

BONY FISHES

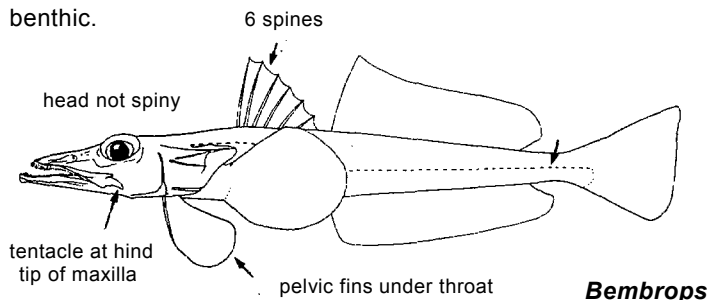
GUIDE TO FAMILIES

PERCOPHIDAE

Flatheads

page 89

To at least 30 cm; marine, from about 100 to 400 m depth; benthic.



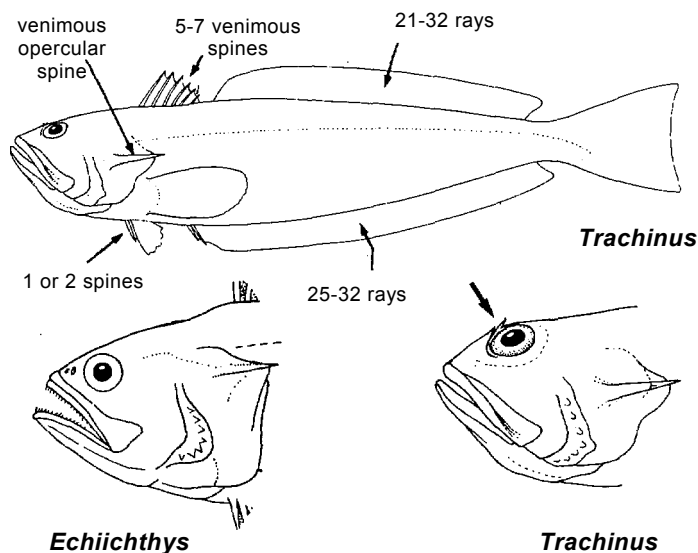
Remarks : do not confuse with Platycephalidae.

TRACHINIDAE

Weeverfishes

page 123

To about 45 cm; marine, in coastal waters to about 200 m depth; benthic.

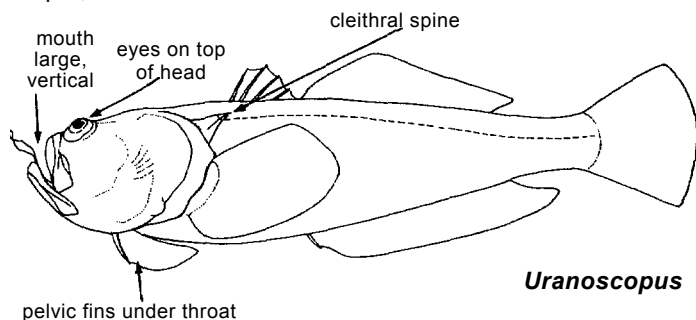


URANOSCOPIDAE

Stargazers

page 128

To about 40 cm; marine, from the coastline to below 200 m depth; benthic.



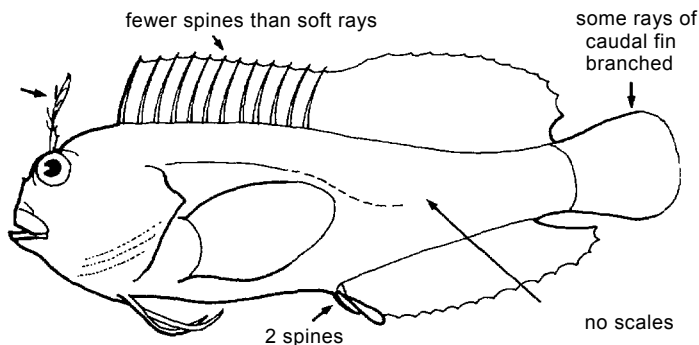
BLENNIES AND ALLIES - Perciformes: Blennioidei

Dorsal fin long; pelvic fins reduced, with 1 hidden spine and 2 to 4 soft rays, located ahead of pectoral fins; tentacles often present on head; two anal-fin spines (one of them sometimes difficult to see).

BLENNIIDAE

Combtooth blennies

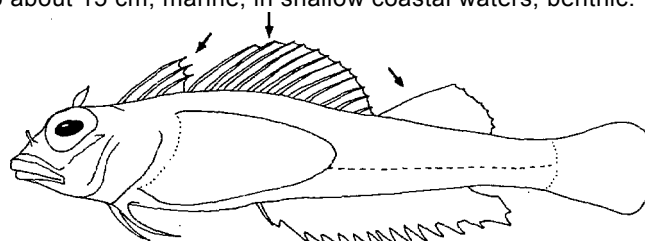
To 20 cm; marine coastal waters (usually at less than 20 m depth), estuaries and coastal lagoons; benthic; a few species to 400 m depth.



TRIPTERYGIIDAE

Threefin blennies

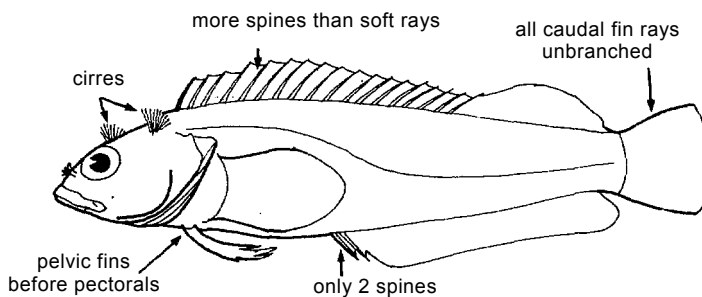
To about 15 cm; marine, in shallow coastal waters; benthic.



CLINIDAE

Clinids

To about 20 cm; marine, usually in shallow waters, but a few species in deeper water (to below 100 m); benthic.



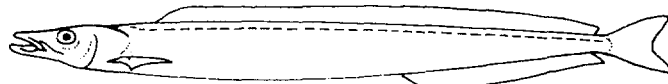
SANDLANCES - Perciformes: Ammodytoidei

Body very elongate; dorsal fin long; lateral line high on body, close to dorsal profile; teeth absent; pelvic fins usually absent.

AMMODYTIDAE

Sandlances

To about 30 cm; marine, from the coastline to about 50 m depth; benthic, burrowing in sand, or pelagic; a cold-water group rarely entering the Gulf of Guinea from the north.



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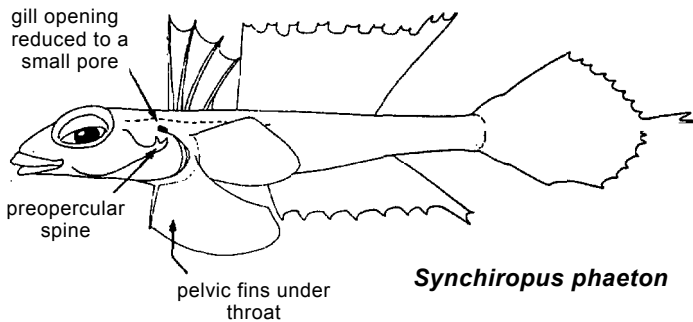
DRAGONETS - Perciformes: Callyonimoidei

A sharp preopercular spine; a small gill opening on upper part of head; size usually under 30 cm.

CALLIONYMIDAE

Dragonets

To about 30 cm; marine, from coastal waters to about 650 m depth; benthic. A single species in the area.



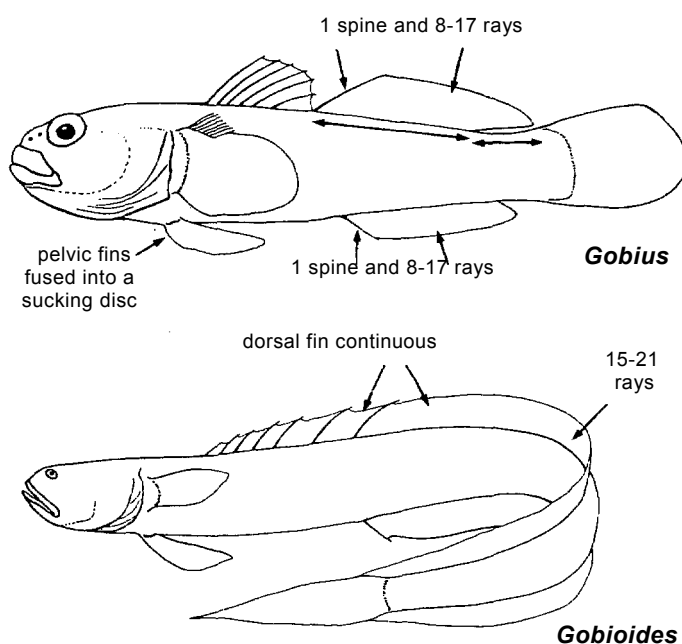
GOBIES AND ALLIES - Perciformes: Gobioidei

Usually small fishes with pelvic fins either very close together, or united into a single cup-like structure.

GOBIIDAE

Gobies

To about 36 cm, but most species less than 10 cm; marine and brackish waters, occasionally freshwaters; usually in very shallow waters, but a few species to below 150 m depth; benthic.

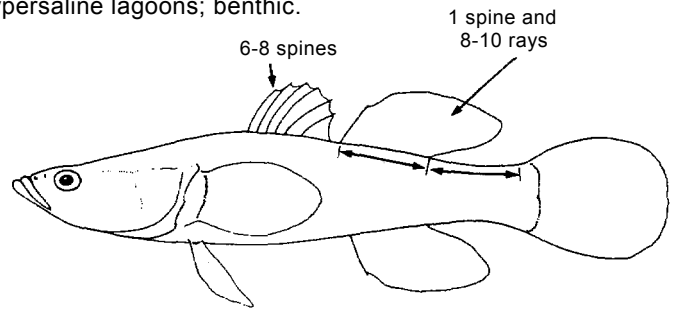


A large number of other genera occur in the area.

ELEOTRIDAE

Sleepers, sleeper gobies

To about 30 cm; adults generally in freshwater, but entering brackish and coastal marine waters and hypersaline lagoons; benthic.

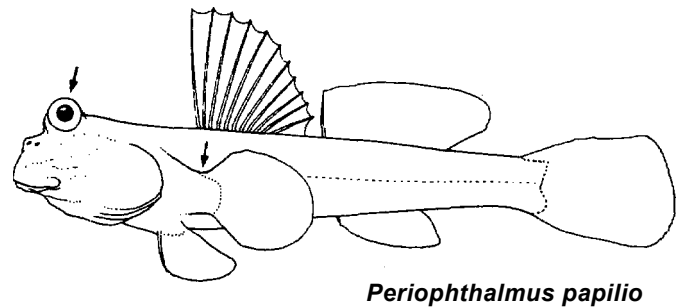


Several genera occur in the area.

PERIOPHTHALMIDAE

Mudskippers

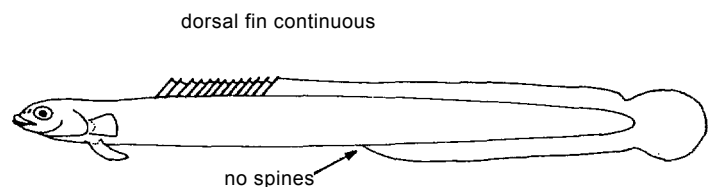
To 25 cm; littoral; amphibious in shallows and on exposed intertidal mud flats of estuarine mangrove swamps. A single species in the area.



MICRODESMIDAE

Wormfishes

To 28 cm; marine, in shallow coastal waters (less than 40 m depth); benthic, burrowing.



SURGEONFISHES - Perciformes: Acanthuroidei

Small scales; a strong, movable, forward-projecting spine mid-laterally on caudal peduncle.

ACANTHURIDAE

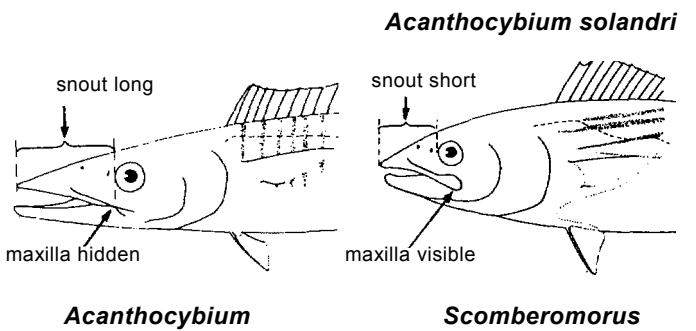
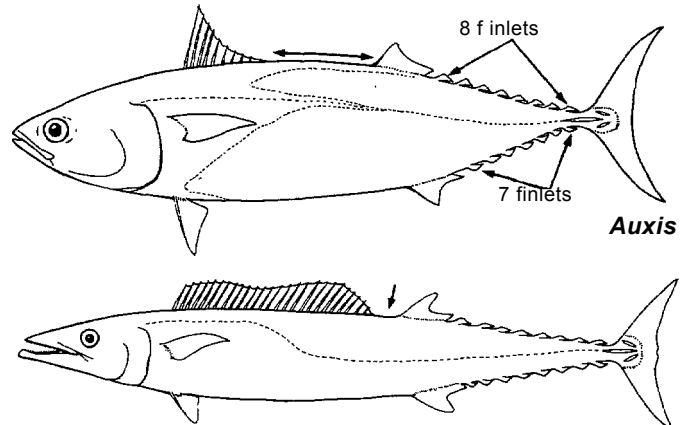
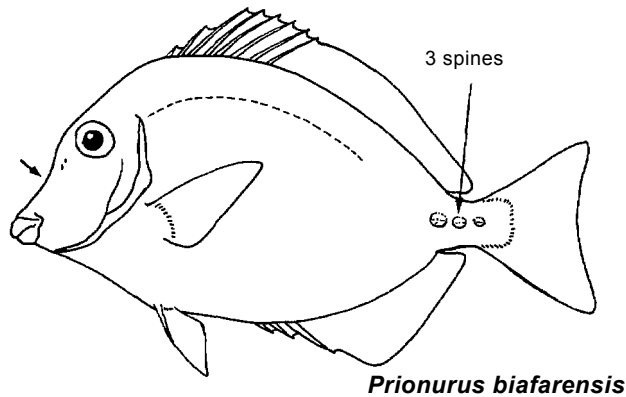
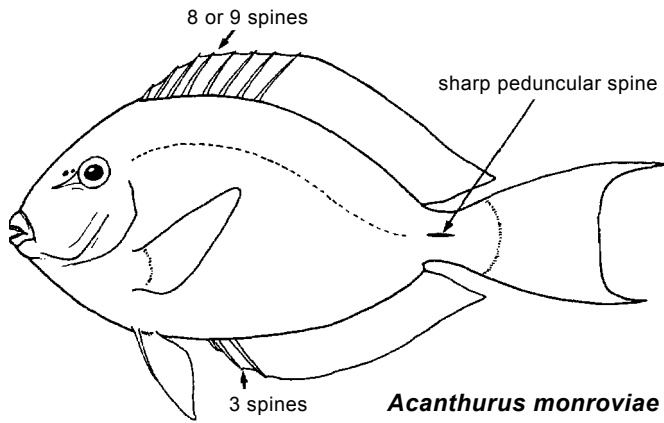
Surgeonfishes, doctorfishes

page 39

To about 45 cm; marine, in shallow waters, usually at less than 50 m depth; benthic.

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TUNAS AND ALLIES - Perciformes: Scombroidei

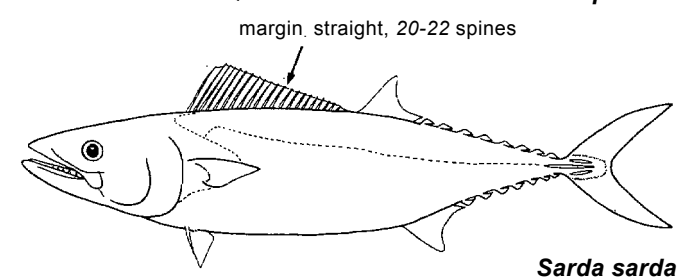
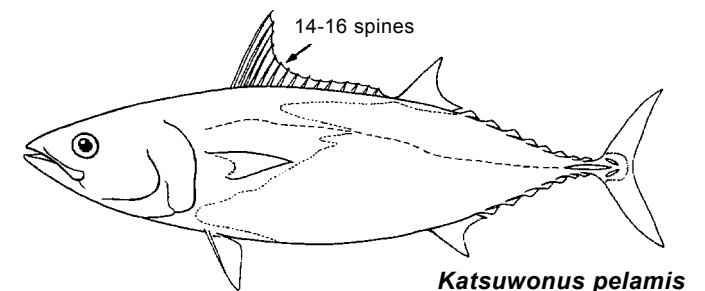
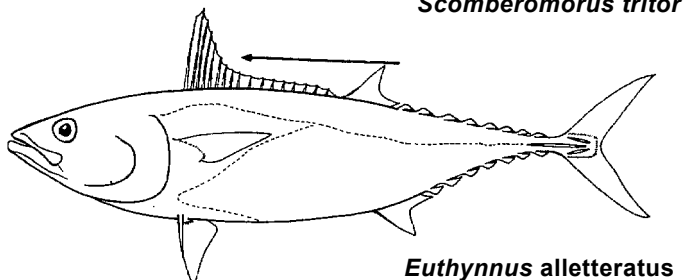
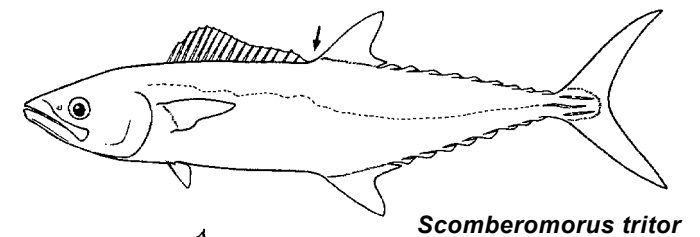
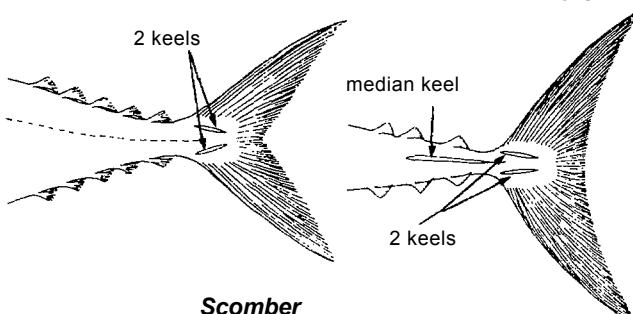
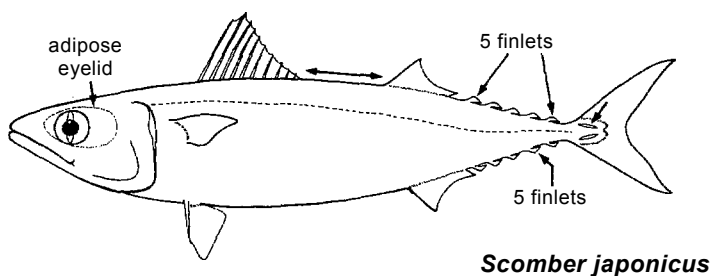
Finlets frequently present at posterior ends of dorsal and anal fins; 1 to 3 keels on either side of caudal peduncle (except in most species of Gempylidae).

SCOMBRIDAE

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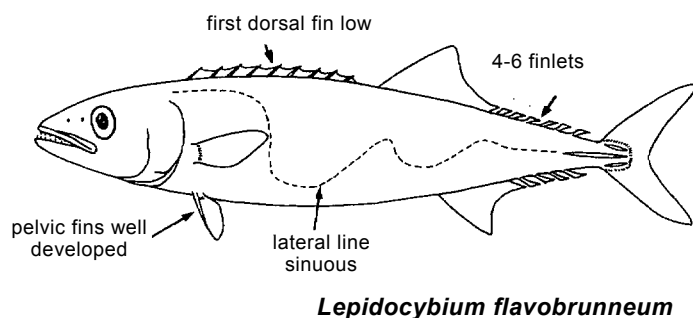
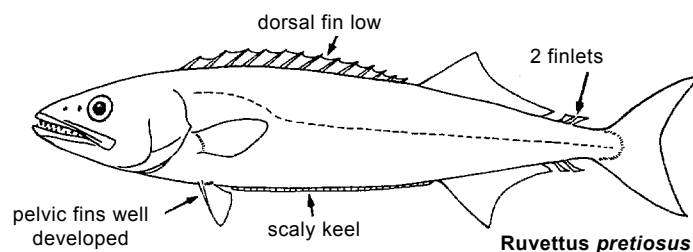
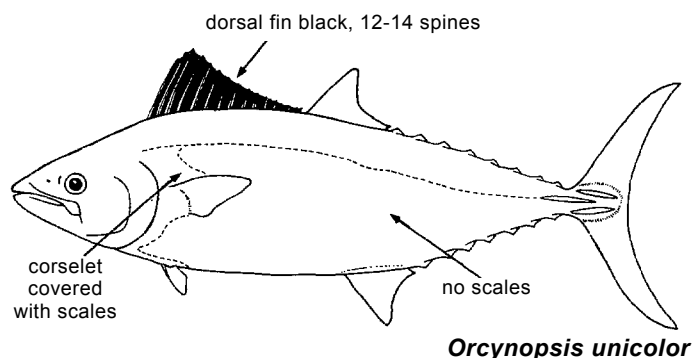
Mackerels, tunas, wahoos, bonitos, ceros, albacores

To over 300 cm; marine, from surface waters to below 100 m depth; pelagic.



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TRICHIURIDAE

Cutlassfishes, frostfishes, scabbardfishes, hairtails

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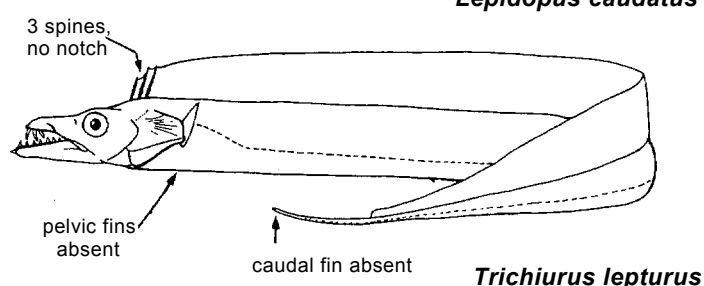
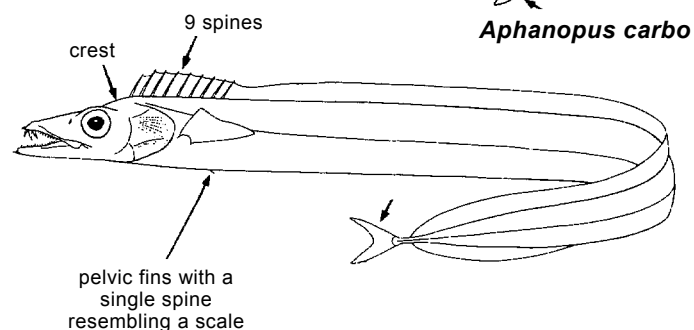
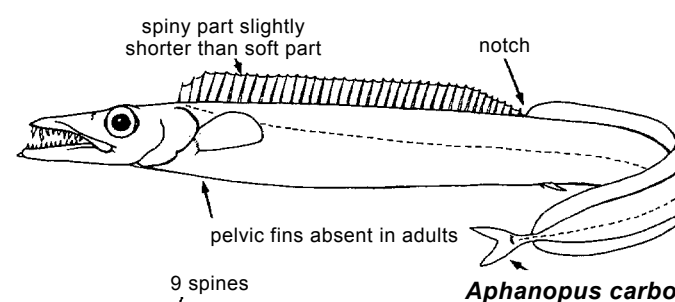
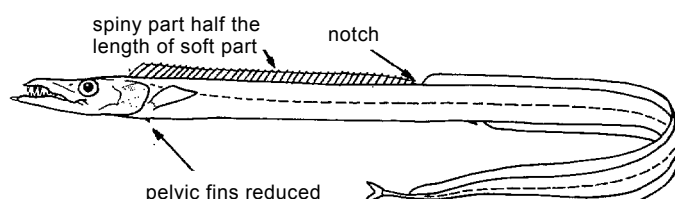
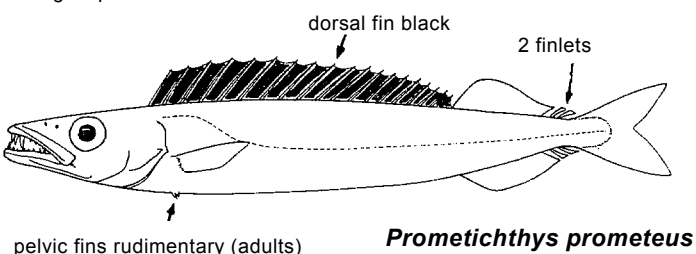
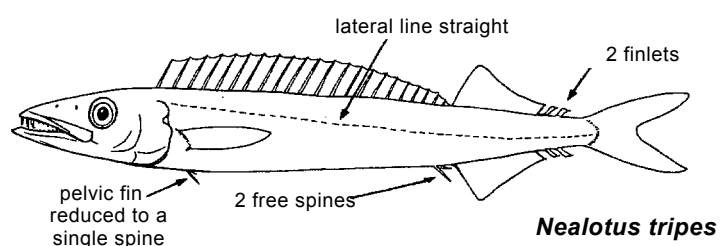
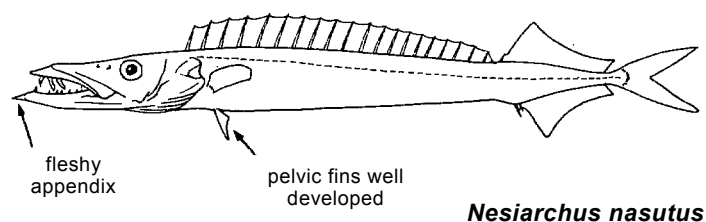
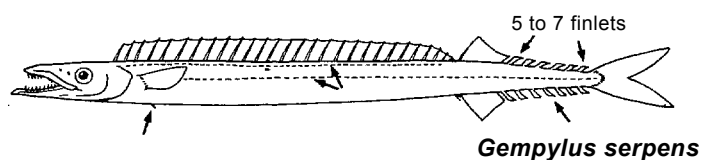
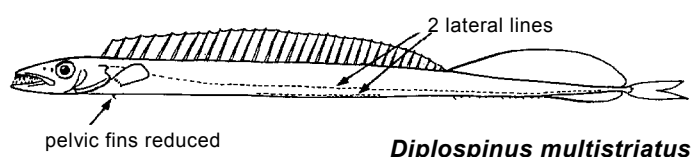
To 250 cm; marine, from the surface (mainly at night) to below 1500 m depth; benthic and pelagic.

GEMPYLIDAE

Snake mackerels, escolars, oilfishes

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To about 300 cm; marine, from the surface (at night) to below 200 m depth; pelagic.



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SWORDFISHES AND ALLIES - Perciformes: Xiphiidae

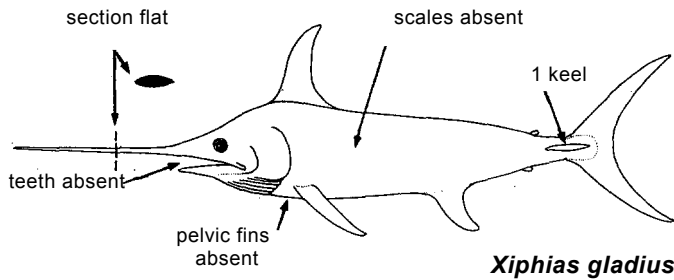
Upper jaw prolonged, sword-like.

XIPHIIDAE

Swordfishes

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To 450 cm; marine, from surface waters to below 800 m depth; pelagic. A single species.



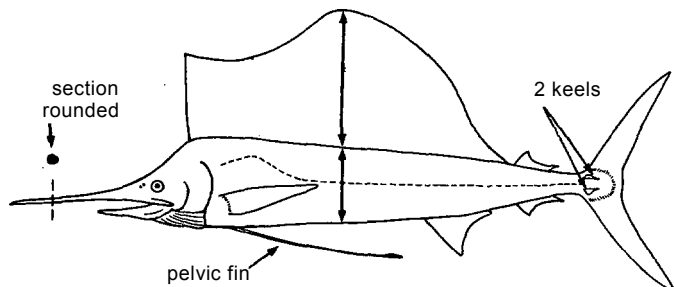
Xiphias gladius

ISTIOPHORIDAE

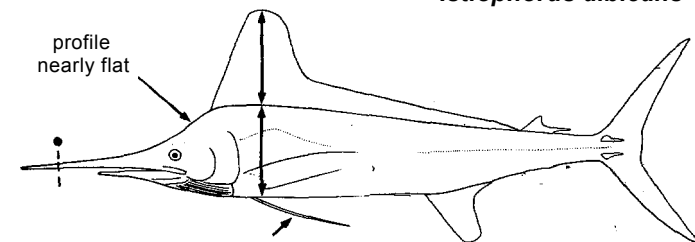
Billfishes, marlins, spearfishes, sailfishes

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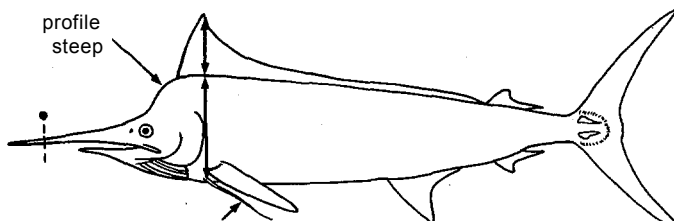
To 400 cm; marine, pelagic oceanic, usually above the thermocline.



Istiophorus albicans



Tetrapturus



Makaira

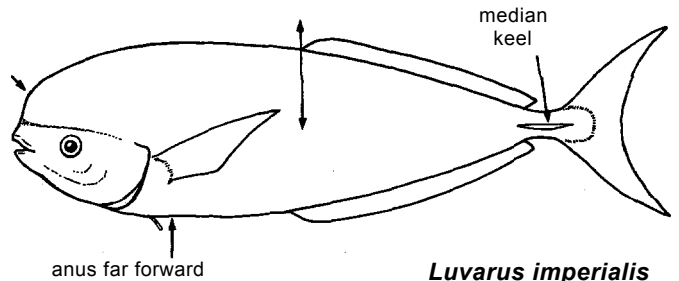
LOUVARS - Perciformes: Luvaridae

Head large with a steep dorsal profile; origin of dorsal fin behind pectoral fins; pelvic fins under throat.

LUVARIDAE

Louvars

To about 190 cm; marine, from the surface to below 150 m depth; pelagic oceanic. A single species.



Luvarus imperialis

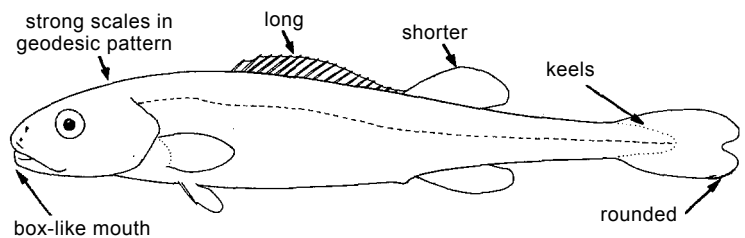
HARVESTFISHES AND ALLIES - Perciformes: Stromateidae

Shape variable; snout blunt and thick; toothed saccular outgrowths (pharyngeal sacs) present in the gullet immediately behind the last gill arch; teeth small, approximately uniserial.

TETRAGONURIDAE

Squaretails

To about 30 cm; marine, in surface waters to below 1000 m depth; mesopelagic to epipelagic.

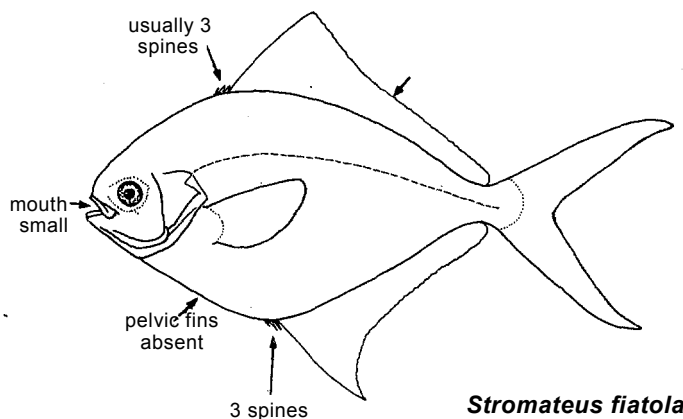


STROMATEIDAE

Harvestfishes, butterfishes

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To about 50 cm; marine, from near the surface to about 200 m depth; pelagic. A single species in the Gulf of Guinea.



Stromateus fiatola

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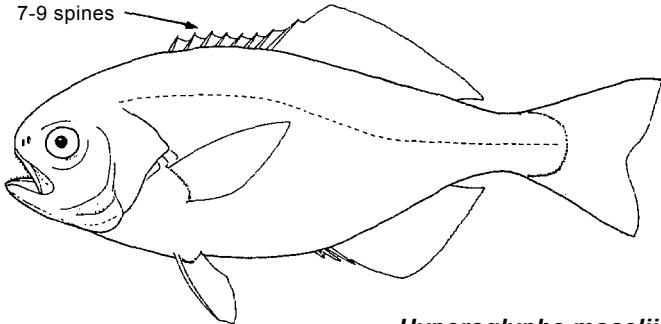
CENTROLOPHIDAE

Ruffs, barrelfishes, blackfishes

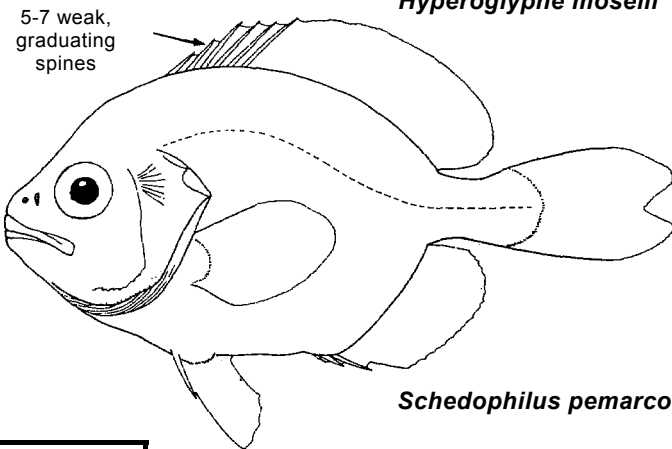
page 56

To about 120 cm; marine, from near the surface to below 200 m depth; pelagic.

7-9 spines

*Hyperoglyphe moselii*

5-7 weak, graduating spines

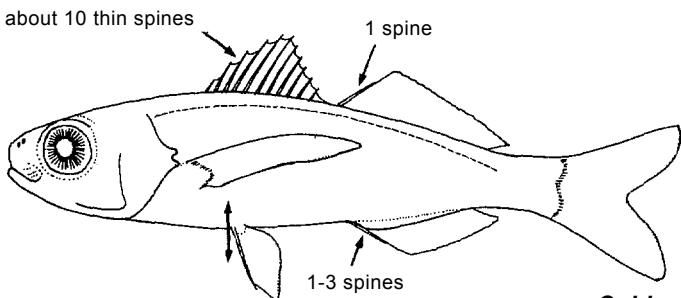
*Schedophilus pamarco***NOMEIDAE**

Man-of-war fishes

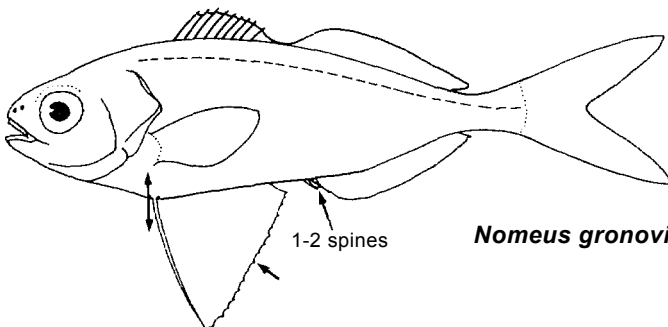
To 100 cm; marine, from near the surface (especially the young) to below 200 m depth; usually, pelagic, but some species may be deep benthic.

about 10 thin spines

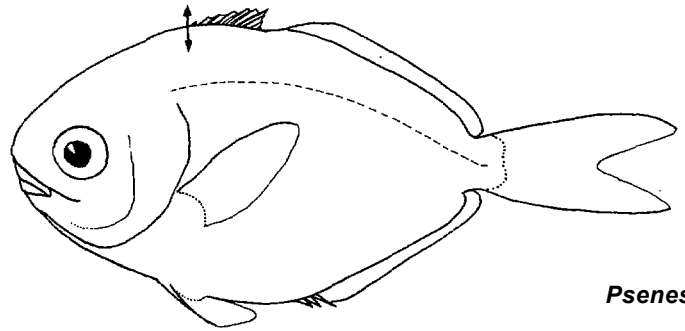
1 spine



1-3 spines

Cubiceps

1-2 spines

Nomeus gronovii*Psenes***ARIOMMATIDAE**

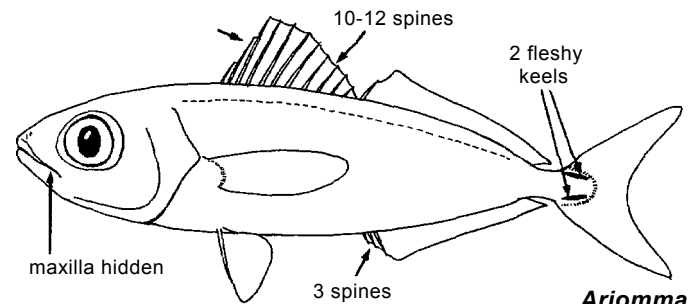
Driftfishes, ariommas

page 41

To about 25 cm; marine, from the surface (the young) to below 500 m depth; mostly benthic to benthopelagic.

10-12 spines

2 fleshy keels



maxilla hidden

3 spines

*Ariomma***FLATFISHES - Pleuronectiformes**

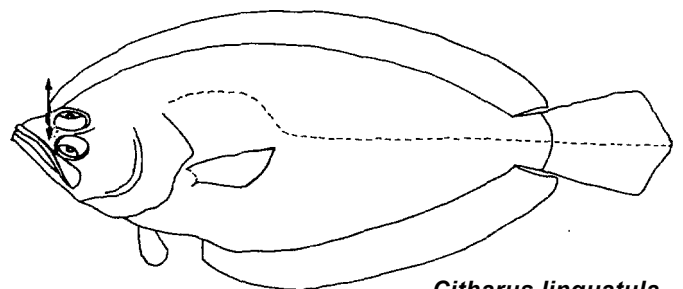
Flattened body shape; eyes present on one side of body only.

CITHARIDAE

Flounders

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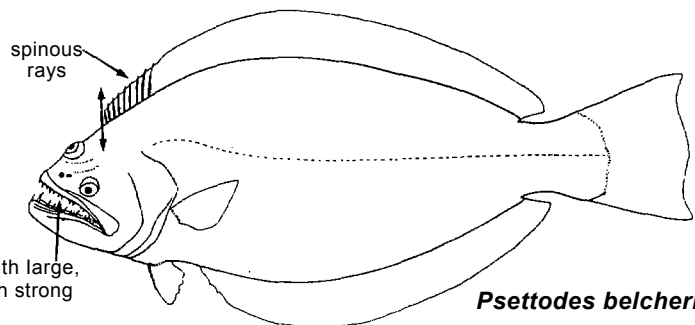
To 25 cm; marine, to about 300 m depth; benthic. A single species in the Gulf of Guinea.

*Citharus linguatula***PSETTODIDAE**

Spinyturbots

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To 60 cm; marine, from coastal waters to about 150 m depth. A single species in the Gulf of Guinea.



spinous rays

mouth large, teeth strong

Psettodes belcheri

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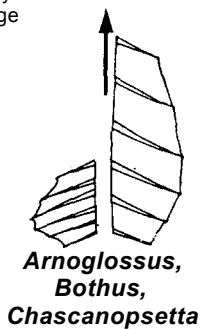
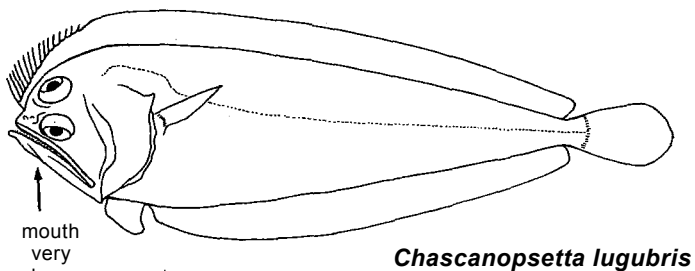
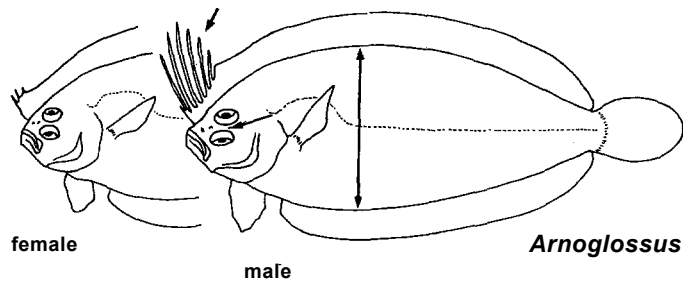
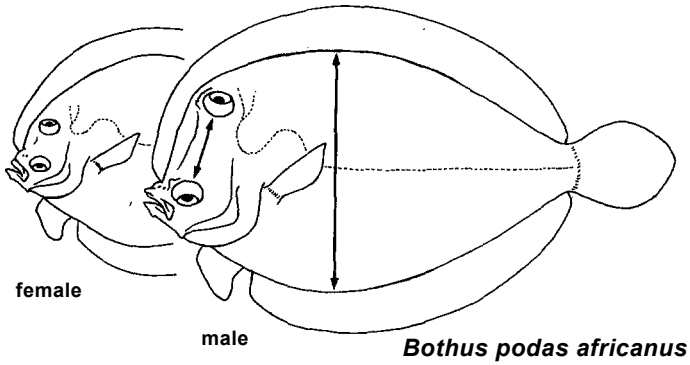
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BOTHIDAE

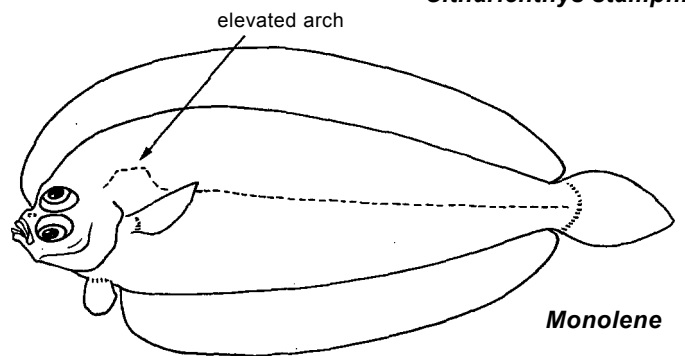
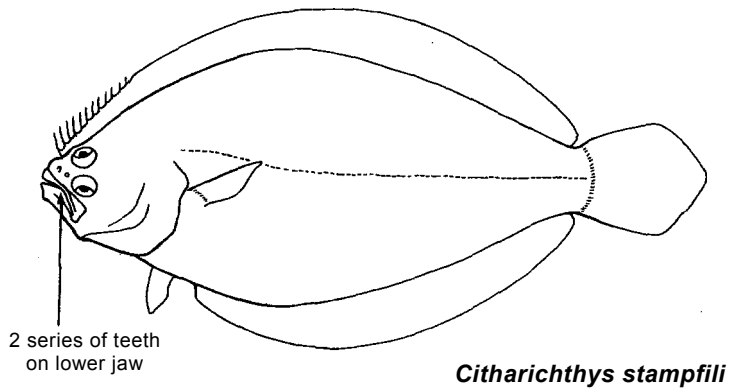
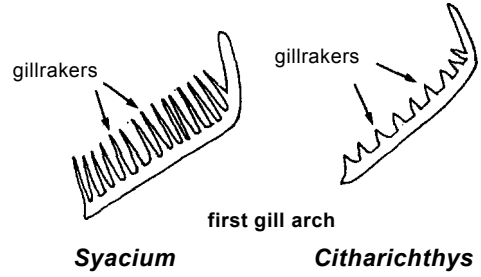
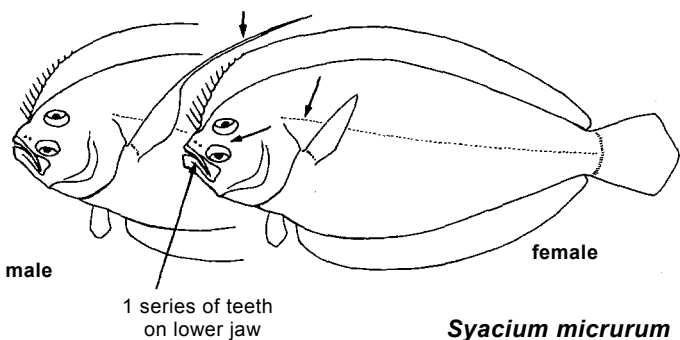
Lefteye flounders

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To about 75 cm; marine, from the coastline to below 200 m depth; benthic.



pelvic fins, ventral view (arrows show towards head)

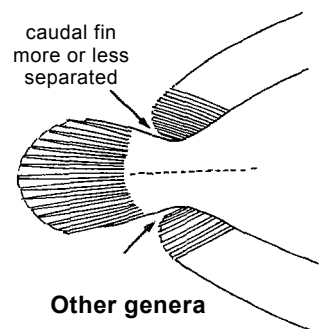
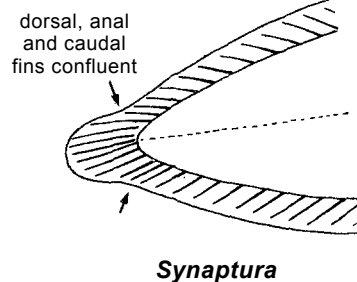
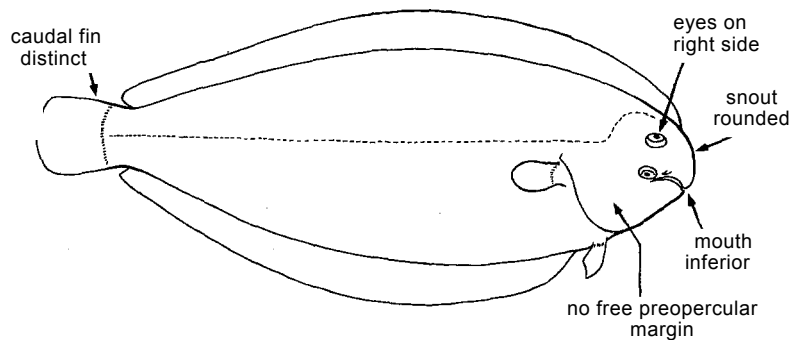


SOLEIDAE

Soles

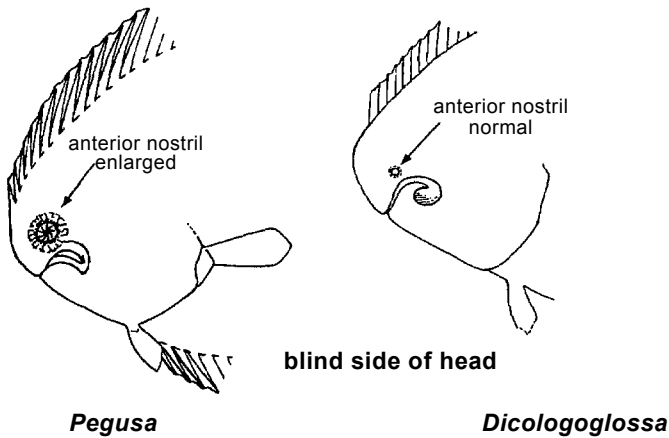
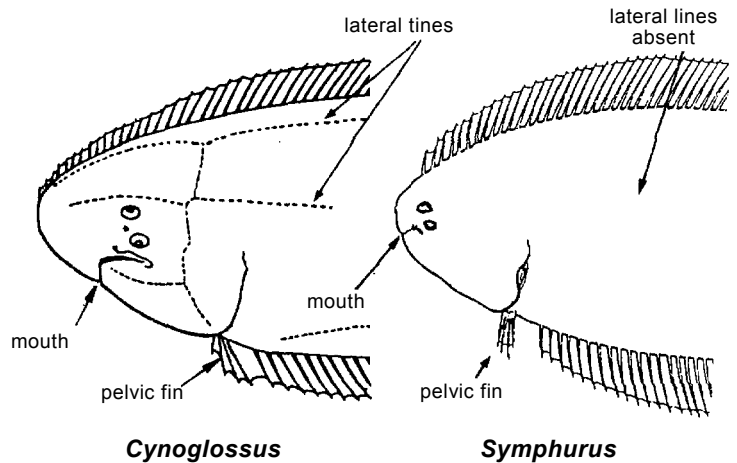
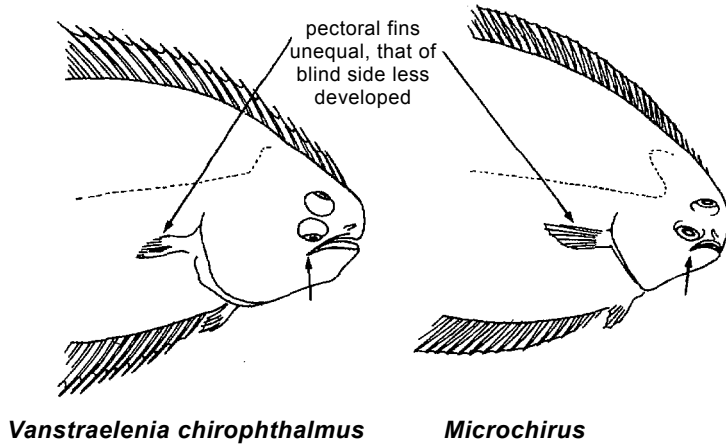
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To about 70 cm; marine, from the coastline to below 100 m depth; some species in estuaries and freshwater; benthic.



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PUFFERFISHES AND ALLIES - Tetraodontiformes

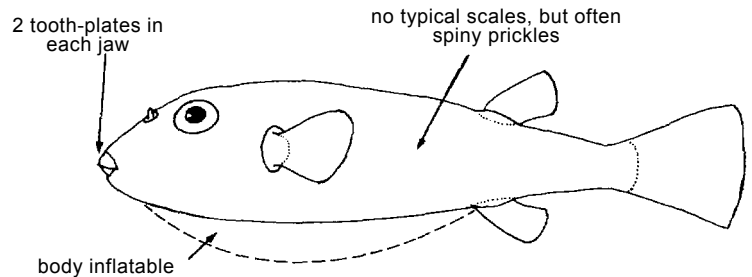
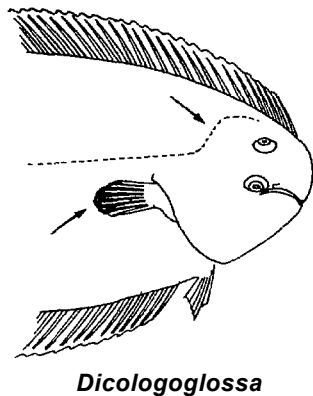
Pelvic fins absent or strongly reduced; a small mouth with strong teeth frequently coalesced into a biting plate; a small gill opening; skin thick or rough, sometimes with prickles, spines or scaly plates.

TETRAODONTIDAE

Puffers

page 121

To about 100 cm; coastal marine waters, estuaries, brackish and hypersaline lagoons and occasionally freshwater; from the coastline to about 180 m depth; benthic.

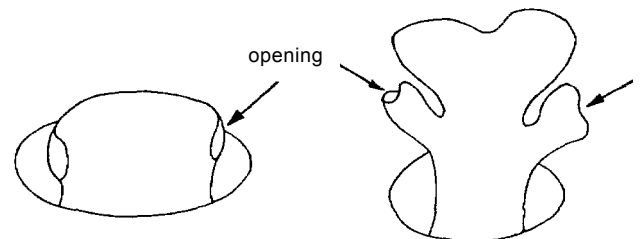
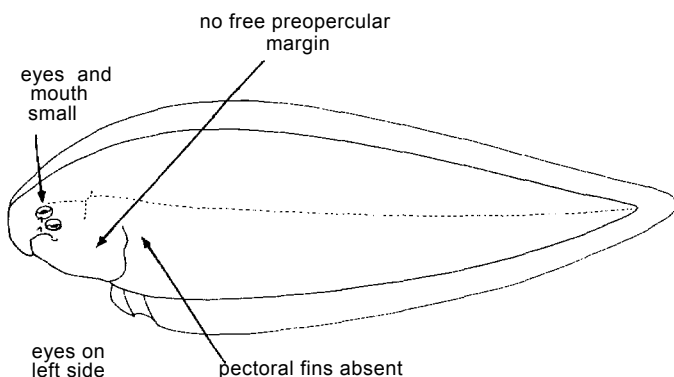


CYNOGLOSSIDAE

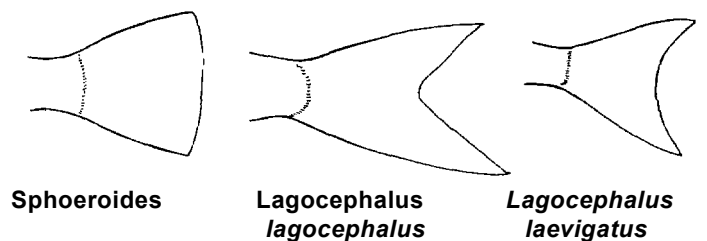
Tonguetishes,
tonguesoles

page 59

To about 60 cm; marine, from shallow coastal waters to about 300 m depth; benthic.

*Lagocephalus*, *Sphoeroides**Ephippion*

nasal papilla



caudal fins

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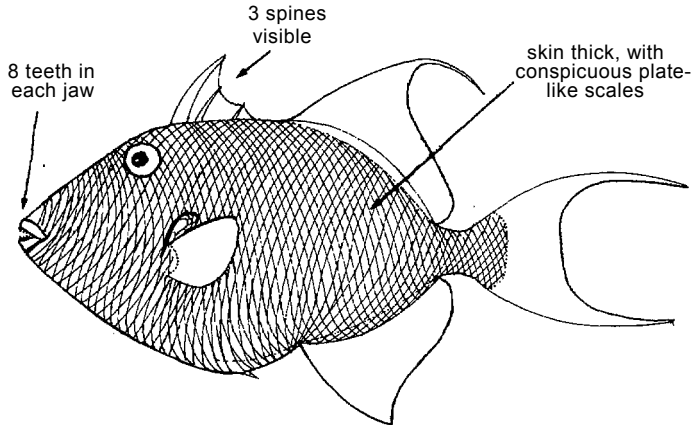
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BALISTIDAE

Triggerfishes, durgons

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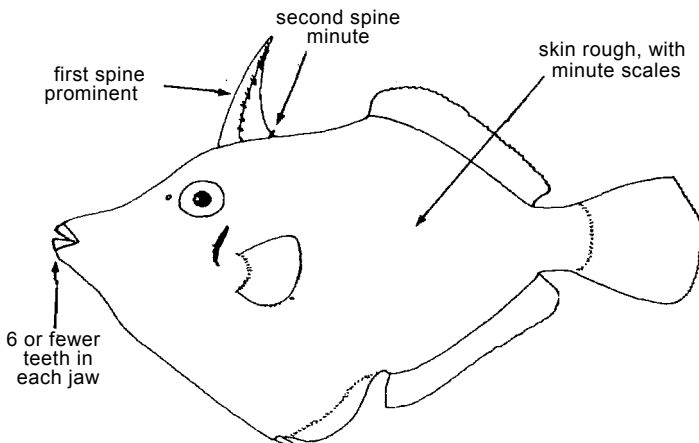
To about 50 cm; from the coastline to about 100 m depth; mostly benthic.



MONACANTHIDAE

Filefishes, leatherjackets

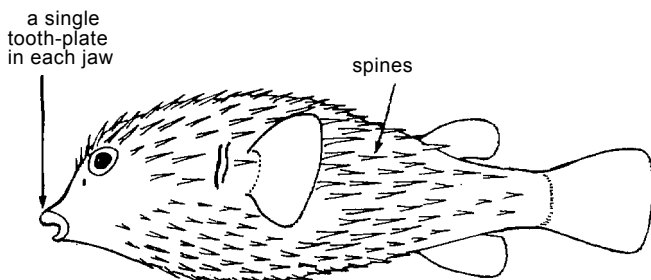
To about 60 cm; marine, from the coastline to about 100 m depth; mostly benthic. Two species caught occasionally.



DIODONTIDAE

Porcupinefishes, spiny puffers, burrfishes

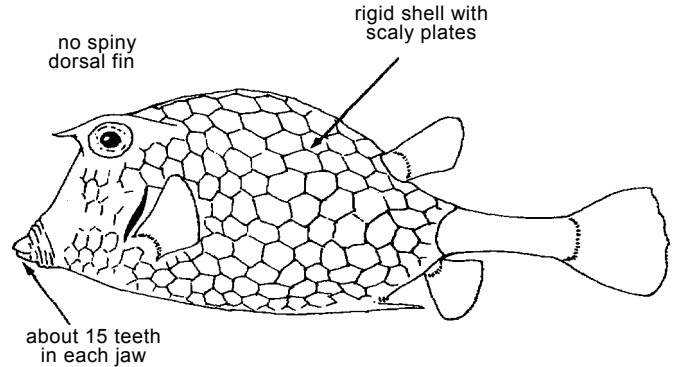
To about 100 cm; from the coastline to about 100 m depth; benthic to pelagic. Four species captured occasionally for ornamental purposes.



OSTRACIIDAE

Trunkfishes, boxfishes, cowfishes

To about 35 cm; marine, from the coastline to about 100 m depth; benthic. Many genera and species captured occasionally for ornamental purposes.



MOLIDAE

Malas, ocean sunfishes, headfishes

To about 400 cm; marine, from the surface to about 360 m depth; pelagic oceanic. Three species caught occasionally.

