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ANNOTATED CHECKLISTS OF FISHES

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Family Bathymasteridae Jordan & Gilbert 1883

ronquils

By

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Ronquils are elongate, cold-water, bottom-dwelling perciform fishes of the North Pacific Ocean. Dorsal and anal fins long, height nearly even along their full length, separated from large, truncate to round caudal fin by distinct caudal peduncle. Dorsal fin composed of 43–49 branched and unbranched rays and anal fin of 31–36 rays, these counts including 1–6 weak, flexible spines at front of dorsal fin and 1 or 2 in anal fin. Pectoral fins large and rounded. Pelvic fins thoracic, with 1 spine and 5 rays. One pair of nostrils. Scales weakly ctenoid, almost smooth, to strongly ctenoid. Sensory pores on top of head and cheeks usually distinct. Lateral line distinct, running high on body and nearly straight to end of dorsal fin, with 75–105 scales. Palatine and vomerine teeth present. Gill membranes separate, free of the isthmus; except in *Rathbunella* broadly joined and forming a free fold across the isthmus. Branchiostegal rays 6. Swim bladder absent. Vertebrae 46–55. Colored olive brown to dull red, bluish black, or purplish with vivid green, blue, yellow, red, orange, and white bars and spots or other markings, varying somewhat by population or between the sexes. Range in maximum size from about 20 cm (8 in) in *Ronquilus jordani* to more than 38 cm (15 in) in *Bathymaster signatus*. Marine; intertidal zone to outer continental shelf, mainly along rocky shores and at depths less than 150 m. Seven species in three genera.

The classification of bathymasterids, with no genus or species having even one junior synonym, may be deceptively simple. Unidentified bathymasterids existing in museum collections, as well as recently collected material, are being examined in connection with a revision of the family (Ann C. Matarese, National Marine Fisheries Service, Alaska Fisheries Science Center, Seattle, Washington, pers. comm.).

The first use of the family-group name evidently was as a subfamily Bathymasterinae, along with Icosteinae and Ichthyinae, in Icosteidae by Jordan and Gilbert (1883:619 [ref. 2476]). At that time the only described ronquil was *Bathymaster signatus*. Jordan (1885 [ref. 2385]) suggested that *Bathymaster* represented a separate family.

From a cladistic analysis of osteological characters in adult bathymasterids, Ann Matarese Kiernan (1990 [ref. 26625]) gave unique characteristics for the family: large pores along frontal bone comprising a central pore and two or more additional pairs of pores; extrascapular bones irregularly shaped, not tubular or elongate; vomer and palatines with more than 50 teeth; dentaries with more than 100 teeth; and expanded arm on ventral postcleithra. Kiernan's analysis supported monophyly for the Bathymasteridae; a sister group relationship between bathymasterids and stichaeids; and monophyly for a group containing the Bathymasteridae, Stichaeidae, Zoarcidae, and Pholidae. The analysis did not specifically address relationships with other families in Zoarcoidei, but indicated that at least one of the other families (Cryptacanthodidae) has cladistic affinity with the Bathymasteridae and Stichaeidae. From the presence of three conditions in Bathymasteridae (scales relatively large, present in all species; large, triangular pelvic bones; well-developed pelvic fins with formula I,5) that differ from the derived conditions found in all other zoarcoids, Anderson

(1984 [ref. 26846], 1994 [ref. 21438]) considered the Bathymasteridae the primitive sister group to the other zoarcoids. Imamura and Yabe (2002 [ref. 26810]) identified an additional primitive character (presence of the extensor proprius, a pelvic fin muscle) present in bathymasterids but not in other zoarcoids.

Genus *Bathymaster* Cope 1873

Bathymaster Cope 1873:31 [ref. 929]. Type species *Bathymaster signatus* Cope 1873. Type by monotypy.

***Bathymaster caeruleofasciatus* Gilbert & Burke 1912**

Bathymaster caeruleofasciatus Gilbert & Burke 1912:84, Fig. 29 [ref. 1634] (Agattu I., Aleutian Is., Alaska, U.S.A.). Holotype: USNM 74391.

DISTRIBUTION: North Pacific: Commander and Aleutian islands to British Columbia.

REMARKS: The paratypes of *B. caeruleofasciatus* also include examples of *B. leurolepis*, so the original description of *B. caeruleofasciatus* is based on both forms (McPhail 1965:1293 [ref. 9230]).

***Bathymaster derjugini* Lindberg 1930**

Bathymaster derjugini Lindberg in Soldatov & Lindberg 1930:478, Fig. 65 [ref. 4164] (Peter the Great Bay, near Vladivostok, Russia). Holotype: missing, not at ZIN.

DISTRIBUTION: Western North Pacific: Kuril Islands and Tatar Strait to Peter the Great Bay, Japan Sea.

***Bathymaster leurolepis* McPhail 1965**

Bathymaster leurolepis McPhail 1965:1294, Fig. 1 [ref. 9230] (Finger Bay, Adak I., Aleutian Is., Alaska, U.S.A.). Holotype: UBC 64-214.

DISTRIBUTION: North Pacific: Hokkaido to southeastern Alaska.

***Bathymaster signatus* Cope 1873**

Bathymaster signatus Cope 1873:31 [8 of separate] [ref. 929] (near Sitka, Alaska, U.S.A.). Holotype (unique): ANSP 8982.

DISTRIBUTION: North Pacific and adjacent Arctic: East Siberian Sea to Hokkaido, including Okhotsk Sea, and Washington. Occurs farther offshore and deeper (to 300 m) than other ronquils.

Genus *Rathbunella* Jordan & Evermann 1896

Rathbunella Jordan & Evermann 1896:463 [ref. 2442]. Type species *Bathymaster hypoplectus* Gilbert 1890. Type by original designation (also monotypic).

REMARKS: Authors have mentioned, although not described, up to six species of *Rathbunella*. Kiernan (1990:99 [ref. 26625]) found up to 10 different names in museum lots she examined, and apportioned them among the two species *R. alleni* and *R. hypoplecta*.

***Rathbunella alleni* Gilbert 1904**

Rathbunella alleni Gilbert 1904:267, Pl. 28 [ref. 12422] (Monterey Bay, California, U.S.A.). Holotype: CAS-SU 8415.

DISTRIBUTION: Eastern North Pacific: northern California to northern Baja California.

REMARKS: Often confused with *R. hypoplecta*.

***Rathbunella hypoplecta* (Gilbert 1890)**

Bathymaster hypoplectus Gilbert 1890:97 [ref. 1623] (off s. California, U.S.A., 34°00'00"N, 119°28'30"W, Albatross sta. 2944, 30 fm). Holotype (unique): USNM 44380.

DISTRIBUTION: Eastern North Pacific: northern California to northern Baja California.

REMARKS: Often confused with *R. alleni*.

Genus *Ronquilus* Jordan & Starks 1895

Ronquilus Jordan & Starks 1895:838 [ref. 2522]. Type species *Bathymaster jordani* Gilbert 1889.
Type by monotypy.

***Ronquilus jordani* (Gilbert 1889)**

Bathymaster jordani Gilbert 1889:554 [ref. 17817] (Seattle, Washington, U.S.A. [stomach content]).
Lectotype: USNM 26641.

DISTRIBUTION: Eastern North Pacific: southeastern Bering Sea and Aleutian Islands, Alaska, to northern California.

REMARKS: The lectotype was designated in an unpublished Ph.D. thesis by Kiernan (1990:111 [ref. 26625]) and later validated by Springer and Anderson [1997:5 [ref. 22953]].

Ronquilus jordani has been reported to occur as far south as Monterey Bay, California. Evidently the only museum lot identified as *R. jordani* from that far south is CAS 36071, comprising two specimens collected in 1931 at Monterey Bay. Characters noted in recent examination of those specimens (e.g., first 5 or 6 dorsal fin elements as thin spines) indicate they probably are *Rathbunella*.

Summary Lists

Genus-Group Names of Family Bathymasteridae

Bathymaster Cope 1873 = *Bathymaster* Cope 1873

Rathbunella Jordan & Evermann 1896 = *Rathbunella* Jordan & Evermann 1896

Ronquilus Jordan & Starks 1895 = *Ronquilus* Jordan & Starks 1895

Incertae Sedis Genus-Group Names

None

Unavailable Genus-Group Names

None

Species-Group Names of Family Bathymasteridae

alleni, *Rathbunella* Gilbert 1904 = *Rathbunella alleni* Gilbert 1904

caeruleofasciatus, *Bathymaster* Gilbert & Burke 1912 = *Bathymaster caeruleofasciatus* Gilbert & Burke 1912

derjugini, *Bathymaster* Lindberg 1930 = *Bathymaster derjugini* Lindberg 1930

hypoplectus, *Bathymaster* Gilbert 1890 = *Rathbunella hypoplecta* (Gilbert 1890)

jordani, *Bathymaster* Gilbert 1889 = *Ronquilus jordani* (Gilbert 1889)

leurolepis, *Bathymaster* McPhail 1965 = *Bathymaster leurolepis* McPhail 1965

signatus, *Bathymaster* Cope 1873 = *Bathymaster signatus* Cope 1873

Incertae Sedis Species-Group Names

None

Unavailable Species-Group Names

None

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