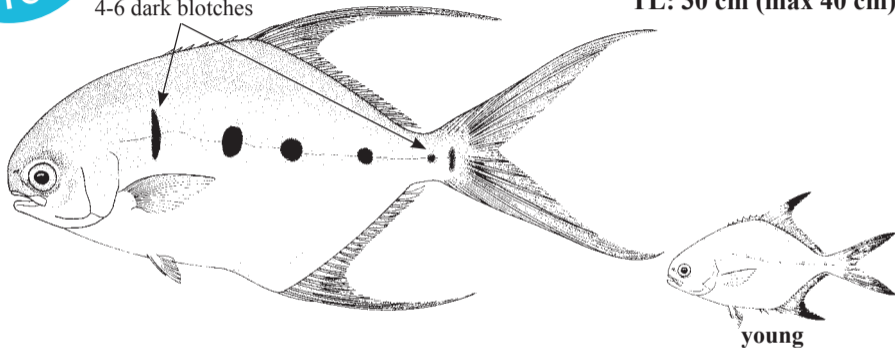
FAO (En): Longfin pompano

*Trachinotus goreensis* Cuvier, 1832

TOG

4-6 dark blotches

TL: 30 cm (max 40 cm)



Body short, deep and compressed with a rounded snout. 2nd dorsal and anal-fin lobes extremely elongated in adults. **Similar species:** *Trachinotus maxillosus* (2nd dorsal-fin lobe usually longer than head in adults; no distinctive markings on body; anal-fin lobe orange); *T. teraia* (2nd dorsal-fin lobe shorter than head in adults; pelvic and anal fins mostly yellow). *T. ovatus* (body slender; dorsal and anal-fin lobes not elongated; usually 3-5 dark blotches on sides). **Habitat:** Pelagic in coastal waters and estuaries. Feeds on molluscs, crustaceans, other invertebrates and small fish. **Fishery:** Utilized fresh and smoked and is of high value.



Local Name(s)

# Sand cavalla

Small cavalla (Gr)

Camoge (Ri)

Note: "Sand cavalla" is also used for *Alectis alexandrina* and "Small cavalla" is also used for *Trachinotus ovatus*.



*Trachinotus goreensis*

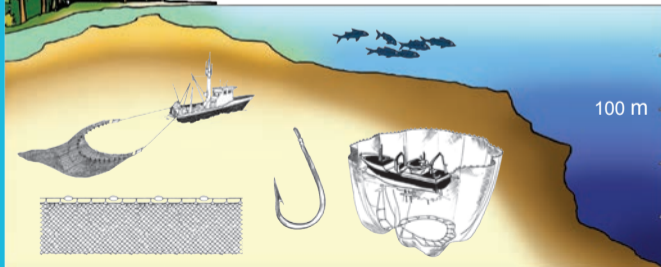


Photo collage

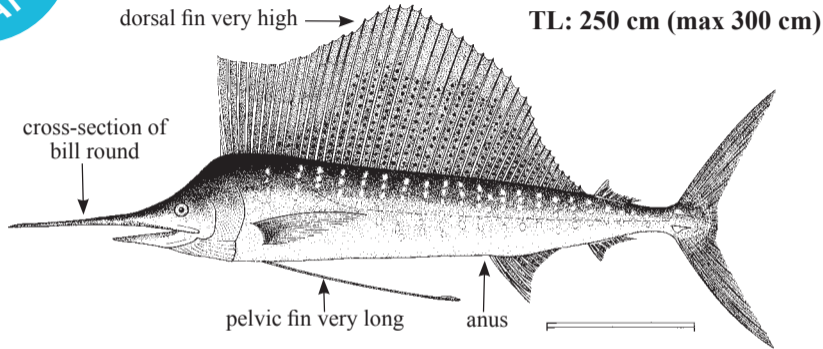


# ISTIOPHORIDAE

FAO (En): Atlantic sailfish

*Istiophorus albicans* (Latreille, 1804)

SAI



Back and upper sides dark blue, lower sides and belly silvery white, first dorsal-fin membrane blue-black, covered with many small black spots; other fins brown-black; about 20 vertical bars consisting of several small pale blue spots on side of body. **Similar species:** *Makaira* spp. and *Tetrapturus* spp. (first dorsal fin not sail-like; pelvic fins far from reaching to anus); *Xiphias gladius* (cross-section of bill flat-oval; pelvic fins absent). **Habitat:** Pelagic, inhabiting open waters but also close to the coast; schooling; fairly migratory. Feeds on a wide variety of fishes, crustaceans and cephalopods, mostly schooling. The bill is used for attacking prey but also to settle territorial disputes. **Fishery:** Marketed fresh and smoked. It is highly regarded as sportfish.

## Local Name(s)

# Napleh

**Note:** *Makaira* species also occurring in the drif-net fishery are locally known as "Diawoo".

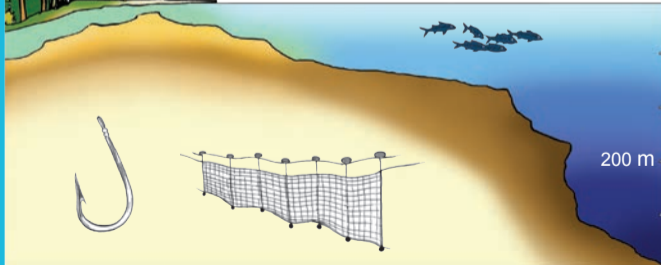


Photo collage

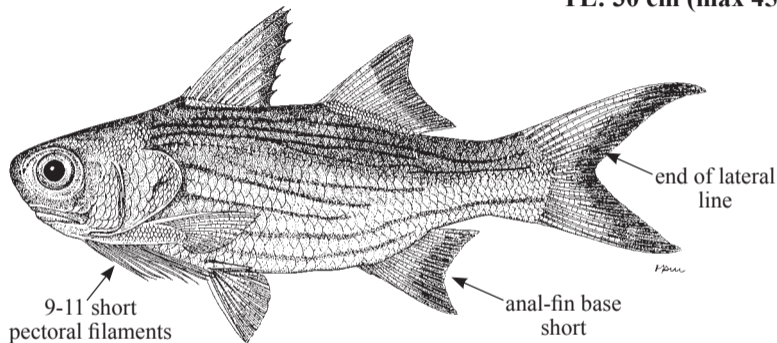
*Istiophorus albicans*



*Galeoides decadactylus* (Bloch, 1795)

GAL

TL: 30 cm (max 45 cm)



Upper sides of head and trunk with brown tinge, becoming silver on lower sides; posterior margins of first, second dorsal and caudal fins dense black. Several brown horizontal stripes above and below lateral line. **Similar species:** *Pentanemus quinquarius* (5 very long pectoral filaments; anal-fin base long); *Polydactylus quadrifilis* (4 pectoral filaments; lateral line extending to upper end of lower caudal-fin lobe). **Habitat:** Sandy and muddy bottoms in shallow coastal waters; also in estuaries. **Fishery:** Utilized fresh and smoked and is of low value.

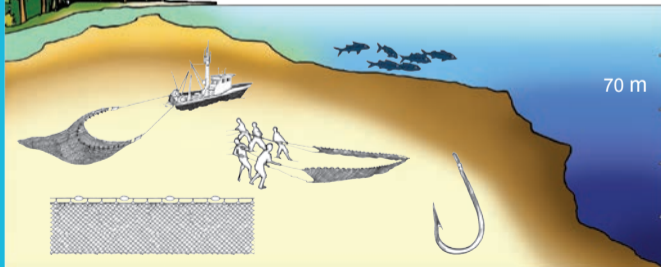
Local Name(s)

# Butternose



Photo: P. Wirtz

*Galeoides decadactylus*

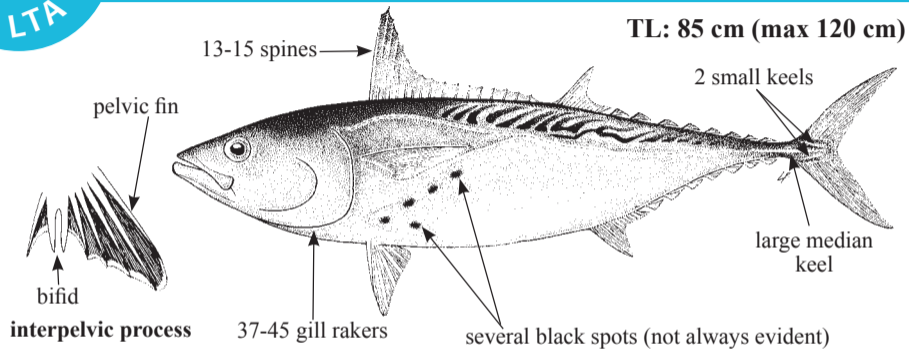


# SCOMBRIDAE

FAO (En): Little tunny

*Euthynnus alletteratus* (Rafinesque, 1810)

LTA



Body robust and fusiform. Back dark blue with a complicated striped pattern not extending forward beyond middle of first dorsal fin, lower sides and belly silvery white. **Similar species:** *Auxis* spp. (dorsal fins widely separated; interpelvic process single); *Katsuwonus pelamis* (dark longitudinal stripes on belly; 53-63 gill rakers); *Scomber colias* (8-10 dorsal-fin spines; no median keel on caudal peduncle; dorsal fins widely separated); *Thunnus* spp. (gill rakers < 37). **Habitat:** Pelagic, mainly in coastal waters; schooling; less migratory than other tunas. **Fishery:** Marketed fresh and smoked, also canned.

Local Name(s)

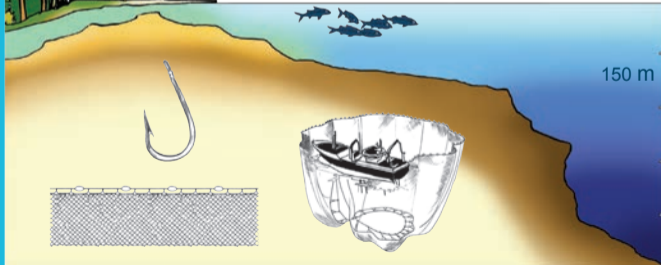
# Blood fish

Spotted Kanmu (Mo)

**Note:** "Blood fish" is also used for *Auxis* species.



Photo collage



*Euthynnus alletteratus*

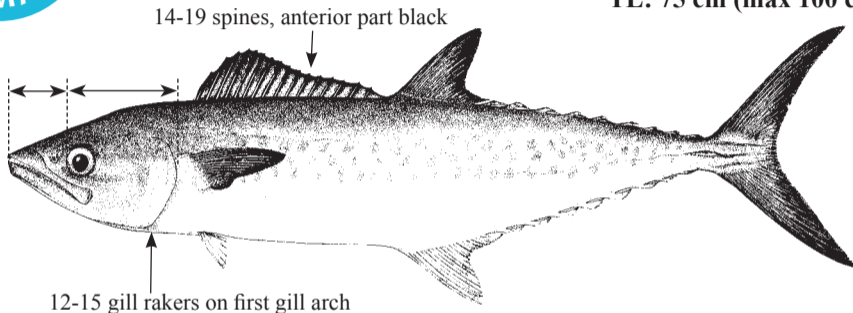
# SCOMBRIDAE

FAO (En): West African Spanish mackerel

*Scomberomorus tritor* (Cuvier, 1832)

MAW

TL: 75 cm (max 100 cm)



Body elongate, strongly compressed. Snout much shorter than rest of head. Teeth in jaws strong, compressed, almost triangular. Bluish green on back, silvery on sides with about 3 rows of vertically elongated spots. **Similar species:** *Acanthocybium solandri* (23-27 dorsal-fin spines; snout about as long as the rest of the head; gillrakers absent); *Sarda sarda* (20-23 dark longitudinal stripes on upper part of body; 20-23 spines in first dorsal fin). **Habitat:** Coastal pelagic species penetrating into coastal lagoons; schooling; feeds on small fishes, especially sardines and anchovies. **Fishery:** Marketed fresh and smoked; the flesh is highly appreciated.



Local Name(s)

# Mackerel

**Note:** "Mackerel" is used also for *Scomber colias*.

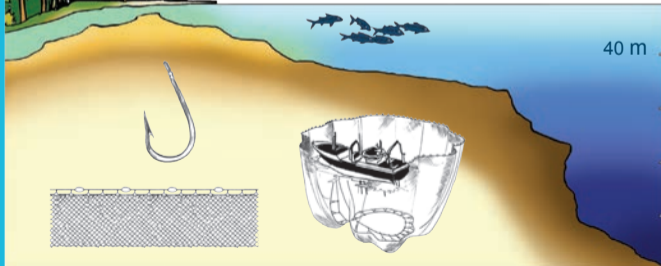


Photo: P.N. Psomadakis (FAO)



*Scomberomorus tritor*

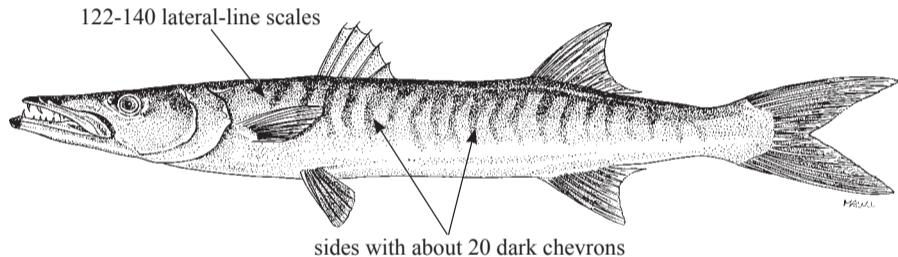
# SPHYRAENIDAE

FAO (En): Guinean barracuda

*Sphyraena afra* Peters, 1844

BAG

TL: 100 cm (max 205 cm)



Body bluish, greenish, or brownish grey on back, becoming silvery white on belly, sides with about 20 dark chevron shaped cross-bars. Teeth in lower jaw erect (never slanting backward) in juveniles as well as in adults. **Similar species:** *Sphyraena barracuda* (75-85 lateral-line scales; sides of body with irregular black blotches); *S. guachancho* (108-122 lateral-line scales; backward-directed teeth in both jaws). **Habitat:** Coastal and offshore waters. Voracious carnivore. Its seasonal distribution and habits are unknown. **Fishery:** Marketed fresh and smoked; excellent taste. Its flesh has never been reported as being ciguatoxic.

Local Name(s)

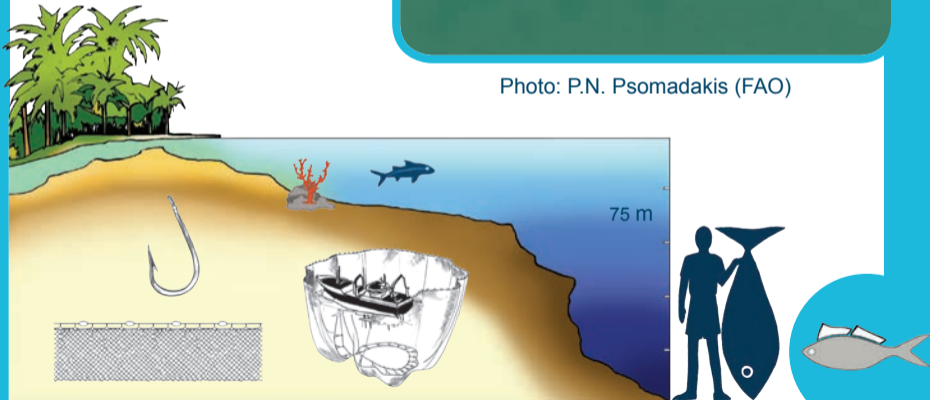
**Cuta**

Pipe fish (Mo)



*Sphyraena afra*

Photo: P.N. Psomadakis (FAO)

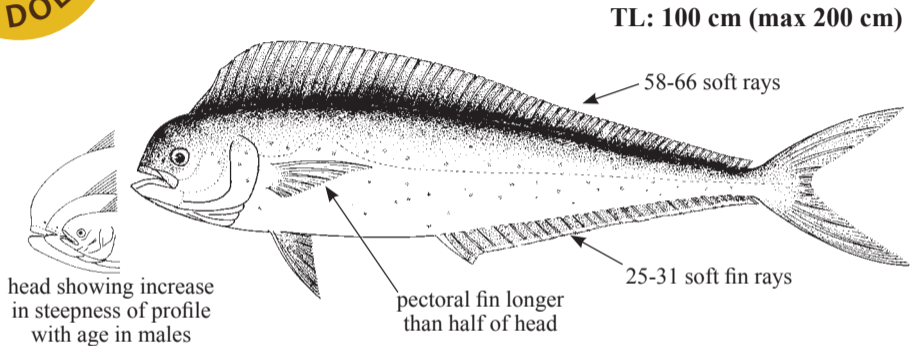


# CORYPHAENIDAE

FAO (En): Common dolphinfish

*Coryphaena hippurus* Linnaeus, 1758

DOL



Colour metallic blue and green on back and sides, golden hues on sides, white and yellow on underparts. Small specimens have pronounced vertical bars on sides of body. Small, oval tooth patch on tongue; mature males possess a prominent bony crest in front of head. **Similar species:** *Coryphaena equiselis* (dorsal-fin rays  $\leq 59$ ; tooth patch on tongue broad and square, pectorals = half of head length). **Habitat:** Pelagic, inhabiting open waters but also approaching the coast; schooling; follows ships and forms small concentrations below floating objects; highly migratory. **Fishery:** Utilized mainly fresh; a very highly appreciated food and sports fish.

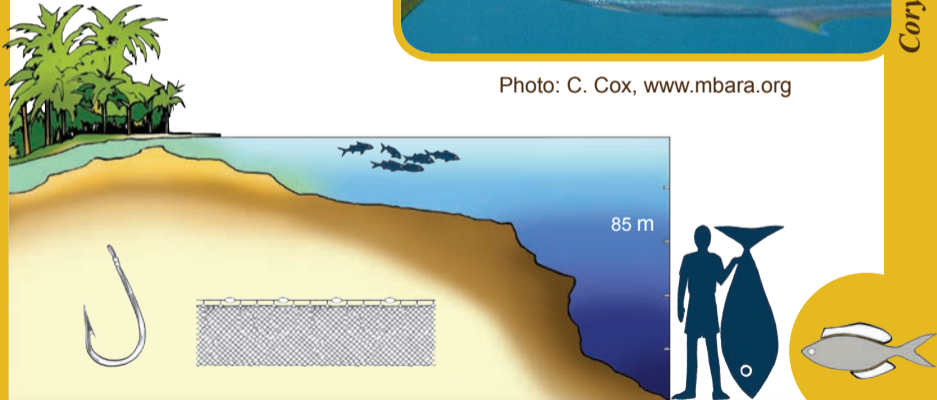
Local Name(s)

**Forbor**



*Coryphaena hippurus*

Photo: C. Cox, [www.mbara.org](http://www.mbara.org)

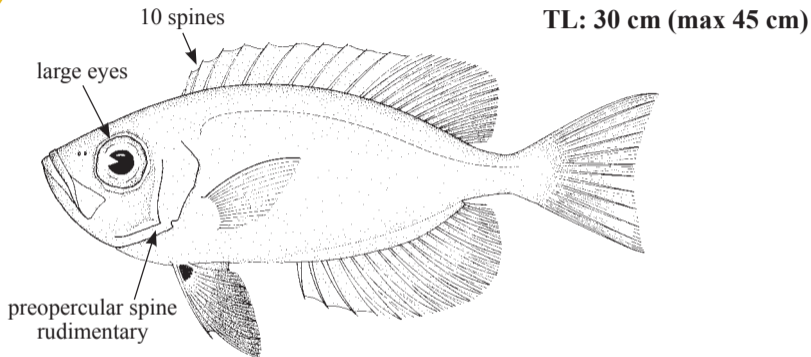


# PRIACANTHIDAE

FAO (En): Atlantic bigeye

*Priacanthus arenatus* Cuvier, 1829

PQR



Body deep, ovate and laterally compressed. Colour uniform bright red. May change to silvery white with pattern of broad reddish bars on head and body. Row of small dark spots sometimes evident along lateral line. Fins red to light pink. **Similar species:** *Heteropriacanthus cruentatus* (well-developed spine at angle of opercle; caudal and soft dorsal and anal fins with elliptical dark spots). **Habitat:** Epibenthic occurring near coral reefs or rock formations. Occurs solitary or in small aggregations. **Fishery:** Marketed mostly fresh. Flesh is said to be of excellent quality.

Local Name(s)

# Snapper old lady

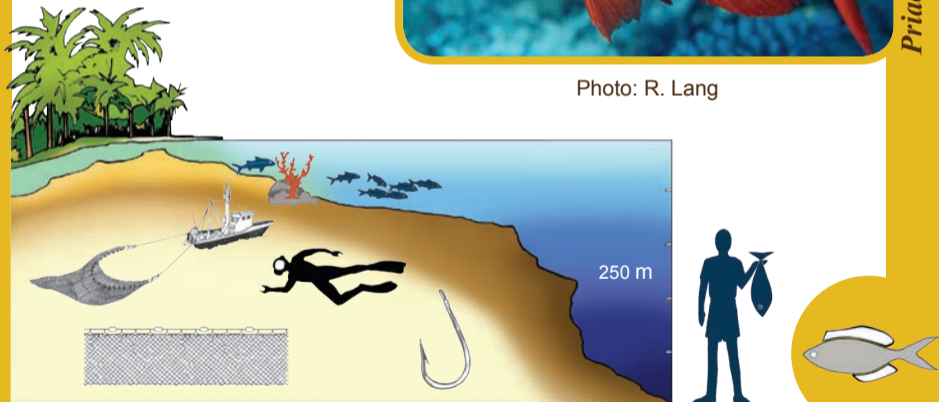
Chicken soup fish (Pi; Bu)

Loton (Ri)



*Priacanthus arenatus*

Photo: R. Lang



# PSETTODIDAE

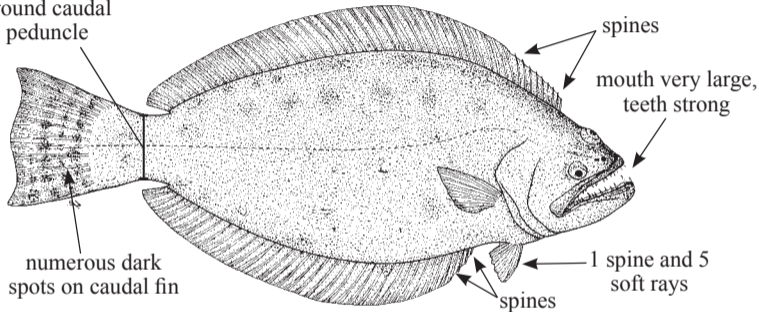
FAO (En): Spottail spiny turbot

*Psettodes belcheri* Bennett, 1831

SOT

28-32 scales  
around caudal  
peduncle

TL: 45 cm (max 61 cm)



Body oval and flat, but thicker than in most other flatfishes. Dorsal-fin origin well posterior to upper eye; anterior rays of dorsal and anal fins spinous. Ocular side brownish with spots and blotches; blind side most often pale. Dorsal, anal and caudal fins darker. **Similar species:** *Psettodes bennetti* (caudal fin without large spots; 34-43 scales around caudal peduncle). Similar families occurring in the area (dorsal-fin origin anterior to upper eye; no spines in fins; no strong canine teeth in jaws). **Habitat:** Coastal waters over muddy, sandy and rocky bottoms; also in estuaries. Feeds on a variety of fishes and crustaceans; gas bladder absent **Fishery:** Marketed fresh and smoked and is of high value.



Local Name(s)

# Black sole fish

Short sole fish (Ha)

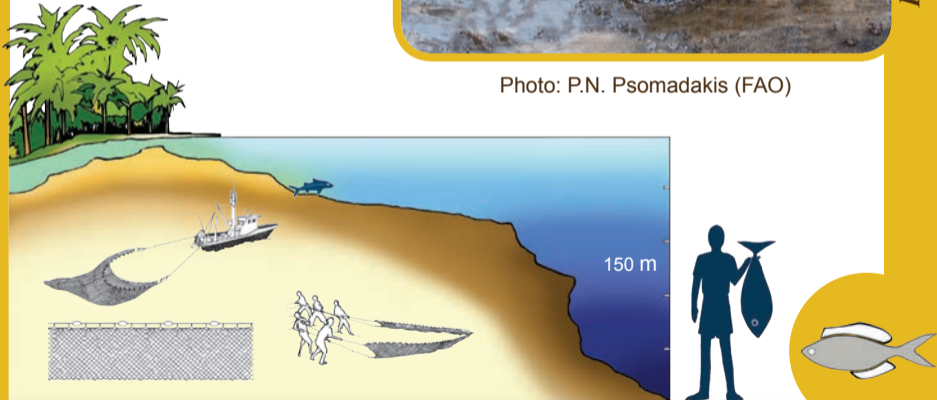
Flat sole fish (Pi)

Rocky sole fish (Mo)



*Psettodes belcheri*

Photo: P.N. Psomadakis (FAO)



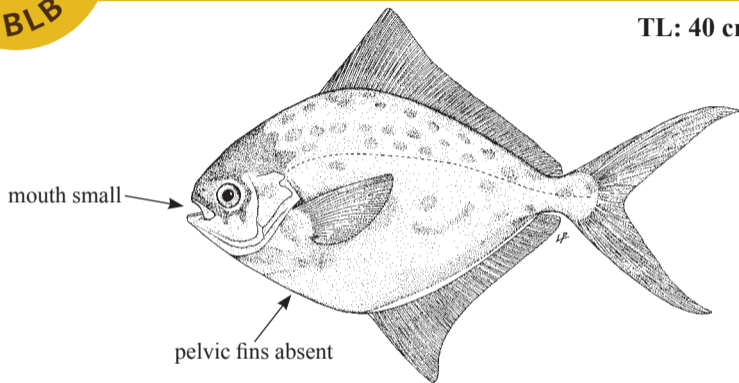
# STROMATEIDAE

FAO (En): Blue butterfish

*Stromateus fiatola* Linnaeus, 1758

BLB

TL: 40 cm (max 50 cm)



Body and head deep and compressed. Blue to brown with a silvery cast and numerous dark spots on the back; lighter on sides and below with a few irregular darker longitudinal bands. Young with 4-8 vertical bars. **Similar species:** Adults of similar families can easily be distinguished by the presence of pelvic fins. **Habitat:** Pelagic, schooling in coastal waters. Juveniles found under floating weeds or in association with medusae. Feeds on zooplankton, jellyfish and small fishes. **Fishery:** Consumed locally fresh and smoked. The flesh is excellent.

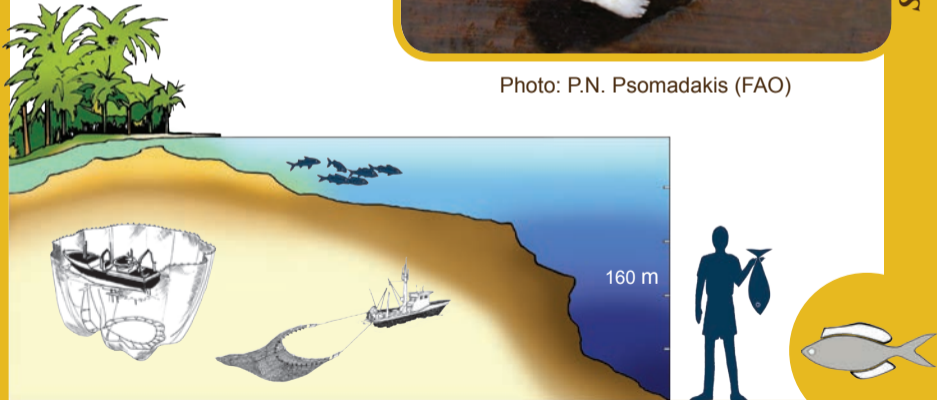
Local Name(s)

# Marry fish



*Stromateus fiatola*

Photo: P.N. Psomadakis (FAO)



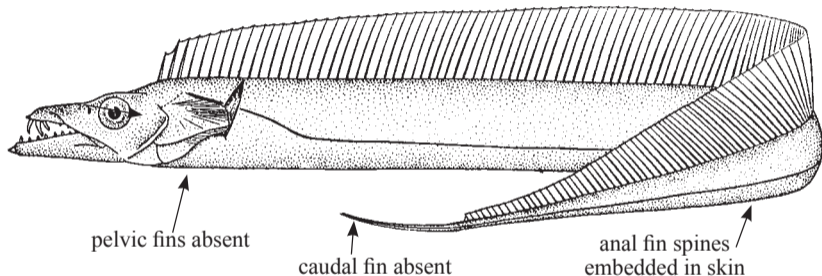
# TRICHIURIDAE

FAO (En): Largehead hairtail

*Trichiurus lepturus* Linnaeus, 1758

LHT

TL: 50 cm (max 120 cm)



Body elongate and strongly compressed, ribbon-like, tapering to a point. Fresh specimens steel blue with silvery reflection; the colour becomes uniform silvery grey after death. **Similar species:** Other trichiurids can easily be distinguished by the presence of a small and forked caudal fin. **Habitat:** Benthopelagic in shallow coastal waters over muddy bottom, occasionally at surface at night. Young and immature feed on crustaceans and small fishes; adults more piscivorous. **Fishery:** Consumed locally fresh and smoked. It is considered of low commercial value.

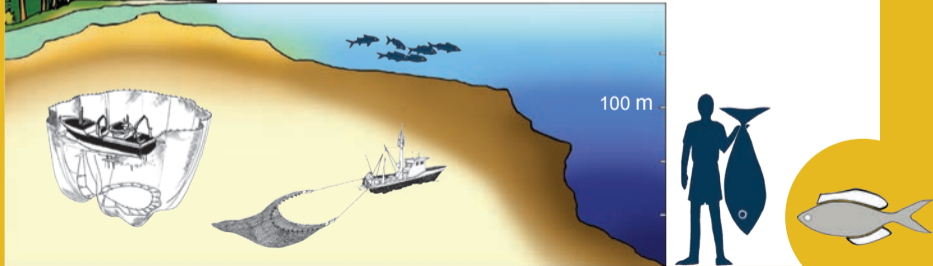
Local Name(s)

# Silver fish



*Trichiurus lepturus*

Photo: D. Azuma, [www.opencage.blogspot.jp](http://www.opencage.blogspot.jp)



# PALINURIDAE

FAO (En): Royal spiny lobster

*Panulirus regius* De Brito Capello, 1864

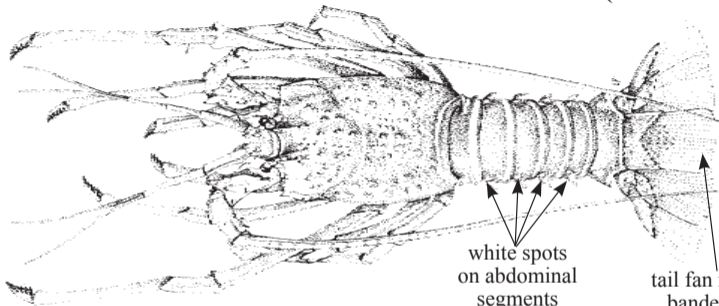
LOY

TL: 30 cm (max 46 cm)

frontal horns



carapace



white spots  
on abdominal  
segments

tail fan not  
banded

Carapace subcylindrical, covered dorsally with spines and scattered with spinules. Short, triangular and slightly curved frontal horns. Colour greenish, each abdominal segment with a white transverse band separated from posterior margin by a very dark green or dark brown band. **Similar species:** *Panulirus argus* (2 very strong, sharp and strongly curved frontal horns; 4 yellowish-white spots, 1 on each side of second and last abdominal segments; tail fan with conspicuous dark red or brown band along posterior margin). **Habitat:** Usually in shallow coastal waters on rocky and sandy bottoms. **Fishery:** Sold mostly fresh in local markets, sometimes exported.

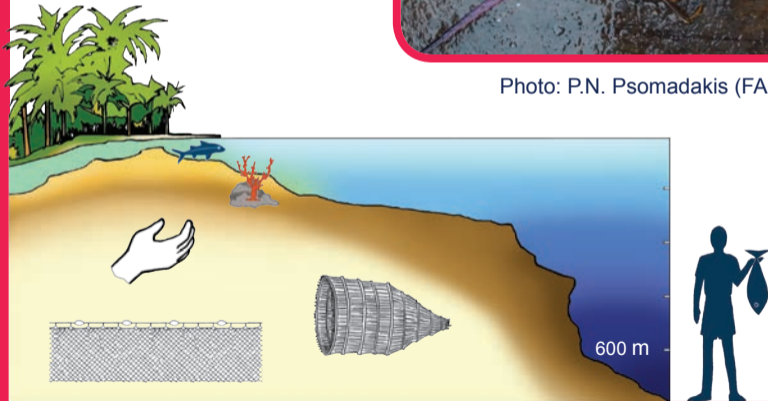
Local Name(s)

# Lobster



*Panulirus regius*

Photo: P.N. Psomadakis (FAO)



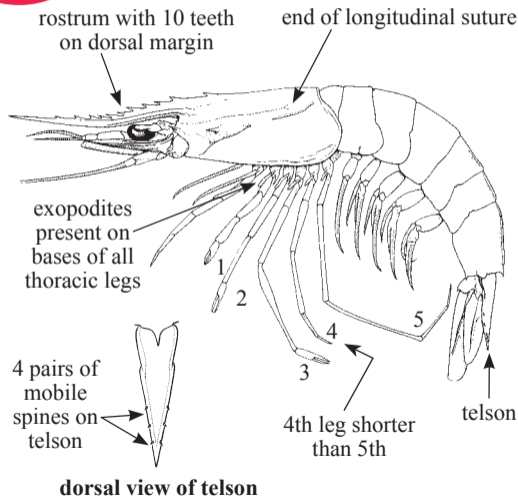
# PENAEIDAE

FAO (En): Guinea shrimp

*Parapenaeopsis atlantica* Balss, 1914

GUS

TL: 12 cm (max 17 cm)



Colour pale brownish pink; eyestalks lemon yellow; antennae and thoracic legs brownish red; tail fan brownish red distally and edged with yellow toward its tip. **Similar species:** *Parapenaeus longirostris* (8 teeth on dorsal margin of rostrum; longitudinal suture reaching posterior margin of carapace; no exopodites on bases of thoracic legs; 2 fixed spines on telson); *Penaeus* spp. (1-2 teeth on ventral margin of rostrum). **Habitat:** Coastal marine waters, estuaries and lagoons. **Fishery:** Marketed mainly fresh; nearly all shrimps caught with bottom trawlers are processed and frozen for export abroad.

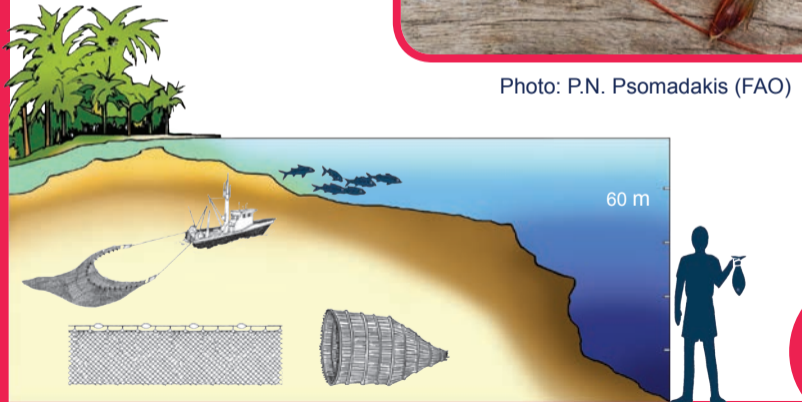


Local Name(s)

# Craw fish



Photo: P.N. Psomadakis (FAO)



*Parapenaeopsis atlantica*

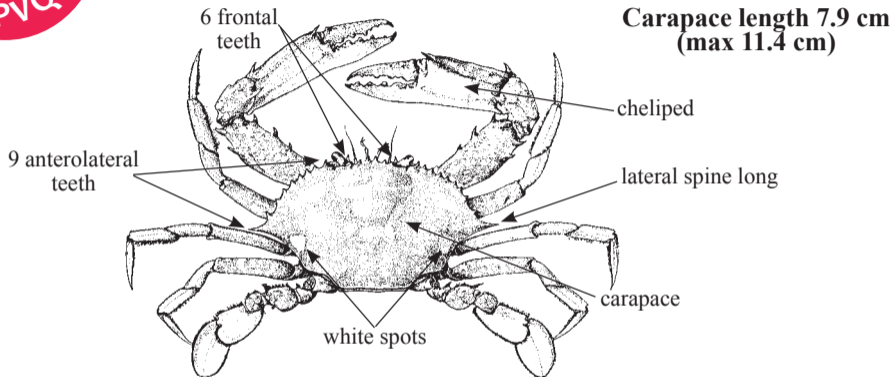


# PORTUNIDAE

FAO (En): Senegalese smooth swimcrab

*Sanquerus validus* (Herklots, 1851)

PVQ



Carapace swollen and smooth, rather uniformly brownish to greenish grey or khaki colour; upper surface of chelipeds and legs strikingly marbled with purple or blue. Lower surface of body uniformly whitish. **Similar species:** *Callinectes* spp. (white spots on carapace absent; upper surface of carapace more or less granular); *Cronius ruber* (4 frontal teeth; carapace covered by a short pubescence); *Liocarcinus corrugatus* (5 equal anterolateral teeth; carapace crossed by very strong, hairy ridges). **Habitat:** Shallow coastal waters. **Fishery:** Marketed fresh; they are cooked or fried in oil.

## Local Name(s)

# Crab

**Note:** “Crab” is used for various crab species occurring in the area.

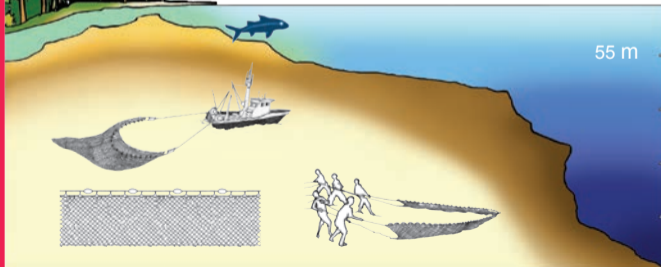


Photo: P.N. Psomadakis (FAO)

*Sanquerus validus*

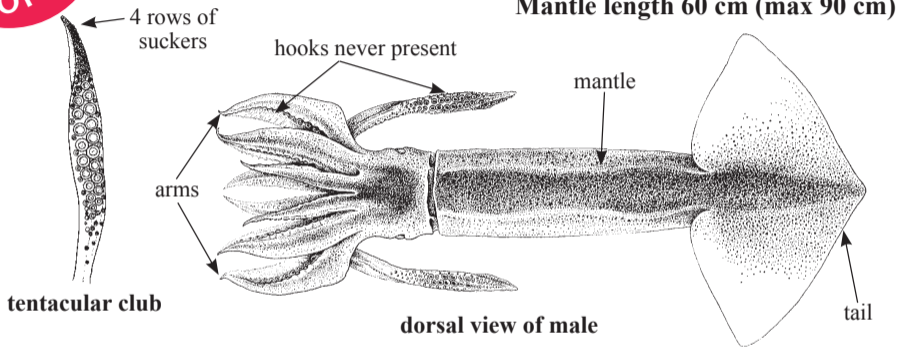


# OMMASTREPHIDAE

FAO (En): Neon flying squid

*Ommastrephes bartramii* (Lesueur, 1821)

OFJ



Mantle wide, posterior end without pronounced pointed tail. Arms with biserial suckers. Colour deep maroon overall; a golden stripe of luminose tissue along ventral midline of mantle. **Similar species:** *Illex coindetii* (8 longitudinal rows of small suckers on distal end of tentacular club). **Habitat:** Oceanic and neritic, it occurs near the surface at night. Young and immature specimens feed on crustaceans and small fishes; adults more piscivorous. A very powerful swimmer, able to leap from the water and to glide for some distance over the surface, thus receiving the name 'flying squid'. **Fishery:** The flesh is of excellent quality. Utilized mainly fresh.

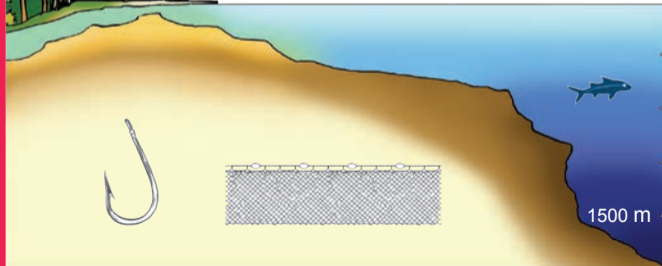
Local Name(s)

# Ink fish

Squid (Ha)



Photo: [www.photolib.noaa.gov](http://www.photolib.noaa.gov)



*Ommastrephes bartramii*

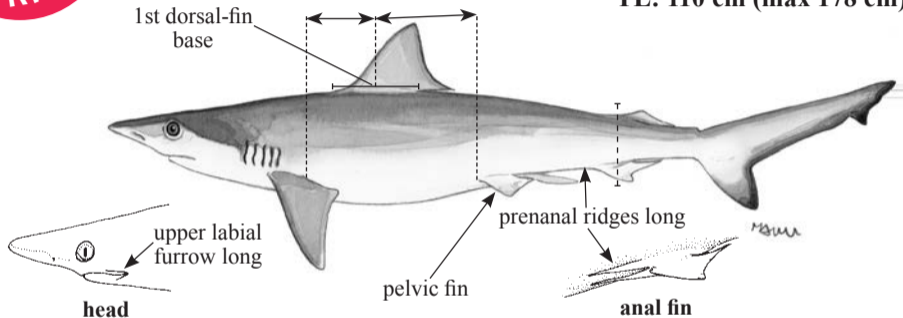
# CARCHARHINIDAE

FAO (En): Milk shark

*Rhizoprionodon acutus* (Rüppel, 1837)

RHA

TL: 110 cm (max 178 cm)



Body slender and fusiform. Grey or grey-brown above, white below, dorsal and anal fins with dusky edges. Origin of second dorsal fin behind that of anal fin. **Similar species:** *Carcharhinus* spp. (upper labial furrows short to rudimentary; preanal ridges very short or absent; origin of second dorsal fin about opposite that of anal fin); *Prionace glauca* (midlength of first dorsal-fin base closer to pelvic-fin origins than to pectoral-fin insertions). **Habitat:** Pelagic in shallow coastal waters and estuaries. Feeds on a wide variety of small bony fishes and invertebrates. Eaten by other larger sharks. **Fishery:** Marketed mainly fresh. Its fins are utilized in Far East markets.

## Local Name(s)

# Shark

Won (Ha)

**Note:** “Shark” and “Won” are used for various shark species occurring in the area.

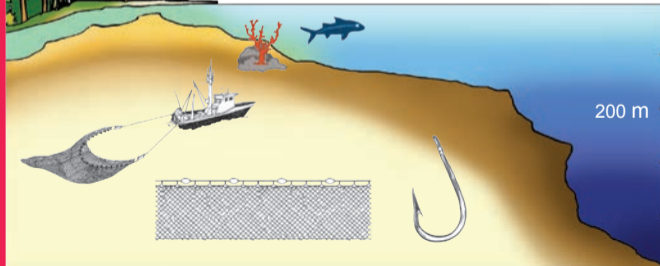


Photo: P.N. Psomadakis (FAO)

*Rhizoprionodon acutus*



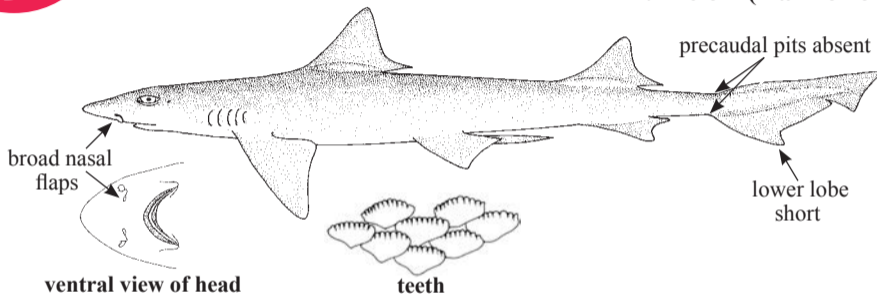
# TRIAKIDAE

FAO (En): Smooth-hound

*Mustelus mustelus* (Linnaeus, 1758)

SMD

TL: 120 cm (max 164 cm)



Body moderately elongated and slender. Head flattened above and below. Plain grey above, cream white below, usually no spots on the body. Teeth low and rounded, alike in both jaws.

**Similar species:** *Galeorhinus galeus* (teeth blade-like with a strong cusp and cusplets; second dorsal fin about as large as anal fin; caudal fin with a strong lower lobe); *Leptocharias smithii* (nasal flaps formed as long slender barbels; teeth with a slender primary cusp and side cusplets; Carcharhinidae (upper edge of caudal fin with a rippled margin; precaudal pits present; teeth more or less unlike in upper and lower jaws). **Habitat:** Demersal on continental shelf and upper slope. Primarily a crustacean feeder. **Fishery:** Utilized fresh and smoked.



## Local Name(s)

# Shark

Won (Ha)

**Note:** “Shark” and “Won” are used for various shark species occurring in the area.

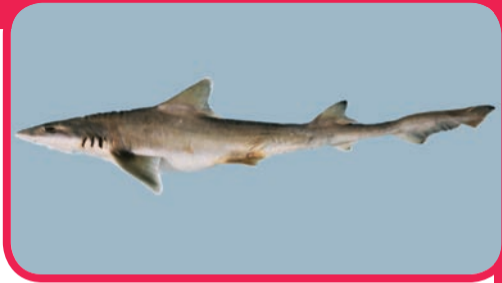
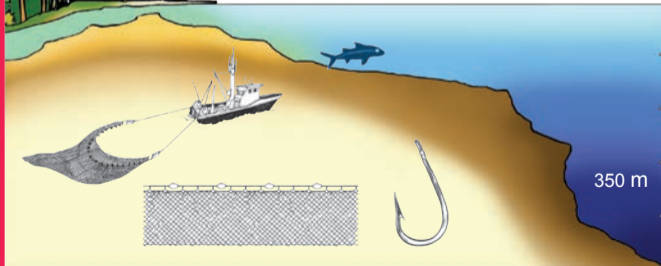


Photo: S.P. Iglesias



*Mustelus mustelus*

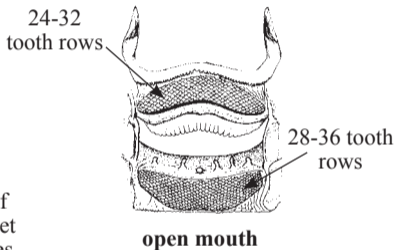
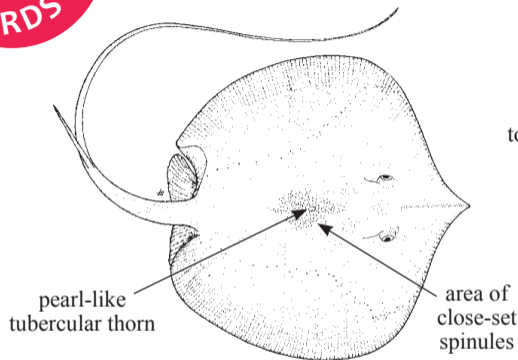
# DASYATIDAE

FAO (En): Daisy stingray

*Dasyatis margarita* (Günther, 1870)

RDS

Disc width 40 cm (max 65 cm)



Disc oval-rounded, about as broad as long, anterior margins distinctly concave so that tip of snout projects. Dorsal side uniform brownish to grey-brown; ventral side whitish with pectoral margins more or less darker. **Similar species:** *Dasyatis margaritella* (small species, 30 cm max disc width; upper jaw moderately undulate; teeth numerous 28-41/34-50); *D. centroura* (disc rhombic; rough thorny tail; large thorny tubercles scattered on disc); *D. marmorata* (dorsal side of disc with a distinct pattern of blue mottling on a golden-brown background). **Habitat:** Shallow coastal waters; enters estuaries and lagoons. Feeds on benthic invertebrates. **Fishery:** Utilized fresh and smoked.

Local Name(s)

# Stinger

**Note:** “Stinger” is used for all Dasyatidae and Gymnuridae species occurring in the area.

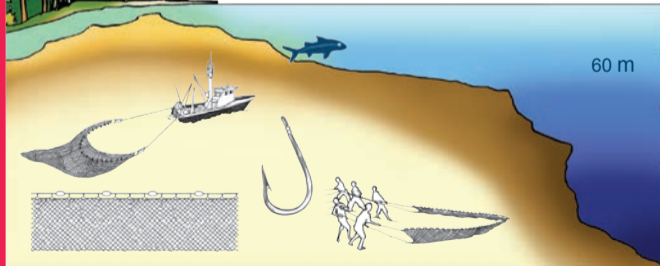


Photo: P.N. Psomadakis (FAO)

*Dasyatis margarita*



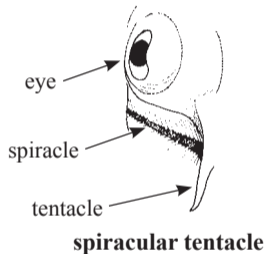
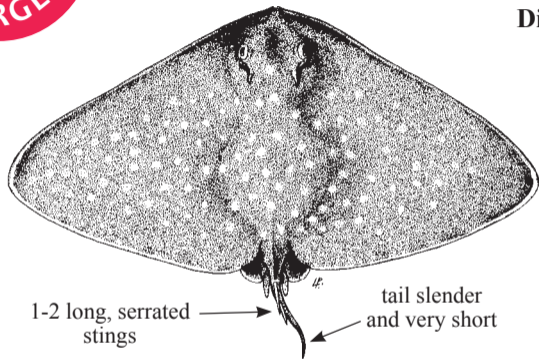
# GYMNURIDAE

FAO (En): Spiny butterfly ray

*Gymnura altavela* (Linnaeus, 1758)

RGL

Disc width 100 cm (max 208 cm)



Disc lozenge-shaped, at least twice as broad as long. Dorsal side light to dark brownish variously patterned with dark and light spots. Tail with several alternating dark and light crossbars; ventral side white to creamy white. **Similar species:** *Gymnura micrura* (tail without sting; no tentacle on posterior margin of spiracle); *Taeniura grabata* (disc roundish, broader than long; tail about as long as disc and relatively thick); *Pteroplatytrygon violacea* (disc rhombic; dorsal and ventral sides of disc uniform purplish-violet). **Habitat:** Demersal in coastal waters. Feeds on benthic invertebrates and small fishes. **Fishery:** The meat is eaten like that of other stingrays, fresh and smoked.

## Local Name(s)

# Sea bat

## Stinger (Gr)

**Note:** “Sea bat” is also used for *Mobula* species occurring in the area.



Photo:T. Shema, [www.putsker.co.il](http://www.putsker.co.il)

## Card Index:

Catfish – *Arius latiscutatus*  
Bonga – *Ethmalosa fimbriata*  
Blapleh – *Ilisha africana*  
Bonny – *Sardinella maderensis*  
Ten-pound – *Elops senegalensis*  
Tarpon – *Megalops atlanticus*

Susuah – *Tylosurus crocodilus crocodilus*  
Snapper – *Dentex maroccanus*  
Grouper – *Lutjanus goreensis*  
Cassava fish – *Pseudolithus senegalensis*  
White boy – *Pseudolithus elongatus*  
Chicken soup fish – *Cephalopholis taeniops*  
Snapper – *Pagrus caeruleostictus*

Sand cavalla – *Alectis alexandrina*  
Cavalla – *Caranx fischeri*  
Pojoe – *Chloroscombrus chrysurus*  
Pojoe – *Seriola carpenteri*  
Sand cavalla – *Trachinotus goreensis*  
Napleh – *Istiophorus albicans*  
Butternose – *Galeoides decadactylus*  
Blood fish – *Euthynnus alletteratus*  
Mackerel – *Scomberomorus tritor*  
Cuta – *Sphyraena afra*

Forbor – *Coryphaena hippurus*  
Snapper old lady – *Priacanthus arenatus*  
Black sole fish – *Psettodes belcheri*  
Marry fish – *Stromateus fiatola*  
Silver fish – *Trichiurus lepturus*

Lobster – *Panulirus regius*  
Craw fish – *Parapenaeopsis atlantica*  
Crab – *Sanquerus validus*  
Ink fish – *Ommastrephes bartramii*  
Shark – *Rhizoprionodon acutus*  
Shark – *Mustelus mustelus*  
Sea bat – *Gymnura altavela*  
Stinger – *Dasyatis margarita*

**Mini disk contains:**

- Schneider, W.** 1990. *FAO species identification guide for fishery purposes. Field Guide to the commercial marine resources of the Gulf of Guinea*. Rome, FAO.
- Fischer, W., Bianchi, G. and Scott, W.B. (eds).** 1981. *FAO species identification sheets for fishery purposes. Eastern Central Atlantic; fishing area 34, 47 (in part)*. Canada Funds-in-Trust. Ottawa, Department of Fisheries and Oceans Canada, by arrangements with the Food and Agriculture Organization of the United Nations, vols 1-7.

The FAO FishFinder Programme\* produces species identification tools for fishery purposes. To date, the Programme has described over 8 000 aquatic species and has an archive of more than 40 000 scientifically reviewed species drawings. This information is organized in many publications accessible on the FAO web pages ([www.fao.org/fishery/sidp/en](http://www.fao.org/fishery/sidp/en)).

This FAO FishFinder pocket guide was developed to assist in the quick field identification of important commercial species and can be useful to: ichthyologists; fishery data collectors, observers and inspectors; consumers; fishery science teachers; and everybody interested in the marine fauna and fisheries of Liberia.

Users must keep in mind that they will encounter many other and often similar marine species in the landings and at markets. To help identify these species a mini disk is included containing more comprehensive FAO identification guides for fishery resources in the Gulf of Guinea and the Eastern Central Atlantic Ocean.

*\*formerly SIDP, Species Identification and Data Programme*

ISBN 978-92-5-107826-6



9 7 8 9 2 5 1 0 7 8 2 6 6

I3380E/1/07.13