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ANNOTATED CHECKLISTS OF FISHES

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Family Anoplogastridae Gill 1893

fangtooths

By

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The fangtooths, also commonly called ogrefishes or sabretooth fishes, are a family of two species of small but formidable-looking beryciform fishes. Head and body extremely compressed. Head large, about one-third length of body, and deep. Body deep anteriorly, sharply tapering to narrow caudal peduncle. Head sculptured-looking, with well-developed mucous cavities covered by thin skin. Eyes small. Mouth large, with upper jaw almost as long as head, and oblique. Dorsal fin with 16–19 soft rays; anal fin with 7–9 soft rays; pectoral fins with 13–16 soft rays; pelvic fins subthoracic, with 7 soft rays (first ray segmented but not branched). One supramaxilla. Long, fanglike, widely spaced teeth in premaxilla and dentary, these teeth depressible in juveniles. Teeth present as well on palatines, ectopterygoid, and endopterygoid; absent from vomer. Branchiostegal rays 7–9. Gill rakers long and slender in juveniles, represented by groups of short spinules in adults. Scales are thin plates embedded in skin, each with short pedicel and thin cup. Lateral line canal an open groove bridged at intervals by scales. Swim bladder present in juveniles, regressed in adults. Vertebrae 25–28. Maximum length of *Anoplogaster cornuta* about 16 cm (6.3 in); adults of *A. brachycera* unknown. Adult description is of necessity based on *A. cornuta*; see Woods and Sonoda (1973:386–394 [ref. 6899]) for additional details. Marine, meso- and bathypelagic to depth of 5,000 m, occurring in tropical to cold-temperate waters worldwide. Feed on crustaceans and fishes. Two species in one genus.

A major breakthrough in understanding of the family was Grey's (1955 [ref. 27081]) recognition of the fact that species in *Caulolepis* represented the adult form, making them junior synonyms of *Anoplogaster cornuta*. Thereafter the family was thought to contain only the one species, until Kotlyar (1986) described another, *A. brachycera*, from a sample of juvenile specimens. One of the most striking differences between the two species is the pair of long temporal spines in juvenile *A. cornuta* (figure 53 of Grey [1955] is an excellent photograph showing this feature), for which Mecklenburg et al. (2002:325 [ref. 25968]) coined the name longhorn fangtooth to contrast to Kotlyar's (1986 [ref. 8082]) name, shorthorn sabretooth, for *A. brachycera*. The most recent family reviews and revisions were by Kotlyar (1986, 1996 [ref. 23292]).

The anoplogastrid family-group name was first used by Gill (1893:133 [ref. 26255]) as a subfamily Anoplogastrinae in Berycidae Lowe. Although frequently used by authors, the spelling Anoplogasteridae is grammatically incorrect (Steyskal 1980:174 [ref. 14191]).

Genus *Anoplogaster* Günther 1859

Anoplogaster Günther 1859:12 [ref. 1961]. Type species *Hoplostethus cornutus* Valenciennes 1833. Type by monotypy.

Caulolepis Gill 1883:258 [ref. 1724]. Type species *Caulolepis longidens* Gill 1883. Type by monotypy.

***Anoplogaster brachycera* Kotlyar 1986**

Anoplogaster brachycera Kotlyar 1986:544 [142 of English translation], Fig. 4 [ref. 8082] (Pacific Ocean, Sulu Sea, 7°35'N, 121°20'E, 1,000–0 m). Holotype: ZMMU P-15945.

DISTRIBUTION: Tropical waters of Pacific and Atlantic oceans. Recorded from the Sulu Sea in the western Pacific and from the Gulf of Mexico to north of the Bahama Islands in the western Atlantic at depths to 1,500 m.

***Anoplogaster cornuta* (Valenciennes 1833)**

Hoplostethus cornutus Valenciennes in Cuvier & Valenciennes 1833:470 [ref. 1002] (South Atlantic, 26°S, 50°W [stomach content]). Holotype: MNHN 7443.

Caulolepis longidens Gill 1883:258 [ref. 1724] (east of New Jersey, 39°27'10"N, 69°56'20"W, U.S.A., *Albatross* sta. 2034, 1346 fm). Holotype (unique): USNM 33270.

Caulolepis subulidens Garman 1899:60, Pls. B, 12, 72 (fig. 1) [ref. 1540] (Panama Bay, 7°21'N, 79°02'E, *Albatross* sta. 3383, 1832 fm.). Holotype (unique): MCZ 28761.

DISTRIBUTION: Worldwide in tropical to temperate and subarctic seas. Adults are caught at 75–5,000 m, juveniles at 45–3,100 m, and larvae at 2 m and more.

REMARKS: Reported by most authors as a species of warm-temperate to tropical waters, *A. cornuta* has also been reported from cold-temperate and subarctic waters of the Pacific and western Atlantic (range records reviewed by Mecklenburg et al. 2002:326 [ref. 25968]).

Summary Lists

Genus-Group Names of Family Anoplogastridae

Anoplogaster Günther 1859 = *Anoplogaster* Günther 1859

Caulolepis Gill 1883 = *Anoplogaster* Günther 1859

Incertae Sedis Genus-Group Names

None

Unavailable Genus-Group Names

None

Species-Group Names of Family Anoplogastridae

brachycera, Anoplogaster Kotlyar 1986 = *Anoplogaster brachycera* Kotlyar 1986

cornutus, Hoplostethus Valenciennes 1833 = *Anoplogaster cornuta* (Valenciennes 1833)

longidens, Caulolepis Gill 1883 = *Anoplogaster cornuta* (Valenciennes 1833)

subulidens, Caulolepis Garman 1899 = *Anoplogaster cornuta* (Valenciennes 1833)

Incertae Sedis Species-Group Names

None

Unavailable Species-Group Names

None

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