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Oarfishes

John E. Olney

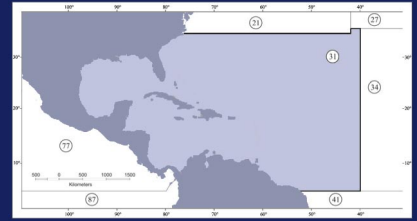
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THE LIVING MARINE RESOURCES OF THE
**WESTERN CENTRAL
ATLANTIC**



Volume 2 Bony fishes part 1 (Acipenseridae to Grammatidae)



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THE LIVING MARINE RESOURCES OF THE WESTERN CENTRAL ATLANTIC

VOLUME 2

Bony fishes part 1 (Acipenseridae to Grammatidae)

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REGALECIDAE

Oarfishes

by J.E. Olney, Virginia Institute of Marine Science, USA

Diagnostic characters: Giant ribbon-like lampridiform fish; body extremely elongate, compressed. Upper jaw highly protrusible, maxilla broad; teeth minute in both jaws; bones of head and jaws thin and fragile. Dorsal fin very long, extending along the entire body length to the tail; **first 8 to 10 dorsal-fin elements (and the single pelvic-fin soft ray) extremely elongate** flexible spines; total dorsal-fin elements 260 to 412. **Anal fin absent.** Caudal fin usually absent in large specimens; usually with 5 rays in small specimens, the middle 3 rays stout and elongate. Pelvic fins with 1 stout ray with fleshy tabs, and 1 small splint-like element. **Scales absent, except for tubular lateral-line scales.** Total vertebrae 143 to 170. In oarfishes (and all lampridiforms), the anterior palatamaxillary ligament and the palatine prong are absent; as a result, the maxilla is free to extend, along with the premaxilla, well away from the ethmo-vomerine region during jaw protusion. Other anatomical features of oarfishes (and all lampridiforms): first dorsal-fin pterygiophore inserts anterior to first neural spine; elongate ascending processes of premaxilla and a large rostral cartilage insert into a frontal vault or cradle; mesethmoid posterior to lateral ethmoids. In regalecids (and trachipterids), the dorsal-, caudal-, and pelvic-fin rays bear spinules that project laterally; in oarfishes, the spinules are very weakly developed, and reduced to nubbins.

Colour: body brilliant silver with oblique dusky bars; head blue; fins deep crimson red, elongate dorsal-fin elements, and the single pelvic-fin ray, ornamented with fleshy tabs, and crimson red.

Habitat, biology, and fisheries: Regalecids are rare, mesopelagic fishes that occur in all oceans. Sightings at surface, or strandings on shore usually related to storm events. There are 2 monotypic genera (*Regalecus* and *Agrostichthys*) but only *R. glesne* occurs in the area. *R. glesne* is the longest of all bony fishes, and is thought to be responsible for many historical sightings of sea monsters. Regalecids feed on deep-sea shrimps (euphausiids), small fishes, and squids. Eggs free-floating, large, and red. Very little is known of their habits and reproductive ecology. There is no fishery for regalecids.

Remarks: There may be only a single species of *Regalecus* with worldwide distribution although some authors recognize other species.

Similar families occurring in the area

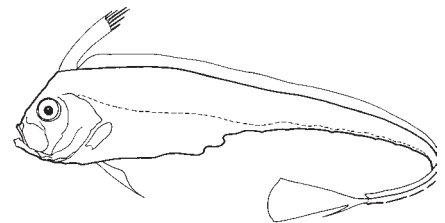
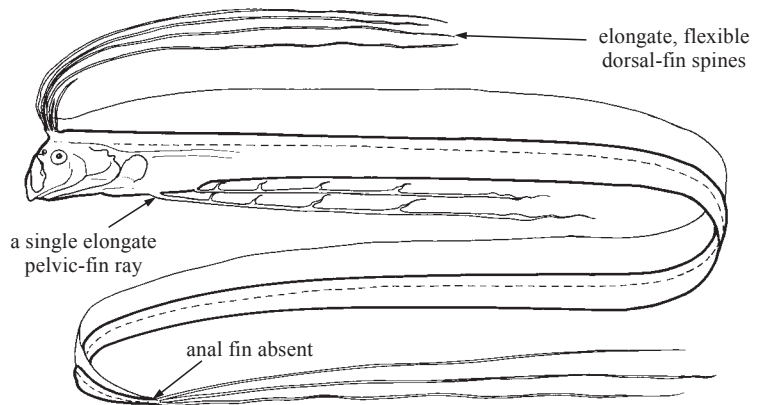
Trachipteridae: also lacking anal fin, but much smaller maximum size and with fewer dorsal-fin soft rays (166 to 190 versus 260 to 412). All other lampridiform families possess an anal fin.

List of species occurring in the area

Regalecus glesne Ascanius, 1772. To 17 m. Circumglobal.

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Trachipteridae