

Catalog of Type Specimens
of Recent Fishes in the
National Museum of Natural History,
Smithsonian Institution, 4:
Gonorynchiformes, Gymnotiformes, and
Siluriformes (Teleostei: Ostariophysi)

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and

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SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY • NUMBER 535

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Robert McC. Adams
Secretary
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A B S T R A C T

Carl J. Ferraris, Jr., and Richard P. Vari. Catalog of Type Specimens of Recent Fishes in the National Museum of Natural History, Smithsonian Institution, 4: Gonorynchiformes, Gymnotiformes, and Siluriformes (Teleostei: Ostariophysi). *Smithsonian Contributions to Zoology*, number 535, 52 pages, 1992. The known type specimens of gonorynchiform, gymnotiform, and siluriform fishes in the collections of the Division of Fishes, National Museum of Natural History, Smithsonian Institution published through 1991 are listed. These include 9086 specimens in 628 lots including 119 holotypes, 8 lectotypes, 1 neotype, 196 syntypes, 8659 paratypes, and 103 paralectotypes of 339 nominal species and subspecies.

The listing is arranged in orders alphabetically by family, and in families alphabetically by original genus, species, and subspecies names. Information for each entry includes genus, species, and subspecies (if any) names; author(s) and date of publication; page of original description, and accompanying figures and plates (if any); current type status; USNM catalog number; number of specimens and their range of standard lengths; locality; collector; and date collected. This is followed by "Remarks," which includes correction, expansion, and updating of information in the original description, and cross-reference to changes in type status. An index arranged by genus, species, and subspecies completes the catalog.

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Carl J. Ferraris, Jr., and Richard P. Vari

Introduction

This paper continues a series of publications (Vari and Howe, 1991; Springer et al., 1991; Collette et al., 1992) listing the type specimens of various groups of Recent fishes in the Division of Fishes, National Museum of Natural History, Smithsonian Institution. These listings were prepared in response to Recommendation 72G(4) of the International Code of Zoological Nomenclature (ICZN) that "every institution in which name-bearing types are deposited should publish lists of name-bearing types in its possession or custody." Vari and Howe (1991) outlined the history of the collections in the Division of Fishes, and of the use of the acronym USNM for the collections of recent fishes in the National Museum of Natural History. We refer readers to that publication for a discussion of those topics.

This paper is the second to deal with the USNM type specimens of the superorder Ostariophysi, the dominant group of freshwater fishes in the World. The three orders dealt with in this paper differ dramatically both in their distributions and number of included species. The Gonorynchiformes, by far the

least speciose of the three orders in the Recent fauna, occurs in the marine, brackish, and sometimes freshwaters of the Indian and Tropical Pacific regions, and in the freshwaters of tropical Africa and the Nile River basin. Gymnotiforms (gymnotid eels) are widespread in the freshwaters of South and Central America. Siluriforms (catfishes), the most speciose group, are common in the freshwaters of North, Central, and South America, Europe, Africa, Asia, and Australia, with some members of two families widely distributed in tropical marine waters.

The type specimens of gonorynchiform, gymnotiform, and siluriform fishes in the collections of the Division of Fishes came from two primary sources, (1) the field work and systematic studies of curators and other researchers associated with the Division, and (2) exchanges from colleagues and institutions worldwide. Type specimens originally deposited in the Division and reported on during this century were typically, but not invariably, cited with USNM catalog numbers. Citations of USNM catalog numbers were often lacking for species described in the nineteenth century. Many type specimens were exchanged to the Smithsonian Institution subsequent to publication under a catalog number of another collection. Foremost among these are a number of paratypes of species described by Carl H. Eigenmann and his co-workers that were exchanged to the Smithsonian either directly from the Carnegie Museum and Indiana University, or secondarily through the Museum of Comparative Zoology. In addition, syntypes of various species of gonorynchiforms and siluriforms were received in exchange from The Natural History Museum, London and the Muséum National d'Histoire Naturelle, Paris.

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This listing serves to bring those and other specimens to the attention of interested researchers.

COMMENTS ON MISSING TYPE SPECIMENS OF SPECIES DESCRIBED BY GILL AND GIRARD.—Gill (1858, 1862a, 1870) described various siluriforms with type localities on the island of Trinidad, North America, and the western portions of the Amazon basin, respectively. In these three papers Gill neither cited the depository of the type specimens, nor typically stated the number of specimens on which he based his descriptions. Type series of two species described in Gill's 1858 paper (*Hoplosoma aeneum*, *Hoplosternum Stevardii*) are deposited in the collections of the Division of Fishes (see following listing). The type series of the two other siluriform species described in that paper (*Callichthys Kneri*, *Pimelotonus Vilsoni*) were not located in the collections of the Division of Fishes, nor was any indication found in the USNM ledgers that they had been deposited at the Smithsonian.

Gill (1862a) named three species of North American catfishes. The type series of one of these, *Amiurus obesus*, was located in the collections of the Division of Fishes, but included three specimens rather than the two cited by Gill. The type series of the other two species described in that paper (*Ictalurus simpsoni*, *Noturus occidentalis*) were not found in the collections and it is possible that the extra specimen in the type series of *Amiurus obesus* is a type specimen of one of those species.

Gill described five species of siluriforms from the western portions of the Amazon basin in 1870, again without any indication of where the material was deposited. The type series of four of these (*Cetopsis ventralis*, *Rhamdia dorsalis*, *Sciades marmoratus*, *Sorubimichthys Ortoni*) were located in the holdings of the Division of Fishes, but no indication was found of the type specimens of the other species of catfish described in that paper (*Centromochlus Steindachneri*). Vari and Howe (1991:1, 2) noted that the type series of a number of characiform species described by Gill in two of the cited publications are also missing.

Girard (1860) described eleven species of North American freshwater fishes. At least parts of the type series of ten of these were located in the USNM holdings. There is no indication that the type specimens of *Pimelodus lynx* were deposited in the Division of Fishes, and we have been unable to locate those specimens.

ABBREVIATIONS.—Many of the specimens listed in this catalog were described under USNM catalog numbers. A number of the cited type specimens, however, were deposited in other institutions when the species was described. In some instances specimens originally reported with USNM catalog numbers have been exchanged to other repositories. These various changes are noted under "Remarks" for each species with the following abbreviations for institutions and collections used in those citations.

AFY	Personal collection of A. Fernández-Yépez
AMNH	American Museum of Natural History, New York
ANSP	Academy of Natural Sciences of Philadelphia
AMS	Australian Museum, Sydney
BMNH	The Natural History Museum, London; formerly the British Museum (Natural History), London
CAS	California Academy of Sciences, San Francisco
CM	Carnegie Museum, Pittsburgh; collections of Recent fishes subsequently transferred to FMNH
FMNH	Field Museum of Natural History, Chicago
IU	Indiana University Collections, Bloomington. Often cited as I.U.M. by C.H. Eigenmann and collaborators. Specimens now largely at California Academy of Sciences, but with portions in other collections.
MBUCV	Museo de Biología, Universidad Central de Venezuela, Caracas
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge
MNHN	Muséum National d'Histoire Naturelle, Paris
MNRJ	Museu Nacional, Rio de Janeiro
MZUSP	Museu de Zoologia da Universidade de São Paulo, São Paulo
NLU	Northeast Louisiana University, Museum of Zoology
NMNH	National Museum of Natural History, Smithsonian Institution, Washington, D.C.
RMNH	Rijksmuseum van Natuurlijke Histoire, Leiden
SU	Stanford University, collections now at CAS
UL	University of Louisville
UKEN	University of Kentucky, Lexington
UMMZ	University of Michigan, Museum of Zoology, Ann Arbor
USBF	United States Bureau of Fisheries, collections now in USNM
USNM	Former United States National Museum, collections in the National Museum of Natural History, Smithsonian Institution, Washington, D.C. (See also Vari and Howe (1991:2) for a discussion of acronym.)
ZMA	Instituut voor Taxonomische Zoölogie, Zoölogisch Museum, Amsterdam
ZMUC	Københavns Universitet Zoologisk Museum, Copenhagen
ZMUL	Zoological Institute, University of Lund, Sweden

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Format

The following template has been used to structure each entry

in the "Catalog of Types."

Genus species (subspecies) Author(s), year:page, figure(s), plate(s).

Type Status

USNM catalog number (number of specimens, range of standard length (gonorynchiforms, siluriforms) or length from snout to posterior end of anal-fin base (gymnotiforms) in mm). Locality (country, department, province or state, specific locality), collector(s), date(s) collected, as stated in the original description, but in standardized presentation.

Remarks: Includes comments on originally cited authorship and year of publication; reference to lectotype, neotype, or paralectotype designation; corrections of originally cited USNM catalog numbers or previous depository and catalog number of specimens; and correction and/or expansion of data on locality, collector, and date collected.

This listing includes all known published gonorynchiform, gymnotiform, and siluriform type-specimens deposited in the collections of the National Museum of Natural History through 1991. The order of listing is alphabetical by order, within order alphabetical by family, and in families alphabetical by genus and then species and subspecies. Genus, species, and subspecies are spelled as in the original description, except that diacritical marks have been deleted as recommended by the International Commission on Zoological Nomenclature. In instances where the original description included an incorrect spelling there is a cross-reference to a corrected entry elsewhere in the text. Page refers to the first page of the species description. Complete references to publications are found in the "Literature Cited." The classification of gymnotiform families follows Mago-Leccia (1978). Siluriform classification follows Greenwood et al. (1966) with the addition of two subsequently recognized families: Scolopidae (Isbrücker, 1980) and Parakysidae (Roberts, 1989b). The families cited as Helogeneidae and Schilbeidae by many previous authors are listed as Helogenidae and Schilbidae following Steyskal (1980:174).

The presented "Type status" is that currently thought correct based on the original description and subsequent literature designations. The categories for primary and secondary types used are holotype, syntype(s), lectotype, neotype, paratype(s), and paralectotype(s) as defined by the International Commission on Zoological Nomenclature (1985), articles 73 and 74. The cited type status for many specimens exchanged to the Smithsonian after publication under the register numbers of another repository is typically based on information in the associated accession records. Discrepancies between the number of specimens originally reported or listed in the USNM ledgers, and those found when the lots were inventoried (1980 and 1985) or at this time are noted under "Remarks." Types not

located during this study are indicated as "MISSING." Lots totally exchanged to another institution are cited as in the original description, but noted as "EXCHANGED." The cited length for gymnotiform type specimens is the length from the snout to the posterior end of the base of the anal fin following Mago-Leccia et al. (1985). The cited length for gonorynchiforms and siluriforms is the standard length (SL) in millimeters (mm). Measurements of specimens greater than 100 mm are to whole mm; specimens less than 100 mm are reported to nearest one-tenth mm, except when damaged or contorted specimens do not warrant that level of precision. Comments about lengths under "Remarks" are included when a different length measurement (e.g., total rather than standard length) was used in the original description, or where there is a notable discrepancy between the originally cited length(s) and the present standard or total length(s). Locality is presented as in the original description, with sequence of presentation of data standardized throughout progressing from country to more specific locality data. Modern equivalents for countries are provided in brackets where necessary. Modern, corrected, and more detailed localities for specimens collected during the Thayer Expedition to Brazil follow Higuchi (ms). Data on the specimens in addition to, or inconsistent with that in the original species description either located in the jar, or in the ledgers in the Division of Fishes are discussed under "Remarks." Complete references for papers involving lectotype and paralectotype designations can be found in the "Literature Cited."

Numerous species cited in the following listing were described by Carl H. Eigenmann and his coworkers. Portions of the type series of these species were exchanged to the Smithsonian and other institutions from the Carnegie Museum and Indiana University prior and subsequent to the publication of the original descriptions. Those exchanges typically were not noted in the ledgers of the Indiana University and Carnegie Museum fish collections making it difficult, or more usually impossible, to determine the disposition of the entire type series. Material cited as type specimens in the correspondence associated with exchanges to the Smithsonian is included in the listing except where collection information for the specimens does not agree with that cited for the type series in the original species description. Correspondence concerning the type status of the specimens is archived in the files of the Office of the Registrar, National Museum of Natural History.

The locality of additional type specimens for species are noted only in two circumstances. First, for type specimens originally cited with USNM catalog numbers that were subsequently exchanged to other institutions. Second, for type specimens originally cited under the catalog number of another institution that were subsequently transferred to Smithsonian Institution. Unresolved questions concerning recognizable species are common in the orders dealt with herein. Thus, it is premature to comment on the validity or possible synonymy of most of these nominal species.

Catalog of Types

Arranged Alphabetically by Order, Family, Genus, Species, and Subspecies

GONORYNCHIFORMES

GRASSEICHTHYIDAE

Grasseichthys gabonensis Géry, 1964:4806, unnumbered fig.

Paratypes

USNM 199590 (10, 13.8–18.8 mm). Gabon, Ivindo basin, stream tributary to the Nzingmeyong.

Remarks: Received from J. Géry; 2 specimens cleared and stained.

Paratypes

USNM 199591 (2, 17.5–18.4 mm). Gabon, Ivindo basin, stream tributary to the Nzingmeyong.

Remarks: Received from J. Géry; specimens cleared and stained.

KNERIIDAE

Parakneria fortuita Penrith, 1973:132, pl. 1.

Paratype

USNM 212026 (1, 44.1 mm). Angola, Cutato River, at bridge between Chitembo and Chimbangombe, about 200 m N of Jamba Water Level Recorder (13°31'S, 16°25'E); M.J. Penrith and J. Batista, 13 Oct 1972.

PHRACTOLAEMIDAE

Phractolaemus spinosus Pellegrin, 1925:550.

Paratype

USNM 92978 (1, 48.4 mm). Gaboon, Sangha; A. Baudon.

Remarks: Received from J. Pellegrin through G.S. Myers; formerly MNHN 29-250, in part.

GYMNOTIFORMES

APTERONOTIDAE

Adontosternarchus clarkae Mago-Leccia et al., 1985:14, fig. 16.

Paratypes

USNM 266551 (3, 94.7–126 mm). Brazil, Roraima, Rio Negro near confluence with Rio Branco, and lower 30 m of Rio Branco (1°24'S, 61°27'W); "Alpha Helix," Mar-Apr 1967.

Adontosternarchus devenanzii Mago-Leccia et al., 1985:11, fig. 14.

Paratypes

USNM 264839 (68, 84.3–116 mm). Venezuela, Río Orinoco, Delta Amacuro Territory, main channel S of Isla Portuguesa; 20 Feb 1978.

Apterodonotus cuchillo Schultz, 1949:69, pl. 3a.

Holotype

USNM 121591 (1, 337 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Paratypes

USNM 121587 (13, 145–329 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Remarks: Taken with holotype.

Paratypes

USNM 121588 (EXCHANGED). Venezuela, Maracaibo basin, Río Palmar at bridge 70 km SW of Maracaibo; L.P. Schultz, 17 Mar 1942.

Remarks: 3 specimens originally in lot exchanged to UMMZ Jul 1949; listed as 215–375 mm TL in original description.

Paratypes

USNM 121589 (7, 65–350 mm). Venezuela, Maracaibo basin, Río Motatán, at bridge 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: 11 specimens cited in original description; 2 specimens exchanged to MCZ Jul 1951, 2 specimens exchanged to G. Dahl Aug 1955.

Paratypes

USNM 121590 (6, 132–174 mm). Venezuela, Maracaibo basin, Río Apón, about 35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Remarks: 7 specimens cited in original description; 1 specimen exchanged to MBUCV 21 Jun 1975; 1 specimen cleared and stained.

Oedemognathus exodon Myers, 1936:115.

Holotype

USNM 102040 (1, 189 mm). Peru, Río Ampiyacu; W.G. Scherer, 14 Dec 1935.

Remarks: Locality is in Departamento Loreto.

Sternarchogiton cuchillejo Schultz, 1949:72, pl. 3b.

Holotype

USNM 121600 (1, 122 mm). Venezuela, Maracaibo basin,

Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121598 (7, 47–123 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratypes

USNM 121599 (39, 69–143 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: 47 specimens cited in original description; 2 specimens exchanged to MCZ Jul 1951, 2 specimens exchanged to ZMA Mar 1958, 2 specimens exchanged to G. Dahl Aug 1955, 2 specimens unaccounted for.

Paratypes

USNM 121601 (4, 116–141 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: 5 specimens cited in original description; 1 specimen exchanged to MBUCV Aug 1975; taken with holotype.

Paratypes

USNM 121602 (10, 63–92 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge, Río Motatán system; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 121603 (EXCHANGED). Venezuela, Maracaibo basin, Río Machango, 20 km above bridge S of Mene Grande; L.P. Schultz, 21 Mar 1942.

Remarks: 2 specimens cited in original description, exchanged to UMMZ Jul 1949; originally cited as 120–156 mm TL.

Ubidia magdalenensis Miles, 1945:461, figs. 11, 12.

Paratype

USNM 123795 (1, 249 mm).

Remarks: Data in USNM ledgers indicate specimen was collected at Colombia, Río Magdalena; received from C. Miles.

HYPOPOMIDAE

Hypopomus beebei Schultz, 1944d:40, fig. 1; pl. 1: fig. 4.

Holotype

USNM 120753 (1, ?). Venezuela, Caripito; W. Beebe, 1942.

Remarks: Tail missing making it impossible to measure length; length originally reported as 112 mm. Data in USNM ledgers indicates that specimen was collected in Río Caripe.

STERNOPYGIDAE

Eigenmannia goajira Schultz, 1949:63, pl. 1b.

Holotype

USNM 121596 (1, 379 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above its mouth; L.P. Schultz, 24 Feb 1942.

Paratype

USNM 121597 (1, 344 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above its mouth; L.P. Schultz, 24 Feb 1942.

Remarks: Taken with holotype.

Rhabdolichops eastwardi Lundberg and Mago-Leccia, 1986:76, figs. 5, 7, 11, 17, 18.

Paratype

USNM 265222 (1, 145 mm). Brazil, Amazonas, creek connecting Rio Solimões (Rio Tefé) with blackwater lake, ~24 km W of Coari.

Remarks: USNM register number incorrectly cited as 26522 in original description; collected by H.R. Axelrod, Mar 1974.

Paratypes

USNM 226306 (41, 78.0–115 mm). Venezuela, Territorio Federal Delta Amacuro, Río Orinoco, main channel N of Isla Tórtola, ~123 nautical miles [228 km] from sea buoy; 19 Feb 1978.

Remarks: Locality is 8°38'N, 61°53'W; collectors J. Lundberg et al.

Rhabdolichops electrogrammus Lundberg and Mago-Leccia, 1986:70, figs. 6, 8, 9, 13, 14.

Paratypes

USNM 273686 (9, 90–156 mm). Venezuela, Territorio Federal Delta Amacuro, Río Orinoco, above Isla Varadero, about 150–151 nautical miles [278–280 km] from sea buoy.

Remarks: Original description cited 10 specimens in lot, 9 specimens received.

Rhabdolichops stewarti Lundberg and Mago-Leccia, 1986:79, fig. 19.

Paratypes

USNM 280124 (2, 130–132 mm). Venezuela, Bolívar, Río Orinoco, near mouth of Río Caura.

Rhabdolichops zareti Lundberg and Mago-Leccia, 1976:74, figs. 6, 10–12, 15, 16.

Paratypes

USNM 265199 (14, 83–136 mm). Venezuela, Anzoátegui, Río Orinoco, N side of Isla Fajardo across from Palua, ~182 nautical miles [337 km] from sea buoy; 6 Nov 1979.

Sternopygus dariensis Meek and Hildebrand, 1916:309, pl. XXVI.

Paratypes

USNM 78766 (11, 163–735 mm). Panama, Darién, Río

Tuyra, Marrigante.

Remarks: 12 specimens listed in USNM ledgers; 1 specimen unaccounted for.

Sternopygus pejeratensis* Schultz, 1949:60, pl. 1a.*Holotype**

USNM 121572 (1, 446 mm). Venezuela, Maracaibo basin, Río Apón, about 35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Paratypes

USNM 121564 (13, 144–589 mm). Venezuela, Maracaibo basin, Río Apón, about 35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Remarks: 17 specimens cited in original description; 4 specimens exchanged to FMNH; taken with holotype.

Paratypes

USNM 121565 (12, ?). Venezuela, Maracaibo basin, Río Motatán, at bridge 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: 14 specimens cited in original description; 2 specimens exchanged to MCZ Jul 1951. Largest and smallest specimens with tails missing making it impossible to take lengths.

Paratypes

USNM 121566 (7, 105–545 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratypes

USNM 121567 (17, 133–380 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Paratypes

USNM 121568 (3, 141–159 mm). Venezuela, Maracaibo basin, Río Machango, 20 km above bridge, S of Lagunillas; L.P. Schultz, 21 Mar 1942.

Paratypes

USNM 121569 (EXCHANGED). Venezuela, Maracaibo basin, Río Palmar, near Totuma, about 100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Remarks: 2 specimens cited in original description, exchanged to UMMZ Jul 1949; originally cited as 195–288 mm TL.

Paratypes

USNM 121570 (10, 86–239 mm). Venezuela, Maracaibo basin, Río Palmar, at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Remarks: 14 specimens cited in original description; 2 specimens exchanged to ZMA Mar 1958, 1 specimen exchanged to MBUCV Aug 1975, 1 specimen exchanged to G. Dahl Aug 1955.

Paratypes

USNM 121571 (2, 570–658 mm). Venezuela, Maracaibo basin, Río Machango, at bridge, S of Lagunillas; L.P. Schultz, 16 Mar 1942.

SILURIFORMES**AMPHILIIDAE*****Amphilus cryptobullatus* Skelton, 1986:279, fig. 15.****Paratypes**

USNM 269285 (4, 38.6–85.4 mm). Zambia, Luongo River, above and at route 74 crossing ($10^{\circ}11'S$, $29^{\circ}43'E$), upper Zaire system; E.K. Balon, 18 Nov 1970.

Remarks: Taken with holotype.

Amphilus pictus* Nichols and La Monte, 1933:1, fig. 1.*Paratype**

USNM 118677 (1, 33.6 mm). Liberia, from a stream near Kaleata; G.W. Harley, Feb 1932.

Remarks: Received from AMNH, formerly AMNH 12314, in part; taken with holotype.

Paramphilius firestonei* Schultz, 1942:333, pl. 36: fig. 3.*Holotype**

USNM 118811 (1, 51.8 mm). Liberia, Bromley; W.M. Mann, 1940.

Remarks: USNM ledger cites collection data as Liberia, Bromley, a few miles above mouth of St. Pauls River; 6 Jun 1940.

Paratypes

USNM 118812 (29, 35.8–55.8 mm). Liberia, Bromley; W.M. Mann, 1940.

Remarks: Taken with holotype; USNM ledger cites collection data as Liberia, Bromley, a few miles above mouth of St. Pauls River; 6 Jun 1940.

Paratype

USNM 118813 (1, 45.4 mm). Liberia, Harbel; W.M. Mann, 1940.

Remarks: USNM ledger cites collection data as Liberia, Harbel (Firestone Plantation), between lower part of Du (= Du Queah-Junk) River and Borlor-Farmington rivers; 10 Mar to 17 Jul 1940.

ARIIDAE***Aelurichthys pinnimaculatus* Steindachner, 1876:565 (reprint p. 15), pl. VIII.****Syntypes**

USNM 123011 (2, 179–237 mm). Panama.

Remarks: Received from MCZ, formerly MCZ 23746, in part. USNM ledger cites collector as Hassler Expedition, 1872.

Arius augustus* Roberts, 1978:36, figs. 14, 20d.*Holotype**

USNM 217065 (EXCHANGED). Papua New Guinea, mouth of Binge River, tributary of the Middle Fly, 675 km

upriver from Toro Pass, (6°32.5'S, 140°55'E); T.R. Roberts, 23 Nov 1975.

Remarks: Exchanged to AMS, in trust for Government of Papua New Guinea; originally cited as 342 mm SL.

Paratypes

USNM 217066 (1 EXCHANGED, 1 MISSING). Papua New Guinea, mouth of Binge River, tributary of the Middle Fly, 675 km upriver from Toro Pass (6°32.5'S, 140°55'E); T.R. Roberts, 23 Nov 1975.

Remarks: One specimen exchanged to AMS, in trust for government of Papua New Guinea, Apr 1981.

Paratype

USNM 217067 (1, 412 mm). Papua New Guinea, ox-bow lake with mouth open to main-stream of Upper Fly, 4 km downriver from Kiunga, 828 km upriver from Toro Pass (6°09.2'S, 141°16.2'E); T.R. Roberts, 27 Oct 1975.

Paratypes

USNM 217068 (2, 91–102 mm). Papua New Guinea, side channel of Strickland 4 km downstream from Massy Bakers Junction, 450 km upriver from Toro Pass (7°22.6'S, 141°29.0'E); T.R. Roberts, 6–7 Dec 1975.

Arius cleptolepis Roberts, 1978:37, figs. 15, 20e.

Holotype

USNM 217069 (EXCHANGED). Papua New Guinea, Elevala River, tributary of the Upper Fly, 17 km E of Kiunga, 859 km upriver from Toro Pass (6°05.7'S, 141°27.7'E); T.R. Roberts, 20 Oct 1975.

Remarks: Exchanged to AMS in trust for Government of Papua New Guinea; originally cited as 309 mm SL.

Paratype

USNM 217070 (1, 218 mm). Papua New Guinea, small tributaries and mainstream of Upper Fly, 1–2 km upstream from mouth of Elevala River, 856 km upriver from Toro Pass (6°03.3'S, 141°24.3'E); T.R. Roberts, 26 Oct 1975.

Paratypes

USNM 217071 (3, 131–375 mm). Papua New Guinea, ox-bow lake with mouth open to mainstream of Upper Fly, 4 km downriver from Kiunga, 828 km upriver from Toro Pass (6°09.2'S, 141°16.2'E); T.R. Roberts, 27 Oct to 19 Nov 1975.

Remarks: 6 specimens cited in original description; 1 specimen exchanged to BMNH, 2 specimens exchanged to Kanudi Fisheries Station, Papua New Guinea.

Paratype

USNM 217072 (1, 225 mm). Papua New Guinea, Lake Herbert Hoover (locally known as Lake Boset), Wam River (which drains Lake Herbert Hoover), and swampy lagoons along mainstream of Middle Fly (7°14.0'S, 141°08.3'E); T.R. Roberts, 27 Nov 1975.

Arius elatturus Jordan and Gilbert, 1882:45.

Holotype

USNM 29408 (MISSING). Panama, Pacific coast; C.H. Gilbert.

Remarks: Not found during 1985 inventory or this study.

Paratype

USNM 30995 (1, 250 mm). Panama; Rowell.

Arius equestris Baird and Girard, 1854:26.

Holotype

USNM 836 (1, 125 mm). Texas, Indianola; J.H. Clark.

Remarks: Original description apparently based on one specimen. The specimen is thus considered the holotype.

Arius insculptus Jordan and Gilbert, 1882:41.

Syntype

USNM 29415 (1, 265 mm). Panama, Pacific coast; C.H. Gilbert.

Syntypes

USNM 30977 (2, 180–245 mm). Panama; Rev. Mr. Rowell.

Arius osculus Jordan and Gilbert, 1882:46.

Holotype

USNM 29476 (1, MISSING). Panama, Pacific coast; C.H. Gilbert.

Remarks: Not found during 1980 inventory or this study.

Arius sciurus Smith, 1931:30.

Holotype

USNM 90310 (1, 195 mm). Siam [= Thailand], Tapi River, near Bandon; 30 Sep 1923.

Arius taylori Hildebrand, 1925:250, fig. 10.

Holotype

USNM 87224 (1, 265 mm). El Salvador, Río Lempa, San Marcos; F.J. Foster and S.F. Hildebrand, 8 Feb 1924.

Remarks: Length of 360 mm cited in original description was apparently total length.

Arius tuyra Hildebrand in Meek and Hildebrand, 1923:128, pl. 5.

Holotype

USNM 79413 (1, 193 mm). Panama, Darien, Río Tuyra, mouth of Río Yape; S.E. Meek and S.F. Hildebrand.

Remarks: USNM ledger cites collection date as 6 Mar 1912.

Paratype

USNM 79411 (1, 174 mm). Panama, Darien, Río Tuyra, Marriganti; S.E. Meek and S.F. Hildebrand.

Remarks: USNM ledger cites collection date as 9 Mar 1912.

Paratypes

USNM 79412 (2, 172-187 mm). Panama, Darien, Río Tuyra, Marriganti; S.E. Meek and S.F. Hildebrand.

Remarks: USNM ledger cites collection date as 9 Mar 1912.

Paratypes

USNM 79414 (2, 186-223 mm). Panama, Darien, Río Tuyra, Boca de Cupe; S.E. Meek and S.F. Hildebrand.

Remarks: USNM ledger cites collection date as 28 Feb 1912.

Conorhynchus nelsoni Evermann and Goldsborough, 1902:140, fig. 1.

Holotype

USNM 50001 (1, 308 mm). Mexico, Yucatan, Río Usumacinta, Montecristo; E.W. Nelson and E.A. Goldman, 8 May 1900.

Paratype

USNM 52963 (1, 258 mm). Mexico, Yucatan, Río Usumacinta, Montecristo; E.W. Nelson and E.A. Goldman, 8 May 1900.

Remarks: Taken with holotype; formerly USFC 2382.

Galeichthys eigenmanni Gilbert and Starks, 1904:21, pl. IV: fig. 7.

Paratype

USNM 50379 (1, 235 mm). Panama Bay; C.H. Gilbert et al., 1896.

Galeichthys gilberti Jordan and Williams in Jordan, 1895:395, pl. XXVI.

Holotype

USNM 29213 (1, 268 mm). Mexico, Mazatlan; C.H. Gilbert.

Paratype

USNM 28161 (1, MISSING). Mexico, Mazatlan; C.H. Gilbert.

Remarks: Jordan and Gilbert (1882) reported on this specimen and others as *Arius assimilis*. Jordan and Williams (1895:395), in their description of *Galeichthys gilberti*, stated: "the description is essentially that of Jordan and Gilbert (1882) under the name of *Arius assimilis*." Given that data from this specimen presumably was included secondarily in the description of *G. gilberti*, we consider it a paratype. Not found during 1985 inventory or this study.

Paratype

USNM 28189 (1, 184 mm). Mexico, Mazatlan; C.H. Gilbert.

Remarks: See comments under USNM 28161.

Paratype

USNM 28210 (1, MISSING). Mexico, Mazatlan; C.H. Gilbert.

Remarks: See comments under USNM 28161; not

found during 1985 inventory or this study.

Paratype

USNM 28213 (1, MISSING). Mexico, Mazatlan; C.H. Gilbert.

Remarks: See comments under USNM 28161; not found during 1985 inventory or this study.

Paratypes

USNM 28221 (2, MISSING). Mexico, Mazatlan; C.H. Gilbert.

Remarks: See comments under USNM 28161; not found during 1985 inventory or this study.

Paratype

USNM 28232 (1, 146 mm). Mexico, Mazatlan; C.H. Gilbert.

Remarks: See comments under USNM 28161.

Paratype

USNM 28276 (1, 207 mm). Mexico, Mazatlan; C.H. Gilbert.

Remarks: See comments under USNM 28161.

Paratype

USNM 28304 (1, 153 mm). Mexico, Mazatlan; C.H. Gilbert.

Remarks: See comments under USNM 28161.

Galeichthys simonsi Starks, 1906:764, figs. 1, 2.

Holotype

USNM 53466 (1, 205 mm). Peru, Callao; P.O. Simons, 1898-1899.

Hemipimelodus taylori Roberts, 1978:40, figs. 19, 20h.

Holotype

USNM 217076 (EXCHANGED). Papua New Guinea, mainstream of Palmer [River] and lower end of small tributary about 1 km up the Palmer from Thompson Junction (mouth of Wai Mungi), 65 km NE of Kiunga, 930 km upriver from Toro Pass ($6^{\circ}46.8'S$, $141^{\circ}36.6'E$); T.R. Roberts, 10-11 Nov 1975.

Remarks: Exchanged to AMS in trust for Government of Papua New Guinea; cited as 353 mm SL in original description.

Paratype

USNM 217077 (1, 330 mm). Papua New Guinea, mainstream of Palmer [River] and lower end of small tributary about 1 km up the Palmer from Thompson Junction (mouth of Wai Mungi), 65 km NE of Kiunga, 930 km upriver from Toro Pass ($6^{\circ}46.8'S$, $141^{\circ}36.6'E$); T.R. Roberts, 10-11 Nov 1975.

Remarks: 2 specimens cited in original description; 1 specimen exchanged to Kanudi Fisheries Station, Papua New Guinea; taken with holotype.

Netuma insularum Greene in Gilbert, 1897:439.

Holotype

USNM 47577 (1, 214 mm). Galapagos Islands; Albatross collection.

Remarks: Published type-locality erroneous. This specimen mentioned by Jordan and Bollman (1890), as *Tachysurus elatturus* from "Albatross" sta 2800, in the Gulf of Panama; Snodgrass and Heller (1905) corrected locality to Gulf of Panama.

Netuma planifrons Higuchi et al., 1982:12, figs. 1, 3.

Paratypes

USNM 233896 (4, 67–121 mm). Brazil, Lagoa dos Patos.

Remarks: Specimens cited as paratypes in addendum to description (Higuchi et al., 1982:15); reported lengths (91–163 mm) evidently represent total lengths; locality is in Rio Grande do Sul.

Paratypes

USNM 233897 (4, 105–130 mm). Brazil, Lagoa dos Patos.

Remarks: Specimens cited as paratypes in addendum to description (Higuchi et al., 1982:15); only 3 specimens cited in original description; reported lengths (138–171 mm) evidently represent total lengths; locality is in Rio Grande do Sul.

Potamarius izabalensis Hubbs and Miller, 1960:104, figs. 1–4, 6.

Holotype

USNM 134347 (1, 386 mm). Guatemala, Lago de Izabal, about 1 mi W of El Paraíso; R.R. Miller and A.D. Holloway, 6–7 Apr 1946.

Paratypes

USNM 114500 (21, 24.5–47.0 mm). Guatemala, Lago de Izabal; R.R. Miller and A.D. Holloway, 24–28 Apr 1947.

Remarks: 22 specimens reported in original description; 1 specimen unaccounted for.

Paratypes

USNM 134346 (8, 254–394 mm). Guatemala, Lago de Izabal, near mouth of Río Polochic; R.R. Miller and A.D. Holloway, 7 Apr 1946.

Paratype

USNM 134348 (1, 217 mm). Guatemala, north shore of Lago de Izabal, about 3 mi W of El Estor; R.R. Miller and A.D. Holloway, 8–9 Apr 1946.

Paratypes

USNM 179837 (2, 253–396 mm). Guatemala, Lago de Izabal, about 1 mi W of El Paraíso; R.R. Miller and A.D. Holloway, 6–7 Apr 1946.

Remarks: Originally cited as USNM 139837; 3 specimens cited in original description, only 2 received at USNM; taken with holotype.

Tachysurus equatorialis Starks, 1906:766, figs. 3, 4.

Holotype

USNM 53470 (1, 151 mm). Ecuador, Guayaquil; P.O. Simons, 1898–1899.

Tachysurus liropus Bristol in Gilbert, 1897:438.

Syntypes

USNM 47584 (2, 132–174 mm). Mexico, Sonora, San Juan Lagoon, near Río Ahome mouth; Albatross collection.

Remarks: 6 specimens cited in original description; 4 specimens unaccounted for.

ASPREDINIDAE

Bunocephalus chamaizelus Eigenmann, 1912a:127, pl. II: fig. 1.

Paratype

USNM 66122 (1, 23.8 mm). British Guiana [= Guyana], Gluck Island; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1559a-b.

Bunocephalus salathei Myers, 1927:125.

Paratypes

USNM 92975 (2, 24.7–25.6 mm). Brazil, Morro Ajudo, 100 km from Rio de Janeiro; R. Brocca and Salathé.

Remarks: Received from G.S. Myers, 15 Jun 1933.

Dupouyichthys sapito Schultz, 1944a:245, pl. 4D; fig. 4b.

Holotype

USNM 121072 (1, 22.8 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Paratypes

USNM 121073 (3, 21.1–22.6 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: Taken with holotype.

Paratypes

USNM 121074 (2, 17.9–18.3 mm). Venezuela, Maracaibo basin, Río San Juan about 12 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Remarks: 3 specimens cited in original description; 1 specimen exchanged to MCZ Jul 1951.

Paratype

USNM 121122 (1, 18.3 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Hoplomyzon atrizona Myers, 1942:95, fig. 3.

Paratype

USNM 130639 (1, 25.7 mm). Venezuela, Estado Táchira, tributary of Río Zulia, at Estacion Táchira, 60 km N of San Cristobal; F.F. Bond, 14 Jun 1938.

Remarks: Presumably a paratype, 5 paratypes originally cited without catalog numbers; received from SU, formerly SU 36495; taken with holotype.

Hoplomyzon atrizona petroleus Schultz, 1944a:248, pl. 4C; fig. 4a.

Holotype

USNM 121070 (1, 25.3 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Paratype

USNM 121071 (1, 24.6 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Remarks: Taken with holotype.

ASTROBLEPIDAE

Arges orientalis Boulenger, 1903:601.

Syntype

USNM 133142 (1, 58.2 mm). Venezuela, Albirregas and Milla rivers; S. Briceño.

Remarks: Received from BMNH, formerly BMNH 1903.6.30:81-90, in part.

Astroblepus nicefori Myers, 1932:137.

Paratype

USNM 94178 (1, 68.0 mm). Colombia, Sonsón, Antioquia; N. María.

Remarks: Received from G.S. Myers; cited as paratype in correspondence.

Astroblepus phelpsi Schultz, 1944a:283, pl. 7D.

Holotype

USNM 121126 (1, 53.6 mm). Venezuela, Río Catatumbo system, Río Cobre above its mouth near La Grita, tributary to Río Quinta; L.P. Schultz, 31 Mar 1942.

Paratypes

USNM 121127 (475, 9.2–63.9 mm). Venezuela, Río Catatumbo system, Río Cobre above its mouth near La Grita, tributary to Río Quinta; L.P. Schultz, 31 Mar 1942.

Remarks: 550 specimens cited in original description; 10 specimens exchanged to ZMA Mar 1958, 20 specimens exchanged to UMMZ May 1944, 20 specimens exchanged to MCZ Jul 1951, 5 specimens exchanged to G. Dahl Aug 1955, 20 specimens exchanged to ANSP Aug 1991; count of specimens confirmed 1988; taken with holotype.

Astroblepus pholeter Collette, 1962:311, figs. 1, 2.

Holotype

USNM 196623 (1, 62 mm). Ecuador, Napo Province, a large cave in Latas, 4 km N of Archidona; P. Porras G., 1961.

Paratypes

USNM 196671 (2, 64–66 mm). Ecuador, Napo Province, a large cave in Latas, 4 km N of Archidona; P. Porras G., 28 Jan 1962.

Cyclopium pirrense Meek and Hildebrand, 1913:83.

Paratypes

USNM 78376 (20, 22.0–95.3 mm). Panama, Río Cana, Cana; S.E. Meek and S.F. Hildebrand.

Remarks: Probable paratypes; original description specifically cited only type (= holotype) but is based on more than one specimen; these specimens collected at type locality; USNM ledger cites 21 specimens, 1 specimen unaccounted for; USNM ledger cites collection date as 1 Mar 1912.

Paratypes

USNM 78377 (6, 31.5–72.6 mm). Panama, Tuyra River basin.

Remarks: See comments under USNM 78376 concerning type status; USNM ledger cites 7 specimens, 1 specimen unaccounted for; USNM ledger cites collection data as Darien, Río Cana; S.E. Meek and S.F. Hildebrand, 29 Feb 1912.

Paratypes

USNM 81924 (6, 35.4–86.2 mm). Panama, Tuyra River basin.

Remarks: See comments under USNM 78376 concerning type status; USNM ledger cites collection data as Darien, Río Cana; S.E. Meek and S.F. Hildebrand, 1 Mar 1912.

Cyclopium trifasciatum Eigenmann, 1912b:14.

Paratypes

USNM 79198 (2, 48.0–48.1 mm). Colombia, Caldas; C.H. Eigenmann, Jan–Apr 1912.

Remarks: Received from CM, presumably formerly CM 4869a-n, in part.

Cyclopium unifasciatum Eigenmann, 1912b:15.

Paratypes

USNM 79199 (3, 38.1–44.4 mm). Colombia, Caldas; C.H. Eigenmann, Jan–Apr 1912.

Remarks: Received from CM, presumably formerly CM 4872a-p, in part.

AUCHENIPTERIDAE

Ageneiosus freiei Schultz, 1944a:240, pl. 4B.

Holotype

USNM 121260 (1, 205 mm). Venezuela, Río Agua Caliente, 2–3 km above Lago Maracaibo; L.P. Schultz, 1 May 1942.

Paratype

USNM 121261 (1, 225 mm). Venezuela, Río Agua Caliente, 2–3 km above Lago Maracaibo; L.P. Schultz, 1 May 1942.

Remarks: 2 specimens cited in original description; 1 specimen exchanged to MCZ Jul 1951; taken with holotype.

Paratypes

USNM 121262 (2, 205–370 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Auchenipterus brevior Eigenmann, 1912a:202, pl. XXI: fig. 1.

Paratype

USNM 66102 (1, 47.8 mm). British Guiana [= Guyana], Tumatumari; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1716a-d, in part; taken with holotype.

Epapterus blohmi Vari et al., 1984:463, figs. 1, 6.

Paratypes

USNM 260637 (6, 65.3–74.7 mm). Venezuela, Guarico, Laguna Los Guáculos, a broad shallow lagoon located on Fundo Pecuario Masaguaral (8°34'N, 67°35'W); R.P. Vari et al., 19 Jan 1983.

Remarks: 2 specimens cleared and stained; 7 specimens cited in original description; taken with holotype.

Paratypes

USNM 260638 (8, 61.6–68.8 mm). Venezuela, Guarico, Río Portuguesa at Camaguan (8°07'N, 67°36'W); A. Machado-Allison et al., 20 Jan 1983.

Remarks: 3 specimens cleared and stained.

Felichthys amblops Meek and Hildebrand, 1913:77.

Paratypes

USNM 78299 (4, 70.2–110 mm). Panama, Río Tuyra, Marriganti; S.E. Meek and S.F. Hildebrand.

Remarks: Probable paratypes; original description specifically cited only type (= holotype) but is based on more than one specimen; these specimens collected at type locality; USNM ledger cites collection date as 8 Mar 1912.

Trachycorystes fisheri Eigenmann, 1916:82.

Paratypes

USNM 76929 (6, 49.8–72.8 mm). Colombia, Río Truando; Wilson.

Remarks: Received from IU, presumably formerly IU 13497, in part.

Trachycorystes insignis peloichthys Schultz, 1944a:236, pl. 4A. Holotype

USNM 121281 (1, 160 mm). Venezuela, Río Agua Caliente, 2–3 km above Lago Maracaibo; L.P. Schultz, 1 May 1942.

Paratypes

USNM 121282 (3, 134–157 mm). Venezuela, Río Agua Caliente, 2–3 km above the SW corner of Lago Maracaibo; L.P. Schultz, 1 May 1942.

Remarks: 4 specimens cited in original description; 1 specimen exchanged to MCZ Jul 1951; taken with holotype.

BAGRIDAE

Bagrichthys micranodus Roberts, 1989b:115, fig. 89.

Paratypes

USNM 230276 (3, 55.2–72.6 mm). Borneo, Kapuas River, mainstream 58 km NE of Sintang and 1 km downstream from Sebruang; T.R. Roberts, 16 Aug 1976.

Remarks: Taken with holotype.

Bagrus caeruleus Roberts and Stewart, 1976:275.

Paratype

USNM 216380 (1, 155 mm). Zaire River, near Inga hydroelectric dam (5°31.5'S, 13°37.5'E); T.R. Roberts and D.J. Stewart, 4–6 Aug 1973.

Remarks: Received from MCZ, formerly MCZ 50527, in part.

Bathybagrus tetranema Bailey and Stewart, 1984:11, figs. 1–4.

Paratypes

USNM 256707 (2, 73–74 mm). Zambia, Lake Tanganyika, near Mpulungu; Mar–Apr 1972.

Chrysichthys ansorgii Boulenger, 1910:558.

Paratype

USNM 86636 (1, 103 mm). Angola, Quanza River at Dondo; W.J. Ansorge.

Remarks: Received from BMNH; formerly BMNH 1911.6.1:116–125, in part.

Chrysichthys helicophagus Roberts and Stewart, 1976:276, pl. 6e.

Paratype

USNM 216366 (1, 68.1 mm). Zaire River, near Tadi about 50 km downstream from Kibunzi (5°14'S, 13°56'E); T.R. Roberts and D.S. Stewart, 21 Jul 1973.

Remarks: Received from MCZ, formerly MCZ 50293, in part; taken with holotype.

Gephyroglanis barnardi Skelton, 1981:220, figs. 2, 5, 6.

Paratypes

USNM 227619 (5, 35.8–63.5 mm). South Africa, Cape Province, Noordhoeks River at roadbridge (32°43'15"S, 19°03'59"E), Olifants River system; F. Farquharson, 7 Apr 1967.

Leiocassis myersi Roberts, 1989b:117, fig. 92.

Paratypes

USNM 230280 (3, 38.9–76.6 mm). Borneo, small forest stream flowing into Kapuas River mainstream (0°24'N, 111°51'E), NE of Gunung Setungkul, 53 km NW of Sintang; T.R. Roberts, 16 Aug 1976.

Remarks: Taken with holotype.

Leiocassis regani Jayaram, 1965:9.

Holotype

USNM 35732 (1, 144 mm). North Borneo, Sadong; Hornaday.

Remarks: Length of 161.5 mm cited in original description is total length.

Paratype

USNM 171526 (1, 105 mm). North Borneo, Sadong; Hornaday.

Lophiobagrus aquilus Bailey and Stewart, 1984:24, figs. 5b, 6b, 8.

Paratypes

USNM 256708 (5, 29–69 mm). Zambia, Lake Tanganyika, E side of Nyika Bay on N side of Nkumbula Island, 2 km N of Mpulungu; R.M. Bailey et al., 31 Oct 1970.

Lophiobagrus brevispinis Bailey and Stewart, 1984:35, figs. 5c, 6c, 10.

Paratypes

USNM 256709 (4, 18.2–35.3 mm). Zambia, Lake Tanganyika, N end of Nkumbula Island, 2 km N of Mpulungu; R.M. Bailey et al., 1 Nov 1970.

Mystus havmollerii Smith, 1931:24, fig. 12.

Holotype

USNM 90304 (1, 36.8 mm). Siam [= Thailand], Klong Thalerng, near Ronpibun; Jan 1927.

Paratypes

USNM 90305 (3, 30.4–39.2 mm). Siam [= Thailand], Klong Thalerng, near Ronpibun; Jan 1927.

Remarks: 6 paratypes cited in original description; 3 specimens unaccounted for; taken with holotype.

Mystus mukherjii Ganguly and Datta, 1975:293.

Paratypes

USNM 205615 (2, 74.2–75.1 mm). India, Bihar.

Remarks: USNM ledger cites collection data as Ranchi district, Subarnarekha River; Dec 1967.

Notoglanidium pallidum Roberts and Stewart, 1976:276, pl. 7a-c.

Paratypes

USNM 216373 (2, 50.3–65.8 mm). Zaire River, near Tadi, about 50 km downstream from Kibunzi, (5°14'S, 13°56'E); T.R. Roberts and D.J. Stewart, 21 Jul 1973.

Remarks: Received from MCZ, formerly MCZ 50294, in part.

Pseudobagrus emarginatus Sowerby, 1921:1.

Holotype

USNM 76716 (1, 395 mm). China, mouth of the Hun Kiang, in the Yalu River, on the south Manchurian border; A. de C. Sowerby, 1915.

CALLICHTHYIDAE

Aspidoras albater Nijssen and Isbrücker, 1976a:115, figs. 6, 15f, 16e.

Paratypes

USNM 213540 (5, 26.7–33.0 mm). Brazil, Goiás, Rio Tocantinzinha near São João da Aliança (14°46'S, 47°30'W), Rio Tocantins system; G. Brasil, Jan 1974.

Remarks: Taken with holotype.

Aspidoras brunneus Nijssen and Isbrücker, 1976a:116, figs. 7, 15g, 16f.

Paratype

USNM 213569 (1, 18.5 mm). Brazil, Mato Grosso, Serra do Roncador, km 125 of the road Chavantina-Casimba; E.J. Fittkau, 17 Aug 1965.

Remarks: Taken with holotype.

Aspidoras poecilus Nijssen and Isbrücker, 1976a:121, figs. 13, 15o, 16m.

Paratype

USNM 191624 (1, 31.0 mm). Brazil, Goiás, Rio Araguaia, near Aruanã (14°58'S, 51°04'W); H.R. Axelrod, 1960.

Aspidoras spilotus Nijssen and Isbrücker, 1976a:123, figs. 14, 15q, 16n.

Paratypes

USNM 213568 (2, 23.8–25.0 mm). Brazil, Ceará, Riacho dos Macacos, tributary of Rio Acará; J.L. de Meneses, 10 Nov 1969.

Remarks: Taken with holotype.

Callichthys adspersus Steindachner, 1877a:135, pl. XI: fig. 2.

Syntype

USNM 41518 (1, 61.8 mm). Brazil, Tabatinga; Bourget.

Remarks: Received from MCZ, formerly MCZ 8245 or 8265, in part; 2 specimens cited in ledger; 1 specimen unaccounted for; complete collection information: Brazil, Rio Solimões at Tabatinga and environs; D. Bourget, Sep 1865.

Chaenothorax multiradiatus Orces, 1960:2, pl. 1.

Holotype

USNM 200739 (1, 77.2 mm). Ecuador, tributary of Río Lagartococha near town of Garza-Cocha, Upper Río Napo system; M. Olalla, Nov 1958.

Remarks: Originally cataloged in the private collection (no. 4,280) of the author, Gustavo Orces V., Escuela Politécnica Nacional, Quito, Ecuador, from whom it was received. Length cited as 82 mm in original description.

Corydoras adolfoi Burgess, 1982:15, unnumbered fig.

Paratypes

USNM 235310 (2, 25.9–35.2 mm). Brazil, upper Rio Negro.

Remarks: Originally 3 paratypes in lot; 1 paratype removed, described as *Corydoras imitator* Nijssen and Isbrücker, and exchanged to MZUSP Aug 1983.

Corydoras amapaensis Nijssen, 1972:417, figs. 2, 3, 11a; pl. III.

Paratype

USNM 205865 (1, 47.8 mm). Brazil, Amapá, Cachoera Creek at right bank of Rio Amapari, 4 km downstream of Casa do 7; J.P. Gosse, 12 Dec 1962.

Remarks: Taken with holotype.

Corydoras atropersonatus Weitzman and Nijssen, 1970:123, figs. 2, 6b.

Holotype

USNM 204359 (1, 38.8 mm). Ecuador, Pastaza, Río Conambo at mouth of Río Shione (2°00'S, 76°30'W), Río Tigre system; R. Olalla, Sep 1960.

Paratypes

USNM 204360 (5, 29.7–39.9 mm). Ecuador, Pastaza, Río Conambo at mouth of Río Shione (2°00'S, 76°30'W), Río Tigre system; R. Olalla, Sep 1960.

Remarks: Taken with holotype.

Corydoras bifasciatus Nijssen, 1972:420, figs. 4, 11b.

Paratypes

USNM 205866 (2, 29.0–36.2 mm). Brazil, Pará, creek in left bank of Rio Cururu; tributary of upper Rio Tapajós near Maloca do Gonzalo (7°45'S, 58°00'W); J.P. Gosse, 20 Nov 1964.

Remarks: Taken with holotype.

Corydoras bondi Gosline, 1940:20.

Paratype

USNM 130633 (1, 25.1 mm). Venezuela, Río Carichapo, a tributary to Río Yuaruri, 30 km E of Upata.

Remarks: Received from SU, formerly SU 35068, in part.

Corydoras bondi coppenamensis Nijssen, 1970:19, fig. 8.

Paratypes

USNM 202129 (5, 34.5–37.4 mm). Surinam, Saramacca District, creek on left bank of Coppename River (3°52'N, 56°55'W); H. Nijssen, 18 May 1967.

Remarks: Taken with holotype.

Corydoras burgessi Axelrod, 1987:22, unnumbered figs.

Paratypes

USNM 288461 (2, 45.4–46.9 mm). Brazil, Amazonas, Rio Unini, tributary of the Rio Negro; A. Schwartz.

Remarks: USNM ledger cites collection date as Jun 1987.

Corydoras condiscipulus Nijssen and Isbrücker, 1980b:494, figs. 1, 4b.

Paratypes

USNM 205869 (2, 35.0–37.1 mm). French Guiana, Adjoumba Creek at right bank of Río Oiapoque between Camopi Village and Sikini Village; J.P. Gosse, 6 Dec 1969.

Remarks: Taken with holotype, these specimens are also paratypes of *Corydoras oiapoquensis* Nijssen (1972:425) (see that species account).

Corydoras elegans Steindachner, 1877a:143 (p. 93 in reprint).

Paralectotypes

USNM 41531 (2, 27.5–30.0 mm). Brazil, Codajás; Thayer, 1865.

Remarks: Lectotype designated by Nijssen and Isbrücker (1980a:213); received from MCZ, formerly MCZ 49375 and 8203a, in part; complete collection information: Rio Solimões at Codajás, near Ilha Codajás; L. Agassiz and D. Bourget, 12 Dec 1865.

Paralectotypes

USNM 41532 (2, 33.8–36.0 mm). Brazil, Codajás; Thayer, 1865.

Remarks: See comments under USNM 41531 concerning lectotype, original depository, and locality; 4 specimens originally deposited in USNM collection, 2 exchanged to P. Miranda Ribeiro Jul 1953.

Paralectotypes

USNM 120252 (6, 27.2–32.3 mm). Brazil, Codajás; Thayer, 1865.

Remarks: See comments under USNM 41531 concerning lectotype, original depository, and locality; received from MCZ, formerly MCZ 7749, in part.

Paralectotypes

USNM 216716 (10, 37.9–45.1 mm). Brazil, Codajás; Thayer, 1865.

Remarks: See comments under USNM 41531 concerning lectotype, original depository, and locality.

Corydoras filamentosus Nijssen and Isbrücker, 1983:77, figs. 6, 10d.

Holotype

USNM 225536 (1, 31.5 mm). Surinam, Nickerie District, Corantijn River basin, tributary to Sisa Creek, north side, approximately 700 m downstream of crossing of Amotopo to Camp Geologie road (3°42'N, 57°42'W); R.P. Vari et al., 20 Sep 1980.

Corydoras funnelli Fraser-Brunner, 1947:241, figs. 1, 2b, 2c, 3b; pl. 1.

Holotype

USNM 102222 (1, 48.8 mm). Amazon (?); C. Griem.

Corydoras gossei Nijssen, 1972:424, figs. 6, 11d.

Paratypes

USNM 205867 (2, 50.5–52.2 mm). Brazil, Rondônia, Rio Mamore system, creek near Guajará Mirim ($10^{\circ}50'S$, $65^{\circ}21'W$); J.P. Gosse, 26 Nov 1967.

Remarks: Taken with holotype.

Corydoras gracilis Nijssen and Isbrücker, 1976b:91, 4 unnumbered figs.

Paratype

USNM 216074 (1, 19.7 mm). Brazil, Rio Madeira drainage, within 100 mi of Porto Velho, Trans-Amazonica Highway; H. Bleher, 1975.

Remarks: USNM ledger cites collection data as Brazil, Amazonas, Rio Madeira basin, Rio Jauna at Trans-Amazonica highway (about $6^{\circ}09'S$, $59^{\circ}55'W$), tributary at right bank of Rio Aripuanã.

Corydoras guianensis Nijssen, 1970:21, figs. 9, 25e.

Paratypes

USNM 204218 (2, 26.4–32.9 mm). Surinam, Nickerie District, creek at right bank of Nickerie River, 12 km WSW of Stondansie Fall; H. Nijssen, 5 Apr 1967.

Remarks: Taken with holotype.

Corydoras heteromorphus Nijssen, 1970:22, figs. 10, 25f.

Paratypes

USNM 204224 (2, 38.9–45.0 mm). Surinam, Saramacca District, creek at left bank of Coppename River ($3^{\circ}52'N$, $56^{\circ}55'W$); H. Nijssen, 18 May 1967.

Corydoras leopardus Myers, 1933:188.

Lectotype

USNM 93305 (1, 40.3 mm). N.E. Brazil (?); Griem, 1933. Remarks: Also described as new in Myers (1935) where this specimen was cited as holotype; lectotype designated by Nijssen and Isbrücker (1980a:197).

Paralectotype

USNM 93306 (1, 22.9 mm). N.E. Brazil (?); Griem, 1933.

Remarks: Also described as new in Myers (1935) where a holotype was cited (USNM 93305); lectotype designated by Nijssen and Isbrücker (1980a:197).

Corydoras Myersi P. Miranda Ribeiro, 1942:427, fig. 1.

Paratypes

USNM 163252 (2, 39.2–40.1 mm). Brazil, Amazonas, Rio Javari, Município de Benjamin Constant; A. Parko, Mar 1942.

Remarks: Received from MNRJ through P. Miranda Ribeiro.

Corydoras napoensis Nijssen and Isbrücker, 1986:73, figs. 25, 26, 33e.

Paratypes

USNM 270358 (2, 27.6–30.0 mm). Ecuador, Río Napo drainage, Lagartococha, tributary of Río Aguarico,

between mouth of river and Garzacocha Village ($0^{\circ}39'S$, $75^{\circ}16'W$ to $0^{\circ}28'S$, $75^{\circ}21'W$); M. Olalla, Jan 1966.

Corydoras octocirrus Nijssen, 1970:26, figs. 12, 13, 25a,b.

Paratypes

USNM 204222 (2, 56.3–56.8 mm). Surinam, Brokopondo District, Surinam River system, Marchall Creek, 1.5 km N of Marchall Village; H. Nijssen, 8 Dec 1966.

Remarks: Taken with holotype.

Corydoras oelemariensis Nijssen, 1970:29, figs. 14, 25g.

Paratypes

USNM 204221 (2, 31.0–39.6 mm). Surinam, Marowijne District, Marowijne river system, creek at left bank of Oelemari River, near airstrip; J.P. Gosse, 10 Nov 1966.

Remarks: Taken with holotype.

Corydoras oiapoquensis Nijssen, 1972:425, figs. 7, 11e.

Paratypes

USNM 205868 (2, 27.0–35.9 mm). French Guiana, Adjoumba Creek at right bank of Río Oiapoque between Camopi Village and Sikini Village; J.P. Gosse, 6 Dec 1969.

Paratypes

USNM 205869 (2, 35.0–37.1 mm). French Guiana, Adjoumba Creek at right bank of Río Oiapoque between Camopi Village and Sikini Village; J.P. Gosse, 6 Dec 1969.

Remarks: Later designated as paratypes of *Corydoras condiscipulus* Nijssen and Isbrücker (1980b:494) (see that species account).

Corydoras ornatus Nijssen and Isbrücker, 1976c:126, figs. 1–3.

Paratype

USNM 216075 (1, 39.1 mm). Brazil, Pará, Río Tapajós, 80 km E of Jacareacanga ($6^{\circ}09'S$, $58^{\circ}15'W$); H. Baensch, Sep 1974.

Remarks: Taken with holotype.

Corydoras orphnopterus Weitzman and Nijssen, 1970:125, figs. 3, 6c.

Holotype

USNM 204361 (1, 57.7 mm). Ecuador, Pastaza, lower Río Bobonaza between Montalvo and Chicherota ($2^{\circ}06'S$, $76^{\circ}59'W$), Río Pastaza system.

Paratype

USNM 204362 (1, 56.4 mm). Ecuador, Pastaza, lower Río Bobonaza between Montalvo and Chicherota ($2^{\circ}06'S$, $76^{\circ}59'W$), Río Pastaza system.

Corydoras osteocarus Böhlke, 1951:824.

Paratype

USNM 157367 (1, 26.1 mm). Venezuela, San Fernando de

Atabapo, where the Río Atabapo empties into Río Orinoco ($-4^{\circ}45'N$, $67^{\circ}43'W$); C. Ternetz, 8 Apr 1925.

Remarks: Formerly SU 16334, in part; taken with holotype.

Corydoras pastazensis Weitzman, 1963:59, fig. 1.

Holotype

USNM 177216 (1, 49.0 mm). Ecuador, Pastaza, Chicherata, near mouth of Río Bobonaza, a tributary of the Río Pastaza, itself a tributary of the Río Marañón ($2^{\circ}23'S$, $76^{\circ}40'W$); R. Olalla, Jan 1954.

Paratypes

USNM 164464 (3, 48.9–61.9 mm). Ecuador, Napo-Pastaza, settlement near the mouth of the Río Bobonaza; R. Olalla, 19 Jan 1954.

Corydoras pastazensis orcesi Weitzman and Nijssen, 1970:120, figs. 1, 6a.

Holotype

USNM 204358 (1, 55.5 mm). Ecuador, Pastaza, Río Conambo near village Conambo ($1^{\circ}55'S$, $76^{\circ}51'W$), Río Tigre system; P. Mena, May 1961.

Paratypes

USNM 203827 (2, 49.2–54.0 mm). Ecuador, Pastaza, Río Conambo near village Conambo ($1^{\circ}55'S$, $76^{\circ}51'W$), Río Tigre system; P. Mena, May 1961.

Remarks: Taken with holotype.

Paratypes

USNM 203828 (5, 48.5–64.0 mm). Ecuador, Pastaza, Río Conambo near village Conambo ($1^{\circ}55'S$, $76^{\circ}51'W$), Río Tigre system; P. Mena, May 1961.

Remarks: Taken with holotype.

Corydoras pauciradiatus Weitzman and Nijssen, 1970:129, figs. 5, 6e.

Holotype

USNM 191625 (1, 23.2 mm). Brazil, Goiás, Rio Araguaia, near Aruanã ($14^{\circ}58'S$, $51^{\circ}04'W$); H.R. Axelrod, 1960.

Paratype

USNM 204363 (1, 22.6 mm). Brazil, Goiás, Rio Araguaia, near Aruanã ($14^{\circ}58'S$, $51^{\circ}04'W$); H.R. Axelrod, 1960.

Remarks: Taken with holotype.

Corydoras robinea Burgess, 1983:42, 2 figs.

Paratypes

USNM 257869 (3, 36.0–42.5 mm). Brazil, Amazonas, Rio Aiiana, a tributary of the Rio Negro; A. Schwartz, Mar 1983.

Corydoras schwartzii surinamensis Nijssen, 1970:39, figs. 22, 25h.

Paratypes

USNM 204223 (2, 30.4–35.8 mm). Surinam, Saramacca District, creek at right bank of Coppename River ($3^{\circ}52'30"N$, $56^{\circ}53'W$); H. Nijssen, 19 May 1967.

Remarks: Taken with holotype.

Corydoras septentrionalis Gosline, 1940:16.

Paratype

USNM 130634 (1, 43.1 mm). Venezuela, Río Piña, N of Maturín; F.F. Bond, 18 Mar 1939.

Remarks: Taken with holotype; received from SU, formerly SU 35056.

Corydoras simulatus Weitzman and Nijssen, 1970:126, figs. 4, 6,d.

Holotype

USNM 197615 (1, 51.0 mm). Colombia, Río Ocoa near Puerto López ($4^{\circ}06'N$, $72^{\circ}57'W$), Río Meta system; K. Nelson, 23 Aug 1961.

Paratypes

USNM 197616 (4, 31.6–53.3 mm). Colombia, Río Ocoa near Puerto López ($4^{\circ}06'N$, $72^{\circ}57'W$), Río Meta system; K. Nelson, 23 Aug 1961.

Remarks: Taken with holotype.

Paratype

USNM 197667 (1, 52.9 mm). Colombia, Meta, Caño Pochaquiaro at Via Puerto Lopez; K. Nelson, 22 Aug 1961.

Corydoras weitzmani Nijssen, 1971:91, figs. 1, 8a.

Paratype

USNM 206018 (1, 39.8 mm). Peru, Estado Cuzco, Vilcanota River system ($13^{\circ}32'S$, $71^{\circ}57'W$); C. Kalinowski, 18 Feb 1949.

Remarks: Taken with holotype.

Corydoras xinguensis Nijssen, 1972:429, figs. 9, 11g.

Paratype

USNM 205870 (1, 28.7 mm). Brazil, Rio Xingu system, Mato Grosso, forest creek near Posto Diauarum ($11^{\circ}15'S$, $53^{\circ}00'W$); J.P. Gosse, 12 Nov 1964.

Hoplostoma aeneum Gill, 1858:403 (reprint p. 43).

Lectotype

USNM 1116 (1, 46.6 mm). Trinidad; T. Gill et al., 1858. Remarks: Lectotype designated by Nijssen and Isbrücker (1980a:208); paralectotypes recataloged as USNM 205649.

Paralectotypes

USNM 205649 (3, 34.6–47.1 mm). Trinidad; T. Gill et al., 1858.

Remarks: Formerly USNM 1116, in part; lectotype designated by Nijssen and Isbrücker (1980a:208).

Hoplosternum punctatum Meek and Hildebrand, 1916:264, pls. 14, 15.

Paratypes

USNM 78378 (2, 70.0–73.6 mm). Panama, Río Marte Amade, a small coastal stream 6 mi E of Panama [City]; S.E. Meek and S.F. Hildebrand, Apr 1911.

Remarks: Probable paratypes; original description spe-

cifically cited only type (= holotype) but is based on more than one specimen; these specimens collected at type locality; USNM ledger cites collection date as 22 Apr 1911.

Hoplosternum Stevardii Gill, 1858:401 (reprint p. 41).

Syntype

USNM 5944 (1, 165 mm). Trinidad; T. Gill et al., 1858.

Remarks: 2 specimens mentioned in original description; 1 specimen unaccounted for.

CETOPSIDAE

Cetopsis ventralis Gill, 1870:95.

Holotype

USNM 8307 (1, 113 mm). Río Marañón or Río Napo, J. Orton.

Hemicetopsis othonops Eigenmann, 1912b:17.

Paratypes

USNM 79213 (2, 54.4–77.3 mm). Colombia, Río Magdalena basin, Giardot; C.H. Eigenmann, Jan–Apr 1912.

Remarks: Received from CM, presumably formerly CM 4831a-j, in part.

Paratypes

USNM 76972 (6, 53.9–93.5 mm). Colombia, Río Magdalena basin, Apulo; C.H. Eigenmann, Jan–Apr 1912.

Remarks: Received from IU, presumably formerly IU 12685a-j, in part.

Paratypes

USNM 167853 (4, 66.0–95.3 mm). Colombia, Río Magdalena basin, Giardot; C.H. Eigenmann, Jan–Apr 1912.

Remarks: Received from UKEN, through W.R. Allen; presumably formerly IU 12684a-j, in part.

Pseudocetopsis plumbeus motatanensis Schultz, 1944a:255, pl. 5B.

Holotype

USNM 121265 (1, 147 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Paratype

USNM 121266 (1, 56.6 mm). Venezuela, Maracaibo basin, Río San Juan at bridge S of Mene Grande, Motatán system; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 121267 (2, 67.0–82.0 mm). Venezuela, Maracaibo basin, Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121268 (2, 112–159 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Remarks: Taken with holotype.

Paratypes

USNM 121269 (3, 56.0–112 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: 5 specimens cited in original description; 1 specimen exchanged to MCZ Jul 1951, 1 specimen exchanged to UMMZ Oct 1944.

Pseudocetopsis plumbeus orinoco Schultz, 1944a:253, pl. 5A.

Holotype

USNM 121263 (1, 95.3 mm). Venezuela, Río Torbes, 1 km above Táriba, Río Orinoco system; L.P. Schultz, 31 Mar 1942.

Paratype

USNM 121264 (1, 92.2 mm). Venezuela, Estado de Aragua, Río Guárico and tributaries between San Sebastián and San Casimiro; L.P. Schultz et al., 12 May 1942.

Remarks: 2 specimens cited in original description; 1 specimen exchanged to MCZ Jul 1951.

Pseudocetopsis praecox Ferraris and Brown, 1991:162, fig. 1.

Paratypes

USNM 309184 (2, 33.5–40.5 mm). Venezuela, Territorio Federal Amazonas, tributary of Río Mawarinuma of Río Baria; C.J. Ferraris and R. Royero, 17 Feb 1984.

CLARIIDAE

Clarias gilli Smith and Seale, 1906:74, fig. b.

Holotype

USNM 55620 (1, 293 mm). Philippines, Mindanao, Rio Grande; Dr. Morse, Oct 1903.

Paratype

USNM 126628 (1, 310 mm). Philippines, Mindanao, Rio Grande; Dr. Morse, Oct 1903.

Remarks: Probably the one paratype of this species; no catalog number given in original description; formerly USBF 1668.

Clarias laeviceps Gill, 1862b:139, footnote.

Holotype

USNM 4099 (1, 169 mm). Probably Liberia.

Remarks: No locality given but Gill suggests it probably came from Liberia, without providing supporting evidence. Teugels' results (1986:143) agree with that suggestion.

Uegitglanis zammaranoi Gianferrari, 1923:1, pl. 1.

Paratype

USNM 93131 (1, 84.0 mm). Italian Somalia [= Somalia], Pozzi di Uegit (el Uegit); V.T. Zammarano.

DORADIDAE

Doraops zuloagai Schultz, 1944a:271, fig. 5, pl. 7A.

Holotype

USNM 121015 (1, 278 mm). Venezuela, Maracaibo basin, Río de Los Pajaros, 3 km above Lago Maracaibo; L.P. Schultz, 30 Apr 1942.

Paratypes

USNM 121016 (3, 330–475 mm). Venezuela, Maracaibo basin, Río Apón, a few km below mouth of Río Cogollo, about 35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Remarks: 7 specimens cited in original description; 2 specimens exchanged to MCZ, 1 specimen exchanged to FMNH; 1 specimen exchanged to UMMZ.

Paratypes

USNM 121017 (3, 230–345 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: 4 specimens cited in original description; 1 specimen exchanged to SU, now SU 41005 (Böhlke, 1953:41).

Paratype

USNM 121018 (1, 365 mm). Venezuela, Lago Maracaibo, 1 km off Pueblo Viejo; L.P. Schultz, 7–9 Apr 1942.

Hemidoras microstomus Eigenmann, 1912a:193, pl. XVIII: fig. 2.

Paratype

USNM 66200 (1, 45.7 mm). British Guiana [= Guyana], Crab Falls; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1651a-b, in part.

Leptodoras linnelli Eigenmann, 1912a:191, pl. XVII: fig. 1; pl. XVIII: fig. 1.

Paratype

USNM 66222 (1, 141 mm). British Guiana [= Guyana], Tumatumari; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1627a-e, in part; taken with holotype.

Leptodoras myersi Böhlke, 1970:54, figs. 1, 2.

Paratypes

USNM 203816 (2, 68.5–74.8 mm). Peru, vicinity of Iquitos, Rio Amazonas (Marañon) between Isla Iquitos and Isla Lapuna, near Isla Lapuna shore; C.C.G. Chaplin and R. Patrick, 9 Oct 1955.

Megalodoras irwini Eigenmann, 1925:308, pl. 1: fig. 4; pl. 3: fig. 3; pl. 6; pl. 25: fig. 2.

Paratype

USNM 167837 (1, 178 mm). Peru, Iquitos; W.R. Allen, 1920.

Remarks: Received from UKEN, through W.R. Allen; presumably formerly IU 15427, in part.

HELOGENIDAE

Helogenes gouldingi Vari and Ortega, 1986:7, fig. 3.

Paratypes

USNM 269446 (4, 25.8–46.0 mm). Brazil, Amazonas, Igarapé, 15 km from Humaitá along Rio Madeira ($7^{\circ}31'S$, $63^{\circ}02'W$); M. Goulding, 7 Aug 1984.

Remarks: Taken with holotype; 1 specimen cleared and stained.

Helogenes marmoratus uruyensis Fernández-Yépez, 1967:166, pl. 2; pl. 3: fig. 2.

Paratype

USNM 219598 (1, 41.5 mm). Venezuela, Río Urubey; A. Fernández-Yépez et al., Apr 1956.

Remarks: Taken with holotype; received from MBUCV through F. Mago-Leccia; formerly MBUCV-V-2615, in part; originally AFY 56.614, in part.

ICTALURIDAE

Amiurus brunneus Jordan, 1877b:366.

Lectotype

USNM 20148 (1, 73.3 mm). Georgia, Dekalb County, South Fork [= South River] of the Ocmulgee River at Flat Shoals; D.S. Jordan and C.H. Gilbert, 1876.

Remarks: Specimen originally deposited at Butler University, Indiana. Lectotype designated by Jordan and Evermann (1896:142), but Yerger and Relyea (1968:370) proposed USNM 17861 as lectotype, based on data in USNM ledger. That information, however, was written in a different hand from original catalog entry, presumably at a later date, and is not considered authoritative.

Paralectotype

USNM 17861 (1, 108 mm). Georgia, Dekalb County, South Fork [= South River] of the Ocmulgee River at Flat Shoals; D.S. Jordan and C.H. Gilbert, 1876.

Remarks: Specimen originally deposited at Butler University, Indiana.

Amiurus cragini Gilbert, 1884:10.

Holotype

USNM 36814 (1, 97.8 mm). Kansas, "the Lake" (a blind arm of the Arkansas River), at Garden City; F.W. Cragin.

Amiurus dugesii Bean, 1880b:304.

Syntype

USNM 23122 (1, 276 mm). Mexico, Río Turbio, Guanajuato; A. Dugès.

Syntype

USNM 23123 (1, 298 mm). Mexico, Río Turbio, Guanajuato; A. Dugès.

Amiurus erebennus Jordan, 1877a:85, figs. 19, 20.

Holotype

USNM 19093 (1, 215 mm). Florida, St. John's River; G.B. Goode.

Remarks: Length of 275 mm cited in original description is apparently total length.

Amiurus natalis analis Jordan, 1877a:81, fig. 31.

Holotype

USNM 31088 (MISSING). Arkansas River, Arkansas.

Remarks: Jordan (1877a:87) and Jordan and Evermann (1896:140) listed locality as the Arkansas River, but the Little Red River is cited in the figure caption and in the key to varieties of *Amiurus natalis* in Jordan and Evermann (1896:139, 140).

Amiurus obesus Gill, 1862a:45.

Syntypes

USNM 8968 (3, 72.0-175 mm). Nebraska; M. McCarthy.

Remarks: Gill (1862a:45) stated "two specimens were collected . . .", but three specimens originally listed in USNM ledgers.

Amiurus ponderosus Bean, 1880a:286.

Holotype

USNM 287439 (1, ?). Missouri, Mississippi River near St. Louis; J.G.W. Steedman.

Remarks: Originally cataloged as USNM 23388, with only the skeleton preserved and a cast made of the body. The skeleton apparently was recataloged as USNM 25928, and then recataloged to its current number. The cast retained the original number (USNM 23388). Specimen said to be 5 ft long by Jordan and Evermann (1896:137).

Ichthaelurus robustus Jordan, 1877a:76, figs. 3, 4.

Holotype

USNM 20056 (1, 308 mm).

Remarks: Original description stated "the record of the locality is lost," but USNM ledger cites locality as "Mississippi Valley"; the paratype from the Ohio River not located.

Ictalurus anguilla Evermann and Kendall, 1898:125, pl. 6: fig. 1.

Holotype

USNM 48788 (1, 330 mm). Louisiana, Atchafalaya River; Evermann and Chamberlain.

Remarks: USNM ledger cites collection date as 24 Apr 1897.

Paratype

USNM 48787 (1, 390 mm). Louisiana, Atchafalaya River; Evermann and Chamberlain.

Remarks: USNM ledger cites collection date as 24 Apr 1897.

Paratype

USNM 48789 (1, 275 mm). Louisiana, Atchafalaya River; Evermann and Chamberlain.

Remarks: USNM ledger cites collection date as 24 Apr 1897.

Paratype

USNM 61240 (1, 348 mm).

Remarks: Formerly USFC 1079; USNM ledger cites collection data as Louisiana, Melville; Evermann and Chamberlain.

Paratype

USNM 61236 (1, 249 mm).

Remarks: Formerly USFC 1078; USNM ledger cites collection data as Louisiana, Morgan City; Evermann and Chamberlain.

Ictalurus serracanthus Yerger and Relyea, 1968:373, fig. 4.

Holotype

USNM 231711 (1, 131 mm). Florida, Gadsden County, N shore of Lake Talquin, 6.8 mi WSW of Ochlockonee River bridge at US Highway 90, between Tallahassee and Quincy; A.D. Cochran and E. Grover, 20 Oct 1959.

Remarks: Originally cited as USNM 254550-F9.

Paratypes

USNM 231710 (6, 52-163 mm). Florida, Lake Talquin; 8 Oct 1964.

Remarks: Originally cited as USNM 254550-F10; K. Relyea and R.F. Christensen listed as collectors on jar label.

Noturus albater Taylor, 1969:144, pl. 4: fig. 4; pl. 11: fig. 2.

Paratypes

USNM 59132 (5, 33.8-40.2 mm). Arkansas, Main Fork White River, Fayetteville; S.E. Meek.

Paratypes

USNM 73569 (3, 33.8-43.8 mm). Arkansas, Spring River, Black Rock; S.E. Meek.

Paratypes

USNM 116375 (32, 33.6-42.3 mm). Arkansas, Middle Fork White River, Fayetteville; S.E. Meek, 1893.

Paratypes

USNM 202484 (9, 41.3-59.1 mm). Missouri, Reynolds County, Sinking Creek at Highway K, 9.2 mi [14.7 km] from Highway 21 junction; L.W. Knapp, 29 Jun 1964.

Paratypes

USNM 202487 (11, 36.0-56.3 mm). Missouri, Wayne County, Black River at Highway A, 3 mi [4.8 km] W of Williamsville; L.W. Knapp, 29 Jun 1964.

Paratypes

USNM 202488 (2, 45.9-60.2 mm). Missouri, Douglas

County, Bryants Creek, Highway 14, 14 mi [22.4 km] E of Ava; L.W. Knapp, 21 May 1965.

Noturus baileyi Taylor, 1969:141, pl. 4: fig. 3; pl. 11: fig. 1.

Holotype

USNM 201602 (1, 45.8 mm). Great Smoky Mountains National Park, lower portion of Abrams Creek; E.W. Whitney et al., 8 Jun 1957.

Paratypes

USNM 201601 (3, 40.7–45.3 mm). Great Smoky Mountains National Park, lower portion of Abrams Creek; E.W. Whitney et al., 8 Jun 1957.

Remarks: Taken with holotype.

Noturus elassochir Swain and Kalb, 1883:639.

Holotype

USNM 29677 (1, 94.6 mm). Illinois, Illinois River, Napierville; E.R. Copeland.

Noturus elegans Taylor, 1969:150, pl. 4: figs. 5, 6; pl. 12.

Paratypes

USNM 163065 (9, 37.1–52.5 mm). Kentucky, Casey County, tributary of Green River, 4.5 mi [7.2 km] SSW of Liberty on Highway 35; F.B. Schwartz et al., 25 Apr 1952.

Paratypes

USNM 163066 (2, 39.5–43.3 mm). Kentucky, Casey County, tributary of Green River, 6 mi [9.6 km] NE of Liberty, on Highway 35; F.B. Schwartz et al., 25 Apr 1952.

Paratypes

USNM 163090 (17, 27.5–60.1 mm). Kentucky, Metcalfe County, tributary of Russell Creek, 7 mi [11.2 km] NE of Edmonton, on Highway 80; F.B. Schwartz et al., 25 Apr 1952.

Remarks: 4 specimens cleared and stained.

Paratypes

USNM 163091 (2, 27.6–35.2 mm). Kentucky, Metcalfe County, tributary of Green River, Highway 80, at Edmonton; F.B. Schwartz et al., 24 Apr 1952.

Paratypes

USNM 163092 (2, 44.5–46.5 mm). Kentucky, Casey County, tributary of Green River, 0.2 mi [0.32 km] E of Dunnville on Highway 35; F.B. Schwartz et al., 25 Apr 1952.

Paratypes

USNM 163093 (2, 53.5–58.7 mm). Kentucky, Adair County, Russell River, about 1 mi [1.6 km] SE of Columbia, on Highway 80; F.B. Schwartz et al., 25 Apr 1952.

Paratypes

USNM 174902 (5, 37.7–43.3 mm). Kentucky, Green County, Green River, at Greensburg; R.M. Bailey et al., 5 Apr 1953.

Paratypes

USNM 174903 (4, 33.7–40.7 mm). Kentucky, Barren County, Fallen Timber Creek at Highway 90, 8 mi [12.8 km] SE of Glasglow; R.M. Bailey and N.J. Wili-movsky, 10 Apr 1947.

Paratypes

USNM 200480 (3, 30.0–49.3 mm). Kentucky, Warren County, Trammel Creek, 1.5 mi [2.4 km] above mouth; P.A. Hackney.

Paratypes

USNM 201396 (3, 38.5–40.2 mm). Kentucky, Casey County, Knob Lick Creek, on Highway 198, just N of Yosemite; F.J. Schwartz and R.V. Miller, 12 June 1965.

Noturus eleutherus Jordan, 1877b:371.

Holotype

USNM 29678 (1, 59.6 mm). Tennessee, French Broad River near Newport; D.S. Jordan and C.H. Gilbert.

Noturus flavater Taylor, 1969:204, pl. 4: fig. 15; pl. 20: fig. 2.

Paratype

USNM 73592 (1, 35.7 mm). Indian Territory, Sallisaw River; S.E. Meek.

Remarks: Note in jar by Taylor indicates that locality is probably incorrect.

Paratype

USNM 36330 (1, 36.5 mm). Arkansas, White River, Eureka Springs; D.S. Jordan and C.H. Gilbert.

Paratypes

USNM 163546 (2, 71.2–76.0 mm). Missouri, Ozarks County, North Fork White River, near Tecumseh; A.C. Bauman, Aug 1944.

Paratype

USNM 163547 (1, 56.1 mm). Missouri, Shannon County, Jacks Fork of Current River, Highway 17, Alley Spring; Funk and Bauman, 9 Oct 1945.

Noturus flavipinnis Taylor, 1969:201, pl. 4: fig. 14; pl. 20: fig.

1.

Holotype

USNM 163801 (1, 65.2 mm). Tennessee, Clinton, Hines Creek; C.H. Gilbert and J. Swain, 1884.

Paratypes

USNM 36820 (3, 29.2–31.5 mm). Tennessee, Clinton, Hines Creek; C.H. Gilbert and J. Swain, 1884.

Remarks: Taken with holotype.

Paratype

USNM 40455 (1, 80.7 mm). Virginia, North Fork Holston River, Saltville; D.S. Jordan, 9 Aug 1888.

Paratype

USNM 125417 (1, 45.3 mm). Tennessee, Chickamauga Creek; R.R. Gurley, Oct 1893.

Noturus flavus Rafinesque, 1818:41.

Neotype

USNM 202494 (1, 114 mm). Kentucky, Grant County,

Eagle Creek, pool below bridge on State Highway 36, 3.5 mi [5.3 km] E of Jonesville; W.R. Turner, 11 Aug 1959.

Remarks: Formerly UL 12460; neotype designated by Taylor (1969:118).

Noturus funebris Gilbert and Swain in Gilbert, 1891:153.

Lectotype

USNM 36696 (1, 77.5 mm). Alabama, a spring run tributary to North River, near Tuscaloosa; J. Swain and C.H. Gilbert, summer 1884.

Remarks: 4 specimens cited in original description; 2 specimens removed to USNM 161732 and USNM ledger cites 2 specimens as exchanged to SU, but Böhlke (1953) lists a single specimen (SU 3952). Lectotype designated by Jordan and Evermann (1896) who cited its length as 3½ inches. Taylor (1969) overlooked this designation and chose the same specimen as lectotype.

Paralectotypes

USNM 161732 (2, 46.2–52.5 mm). Alabama, a spring run tributary to North River, near Tuscaloosa; J. Swain and C.H. Gilbert, summer 1884.

Remarks: Removed from USNM 36696.

Noturus furiosus Jordan and Meek in Jordan, 1889:351, pl. XLIII: figs. 1, 1a, 1b.

Lectotype

USNM 39932 (1, 70.5 mm). North Carolina, Neuse River, at Millburnie, near Raleigh; D.S. Jordan et al., summer 1888.

Remarks: Lectotype designated by Taylor (1969:184); 5 specimens listed in USNM ledger with this catalog number; 2 specimens recataloged as USNM 164109, 2 specimens exchanged to SU, now SU 1380.

Paralectotypes

USNM 20926 (6, 71.5–91.8 mm). North Carolina, Edgecomb County, Tarboro; J.W. Milner.

Remarks: 11 specimens listed in USNM ledger; 1 specimen exchanged to ANSP, 2 specimens exchanged to UMMZ, 2 specimens exchanged to SU.

Paralectotype

USNM 40398 (1, 28.0 mm). North Carolina, Tar River, at Rocky Mount; D.S. Jordan et al., summer 1888.

Paralectotype

USNM 40572 (1, 34.3 mm). North Carolina, Little River, Goldsborough; D.S. Jordan et al., summer 1888.

Paralectotype

USNM 67937 (1, 36.7 mm).

Remarks: USNM ledger lists locality as North Carolina, Neuse River, Raleigh; O.P. Jenkins and S. Meek, 27 Aug 1888.

Paralectotypes

USNM 164109 (2, 52.3–54.9 mm). North Carolina,

Neuse River, at Millburnie, near Raleigh; D.S. Jordan et al., summer 1888.

Remarks: Formerly USNM 39932, in part.

Noturus giberti Jordan and Evermann in Jordan, 1889:352, pl. XLIII: figs. 2, 2a, 2b.

Lectotype

USNM 39931 (1, 69.3 mm). Virginia, Roanoke River, Salem; D.S. Jordan, 1888.

Remarks: Lectotype designated by Taylor (1969); Böhlke (1953) credited Jordan and Evermann (1896) with lectotype designation but they cited the catalog number without specifying a particular specimen. Lot originally contained 4 syntypes; 2 specimens from original syntype series recataloged as USNM 161733; 1 paralectotype reidentified as *Noturus insignis* and recataloged as USNM 161734.

Paralectotypes

USNM 40219 (8, 46.3–62.3 mm). Virginia, Roanoke River, Roanoke; D.S. Jordan, 1888.

Paralectotypes

USNM 161733 (2, 51.2–61.2 mm). Virginia, Roanoke River, Salem; D.S. Jordan, 1888.

Remarks: Originally cataloged as USNM 39931, in part.

Paralectotype

USNM 161734 (1, 56.5 mm). Virginia, Roanoke River, Salem; D.S. Jordan, 1888.

Remarks: Reidentified as *Noturus insignis* and removed from USNM 39931.

Noturus hildebrandi laetus Taylor, 1969:138, pl. 4: fig. 2; pl. 10: fig. 2.

Holotype

USNM 201665 (1, 40.3 mm). Tennessee, Henry County, North Fork Obion River, at Highway 69; C.E. Ruhr et al., 27 Jul 1954.

Paratypes

USNM 193470 (16, 34.0–44.4 mm). Tennessee, Henry County, North Fork Obion River, at Highway 69; C.E. Ruhr et al., 27 Jul 1954.

Remarks: Taken with holotype; 1 specimen cleared and stained.

Paratypes

USNM 197395 (4, 23.2–44.8 mm). Tennessee, Weakley County, North Fork Obion River, Campground Levee Crossing; C.E. Farrell, 15 Sep 1954.

Paratypes

USNM 197402 (2, 32.5–44.8 mm). Tennessee, Weakley County, Middle Fork of Obion River, Highway 6, Gleason Crossing; C.E. Farrell, 16 Sep 1954.

Noturus lachneri Taylor, 1969:54, pl. 3: fig. 2; pl. 5: fig. 2.

Holotype

USNM 201592 (1, 40.0 mm). Arkansas, Garland County,

Middle Fork of the Saline River at Highway 7 crossing, 11.2 mi [17.9 km] N of Mountain Valley; L. and B. Knapp, 27 May 1967.

Paratypes

USNM 165901 (5, 27.3–62.2 mm). Arkansas, Saline County, Tributary of Saline River, about 1 mi [1.6 km] NW of Benton, just off U.S. 70, Ouachita drainage; E.A. Lachner et al., 22 Apr 1952.

Remarks: 1 specimen cleared and stained.

Noturus marginatus Baird in Cope, 1869:237.

Syntypes

USNM 1571 (9, 32.7–94.6 mm). The Susquehanna.

Remarks: USNM ledger cites 20+ specimens collected by S.F. Baird, 1847; Taylor (1969) reports syntypes at UMMZ (1), ANSP (2), MNHN (2), and MCZ (1); remaining specimens unaccounted for.

Noturus munitus Suttkus and Taylor, 1965:171, figs. 1, 2.

Paratypes

USNM 197708 (23, 22.0–46.0 mm). Mississippi, Marion County, Pearl River, 2.6 mi [4.2 km] E of Sandy Hook; R.D. Suttkus and K.T. Nielsen, 24–25 Nov 1951.

Remarks: 2 specimens cleared and stained.

Paratypes

USNM 198208 (25, 27.7–40.7 mm). Mississippi, Marion County, Pearl River, 2.6 mi [4.2 km] E of Sandy Hook; R.D. Suttkus and R.P. Anderson, 14 Nov 1955.

Remarks: Taken with holotype.

Noturus nocturnus Jordan and Gilbert, 1886:6.

Lectotype

USNM 36461 (1, 45.4 mm). Arkansas, Saline River, Benton; D.S. Jordan et al., Jul–Sep 1884.

Remarks: Lectotype designated by Taylor (1969); 2 specimens recataloged as USNM 201388.

Paralectotypes

USNM 36383 (28, 25.0–45.3 mm). Indian Territory, Poteau River, Slate Ford W of Hackett City; D.S. Jordan et al., Jul–Sep 1884.

Remarks: 1 specimen reidentified as *Noturus exilis* and recataloged as USNM 161730.

Paralectotypes

USNM 36426 (15, 30.2–37.6 mm). Poteau River.

Remarks: USNM ledger cites locality as Arkansas, Washita River, at Arkadelphia; 16 specimens cited in original description; 1 specimen reidentified as *Noturus eleutherus* and recataloged as USNM 161731.

Paralectotype

USNM 161730 (1, 37.8 mm). Indian Territory, Poteau River, Slate Ford W of Hackett City; D.S. Jordan et al., Jul–Sep 1884.

Remarks: Reidentified as *Noturus exilis* and removed from USNM 36383.

Paralectotype

USNM 161731 (1, 29.8 mm). Poteau River.

Remarks: USNM ledger cites locality as Arkansas, Washita River, at Arkadelphia; reidentified as *Noturus eleutherus* and removed from USNM 36426.

Paralectotypes

USNM 201388 (2, 37.6–38.1 mm). Arkansas, Saline River, Benton; D.S. Jordan et al., Jul–Sep 1884.

Remarks: Specimens originally cataloged as USNM 36461, in part.

Noturus phaeus Taylor, 1969:100, pl. 3: fig. 8; pl. 7: fig. 2.

Holotype

USNM 202143 (1, 94.6 mm). Tennessee, Henry County, North Fork Obion River, at Highway 69; C.E. Ruhr et al., 27 Jul 1954.

Paratype

USNM 175389 (1, 29.2 mm). Mississippi, Benton County, Shones Lake, E of Holly Springs; Y.J. McGaha, 9 Jun 1952.

Paratypes

USNM 175390 (2, 30.1–37.2 mm). Mississippi, Marshall County, Little Spring Creek, 2 mi [3.6 km] N of Little Tallahatchie River on Highway 7; Y.J. McGaha, 16 Jun 1952.

Paratypes

USNM 175391 (2, 26.0–27.2 mm). Mississippi, Benton County, Snow Creek, 5 mi [8.0 km] W of Ashland; W.L. Hudspeth, 12 May 1951.

Paratypes

USNM 190745 (2, 12.5–28.6 mm). Tennessee, McNairy County, Moss Creek, on Rose Creek Road, 1.3 mi [2.1 km] N of Highway 57, about 2.5 mi [4.4 km] ENE of Pocahontas; W.R. Taylor and R. Kanazawa, 31 Aug 1959.

Paratypes

USNM 190777 (10, 15.4–29.8 mm). Tennessee, Hardeman County, Spring Creek, 1.2 mi [1.96 km] S of Bolivar on Highway 125; W.R. Taylor and R. Kanazawa, 1 Sep 1959.

Paratypes

USNM 193465 (3, 72.9–100 mm). Tennessee, McNairy County, Moss Creek, about 4 mi [6.4 km] W of Selmer; C.E. Ruhr, 18 Aug 1954.

Paratype

USNM 193466 (1, 89.3 mm). Tennessee, Hardeman County, Indian Creek, 3 mi [4.8 km] S of Grand Junction; C.E. Ruhr, 6 Aug 1954.

Paratypes

USNM 193467 (13, 36.8–91.8 mm). Tennessee, Henderson County, Deer Creek at Huron; C.E. Ruhr, 21 Jul 1954.

Paratypes

USNM 193468 (8, 56.9–110 mm). Tennessee, Fayette

County, Loosahatchie River N of Somerville on Highway 76; C.E. Ruhr, 31 Aug 1954.

Remarks: 1 specimen cleared and stained.

Paratype

USNM 193469 (1, 77.2 mm). Tennessee, Fayette County, Loosahatchie River, 5 mi [8.0 km] N of Oakland; C.E. Ruhr, 31 Aug 1954.

Paratypes

USNM 193471 (10, 40.2–97.8 mm). Tennessee, Henry County, North Fork Obion River, at Highway 69; C.E. Ruhr et al., 27 Jul 1954.

Remarks: Taken with holotype; 3 specimens cleared and stained.

Paratypes

USNM 193473 (4, 61.5–104 mm). Tennessee, Hardeman County, Spring Creek, about 4 mi [6.4 km] SSW Bolivar; C.E. Ruhr, 4 Aug 1954.

Paratypes

USNM 197401 (2, 56.8–72.1 mm). Tennessee, Weakley County, Middle Fork of Obion River, Highway 6, Gleason Crossing; C.E. Farrell, 16 Sep 1954.

Noturus placidus Taylor, 1969:168, pl. 4: fig. 9; pl. 15: fig. 2; pl. 17: fig. 2.

Paratypes

USNM 200677 (38, 18.8–36.4 mm). Kansas, Chase County, Cottonwood River at mouth of South Fork of Cottonwood River, sec. 25, T.19S, R.8E; W.R. Taylor et al., 13 Aug 1965.

Paratypes

USNM 200679 (8, 15.3–27.7 mm). Kansas, Lyon County, Neosho River, just S of US Highway 50, near Emporia, sec. 7, T.19S, R.12E; W.R. Taylor et al., 13 Aug 1965.

Noturus stanauli Etnier and Jenkins, 1980:19, figs. 1, 2.

Paratype

USNM 219281 (1, 24.3 mm). Tennessee, Hancock County, Clinch River at Frost Ford, Clinch River mi 181.1, 11.8 air km WSW of Kyles Ford; 1 May 1976.

Remarks: USNM ledger cites collector as D.A. Etnier.

Paratype

USNM 219282 (1, 25.2 mm). Tennessee, Humphreys County, Duck River, just above mouth of Hurricane Creek, Duck River mi 17.5; 20 Sep 1972.

Remarks: USNM ledger cites collector as R.B. Fitz.

Paratypes

USNM 219283 (2, 21.5–22.0 mm). Tennessee, Humphreys County, Duck River, just above mouth of Hurricane Creek, Duck River mi 17.5; 29 Aug 1973.

Remarks: USNM ledger cites collector as G.F. Boronow.

Paratype

USNM 219284 (1, 28.7 mm). Tennessee, Humphreys County, Duck River, just above mouth of Hurricane

Creek, Duck River mi 17.5; 28 Apr 1974.

Remarks: USNM ledger cites collector as G.F. Boronow.

Paratypes

USNM 219285 (2, 24.3–27.1 mm). Tennessee, Humphreys County, Duck River, just above mouth of Hurricane Creek, Duck River mi 17.5; 21 Oct 1978.

Remarks: USNM ledger cites collector as D.A. Etnier et al.

Noturus stigmosus Taylor, 1969:173, pl. 2: fig. 4; pl. 4: fig. 11; pl. 16: fig. 1; pl. 18: fig. 1.

Paratype

USNM 174906 (1, ? mm). Michigan, Washtenaw County, Huron River, 1.75 mi [2.8 km] NW of Dexter; R.M. Bailey et al., 10 Aug 1951.

Remarks: Disarticulated dry skeleton.

Noturus taylori Douglas, 1972:785, fig. 1.

Holotype

USNM 206181 (1, 38.0 mm). Arkansas, Montgomery County, South Fork of the Caddo River, 1.6 km SE of Hopper and 0.8 km S of Highway 240; N.H. Douglas et al., 5 Mar 1971.

Paratypes

USNM 206182 (15, 28.0–43.0 mm). Arkansas, Montgomery County, South Fork of the Caddo River, 1.6 km SE of Hopper and 0.8 km S of Highway 240; N.H. Douglas et al., 5 Mar 1971.

Remarks: Taken with holotype.

Paratypes

USNM 211571 (13, 25.6–48.0 mm). Arkansas, Montgomery County, Caddo River, at junction of Highway 8 and Highway 240, 9 km NW of Glenwood; 21 Feb 1970.

Remarks: Received from NLU, originally NLU 15233; USNM ledger cites collectors as P. Hambrick and H. Daily.

Noturus trautmani Taylor, 1969:156, pl. 4: fig. 7; pl. 13: fig. 1.

Paratypes

USNM 202493 (6, 24.0–36.0 mm). Ohio, Pickaway County, SE Jackson Township, Big Darby Creek, 1 mi [1.6 km] S of Fox; M.B. Trautman and D.I. Mount, 16 or 17 Nov 1957.

Remarks: 1 specimen cleared and stained.

Pimelodus affinis Baird and Girard, 1854:26.

Syntypes

USNM 837 (9, 55.8–126 mm). Rio Grande del Norte; J.H. Clark.

Remarks: 10 specimens cited in USNM ledger; 1 specimen unaccounted for.

Pimelodus ailurus Girard, 1858a:210, pl. XLIV.

Syntypes

USNM 904 (2, 215–225 mm). Minnesota, Lake Amelia, near Fort Snelling; G. Suckley, 1853.

Remarks: 2 specimens with this catalogue number but only 1 specimen listed in original description; second specimen may be USNM 905.

Syntype

USNM 905 (MISSING). Minnesota, Lake Amelia, near Fort Snelling; G. Suckley, 1853.

Remarks: 1 specimen cited in original description; may have been combined with USNM 904.

Pimelodus antoniensis Girard, 1858a:209.

Holotype

USNM 923 (1, 163 mm). Texas, near San Antonio; C.B. Kennerly, 1853.

Pimelodus catulus Girard, 1858a:208, pl. XLI: figs. 4–6.

Syntype

USNM 926 (1, 92.1 mm). Arkansas, Fort Smith; G.G. Schumard, 1853.

Syntypes

USNM 927 (MISSING). Arkansas, Fort Smith; G.G. Schumard, 1853.

Remarks: 5 specimens cited in original description; not found during 1980 inventory or this study.

Pimelodus confinis Girard, 1860:159.

Syntypes

USNM 1514 (7, 54.2–207 mm). Wisconsin, Racine, Root River; S.F. Baird.

Remarks: USNM ledger indicates that "some sent to ZMUC 1881" but only 8 specimens originally listed in ledger.

Syntypes

USNM 1515 (3, 62.5–153 mm). Wisconsin, Racine, Root River; S.F. Baird.

Remarks: USNM ledger cites 6 specimens; 3 specimens unaccounted for; see also remarks for USNM 1514.

Pimelodus cupreoides Girard, 1860:159.

Syntypes

USNM 1497 (4, 33.1–157 mm). Illinois, Aux Plaines; R. Kennicott.

Pimelodus dekayi Girard, 1860:160.

Syntype

USNM 1512 (MISSING). New York, Lake Ontario at Oswego; S.F. Baird.

Remarks: Not found during 1980 inventory or this study.

Syntypes

USNM 1513 (4, 36.3–122 mm). New York, 4 Mile Creek, near Oswego; S.F. Baird.

Remarks: USNM ledger cites 7 specimens; 3 specimens unaccounted for.

Pimelodus felinus Girard, 1858a:209.

Lectotype

USNM 924 (1, 106 mm). "Tributary of Gypsum Creek, Canadian"; H.B. Mollhausen, 1853.

Remarks: Lectotype designated by Jordan and Evermann (1896:140).

Paralectotypes

USNM 925 (MISSING). Arkansas, Coal Creek; H.B. Mollhausen, 1853.

Remarks: 2 specimens cited in original description; not found during 1980 inventory or this study.

Pimelodus graciosus Girard, 1860:161.

Syntypes

USNM 1511 (2, 109–111 mm). Louisiana, Prairie Mer Rouge; J. Fairie.

Remarks: 3 specimens cited in ledger; 1 specimen unaccounted for.

Pimelodus houghi Girard, 1860:159.

Syntype

USNM 1532 (1, 241 mm). New York, St. Lawrence County, Summerville; F.B. Hough.

Pimelodus hoyi Girard, 1860:159.

Syntypes

USNM 1539 (3, 73.2–173 mm). Wisconsin, in the neighborhood of Racine, Dr. Hoy.

Remarks: USNM ledger cites 4 specimens and collection date as 1852; 1 specimen unaccounted for.

Pimelodus lupus Girard, 1858a:211.

Syntype

USNM 915 (1, 152 mm). From Indianola to Nueces [United States]; J. Pope, 1854.

Syntypes

USNM 916 (3, 168–194 mm). Headwaters of the Rio Pecos [United States]; J. Pope, 1854.

Pimelodus marmoratus Holbrook, 1855:54, pl. VI: fig. 4.

Holotype

USNM 9031 (1, 185 mm). Georgia, Altamaha River.

Remarks: Originally deposited in "the collection of Prof. Agassiz at Cambridge, Massachusetts."

Pimelodus megalops Girard, 1860:161.

Syntype

USNM 1535 (1, 137 mm). Alabama, Black Warrior River and Bigsby River; A. Winchell.

Remarks: 3 specimens cited in USNM ledger; 2 specimens unaccounted for.

Pimelodus olivaceus Girard, 1858a:211, pl. XLI: figs. 1-3; pl. XLII.

Syntypes

USNM 906 (3, 87.2-153 mm). Nebraska, Fort Pierre; J. Evans, 1853.

Remarks: 5 specimens cited in original description; 2 specimens unaccounted for.

Syntype

USNM 908 (1, 173 mm). Nebraska, Yellowstone; F.V. Hayden, 1854.

Remarks: 2 specimens cited in original description; 1 specimen unaccounted for.

Syntypes

USNM 909 (5, ?-125 mm). Near mouth of Poteau River; G.G. Shumard, 1853.

Remarks: 6 specimens cited in original description; 1 specimen unaccounted for; smallest specimen dehydrated at some point and now unmeasurable.

Syntype

USNM 910 (1, 82.5 mm). Arkansas River, near Fort Smith; G.G. Shumard, 1853.

Syntype

USNM 911 (MISSING). Nebraska; Mr. Walker, 1856.

Remarks: Many specimens cited in original description, but only 1 listed in USNM ledger; specimen(s) not found during 1980 inventory or this study.

Syntype

USNM 907 (1, ?). Missouri, Milk River; I.I. Stevens, 1853.

Remarks: 2 specimens reported in original description, 1 specimen unaccounted for; USNM 907 evidently erroneously recataloged as USNM 8449, labels containing each number are found in jar; tail missing from specimen.

Pimelodus platycephalus Girard, 1860:161.

Paralectotypes

USNM 1534 (5, 156-175 mm). South Carolina, Anderson; E. Daniel.

Remarks: Lectotype designated by Yerger and Relyea (1968:364); originally 7 specimens in lot; 1 specimen exchanged to MCZ; 1 specimen exchanged to ANSP.

Pimelodus puma Girard, 1860:160.

Holotype

USNM 1536 (1, 169 mm). South Carolina, Charleston; C. Girard.

Pimelodus vulpeculus Girard, 1860:160.

Holotype

USNM 1530 (1, 173 mm). South Carolina, Charleston; C. Girard.

Pimelodus vulpes Girard, 1858b:170.

Syntypes

USNM 843 (2, 108-115 mm). Texas, fresh water, rivers and streams.

Remarks: USNM ledger lists collection data as Texas, Live Oak Creek; Major Emory; Girard (1859) cited collector as C.B. Kennerly.

Syntype

USNM 844 (MISSING). Texas, fresh water, rivers and streams.

Remarks: 1 specimen listed in USNM ledger and by Girard (1859) who cited collector as J.H. Clark; USNM ledger cites collection data as Texas, Camanche Spring; Col. Graham.

Syntypes

USNM 845 (4, 42.4-57.6 mm). Texas, fresh water, rivers and streams.

Remarks: 6 specimens listed in USNM ledger and by Girard (1859), 2 specimens unaccounted for; USNM ledger lists collection data as Rio Leona, Nueces; Col. Graham; Girard (1859) cited collector as J.H. Clark.

Syntypes

USNM 846 (4, 39.1-67.0 mm). Texas, fresh water, rivers and streams.

Remarks: USNM ledger lists collection data as Piedra Painte; Col. Graham. Girard (1859) cited collector as J.H. Clark.

Syntype

USNM 847 (MISSING). Texas, fresh water, rivers and streams.

Remarks: 1 specimen listed in USNM ledger and by Girard (1859) who cited collector as J.H. Clark; ledger lists collection data as Texas, Devil's River; Col. Graham.

Syntype

USNM 848 (MISSING). Texas, fresh water, rivers and streams.

Remarks: 1 specimen listed in USNM ledger and by Girard (1859) who cited collector as J.H. Clark; ledger lists collection data as Camanche Spring; Col. Graham.

Syntypes

USNM 849 (MISSING). Texas, fresh water, rivers and streams.

Remarks: 2 specimens listed in USNM ledger and by Girard (1859) who cited collector as J.H. Clark; ledger lists collection data as Texas, Rio Salado; J.D. Graham, 1851.

Prietella phreatophila Carranza, 1954:132, pl. 1.

Paratypes

USNM 164169 (3, 37.8-46.2 mm). Mexico, Coahuila, well at the base of Sierra de Santa Rosa, Muzquiz; C. Bolívar and J. Carranza, 29 Aug 1954.

Remarks: 1 specimen cleared and stained.

Schilbeodes hildebrandi Bailey and Taylor, 1950:32, pl. 1; pl. 2: figs. e, f.

Paratypes

USNM 112066 (4, 33.4-36.8 mm). Mississippi, Amite

County, Brushy Creek, 1 mi [1.6 km] above mouth in Homochitto River; M.K. and R.M. Bailey, 1 Apr 1948.
Remarks: Received from UMMZ, formerly UMMZ 155338, in part.

Schilbeodes marginatus atrorus Hubbs and Raney, 1944:10, pl. 1.

Paratypes

USNM 104091 (2, 52.5–56.0 mm). Virginia, Giles County, Sinking Creek, 3 mi [4.8 km] above its mouth in the New River; L.P. Schultz and E.D. Reid, 17 June 1937.

Synechoglanis Beadlei Gill, 1859:40 (reprint p. 1).

Holotype

USNM 5115 (1, 99.2 mm). Canada (West), St. Catherine's; D.W. Beadle.

LORICARIIDAE

Acanthicus canensis Meek and Hildebrand, 1913:80.

Paratypes

USNM 78300 (14, 24.4–52.9 mm). Panama, Río Cana, Cana; S.E. Meek and S.F. Hildebrand.

Remarks: Probable paratypes; original description specifically cited only type (= holotype) but is based on more than one specimen; these specimens collected at type locality; 15 specimens cited in ledger; 1 specimen unaccounted for; USNM ledger cites collection date as 1 Mar 1912.

Ancistrus brevifilis bodenhameri Schultz, 1944a:305, pl. 10a

Holotype

USNM 121066 (1, 61.2 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge S of Mene Grande, Río Motatán system; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 121067 (123, 22.4–64.8 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge S of Mene Grande, Río Motatán system; L.P. Schultz, 20 Mar 1942.

Remarks: 132 specimens cited in original description; 3 specimens exchanged to MCZ Jul 1951; 6 specimens exchanged to UMMZ May 1944; taken with holotype.

Paratype

USNM 121068 (1, 25.3 mm). Venezuela, Maracaibo basin, Río San Juan, 12 km S of Rosario, Río Motatán system; L.P. Schultz, 26 Feb 1942.

Paratypes

USNM 121069 (2, 27.6–54.7 mm). Venezuela, Zulia, Maracaibo basin, Río Machango at bridge S of Lagunillas; L.P. Schultz, 16 Mar 1942.

Paratype

USNM 121299 (1, 26.9 mm). Venezuela, Maracaibo basin, Río San Juan, 12 km S of Rosario, Río Motatán system; L.P. Schultz, 26 Feb 1942.

Ancistrus lithurgicus Eigenmann, 1912a:241, fig. 36; pl. 25: fig. 3.

Paratype

USNM 66104 (1, 36.5 mm). British Guiana [= Guyana], Crab Falls; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1525a-d, in part; taken with holotype.

Ancistrus pirareta Muller, 1989:891, fig. 2.

Paratypes

USNM 307765 (2, 63.1–82.2 mm). Paraguay, Cordillera, Salto Pirareta, S of Piribeauy, tributary of Río Tebicuary-mi (25°30'S, 56°55'W); F. Baud et al., 21–23 Mar 1985.

Remarks: Taken with holotype.

Ancistrus piriformis Muller, 1989:887, fig. 1.

Paratypes

USNM 307766 (2, 63.2–65.5 mm). Paraguay, Alto Parana, Río Acaray, above the lake behind the dam (25°23'S, 54°42'W); C. Dlouhy, 15 May 1982.

Remarks: Taken with holotype.

Ancistrus planiceps Meek and Hildebrand, 1913:79.

Paratypes

USNM 78312 (2, 163–180 mm). Panama, Río Tuyra, Boca de Cupe; S.E. Meek and S.F. Hildebrand.

Remarks: Probable paratypes; original description specifically cited only type (= holotype) but is based on more than one specimen; these specimens collected at type locality; USNM ledger cites collection date as 26 Feb 1912.

Paratype

USNM 79137 (1, 147 mm). Panama, Río Tuyra, Boca de Cupe; S.E. Meek and S.F. Hildebrand.

Remarks: See comments under USNM 78312.

Paratypes

USNM 79138 (4, 24.6–50.1 mm). Panama, Tuyra River basin; S.E. Meek and S.F. Hildebrand.

Remarks: See comments under USNM 78312 concerning type status; these specimens collected near type locality; USNM ledger cites collection data as Darién, Satiganti, Cana; 1 Mar 1912.

Ancistrus triradiatus martini Schultz, 1944a:302, pl. 9c,d.

Holotype

USNM 121064 (1, 81.7 mm). Venezuela, Maracaibo basin, Río Catatumbo system, Río Táchira, 7 km N of San Antonio; L.P. Schultz, 1 Apr 1942.

Paratype

USNM 120094 (1, 79.8 mm). Colombia, Maracaibo basin, Río Catatumbo system, Cúcuta; N. María.

Paratypes

USNM 121065 (2, 13.8–50.7 mm). Venezuela, Maracaibo basin, Río Catatumbo system, Río Táchira, 7 km

N of San Antonio; L.P. Schultz, 1 Apr 1942.

Remarks: 3 specimens cited in original description; 1 specimen exchanged to MCZ Jul 1951; taken with holotype.

Chaetostoma anomala sovichthys Schultz, 1944a:292, pl. 8a,b.

Holotype

USNM 121053 (1, 71.3 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge, Motatán system; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 86262 (2, 20.3-36.7 mm). Venezuela, Maracaibo basin, Trujillo, Río Motatán near Valeria; H. Pittier, 1923.

Paratypes

USNM 121054 (15, 11.9-29.8 mm). Venezuela, Maracaibo basin, Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121055 (20, 12.8-45.3 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Paratypes

USNM 121056 (94, 19.7-72.1 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge, Motatán system; L.P. Schultz, 20 Mar 1942.

Remarks: 118 specimens cited in original description; 8 specimens exchanged to ZMA Mar 1958; 6 specimens exchanged to UMMZ May 1944, 10 specimens exchanged to MCZ Jul 1951; taken with holotype.

Paratypes

USNM 121057 (3, 17.3-44.7 mm). Venezuela, Maracaibo basin, Río Jimellos, 12 km E of Motatán, Río Motatán system; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121058 (11, 43.9-62.6 mm). Venezuela, Maracaibo basin, Río San Juan above bridge S of Mene Grande, Río Motatán system; L.P. Schultz, 17 Mar 1942.

Remarks: 14 specimens cited in original description; 3 specimens exchanged to G. Dahl Aug 1955.

Chaetostoma tachiraensis Schultz, 1944a:288, pl. 7c,d.

Holotype

USNM 121052 (1, 58.4 mm). Venezuela, Estado de Táchira, Maracaibo basin, Río Catatumbo system, Río Táchira, 7 km N of San Antonio; L.P. Schultz, 1 Apr 1942.

Paratype

USNM 101612 (1, 86.8 mm). Colombia, Santander del Norte, Maracaibo basin, Río Pamplonita, near Cúcuta; N. María.

Chaetostomus anomalus Regan, 1903a:599.

Syntype

USNM 133135 (1, 90.8 mm). Venezuela, Albirregas and Milla rivers, above Merida; S. Briceño.

Remarks: Received from BMNH; formerly BMNH 1903.6.30:91-102, in part.

Cochliodon pospisili Schultz, 1944a:312, pl. 11c,d.

Holotype

USNM 121003 (1, 66.8 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, about 100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Questionable Paratypes

USNM 121004 (6, 14.8-18.7 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Remarks: Status uncertain; comments in original description equivocal as to whether these are paratypes.

Paratype

USNM 121005 (1, 36.6 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Paratype

USNM 121006 (1, 13.9 mm). Venezuela, Maracaibo basin, Río Machango, at bridge; L.P. Schultz, 16 Mar 1942.

Paratypes

USNM 121007 (33, 16.3-46.7 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: 46 specimens cited in original description; 4 specimens exchanged to ZMA, 3 specimens exchanged to MCZ Jul 1951, 4 specimens exchanged to G. Dahl Aug 1955, 2 specimens exchanged to O. Schindler Oct 1958.

Paratypes

USNM 121008 (23, 15.3-62.4 mm). Venezuela, Maracaibo basin, Río Machango, 20 km above bridge, S of Lagunillas; L.P. Schultz, 21 Mar 1942.

Remarks: 24 specimens cited in original description; 1 specimen exchanged to UMMZ Oct 1944.

Paratype

USNM 121009 (1, 26.8 mm). Venezuela, Maracaibo basin, Río Palmar at bridge 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Paratypes

USNM 121010 (13, 25.4-65.8 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, about 100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Remarks: Taken with holotype.

Paratypes

USNM 121011 (11, 21.4-34.8 mm). Venezuela, Maracaibo basin, Río Motatán 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Corymbophanes venezuelae Schultz, 1944d:41, pl. 1: figs. 1-3.

Holotype

USNM 120752 (1, 72.5 mm). Venezuela, Río Caripe, Caripito; W. Beebe, 1942.

Farlowella curtirostra Myers, 1942:102, fig. 11.

Paratypes

USNM 130635 (2, 59.0–80.0 mm). Venezuela, Río Monay, 35 km N of Trujillo.

Remarks: Additional collection data in USNM ledger F.F. Bond, 14 Mar 1938; received from SU, formerly SU 36510, in part.

Farlowella vittata Myers, 1942:103, fig. 12.

Paratype

USNM 130636 (1, 92.1 mm). Venezuela, tributaries of Río Uribanto, from San Cristobal to the Llanos; F.F. Bond, 15 Jun 1938.

Remarks: Taken with holotype; received from SU, formerly SU 36513, in part.

Harttia loricariformis Steindachner, 1877b:669, pl. VI: figs. 2, 2a, 2b.

Paralectotype

USNM 120415 (1, 177 mm). Brazil, Rio Parahyba; Thayer Expedition.

Remarks: Lectotype designated by Isbrücker (1979:113); received from MCZ, presumably formerly MCZ 8118, in part. Complete collection information: Brazil, Rio de Janeiro, Rio Parába do Sul between Barra do Pirai and Três Rios (Dom Pedro II Railroad); L. Agassiz and D. Bourget, Apr 1865.

Harttia microps Eigenmann and Allen, 1942:211, pl. VIII: figs. 3, 4; pl. IX: fig. 1.

Paralectotype

USNM 86820 (1, 165 mm). Peru, Iquitos; W.R. Allen, Sep 1920.

Remarks: Isbrücker and Nijssen (1978:71) designated a lectotype after presenting evidence that two specimens were designated as the "type" in the original description; received from UKEN, through W.R. Allen; formerly IU 15380, in part; taken with lectotype.

Paralectotype

USNM 167890 (1, 156 mm). Peru, Iquitos; W.R. Allen, Sep 1920.

Remarks: See comments under USNM 86820.

Harttia nijsseni Boeseman, 1976:170, pl. 8.

Paratype

USNM 216482 (1, 226 mm). Surinam, Suriname River, near Brokopondo (pools in mostly dry river bed); M. Boeseman, 25 Apr 1964.

Remarks: Received from RMNH, probably formerly RMNH 27502, in part.

Hemiancistrus maracaiboensis Schultz, 1944a:317, pl. 10C.

Holotype

USNM 121012 (1, 284 mm). Venezuela, Lago Maracaibo, near mouth of Río Concha; L.P. Schultz, 2 May 1942.

Paratypes

USNM 121013 (2, 84.6–212 mm). Venezuela, cano 1/2 mi W of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratype

USNM 121014 (EXCHANGED). Venezuela, Maracaibo basin, Río San Ignacio, 25 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Remarks: 1 specimen cited in original description; exchanged to MCZ Jul 1951.

Hypoptopoma guianense Boeseman, 1974:259, fig. 1; pl. 1.

Paratypes

USNM 213484 (2, 49.2–50.8 mm). Surinam, left tributary of the Nickerie River, a few km upstream from the Stondansi Falls; M. Boeseman, 30 Jan 1971.

Remarks: Received from RMNH; formerly RMNH 26920, in part.

Lamontichthys stibaros Isbrücker and Nijssen, 1978:66, figs. 8, 9.

Holotype

USNM 167914 (1, 242 mm). Ecuador, Pastaza, Río Bobonaza at Chicherota (2°25'S, 76°38'W), upper Río Pastaza; R. Olalla, Jan 1954.

Paratype

USNM 217423 (1, 213 mm). Ecuador, Pastaza, Río Bobonaza at Chicherota (2°25'S, 76°38'W), upper Río Pastaza; R. Olalla, Jan 1954.

Lasiancistrus brevispinis Heitmans et al., 1983:38, figs. 4–7.

Paratypes

USNM 276368 (2, 60.9–117 mm). Surinam, Nickerie District, Stondansie Fall in Nickerie River; H. Nijssen, 5 Apr 1967.

Lasiancistrus maracaiboensis Schultz, 1944a:314, pl. 11a,b.

Holotype

USNM 121038 (1, 118 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Paratypes

USNM 121039 (17, 22.9–72.4 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, about 100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Paratypes

USNM 121040 (50, 14.1–72.6 mm). Venezuela, Maracaibo basin, Río Jimelles, 12 km E of Motatán, Motatán system; L.P. Schultz, 24 Mar 1942.

Remarks: 49 specimens cited in original description.

Paratypes

USNM 121041 (2, 27.2–67.1 mm). Venezuela, Maracaibo basin, Río Palmar at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Paratypes

USNM 121042 (36, 18.1–68.9 mm). Venezuela, Mara-

caibo basin, Río San Juan near bridge S of Mene Grande, Río Motatán system; L.P. Schultz, 17-20 Mar 1942.

Paratypes

USNM 121043 (2, 37.1-45.8 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratypes

USNM 121044 (3, 29.9-40.7 mm). Venezuela, Maracaibo basin, Río Machango 20 km above bridge S of Lagunillas; L.P. Schultz, 21 Mar 1942.

Paratypes

USNM 121045 (71, 14.4-70.3 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: 91 specimens cited in original description; 5 specimens exchanged to ZMA Mar 1958, 9 specimens exchanged to MCZ Jul 1951, 6 specimens exchanged to G. Dahl Aug 1955.

Paratype

USNM 121046 (1, 19.9 mm). Venezuela, Maracaibo basin, tributary to Río Machango near hot spring, 20 km above bridge S of Lagunillas; L.P. Schultz, 21 Mar 1942.

Paratypes

USNM 121047 (76, 14.3-48.2 mm). Venezuela, Maracaibo basin, Río Motatán 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Remarks: 85 specimens cited in original description; 9 specimens exchanged to UMMZ May 1944.

Paratypes

USNM 121048 (34, 26.3-91.4 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Paratypes

USNM 121049 (8, 64.9-110 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Remarks: Taken with holotype.

Paratypes

USNM 121050 (11, 24.2-90.3 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge S of Mene Grande, Motatán system; L.P. Schultz, 20 Mar 1942.

Lithoxus lithoides Eigenmann, 1912a:242, pl. XXIX: figs. 1-4.

Paratypes

USNM 66223 (3, 29.7-44.8 mm). British Guiana [= Guyana], Amatuk; C.H. Eigenmann, 1908.

Remarks: Taken with holotype; received from CM, presumably formerly CM 1528a-j, in part.

Loricaria bransfordi Gill, 1877:338.

Holotype

USNM 16673 (1, ? mm). Panama, Empire Station; Dr.

Bransford.

Remarks: Snout and jaws lost before original description.

Loricaria capetensis Meek and Hildebrand, 1913:80.

Paratype

USNM 78340 (1, 142 mm). Panama, Río Capeti; S.E. Meek and S.F. Hildebrand.

Remarks: Probable paratypes; original description specifically cited only type (= holotype) but is based on more than one specimen; these specimens collected at type locality; USNM ledger cites collection date as 5 Mar 1912.

Loricaria filamentosa latiura Eigenmann and Vance in Eigenmann, 1912b:13.

Syntype

USNM 79219 (1, 207 mm). Colombia, Boca de Certegai; C.H. Eigenmann, Jan-Apr 1912.

Remarks: Received from CM, presumably formerly CM 3806, in part.

Loricaria griseus Eigenmann, 1909:8.

Paratype

USNM 66224 (1, 62.0 mm). British Guiana [= Guyana], Bartica sand bank; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1506a-e, in part.

Loricaria gymnogaster Eigenmann and Vance in Eigenmann, 1912b:12.

Paratypes

USNM 79218 (2, 66.6-80.8 mm). Colombia, Giardot; C.H. Eigenmann, Jan-Apr 1912.

Remarks: Received from CM, presumably formerly CM 3839a-j, in part.

Loricaria gymnogaster lagoichthys Schultz, 1944a:331, pl. 13.

Holotype

USNM 121092 (1, 302 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, about 100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Paratypes

USNM 121093 (3, 72.8-122 mm). Venezuela, Maracaibo basin, caño 1/2 mile W of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratypes

USNM 121094 (15, 56.8-101 mm). Venezuela, Maracaibo basin, Río Jimelles, 12 km E of Motatán, Río Motatán system; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121095 (30, 18.8-91.2 mm). Venezuela, Maracaibo basin, Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Remarks: 41 specimens cited in original description; 1 specimen exchanged to MBUCV Jun 1982, 10 specimens exchanged to MCZ Jul 1951.

Paratypes

USNM 121096 (19, 51.9-269 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, about 100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Remarks: 18 specimens cited in original description; taken with holotype.

Paratypes

USNM 121097 (43, 52.4-259 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Paratypes

USNM 121098 (399, 21.0-138 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: 433 specimens cited in original description; 6 specimens exchanged to ZMA Mar 1958, 15 specimens exchanged to UMMZ May 1944, 2 specimens exchanged to ZMUL Mar 1947, 5 specimens exchanged to FMNH Nov 1946, 6 specimens exchanged to G. Dahl Aug 1955.

Paratypes

USNM 121099 (4, 66.2-104 mm). Venezuela, Zulia, Maracaibo basin, Río Apón, about 35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Paratypes

USNM 121100 (3, 60.9-138 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratypes

USNM 121101 (13, 21.1-138 mm). Venezuela, Maracaibo basin, Río Palmar at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Loricaria tucumanensis Isbrücker, 1979:98, fig. 14.

Holotype

USNM 88669 (1, 122 mm). Argentina, Tucuman, San Miguel de Tucuman ($26^{\circ}47'S$, $65^{\circ}15'W$); Mr. and Mrs. R.C. Shannon.

Paratype

USNM 217426 (1, 113 mm). Argentina, Tucuman, San Miguel de Tucuman ($26^{\circ}47'S$, $65^{\circ}15'W$); Mr. and Mrs. R.C. Shannon.

Remarks: Taken with holotype.

Loricaria tuyrensis Meek and Hildebrand, 1913:81.

Paratypes

USNM 78341 (3, 255-259 mm). Panama, Tuyra River basin; S.E. Meek and S.F. Hildebrand.

Remarks: Probable paratypes; original description specifically cited only type (= holotype) but is based on more than one specimen; these specimens collected

near type locality. USNM ledger cites collection data as Darien, Río Tuyra at mouth of Yape; 28 Feb 1912.

Paratype

USNM 78342 (1, 285 mm). Panama, Tuyra River basin; S.E. Meek and S.F. Hildebrand.

Remarks: See comments under USNM 78341 concerning type status; USNM ledger cites collection data as Darien, Río Tuyra at mouth of Yape; 6 Mar 1912.

Paratypes

USNM 78343 (5, 242-275 mm). Panama, Tuyra River basin; S.E. Meek and S.F. Hildebrand.

Remarks: See comments under USNM 78341 concerning type status; USNM ledger cites collection data as Darien, Río Tuyra at mouth of Yape; 6 Mar 1912.

Loricaria uracantha rupestris Schultz, 1944a:325, pl. 12a,b.

Holotype

USNM 121102 (1, 78.6 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge S of Mene Grande, Río Motatán system; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 121103 (4, 19.8-77.4 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Paratypes

USNM 121104 (34, 47.5-86.2 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge S of Mene Grande, Río Motatán system; L.P. Schultz, 20 Mar 1942.

Remarks: Taken with holotype; 39 specimens cited in original description; 5 specimens exchanged to MCZ Jul 1951.

Paratypes

USNM 121105 (50, 28.5-90.2 mm). Venezuela, Maracaibo basin, Río San Juan above bridge S of Mene Grande, Río Motatán system; L.P. Schultz, 17 Mar 1942.

Remarks: 67 specimens cited in original description; 4 specimens exchanged to G. Dahl Aug 1955, 6 specimens exchanged to UMMZ May 1944, 5 specimens exchanged to FMNH Nov 1946; 2 specimens unaccounted for.

Paratypes

USNM 121106 (3, 38.2-89.7 mm). Venezuela, Maracaibo basin, Río Táchira, 7 km N of San Antonio, Catatumbo system; L.P. Schultz, 1 Apr 1942.

Paratypes

USNM 121107 (2, 24.3-27.9 mm). Venezuela, Maracaibo basin, Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Loricaria variegata venezuelae Schultz, 1944a:329, pl. 12c.

Holotype

USNM 121108 (1, 162 mm). Venezuela, Maracaibo basin, Río Palmar at bridge, 70 km SW of Maracaibo; L.P.

Schultz, 6 Mar 1942.

Paratypes

USNM 121109 (45, 33.7–169 mm). Venezuela, Maracaibo basin, Río Palmar at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Remarks: Taken with holotype; 50 specimens cited in original description; 5 specimens exchanged to MCZ Jul 1951.

Paratypes

USNM 121110 (58, 46.0–171 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Remarks: 73 specimens cited in original description; 4 specimens exchanged to ZMA Mar 1958, 6 specimens exchanged to UMMZ May 1944, 5 specimens exchanged to FMNH.

Paratypes

USNM 121111 (8, 6.9–151 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: Incorrectly cited in the original description as USNM 121108, the catalog number of the holotype.

Paratypes

USNM 121112 (25, 25.6–141 mm). Venezuela, Maracaibo basin, Río Apón, about 35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Remarks: 27 specimens cited in original description; 2 specimens exchanged to University of Rajasthan 26 Sep 1962.

Loricariichthys platymetopon Isbrücker and Nijssen, 1979:203, figs. 7, 8.

Holotype

USNM 181580 (1, 222 mm). Paraguay, Lago Ypacarai, San Bernardino ($25^{\circ}16'S$, $57^{\circ}16'W$), Río Paraguay system; C.J.D. Brown, 16 Aug 1956.

Paratype

USNM 181437 (1, 142 mm).

Remarks: Not cited in material examined and no locality data given, but included as a paratype in Table 4 of Isbrücker and Nijssen (1979). USNM ledger cites collection data as Paraguay, Río Paraguay, near Asunción Bay; C.J.D. Brown, 8 Jan 1957.

Paratypes

USNM 181755 (2, 271–296 mm). Paraguay, Río Paraguay, Asunción Bay near Asunción; C.J.D. Brown, 8 Jan 1957.

Remarks: USNM ledger cites collection data as 31 Jan 1957.

Paratype

USNM 181768 (1, 286 mm). Paraguay, Asunción Bay, Río Paraguay near Asunción ($25^{\circ}15'S$, $57^{\circ}40'W$); C.J.D. Brown, 20 Dec 1956.

Neblinichthys pilosus Ferraris et al., 1986:70, figs. 1, 4, 5.

Paratypes

USNM 274486 (2, 50.1–57.7 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, Río Baria drainage, Río Mawarinuma, at Neblina base camp ($00^{\circ}55'N$, $66^{\circ}10'W$); C.J. Ferraris et al., 1 Feb 1984.

Otothyris canaliferus Myers, 1927:128.

Syntypes

USNM 92974 (3, 21.3–23.2 mm). Brazil, hills in vicinity Rio de Janeiro; R. Brocca, 1924.

Remarks: Received from G.S. Myers.

Oxyloricaria citurensis Meek and Hildebrand, 1913:82.

Paratypes

USNM 78363 (2, 188–206 mm). Panama, Río Cupe, Cituro; S.E. Meek and S.F. Hildebrand.

Remarks: Probable paratypes; original description specifically cited only type (= holotype) but is based on more than one specimen; these specimens collected at type locality; USNM ledger cites collection date as 25 Feb 1912.

Panaque albomaculatus Kanazawa, 1958:327, fig. 1.

Holotype

USNM 167909 (1, 90.5 mm). Ecuador, Río Pucuno ($0^{\circ}47'S$, $77^{\circ}16'W$), tributary of Río Suno, upper Río Napo; J. Olalla, Nov 1950.

Paratypes

USNM 167908 (4, 48–77.5 mm). Ecuador, Napo-Pastaza, Chicherota, Río Bobonaza ($2^{\circ}22'S$, $76^{\circ}36'W$), upper Río Pastaza; R. Olalla, Jan 1954.

Paratype

USNM 167910 (1, 58 mm). Ecuador, Río Cotapino, tributary of Río Pucuno ($0^{\circ}40'S$ to $0^{\circ}45'S$, $77^{\circ}17'W$ to $77^{\circ}22'W$).

Panaque suttoni Schultz, 1944a:308, pl. 10b.

Holotype

USNM 121033 (1, 280 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratype

USNM 121034 (1, 224 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Paratypes

USNM 121035 (2, 31.0–265 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: 3 specimens cited in original description; 1 specimen exchanged to MCZ Jul 1951.

Paratype

USNM 121075 (1, 53.0 mm). Venezuela, Maracaibo

basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: Taken with holotype.

Parotocinclus collinsae Schmidt and Ferraris, 1985:341, figs. 1-3.

Paratypes

USNM 265091 (2, 18.5-22.0 mm). Guyana, Essequibo, Essequibo River drainage, tributary to Takutu River, about 2 mi from Mazarahally Takutu lumber camp ($6^{\circ}15'N$, $59^{\circ}5'W$); R.E. Schmidt and A. Pappantoniou, 17 Aug 1983.

Remarks: Taken with holotype.

Plecostomus affinis Steindachner, 1877b:685.

Syntype

USNM 120428 (1, 190 mm). Brazil, Rio Mucury; Thayer Expedition, Hartt and Copeland.

Remarks: Received from MCZ, formerly MCZ 7893; complete collection information: Bahia, Rio Mucuri at Santa Clara; F.C. Hartt and E. Copeland, Dec 1865.

Syntype

USNM 120431 (1, 117 mm). Brazil, Rio Parahyba; Thayer Expedition, Hartt and Copeland.

Remarks: Received from MCZ, formerly MCZ 8179; complete collection information: Rio de Janeiro, Rio Paraíba do Sul between Barra do Pirai and Três Rios (Dom Pedro II Railroad); F.C. Hartt and E. Copeland, 1865.

Plecostomus boliviensis Pearson, 1924:21, pl. IV: figs. 1-3.

Paratype

USNM 117586 (1, 125 mm). Bolivia, Huachi; N.E. Pearson, Aug 1921.

Remarks: Received from UMMZ, formerly UMMZ 66310, in part; originally from IU, presumably IU 17012, in part.

Plecostomus Johnii Steindachner, 1877b:691.

Syntypes

USNM 123009 (2, 87.9-129 mm). Brazil; Thayer Expedition, St. John.

Remarks: Received from MCZ, formerly MCZ 7831 or 7864, in part; 3 specimens cited in ledger; 1 specimen unaccounted for; complete collection information: Brazil, Bahia, Rio Poti (tributary of Rio Parnaíba), at Teresina; O. St. John, Dec 1865.

Plecostomus vermicularis Eigenmann and Eigenmann, 1888:171.

Syntypes

USNM 123010 (3, 97.0-109 mm). Rio Parahyba.

Remarks: Received from MCZ, formerly MCZ 7850, in part; complete collection information: Brazil, Rio de

Janeiro, Rio Paraíba do Sul between Barra do Pirai and Três Rios (Dom Pedro II Railroad); F.C. Hartt and E. Copeland, 1865.

Pseudancistrus pediculatus cobrensis Schultz, 1944a:299, pl. 9a,b.

Holotype

USNM 121036 (1, 78.7 mm). Venezuela, Río Catatumbo system, Río Cobre below La Grita, tributary to Río Quinta; L.P. Schultz, 31 Mar 1942.

Paratypes

USNM 121037 (4670, 9.0-79.0 mm). Venezuela, Río Catatumbo system, Río Cobre below La Grita, tributary to Río Quinta; L.P. Schultz, 31 Mar 1942.

Remarks: 4820 specimens cited in original description; 30 specimens exchanged to ZMA Mar 1958, 60 specimens exchanged to UMMZ May 1944, 50 specimens exchanged to MCZ Jul 1951, 10 specimens exchanged to MBUCV Jul 1988; specimen count verified 1988; measurements taken from Schultz (1944a:299); taken with holotype.

Pseudancistrus torbesensis Schultz, 1944a:296 pl. 8C,D.

Holotype

USNM 121001 (1, 64.8 mm). Venezuela, Río Orinoco system, Río Torbes, 1 km above Táriba; L.P. Schultz, 31 Mar 1942.

Paratypes

USNM 121002 (160, 15.4-64.2 mm). Venezuela, Río Orinoco system, Río Torbes, 1 km above Táriba; L.P. Schultz, 31 Mar 1942.

Remarks: 174 specimens cited in original description; 2 specimens exchanged to MCZ Jul 1944, 3 specimens exchanged to UMMZ Oct 1944, 4 specimens exchanged to G. Dahl Aug 1955, 5 specimens exchanged to MBUCV Jul 1988; 2 specimens cleared and stained.

Spatularicaria atratoensis Schultz, 1944b:155.

Holotype

USNM 93810 (1, 338 mm). Colombia, Río Truando, tributary of Río Atrato; N. Michler and A. Schott, 1857-1858.

Spatularicaria phelpsi Schultz, 1944a:335, pl. 14.

Holotype

USNM 121121 (1, 338 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Sturisoma festivum Myers, 1942:100, figs. 8-10.

Paratypes

USNM 130637 (2, 146-162 mm). Venezuela, Maracaibo basin, Río Motatán system, Río Monay, 35 km N of Trujillo; F.F. Bond, 14 Mar 1938.

Remarks: Received from SU, formerly SU 36506, in part; taken with holotype.

MOCHOKIDAE

Chiloglanis carnosus Roberts and Stewart, 1976:282, fig. 5c, pl. 8b-d.

Paratypes

USNM 216372 (3, 39.3-47.4 mm). Zaire River, near Bulu, about 15 km downstream from Luozi ($5^{\circ}01'S$, $14^{\circ}01'E$); T.R. Roberts and D.J. Stewart, 15 Jul and 18-19 Aug 1973.

Remarks: Received from MCZ, formerly MCZ 50241, in part.

Chiloglanis sanagaensis Roberts 1989a:169, figs. 1c, 2c, 3e, f, 6c,d, 9.

Paratypes

USNM 301202 (2, 20.5-33.9 mm). Cameroun, Sanaga basin, R. Nana, 23 km N of Bafia on route from Bafia to Bafoussam; T.R. Roberts, 1 Jan 1988.

Remarks: Received from MNHN, formerly MNHN 1988-1165.

PANGASIIDAE

Pangasius beani Smith, 1931:26.

Holotype

USNM 90308 (1, 150 mm). Siam [= Thailand], Klong Ban Poh, off Lopburi River, near Ayuthia; 26 Nov 1923.

Pangasius cultratus Smith, 1931:25.

Holotype

USNM 90306 (1, 215 mm). Siam [= Thailand], Tapi River, near Bandon; 30 Sep 1923.

Remarks: Cited as 225 mm SL in original description.

Paratype

USNM 90307 (1, 133 mm).

Remarks: No locality data in original description; USNM ledger cites collection data as Menam Chao Phya Bang Sai; H.M. Smith, 11 Nov 1923.

Pangasius fowleri Smith, 1931:28.

Holotype

USNM 90309 (1, 158 mm). Siam [= Thailand], Lopburi River at Lopburi; 22 Oct 1926.

Pangasius lithostoma Roberts, 1989b:132, fig. 102.

Paratype

USNM 230299 (1, 197 mm). Borneo, Sintang market.

Remarks: USNM ledger cites collector as T.R. Roberts, 19 Jul 1976.

PARAKYSIDAE

Parakysis anomalopteryx Roberts, 1989b:142.

Paratypes

USNM 230307 (5, 18.5-23.0 mm). Borneo, Kapuas River

basin, small forest stream flowing into Kapuas River mainstream, $00^{\circ}24'N$, $111^{\circ}51'E$, NE of Gunung Setunggul, 53 km NW of Sintang; T.R. Roberts, 16 Aug 1976.

PIMELODIDAE

Brachyglanis melas Eigenmann, 1912a:157, pl. XI: fig. 2.

Paratype

USNM 66124 (1, 35.1 mm). British Guiana [= Guyana], Crab Falls; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1673a-b, in part; taken with holotype.

Brachyplatystoma goeldii Eigenmann and Bean, 1907:661, fig. 1.

Holotype

USNM 52561 (1, 208 mm). Brazil, Amazon River, between Para and Manaos [= Manaus]; J.B. Steere, 1901.

Cetopsorhamdia orinoco Schultz, 1944a:225, pl. 3a.

Holotype

USNM 121214 (1, 53.5 mm). Venezuela, Río Orinoco system, Río Torbes, 1 km above Táriba; L.P. Schultz, 31 Mar 1942.

Paratypes

USNM 121215 (3, 32.8-50.9 mm). Venezuela, Río Orinoco system, Río Torbes, 1 km above Táriba; L.P. Schultz, 31 Mar 1942.

Remarks: 4 specimens cited in original description; 1 exchanged to MCZ Jul 1951; taken with holotype.

Cetopsorhamdia picklei Schultz, 1944a:222, pl. 2d.

Holotype

USNM 121217 (1, 87.6 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Paratypes

USNM 121218 (30, 45.2-118 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Remarks: 37 specimens cited in original description; 3 specimens exchanged to MCZ Jul 1951, 4 specimens exchanged to ZMA Mar 1958; taken with holotype.

Paratypes

USNM 121219 (22, 36.8-77.5 mm). Venezuela, Maracaibo basin, Río San Juan near bridge S of Mene Grande, Motatán system; L.P. Schultz, 17 and 20 Mar 1942.

Remarks: 24 specimens cited in original description; 2 specimens exchanged to G. Dahl Aug 1955.

Paratypes

USNM 121220 (7, 53.2-95.4 mm). Venezuela, Maracaibo basin, Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121221 (17, 37.9-70.1 mm). Venezuela, Mar-

caibo basin, Río Palmar near Totuma, about 100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Paratypes

USNM 121222 (24, 45.1–95.8 mm). Venezuela, Maracaibo basin, Río Jimelles, 12 km E of Motatán, Motatán system; L.P. Schultz, 24 Mar 1942.

Remarks: 29 specimens cited in original description; 5 specimens exchanged to UMMZ May 1944.

Cetopsorhamdia shermani Schultz, 1944a:220, pl. 2c.

Holotype

USNM 121216 (1, 29.9 mm). Venezuela, Estado de Aragua, Río Orinoco system, Río Guárico and tributaries between San Sebastián and San Casimiro; L.P. Schultz et al., 12 May 1942.

Chasmocranus longior Eigenmann, 1912a:160, fig. 33; pl. XIV: fig. 2.

Paratype

USNM 66133 (1, 30.8 mm). British Guiana [= Guyana], Amatuk; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1656a-c, in part; taken with holotype.

Exallodontus aguanai Lundberg et al., 1991:847, figs. 2–10, 13.

Paratype

USNM 308421 (1, 188 mm). Venezuela, N side of Isla Tres Caños near mouth of Caño Araguaito, 130 n mi from sea buoy (8°40'N, 61°59'W); 19 Feb 1978.

Paratype

USNM 308422 (1, 93 mm). Venezuela, near Los Castillos, 161 n mi from sea buoy (8°31'N, 62°25'W); 10 Nov 1979.

Paratypes

USNM 308423 (7, 74–115 mm). Venezuela near mouth of Caño Guine downstream from El Consejo, 133 n mi from sea buoy (8°35'N, 62°02'W); 11 Nov 1979.

Paratype

USNM 320097 (1, 124 mm). Venezuela, near Puerto Cabrian, 151 n mi from sea buoy (8°35'N, 62°16'W); 11 Nov 1979.

Gladioglanis conquistador Lundberg et al., 1991:192, figs. 1–11.

Paratypes

USNM 306595 (2, 25.5–28.8 mm). Ecuador, Napo Province, Río Napo basin, Río Yasuni, tributary of Río Jatuncocha, est. 2 km upstream from Laguna Jatuncocha (1°0.1'S, 75°31.6'W); 26 Oct 1981.

Gladioglanis machadoi Ferraris and Mago-Leccia, 1989:167, figs. 1, 2.

Paratypes

USNM 268648 (8, 19.0–29.0 mm). Venezuela, Territorio

Federal Amazonas, Departamento Río Negro, Caño Manu, tributary of Río Casiquiare, approximately 250 m upstream of Solano (02°00'N, 66°57'W); R.P. Vari et al., 7 Dec 1984.

Remarks: Taken with holotype; 2 specimens cleared and stained.

Paratypes

USNM 268647 (10, 19.0–31.5 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, small caño off Caño Urami, just upriver of Santa Lucia (1°17'N, 66°51'W); R.P. Vari et al., 6 Dec 1984.

Remarks: 3 specimens cleared and stained.

Imparales mariae Schultz, 1944c:94, fig. 1.

Holotype

USNM 121251 (1, 38.5 mm). Colombia, Río Meta at Villavicencio; N. María.

Imparales panamensis Bussing, 1970:7, fig 2.

Holotype

USNM 204692 (1, 62.3 mm). Panama, Veraguas, creek crossing road on S side of Santa Fe; H. Loftin and E.L. Tyson, 9 Feb 1962.

Paratypes

USNM 204693 (40, 23.4–71.5 mm). Panama, Veraguas, creek crossing road on S side of Santa Fe; H. Loftin and E.L. Tyson, 9 Feb 1962.

Leptoglanis essequibensis Eigenmann, 1912a:158, pl. XIII: fig. 2.

Paratype

USNM 66221 (1, 145 mm). British Guiana [= Guyana], Warraputa; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1653a, in part.

Megalonema platycephalum psammium Schultz, 1944a:216, pl. 2b.

Holotype

USNM 121175 (1, 133 mm). Venezuela, Río Palmar at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Paratypes

USNM 121176 (10, 63.7–99.8 mm). Venezuela, Maracaibo basin, Río Apón, about 35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Remarks: 14 specimens cited in original description; 2 specimens exchanged to MCZ Jul 1951, 2 specimens exchanged to G. Dahl Aug 1955.

Paratypes

USNM 121177 (41, 34.5–118 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Remarks: 46 specimens cited in original description; 2 specimens exchanged to MBUCV Apr 1979, 3 speci-

mens exchanged to UMMZ 1944.

Paratypes

USNM 121178 (15, 73.8–104 mm). Venezuela, Río Palmar at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Remarks: Taken with holotype.

Megalonema punctatum Meek and Hildebrand, 1913:77.

Paratypes

USNM 78279 (2, 220–236 mm). Panama, Río Tuyra basin.

Remarks: Probable paratypes; original description specifically cited only type (= holotype) but is based on more than one specimen; these specimens collected near type locality; USNM ledger cites collection data as: Río Tuyra, Marrigante; Meek and Hildebrand, 8 Mar 1912.

Megalonema robustum Meek and Hildebrand, 1913:78.

Paratype

USNM 78278 (1, ? mm). Panama, Tuyra River basin.

Remarks: Probable paratype; original description specifically cited only type (= holotype) but is based on more than one specimen; this specimen collected near type locality; tail missing; USNM ledger cites collection data as: Río Tuyra, Boca de Yape; Meek and Hildebrand, 6 Mar 1912.

Megalonema xanthum Eigenmann, 1912b:16.

Paratypes

USNM 76930 (24, 47.5–121 mm). Colombia, Apulo; C.H. Eigenmann, Jan–Apr 1912.

Remarks: Received from IU, presumably formerly IU 12682a-z, in part.

Paratypes

USNM 79222 (5, 59.1–103 mm). Colombia, Giardot; C.H. Eigenmann, Jan–Apr 1912.

Remarks: Received from CM, presumably formerly CM 4822a-j, in part.

Paratypes

USNM 167852 (5, 87.5–113 mm). Colombia, Apulo; C.H. Eigenmann, Jan–Apr 1912.

Remarks: Received from UKEN through W.R. Allen, presumably formerly IU 12682a-z, in part.

Microglanis iheringi Gomes, 1946:9, pl. 1.

Paratypes

USNM 121985 (2, 30.5–30.6 mm). Venezuela, Aragua, Río Turmero, near Turmero; V. Barnes, Jr., 24 Sep 1937.

Remarks: Taken with holotype; smaller specimen cited as 26 mm SL in original description.

Microglanis poecilus Eigenmann, 1912a:155, pl.XII: fig. 2.

Paratype

USNM 66123 (1, 23.4 mm). British Guiana [= Guyana],

below Packeo Falls; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1676a-b, in part; taken with holotype.

Microglanis variegatus Eigenmann and Henn in Eigenmann et al., 1914:14.

Paratype

USNM 83653 (1, 28.4 mm). Ecuador, forest pool near Vincos; A. Henn, 1913.

Remarks: Received from IU.

Myoglanis potaroensis Eigenmann, 1912a:159, pl. XIV: fig. 1.

Paratype

USNM 66225 (1, 28.4 mm). British Guiana [= Guyana], Tukeit; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1665a-d, in part; taken with holotype.

Nannorhamdia lineata Bussing, 1970:1, fig. 1.

Paratype

USNM 194230 (1, 57.0 mm). Costa Rica, Río Salamá Nuevo (?) at Interamerican Highway; A. Greenberg, 21 Jan 1963.

Paratypes

USNM 204694 (2, 58.4–69.5 mm). Costa Rica, Puntarenas Province, Quebrada 36, 12 km W of Pueblo Río Claro at Interamerican Highway; W. Bussing and O. Blanco B., 5 Jan 1967.

Nannorhamdia macrocephala Miles, 1943:25.

Paratypes

USNM 120157 (3, 13.9–26.0 mm). Colombia, Upper Río Cauca.

Remarks: Additional collection data from USNM ledger: Juanchito, Cali; C. Miles, 14 Dec 1942; received from C. Miles.

Nemuroglanis pauciradiatus Ferraris, 1988:510, fig. 1.

Paratype

USNM 268645 (1, 19.5 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, rocky pools on island in center of Río Negro (01°57'N, 67°03'W); R.P. Vari et al., 4 Dec 1984.

Paratype

USNM 268646 (1, 24.5 mm). Venezuela, Territorio Federal Amazonas, Departamento Ature, cañón about 15 km S of El Burro, on road from Puerto Ayacucho to El Burro (06°02'N, 67°23'W); R.P. Vari et al., 9 Dec 1984.

Perrunichthys perruno Schultz, 1944a:230, fig. 3d; pl. 3b.

Holotype

USNM 121189 (1, 270 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratype

USNM 121200 (1, ~620 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: Taken with holotype.

Pimelodella chagresi odynea Schultz, 1944a:213, pl. 2a.

Holotype

USNM 121133 (1, 88.6 mm). Venezuela, Maracaibo basin, Río San Juan above bridge S of Mene Grande, Río Motatán system; L.P. Schultz, 17 or 20 Mar 1942.

Paratype

USNM 82618 (1, 42.3 mm). Venezuela, Sierra de Perija; T. de Booy.

Paratype

USNM 101610 (1, 83.9 mm). Colombia, Santander del Norte, Maracaibo basin, Río Pamplonita, near Cúcuta; N. María.

Remarks: USNM ledger cites collection date as "probably 1935."

Paratypes

USNM 121134 (47, 43.8–80.3 mm). Venezuela, Maracaibo basin, Río Motatán, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: 50 specimens cited in original description; 3 specimens exchanged to G. Dahl Aug 1955.

Paratypes

USNM 121135 (2, 52.1–61.0 mm). Venezuela, Maracaibo basin, Río Apón, about 35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Paratypes

USNM 121136 (103, 23.2–71.8 mm). Venezuela, Maracaibo basin, Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121137 (3, 70.1–77.3 mm). Venezuela, Río Motatán system, Río San Pedro at bridge; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 121138 (3, 51.1–80.5 mm). Venezuela, Maracaibo basin, Río Machango at bridge S of Lagunillas; L.P. Schultz, 16 Mar 1942.

Paratype

USNM 121139 (1, 74.2 mm). Venezuela, Maracaibo basin, Río Catatumbo system, Río Táchira, 7 km N of San Antonio; L.P. Schultz, 1 Apr 1972.

Paratypes

USNM 121140 (86, 28.6–90.4 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Remarks: 88 specimens cited in original description; 2 specimens exchanged to MBUCV Apr 1979.

Paratypes

USNM 121141 (24, 49.0–92.1 mm). Venezuela, Mara-

caibo bas.n, Río Motatán system, Río San Juan above bridge S of Mene Grande; L.P. Schultz, 17 and 20 Mar 1942.

Remarks: 26 specimens cited in original description; 2 specimens exchanged to UMMZ Oct 1944.

Paratypes

USNM 121142 (18, 33.4–89.8 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Paratypes

USNM 121143 (8, 26.2–57.4 mm). Venezuela, Maracaibo basin, Río Jimelles, 12 km E of Motatán, Río Motatán system; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121144 (3, 26.4–77.4 mm). Venezuela, Maracaibo basin, Río Machango 20 km above bridge S of Lagunillas; L.P. Schultz, 21 Mar 1942.

Paratypes

USNM 121213 (17, 30.5–69.8 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: 22 specimens cited in original description; 5 specimens exchanged to MCZ Jul 1951.

Paratype

USNM 121252 (1, 101 mm). Colombia, Cúcuta; N. María.

Pimelodella linami Schultz, 1944a:210, pl. 1d.

Holotype

USNM 121132 (1, 75.4 mm). Venezuela, Río Orinoco system, Río Torbes, 1 km above Táriba; L.P. Schultz, 31 Mar 1942.

Pimelodella macturki Eigenmann, 1912a:170, pl. XVI: fig. 1.

Paratype

USNM 66263 (1, 37.6 mm). British Guiana [= Guyana], Choca trenches at Morowhanna; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1698a-d, in part.

Pimelodella megalops Eigenmann, 1912a:169, pl. XV: fig. 2.

Paratypes

USNM 66262 (2, 56.3–67.5 mm). British Guiana [= Guyana], Tumatumari; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1693a-e, in part; taken with holotype.

Pimelodella rambarrani Axelrod and Burgess in Axelrod, 1987:24, 2 unnumbered figs.

Paratype

USNM 288460 (1, 52.9 mm). Brazil, Amazonas, Rio Unini, tributary of Rio Negro; A. Schwartz.

Remarks: USNM ledger lists collection date as Jun 1987.

Pimelodus clarias coprophagus Schultz, 1944a:203, fig. 2.

Holotype

USNM 121150 (1, 163 mm). Venezuela, Río Agua Caliente, 2 to 3 km above SW corner of Lago Maracaibo; L.P. Schultz, 1 May 1942.

Paratypes

USNM 121145 (6, 120–157 mm). Venezuela, Río de Los Pajaros, 3 km above Lago Maraciabo; L.P. Schultz, 30 Apr 1942.

Paratype

USNM 121146 (1, 127 mm). Venezuela, Maracaibo basin, Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121147 (19, 116–153 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, about 100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Remarks: 25 specimens cited in original description; 4 specimens exchanged to FMNH 1983, 2 specimens exchanged to UMMZ Oct 1944.

Paratypes

USNM 121148 (31, 117–192 mm). Venezuela, Maracaibo basin, Río Apón, about 35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Paratypes

USNM 121149 (5, 163–175 mm). Venezuela, Maracaibo basin, caño 1/2 mi W of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratypes

USNM 121151 (9, 115–169 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: 11 specimens cited in original description; 2 specimens exchanged to G. Dahl Aug 1955.

Paratype

USNM 121152 (1, 196 mm). Venezuela, Ciénaga del Guanavana, about 10 km N of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratypes

USNM 121153 (6, 127–194 mm). Venezuela, Río Agua Caliente, 2–3 km above the SW corner of Lago Maracaibo; L.P. Schultz, 1 May 1942.

Remarks: Taken with holotype.

Paratypes

USNM 121154 (8, 133–173 mm). Venezuela, Lago Maracaibo, 7 km S of Maracaibo; L.P. Schultz, 6 Mar 1942.

Remarks: 10 specimens cited in original description; 2 specimens exchanged to ZMA Mar 1958.

Paratypes

USNM 121155 (7, 118–192 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratypes

USNM 121156 (9, 124–217 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Remarks: Tag written by Schultz indicates 9 specimens in jar, but 15 specimens listed in USNM ledgers and cited in original description.

Paratypes

USNM 121157 (5, 108–160 mm). Venezuela, Río Palmar at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Paratypes

USNM 121158 (2, 229–240 mm). Venezuela, Lago Maracaibo, 1 km off Pueblo Viejo; L.P. Schultz, 7–9 Apr 1942.

Paratypes

USNM 121159 (2, 121–146 mm). Venezuela, Lago Maracaibo at Yacht Club, Maracaibo; L.P. Schultz, 5 Mar 1942.

Pimelodus grosskopfii navarroi Schultz, 1944a:207, pl. 1c.

Holotype

USNM 121174 (1, 251 mm). Venezuela, Río Palmar at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Paratype

USNM 101614 (1, 175 mm). Colombia, Río Pamplonita, near Cúcuta, Río Catatumbo system; N. María.

Paratypes

USNM 121172 (16, 60.6–193 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Remarks: 17 specimens cited in original description; 1 specimen exchanged to MBUCV Apr 1979.

Paratypes

USNM 121173 (3, 75.3–146 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: 4 specimens cited in original description; 1 specimen exchanged to MCZ Jul 1951.

Platysilurus malarmo Schultz, 1944a:234, fig. 3g, pl. 3c.

Holotype

USNM 121179 (1, 318 mm). Venezuela, Lago Maracaibo, near mouth of Río Concho; L.P. Schultz, 2 May 1942.

Paratypes

USNM 121180 (2, 225–322 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: 4 specimens cited in original description; 2 specimens exchanged to MCZ Jul 1951.

Paratypes

USNM 121181 (3, 285–351 mm). Venezuela, Maracaibo basin, Río Apón, about 35 km S of Rosario; L.P.

Schultz, 26 Feb 1942.

Remarks: 4 specimens cited in original description; 1 specimen exchanged to UMMZ Oct 1944.

Paratypes

USNM 121182 (3, 280–324 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Remarks: 4 specimens cited in original description; 1 specimen exchanged to MBUCV Apr 1979.

Paratype

USNM 121201 (1, 555 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Pseudarioides pantherinus Lütken, 1875:192.

Syntype

USNM 44970 (1, 141 mm). Venezuela, Caracas.

Remarks: Received from C. Lütken; original description did not indicate number of syntypes; other syntypes at ZMUC (Nielsen, 1974:50).

Pseudopimelodus albomarginatus Eigenmann, 1912a:153, pl. XI: fig. 1.

Paratype

USNM 66266 (1, 25.4 mm). British Guiana [= Guyana], Tukeit; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1681a-d, in part; taken with holotype.

Pseudopimelodus villosus butcheri Schultz, 1944a:199, pl. 1b.

Holotype

USNM 121270 (1, 108 mm). Venezuela, Maracaibo basin, Río San Juan near bridge S of Mene Grande, tributary to Río Motatán; L.P. Schultz, 17 and 20 March 1942.

Paratypes

USNM 121271 (22, 29.3–68.7 mm). Venezuela, Maracaibo basin, Río San Pedro near bridge S of Mene Grande, Río Motatán system; L.P. Schultz, 20 March 1942.

Remarks: 25 specimens previously cited in ledger; 3 specimens exchanged to ZMA Mar 1958.

Paratypes

USNM 121272 (2, 39.3–43.7 mm). Venezuela, Maracaibo basin, Río Motatán, at bridge, 22 km N of Motatán; L.P. Schultz, 17 and 20 Mar 1942.

Paratypes

USNM 121273 (46, 29.8–174 mm). Venezuela, Maracaibo basin, Río San Juan near bridge S of Mene Grande, tributary to Río Motatán; L.P. Schultz, 17 March 1942.

Remarks: 58 cited in original description; 1 specimen exchanged to MBUCV Apr 1979, 5 specimens exchanged to MCZ Aug 1944, 3 specimens exchanged to G. Dahl Aug 1955, 3 specimens exchanged to UMMZ.

Paratypes

USNM 121274 (6, 15.8–62.6 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Paratype

USNM 121275 (1, 37.8 mm). Venezuela, Maracaibo basin, Río Palmar, near Totuma, about 100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Paratypes

USNM 121276 (11, 34.4–60.9 mm). Venezuela, Maracaibo basin, Río Machango, 20 km above bridge, S of Lagunillas; L.P. Schultz, 21 March 1942.

Paratype

USNM 121277 (1, 94.8 mm). Venezuela, Maracaibo basin, Río Palmar, at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Paratype

USNM 121278 (1, 27.2 mm). Venezuela, Maracaibo basin, Río Jimelles 12 km E of Motatán, tributary of Río Motatán; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121279 (5, 19.8–75.9 mm). Venezuela, Río Catatumbo system, Río Táchira, 7 km N of San Antonio; L.P. Schultz, 1 Apr 1942.

Paratypes

USNM 121280 (2, 33.8–185 mm). Venezuela, Maracaibo basin, Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Rhamdella rusbyi Pearson, 1924:12, pl. II: fig. 4.

Syntypes

USNM 86829 (3, 135–183 mm). Bolivia, Río Colorado, Lower Bopi; N.E. Pearson, Sep 1921.

Remarks: Received through C.H. Eigenmann, presumably formerly IU 17275, in part. Pearson cited a "type" (= holotype) and "paratypes," but "type" was not identified. Thus, all specimens in lot are treated as syntypes.

Syntype

USNM 117603 (1, 169 mm). Bolivia, Río Colorado, Lower Bopi; N.E. Pearson, Sep 1921.

Remarks: Received from UMMZ, formerly UMMZ 66321, in part; originally from IU, presumably formerly IU 17275, in part. See comments under USNM 86829 concerning type status.

Rhamdia bransfordii Gill, 1877:337.

Holotype

USNM 16674 (1, 183 mm). Panama, Camp Marie Caretta; J.F. Bransford, Jan 1875.

Rhamdia depressa Barbour and Cole, 1906:155, pl. 1.

Syntype

USNM 120433 (1, 167 mm). Mexico, Yucatan, Ikal

Cenote, near Chichen-Itza; L.J. Cole, 1904.

Remarks: Received from MCZ, formerly MCZ 29072, in part.

Rhamdia dorsalis Gill, 1870:94.

Holotype

USNM 35334 (1, 172 mm). Río Marañón or Río Napo; J. Orton.

Rhamdia gilli Starks, 1906:769, pl. LXV: fig. 1.

Holotype

USNM 53472 (1, 125 mm). Peru, Río Eten, Eten; P.O. Simons, 1898-1899.

Remarks: Status of this specimen somewhat ambiguous. Starks (1906:770) stated "The type is 155 mm in entire length and the cotype 110. The latter is deposited in the U. S. National Museum, Cat No. 53472; the cotype in Stanford University Museum." USNM 53472 is 152 mm total length. Thus, it appears that Starks erroneously associated this catalog number with 110 mm total length paratype.

Rhamdia guatemalensis decolor Hubbs, 1936:201, pl. 1: fig. 3.

Paratypes

USNM 117602 (2, 97-114 mm). Mexico, Yucatan, San Bulha Cave, Motul; 1932.

Remarks: Received from UMMZ, formerly UMMZ 102125, in part.

Rhamdia guatemalensis muriei Hubbs, 1935:7, pl. IV: fig. 1.

Paratypes

USNM 117598 (2, 108-129 mm). Guatemala, Department of Petén, Uaxactun, Río Hondo system; J. Van Tyne and A. Murie, 20-21 Apr 1931.

Remarks: Received from UMMZ, formerly UMMZ 97882, in part.

Rhamdia guatemalensis stygaea Hubbs, 1936:203, pl. 1: fig. 2.

Paratype

USNM 117599 (1, 81.3 mm). Mexico, Yucatan, San Isidro Cave in Salar Colony, near Merida; 1932.

Remarks: Received from UMMZ, formerly UMMZ 102112, in part.

Rhamdia luigiana Villa, 1977:133, figs. 1-3.

Holotype

USNM 217535 (1, 152 mm). Nicaragua, Departamento de Granada, Lake Nicaragua, between Ometepe and Zapatera islands; J. Villa et al., 6 Nov 1976.

Paratype

USNM 217549 (1, 130 mm). Nicaragua, Departamento de Granada, Lake Nicaragua, between Ometepe and Zapatera islands; J. Villa et al., 6 Nov 1976.

Remarks: Taken with holotype.

Sciades marmoratus Gill, 1870:95.

Possible Holotype

USNM 8447 (1, ?). Río Marañón or Río Napo; J. Orton.

Remarks: Head and attached skin.

Sorubimichthys Ortoni Gill, 1870:94.

Holotype

USNM 8238 (1, ~470 mm). Río Marañón or Río Napo; J. Orton.

Sovichthys abuelo Schultz, 1944a:191, pl. 1a.

Holotype

USNM 121183 (1, 214 mm). Venezuela, Río de Los Pajaros, 3 km above Lago Maracaibo; L.P. Schultz, 30 Apr 1942.

Paratypes

USNM 121184 (2, 138-171 mm). Venezuela, Río Negro, below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: 4 specimens cited in original description; 2 specimens exchanged to ZMA Mar 1958.

Paratypes

USNM 121185 (3, 170-179 mm). Venezuela, Río Palmar at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Paratypes

USNM 121186 (2, 140-156 mm). Venezuela, cañón 1/2 mi [= 0.8 km] W of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratypes

USNM 121187 (3, 31.8-147 mm). Venezuela, Ciénaga del Guanavana, about 10 km N of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratypes

USNM 121188 (3, 169-185 mm). Venezuela, Río Agua Caliente, 2 to 3 km above Lago Maracaibo; L.P. Schultz, 1 May 1942.

Paratypes

USNM 121198 (4, 118-189 mm). Venezuela, Río de Los Pajaros, 3 km above Lago Maracaibo; L.P. Schultz, 30 Apr 1942.

Remarks: Taken with holotype.

Paratypes

USNM 121211 (14, 124-174 mm). Venezuela, Maracaibo basin, Río Apón, about 35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Remarks: 17 specimens cited in original description; 2 specimens exchanged to MCZ Jul 1951, 1 specimen exchanged to UMMZ Oct 1944.

Paratypes

USNM 121212 (46, 59.6-219 mm). Venezuela, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Remarks: 57 specimens cited in original description; 4 specimens exchanged to FMNH Feb 1981, 4 specimens exchanged to CAS Nov 1944, 3 specimens exchanged to G. Dahl Aug 1955.

Taenionema steerei Eigenmann and Bean, 1907:662, fig. 2.

Holotype

USNM 52571 (1, 238 mm). Brazil, Amazon River between Para and Manaos [= Manaus]; J.B. Steere, 1901.

PLOTOSIDAE

Oloplotosus luteus Gomon and Roberts in Roberts, 1978:47, fig. 25.

Holotype

USNM 217107 (EXCHANGED). Papua New Guinea, shallow turbid backwater of Ok Tedi and lowermost half km of small tributary about 16 km NE of Ningerum, 915 km upriver from Toro Pass ($5^{\circ}34.1'S$, $141^{\circ}15.0'E$); T.R. Roberts, 2 Nov 1975.

Remarks: Exchanged to AMS in trust for Government of Papua New Guinea; originally cited as 122.8 mm.

Paratype

USNM 217108 (1, 140 mm). Papua New Guinea, side channel of Ok Tedi, 3 km above confluence with Ok Menga, 39 km NNE of Ningerum, 943 km upriver from Toro Pass ($5^{\circ}21.2'S$, $141^{\circ}16.9'E$); T.R. Roberts, 5 Nov 1975.

Remarks: 2 specimens originally in lot, a 123 mm specimen exchanged to Kanudi Fisheries Station, Papua New Guinea.

Plotosus nkunga Gomon and Taylor, 1982:3, pl. 1.

Paratype

USNM 219606 (1, 171 mm). South Africa, Xora.

Paratypes

USNM 226490 (3, 443–510 mm). South Africa, Kasouga, eastern Cape ($33^{\circ}39'S$, $26^{\circ}44'E$).

Remarks: USNM ledger cites collector as G.P. Bezuidenhout, Feb 1980; largest specimen is a dry skeleton.

SCHILBIDAE

Eutropius eclipsis Fowler, 1919:270, fig. 12.

Holotype

USNM 42342 (1, 150 mm). Africa, Angola, Quanza River at Cunga; W.H. Brown, 29 Dec 1889.

Paratypes

USNM 42341 (4, 101–118 mm). Africa, Angola, Quanza River at Cunga; W.H. Brown, 29 Dec 1889.

SCOLOPLACIDAE

Scolopax distolothrix Schaefer et al., 1989:191, figs. 2, 5, 6.

Paratypes

USNM 300622 (24, 11.7–16.2 mm). Brazil, Mato Grosso, small tributary of Batovi River, upper Rio Xingu ($12^{\circ}58'S$, $53^{\circ}37'W$), Rio Amazonas drainage; H.

Schultz, Oct 1964.

Remarks: Taken with holotype.

Paratypes

USNM 300623 (2, 12.6–13.0 mm). Brazil, Mato Grosso, small tributary of Batovi River, upper Rio Xingu ($12^{\circ}58'S$, $53^{\circ}37'W$), Rio Amazonas drainage; H. Schultz, Oct 1964.

Remarks: Taken with holotype; specimens cleared and stained.

Scolopax dolicholophia Schaefer et al., 1989:196, figs. 9, 10.

Paratypes

USNM 300628 (7, 9.5–11.6 mm). Brazil, Amazonas, an igarapé, tributary of Rio Tarumazinho, ~45 km N of Manaus ($2^{\circ}42'S$, $60^{\circ}03'W$); Expedição Permanente da Amazônia; H.A. Britski, 18 Nov 1967.

Remarks: Taken with holotype; 2 specimens cleared and stained.

Paratypes

USNM 300629 (2, 8.1–9.1 mm). Brazil, Amazonas, an igarapé, tributary of Rio Tarumazinho, ~45 km N of Manaus ($2^{\circ}42'S$, $60^{\circ}03'W$); Expedição Permanente da Amazônia; H.A. Britski, 18 Nov 1967.

Remarks: Taken with holotype; specimens cleared and stained.

Paratype

USNM 300630 (1, 11.2 mm). Brazil, Amazonas, an igarapé, tributary of Rio Tarumazinho, ~45 km N of Manaus ($2^{\circ}42'S$, $60^{\circ}03'W$); Expedição Permanente da Amazônia; H.A. Britski, 18 Nov 1967.

Remarks: Taken with holotype; specimen cleared and stained.

Scolopax empousa Schaefer et al., 1989:194, figs. 7, 8.

Paratypes

USNM 300625 (5, 13.9–16.8 mm). Brazil, Mato Grosso, Rio Ivinheima, 70 km upstream from its confluence with the Rio Paraná and Rio dos Bandeirantes ($22^{\circ}35'S$, $53^{\circ}30'W$); O. Schindler, 8 May 1938.

Remarks: Taken with holotype.

Paratypes

USNM 300626 (2, 13.1–14.2 mm). Brazil, Mato Grosso, Rio Ivinheima, 70 km upstream from its confluence with the Rio Paraná and Rio dos Bandeirantes ($22^{\circ}35'S$, $53^{\circ}30'W$); O. Schindler, 8 May 1938.

Remarks: Taken with holotype; specimens cleared and stained.

Paratypes

USNM 300627 (2, 15.1–16.4 mm). Brazil, Mato Grosso, Rio Ivinheima, 70 km upstream from its confluence with the Rio Paraná and Rio dos Bandeirantes ($22^{\circ}35'S$, $53^{\circ}30'W$); O. Schindler, 8 May 1938.

Remarks: Taken with holotype; specimens cleared and stained.

SILURIDAE

Glanis aristotelis Agassiz, 1856:333.

Syntype

USNM 55895 (1, 180 mm). Greece, Achelouïs [= Aspro] River, Acarnania; Dr. Roeser.

Remarks: Garman (1890) claimed that this name was unavailable as it was not accompanied by a description; he proposed the name *Silurus aristotelis* for the same specimens; see also under that account; received from MCZ, 1906.

Hemisilurus mekongensis Bornbusch and Lundberg, 1989:435, figs. 1-4.

Paratype

USNM 293952 (1, 274 mm). Thailand, Ubon Ratchathani Province, bought in Warinchamrap market; A.H. Bornbusch, 26-30 Mar 1987.

Kryptopterus minor Roberts, 1989b:149, fig. 115.

Paratypes

USNM 230288 (7, 55.5-60.0 mm). Borneo, Sungai Landak at Ngabang, 83 km ENE of Pontianak (0°23.5'N, 109°53'E); T.R. Roberts, 15 Jul 1976.

Remarks: Only 4 specimens reported in original description, but 7 received at USNM; 1 specimen cleared and stained.

Kryptopterus moorei Smith, 1945:342, fig. 78.

Holotype

USNM 109787 (1, 195 mm). Siam [= Thailand], a small klong off Menam Chao Phya, near Paknampo; 26 Nov 1923.

Paratype

USNM 109671 (MISSING).

Remarks: 1 specimen cited in original description; not found during 1980 inventory or this study; locality not cited in description; USNM ledger cites collection data as Siam [= Thailand], C. Klong Ban Poh, off Menam Chao Phya, Paknampo; H.M. Smith, 25 Nov 1923.

Paratype

USNM 109672 (MISSING).

Remarks: 1 specimen cited in original description; not found during 1980 inventory or this study; see comments under USNM 109671 with respect to locality.

Paratype

USNM 109786 (1, 136 mm).

Remarks: Locality not cited in description; USNM ledger cites collection data as Siam [= Thailand], Klong Ban Poh, off Menam Chao Phya, Paknampo; H.M. Smith, 26 Nov 1923.

Silurus aristotelis Garman, 1890:56.

Syntype

USNM 55895 (1, 180 mm). Greece, Achelouïs [= Aspro]

River, Acarnania; Dr. Roeser.

Remarks: See comments under *Glanis aristotelis*.

SISORIDAE

Exostoma Feae Vinciguerra, 1890:256 (128 in reprint), pl. VIII: fig. 6.

Syntypes

USNM 44743 (3, 59.6-92.3 mm). Birmania [= Burma, = Myanmar], Taò and Iaddò; L. Fea, 1885.

Remarks: Received from L. Fea, locality on tag with specimens reads Mt. Carin.

Exostoma macropterum Vinciguerra, 1890:253 (125 in reprint), pl. VIII: fig. 5.

Syntype

USNM 44805 (1, 54.1 mm). Birmania [= Burma, = Myanmar], Mt. Catcin; L. Fea, 1885.

Remarks: Cited as syntype in USNM ledger; received from L. Fea.

Glyptothorax buchanani Smith, 1945:402, fig. 89.

Holotype

USNM 117754 (1, 52.8 mm). Siam [= Thailand], Metum, tributary of the Mechem, tributary of the Meping; A.R. Buchanan, 20 Jun 1935.

Paratype

USNM 119824 (1, 35.1 mm). Siam [= Thailand], Metum, tributary of the Mechem, tributary of the Meping; H.G. Deignan.

Remarks: 2 specimens cited in original description; 1 specimen exchanged to MCZ Jul 1951.

Glyptothorax callopterus Smith, 1945:400, fig. 87.

Holotype

USNM 109820 (1, 50.3 mm). Siam [= Thailand], waterfall stream on Kao Chong, near Trang; 2 Sep 1933.

Paratypes

USNM 109819 (2, 46.2-46.8 mm).

Remarks: No collection data in original description; USNM ledger cites collection data as Siam [= Thailand], waterfall stream on Kao Chong near Trang; H.M. Smith, 2 Sep 1933.

Glyptothorax coheni Ganguly et al., 1972:342, figs. 3, 4.

Holotype

USNM 205612 (1, 66.0 mm). India, Subarnarekha River, Bihar, 200 m below Getalsud Dam; N.C. Datta, 24 Jun 1968.

Paratype

USNM 205613 (1, 69.8 mm). India, Subarnarekha River, Bihar, 200 m below Getalsud Dam; N.C. Datta, 24 Jun 1968.

Remarks: Taken with holotype; 2 specimens cited in original description, but only 1 received at NMNH.

Glyptothorax nelsoni Ganguly et al., 1972:341, figs. 1, 2.

Holotype

USNM 205611 (1, 60.7 mm). India, Subarnarekha River, Bihar, 200 m downstream from Namkum railway station; N.C. Datta, 23 Oct 1967.

TRICHOZYCTERIDAE

Branchioica magdalena Miles, 1943:33 (footnote).

Paratype

USNM 120142 (1, ? mm). Colombia, Río Magdalena. Remarks: Specimen received dehydrated; USNM ledger includes additional collection data as: Honda; C. Miles, Feb 1943; received from C. Miles.

Branchioica phaneronema Miles, 1943:32, fig. 8.

Paratype

USNM 120141 (1, 26.2 mm). Colombia, Upper Río Cauca.

Remarks: USNM ledger includes additional collection data as: Virginia; C. Miles, 14 Oct 1942.

Hatcheria maldonadoi Eigenmann, 1927:39, pl. VIII: figs. 2-2b.

Paratypes

USNM 84344 (2, 45.4-50.0 mm). Chile, Río Nonguen, Concepcion; 20 Mar 1919.

Remarks: Received from IU, presumably formerly IU 15058, in part.

Paratypes

USNM 167872 (9, 29.9-57.0 mm). Chile, Río Nonguen, Concepcion; 20 Mar 1919.

Remarks: Received from UKEN, through W.R. Allen; presumably formerly IU 15058, in part.

Homodiaetus haemomyzon Myers, 1942:98, fig. 4.

Paratype

USNM 130638 (1, 49.5 mm). Venezuela, lagoon 10 km S of San Fernando de Apuré; F.F. Bond, 17 Feb 1938.

Remarks: Taken with holotype; presumably a paratype, no catalog numbers given in original description; received from SU, formerly SU 36503, in part.

Paratype

USNM 130632 (1, 26.5 mm). Venezuela, Río Guarico at Calabozo; F.F. Bond, 12 Feb 1938.

Remarks: Presumably a paratype, no catalog numbers given in original description; received from SU, formerly SU 36501, in part.

Megalocentor echthrus de Pinna and Britski, 1991:116, figs. 3, 4a,b.

Paratype

USNM 316024 (1, 46.1 mm). Brazil, Rio Purus, Caitaú; M. Goulding, Jul 1980.

Pygidium atocha Allen in Eigenmann and Allen, 1942:156, pl.XIII: figs. 3-5.

Syntypes

USNM 167864 (83, 25.3-77.9 mm). Bolivia, Río de Atocha, Atocha; W.R. Allen, Feb 1919.

Remarks: Received from UKEN, through W.R. Allen; presumably formerly IU 17819, in part. Allen cited a "type and paratypes" as IU 17819, but did not identify the type (= holotype). His illustrations of the species list three different "types," so we treat this series as syntypes.

Pygidium banneui Eigenmann, 1912b:19.

Paratypes

USNM 79234 (3, 25.3-26.2 mm). Colombia, Bernal Creek, near Honda; C.H. Eigenmann, Jan-Apr 1912.

Remarks: Received from CM, presumably formerly CM 4816a-z, in part.

Pygidium banneui maracaiboensis Schultz, 1944a:262, pl. 6b.

Holotype

USNM 121227 (1, 43.7 mm). Venezuela, Maracaibo basin, Río Motatán system, Río San Juan at bridge, S of Mene Grande; L.P. Schultz, 17 and 20 Mar 1942.

Paratypes

USNM 121228 (5, 29.8-55.7 mm). Venezuela, Maracaibo basin, Río Motatán system, Río San Juan at bridge S of Mene Grande; L.P. Schultz, 17 and 20 Mar 1942.

Remarks: Taken with holotype.

Paratypes

USNM 121229 (12, 32-56 mm). Venezuela, Maracaibo basin, Río Machango, 20 km above bridge, S of Lagunillas; L.P. Schultz, 21 Mar 1942.

Remarks: 16 specimens cited in original description; 3 specimens exchanged to MCZ Jul 1951, 1 specimen exchanged to UMMZ Oct 1944.

Paratype

USNM 121230 (MISSING). Venezuela, Maracaibo basin, Río Palmar near Totuma, about 100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Remarks: 1 specimen cited in original description.

Paratypes

USNM 121231 (2, 33.2-65.4 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Pygidium barbouri Eigenmann, 1911:214, pl. XXXII.

Paratypes

USNM 120289 (4, 29.9-31.0 mm). Bolivia, upper reaches of Beni River at La Paz; T. Barbour.

Remarks: Received from MCZ, formerly MCZ 29314, in part.

Pygidium bogotense Eigenmann, 1912b:18.

Paratypes

USNM 79232 (10, 47–63 mm). Colombia, Chapinero; C.H. Eigenmann, Jan–Apr 1912.

Remarks: Received from CM, presumably formerly CM 4821a-z, in part.

Pygidium chapmani Eigenmann, 1912b:18.

Paratypes

USNM 79233 (3, 52.5–87.9 mm). Colombia, Boquia; C.H. Eigenmann, Jan–Apr 1912.

Remarks: Received from CM, presumably formerly CM 4818a-i, in part.

Pygidium chiltoni Eigenmann, 1927:40, pl. VIII: figs. 1–1a; pl. XIII: figs. 5, 6.

Paratypes

USNM 84350 (2, 72.5–81.0 mm). Chile, Estero Nonguen, Concepcion; 20 Mar 1919.

Remarks: Received from IU, presumably formerly IU 15059, in part.

Pygidium emanueli emanueli Schultz, 1944a:259, pl. 5c.

Holotype

USNM 121223 (1, 173 mm). Venezuela, Maracaibo basin, Estado de Mérida, Río Chama at Estanques; L.P. Schultz, 3 Apr 1942.

Paratypes

USNM 121224 (33, 52.0–169 mm). Venezuela, Maracaibo basin, Estado de Mérida, Río Chama at Estanques; L.P. Schultz, 3 Apr 1942.

Remarks: Taken with holotype; 51 specimens cited in original description; 5 specimens exchanged to MCZ July 1951, 1 specimen exchanged to S. Hora, 2 specimens exchanged to ZMA Mar 1958, 5 specimens exchanged to UMMZ May 1944, 2 specimens exchanged to G. Dahl Aug 1955, 3 specimens unaccounted for.

Paratypes

USNM 121225 (16, 75.3–203 mm). Venezuela, Maracaibo basin, Estado de Mérida, Río Gonzales, tributary to Río Chama, at La Gonzales; L.P. Schultz, 29 Mar 1942.

Remarks: 19 specimens cited in original description; 1 specimen exchanged to S. Hora, 2 specimens unaccounted for.

Paratypes

USNM 121226 (14, 59.2–244 mm). Venezuela, Maracaibo basin, Estado de Mérida, Río Chama, 10 km below Lagunillas; L.P. Schultz, 30 Mar 1942.

Pygidium emanueli motatanensis Schultz, 1944a:260, pl. 6a.

Holotype

USNM 121232 (1, 71.2 mm). Venezuela, Maracaibo

basin, Río Motatán system, Río San Juan at bridge, S of Mene Grande; L.P. Schultz, 17 and 20 Mar 1942.

Paratypes

USNM 121233 (4, 42.5–55.8 mm). Venezuela, Maracaibo basin, Río Motatán system, Río San Juan at bridge S of Mene Grande; L.P. Schultz, 17 and 20 Mar 1942.

Remarks: Taken with holotype; 5 specimens cited in original description; 1 specimen exchanged to MCZ.

Pygidium mondolfii Schultz, 1945:29, fig. 1.

Holotype

USNM 120377 (1, 60.5 mm). Venezuela, Estado de Miranda, Río Tuy system, Quebrada Chacaito near Caracas; E. Mondolfi and Sr. Vivas, 16 Jul 1939.

Paratypes

USNM 120378 (2, 33.0–45.5 mm). Venezuela, Estado de Miranda, Río Tuy system, Quebrada Chacaito near Caracas; E. Mondolfi and Sr. Vivas, 16 Jul 1939.

Pygidium striatum Meek and Hildebrand, 1913:78.

Paratypes

USNM 78374 (4, 35.5–61.6 mm). Panama, Río Cana, Cana; S.E. Meek and S.F. Hildebrand.

Remarks: Probable paratypes; original description specifically cited only type (= holotype) but is based on more than one specimen; these specimens collected at type locality. USNM ledger cites collection date as 29 Feb 1912.

Paratypes

USNM 78375 (11, 35–73 mm). Panama, Río Cana; S.E. Meek and S.F. Hildebrand.

Remarks: See comments under USNM 78374 concerning type status; 13 specimens cited in ledger; 2 specimens unaccounted for; USNM ledger cites collection date as 1 Mar 1912.

Stenolicmus sarmientoi Pinna and Starnes, 1990:77, figs. 1, 2.

Holotype

USNM 301664 (1, 29.5 mm). Bolivia, Departamento Beni, Ballivia Province, Río Matos, below road crossing, 48 km E San Borja (14°55'S, 66°17'W); M. Brun et al., 28 Aug 1987.

Paratypes

USNM 301663 (2, 21.1–21.3 mm). Bolivia, Departamento Beni, Ballivia Province, Río Matos, below road crossing, 48 km E San Borja (14°55'S, 66°17'W); M. Brun et al., 28 Aug 1987.

Remarks: One specimen cleared and stained.

Trichomycterus macraei Girard, 1855:245.

Syntype

USNM 1546 (1, ?). Near Uspallata [Argentina]; Lieutenant MacRae.

Remarks: 3 specimens cited in original description and USNM ledger; 2 specimens unaccounted for; specimen twisted, unmeasurable.

Trichomycterus meridae Regan, 1903b:624.

Syntype

USNM 133136 (1, 60.0 mm). Venezuela, Río Albireggas, above Merida; S. Briceño.

Remarks: Received from BMNH Sep 1946; formerly BMNH 1903.6.30:77-80, in part.

Tridens melanops Eigenmann and Eigenmann, 1889:53.

Syntype

USNM 41522 (1, ~17 mm). Iça; James.

Remarks: Received from MCZ, formerly MCZ 8137, in part; complete collection information: Brazil, Amazonas, Rio Iça (tributary of Rio Solimões) near Brazilian-Colombian border; W. James and "Talisman," Nov 1865.

Syntypes

USNM 120296 (3, ~17-26 mm). Iça; James.

Remarks: See comments under USNM 41522 concerning origin of specimens and complete collection information; 4 specimens cited in USNM ledger; 1 specimen unaccounted for; 1 specimen incomplete.

Tridensimilis venezuelae Schultz, 1944a:267, pl. 6c.

Holotype

USNM 121290 (1, 19.5 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratypes

USNM 121291 (22, 13.9-20.4 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: 28 specimens cited in original description; 1 specimen exchanged to UMMZ Oct 1944, 3 specimens exchanged to MCZ Jul 1951, 2 specimens unaccounted for; 3 specimens stained with alizarin red, 2 of which also are cleared; taken with holotype.

Literature Cited

- Agassiz, L.
- 1856. [Habits of the *Glanis* of Aristotle]. *Proceedings of the American Academy of Arts and Sciences*, 3:325–333. [Title following Dean, 1916:12.]
- Axelrod, H.R.
- 1987. Two New Species of Catfishes (Siluriformes, Callichthyidae and Pimelodidae) from the Rio Unini, Amazonas, Brazil. *Tropical Fish Hobbyist*, 35(12):22–25.
- Bailey, R.M., and D.J. Stewart
- 1984. Bagrid Catfishes from Lake Tanganyika, with a Key and Descriptions of New Taxa. *Miscellaneous Publications, Museum of Zoology, University of Michigan*, 168:1–41.
- Bailey, R.M., and W.R. Taylor
- 1950. *Schilbeoides hildebrandi*, a New Ameiurid Catfish from Mississippi. *Copeia*, 1950(1):31–38, plates. 1, 2.
- Baird, F.S., and C. Girard
- 1854. Descriptions of New Species of Fishes Collected in Texas, New Mexico and Sonora, by Mr. H. Clark, on the U.S. and Mexican Boundary Survey, and in Texas by Capt. Stewart Van Vliet, U.S.A. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 7:24–29.
- Barbour, T., and L.J. Cole
- 1906. Reptilia, Amphibia, and Pisces. In G.M. Allen, T. Barbour, and L.C. Cole, Vertebrata from Yucatan. *Bulletin of the Museum of Comparative Zoology at Harvard College*, 50(5):99–160, 2 plates.
- Bean, T.H.
- 1880a. Description of a New Species of *Amiurus* (*A. ponderosus*) from the Mississippi River. *Proceedings of the United States National Museum*, 2(for 1879):286–290.
 - 1880b. Descriptions of Two Species of Fishes Collected by Prof. A. Dugès in Central Mexico. *Proceedings of the United States National Museum*, 2(for 1879):302–305.
- Boeseman, M.
- 1974. On Two Surinam Species of Hypoptomatinae, Both New to Science (Loricariidae, Siluriformes, Ostariophysi). *Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam*, series C, 77(3):257–271.
 - 1976. A Short Review of the Surinam Loricariinae; with Additional Information on Surinam Harttiinae, Including the Description of a New Species (Loricariidae, Siluriformes). *Zoologische Mededelingen*, 50(11):155–177.
- Böhlke, J.E.
- 1951. A New Miniature Catfish of the Genus *Corydoras* from the Río Orinoco in Venezuela. *Annals and Magazine of Natural History*, series 12, 4:824–827.
 - 1953. A Catalogue of the Type Specimens of Recent Fishes in the Natural History Museum of Stanford University. *Stanford Ichthyological Bulletin*, 5:1–168.
 - 1970. A New Species of the Doradid Catfish Genus *Leptodoras*, with Comments on Related Forms. *Proceedings of the California Academy of Sciences*, 38(3):53–62.
- Bornbusch, A.H., and J.G. Lundberg
- 1989. A New Species of *Hemisilurus* (Siluriformes, Siluridae) from the Mekong River, with Comments on Its Relationships and Historical Biogeography. *Copeia*, 1989(2):434–444.
- Boulenger, G.A.
- 1903. Description of a New Fish of the Genus *Arges* from Venezuela. *Annals and Magazine of Natural History*, series 7, 11:601–602.
- 1910. On a Large Collection of Fishes Made by Dr. W.L. Ansorge in the Quanza and Bengo Rivers, Angola. *Annals and Magazine of Natural History*, series 8, 6:537–561.
- Burgess, W.E.
- 1982. *Corydoras adolfoi*, a New Species of Catfish (Siluriformes, Callichthyidae) from the Upper Rio Negro, Brazil, Near São Gabriel da Cachoeira. *Tropical Fish Hobbyist*, 30(7):15–16.
 - 1983. *Corydoras robineae*, a New Species of Callichthyid Catfish from Brazil. *Tropical Fish Hobbyist*, 31(9):42–43.
- Bussing, W.A.
- 1970. Two New Species of Catfishes of the Genera *Nannorhamdia* and *Imparales* (Family Pimelodidae) from Central America. *Los Angeles County Museum Contributions in Science*, 196:1–11.
- Carranza, J.
- 1954. Descripción del primer Bagre anoftálmico y depigmentado encontrado en aguas Mexicanas. *Ciencia, Revista Hispano-Americana de Ciencias Puras y Aplicadas*, 14(7–8):129–136, plate 1.
- Collette, B.B.
- 1962. *Astroblepus pholeter*, a New Species of Cave-dwelling Catfish from Eastern Ecuador. *Proceedings of the Biological Society of Washington*, 75:311–314.
- Collette, B.B., N.V. Parin, and M.S. Nizinski
- 1992. Catalog of Type Specimens of Recent Fishes in the National Museum of Natural History, Smithsonian Institution, 3: Beloniformes (Teleostei). *Smithsonian Contributions to Zoology*, 525: 16 pages.
- Cope, E.D.
- 1869. On the Distribution of Fresh-water Fishes in the Allegheny Region of Southwestern Virginia. *Journal of the Academy of Natural Sciences of Philadelphia*, series 2, 6:207–247, plates 22–24 [actually plates 26–28].
- Dean, B.
- 1916. *A Bibliography of Fishes*. Volume 1, 718 pages. New York: American Museum of Natural History.
- Douglas, N.H.
- 1972. *Noturus taylori*, a New Species of Madtom (Pisces, Ictaluridae) from the Caddo River, Southwest Arkansas. *Copeia*, 1972(4):785–789.
- Eigenmann, C.H.
- 1909. Reports on the Expedition to British Guiana of the Indiana University and the Carnegie Museum, 1908, Report No. 1: Some New Genera and Species of Fishes from British Guiana. *Annals of the Carnegie Museum*, 6(1):4–54.
 - 1911. Description of a New Species of Pygidium. *Annals of the Carnegie Museum*, 7(2):214, plate 32.
 - 1912a. The Freshwater Fishes of British Guiana, Including a Study of the Ecological Groupings of Species and the Relation of the Fauna of the Plateau to That of the Lowlands. *Memoirs of the Carnegie Museum*, 5: xii + 578 pages, 103 plates.
 - 1912b. Some Results of an Ichthyological Reconnaissance of Colombia, South America. *Indiana University Studies*, 10(8):1–27.
 - 1916. New and Rare Fishes from South American Rivers. *Annals of the Carnegie Museum*, 10(1, 2):77–86, plates 13–16.
 - 1925. A Review of the Doradidae, a Family of South American Nematognathi, or Catfishes. *Transactions of the American Philosophical Society*, new series, 22:280–365, plates 1–27.
 - 1927. The Fresh-water Fishes of Chile. *Memoirs of the National Academy of Sciences*, 22:1–63, 7 figures, 16 plates.

- Eigenmann, C.H., and W.R. Allen
1942. *Fishes of Western South America; I: The Intercordilleran and Amazonian Lowlands of Peru; II: The High Pampas, Bolivia, and Northern Chile; With a Revision of the Peruvian Gymnotidae, and of the Genus Orestias.* 494 pages, plates 1-22. Lexington: University of Kentucky.
- Eigenmann, C.H., and B.A. Bean
1907. An Account of Amazon River Fishes Collected by J.B. Steere; with a Note on *Pimelodus clariss*. *Proceedings of the United States National Museum*, 31:659-668.
- Eigenmann, C.H., and R.S. Eigenmann
1888. Preliminary Notes on South American Nematognathi, I. *Proceedings of the California Academy of Sciences*, series 2, 1:119-172.
1889. Preliminary Notes on South American Nematognathi, II. *Proceedings of the California Academy of Sciences*, series 2, 2:28-56.
- Eigenmann, C.H., A. Henn, and C. Wilson
1914. New Fishes from Western Colombia, Ecuador, and Peru. *Indiana University Studies*, 19:1-15.
- Etnier, D.A., and R.E. Jenkins
1980. *Noturus stanauli*, a New Madtom Catfish (Ictaluridae) from the Clinch and Duck Rivers, Tennessee. *Bulletin Alabama Museum of Natural History*, 5:17-22.
- Evermann, B.W., and E.L. Goldsborough
1902. A Report on Fishes Collected in Mexico and Central America, with Notes and Descriptions of Five New Species. *Bulletin of the United States Fish Commission*, 21(for 1901):137-159.
- Evermann, B.W., and W.C. Kendall
1898. Descriptions of New or Little-known Genera and Species of Fishes from the United States. *Bulletin of the United States Fish Commission*, 17(1897):125-133, plates 6-9.
- Fernández-Yépez, A.
1967. Resultado zoologicos de la expedicion de la Universidad Central de Venezuela a la region del Auyantepui en la Guyana Venezolana, Abril de 1956, 6: Primera contribucion al conocimiento de los peces, con descripcion de dos especies y una subespecie nuevas. *Acta Biologica Venezolica*, 5(10):159-177.
- Ferraris, C.J., Jr.
1988. Relationships of the Neotropical Catfish Genus *Nemuroglanis*, with a Description of a New Species (Osteichthys: Siluriformes: Pimelodidae). *Proceedings of the Biological Society of Washington*, 101(3):509-516.
- Ferraris, C.J., Jr., and B.A. Brown
1991. A New Species of *Pseudocetopsis* from the Río Negro Drainage of Venezuela (Siluriformes: Cetopsidae). *Copeia*, 1991(1):161-165.
- Ferraris, C.J., Jr., I.J.H. Isbrücker, and H. Nijssen
1986. *Neblinichthys pilosus*, a New Genus and Species of Mailed Catfish from the Río Baria System, Southern Venezuela (Pisces, Siluriformes, Loricariidae). *Revue Française d'Aquariologie*, 13(3):69-72
- Ferraris, C.J., Jr., and F. Mago-Leccia
1989. A New Genus and Species of Pimelodid Catfish from the Río Negro and Río Orinoco Drainages of Venezuela (Siluriformes: Pimelodidae). *Copeia*, 1989(1):166-171.
- Fowler, H.W.
1919. The Fishes of the United States Eclipse Expedition to West Africa. *Proceedings of the United States National Museum*, 56:195-292.
- Fraser-Brunner, A.
1947. New Fishes of the Genus *Corydoras*. *Proceedings of the Zoological Society of London*, 117(1):241-246, plate 1.
- Ganguly, D.N., and N.C. Datta
1975. A New Catfish of the Genus *Mystus* Scopoli (Family: Bagridae) from the Vicinity of the Hundru Falls, Bihar, India, with Comment on the Genus *Mystus*. In K.K. Tiwari and C.B. Srivastava, editors, Dr. B.S. Chauhan Commemoration Volume 1975. *Zoological Society of India, Orissa*, 1975: i-viii + 1-439 pages.
- Ganguly, D.N., N.C. Datta, and S. Sen
1972. Two New Catfishes of the Genus *Glyptothorax* Blyth (Family: Sisoridae) from Subarnarekha River, Bihar, India. *Copeia*, 1972(2):340-344.
- Garman, S.
1890. *Silurus (Parasilurus) aristotelis*. *Bulletin of the Essex Institute*, 22(4-6):56-59.
- Géry, J.
1964. Une nouvelle famille de Poissons dulcaquicoles africains: les Grasseichthyidae. *Comptes Rendus des Séances de l'Academie des Sciences*, 259:4805-4807.
- Gianferrari, L.
1923. *Uegitglanis zammaranoi* un nuovo siluride cieco Africano. *Atti della Società Italiana di Scienze Naturali*, 62:1-3, 1 plate.
- Gilbert, C.H.
1884. Notes on the Fishes of Kansas. *Bulletin of the Washburn Laboratory of Natural History*, 1(1):10-16.
1891. Report of Explorations Made in Alabama during 1889, with Notes on the Fishes of the Tennessee, Alabama, and Escambia Rivers. *Bulletin of the United States Fish Commission*, 9(for 1889):143-159, plate 43.
1897. Descriptions of Twenty-two New Species of Fishes Collected by the Steamer Albatross, of the United States Fish Commission. *Proceedings of the United States National Museum*, 19:437-457, plates 49-60.
- Gilbert, C.H., and E.C. Starks
1904. The Fishes of Panama Bay. *Memoirs of the California Academy of Sciences*, 4:1-304, plates 1-33.
- Gill, T.
1858. Synopsis of the Fresh Water Fishes of the Western Portion of the Island of Trinidad, W.I. *Annals of the Lyceum of Natural History of New York*, 6:363-429.
1859. Description of a New Genus of Pimelodinae from Canada. *Transactions of the Lyceum of Natural History of New York*, 7:39-42.
- 1862a. Descriptions of New Species of Pimelodinae (Abridged from the Forthcoming Report of Captain J.H. Simpson). *Proceedings of the Boston Society of Natural History*, 8:42-46.
- 1862b. On the West African Genus *Hemicromis* and Descriptions of New Species in the Museums of the Academy and Smithsonian Institution. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 14:134-139.
1870. On Some New Species of Fishes Obtained by Prof. Orton from the Maranon, or Upper Amazon, and Napo Rivers. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 22:92-96.
1877. Notes on Fishes from the Isthmus of Panama, Collected by Dr. J.F. Bransford, U.S.N. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 28(1876):335-339.
- Girard, C.
1855. Fishes. In *U.S. Naval and Astronomical Expedition to the Southern Hemisphere during the Years 1849-'50-'51-'52, II: Appendix F, Zoology*, pages 230-253, plates 29-33. Washington, D.C.: [United States] House of Representatives, Executive Document No. 121.
- 1858a. General Report upon the Zoology of the Several Pacific Railroad Routes, Part IV: Fishes. In *Reports of the Explorations and Surveys, to Ascertain the Most Practicable and Economical Route for a Railroad from the Mississippi River to the Pacific Ocean...*, 10: xiv + 1-400 pages, 21 plates. Washington, D.C.: [United States] Senate Executive Document No. 78 (33d Congress, 2d Session).
- 1858b. Notes upon Various New Genera and New Species of Fishes, in the Museum of the Smithsonian Institution, and Collected in Connection with the United States and Mexican Boundary Survey, Major William Emory, Commissioner. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 10:167-171.
1859. United States and Mexican Boundary Survey under Order of Lt. Col.

- W.H. Emory, Major First Cavalry, and the United States Commissioner, Ichthyology of the Boundary. In *Report of the U.S. and Mexican Boundary Survey*, 2(2):1-85, plates 1-41. Washington, D.C.: [United States] House of Representatives, Executive Document No. 135 (34th Congress, 1st Session).
1860. Ichthyological Notices [LX-LXXVII]. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 11(1859):157-161.
- Gomes, A.L.
1946. A Review of *Microglanis*, a Genus of South American Catfishes, with Notes on Related Genera. *Occasional Papers of the Museum of Zoology, University of Michigan*, 494:1-19, 1 plate.
- Gordon, J.R., and W.R. Taylor
1982. *Plotosus nkunga*, a New Species of Catfish from South Africa, with a Redescription of *Plotosus limbatus* Valenciennes and Key to the Species of *Plotosus* (Siluriformes: Plotosidae). *J.L.B. Smith Institute of Ichthyology, Special Publication*, 22:1-16.
- Gosline, W.A.
1940. A Revision of the Neotropical Catfishes of the Family Callichthyidae. *Stanford Ichthyological Bulletin*, 2(1):1-29.
- Greenwood, P.H., D.E. Rosen, S.W. Weitzman, and G.S. Myers
1966. Phylogenetic Studies of Teleostean Fishes, with a Provisional Classification of Living Forms. *Bulletin of the American Museum of Natural History*, 131(4):339-456.
- Heitmans, W.R.B., H. Nijssen, and I.J.H. Isbrücker
1983. The Mailed Catfish Genus *Lasiancistrus* Regan, 1904, from French Guiana and Surinam, with Descriptions of Two New Species (Pisces, Siluriformes, Loricariidae). *Bijdragen tot de Dierkunde*, 53(1):33-48.
- Higuchi, H.
- Ms. An Updated List of Ichthyological Collecting Stations of the Thayer Expedition to Brazil (1865-1866). [Manuscript deposited in Library, Museum of Comparative Zoology, Harvard University.]
- Higuchi, H., E.G. Reis, and F.G. Aruájo
1982. Una nova espécie de bagre marinho do litoral do Rio Grande do Sul e considerações sobre o gênero nominal *Netuma* Bleeker, 1858 no Atlântico Sul ocidental (Siluriformes, Ariidae). *Atlântica, Rio Grande*, 5:1-15.
- Hildebrand, S.F.
1925. Fishes of the Republic of El Salvador, Central America. *Bulletin of the [United States] Bureau of Fisheries*, 41:237-287, figures 1-20.
- Holbrook, J.E.
1855. An Account of Several Species of Fish Observed in Florida, Georgia, etc. *Journal of the Academy of Natural Sciences of Philadelphia*, second series, 3(1):47-58, plates 5, 6.
- Hubbs, C.L.
1935. Fresh-water Fishes Collected in British Honduras and Guatemala. *University of Michigan Museum of Zoology, Miscellaneous Publications*, 28:1-22, plates 1-4, 1 map.
1936. Fishes of the Yucatan Peninsula. *Carnegie Institution of Washington, Publication*, 457:157-287, plates 1-15.
- Hubbs, C.L., and R.R. Miller
1960. *Potamarius*, a New Genus of Ariid Catfishes from the Fresh Waters of Middle America. *Copeia*, 1960(2):101-112.
- Hubbs, C.L., and E.C. Raney
1944. Systematic Notes on North American Siluroid Fishes of the Genus *Schilbeoides*. *Occasional Papers of the Museum of Zoology, University of Michigan*, 487:1-36, 1 plate, 1 map.
- International Commission on Zoological Nomenclature
1985. *International Code of Zoological Nomenclature*. 338 pages. London: International Trust for Zoological Nomenclature.
- Isbrücker, I.J.H.
1979. Descriptions préliminaires de nouveaux taxa de la famille des Loricariidae. *Revue Française d'Aquariologie*, 5(4)(for 1978):86-116.
1980. Classification and Catalogue of the Mailed Loricariidae (Pisces, Siluriformes). *Verslagen en Technische Gegevens, Instituut voor Taxonomische Zoologie (Zoölogisch Museum)*, Universiteit van Amsterdam, 22:1-181.
- Isbrücker, I.J.H., and H. Nijssen
1978. The Neotropical Mailed Catfishes of the Genera *Lamontichthys* P. de Miranda Ribeiro, 1939 and *Pterosturisoma* n. gen., Including the Description of *Lamontichthys stibaros* n. sp. from Ecuador (Pisces, Siluriformes, Loricariidae). *Bijdragen tot de Dierkunde*, 48(1):57-80.
1979. Three New South American Mailed Catfishes of the Genera *Rineloricaria* and *Loricariichthys* (Pisces, Siluriformes, Loricariidae). *Bijdragen tot de Dierkunde*, 48(2):191-211.
- Jayaram, K.C.
1965. On a New Species of Fish of the Family Bagridae. *Bulletin of Systematic Zoology, Calcutta*, 1(1):9-10.
- Jordan, D.S.
- 1877a. Contributions to North American Ichthyology Based Primarily on the Collections of the United States National Museum, II, B: Synopsis of the Siluridae of the Fresh Waters of North America. *Bulletin of the United States National Museum*, 10:69-120, plates 1-44.
- 1877b. A Partial Synopsis of the Fishes of Upper Georgia. *Annals of the Lyceum of Natural History of New York*, 11(for 1876):307-377.
1889. Descriptions of Fourteen Species of Fresh-water Fishes Collected by the U.S. Fish Commission in the Summer of 1888. *Proceedings of the United States National Museum*, 11(for 1888):351-362, plates 43-45.
1895. The Fishes of Sinaloa. *Proceedings of the California Academy of Sciences*, 2nd series, 5:377-514, plates 26-55.
- Jordan, D.S., and C.H. Bollman
1890. Descriptions of New Species of Fishes Collected at the Galapagos Islands and Along the Coast of the United States of Colombia, 1887-'88. *Proceedings of the United States National Museum*, 12(for 1889):149-183.
- Jordan, D.S., and B.W. Evermann
1896. The Fishes of North and Middle America: A Descriptive Catalogue of the Species of Fish-like Vertebrates Found in the Waters of North America, North of the Isthmus of Panama, Part 1. *Bulletin of the United States National Museum*, 47:1-1240.
- Jordan, D.S., and C.H. Gilbert
1882. A Review of the Siluroid Fishes Found on the Pacific Coast of Tropical America, with Descriptions of Three New Species. *Bulletin of the United States Fish Commission*, 2:34-54.
1886. List of Fishes Collected in Arkansas, Indian Territory, and Texas, in September, 1884, with Notes and Descriptions. *Proceedings of the United States National Museum*, 9:1-25.
- Kanazawa, R.H.
1958. A New Species of Catfish, Family Loricariidae, from Ecuador. *Copeia*, 1958(4):327-328.
- Lundberg, J.G., A.H. Bornbusch, and F. Mago-Leccia
1991. *Gladioglanis conquistador* N. Sp. from Ecuador with Diagnoses of the Subfamilies Rhamdiinae Bleeker and Pseudopimelodinae N. Subf. (Siluriformes: Pimelodidae). *Copeia*, 1991(1):190-209.
- Lundberg, J.G., and F. Mago-Leccia
1986. A Review of *Rhabdolichops* (Gymnotiformes, Sternopygidae), A Genus of South American Freshwater Fishes, with Descriptions of Four New Species. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 138(1):53-85.
- Lundberg, J.G., F. Mago-Leccia, and P. Nass
1991. *Exallodontus aguanai*, a New Genus and Species of Pimelodidae (Pisces: Siluriformes) from Deep River Channels of South America, and Delimitation of the Subfamily Pimelodinae. *Proceedings of the Biological Society of Washington*, 104(4):840-869.
- Lütken, C.
1875. Ichthyographiske Bidrag, II: Nye eller mindre vel kjendte maller-

- former fra forskellige verdensdele. *Viedenskabelige Meddelelser fra den Naturhistoriske Forening i Kjøbenhavn*, 1874(12-16):190-220.
- Mago-Leccia, F.
- 1978. Los peces de la familia Sternopygidae de Venezuela. *Acta Científica Venezolana*, 29(suplemento no. 1):1-89.
- Mago-Leccia, F., J.G. Lundberg, and J.N. Baskin
- 1985. Systematics of the South American Freshwater Fish Genus *Adontosternarchus* (Gymnotiformes, Apterodontidae). *Contributions in Science, Natural History Museum of Los Angeles County*, 358:1-19.
- Meek, S.E., and S.F. Hildebrand
- 1913. New Species of Fishes from Panama. *Field Museum of Natural History, Zoological Series, Publication* 166, 10(8):77-91.
 - 1916. The Fishes of the Fresh Waters of Panama. *Field Museum of Natural History, Zoological Series, Publication*, 191, 10(15):217-374, plates 6-32.
 - 1923. The Marine Fishes of Panama, Part 1. *Field Museum of Natural History, Zoological Series, Publication*, 215, 15:1-330, 24 plates.
- Miles, C.W.
- 1943. *Estudio económico y ecológico de los peces de agua dulce del Valle del Cauca*. 97 pages. Cali: Publicaciones de la Secretaría de Agricultura y Fomento del Departamento.
 - 1945. Some Newly Recorded Fishes from the Magdalena River System. *Caldasia*, 3(15):453-464.
- Miranda Ribeiro, P. de
- 1942. Um novo *Corydoras* do Rio Javari, Amazonas, Brasil (Pisces, Callichthyidae). *Revista Brasileira de Biologia*, 2(4):427-428.
- Muller, S.
- 1989. Description de deux nouvelles espèces Paraguayennes du genre *Ancistrus* Kner, 1854 (Pisces, Siluriformes, Loricariidae). *Revue Suisse de Zoologie*, 96(4):885-904.
- Myers, G.S.
- 1927. Descriptions of New South American Fresh-water Fishes Collected by Dr. Carl Ternetz. *Bulletin of the Museum of Comparative Zoology at Harvard College*, 68(3):107-135.
 - 1932. Notes on Colombian Fresh-water Fishes, with Description of a New *Astroblepus*. *Copeia*, 1932(3):137-138.
 - 1933. New Importations, *Corydoras leopardus*. *The Aquarium*, 2(8):188-189.
 - 1935. Four New Fresh-water Fishes from Brazil, Venezuela, and Paraguay. *Proceedings of the Biological Society of Washington*, 48:7-14.
 - 1936. A New Genus of Gymnotid Eels from the Peruvian Amazon. *Proceedings of the Biological Society of Washington*, 49:115-116.
 - 1942. Studies on South American Fresh-water Fishes, I. *Stanford Ichthyological Bulletin*, 2(4):89-114.
- Nichols, J.T., and F.R. LaMonte
- 1933. A New Catfish, *Amphilus pictus*, and a Discussion of a Small Liberian Collection of Fishes. *American Museum Novitates*, 626:1-3.
- Nielsen, J.G.
- 1974. *Fish Types in the Zoological Museum of Copenhagen*. 115 pages. Copenhagen: Zoological Museum, University of Copenhagen.
- Nijssen, H.
- 1970. Revision of the Surinam Catfishes of the Genus *Corydoras* Lacépède, 1803 (Pisces, Siluriformes, Callichthyidae). *Beaufortia*, 18(230):1-75.
 - 1971. Two New Species and One New Subspecies of the South American Catfish Genus *Corydoras* (Pisces, Siluriformes, Callichthyidae). *Beaufortia*, 19(250):89-98.
 - 1972. Records of the Catfish Genus *Corydoras* from Brazil and French Guiana with Descriptions of Eight New Species (Pisces, Siluriformes, Callichthyidae). *Netherlands Journal of Zoology*, 21(4)(for 1971):412-433.
- Nijssen, H., and L.J.H. Isbrücker
- 1976a. The South American Plated Catfish Genus *Aspidoras* R. Von Ihering, 1907, with Descriptions of Nine New Species from Brazil (Pisces, Siluriformes, Callichthyidae). *Bijdragen tot de Dierkunde*, 46:107-131.
 - 1976b. A New Callichthyid Catfish, *Corydoras gracilis*, from Brazil (Pisces, Siluriformes, Callichthyidae). *Tropical Fish Hobbyist*, 25(1):90, 91, 94-96, 98, 4 figures.
 - 1976c. *Corydoras ornatus*, a New Species of Callichthyid Catfish from the Rio Tapajós Drainage, Brazil (Pisces, Siluriformes, Callichthyidae). *Bulletin Zoologisch Museum, Universiteit van Amsterdam*, 5(15):125-129.
 - 1980a. A Review of the Genus *Corydoras* Lacépède, 1803 (Pisces, Siluriformes, Callichthyidae). *Bijdragen tot de Dierkunde*, 50(1):190-220.
 - 1980b. Three New *Corydoras* Species from French Guiana and Brazil (Pisces, Siluriformes, Callichthyidae). *Netherlands Journal of Zoology*, 30(3):494-503.
 - 1983. Sept espèces nouvelles de poissons-chats cuirassés du genre *Corydoras* Lacépède, 1803, de Guyane Française, de Bolivie, d'Argentine, du Surinam et du Brésil (Pisces, Siluriformes, Callichthyidae). *Revue Française d'Aquariologie*, 10(3):73-82.
 - 1986. Cinq espèces nouvelles de poissons-chats cuirassés du genre *Corydoras* Lacépède, 1803, du Pérou et de l'Equateur (Pisces, Siluriformes, Callichthyidae). *Revue Française d'Aquariologie*, 12(3)(for 1985):65-76.
- Orces V. G.
- 1960. Peces ecuatorianos de la familia Callichthyidae, con la descripción de una especie nueva. *Ciencia y Naturaleza*, 3(1):2-6, plate 1.
- Pearson, N.E.
- 1924. The Fishes of the Eastern Slope of the Andes, I: The Fishes of the Rio Beni Basin, Bolivia, Collected by the Mulford Expedition. *Indiana University Studies*, 11:1-83.
- Pellegrin, J.
- 1925. Sur les poissons africains de la famille des Phractolaemidés. *Comptes Rendu Hebdomadaire des Séances de l'Académie des Sciences, Paris*, 180:549-551.
- Penrith, M.J.
- 1973. A New Species of *Parakneria* from Angola (Pisces: Kneriidae). *Cimbebasia*, series A, 2(11):131-135.
- Pinna, M.C.C. de, and H.A. Britski
- 1991. *Megalocentor*, a New Genus of Parasitic Catfish from the Amazon Basin: the Sister Group of *Apomatoxceros* (Trichomycteridae: Stegophilinae). *Ichthyological Explorations of Freshwaters*, 2(2):113-128.
- Pinna, M.C.C. de, and W.C. Starnes
- 1990. A New Genus and Species of Sarcoglanidinae from the Rio Mamoré, Amazon Basin, with Comments on Subfamilial Phylogeny (Teleostei, Trichomycteridae). *Journal of Zoology, London*, 222:75-88.
- Rafinesque, C.S.
- 1818. Farther [sic] Account of Discoveries in Natural History, in the Western States. *American Monthly Magazine and Critical Review*, 4:39-42.
- Regan, C.T.
- 1903a. Description of a New Fish of the Genus *Chaetostomus* from Venezuela. *Annals and Magazine of Natural History*, series 7, 11:599.
 - 1903b. Descriptions of New South-American Fishes in the Collection of the British Museum. *Annals and Magazine of Natural History*, series 7, 12:621-630.
- Roberts, T.R.
- 1978. An Ichthyological Survey of the Fly River in Papua New Guinea with Descriptions of New Species. *Smithsonian Contributions to Zoology*, 281:1-72.
 - 1989a. Systematic Revision and Description of New Species of Sucker-

- mouth Catfishes (*Chiloglanis*, Mochokidae) from Cameroun. *Proceedings of the California Academy of Sciences*, 46(6):151-178.
- 1989b. The Freshwater Fishes of Western Borneo (Kalimantan Barat, Indonesia). *Memoirs of the California Academy of Sciences*, 14: xii + 210 pages.
- Roberts, T.R., and D.J. Stewart
1976. An Ecological and Systematic Survey of Fishes in the Rapids of the Lower Zaire or Congo River. *Bulletin of the Museum of Comparative Zoology*, 147(6):239-317.
- Schaefer, S.A., S.H. Weitzman, and H.A. Britski
1989. Review of the Neotropical Catfish Genus *Scolopax* (Pisces: Loricarioidea: Scolopacidae) with Comments on Reductive Characters in Phylogenetic Analysis. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 141:181-211.
- Schmidt, R.E., and C.J. Ferraris, Jr.
1985. A New Species of *Parotocinclus* (Pisces: Loricariidae) from Guyana. *Proceedings of the Biological Society of Washington*, 98(2):341-346.
- Schultz, L.P.
1942. The Fresh-water Fishes of Liberia. *Proceedings of the United States National Museum*, 92:301-348, plate 36.
- 1944a. The Catfishes of Venezuela, with Descriptions of Thirty-eight New Forms. *Proceedings of the United States National Museum*, 94:173-338, 14 plates.
- 1944b. A New Loricariid Catfish from the Rio Truando, Colombia. *Copeia*, 1944(3):155-156.
- 1944c. A New Genus and Species of Pimelodid Catfish from Colombia. *Journal of the Washington Academy of Sciences*, 34(3):93-95.
- 1944d. Two New Species of Fishes (Gymnotidae, Loricariidae) from Caripito, Venezuela. *Zoologica, Scientific Contributions of the New York Zoological Society*, 29(1):39-44, plate 1.
1945. *Pygidium mondolfi*, a New Catfish from Venezuela. *Journal of the Washington Academy of Sciences*, 35(1):29-31.
1949. A Further Contribution to the Ichthyology of Venezuela. *Proceedings of the United States National Museum*, 99:1-211, figures 1-20, plates 1-3.
- Skelton, P.H.
1981. The Description and Osteology of a New Species of *Gephyroglanis* (Siluriformes, Bagridae) from the Olifants River, South West Cape, South Africa. *Annals of the Cape Provincial Museums (Natural History)*, 13(15):217-250.
1986. Two New *Amphililus* (Pisces, Siluroidei, Amphililiidae) from the Zaire River System, Africa. *Revue Zoologie Africaine*, 99:263-291.
- Smith, H.M.
1931. Descriptions of New Genera and Species of Siamese Fishes. *Proceedings of the United States National Museum*, 79(7):1-48.
1945. The Fresh-water Fishes of Siam, or Thailand. *United States National Museum Bulletin*, 188:1-622, 9 plates.
- Smith, H.M., and A. Seale
1906. Notes on a Collection of Fishes from the Island of Mindanao, Philippine Archipelago, with Descriptions of New Genera and Species. *Proceedings of the Biological Society of Washington*, 19:73-82.
- Snodgrass, R.E., and E. Heller
1905. Shore Fishes of the Revillagigedo, Clipperton, Cocos, and Galapagos Islands. *Proceedings of the Washington Academy of Sciences*, 6:333-427.
- Sowerby, A. de C.
1921. On a New Silurid Fish from the Yalu River, South Manchuria. *Proceedings of the United States National Museum*, 60(13):1, 2.
- Springer, V.G., J.T. Williams, and T.M. Orell
1991. Catalog of Type Specimens of Recent Fishes in the National Museum of Natural History, Smithsonian Institution, 2: Blenniidae. *Smithsonian Contributions to Zoology*, 519:1-28.
- Starks, E.C.
1906. On a Collection of Fishes Made by P.O. Simons in Ecuador and Peru. *Proceedings of the United States National Museum*, 30:761-800, plates 65, 66.
- Steindachner, F.
1876. Ichthyologische Beiträge (IV). *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien*, 74(1):551-620, plates 1-13.
- 1877a. Ichthyologische Beiträge (V). *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien*, 74(1):49-240, plates 1-15.
- 1877b. Die Süßwasserfische des südöstlichen Brasilien (III). *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien*, 74(1):559-694, plates 1-13.
- Steykal, G.C.
1980. The Grammar of Family-group Names as Exemplified by Those of Fishes. *Proceedings of the Biological Society of Washington*, 93(1):168-177.
- Suttkus, R.D., and W.R. Taylor
1965. *Noturus munitus*, a New Species of Madtom, Family Ictaluridae, from Southern United States. *Proceedings of the Biological Society of Washington*, 78:169-178.
- Swain, J., and G.B. Kalb
1883. A Review of the Genus *Noturus*, with a Description of One New Species. *Proceedings of the United States National Museum*, 5(1882):638-644.
- Taylor, W.R.
1969. A Revision of the Catfish Genus *Noturus* with an Analysis of Higher Groups in the Ictaluridae. *United States National Museum Bulletin*, 282:1-315, 21 plates.
- Teugels, G.G.
1986. A Systematic Revision of the African Species of the Genus *Clarias* (Pisces; Clariidae). *Annales Musée Royal de l'Afrique Centrale, Tervuren*, 247:1-199.
- Vari, R.P., and J.C. Howe
1991. Catalog of Type Specimens of Recent Fishes in the National Museum of Natural History, Smithsonian Institution, 1: Characiformes (Teleostei, Ostariophysi). *Smithsonian Contributions to Zoology*, 517:1-52.
- Vari, R.P., S.L. Jewett, D.C. Taphorn, and C.R. Gilbert
1984. A New Catfish of the Genus *Erapterus* (Siluriformes: Auchenipteridae) from the Orinoco River Basin. *Proceedings of the Biological Society of Washington*, 97(2):462-472.
- Vari, R.P., and H. Ortega
1986. The Catfishes of the Neotropical Family Helogenidae (Ostariophysi: Siluroidei). *Smithsonian Contributions to Zoology*, 442:1-20.
- Villa, J.
1977. A New Species of Pimelodid Catfish of the Genus *Rhamdia* from Nicaragua, Central America. *Borenia*, 12/13:133-142.
- Vinciguerra, D.
1890. Viaggio di Leonardo Fea in Birmania e Regioni Vicine, XXIV, Pesci. *Annali del Museo Civico di Storia Naturale di Genova*, series 2, 9 (for 1889-1890):129-362, plates 7-11.
- Weitzman, S.H.
1963. A New Catfish, *Corydoras pastazensis* (Callichthyidae) from Ecuador. *Proceedings of the Biological Society of Washington*, 76:59-63.
- Weitzman, S.H., and H. Nijssen
1970. Four New Species and One New Subspecies of the Catfish Genus *Corydoras* from Ecuador, Colombia, and Brazil. *Beaufortia*, 18(233):119-132.
- Yerger, R.W., and K. Relyea
1968. The Flat-headed Bullheads (Pisces: Ictaluridae) of the Southeastern United States, and a New Species of *Ictalurus* from the Gulf Coast. *Copeia*, 1968(2):361-384.

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