AID TO THE IDENTIFICATION OF FAMILIES OCCURRING IN THE WESTERN INDIAN OCEAN

This guide includes:

1. Families with representatives over 6 cm in total length occurring in marine waters above 250 m depth or in brackish waters.
2. Families with representatives usually occurring in deeper marine waters that might be of potential interest to fisheries.

Code numbers are given for families described on Identification Sheets.

Note:

(a) Outline drawings are intended to represent major morphological types in each family; therefore, not every genus is illustrated.

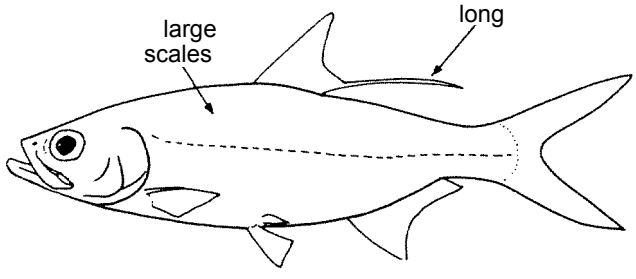
(b) Information applies to the Western Indian Ocean representatives onlv.

TARPONS AND ALLIES - Elopiformes

Fin-spines absent; a single dorsal fin located above middle of body; pelvic fins in abdominal position; colour silverv.

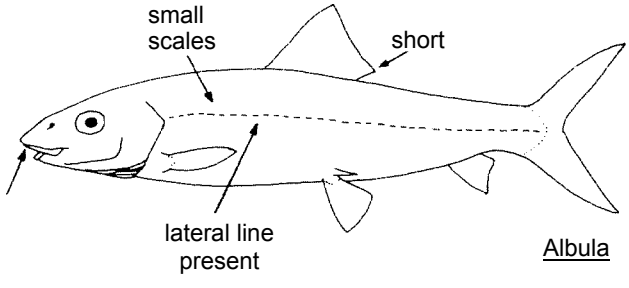
MEGALOPIDAE Tarpons MEGAL

To 55 cm; in coastal marine waters, estuaries and freshwater; pelagic. A single species in the area: Megalops cyprinoides.



ALBULIDAE Bonefishes ALBO

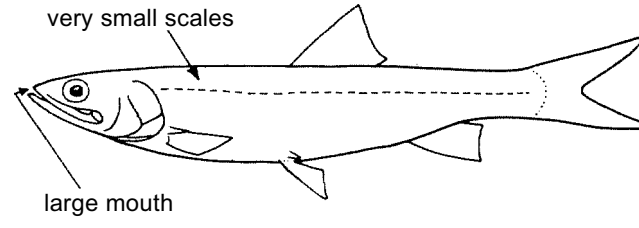
To 80 cm; mainly in coastal marine waters, sometimes entering estuaries; demersal.



Albula

ELOPIDAE Ladyfishes, tenpounders ELOP

To 90 cm; coastal marine waters, estuaries and freshwater; mainly pelagic. A single species: Elops machnata



HERRINGS AND ALLIES - Clupeiformes

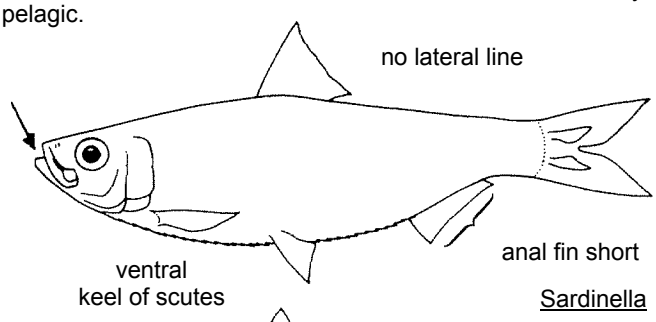
Fin-spines absent; a single dorsal fin located above middle of body; pelvic fins in abdominal position; lateral line absent; colour silvery.

CLUPEIDAE

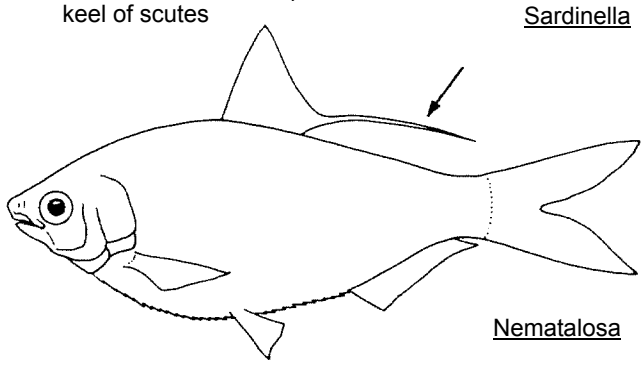
CLUP

Herrings, shads, menhadens, pilchards, sardines, sardinellas, sprats and pellonas

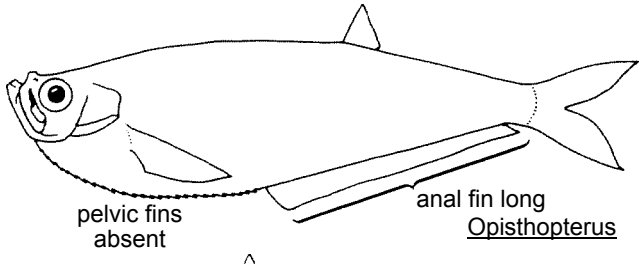
To 60 cm, but most species less than 25 cm; in coastal marine waters, estuaries and freshwater; mainly pelagic.



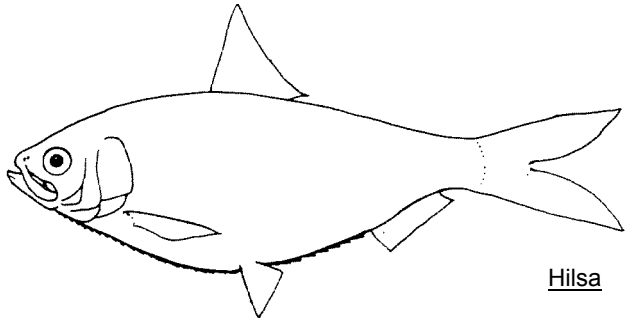
Sardinella



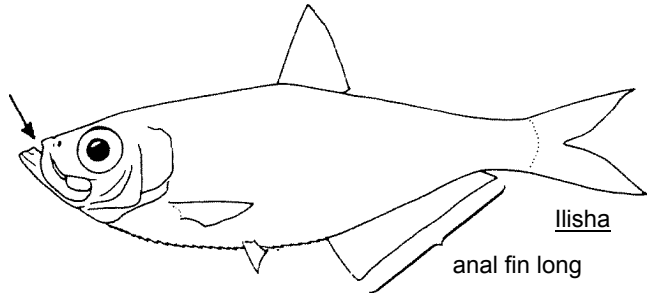
Nematalosa



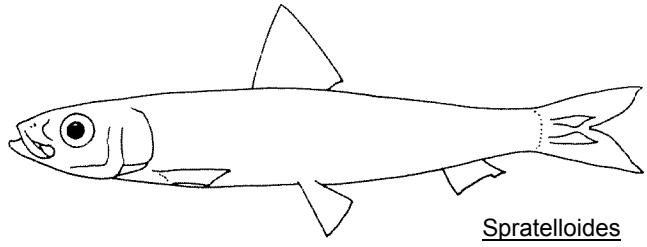
Opisthopterus



Hilsa



Ilisha

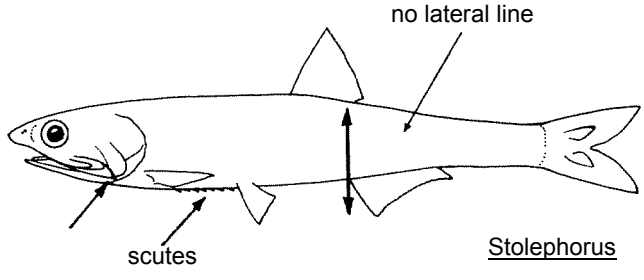


Spratelloides

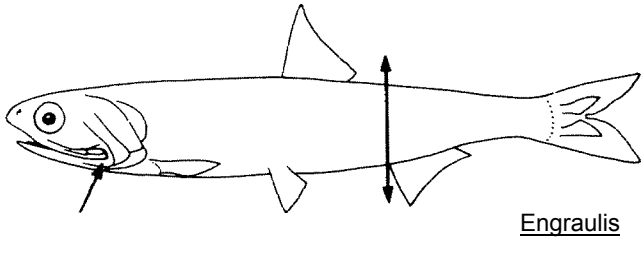
ENGRAULIDAE Anchovies

ENGR

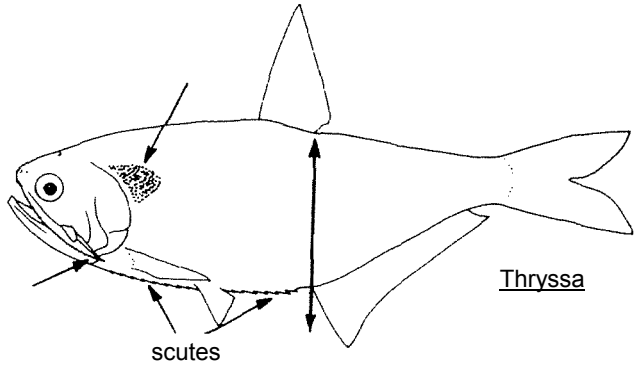
To 20 cm; coastal marine waters to 400 m depth and estuaries; off-bottom to pelagic.

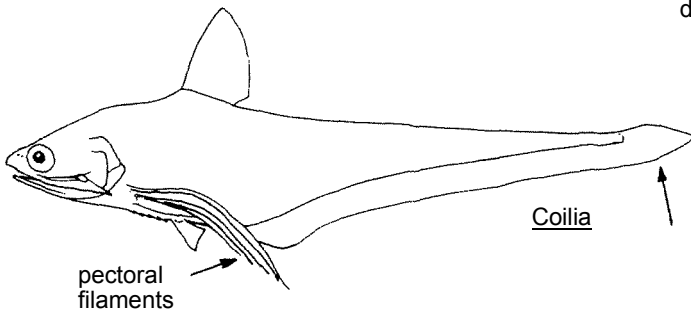


Stolephorus



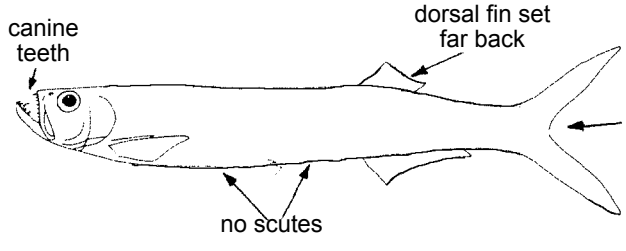
Engraulis





CHIROCENTRIDAE Wolf-herrings CHIROC

To 100 cm; marine, coastal waters from the shore to about 150 m depth; pelagic

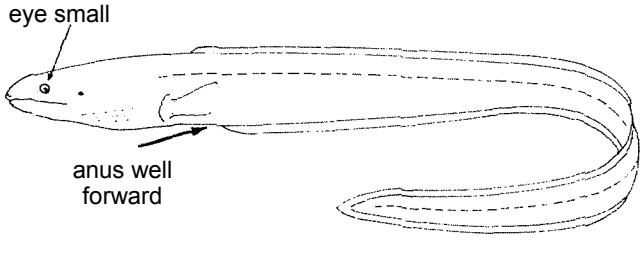


EELS - Anguilliformes

Body very elongate; fin-spines absent; pelvic fins absent; usually scaleless (minute scales present only in Anguilla).

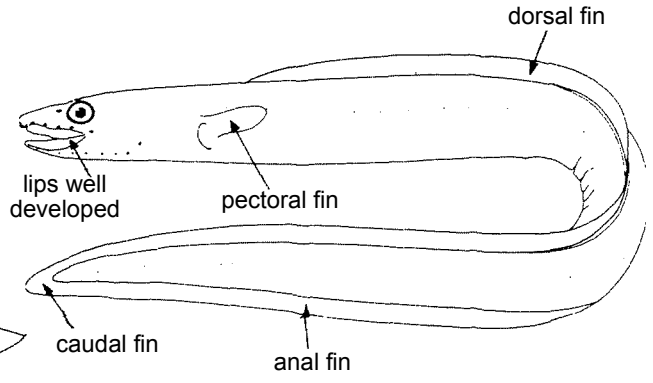
DYSOMMIDAE Mustard and arrowtooth eels

To at least 25 cm; marine coastal waters to below 4 000 m depth; benthic.



CONGRIDAE Conger eels CONGR

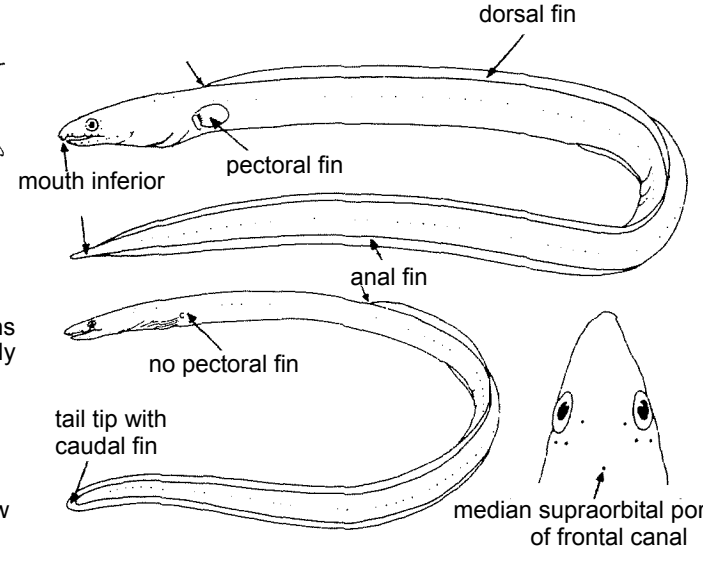
To about 120 cm; marine, from the shore to about 2 000 m depth; benthic.



OPHICHTHIDAE OPHICH

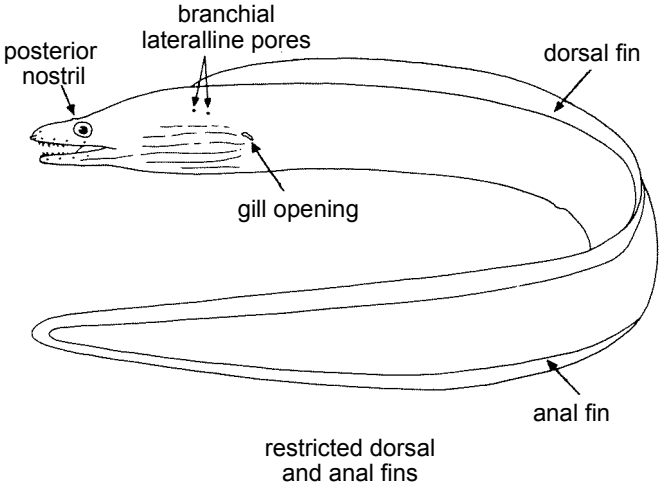
Snake eels, snapper eels and worm eels

To 150 cm; marine, from shallow coastal waters to below 750 m depth; occasionally in estuaries; most benthic, some pelagic.



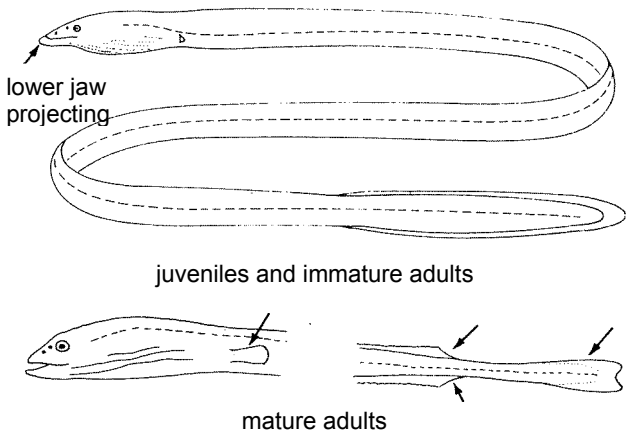
MURAENIDAE Morays MURAEN

To over 400 cm; marine, from shallow coastal waters to beyond 500 m depth; benthic.



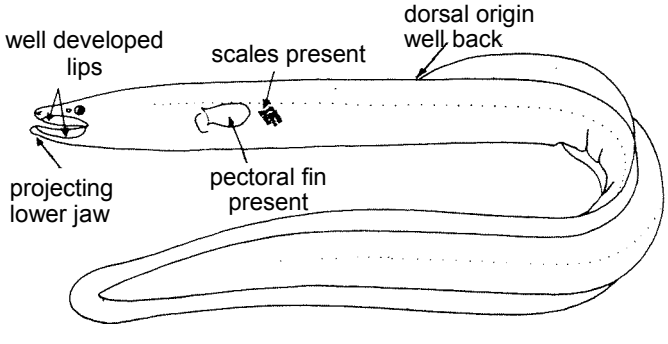
MORINGUIDAE Spaghetti eels

To at least 50 cm; marine, mostly inshore waters; benthic (burrowing) by day, but pelagic at night; a strong sexual dimorphism.



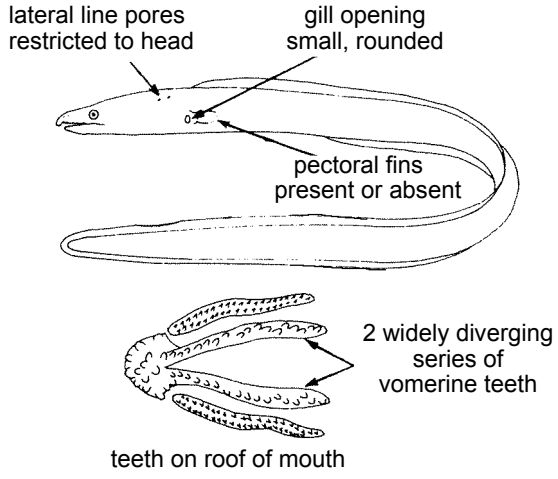
ANGUILLIDAE Freshwater eels ANGUIL

To 200 cm; generally fresh and brackish waters but migrating into offshore marine waters for spawning; predominantly benthic.



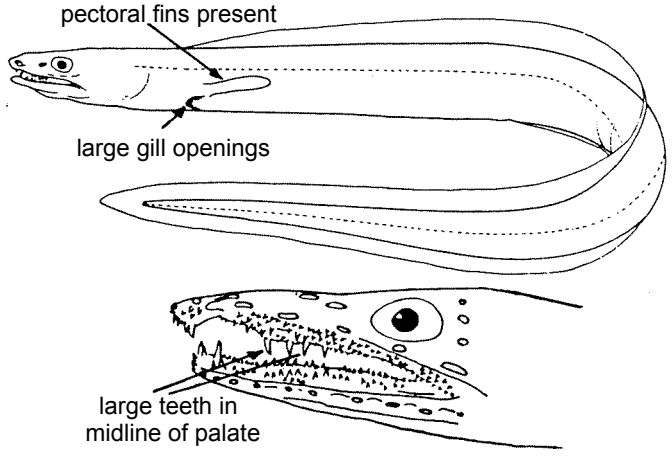
XENOCONGRIDAE False morays

To about 50 cm; marine, from the shore to at least 350 m depth; benthic.



MURAENESOCIDAE Pike congers MURAENES

To 50 cm; marine, from shallow coastal waters to below 500 m depth; benthic.

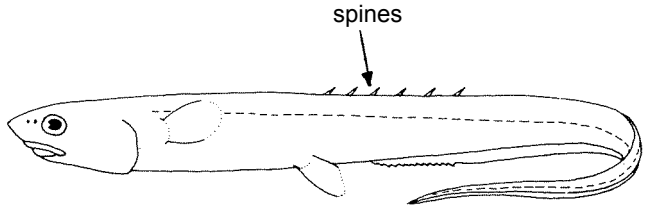


SPINY EELS - Notacanthiformes

Body very elongate; snout projecting; either a series of spines along back, or a single short-based and soft-rayed dorsal fin; anal fin long.

NOTACANTHIDAE Spiny eels

To 120 cm; marine, from 150 to below 800 m depth; benthic.

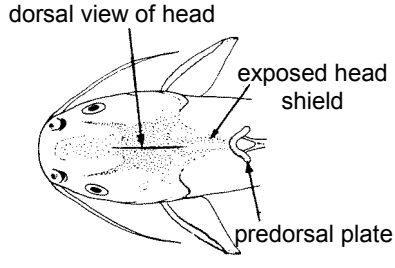


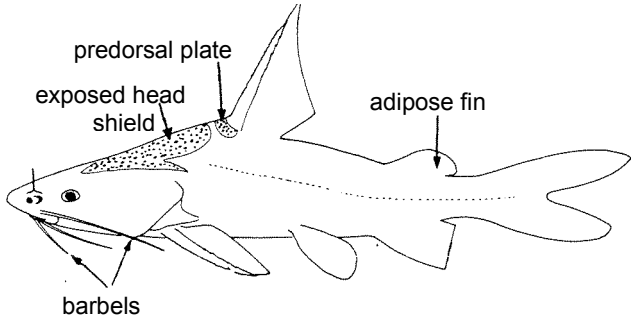
CATFISHES - Siluriformes

Barbels present around mouth; a strong spine usually present at front of dorsal and pectoral fins; an adipose fin often present; scales absent, but a bony head shield often present.

ARIIDAE Sea catfishes ARAD

To over 120 cm; in coastal marine waters, estuaries and freshwater; a few species to depths greater than 50 m; benthic.

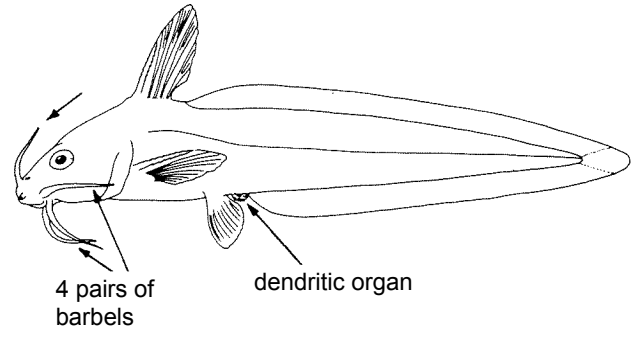




PLOTOSIDAE PLOT

Eel catfishes, stinging catfishes, coral reef catfishes, barbel eels

To 150 cm; coastal marine, brackish and freshwaters; benthic

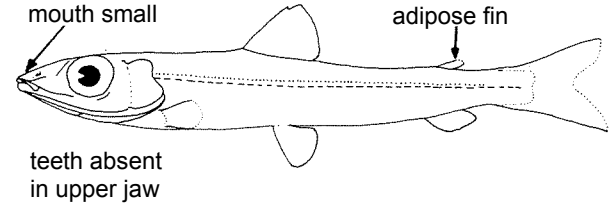


ARGENTINES AND ALLIES - Salmoniformes

A diverse assemblage of families characterized by the inclusion of the maxilla in the gape of mouth; fin spines absent; adipose fin often present.

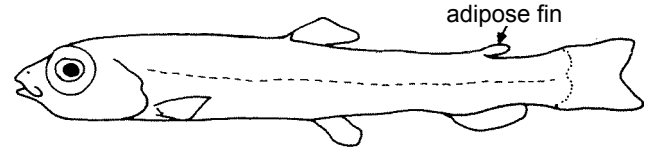
ARGENTINIDAE Argentines ARGEN

To about 40 cm; marine, from 80 to about 400 m depth; benthopelagic and pelagic.



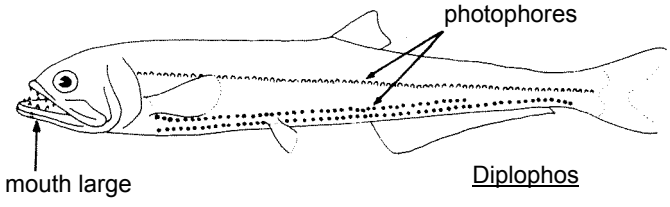
BATHYLAGIDAE Deep-sea smelts

To about 20 cm; marine, from the surface to below 2 000 m depth; epipelagic to mesopelagic and bathy pelagic.

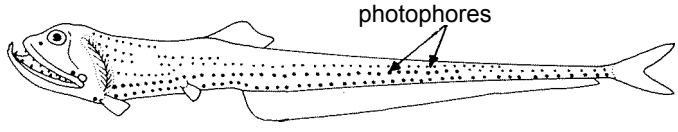


GONOSTOMATIDAE Bristlemouths GONOST

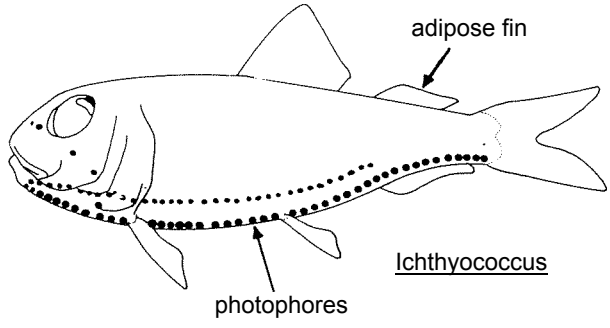
To about 25 cm; mostly in deep water (usually below 200 m), but some species coming up to about 50 m at night; mesopelagic to bathypelagic.



Diplophos



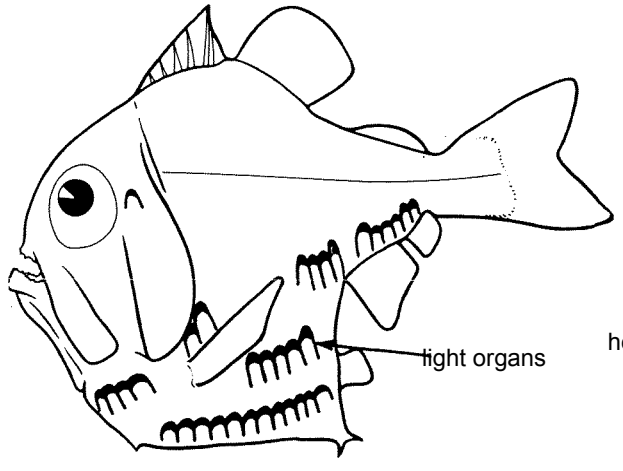
Triplophos



Ichthyococcus

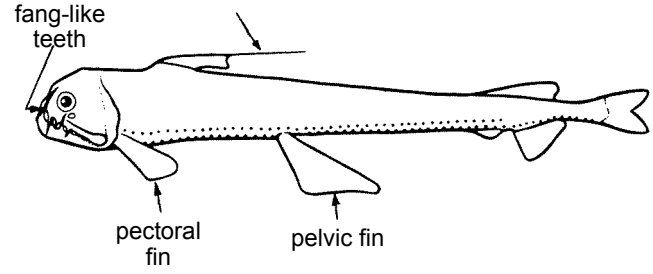
STERNOPTYCHIDAE Marine hatchet fishes

To 20 cm; marine, from the surface to below 3 500 m depth; meso and bathypelagic.



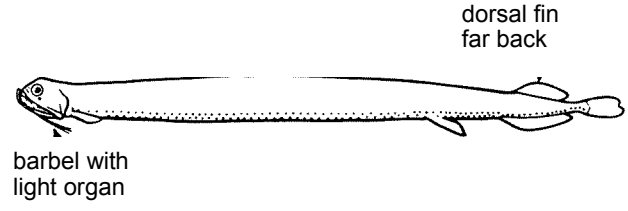
CHAULIODONTIDAE Viperfishes

To about 20 cm; marine, between 600 and 2 000 m depth, but coming to the surface at night; pelagic.



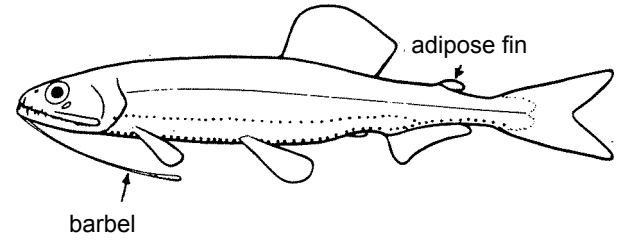
STOMIIDAE Scaly dragonfishes

To 40 cm; marine, from the surface to 2 000 m depth, but mainly between 300 and 500 m; meso-and bathy-pelagic.



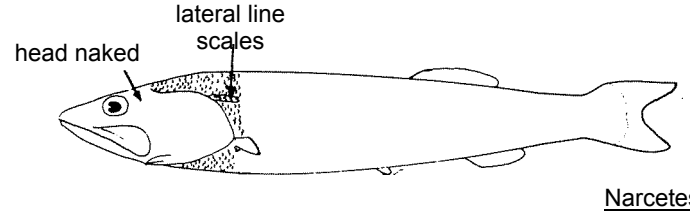
ASTRONESTHIDAE Snaggletooths

To about 20 cm; marine, from about 150 to below 2 000 m depth; mesopelagic.



ALEPOCEPHALIDAE Slickheads ALEPO

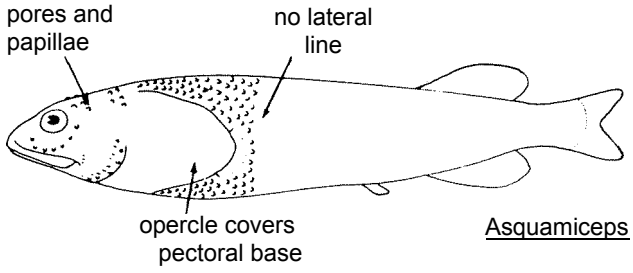
To about 55 cm; oceanic waters, most species below 1 000 m depth; benthopelagic to pelagic.



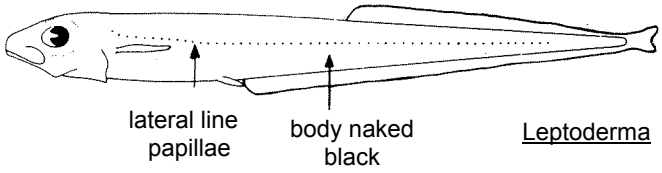
Narcetes

FAO Sheets

Fishing Area 51



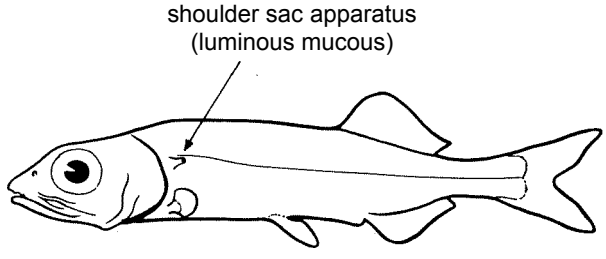
Asquamiceps



Leptoderma

SEARSIDAE Searsids

To about 20 cm; marine, between 200 and below 4 000 m depth, rising to upper layers at night; meso- and bathypelagic.

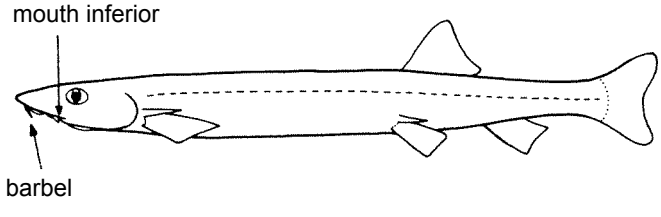


MILKFISHES AND ALLIES - Gonorhynchiformes

Mouth small; toothless jaws.

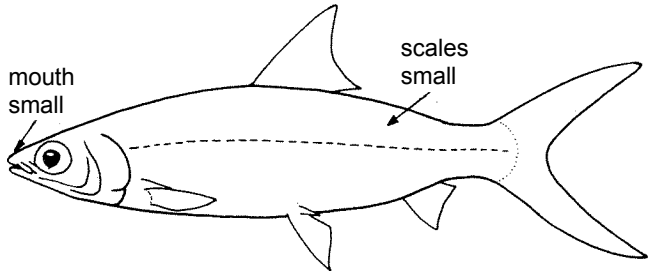
GONORHYNCHIDAE Beaked salmons GONORH

To 60 cm; marine, to 160 m depth; benthic; a single species in the area: Gonorhynchus gonorhynchus.



CHANIDAE Milkfishes CHAN

To about 180 cm; coastal marine, brackish and fresh-waters; benthic; a single species: Chanos chanos.

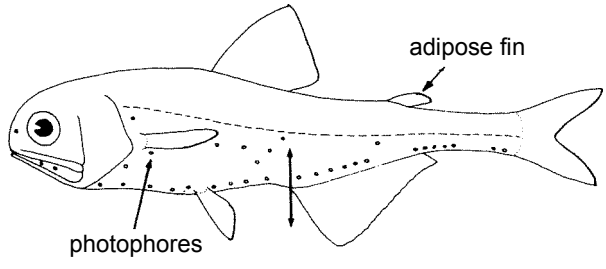


LANTERNFISHES AND ALLIES - Myctophiformes

Fin-spines absent; adipose fin present; light organs (photophores) sometimes present.

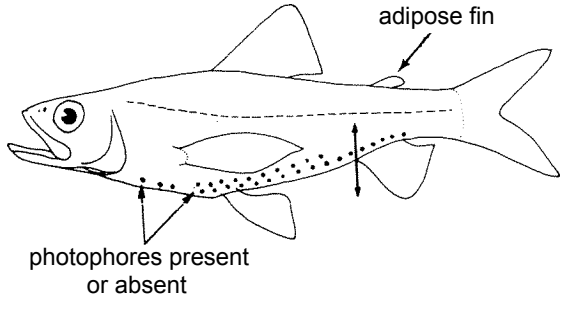
MYCTOPHIDAE Lanternfishes MYCT

To 30 cm, but most species less than 10 cm; from the surface (at night) to below 2 000 m depth; meso pelagic to bathypelagic.



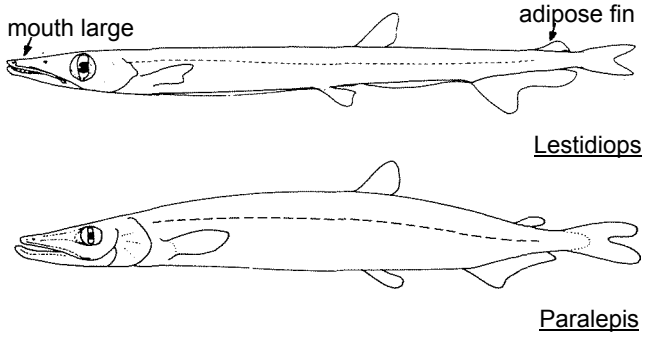
NEOSCOPELIDAE Neoscopelids

To about 30 cm; marine, from the surface to below 500 m depth; pelagic or benthopelagic.



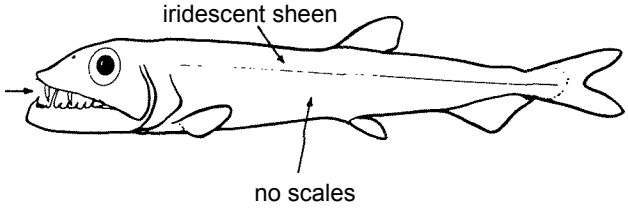
PARALEPIDIDAE Barracudinas PARALEP

To 50 cm; marine, from the surface to below 800 m; mesopelagic to bathypelagic.



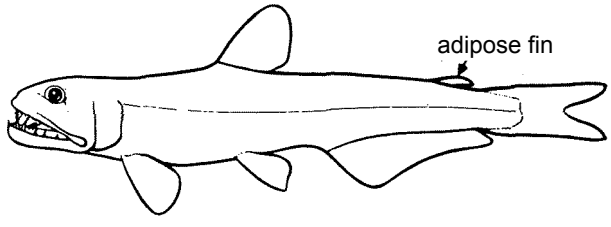
OMOSUDIDAE Omosudids

To 23 cm; marine, from the surface to about 1 300 m depth; rising to the surface at night; mesopelagic.



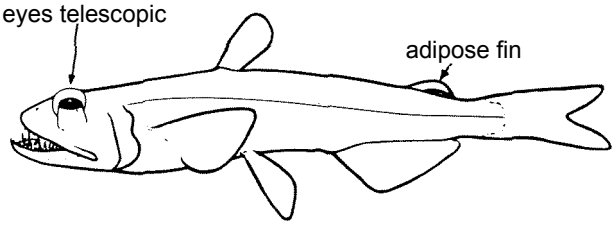
EVERMANNELLIDAE Sabertooth fishes

To 12 cm; marine, mesopelagic, but rising to the surface at night.



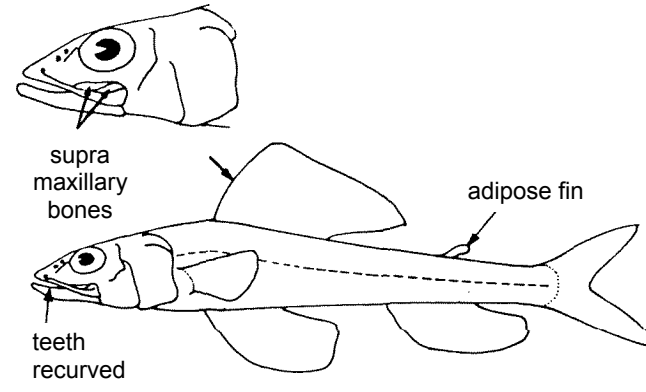
SCOPELARCHIDAE Pearleyes

To 13 cm; marine, from the surface to below 2 300 m depth, mostly below 300 m; meso- and bathypelagic.



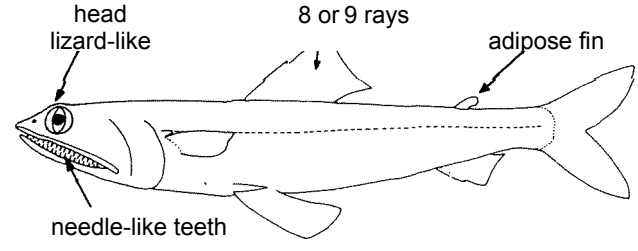
AULOPIDAE Flagfishes AULOP

To 45 cm; marine, from about 75 to at least 300 m depth; benthic.



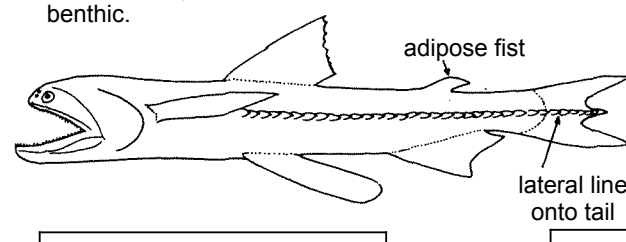
SYNODONTIDAE Lizardfishes SYNOD

To about 50 cm; marine, from shallow waters to below 200 m depth; benthic.



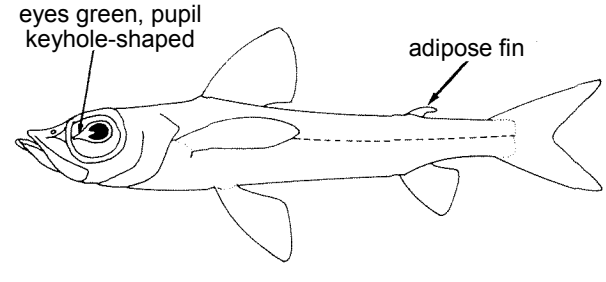
HARPADONTIDAE Bombay ducks HARP

To 45 cm; marine coastal waters and estuaries; benthic.



CHLOROPHTHALMIDAE Greeneyes CHLOR

To 30 cm; marine, from about 75 m to about 750 m depths; benthic.

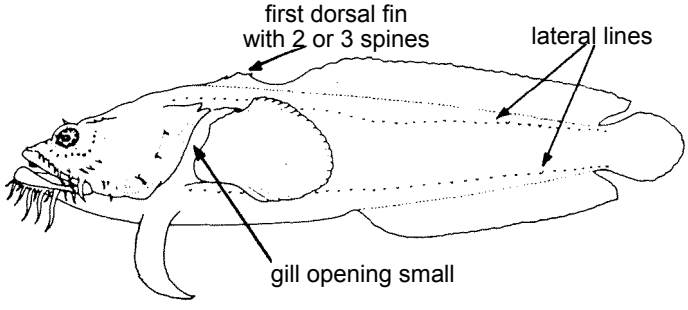


TOADFISHES - Batrachoidiformes

Head large and depressed, body compressed; two dorsal fins, the first with 2 or 3 spines; pelvic fins under throat; gill openings restricted to sides of head; one to several lateral lines on body.

BATRACHOIDIDAE	Toadfishes	BATRACH

To about 45 cm; in coastal marine waters to at least 400 m depth; also in estuaries and freshwater; benthic.

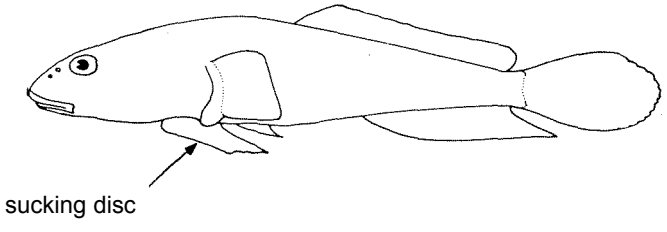


CLINGFISHES - Gobiesociformes

A sucking disc under anterior part of body (formed by pectoral and pelvic fins); a single dorsal fin without spines.

GOBIESOCIDAE	Clingfishes

To 15 cm, but most species less than 8 cm; littoral marine, also in estuaries and freshwater.

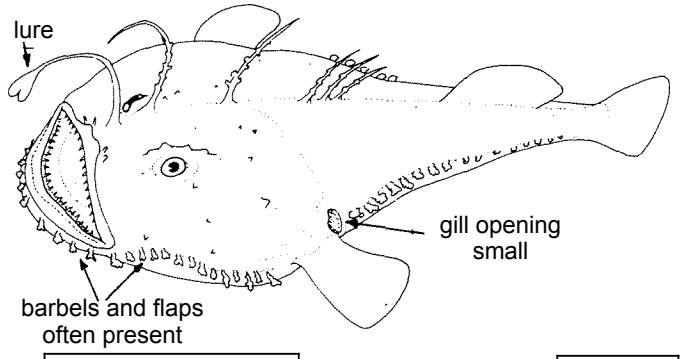


ANGLERFISHES AND ALLIES - Lophiiformes

Body globose or depressed; first spine of dorsal fin modified to form a "fishing pole", gill openings small and circular, usually located below or behind pectoral fins.

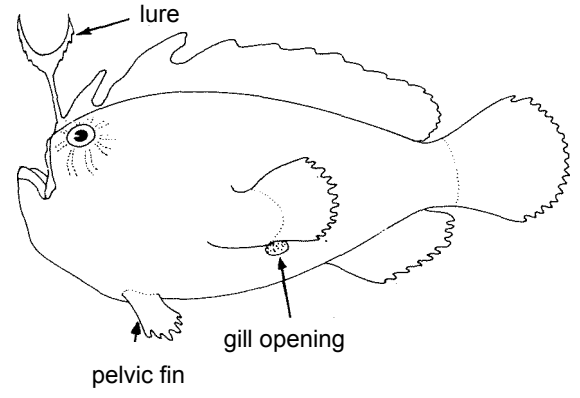
LOPHIIDAE	Anglerfishes	LOPH

To about 100 cm; marine, from coastal waters to below 800 m depth; benthic.



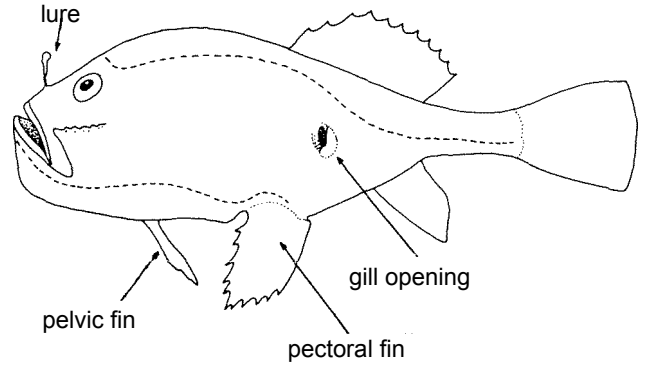
ANTENNARIIDAE	Frogfishes	ANTEN

To 50 cm; marine, from coastal and surface waters to below 100 m depth; mostly benthic.



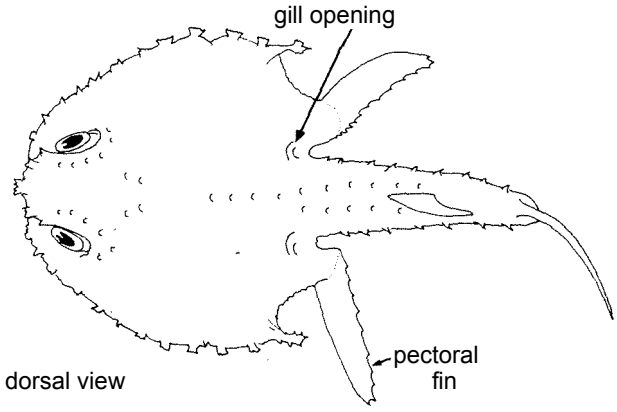
CHAUNACIDAE	Sea toads

To about 50 cm; marine, between 180 and 550 m depth; benthic.



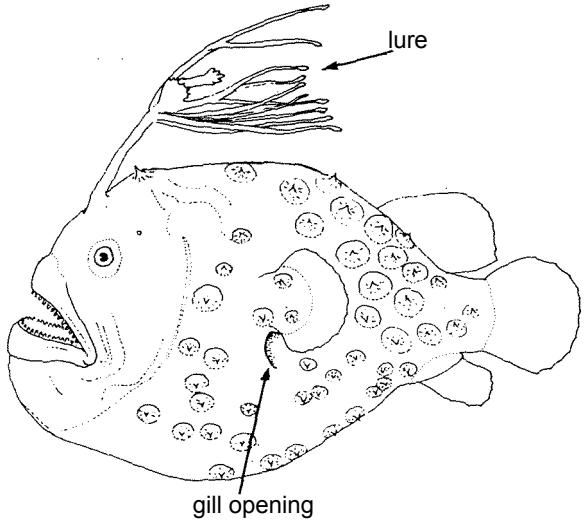
OGCOCEPHALIDAE Batfishes

To 15 cm; marine, from 100 to 300 m depth; benthic.



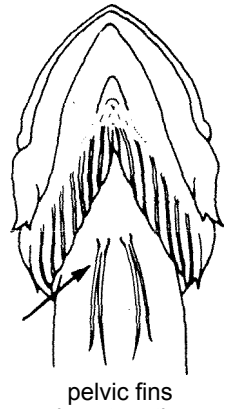
HIMANTOLOPHIDAE Footballfishes

To about 60 cm; marine, from near the surface to below 500 m depth; pelagic.



CUSKEELS, BROTULAS AND ALLIES
- Ophidiiformes

No sharp spines in fins; pelvic fins absent in some species; when present, these fins are placed anterior to pectoral fins, sometimes far forward on under-surface of head; they are always close together and filamentous, each with no more than 2 rays; caudal fin separate or. joined to dorsal and anal fins; snout without barbels (except for a single species).

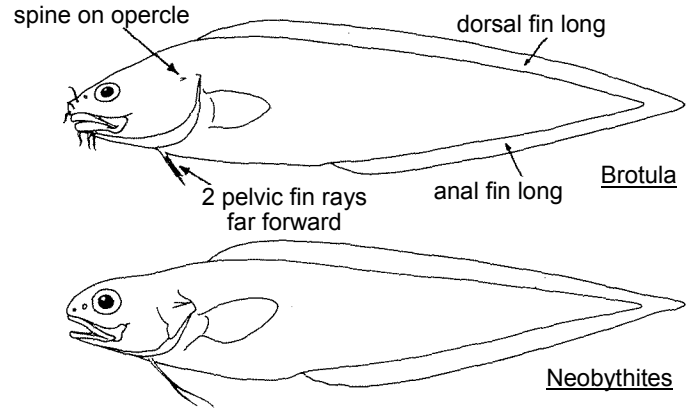


pelvic fins close together when present

OPHIDIIDAE OPHID

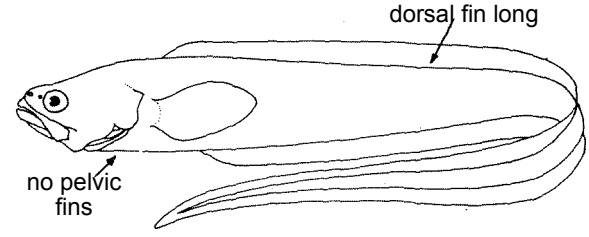
Cusk eels, brotulas (including Brotulidae)

To 150 cm, but most around 30 cm; marine, from the shore to 5 000 m depth; benthic.



CARAPIDAE Pearlfishes

To about 20 cm; marine from shallow coastal waters to the continental slope; mostly benthic, living in sea cucumbers, clams, sea urchins, tunicates and starfish, but 1 species free-living.



CODS, HAKES AND ALLIES
- Gadiformes

No sharp spines in fins (except in dorsal fin of some macrourids);. pelvic fins below or anterior to pectoral fins and widely separated from each other, usually entire, but reduced to filaments in some species; barbels often present on chin (on snout of a single species).

pelvic fins widely separated underside of head

click for next page