

California Academy of Sciences

ANNOTATED CHECKLISTS OF FISHES

Number 16

September 2003

Family Belontiidae Bonaparte 1832

needlefishes

By

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Needlefishes are a relatively small family of belontiiform fishes (Rosen and Parenti 1981 [ref. 5538], Collette et al. 1984 [ref. 11422]) that differ from other members of the order in having both the upper and the lower jaws extended into long beaks filled with sharp teeth (except in the neotenic *Belontiidae*), the third pair of upper pharyngeal bones separate, scales on the body relatively small, and no finlets following the dorsal and anal fins. The nostrils lie in a pit anterior to the eyes. There are no spines in the fins. The dorsal fin, with 11–43 rays, and anal fin, with 12–39 rays, are posterior in position; the pelvic fins, with 6 soft rays, are located in an abdominal position; and the pectoral fins are short, with 5–15 rays. The lateral line runs down from the pectoral fin origin and then along the ventral margin of the body. The scales are small, cycloid, and easily detached. Precaudal vertebrae number 33–65, caudal vertebrae 19–41, and total vertebrae 52–97. Some freshwater needlefishes reach only 6 or 7 cm (2.5 or 2.75 in) in total length while some marine species may attain 2 m (6.5 ft).

The classification is based on Collette et al. (1984 [ref. 11422]), Boughton et al. (1991 [ref. 26766]), and Lovejoy (2000 [ref. 26767]). Ten genera containing 34 species are recognized. Eight of the genera are monotypic or contain only two or three species. Two genera, *Tylosurus* and *Strongylura*, contain most of the species in the family: 6 and 14, respectively. Five species are considered polytypic, containing a total of 17 subspecies. Type catalogs are available for belontiiform fishes in two of the major collections: USNM (Collette et al. 1992 [ref. 19410]) and MNHN (Collette et al. 1997 [ref. 22813]). Two major remaining taxonomic problems are definition of the genus *Strongylura*, which has not been demonstrated to be monophyletic, and clarification of the number of species of *Xenentodon*.

Most needlefishes are marine, but 12 species are restricted to freshwaters and several species of *Strongylura* move long distances into freshwater. Freshwater species include three genera (*Belontiidae*, *Potamorhaphis*, and *Pseudotylosurus*) with seven species plus two species of *Strongylura* in freshwaters of Central and South America, and one genus (*Xenentodon*) with two species plus *Strongylura krefftii* in Asian freshwaters.

Needlefishes live at the surface of the water and are protectively colored for this mode of life by being green or blue on the back and silvery white on the lower sides and belly. A dusky or dark blue stripe may be present along the sides of the body. The fleshy tip of the lower jaw is frequently red or orange. Needlefishes are carnivorous, feeding primarily on small fishes which they catch sideways in their beaks. Needlefishes tend to leap and skitter at the surface and people have been injured when accidentally struck by them, particularly at night when the fishes are attracted by lights. They are caught by casting or trolling surface or near-surface lures and in floating gill nets. The flesh is excellent in flavor although some people have misgivings about eating them due to the presence of many small bones and the green color of the bones.

Genus *Ablennes* Jordan & Fordice 1887

Ablennes Jordan & Fordice 1887:342, 345 [ref. 2456]. Subgenus of *Tylosurus*. Type species *Belone hians* Valenciennes 1846. Type by original designation (also monotypic).

***Ablennes hians* (Valenciennes 1846)**

Belone hians Valenciennes in Cuvier & Valenciennes 1846:432, Pl. 548 [ref. 1011] (Bahia, Brazil). Lectotype: MNHN B-1125.

Belone melanostigma Valenciennes (ex Ehrenberg) in Cuvier & Valenciennes 1846:450 [ref. 1011] (Massawa, Eritrea, Red Sea). Holotype (unique) (?): ZMB 2866 (dry, poor condition).

Belone schismatorhynchus Bleeker 1850:95 [ref. 13402] (Jakarta [Batavia], Java, Indonesia). Syntypes: RMNH 6941 (some of 6).

Belone maculata Poey 1860:290 [ref. 3499] (Havana, Cuba). No types known.

Mastacembelus fasciatus Bleeker 1873:154 [ref. 431] (China). No types known.

Tylosurus caeruleofasciatus Stead 1908:3, Pl. 1 [ref. 13271] (Port Stephens, N.S.W., Australia). Holotype: AMS IA.28.

Ablennes pacificus Walford 1936:4, Fig. 1b–c [ref. 13272] (Zihuatanejo, Guerrero [not Mazatlán], Mexico). Holotype (unique): USNM 101049.

DISTRIBUTION: Marine, worldwide in tropical and subtropical waters.

Genus *Belone* Cuvier 1816

Belone Cuvier 1816:185 [ref. 993]. Type species *Esox belone* Linnaeus 1761. Type by monotypy (also by absolute tautonymy).

REMARKS: The name “Acus,” attributed to Müller (1774 [ref. 6461]) by Eschmeyer (1990:14, 464 [ref. 23276], 1998:2470 [ref. 23416]), was used only as a Latin common name for *Esox belone* Linnaeus 1761, and therefore was not made available by Müller (1774) as a generic name for a belonid.

***Belone belone* (Linnaeus 1761)**

Esox belone Linnaeus 1761:126 [ref. 13326] (European seas). No types known.

Belone longirostris Schinz 1822:312 [ref. 3926] (European seas). No types known.

Belone acus Risso 1827:443 [ref. 3757] (Mediterranean Sea). No types known.

Belone vulgaris Fleming 1828:184 [ref. 1339] (coasts of Great Britain). No types known.

Belone rostrata Faber 1829:152 [ref. 13329] (Iceland). No types known.

Hemiramphus europaeus Yarrell 1837:506, Fig. 63 [ref. 13330] (Ipswich, Suffolk coast, England). No types known.

Belone gracilis Lowe 1839:86 [ref. 2829] (off Madeira). Syntypes: (2) whereabouts unknown.

Hemiramphus balticus Hohnbaum-Hornschuch in Hohnbaum-Hornschuch & van der Hoeven 1843:299 [ref. 13331] (Kiel, Germany). No types known.

Hemiramphus behnii van der Hoeven in Hohnbaum-Hornschuch & van der Hoeven 1843:300 [ref. 13331] (Kiel, Germany). No types known.

Belone vulgaris Valenciennes in Cuvier & Valenciennes 1846:399 [ref. 1011] (Dieppe, Fecamp, Abbeville, Caen, Boulogne, Paris, La Rochelle, Manche). Syntypes: MNHN 3070 (2) La Rochelle, 4501 (2) Iceland, 5495 (1) Boulogne, B-1124 (2) La Rochelle.

Belone undecimradiata Budge 1848:384, Pl. 12 [ref. 13332] (probably North Sea). No types known.

Hemiramphus obtusus Couch 1848:1978, Fig. [ref. 13345] (Mount’s Bay, Cornwall, England). No types known.

Macrogathus scolopax Gronow in Gray 1854:147 [ref. 1911] (all the seas of Europe). Syntypes: BMNH 1853.11.12.147 [Gronovius coll.] (1, skin).

Belone euxini Günther 1866:252 [ref. 1983] (Black Sea). Holotype (unique): BMNH 1864.4.25.147.

Belone cornidii Günther 1866:255 [ref. 1983] (coast of Portugal). Syntypes: (2) BMNH uncat.

Belone linnei Malm 1877:553 [ref. 2881] (European seas). No types known.

DISTRIBUTION: Marine, eastern Atlantic Ocean and Mediterranean Sea. See Remarks.

REMARKS: Three subspecies were recognized by Collette and Parin (1970 [ref. 7415]): *B. b. belone* (Linnaeus 1761) from eastern North Atlantic Ocean; *B. b. euxini* Günther 1866 from the Black Sea and Sea of Azov; and *B. b. acus* Risso 1827 from the Mediterranean Sea and adjacent parts of the Atlantic Ocean, Madeira, Canary Islands, Azores, and south to the Cape Verde Islands.

Belone longirostris Schinz 1822 is an unneeded new name for and objective synonym of *Esox belone* Linnaeus 1761 (see Daget 1968:1058 [ref. 26392]). *Belone linnei* Malm 1877 is an unneeded new name for and objective synonym of *Esox belone* Linnaeus 1761.

***Belone svetovidovi* Collette & Parin 1970**

Belone svetovidovi Collette & Parin 1970:21, Figs. 1, 3 [ref. 7415] (Vigo fish market, Galicia, Spain). Holotype: MCZ 41387.

DISTRIBUTION: Marine, eastern Atlantic Ocean and Mediterranean Sea.

Genus *Belonion* Collette 1966

Belonion Collette 1966:7 [ref. 892]. Type species *Belonion apodion* Collette 1966. Type by original designation.

***Belonion apodion* Collette 1966**

Belonion apodion Collette 1966:12, Figs. 1B–C [ref. 892] (laguna 3 km southwest of Costa Marques, Rio Guaporé, Bolivia at Brazil–Bolivia boundary). Holotype: AMNH 20805.

DISTRIBUTION: Freshwater, Bolivia and Brazil.

***Belonion dibranchodon* Collette 1966**

Belonion dibranchodon Collette 1966:9, Fig. 1A [ref. 892] (Río Atabapo, tributary of Orinoco R. on border between Amazonas, Venezuela and Vaupes, Colombia). Holotype: MNHN 1887-836.

DISTRIBUTION: Freshwater, Venezuela and Colombia.

Genus *Petalichthys* Regan 1904

Petalichthys Regan 1904:129 [ref. 12514]. Type species *Petalichthys capensis* Regan 1904. Type by monotypy.

***Petalichthys capensis* Regan 1904**

Petalichthys capensis Regan 1904:129 [ref. 12514] (Port Elizabeth, South Africa). Holotype (unique): BMNH 1890.9.25.14.

Belone megalolepis Mees 1962:51 [ref. 13277] (Port Elizabeth, South Africa). Holotype (unique): BMNH 1890.9.25.14.

DISTRIBUTION: Marine, South Africa.

REMARKS: *Belone megalolepis* Mees 1962 is a replacement name for *Petalichthys capensis* Regan 1904, which is secondarily preoccupied in the genus *Belone* by *Belone capensis* Günther 1866.

Genus *Platybelone* Fowler 1919

Platybelone Fowler 1919:2 [ref. 1397]. Type species *Belone platyura* Bennett 1832. Type by being a replacement name.

Eurycaulus Ogilby 1908:91 [ref. 3287]. Subgenus of *Tylosurus*. Type species *Belone platyura* Bennett 1832. Type by original designation (also monotypic).

Tropidocaulus Ogilby 1919:45 [ref. 3300]. Type species *Belone platyura* Bennett 1832. Type by being a replacement name.

REMARKS: *Eurycaulus* Ogilby 1908 is preoccupied in Coleoptera by *Eurycaulus* Fairmaire 1868 and was replaced by *Platybelone* Fowler 1919 (20 May) and *Tropidocaulus* Ogilby 1919 (4 Aug.).

***Platybelone argalus* (Lesueur 1821)**

Belona argalus Lesueur 1821:125, Unnumbered plate (apparently 10) [ref. 13274] (Guadeloupe I., West Indies). No types known.

Belone platyura Bennett 1832:168 [ref. 4944] (Mauritius). No types known.

Belone platura Rüppell 1837:73, Pl. 20 (fig. 1) [ref. 3844] (Massawa, Eritrea, Red Sea). Lectotype: SMF 673.

Belone carinata Valenciennes in Cuvier & Valenciennes 1846:437 [ref. 1011] (Guayaquil, Mexico to Hawaiian Is., U.S.A.). Holotype (unique): MNHN 9125.

Belone trachura Valenciennes in Cuvier & Valenciennes 1846:456 [ref. 1011] (Ascension I.). Lectotype: MNHN 4512.

Belone ardeola Valenciennes in Cuvier & Valenciennes 1846:425 [ref. 1011] (Martinique I., West Indies). Holotype (unique): whereabouts unknown.

Belone lovii Günther 1866:236 [ref. 1983] (Cape Verde Is.). Holotype (unique): BMNH 1866.4.10.1.

Belone persimilis Günther 1909:349 [ref. 14377] (Hawaii; Tonga Is.; Yap; nw. coast of Australia). Syntypes: BMNH 1883.12.15.96–97 (2).

Tylosurus pterurus Osburn & Nichols 1916:152, Fig. 6 [ref. 15062] (Carmen I., Gulf of California, Mexico, *Albatross* sta. 5682). Holotype (unique): USNM 201341 [ex AMNH 5202].

Platybelone dorsalis Whitley 1932:335 [ref. 4674] (nw. Australia). Holotype: BMNH 1855.9.19.1087.

Strongylura longleyi Breder 1932:12, Pls. 2 (fig. 1), 3 (fig. 5), 9 [ref. 13366] (Dry Tortugas, Monroe Co., Florida). Holotype: AMNH 9686 (missing since 1/1961).

Esox teatae Curtiss 1938:41 [ref. 18057] (lagoon near Tautira, Tahiti, Society Is.). No types known.

Platybelone argalus annobonensis Collette & Parin 1970:33, Fig. 4 [ref. 7415] (Annobón I., Equatorial Guinea, Gulf of Guinea). Holotype: USNM 201500.

DISTRIBUTION: Marine, worldwide in tropical and subtropical waters.

REMARKS: Seven subspecies were recognized by Collette and Parin (1970 [ref. 7415]): *P. a. argalus* (Lesueur 1821) from the western Atlantic; *P. a. lovii* (Günther 1866) from the Cape Verde Islands; *P. a. annobonensis* Collette & Parin 1970 from Annobón and Fernando Po islands in the Gulf of Guinea; *P. a. trachura* from Ascension and St. Helena; *P. a. platyura* (Bennett 1832) in most of the Indo-western Pacific; *P. a. platura* (Rüppell 1837) in the Red Sea and Persian Gulf; and *P. a. pterura* (Osburn & Nichols 1916) from the eastern Pacific.

Genus *Potamorrhaphis* Günther 1866

Potamorrhaphis Günther 1866:234, 256 [ref. 1983]. Subgenus of *Belone*. Type species *Belone taeniata* Günther 1866. Type by subsequent designation.

REMARKS: The type species was designated by Jordan and Fordice (1887:359 [ref. 2456]).

***Potamorrhaphis eigenmanni* Miranda-Ribeiro 1915**

Potamorrhaphis eigenmanni Miranda-Ribeiro 1915:Belonidae p. 13 [ref. 3711] (Cáceres, Rio Jaurú at Pôrto Esperidião, Mato Grosso, Brazil). Lectotype: MNRJ 1343A.

DISTRIBUTION: Freshwater, South America: Upper Madeira River, Bolivia and Brazil; Paraguay River, Brazil and Paraguay; and Paraná River, Argentina.

***Potamorrhaphis guianensis* (Jardine 1843)**

Belone guianensis Jardine in Schomburgk 1843:131, Pl. 1 [ref. 3948] (Paduiri R., Guyana). Holotype (unique): whereabouts unknown.

Belone scolopacina Valenciennes in Cuvier & Valenciennes 1846:428 [ref. 1011] (Rio de la Mana, Cayenne, French Guiana). Holotype (unique): MNHN 0833.

Belone taeniata Günther 1866:256 [ref. 1983] (Capim R., Brazil). Lectotype: BMNH 1849.11.9.59.

DISTRIBUTION: Freshwater, South America: Orinoco River, Colombia and Venezuela; throughout the Guianas; and Amazon River, Brazil.

***Potamorrhaphis petersi* Collette 1974**

Potamorrhaphis petersi Collette 1974:34, Figs. 1–2 [ref. 7496] (Laguna Coco ne. of Puerto Inírida, pool near junction of Río Guaviare and Río Inírida, Colombia). Holotype: USNM 210546.

DISTRIBUTION: Freshwater, South America: Orinoco River, Colombia and Venezuela and Rio Negro, Brazil.

Genus *Pseudotylosurus* Fernández-Yépez 1948

Pseudotylosurus Fernández-Yépez 1948:72 [ref. 1317]. Type species *Pseudotylosurus brasiliensis* Fernández-Yépez 1948. Type by monotypy.

Deltatylosurus Martin 1954:4 [ref. 2897]. Type species *Deltatylosurus guayoensis* Martin 1954. Type by monotypy.

***Pseudotylosurus angusticeps* (Günther 1866)**

Belone angusticeps Günther 1866:238 [ref. 1983] (coast of Ecuador). Holotype (unique): BMNH 1860.6.16.181.

Pseudotylosurus brasiliensis Fernández-Yépez 1948:72 [ref. 1317] (junction of Rio Xingu with Amazon River at Pôrto do Moz, Pará, Brazil). Holotype (unique): MCZ 8797.

DISTRIBUTION: Freshwater, South America: primarily a species of the upper Amazon River in Peru and Ecuador and the Paranà and the Paraguay in Brazil; two records from the lower Amazon.

***Pseudotylosurus microps* (Günther 1866)**

Belone microps Günther 1866:237 [ref. 1983] (Suriname). Lectotype: BMNH 1845.6.22.104.

Belone amazonica Steindachner 1876:94 [66 of separate] [ref. 4223] (Tajapurú, Amazon R., Brazil). Lectotype: NMW 12926.

Deltatylosurus guayoensis Martin 1954:5, Fig. [ref. 2897] (channel of the Orinoco R., near Misión de Guayo, Estado Delta Amacuro, Venezuela). Holotype (unique): MHNLS 9923.

DISTRIBUTION: Freshwater, South America: primarily a species of the Orinoco, Guianas, and lower Amazon (Araguaia, Xingu, Negro, and Branco); one record from the upper Amazon.

Genus *Strongylura* van Hasselt 1824

Strongylura van Hasselt 1824:374 [ref. 5964]. Type species *Strongylura caudimaculata* van Hasselt 1824. Type by monotypy.

Stenocaulus Ogilby 1908:91 [ref. 3287]. Subgenus of *Tylosurus*. Type species *Belone krefftii* Günther 1866. Type by original designation (also monotypic).

Lewinichthys Whitley 1933:67 [ref. 4677]. Type species *Belone ferox* Günther 1866. Type by original designation (also monotypic).

Rhaphiobelone Fowler 1934:322 [ref. 1416]. Type species *Rhaphiobelone dammermani* Fowler 1934. Type by original designation (also monotypic).

Dorybelone Fowler 1944:215 [ref. 1448]. Type species *Belone stolzmanni* Steindachner 1878. Type by original designation (also monotypic).

REMARKS: *Strongylura* has not been demonstrated to be monophyletic (Boughton et al. 1991 [ref. 26766], Lovejoy 2000 [ref. 26767]). Species currently assigned to the genus lack the characters defining other genera.

***Strongylura anastomella* (Valenciennes 1846)**

Belone anastomella Valenciennes in Cuvier & Valenciennes 1846:446 [ref. 1011] (China). Holotype (unique): MNHN B-1130.

Belone gracilis Temminck & Schlegel 1846:246, Pl. 110 (fig. 1) [ref. 4374] (Japan). Lectotype: RMNH D1878 (stuffed).

Belone esocina Basilewsky 1855:260 [ref. 200] (“Mari Provinciam Shandun’ensem alluente,” China). No types known.

Tylosurus issajewi Gratzianov 1907:243 [ref. 1871] (Vladivostok, Russia). Syntypes: ?ZIN 8662 (1).

DISTRIBUTION: Marine, western North Pacific: Sea of Japan, Yellow Sea, and the Pacific coast of Japan from Hokkaido to Kyushu.

***Strongylura exilis* (Girard 1854)**

Belone exilis Girard 1854:149 [ref. 5769] (San Diego, California, U.S.A.). Holotype (unique): USNM 485.

Belone stolzmanni Steindachner 1878:397 [21 of separate] [ref. 4226] (Tumbez, Peru). Holotype (unique): NMW 16695.

Tylosurus sierrita Jordan & Gilbert 1882:458 [ref. 10610] (Mazatlán, Sinaloa, w. Mexico). Syntypes: USNM 28162 (1, missing), 28265 (1, missing), 28377 (1, missing), 28378 (1, missing), ?29227 (1, missing, in ledger as *Pomadasys leuciscus*). Additional material or syntypes: USNM 29562 and 29564 (missing, listed in USNM ledger but not in original).

Strongylura peruana Fowler 1919:3, Fig. 1 [ref. 1397] (Callao Bay, Peru). Holotype (unique): ANSP 21924.

Strongylura tahitiensis Fowler & Bean 1923:10 [ref. 1474] (Tahiti, Society Is. [probably Peru]). Holotype (unique): USNM 83424.

DISTRIBUTION: Marine, eastern Pacific: southern California to Peru and the Galápagos Islands.

REMARKS: The original description of *Belone exilis* and the subsequent expansion of the description by Girard (1858 [ref. 4911]) indicate that the description was based on a single specimen (“about twelve inches and a half”) cataloged as USNM 485; therefore, MNHN A-3342 listed as a paratype by Collette et al. (1997 [ref. 22813]) is apparently not a type.

***Strongylura fluviatilis* (Regan 1903)**

Belone fluviatilis Regan 1903:626 [ref. 13401] (rivers of nw. Ecuador). Syntypes: BMNH 1901.8.3.26 (1), 1902.5.27.52 (1), 1902.7.29.61 (1).

DISTRIBUTION: Freshwater, Pacific slope of Ecuador.

***Strongylura hubbsi* Collette 1974**

Strongylura hubbsi Collette 1974:612, Fig. 1 [ref. 7495] (Río de la Pasión immediately above mouth of Arroyo de Petexbatúm at Sayaxché, El Petén, Guatemala). Holotype: UMMZ 194998 [ex 143506].

DISTRIBUTION: Freshwater, Usumacinta Province of Guatemala and Mexico.

***Strongylura incisa* (Valenciennes 1846)**

Belone incisa Valenciennes in Cuvier & Valenciennes 1846:451 [ref. 1011] (Indian Ocean). Holotype (unique): MNHN (lost) or RMNH 6945 (1 of several).

Belone leiuroides Bleeker 1851:479 [ref. 16892] (Billiton I. [Belitung I.], off Sumatra, East Indies). Holotype (unique): ?BMNH 1866.5.2.1.

Belone liuroides Günther 1866:243 [ref. 1983] (Billiton I. [Belitung I.], off Sumatra, East Indies). Holotype (unique): ?BMNH 1866.5.2.1.

Tylosurus terebra Whitley 1927:8, Pl. 1 (fig. 6) [ref. 15829] (Michaelmas Cay, Great Barrier Reef, off Cairns, Queensland, Australia). Holotype (unique): AMS IA.2736.

Rhaphiobelone robusta Schultz in Schultz et al. 1953:164, Pl. 17 (fig. a) [ref. 3975] (off Yugui I., Rongelap Atoll, Marshall Is.). Holotype: USNM 141749.

DISTRIBUTION: Marine, Indo-western Pacific.

***Strongylura krefftii* (Günther 1866)**

Belone krefftii Günther 1866:250 [ref. 1983] (Australia [not Sydney]). Holotype (unique): BMNH 1866.2.13.1.

Stenocaulus perornatus Whitley 1938:233 [ref. 4693] (Fly R. system [not Upper Sepik R.], Papua New Guinea). Holotype (unique): AMS IA.7287.

DISTRIBUTION: Freshwater, rivers of northern Australia and southern Papua New Guinea.

***Strongylura leiura* (Bleeker 1850)**

Belone leiurus Bleeker 1850:94 [ref. 13402] (Jakarta [Batavia], Java, Indonesia). Syntypes: ?BMNH 1866.5.2.4 (1), RMNH 6946 (some of 9), SMNS 10573 (1).

Belone ciconia Richardson 1846:264 [ref. 3742] (Canton, Chinese seas). No types known.

Belone tenuirostris Blyth 1858:287 [ref. 476] (near mouth of Hughli [= Hooghly] R., Bay of Bengal, India). No types known.

Belone ferox Günther 1866:242 [ref. 1983] (Sydney, N.S.W., Australia). Holotype (unique): BMNH 1865.5.8.1.

Belone natalensis Günther 1866:243 [ref. 1983] (Natal, South Africa). Syntypes: (at least 4) BMNH 1855.9.19.1085–1086 (2), 1862.12.19.35–36 (2).

Rhaphiobelone dammermani Fowler 1934:323, Fig. 76 [ref. 1416] (Taal Anchorage, Luzon I., Philippines). Holotype: USNM 93065.

DISTRIBUTION: Marine, widespread in the tropical and subtropical Indo-western Pacific from Durban, South Africa to the Philippines, southern China, New Guinea, and Australia.

REMARKS: *Belone ciconia* Richardson 1846 is questionably a senior synonym of *Belone leiurus* Bleeker 1850; priority not followed because of questionable status.

Belone ferox was recognized as a valid subspecies by Parin (1967 [ref. 10272]).

***Strongylura marina* (Walbaum 1792)**

Esox marinus Walbaum 1792:88 [ref. 4572] (Long Island, New York, U.S.A.). No types known.

Esox houttuyni Walbaum 1792:88 [ref. 4572] (no locality). No types known.

Esox belone var. *marinus* Bloch & Schneider 1801:391 [ref. 471] (North America). No types known.

Esox belone var. *houttuyni* Bloch & Schneider 1801:391 [ref. 471] (no locality). No types known.

Esox longirostris Mitchill 1818:322 [ref. 17774] (Hudson R. near Albany, New York, U.S.A.). No types known.

Belona truncata Lesueur 1821:126, unnumbered plate (apparently 11) [ref. 13274] (Philadelphia, Pennsylvania, U.S.A.). Lectotype: MNHN 4506.

Belone almeida Quoy & Gaimard 1824:226 [ref. 3574] (Rio de Janeiro, Brazil). Syntypes: MNHN 4508 (1), 4511 (1).

Belone timucu Valenciennes in Cuvier & Valenciennes 1846:426 [ref. 1011] (Rio de Janeiro, Brazil; Cayenne, French Guiana). Syntypes: MNHN 0721 (1) Cayenne, 0722 (1) Brazil, 0944 (3) Brazil, 4508 (1) Rio, 4510 (1) Rio, 4511 (1) Rio.

Belone galeata Valenciennes in Cuvier & Valenciennes 1846:429 [ref. 1011] (Cayenne, French Guiana). Holotype (unique): MNHN A-792 (dry).

Belone scrutator Girard 1858:170 [ref. 1813] (St. Joseph's I., Texas, U.S.A.). Lectotype: USNM 834.

DISTRIBUTION: Marine, western Atlantic: Massachusetts south to Rio de Janeiro but absent from the Bahamas and the West Indies. Frequently moves long distances into freshwaters.

REMARKS: All of Valenciennes' specimens of *Belone timucu* are *Strongylura marina* (Collette et al. 1997:27 [ref. 22813]).

***Strongylura notata* (Poey 1860)**

Belone notata Poey 1860:293 [ref. 3499] (Havana, Cuba). Syntypes and/or Poey specimens: MCZ 32933 (1), ZMB 5499 [Poey no. 413] (1).

Strongylura notata forsythia Breder 1932:3, Fig. 2 [ref. 16362] (Lake Forsyth, Andros I., Bahamas). Holotype: AMNH 10108.

DISTRIBUTION: Marine, western Atlantic. See Remarks.

REMARKS: Two subspecies are recognized by Collette (2003 [ref. 26981]): *S. n. notata* (Poey 1860) from Cuba, Jamaica, and the coast of central America from Mexico to Honduras; and *S. n. forsythia* Breder 1932 from the Bahama Islands, southern Florida, and the Gulf of Mexico west to Mobile Bay, Alabama.

***Strongylura scapularis* (Jordan & Gilbert 1882)**

Tylosurus scapularis Jordan & Gilbert 1882:307 [ref. 2471] (Panama Bay, [Pacific] Panama). Syntypes: USNM 29427 (1, not found in 1980), 29435 (missing; listed on USNM ledger as *Centropomus armatus*), 29438 (1, not found in 1980).

Tylosurus jordani Starks 1906:781, Fig. 6 [ref. 10101] (Guayaquil, w. Ecuador). Holotype (unique): USNM 53469.

DISTRIBUTION: Marine, eastern Pacific: Gulf of Nicoya, Costa Rica to Guayaquil, Ecuador.

***Strongylura senegalensis* (Valenciennes 1846)**

Belone senegalensis Valenciennes in Cuvier & Valenciennes 1846:421 [ref. 1011] (Senegal). Lectotype: MNHN 4581.

Belone capensis Günther 1866:247 [ref. 1983] (Cape of Good Hope, South Africa [possibly an error]). Lectotype: BMNH 1845.11.8.17.

DISTRIBUTION: Marine, eastern Atlantic: Gulf of Guinea from Senegal to Angola.

REMARKS: Günther (1866) gave the type locality of *Belone capensis* as Cape of Good Hope but inspection of the original register shows that while BMNH 1845.11.8.1–16 are listed from “C. G. Hope,” the only entry for 1845.11.8.17 on the next page is simply *Esox* so there is some doubt about the actual location of the type locality. It is unlikely that the specimen came from as far south as the Cape because the next nearest record to the north is from Angola.

***Strongylura strongylura* (van Hasselt 1823)**

Belone strongylura van Hasselt 1823:130 [ref. 5963] (Vishakhapatnam [Vizagapatam], India; Java, Indonesia). Holotype (unique): whereabouts unknown.

Strongylura caudimaculata van Hasselt 1824:374 [ref. 5964] (Vishakhapatnam [Vizagapatam], India). Holotype (unique) (?): whereabouts unknown.

Belone caudimacula Cuvier 1829:285 [ref. 995] (Vishakhapatnam [Vizagapatam], India). Holotype (unique): whereabouts unknown.

Belone saigonensis Sauvage 1879:208 [ref. 13259] (Mekong R., Saigon, s. Vietnam). Syntypes: BMNH 1883.7.4.52 [ex MNHN] (1); MNHN 9645 (5), 9646 (1), B-2975 [ex MNHN 9646] (1).

DISTRIBUTION: Marine, Indo-western Pacific: Persian Gulf east to the west central Pacific, north to the Philippines and southern China, south to northern Australia. Frequently moves into brackish and freshwaters.

REMARKS: *Belone strongylura* van Hasselt 1823 was based on a drawing in Russell (1803:61, Pl. 176 [ref. 12456]), so the type should be the specimen that was illustrated; the figure was reproduced in Alfred (1961:Pl. 8 [ref. 20553]). *Strongylura caudimaculata* van Hasselt 1824 was based on Russell (1803:Pl. 176), and *Belone caudimacula* Cuvier 1829 was based on the Kuddera A of Russell (1803:Pl. 176); therefore, the types of these species also should be the specimens that were illustrated.

***Strongylura timucu* (Walbaum 1792)**

Esox belone var. *timucu* Walbaum 1792:88 [ref. 4572] (Lake Papary, about 24 mi. south of Natal, Brazil). Neotype: SU 22073.

Belone cigonella Valenciennes in Cuvier & Valenciennes 1846:436 [ref. 1011] (Puerto Rico). Holotype (unique): whereabouts unknown.

Belone depressa Poey 1860:296 [ref. 3499] (Havana, Cuba). Holotype: USNM 4745.

Belone subtruncata Poey 1860:295 [ref. 3499] (Havana Bay, Cuba). Syntypes and/or Poey specimens: ZMB 5498 [Poey no. 327] (1).

Belone diplotaenia Cope 1871:481 [ref. 920] (St. Martin I., West Indies). Holotype (unique): ANSP 7572.

Tylosurus euryops Bean & Dresel 1884:168 [ref. 12727] (Jamaica). Holotype (unique): USNM 32073.

Tylosurus sagitta Jordan & Gilbert 1884:25 [ref. 12325] (Key West, Florida, U.S.A.). Lectotype: USNM 34965.

DISTRIBUTION: Marine, western Atlantic: southern Florida, Bahamas, West Indies, and Central America south to Rio de Janeiro, Brazil.

***Strongylura urvillii* (Valenciennes 1846)**

Belone urvillii Valenciennes in Cuvier & Valenciennes 1846:444 [ref. 1011] (Vanikoro I., Santa Cruz Is., sw. Pacific, 11°37'S, 166°58'E). Holotype (unique): MNHN B-1131.

Belone macrolepis Bleeker 1857:225 [ref. 354] (Nias I., Indonesia). Holotype (unique): BMNH 1862.5.2.5.

DISTRIBUTION: Marine, western Pacific: Indonesia, New Guinea, Philippines, and northern part of the Solomon Sea.

Genus *Tylosurus* Cocco 1833

Tylosurus Cocco 1833:18 [ref. 859]. Type species *Tylosurus cantrainei* Cocco 1833. Type by monotypy.

Thalassosteus Jordan, Evermann & Tanaka 1927:651 [ref. 2454]. Type species *Belone appendiculatus* Klunzinger 1871. Type by original designation (also monotypic).

Busuanga Herre 1930:132 [ref. 2105]. Type species *Tylosurus philippinus* Herre 1928. Type by original designation (also monotypic).

Lhotskia Whitley 1933:67 [ref. 4677]. Type species *Belone macleayana* Ogilby 1886. Type by original designation (also monotypic).

Djulongi Whitley 1935:223 [ref. 4683]. Type species *Belone melanotus* Bleeker 1850. Type by original designation (also monotypic).

***Tylosurus acus* (Lacepède 1803)**

Sphyræna acus Lacepède 1803:325, 327, Pl. 1 (fig. 3) [ref. 4930] (Martinique I. or West Indies). No types known.

Esox imperialis Rafinesque 1810:59, Pl. 9 (fig. 2) [ref. 3594] (Palermo, Sicily). No types known.

Belona caribæa Lesueur 1821:127 [ref. 13274] (Basseterre, near Guadeloupe I., Caribbean Sea). No types known.

Tylosurus cantrainei Cocco 1833:18, Pl. (fig. 4) [ref. 859] (Messina, Italy). No types known.

Belone melanotus Bleeker 1850:94 [ref. 13402] (Jakarta [Batavia], Java, Indonesia). Lectotype: RMNH 6940.

Belone latimana Poey 1860:292 [ref. 3499] (Havana, Cuba). Holotype (unique): MCZ 622.

Belone altipinna Poey 1860:293 [ref. 3499] (Havana, Cuba). No types known.

Belone appendiculatus Klunzinger 1871:580 [140 of separate] [ref. 2622] (Al-Quseir [Kosseir], Egypt, Red Sea). Syntypes: SMF ?1615 (1, dry); ?NMW 14235 (1); ZMB 10584 (1, missing), 10689 (1).

Belone jonesii Goode 1877:295 [ref. 13360] (Bermuda). Lectotype: USNM 21392.

Belone jonesii Günther 1879:151 [2 of separate] [ref. 13362] (Bermuda). Holotype (unique): BMNH 1879.1.8.2.

Strongylura auloiceps Fowler & Bean 1923:12 [ref. 1474] (Fiji Is. or Samoa). Holotype (unique): USNM 83422.

Tylosurus acus rafale Collette & Parin 1970:49, Fig. 12 [ref. 7415] (off Freetown, Sierra Leone). Holotype: USNM 188847.

DISTRIBUTION: Marine, worldwide in tropical and subtropical seas within the 23.9 degree isothere.

REMARKS: *Tylosurus acus* is the name most used for this species since 1965 but was ruled against by the International Commission on Zoological Nomenclature in favor of *T. imperialis*. We have appealed (Collette and Parin in press) to the ICZN to allow continued usage of *acus* in the interest of stability. The name *T. acus* has been used for this species consistently since 1965.

Five subspecies were recognized by Collette and Parin (1970): *T. a. acus* (Lacepède 1803) in the western Atlantic, *T. a. imperialis* (Rafinesque 1810) in the Mediterranean Sea, *T. a. rafale* Collette & Parin 1970 in the Gulf of Guinea, *T. a. melanotus* (Bleeker 1850) throughout the Indo-western Pacific and extending into the eastern Pacific, and *T. a. pacificus* (Steindachner 1876) in the eastern Pacific. The latter subspecies was subsequently raised to species level by Collette and Banford (2001 [ref. 25982]).

***Tylosurus choram* (Rüppell 1837)**

Belone choram Rüppell 1837:72 [ref. 3844] (Red Sea). Lectotype: SMF 671.

Esox belone var. *marisrubri* Bloch & Schneider 1801:391 [ref. 471] (Red Sea). No types known.

Belone robusta Günther 1866:242 [ref. 1983] (Red Sea; Egypt). Syntypes: BMNH 1859.6.11.5 (1, dry) Egypt, 1861.1.12.1 (1, stuffed) Red Sea.

DISTRIBUTION: Marine, western Indian Ocean; Mediterranean Sea migrant.

***Tylosurus crocodilus* (Péron & Lesueur 1821)**

Belona crocodila Péron & Lesueur in Lesueur 1821:129 [ref. 13274] (Mauritius). Holotype (unique): MNHN (not found).

Belone coromandelica van Hasselt (ex Cuvier) 1823:331 [ref. 5963] (Vishakhapatnam [Vizagapatam], India). Holotype (unique) (?): whereabouts unknown.

Belone timucoides van Hasselt 1824:372, 374 [ref. 5964] (Vishakhapatnam [Vizagapatam], India). Holotype (unique): whereabouts unknown.

Belone raphidoma Ranzani 1842:359, Pl. 37 [ref. 9017] (Brazilian seas). Holotype (unique): MZUB 929.

Belone annulata Valenciennes in Cuvier & Valenciennes 1846:447, Pl. 550 [ref. 1011] (Sulawesi [Celebes], Tongatabou, Seychelles and Pondicherry, India). Syntypes: MNHN 4582 (1) Celebes, B-1132 (1) Tongatabou, A-6351 (1) Seychelles, A-8897 (1) Pondicherry.

Belone gigantea Temminck & Schlegel 1846:245 [ref. 4374] (Nagasaki, Japan). Lectotype: RMNH D2270 (stuffed).

Belone gerania Valenciennes in Cuvier & Valenciennes 1846:437 [ref. 1011] (Martinique I., West Indies). Syntypes: (2) MNHN A-8896 (1).

Belone melanurus Bleeker 1849:11 [ref. 320] (Madura Straits near Surabaya and Kammal, Java, Indonesia). Syntypes: SMNS 10574 (3).

Belone cylindrica Bleeker 1852:13 [ref. 13275] (Indonesia: Java; Sumatra (fide Parin 1967 [ref. 10272])); Batavia; Surabaya; Kammal (Fowler)). Syntypes: (16) RMNH 26144 (1), 26145 (some of 16).

Belone melanochira Poey 1860:294 [ref. 3499] (Cuba). Holotype (unique): MCZ 624.

Belone crassa Poey 1860:291 [ref. 3499] (Havana, Cuba). Syntypes: MCZ 623 (1).

Belone koseirensis Klunzinger 1871:579 [139 of separate] [ref. 2622] (Al-Quseir [Kosseir], Egypt, Red Sea). Lectotype: ZIN 2570.

Tylosurus fodiator Jordan & Gilbert 1882:459 [ref. 10610] (Mazatlán, Sinaloa, w. Mexico). Holotype: USNM 28190.

Tylosurus gladius Bean in Goode & Bean 1882:430 [ref. 1840] (Pensacola, Florida, U.S.A.). Holotype (unique): USNM 30151.

Esox aaveri Curtiss 1938:40 [ref. 18057] (lagoon near Tautira, Tahiti, Society Is.). No types known.

DISTRIBUTION: Marine, worldwide in tropical and subtropical seas.

REMARKS: Two subspecies are recognized: *T. c. crocodilus* (Péron & Lesueur 1821) in the Atlantic and Indo-western Pacific and *T. c. fodiator* (Jordan & Gilbert 1882) in the eastern Pacific.

Belone coromandelica van Hasselt 1823 and *Belone timucoides* van Hasselt 1824 were based on a drawing in Russell (1803:Pl. 175 [ref. 12456]), so the type should be the specimen that was illustrated.

***Tylosurus gavialoides* (Castelnau 1873)**

Belone gavialoides Castelnau 1873:142 [ref. 758] (Fremantle, Western Australia). Syntypes: NMV 51847 (not found in 1997).

Belone groeneri Klunzinger 1880:414 [90 of separate] [ref. 2624] (Darwin, Northern Terr., Australia). Holotype (unique): SMNS 2601.

Belone gracilis Macleay 1881:243 [ref. 6222] (Port Jackson, N.S.W., Australia). Syntypes: AMS I.16272-001 [ex MAMU F190] (4).

Belone macleayana Ogilby 1886:53 [ref. 13268] (Port Jackson, N.S.W., Australia). Syntypes: AMS I.16272-001 [ex MAMU F190] (4).

Tylosurus impotens Ogilby 1908:89 [ref. 3287] (Moreton Bay, Queensland, Australia). Syntypes: (2) Not at QM [ex AFAQ 537] (whereabouts unknown).

Strongylura fijiense Fowler & Bean 1923:13 [ref. 1474] (Fiji Is. or Samoa [original label gives Fiji]). Holotype (unique): USNM 83421.

DISTRIBUTION: Marine, Australia.

REMARKS: *Belone macleayana* Ogilby 1886 is a replacement name for *Belone gracilis* Macleay 1881, which is preoccupied by *Belone gracilis* Lowe 1839 and *Belone gracilis* Temminck & Schlegel 1846.

***Tylosurus pacificus* (Steindachner 1876)**

Belone pacifica Steindachner 1876:93 [65 of separate] [ref. 4223] (Acapulco, w. Mexico; Panama). Syntypes: (several) NMW 77255 (2), 77501 (3) 16698 (2).

Strongylura galapagensis Fowler 1944:304, Fig. 102 [ref. 1448] (Abingdon I. [Pinta I.], Galápagos Is.). Holotype (unique): ANSP 70251.

DISTRIBUTION: Marine, eastern Pacific: Gulf of California south to Cabo Blanco, Peru, plus one record from the Galápagos Islands.

REMARKS: Formerly considered a subspecies of *T. acus* until raised to specific rank by Collette and Banford (2001 [ref. 25982]).

***Tylosurus punctulatus* (Günther 1872)**

Belone punctulata Günther 1872:670 [ref. 1997] (Manado, Sulawesi [Celebes], Indonesia). Holotype (unique): BMNH 1871.9.1.12.

Belone brachyrhynchos Bleeker 1854:61 [ref. 16923] (Sindangole, Halmahera, Indonesia). Holotype (unique): BMNH 1866.5.2.7.

Tylosurus philippinus Herre 1928:31, Pl. 2 [ref. 10964] (Coron, Busuanga I., Philippines). Holotype: BSMP 11084 (presumed destroyed).

DISTRIBUTION: Marine, western Pacific.

REMARKS: The name *Belone brachyrhynchos* Bleeker 1854 has been considered to be a junior synonym of *T. c. crocodilus* by most authors including Mees (1962 [ref. 13277]) and Parin (1967 [ref. 10272]), but the presumed holotype (BMNH 1866.5.2.7) is a specimen of *T. punctulatus*. Rather than changing the long-established name of this species, it is preferable to continue using the name *T. punctulatus* (Günther 1872).

Genus *Xenentodon* Regan 1911

Xenentodon Regan 1911:332 [ref. 3641]. Type species *Esox cancila* Hamilton 1822. Type by subsequent designation.

REMARKS: *Xenentodon* has generally been considered to be monotypic, but Roberts (1989 [ref. 6439]) presented evidence that the genus contains at least two species: *X. cancila* and *X. canciloides*. The type species was designated by Jordan (1920:540 [ref. 4905]).

***Xenentodon cancila* (Hamilton 1822)**

Esox cancila Hamilton 1822:213, 380, Pl. 27 (fig. 70) [ref. 2031] (ponds and smaller rivers of Gangetic provinces). No types known.

Belone graii Sykes 1839:163 [ref. 18720] (Deccan, India). No types known.

Esox indica McClelland 1842:582 [ref. 2926] (Loodianah, India). No types known.

Esox (Belone) hindostanicus Falconer 1868:589 [ref. 13399] (nullahs and stagnant waters at Suharunpore [Sukarumpoor], India). No types known.

DISTRIBUTION: Freshwater, Asia: India, Burma, Thailand.

***Xenentodon canciloides* (Bleeker 1853)**

Belone canciloides Bleeker 1853:454 [ref. 338] (Kapuas R., Pontianak, Borneo; Pangaboang, Lampong, Sumatra, Indonesia). Syntypes: (4) BMNH 1866.5.2.6 (1) no locality (Bleeker coll.), RMNH 6947 (2).

DISTRIBUTION: Freshwater, Asia: Malay Peninsula, Sumatra, western Borneo.

Summary Lists

Genus-Group Names of Family Belonidae

Ablennes Jordan & Fordice 1887 = *Ablennes* Jordan & Fordice 1887

Belone Cuvier 1816 = *Belone* Cuvier 1816

Belonion Collette 1966 = *Belonion* Collette 1966

Busuanga Herre 1930 = *Tylosurus* Cocco 1833

Deltatylosurus Martin 1954 = *Pseudotylosurus* Fernández-Yépez 1948

Djulongius Whitley 1935 = *Tylosurus* Cocco 1833

Dorybelone Fowler 1944 = *Strongylura* van Hasselt 1824

Eurycaulus Ogilby 1908 = *Platybelone* Fowler 1919

Lewinichthys Whitley 1933 = *Strongylura* van Hasselt 1824

Lhotskia Whitley 1933 = *Tylosurus* Cocco 1833
Petalichthys Regan 1904 = *Petalichthys* Regan 1904
Platybelone Fowler 1919 = *Platybelone* Fowler 1919
Potamorrhaphis Günther 1866 = *Potamorrhaphis* Günther 1866
Pseudotylosurus Fernández-Yépez 1948 = *Pseudotylosurus* Fernández-Yépez 1948
Rhaphiobelone Fowler 1934 = *Strongylura* van Hasselt 1824
Stenocaulus Ogilby 1908 = *Strongylura* van Hasselt 1824
Strongylura van Hasselt 1824 = *Strongylura* van Hasselt 1824
Thalassosteus Jordan, Evermann & Tanaka 1927 = *Tylosurus* Cocco 1833
Tropidocaulus Ogilby 1919 = *Platybelone* Fowler 1919
Tylosurus Cocco 1833 = *Tylosurus* Cocco 1833
Xenentodon Regan 1911 = *Xenentodon* Regan 1911

Incertae Sedis Genus-Group Names

None

Unavailable Genus-Group Names

Athlennes Jordan & Fordice 1887:342, 345 [ref. 2456]. An incorrect original spelling. See *Ablennes* Jordan & Fordice 1887 and ICZN Opinion 41.
Mastacembelus Klein 1776:271 [ref. 4919]. Suppressed. In the synonymy of *Belone* Cuvier 1816.
Raphistoma Rafinesque 1815:89 [ref. 3584]. Suppressed. In the synonymy of *Belone* Cuvier 1816. See Opinion 225. *Ramphistoma* Swainson 1838:295, 296 [ref. 4302] is an incorrect subsequent spelling.

Species-Group Names of Family Belonidae

aaveri, *Esox* Curtiss 1938 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
acus, *Belone* Risso 1827 = *Belone belone acus* Risso 1827
acus, *Sphyaena* Lacepède 1803 = *Tylosurus acus acus* (Lacepède 1803)
almeida, *Belone* Quoy & Gaimard 1824 = *Strongylura marina* (Walbaum 1792)
altipinna, *Belone* Poey 1860 = *Tylosurus acus acus* (Lacepède 1803)
amazonica, *Belone* Steindachner 1876 = *Pseudotylosurus microps* (Günther 1866)
anastomella, *Belone* Valenciennes 1846 = *Strongylura anastomella* (Valenciennes 1846)
angusticeps, *Belone* Günther 1866 = *Pseudotylosurus angusticeps* (Günther 1866)
annobonensis, *Platybelone argalus* Collette & Parin 1970 = *Platybelone argalus annobonensis* Collette & Parin 1970
annulata, *Belone* Valenciennes 1846 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
apodion, *Belonion* Collette 1966 = *Belonion apodion* Collette 1966
appendiculatus, *Belone* Klunzinger 1871 = *Tylosurus acus melanotus* (Bleeker 1850)
ardeola, *Belone* Valenciennes 1846 = *Platybelone argalus argalus* (Lesueur 1821)
argalus, *Belona* Lesueur 1821 = *Platybelone argalus argalus* (Lesueur 1821)
auloiceps, *Strongylura* Fowler & Bean 1923 = *Tylosurus acus melanotus* (Bleeker 1850)
balticus, *Hemiramphus* Hohnbaum-Hornschuch 1843 = *Belone belone belone* (Linnaeus 1761)
behni, *Hemiramphus* van der Hoeven 1843 = *Belone belone belone* (Linnaeus 1761)
belone, *Esox* Linnaeus 1761 = *Belone belone belone* (Linnaeus 1761)
brachyrhynchus, *Belone* Bleeker 1854 = *Tylosurus punctulatus* (Günther 1872)
brasiliensis, *Pseudotylosurus* Fernández-Yépez 1948 = *Pseudotylosurus angusticeps* (Günther 1866)
caeruleofasciatus, *Tylosurus* Stead 1908 = *Ablennes hians* (Valenciennes 1846)
cancila, *Esox* Hamilton 1822 = *Xenentodon cancila* (Hamilton 1822)
canciloides, *Belone* Bleeker 1853 = *Xenentodon canciloides* (Bleeker 1853)

cantrainei, *Tylosurus* Cocco 1833 = *Tylosurus acus imperialis* (Rafinesque 1810)
capensis, *Belone* Günther 1866 = *Strongylura senegalensis* (Valenciennes 1846)
capensis, *Petalichthys* Regan 1904 = *Petalichthys capensis* Regan 1904
carinata, *Belone* Valenciennes 1846 = *Platybelone argalus platyura* (Bennett 1832)
carribaea, *Belona* Lesueur 1821 = *Tylosurus acus acus* (Lacepède 1803)
caudimacula, *Belone* Cuvier 1829 = *Strongylura strongylura* (van Hasselt 1823)
caudimaculata, *Strongylura* van Hasselt 1824 = *Strongylura strongylura* (van Hasselt 1823)
choram, *Belone* Rüppell 1837 = *Tylosurus choram* (Rüppell 1837)
ciconia, *Belone* Richardson 1846 = *Strongylura leiura* (Bleeker 1850)
cigonella, *Belone* Valenciennes 1846 = *Strongylura timucu* (Walbaum 1792)
cornidii, *Belone* Günther 1866 = *Belone belone belone* (Linnaeus 1761)
coromandelica, *Belone* van Hasselt 1823 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
crassa, *Belone* Poey 1860 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
crocodila, *Belona* Péron & Lesueur 1821 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
cylindrica, *Belone* Bleeker 1852 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
dammermani, *Rhaphiobelone* Fowler 1934 = *Strongylura leiura* (Bleeker 1850)
depressa, *Belone* Poey 1860 = *Strongylura timucu* (Walbaum 1792)
dibranchodon, *Belonion* Collette 1966 = *Belonion dibranchodon* Collette 1966
diplotaenia, *Belone* Cope 1871 = *Strongylura timucu* (Walbaum 1792)
dorsalis, *Platybelone* Whitley 1932 = *Platybelone argalus platyura* (Bennett 1832)
eigenmanni, *Potamorrhaphis* Miranda-Ribeiro 1915 = *Potamorrhaphis eigenmanni* Miranda-Ribeiro 1915
esocina, *Belone* Basilewsky 1855 = *Strongylura anastomella* (Valenciennes 1846)
europaeus, *Hemiramphus* Yarrell 1837 = *Belone belone belone* (Linnaeus 1761)
euryops, *Tylosurus* Bean & Dresel 1884 = *Strongylura timucu* (Walbaum 1792)
euxini, *Belone* Günther 1866 = *Belone belone euxini* Günther 1866
exilis, *Belone* Girard 1854 = *Strongylura exilis* (Girard 1854)
fasciatus, *Mastacembelus* Bleeker 1873 = *Ablennes hians* (Valenciennes 1846)
ferox, *Belone* Günther 1866 = *Strongylura leiura* (Bleeker 1850)
fijiense, *Strongylura* Fowler & Bean 1923 = *Tylosurus gavialoides* (Castelnau 1873)
fluviatilis, *Belone* Regan 1903 = *Strongylura fluviatilis* (Regan 1903)
fodiator, *Tylosurus* Jordan & Gilbert 1882 = *Tylosurus crocodilus fodiator* Jordan & Gilbert 1882
forsythia, *Strongylura notata* Breder 1932 = *Strongylura notata forsythia* Breder 1932
galapagensis, *Strongylura* Fowler 1944 = *Tylosurus pacificus* (Steindachner 1876)
galeata, *Belone* Valenciennes 1846 = *Strongylura marina* (Walbaum 1792)
gavialoides, *Belone* Castelnau 1873 = *Tylosurus gavialoides* (Castelnau 1873)
gerania, *Belone* Valenciennes 1846 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
gigantea, *Belone* Temminck & Schlegel 1846 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
gladius, *Tylosurus* Bean 1882 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
gracilis, *Belone* Lowe 1839 = *Belone belone acus* Risso 1827
gracilis, *Belone* Macleay 1881 = *Tylosurus gavialoides* (Castelnau 1873)
gracilis, *Belone* Temminck & Schlegel 1846 = *Strongylura anastomella* (Valenciennes 1846)
graii, *Belone* Sykes 1839 = *Xenentodon cancila* (Hamilton 1822)
groeneri, *Belone* Klunzinger 1880 = *Tylosurus gavialoides* (Castelnau 1873)
guayoensis, *Deltatylosurus* Martin 1954 = *Pseudotylosurus microps* (Günther 1866)
guianensis, *Belone* Jardine 1843 = *Potamorrhaphis guianensis* (Jardine 1843)

hians, *Belone* Valenciennes 1846 = *Ablennes hians* (Valenciennes 1846)
hindostanicus, *Esox* (*Belone*) Falconer 1868 = *Xenentodon cancila* (Hamilton 1822)
houuttuyni, *Esox* Walbaum 1792 = *Strongylura marina* (Walbaum 1792)
houuttuyni, *Esox belone* Bloch & Schneider 1801 = *Strongylura marina* (Walbaum 1792)
hubbsi, *Strongylura* Collette 1974 = *Strongylura hubbsi* Collette 1974
imperialis, *Esox* Rafinesque 1810 = *Tylosurus acus imperialis* (Rafinesque 1810)
impotens, *Tylosurus* Ogilby 1908 = *Tylosurus gavialooides* (Castelnau 1873)
incisa, *Belone* Valenciennes 1846 = *Strongylura incisa* (Valenciennes 1846)
indica, *Esox* McClelland 1842 = *Xenentodon cancila* (Hamilton 1822)
issajewi, *Tylosurus* Gratzianov 1907 = *Strongylura anastomella* (Valenciennes 1846)
jonesii, *Belone* Goode 1877 = *Tylosurus acus acus* (Lacepède 1803)
jonesii, *Belone* Günther 1879 = *Tylosurus acus acus* (Lacepède 1803)
jordani, *Tylosurus* Starks 1906 = *Strongylura scapularis* (Jordan & Gilbert 1882)
koseirensis, *Belone* Klunzinger 1871 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
krefftii, *Belone* Günther 1866 = *Strongylura krefftii* (Günther 1866)
latimana, *Belone* Poey 1860 = *Tylosurus acus acus* (Lacepède 1803)
leiurooides, *Belone* Bleeker 1851 = *Strongylura incisa* (Valenciennes 1846)
leiurus, *Belone* Bleeker 1850 = *Strongylura leiura* (Bleeker 1850)
linnei, *Belone* Malm 1877 = *Belone belone belone* (Linnaeus 1761)
liurooides, *Belone* Günther 1866 = *Strongylura incisa* (Valenciennes 1846)
longirostris, *Belone* Schinz 1822 = *Belone belone belone* (Linnaeus 1761)
longirostris, *Esox* Mitchill 1818 = *Strongylura marina* (Walbaum 1792)
longleyi, *Strongylura* Breder 1932 = *Platybelone argalus argalus* (Lesueur 1821)
lovii, *Belone* Günther 1866 = *Platybelone argalus lovii* Günther 1866
macleayana, *Belone* Ogilby 1886 = *Tylosurus gavialooides* (Castelnau 1873)
macrolepis, *Belone* Bleeker 1857 = *Strongylura urvillii* (Valenciennes 1846)
maculata, *Belone* Poey 1860 = *Ablennes hians* (Valenciennes 1846)
marinus, *Esox* Walbaum 1792 = *Strongylura marina* (Walbaum 1792)
marinus, *Esox belone* Bloch & Schneider 1801 = *Strongylura marina* (Walbaum 1792)
marisrubri, *Esox belone* Bloch & Schneider 1801 = *Tylosurus choram* (Rüppell 1837)
megalolepis, *Belone* Mees 1962 = *Petalichthys capensis* Regan 1904
melanochira, *Belone* Poey 1860 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
melanostigma, *Belone* Valenciennes 1846 = *Ablennes hians* (Valenciennes 1846)
melanotus, *Belone* Bleeker 1850 = *Tylosurus acus melanotus* (Bleeker 1850)
melanurus, *Belone* Bleeker 1849 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
microps, *Belone* Günther 1866 = *Pseudotylosurus microps* (Günther 1866)
natalensis, *Belone* Günther 1866 = *Strongylura leiura* (Bleeker 1850)
notata, *Belone* Poey 1860 = *Strongylura notata notata* (Poey 1860)
obtusus, *Hemiramphus* Couch 1848 = *Belone belone belone* (Linnaeus 1761)
pacifica, *Belone* Steindachner 1876 = *Tylosurus pacificus* (Steindachner 1876)
pacificus, *Ablennes* Walford 1936 = *Ablennes hians* (Valenciennes 1846)
perornatus, *Stenocaulus* Whitley 1938 = *Strongylura krefftii* (Günther 1866)
persimilis, *Belone* Günther 1909 = *Platybelone argalus platyura* (Bennett 1832)
peruana, *Strongylura* Fowler 1919 = *Strongylura exilis* (Girard 1854)
petersi, *Potamorrhaphis* Collette 1974 = *Potamorrhaphis petersi* Collette 1974

- philippinus*, *Tylosurus* Herre 1928 = *Tylosurus punctulatus* (Günther 1872)
platura, *Belone* Rüppell 1837 = *Platybelone argalus platura* (Rüppell 1837)
platyura, *Belone* Bennett 1832 = *Platybelone argalus platyura* (Bennett 1832)
pterurus, *Tylosurus* Osburn & Nichols 1916 = *Platybelone argalus pterura* (Osburn & Nichols 1916)
punctulata, *Belone* Günther 1872 = *Tylosurus punctulatus* (Günther 1872)
rafale, *Tylosurus acus* Collette & Parin 1970 = *Tylosurus acus rafale* Collette & Parin 1970
raphidoma, *Belone* Ranzani 1842 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
robusta, *Belone* Günther 1866 = *Tylosurus choram* (Rüppell 1837)
robusta, *Rhaphiobelone* Schultz 1953 = *Strongylura incisa* (Valenciennes 1846)
rostrata, *Belone* Faber 1829 = *Belone belone belone* (Linnaeus 1761)
sagitta, *Tylosurus* Jordan & Gilbert 1884 = *Strongylura timucu* (Walbaum 1792)
saigonensis, *Belone* Sauvage 1879 = *Strongylura strongylura* (van Hasselt 1823)
scapularis, *Tylosurus* Jordan & Gilbert 1882 = *Strongylura scapularis* (Jordan & Gilbert 1882)
schismatorhynchus, *Belone* Bleeker 1850 = *Ablennes hians* (Valenciennes 1846)
scolopacina, *Belone* Valenciennes 1846 = *Potamorrhaphis guianensis* (Jardine 1843)
scolopax, *Macrognaathus* Gronow 1854 = *Belone belone belone* (Linnaeus 1761)
scrutator, *Belone* Girard 1858 = *Strongylura marina* (Walbaum 1792)
senegalensis, *Belone* Valenciennes 1846 = *Strongylura senegalensis* (Valenciennes 1846)
sierrita, *Tylosurus* Jordan & Gilbert 1882 = *Strongylura exilis* (Girard 1854)
stolzmanni, *Belone* Steindachner 1878 = *Strongylura exilis* (Girard 1854)
strongylura, *Belone* van Hasselt 1823 = *Strongylura strongylura* (van Hasselt 1823)
subtruncata, *Belone* Poey 1860 = *Strongylura timucu* (Walbaum 1792)
svetovidovi, *Belone* Collette & Parin 1970 = *Belone svetovidovi* Collette & Parin 1970
taeniata, *Belone* Günther 1866 = *Potamorrhaphis guianensis* (Jardine 1843)
tahitiensis, *Strongylura* Fowler & Bean 1923 = *Strongylura exilis* (Girard 1854)
teatae, *Esox* Curtiss 1938 = *Platybelone argalus platyura* (Bennett 1832)
tenuirostris, *Belone* Blyth 1858 = *Strongylura leiura* (Bleeker 1850)
tebra, *Tylosurus* Whitley 1927 = *Strongylura incisa* (Valenciennes 1846)
timucoides, *Belone* van Hasselt 1824 = *Tylosurus crocodilus crocodilus* (Péron & Lesueur 1821)
timucu, *Belone* Valenciennes 1846 = *Strongylura marina* (Walbaum 1792)
timucu, *Esox belone* Walbaum 1792 = *Strongylura timucu* (Walbaum 1792)
trachura, *Belone* Valenciennes 1846 = *Platybelone argalus trachura* (Valenciennes 1846)
truncata, *Belone* Lesueur 1821 = *Strongylura marina* (Walbaum 1792)
undecimradiata, *Belone* Budge 1848 = *Belone belone belone* (Linnaeus 1761)
urvillii, *Belone* Valenciennes 1846 = *Strongylura urvillii* (Valenciennes 1846)
vulgaris, *Belone* Fleming 1828 = *Belone belone belone* (Linnaeus 1761)
vulgaris, *Belone* Valenciennes 1846 = *Belone belone belone* (Linnaeus 1761)

Incertae Sedis Species-Group Names

- bellone*, *Esox* Linnaeus 1758:314 [ref. 2787].
indica, *Belone* Lesueur 1821:130 [ref. 13274].
vulgaris, *Ramphistoma* Swainson 1839:297 [ref. 4303].

Unavailable Species-Group Names

- fasciata*, *Belone* Ehrenberg in Cuvier & Valenciennes 1846:442 [ref. 1011]. Nomen nudum. Included by authors in the synonymy of *Belone marisrubri* (Bloch & Schneider 1801) or *Tylosurus crocodilus* (Péron & Lesueur 1821).

- howesi*, *Tylosurus* Ogilby 1907:12 [ref. 19275]. Nomen nudum. Included by authors in the synonymy of *Tylosurus gavialoides* (Castelnaud 1873) or *Lhotskia gavialoides* (Castelnaud 1873).
- japonica*, *Belone* Döderlein in Steindachner & Döderlein 1887:293 [37 of separate] [ref. 4249]. Nomen nudum.
- mentalis*, *Belone* Klunzinger in Paepke & Seegers 1986:147 [ref. 19981]. Nomen nudum.
- oculata*, *Belone* Leschenault in Cuvier & Valenciennes 1846:449 [ref. 1011]. Nomen nudum. Included by authors in the synonymy of *Belone strongylura* van Hasselt 1823 or *Strongylura strongylura* (van Hasselt 1823).
- pusillus*, *Hemiramphus* Risso in Bonaparte 1846:81 [ref. 519]. Nomen nudum.
- rov*, *Orphie* Montrouzier 1857:482 [204 of separate] [ref. 17789]. Nomen nudum.
- staigeri*, *Belone* Saville-Kent 1893:370 [ref. 13269]. Nomen nudum. Included by authors in the synonymy of *Tylosurus gavialoides* (Castelnaud 1873) or *Lhotskia gavialoides* (Castelnaud 1873).
- tyrannus*, *Belone* Saville-Kent 1893:370 [ref. 13269]. Nomen nudum. Included by authors in the synonymy of *Tylosurus gavialoides* (Castelnaud 1873) or *Lhotskia gavialoides* (Castelnaud 1873).
- vorax*, *Belone* Saville-Kent 1893:370 [ref. 13269]. Nomen nudum. In the synonymy of *Tylosurus gavialoides* (Castelnaud 1873).

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Acknowledgments

This checklist could not have been completed without creation of the Catalog of Fishes database by William N. Eschmeyer and the dedicated assistance of the CAS checklist staff. David L. Stein assisted with formatting and J. David Hardy provided valuable nomenclatorial advice.

Suggested citation format:

Collette, B. B. 2003. Family Belonidae Bonaparte 1832 — needlefishes. Calif. Acad. Sci. Annotated Checklists of Fishes No. 16. 22 pp.

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