

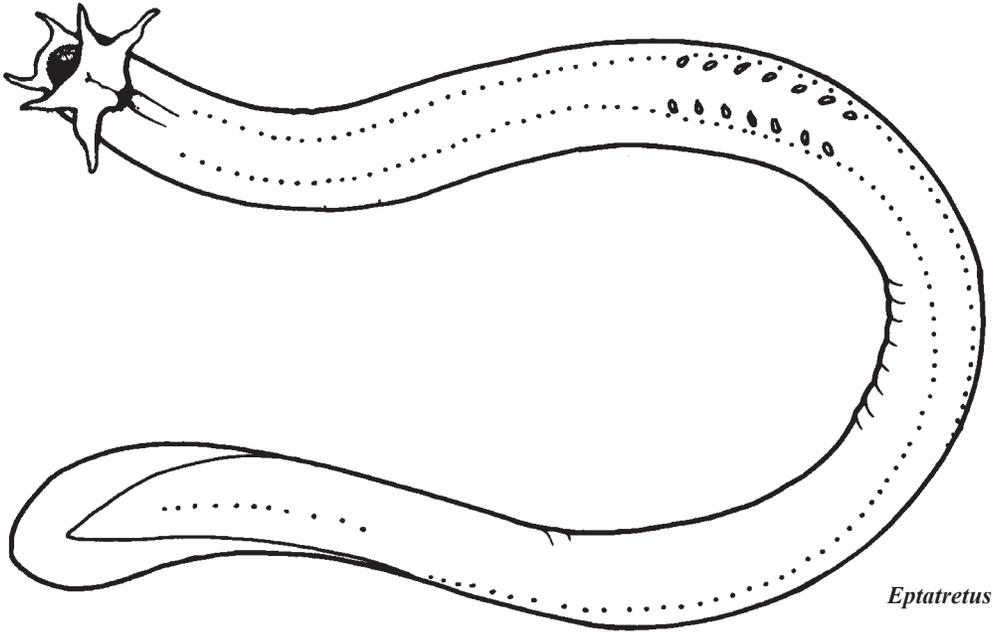
HAGFISHES

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MYXINIDAE

Hagfishes

Diagnostic characters: Moderate-sized to large (100 cm worldwide, 72 cm in the area), very elongate with eel-shaped body. Eye reduced. **Mouth with laterally biting horny teeth; no jaws. Anterior single nostril surrounded by 4 tentacles. No operculum; 1 to 16 pairs of external gill openings. Two ventrolateral rows of slime glands. No paired fins; median fins without rays. No scales. Skeleton cartilaginous. Colour:** pink to brown.



Habitat, biology, and fisheries: Benthic fishes, often burrowing in mud, from inshore to deep sea. Feed as scavengers, often on dead or disabled fishes. Rare to common, most efficiently taken in baited traps, a few species of commercial interest for skin (eelskin) industry based in Korea.

Remarks: Two subfamilies, Eptatretinae with more than 1 pair of gill openings and Myxiniinae with 1 pair of gill openings, occur with about 60 species throughout the world's oceans in tropical and temperate latitudes; tropical species occur in deep water. In the area the genera *Eptatretus* and *Myxine* occur with about 12 species. Hagfishes generally are not frequently collected and more specimens are needed to resolve the taxonomy of the group. The best known and well-collected species in the area is *Myxine limosa* (syn. *Myxine atlanticus* Regan, 1913) which, following Wisner and McMillan (1995) against recent common practice, is here not synonymized with *M. glutinosa*. A revision of the family is needed; the best recent overview is that of Fernholm (1998).

Similar families occurring in the area

None. The laterally biting horny teeth, the single nostril, the separate external gill openings, and the absence of paired fins clearly distinguish hagfishes from any other fish in the area.

List of species occurring in the area

- Eptatretus caribbeaus* Fernholm, 1982. To 385 mm. W Caribbean.
Eptatretus mendozai Hensley, 1985. To 450 mm. SW of Puerto Rico.
Eptatretus minor Fernholm and Hubbs, 1981. To 395 mm. W of Florida.
Eptatretus multidentis Fernholm and Hubbs, 1981. To 655 mm. Off N coast of South America.
Eptatretus springeri (Bigelow and Schroeder, 1952). To 590 mm. W of Florida.
Eptatretus sp. Shimizu, 1983. To 558 mm. Off Suriname.
Eptatretus sp. A Fernholm and Hubbs, 1981. To 433 mm. N Grand Bahama Island.
Eptatretus sp. B Fernholm and Hubbs, 1981. To 308 mm. S Grand Bahama Island.
Myxine limosa Girard, 1859. To 720 mm. Around Florida north to Davis Strait.
Myxine mccoskeri Wisner and McMillan, 1995. To 286 mm. Southern Caribbean Sea.
Myxine mcmillanae Hensley, 1991. To 473 mm. W and SW Puerto Rico, St Croix, Virgin Islands.
Myxine robinsorum Wisner and McMillan, 1995. To 540 mm. S Caribbean Sea.
Myxine sp. Shimizu, 1983. To 310 mm. Off Suriname.

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