

2002

Tapertails

John E. Olney

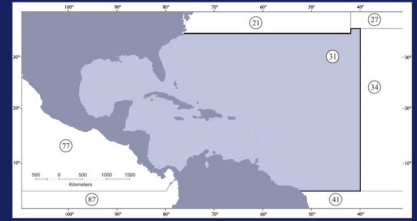
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THE LIVING MARINE RESOURCES OF THE
**WESTERN CENTRAL
ATLANTIC**



Volume 2 Bony fishes part 1 (Acipenseridae to Grammatidae)



AMERICAN
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EUROPEAN
COMMISSION



FAO SPECIES IDENTIFICATION GUIDE FOR FISHERY PURPOSES
and
AMERICAN SOCIETY OF ICHTHYOLOGISTS AND HERPETOLOGISTS
SPECIAL PUBLICATION No. 5

THE LIVING MARINE RESOURCES OF THE WESTERN CENTRAL ATLANTIC

VOLUME 2

Bony fishes part 1 (Acipenseridae to Grammatidae)

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with the support of the
American Society of Ichthyologists and Herpetologists
and the
European Commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 2002

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ISBN 92-5-104825-8

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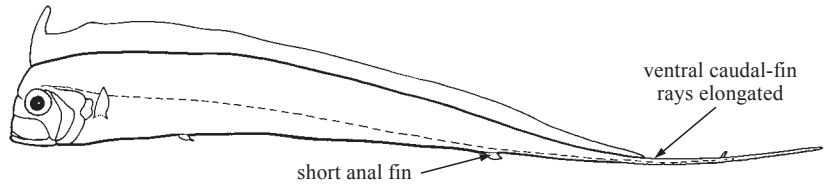
RADIICEPHALIDAE

Tapertails

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

Diagnostic characters:

Small to moderate-sized lampridiform fishes; body slender, elongate, compressed, its depth gradually decreasing from the head to caudal peduncle. Upper jaw highly protrusible; jaw teeth absent; 1 to several teeth on roof of mouth. Dorsal fin long, its first rays inserting over eye; anterior dorsal-fin rays somewhat elongate; total dorsal-fin soft rays 150 to 160. Anal fin short, inconspicuous, posteriorly placed near caudal peduncle; total anal-fin soft rays 6 or 7. Caudal fin highly modified into separate parts; **ventral caudal-fin soft rays (these total approximately 6 or 7) elongate, forming a caudal projection that may equal the body length in undamaged specimens**; upper caudal-fin lobe with 4 or 5 short rays. Pectoral fins with 9 or 10 soft rays; fin base obliquely rotated. Pelvic fins with 9 soft rays in small specimens, often damaged or inconspicuous in adults; pelvic fins inserted well posterior to pectoral-fin base. **Scales absent except for tubular lateral-line scales.** Total vertebrae 114 to 121 (36 to 39 thoracic, 77 to 79 abdominal); **fourth, fifth, and sixth preural centra with elongate haemal spines that pierce ventral margin of body** (unique among fishes). In radiicephalids (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 protrusion. Other anatomical features of radiicephalids (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 radiicephalids (and lophotids), the supraoccipital bears an anteriorly directed process (a weak spine in radiicephalids, but broader and well-developed in lophotids). **Colour:** body silver; dorsal, pectoral and caudal fins may be tinted red.



Habitat, biology and fisheries: A single, very rare species, *Radiicephalus elongatus* is known from a few small, immature specimens captured by research nets in the area. Usually attains 60 to 75 cm in length. Mesopelagic; little is known of its habits or reproduction. Like the Lophotidae, it possesses a gland that discharges a black, ink-like fluid through a vent near the anus in an alarm response. There is no fishery for the species.

Similar families occurring in the area

Lophotidae: more dorsal-fin soft rays (206 to 392 versus 152 to 160); head with conspicuous flesh crest or horn; anus situated near caudal fin (situated at mid-body in Radiicephalidae)

Trachipteridae: anal fin absent

List of species occurring in the area

A single species in the family.

Radiicephalus elongatus Osório, 1917. Usually under 80 cm. Mesopelagic in most oceans.

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