9.3 FAMILY PSEUDOTRIAKIDAE Gill, 1893 (emended)

PSEUDOT

Subfamily Pseudotriacinae, Gill, 1893, (Family Scylliorhinidae; emended to Family Pseudotriakidae by Jordan & Evermann, 1896).

Synonymy : None.

FAO Names: En - False catsharks; Fr - Requins à longue dorsale; Sp - Musolones.

Diagnostic Features: Head without laterally expanded blades; eyes elongated and slitlike, their lengths over 2 times the height; nictitating eyelids rudimentary; spiracles present and very large; anterior nasal flaps broadly angular, not barbel-like; internarial width about 2.8 times the nostril width; labial furrows very short; teeth small, with acute narrow cusps, lateral cusplets, and strong basal ledges and grooves, not bladelike and similar in both jaws; posterior teeth comblike; tooth rows very numerous, 202 to 294/258 to 335. Precaudal pits absent. First dorsal fin very large, low and formed as a rounded keel, about as long as caudal fin; first dorsal base on back with insertion just opposite pelvic origins and origin about opposite free rear tips of pectorals; midpoint of first dorsal base well in front of pelvic origins; pectoral fins with radials confined to bases of fins; ventral caudal lobe absent or very weak; no undulations or ripples in dorsal caudal margin. Neurocranium with supraorbital crests; vertebral centra without strong, wedge-shaped intermedial calcifications. Valvular intestine with a spiral valve of 17 turns. Colour plain except for darker fins. Development ovoviviparous:

Remarks : Most writers recognize this family for the false catsharks, Pseudotriakis. See Compagno (1979) for a discussion of the rationalle for recognizing the family and its relationships to other carcharhinoids. The odd New Zealand proscylliid Gollum is thought to be the closest living relative of Pseudotriakis, and there is some merit in an alternate scheme of including Gollum and Pseudotriakis in a common taxon (Compagno, 1979).

Pseudotriakis Capello, 1868

PSEUDOT Pseu

Genus : Pseudotriakis Capello, 1868, J.Sci.Math.Phys.Nat.Lisboa, ser. 2, (4):321.

Type Species : Pseudotriakis microdon Capello, 1868, by monotypy.

Synonymy : Genus Pseudotriacis Günther, 1870 (emended spelling).

Remarks : Two species of Pseudotriakis are commonly recognized, the Atlantic P. microdon Capello, 1867 and the Pacific P. acrales Jordan & Snyder, 1904. Elsewhere, the writer has, traced the taxonomic history of Pseudotriakis (Compagno, 1979), and noted that several writers have disagreed on the validity of P. acrales. The writer has compared the holotype of P. acrages (Stanford University, SU 12903, 1765 mm immature male, from Suruga Gulf, Japan) with various literature accounts of the two species as well as with specimens of Pseudotriakis from the North Sea and from the Hawaiian Islands. This resulted in the writer being unable to find any reliable characters to separate Atlantic and Pacific Pseudotriakis, although it was initially thought that the Atlantic species might have a longer snout. The criteria that Jordan & Snyder (1904) and Bigelow & Schroeder (1948) proposed to separate these species do not hold, and hence, they are tentatively synonymized here.

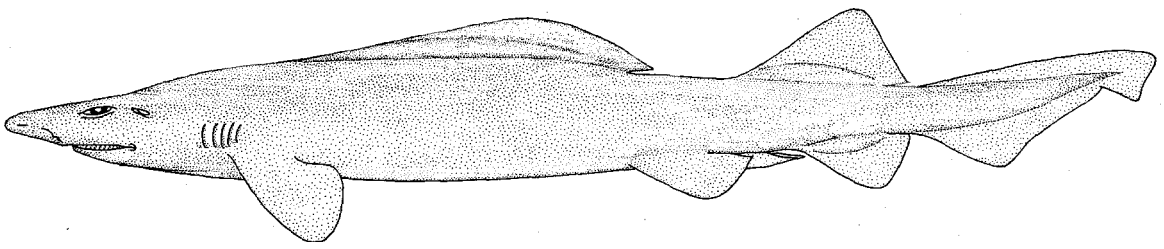
Pseudotriakis microdon Capello, 1868

PSEUDOT Pseu 1

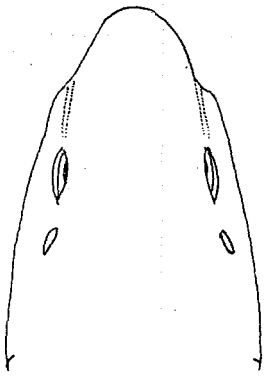
Pseudotriakis microdon Capello, 1868, J.Sci.Math.Phys.Nat.Lisboa, ser. 2, (4):321, pl. 5. Holotype: Museu Bocage, Lisbon, Portugal, 2310 mm adult male, lost in fire that recently destroyed this museum. Type Locality: Setubal, Portugal.

Synonymy : Pseudotriakis acrales Jordan & Snyder, 1904; Pseudotriakis acrages Garman, 1913 (emended spelling for acrales).

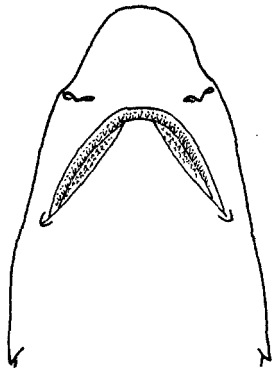
FAO Names : En - False catshark; Fr - Requin à longue dorsale; Sp - Musolón de aleta larga.



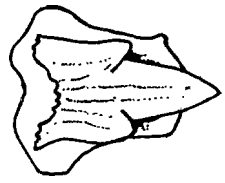
Field Marks: A large, bulky, dark-brown, soft-bodied shark with elongated, catlike eyes and nictitating eyelids, large spiracles, a huge, wide, angular mouth that reaches behind eyes, very short labial furrows, numerous small cuspidate teeth in 200 or more rows in each jaw, two large spineless dorsal fins and an anal fin, a low, long, keel-like first dorsal fin on back, no precaudal pits, and a caudal fin without a strong ventral lobe or lateral undulations on its dorsal margin.



dorsal view of head



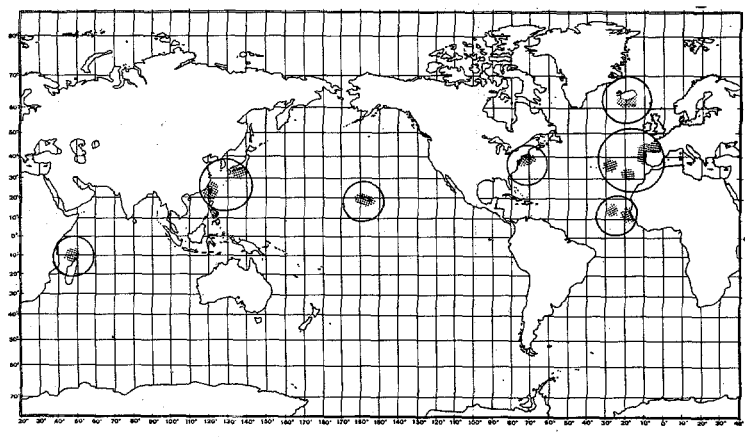
underside of head



dermal denticle

Diagnostic Features: See family.

Geographical Distribution : Western North Atlantic: New York to New Jersey. Eastern North Atlantic: Atlantic Slope off Iceland, France, Portugal, Madeira, Azores, Senegal, and Cape Verde Islands. Western Indian Ocean: Aldabra Islands group. Western Pacific: Japan and Taiwan Island. Central Pacific: Hawaiian Islands.



Habitat and Biology : A big deepwater bottom-dwelling shark of the continental and insular slopes at depths from 200 to 1500 m; occasionally wandering onto continental shelves, even in shallow water (possibly abnormally). The large body cavity, soft fins, and soft skin and musculature of this shark suggests that it is relatively inactive and sluggish, and can hover off the bottom at virtually neutral buoyancy.

Ovoviviparous, with litters of 2 to possibly 4 young. At 8 to 32 cm length embryos have large yolk sacs with abundant yolk, but the considerably larger size attained by term fetuses, the small litter size of this shark, and the immense number of eggs produced by adult females (estimated at 20 000 in one ovary for a 280 cm adult female) led Forster et al. (1970) to suggest that this shark may have oophagy or uterine cannibalism as in lamnoid sharks. This hypothesis remains unproven, however.

Feeding habits little-known, once photographed in deep water in the Indian Ocean eating a bony fish used as bait on the camera. Probably feeds on a variety of deepwater bony fishes, elasmobranchs and invertebrates. Its teeth are small but sharp-cusped, and its mouth is very large, which may allow prey organisms of considerable size to be ingested.

Size : Maximum 295 cm; adult males from 200 to 269 cm, adult females reported from 212 to 295 cm.; size at birth between 70 and 85 cm.

Interest to Fisheries: Minimal, taken on deep-set longlines and less commonly in bottom trawls. Utilization not reported.

Literature : Lozano y Rey (1928); Bigelow & Schroeder (1948); Forster et al. (1970); Compagno (1979, 1981); Cadenat & Blache (1981).

9.4 FAMILY LEPTOCHARIIDAE Gray, 1851

LEPTOC

Tribe Leptochariana Gray, 1851 (Family Squalidae), London, British Museum (Natural History), Pt. 1, Chondropterygii:39.

Synonymy : None.

FAO Names: En - Barbeled houndsharks; Fr - Emissoles; Sp - Tiburones barbudos.

Diagnostic Features: Head without laterally expanded blades; eyes horizontally oval, with lengths less than 2 times height; nictitating eyelids internal; spiracles present and very small; anterior nasal flaps formed into slender barbels; internarial width about 2.5 to 3.2 times the nostril width; labial furrows very long; teeth small, with acute narrow cusps, lateral cusplets, and strong basal ledges and grooves, not bladelike and similar in both jaws; posterior teeth not comblike; tooth rows 49 to 60/43 to 54. Precaudal pits absent. First dorsal fin small and not keel-like, much shorter than caudal fin; first dorsal base well ahead of pelvic bases, slightly closer to pectoral bases than pelvics; pectoral fins with radials confined to bases of fins; ventral caudal lobe absent or very weak; no undulations or ripples in dorsal caudal margin. Neurocranium without supraorbital crests; vertebral centra with strong, wedge-shaped intermedial calcifications. Valvular intestine with a spiral valve of 14 to 16 turns. Colour grey above, light below, no colour pattern. Development viviparous, with a unique globular placenta.

Remarks: The single genus and species, Leptocharias smithii, is conventionally placed in the family Triakidae or Carcharhinidae, but a study of its morphology (Compagno, 1979) shows that it is rather divergent in morphology from triakids. It is thereby placed in its own family, Leptochariidae. See Compagno (1979) for a detailed discussion of the morphology and relationships of Leptocharias.

Leptocharias Smith, 1838

LEPTOC Lep

Genus: Leptocharias Smith, in Müller & Henle, 1838, Mag.Nat.Hist.Charlesworth, 2:36.

Type Species : Triaenodon smithii Müller & Henle, 1839, by subsequent designation of Müller & Henle, 1839, Syst.Beschr.Plagiost., pt. 2, 56.

Synonymy : Genus Leptocarias Smith, in Müller & Henle, 1839 (error?); Genus Leptocarcharias Günther, 1870 (emended spelling).

Diagnostic Features: See family.

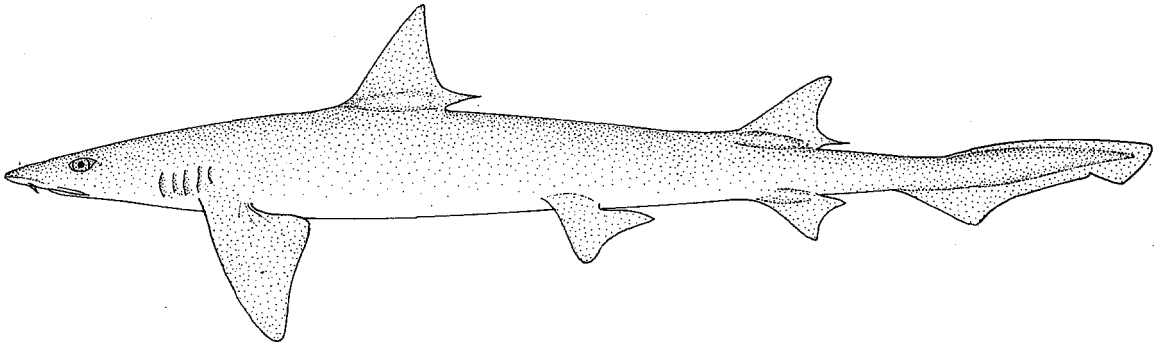
Leptocharias smithii (Müller & Henle, 1839)

LEPTOC Lep 1

Triaenodon smithii Müller & Henle, 1839, Syst.Beschr.Plagiost., (pt. 2):56, pl. 21. Holotype: British Museum (Natural History), stuffed adult male. Type Locality: "Kabendabay" (Cabinda Bay, Cabinda, Angola).

Synonymy : Mustelus osborni Fowler, 1923.

FAO Names: En - Barbeled houndshark; Fr - Emissole barbue; Sp - Tiburón barbudo.



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