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Annotated checklist of the primarily freshwater fishes of Guyana

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ABSTRACT.—Guyana, located in northern South America north of Brazil between Venezuela and Suriname, includes portions of the Orinoco, Amazon, and Courantyne river basins, a majority of the Essequibo River Basin, and all of the Berbice and Demerara river basins. Partly as a consequence of historical and contemporary drainage complexity, Guyana has a remarkably diverse freshwater fish fauna. Here, we compile the first comprehensive list of Guyana's freshwater fishes, totaling some 657 species-level taxa (97 first records, 117 endemics and at least three introduced species), based on photographic records, published reports, and over 145,000 type and non-type specimens in 29 museum collections. The IUCN conservation status for each species is provided. We separately list an additional 151 undocumented species that are possibly or likely present in Guyana based on their adjacent distributions in either the Orinoco River Delta in Venezuela or the Courantyne River in Suriname. The largest holdings of fish specimen vouchers and frozen fish tissues from Guyana are housed at the Royal Ontario Museum, Toronto (ROM), Auburn University Museum, Auburn (AUM), University of Michigan Museum of Zoology, Ann Arbor (UMMZ), and the Academy of Natural Sciences of Drexel University, Philadelphia (ANSP). Additional important collections of Guyanese fishes are deposited at the Centre for Study of Biological Diversity, Georgetown, Guyana (CSBD), Field Museum of Natural History, Chicago (FMNH), Illinois Natural History Survey, Champaign (INHS), The Natural History Museum, London (NHMUK, formerly BMNH), Oregon State University, Corvallis (OS), and the US National Museum, Washington (USNM). Despite the many collections that have been made in Guyana, many species still lack vouchered specimens or tissues, and many more species require formal description.

INTRODUCTION

The tropical country of Guyana spans approximately 215,000 km² along the northwest coast of South America. Bordered by Venezuela to the northwest, Brazil to the southwest, and Suriname to the east, Guyana stretches from 1° to 8° north latitude and 57° to 61° west longitude. The name Guyana is believed to be derived from an indigenous word meaning water or many waters (Hammond, 2005), and Guyana's abundant, biodiverse freshwaters reflect this etymology. In this study, we review published reports and more than 145,000 type and non-type specimens, over 26,000 museum lots (including estuarine and marine species, most of which are not considered further herein) in 29 museum collections to positively identify 657 primarily freshwater species. Ninety-seven of those are first records for the country and about 117 species are endemic to Guyana. This richness equates to approximately three unique species per 1,000 km², making Guyana the second densest South American country in freshwater fish species per unit area, after French Guiana and ahead of Suriname (despite Guyana having about 180 more species than either of those countries). This remarkable diversity stems in part from the diverse river systems that divide Guyana into several independent watersheds. From west to east, four major rivers drain Guyana and separately discharge into the Caribbean Sea: Essequibo, Demerara, Berbice, and Courantyne (Fig. 1). Of these watersheds, Venezuela shares the Essequibo and Suriname shares the Courantyne/Corantijn/Corentyne whereas Guyana exclusively contains the Demerara and Berbice watersheds. In addition, in extreme northwestern Guyana, several small rivers drain into the Orinoco River Delta, and in southwestern Guyana north and south of Lethem the Takutu and Ireng rivers drain westward into the vast Amazon Basin via the south-flowing Branco River. Guyana's many watersheds (Fig. 1) are the products of unique, diverse, and dynamic hydrological histories, and each hosts mixed assemblages of endemic and widely distributed species that contribute to Guyana's rich freshwater fish diversity (Lowe-McConnell, 1995; Vari et al., 2009; Lujan and Armbruster, 2011; Lemopoulos and Covain, 2018).

Headwaters of most of Guyana's rivers originate in highlands of the Guiana Shield, an Archean to Paleoproterozoic granitic craton patchily covered by kilometers-deep sedimentary formations of the Roraima Supergroup (Gibbs and Barron, 1983). Relatively high elevation tepuis, plateaus, and waterfalls of the Pakaraima Mountains in Western-central Guyana (Regions 7 and 8; 400 – 2500 m above sea level) are formed by Roraima sandstones, and the characteristic stair-step plateau/escarpment pattern of these highlands results from

approximately six major episodes of uplift and subsequent erosion dating back to at least the Late Cretaceous (Gibbs and Barron, 1983; Lujan and Armbruster, 2011). Sediment eroding from these highlands has accumulated along Guyana's coast, creating a broad, flat coastal plain and a 432 km coastline that is mostly muddy and naturally blanketed by mangrove forest. In contrast, exposed granite outcrops of the craton itself form bedrock shoals and rapids that are common throughout lowland rivers of southern Guyana (Gibbs and Barron, 1983; Edmond et al., 1995).

Dense rainforest covers most of Guyana, despite an ever-expanding timber industry that dates back to Guyana's 17th century history as a colony of the Netherlands. The vast naturally open Rupununi Savannah in southwestern Guyana is a notable exception. Guyana's extensive natural forest cover and sandy soils, combined with widespread geologically ancient and shallow bedrock, makes 'blackwater' the most common water type throughout the country. Blackwater rivers are typically low in alkalinity, turbidity, fine suspended sediment, and dissolved solids, yet high in acidity and dissolved organic carbon (Sioli, 1984), though the degree of these physicochemical parameters can vary considerably across and within watersheds. Increased drainage slope and decreased forest cover, for example, can reduce dissolved organic carbon inputs and lead to a more clearwater physicochemistry (Sioli, 1984).

Overview of Fish Taxonomic Research and Collections.—Scientific descriptions of Neotropical freshwater fish species here recognized as occurring in Guyana began with Linnaeus' 10th and 12th editions of *Systema Naturae* (1758; 1766), which included descriptions of 23 currently valid Guyanese fish species, despite Linnaeus's specimens coming mainly from Suriname and Brazil. Few species were subsequently described in the late-18th to early-19th centuries, but the mid-19th and early-20th centuries produced descriptions of over 200 currently valid Guyanese fishes. Notable contributions were made by Franz Steindachner (from 1864–1915: 41 spp.), Albert Günther (from 1860–1872: 37 spp.), Achille Valenciennes (from 1821–1850: 31 spp.), Johannes Müller and Franz Troschel (from 1849: 26 spp.), and Rudolf Kner (from 1843–1858: 25 spp.). Most taxonomists or zoologists of this era worked exclusively in Europe and studied material sent to them by collectors sampling multiple countries or territories. As with many modern taxonomic studies, the contributions of these early scientists may help clarify the taxonomy of fishes now documented in Guyana, but rarely did their research focus specifically on Guyana's fishes.

The earliest fish collections from Guyana come from the expeditions of Robert H. Schomburgk (1804–1865) in the 1830s and 1840s. Schomburgk was commissioned

to set the boundaries of British Guiana, and he collected specimens during his journeys. Many drawings taken during this time were collected in “The Naturalist’s Library” which included descriptions of some species (Schomburgk, multiple publication years, 1841 for some species, 1852 edition included volume 39 as the *Fishes of British Guiana*). Carl Eigenmann (1863–1927) contributed most extensively to taxonomic research specifically focused on the freshwater fishes of Guyana. He described 116 currently valid Guyanese fish species, mostly between 1888 and 1917. Eigenmann’s seminal work on Guyana’s freshwater fishes, which remains a key taxonomic reference and rich source of ecological and biogeographical insights, is his 578-page 1912 monograph *The Freshwater Fishes of British Guiana*. Unlike previous taxonomists, Eigenmann collected many of his own specimens during an extensive expedition to Guyana (then British Guiana) from 6 September to 11 November 1908 (Hardman et al., 2002). Some species collected by Eigenmann have never been observed since. Eigenmann traveled by boat from Guyana’s capital, Georgetown, up the Demerara River, then overland via train to Rockstone on the Essequibo River. From there, he traveled by boat up the Essequibo River, and by boat and portage up the Potaro River to Tukeit, near the base of Kaieteur Falls, from where he ascended the Kaieteur plateau and continued upstream above the falls to the Amerindian community of Chenapou (then the ‘Holmia’ trading camp). From Chenapou, Eigenmann returned to Georgetown by the same route.

In reviewing material collected during his expedition (Eigenmann, 1912), he conducted one of the first taxonomically broad, geographically delimited revisions of Neotropical fishes, in which historical literature was related to freshly collected specimens. Eigenmann divided his specimens mostly between the Carnegie Museum of Natural History and the University of Indiana, whose fish collections were respectively absorbed by the Field Museum of Natural History (FMNH) in Chicago, which now holds the majority Eigenmann’s Guyana type specimens, and the California Academy of Sciences in San Francisco (CAS). In the century since Eigenmann’s landmark expedition and monograph, dozens of expeditions have inventoried the aquatic biodiversity of Guyana’s rivers (Fig. 2) and dozens more species have been described, many of which have been collected and described by the Guyanese and international authors of this paper. After Eigenmann, various small collections were made during the early 1900’s until Rosemary Lowe McConnell began working on the freshwater and marine fishes of Guyana in the 1950s–60s (specimens deposited at BMNH; see McConnell 1964, 1967 for works most relevant here). In 1967, R. Dobson and R. Greyell of the Canadian Museum of Nature (CMN) and J. Price of ROM

collected in the Essequibo River. In the early 1970’s, Frederick Cichocki led several expeditions to Guyana, including collections in the Potaro, Rupununi, and lower Essequibo (deposited at UMMZ), and Jamie Thomerson led an expedition (including DCT) over much of Guyana with a focus on annual fishes (deposited at FMNH).

The modern era of fish collecting in Guyana began with Erling Holm in 1990 (ROM), who began sampling in the lower portions of the Essequibo and Potaro rivers. This was followed by William Saul (ANSP) and Graham Watkins (Iwokrama) who collected in the Iwokrama Forest in 1997. In 1998, Lawrence Page led an expedition to resample many of Eigenmann’s sites, which was documented by Hardman et al. (2002) and in National Geographic Magazine (Montaigne, 2002) (specimens at INHS, AUM, and CSBD). In the twenty-first century, there has been a much greater effort to explore the country led by the authors of this paper. These collections expanded greatly the understanding of Guyana’s freshwater fishes and included collections in previously unreached areas. Regions sampled by expeditions in the 21st century have included the Rupununi (AUM/ANSP/CSBD/ROM/FMNH 2002, 2003, 2005, 2007, 2009, 2012, 2013, 2016); Mazaruni (ROM/UMMZ/CSBD 2008, 2011, 2016, 2019), Berbice (ROM/CSBD 2010, 2014), Cuyuni (CSBD/USNM/OS 2011), upper Potaro and Kuribrong (AUM/CSBD/ROM 2011, 2014), Demerara (ROM/CSBD 2015), upper Ireng (AUM/CSBD/ROM 2016), Rewa (UMMZ/CSBD 2018) and middle Essequibo (UMMZ/CSBD 2022).. Despite over a century of exploration and natural history surveys, there are still major areas of Guyana from which collections are lacking, including the upper Essequibo, most of the Kanuku Mountains, the upper Takutu, the New River Triangle, and the Pakaraima Mountains bordering Venezuela. Given the high degree of endemism in many of these regions, especially the Pakaraima Mountains (Hardman et al., 2002; Alofs et al., 2013, Lujan et al., 2019), further explorations of these areas are likely to yield additional new species. Unfortunately, some areas, such as the New River Triangle, are not currently accessible to biologists due to political considerations.

Over the last century, fish specimens collected in Guyana have been exported to over two dozen fish collections in North and South America and Europe (see Material and Methods). In 1991, in collaboration with the Smithsonian Institution, Guyana established its first permanent biodiversity collection facility, the Centre for the Study of Biological Diversity (CSBD) at the University of Guyana Turkeyen campus. The CSBD continues to function as an epicenter for biodiversity research throughout the country. In addition to whole, formalin-fixed specimens, an increasingly important product of

biodiversity surveys in Guyana are specimen-linked frozen tissue collections, primarily for genetic research. The most extensive collections of frozen fish tissues from Guyana are held at ROM (7672 tissues), AUM (2227), UMMZ (1550 tissues), and ANSP (445 tissues). Guyanese specimens and tissues deposited in international collections are mostly searchable online and available to the international research community via onsite visits and loan requests. Several museums also have dedicated funds available to support international travel by students and other scientists interested in reviewing their collections.

Largescale Biogeographical Patterns.—Guyana's freshwater fish fauna exhibits large-scale distribution patterns in relation to distance from river mouth, drainage, elevation, and river hydrologic history. Near-shore marine and brackish-water fishes, such as *Awaous*, *Citharichthys*, *Dormitator*, and *Syngnathus*, have widespread distributions not only along the coast but also up to at least 50 km inland (Eigenmann, 1912) along each of Guyana's four major river drainages. Likewise, some fishes typically considered primarily freshwater, such as *Brachyplatystoma*, are commonly collected offshore. Each of Guyana's major drainage basins hosts endemic fishes, highlighting the importance of river identity as a determinant of fish community structure. Drainage identity combined with elevation, or longitudinal position with respect to the Guiana Shield escarpment, predict fish community composition in the Essequibo River's left-bank tributaries having headwaters that drain the Guiana Shield highlands, such as the Cuyuni, Mazaruni, and Potaro rivers. Highland reaches of these rivers and adjacent Branco River headwaters, such as the Ireng, are isolated from lowland reaches by high waterfalls, such as Kaieteur and Amaila falls in the Potaro River watershed, and/or extensive series of rapids and smaller falls, such as Orinduik Falls in the Ireng River. These physical barriers restrict the distributions of many fishes to reaches above or below the escarpment. Reaches above the escarpment are especially rich in narrowly endemic fish species (Eigenmann, 1912; Armbruster et al., 2000; Lujan, 2008; López-Fernández et al., 2012; Lujan et al., 2012; 2018; 2020; Maldonado-Ocampo et al., 2014; Alofs et al., 2014). The upper Mazaruni River is the most extreme example of such highland endemism, with up to 95% of species occurring exclusively within this sub-basin (Alofs et al., 2014). Other adjacent basins, such as headwaters of the Kuribrong, Potaro, and Ireng rivers, have endemism rates of 42–50% (Lujan et al., 2020).

A century of fish faunal surveys, taxonomic revisions, phylogenetic analyses, and geological research encompassing drainages around the Guiana Shield in Guyana, Venezuela, and Brazil, is beginning to clarify

the long history of periodic highland and lowland interconnections among these basins (Lujan and Armbruster, 2011; Lemopoulos and Covain, 2018; de Souza et al., 2019; Armbruster et al., 2021; Faustino-Fuster et al., 2021). Indeed, Guyana's rivers have not been static, well-defined watersheds throughout the evolutionary diversification of Neotropical fishes, but have changed dramatically through time in response to tectonic, isostatic, and erosional processes (Passarge, 1931; McConnell, 1959; 1968; Sinha, 1968; McConnell et al., 1969; Berrangé, 1975; Gibbs and Barron, 1993; Lujan and Armbruster, 2011). Distributions and compositions of freshwater fish communities reflect these changes and provide unique insights into when, how, and why Guyana's landscape and diverse aquatic and terrestrial ecosystems developed.

One ancient geological and hydrological process hypothesized to have heavily influenced Guyana's rivers and freshwater fish distributions is the break-up of the proto-Berbice paleodrainage. The proto-Berbice was a river similar in size to the modern Orinoco River that existed from the late Cretaceous into the Pleistocene (approximately 66–1 Ma), and hypothetically drained the southern slopes of the western Guiana Shield highlands via a main channel that flowed eastward through the Rupununi Savannas, then northeastward into the Atlantic via the modern Berbice River mouth. The main channel of the proto-Berbice flowed through the Takutu Graben (a graben is a low area between two faults), which ends approximately at the mouth of the Rupununi River. This paleo-drainage is thought to have united headwaters of various modern right-bank tributaries of the Orinoco River with the modern Uruaricoera River in northern Brazil (a Branco River tributary in the Amazon Basin), the modern middle Essequibo River, and the modern lower Berbice River. Various lines of geological and geomorphological evidence have long suggested the existence of the proto-Berbice (Passarge, 1931; McConnell, 1959; Sinha, 1968; Berrangé, 1975; Gibbs and Baron, 1993), and continue to yield new insights (Yang and Escalona, 2011; Ugwu-Oju, 2018), whereas ichthyological studies of the scope and composition of the proto-Berbice have only developed within the last decade (Lujan et al., 2018; de Souza et al., 2019; Armbruster et al., 2021; Faustino-Fuster et al., 2021). Recent taxonomic revisions of various genera of benthic and rheophilic fishes, such as *Ancistrus* (Souza et al., 2019), *Characidium* (Armbruster et al., 2021), *Exastilithoxus* (Lujan et al., 2018), and *Potamotrygon* (Fontenelle et al., 2021a) have documented disjunct distributions consistent with the hypothesis that a once contiguous proto-Berbice River broke up in the relatively recent geologic past (Pliocene-Pleistocene), giving birth to drainage networks seen today.

The right-angle bends and massive braided bedrock channels of various rivers in Guyana provide geomorphological evidence for large-scale stream capture events (McConnell, 1968). Such areas occur in the lower sections of the Cuyuni and Mazaruni rivers, the Essequibo River beginning at the Takutu Rift and continuing downstream, and the Courantyne River from the mouth of the New River to about the same latitude as the start of the Essequibo complex. These braided bedrock channels likely formed as rivers were redirected to their modern courses. The increased flow met durable rock, and the rivers could not find one channel, but had to flow as these complex braids (i.e., bedrock-alluvial anabranching system). Similar bedrock-influenced rivers are found throughout the Guiana and Brazilian shields (Garner, 1966; 1967; 1974; Zonneveld, 1972), and are particularly well studied in Southern Africa (Tooth and McCarthy, 2004; Tooth, 2015). With time, the braided channels may coalesce to form a single channel, but durability of the Guiana Shield basement rock assures that evidence for stream capture remains visible (McConnell, 1968). This is

a rare phenomenon that is best seen in Guyana, and the complexity of resulting habitat likely contributes to the high number of aquatic species found in Guyana.

Environmental Impacts.—Human impacts, especially due to mining, are altering river physicochemistry and geomorphology in Guyana, especially in the lower Essequibo River and its left-bank tributaries that drain the Pakaraima Mountains, such as the Potaro, Mazaruni, and Cuyuni (Montaña et al., 2021). Mining of rich placer gold deposits that occur throughout the channels and floodplains of these rivers has driven deforestation, erosion, bank destabilization, increased channel turbidity and the blanketing of river channels with fine sediment and unstable sandbars for many kilometers downstream of the mining zone, resulting in significant shifts in fish community structure (Ouboter, 2012; Montaña et al., 2021). Benthic fishes, such as catfishes, are especially impacted by such habitat alteration and some species from the lower Potaro and Essequibo Rivers, such as *Leptorhamdia essequibensis* and *Pseudancistrus megacephalus*, have not been recorded

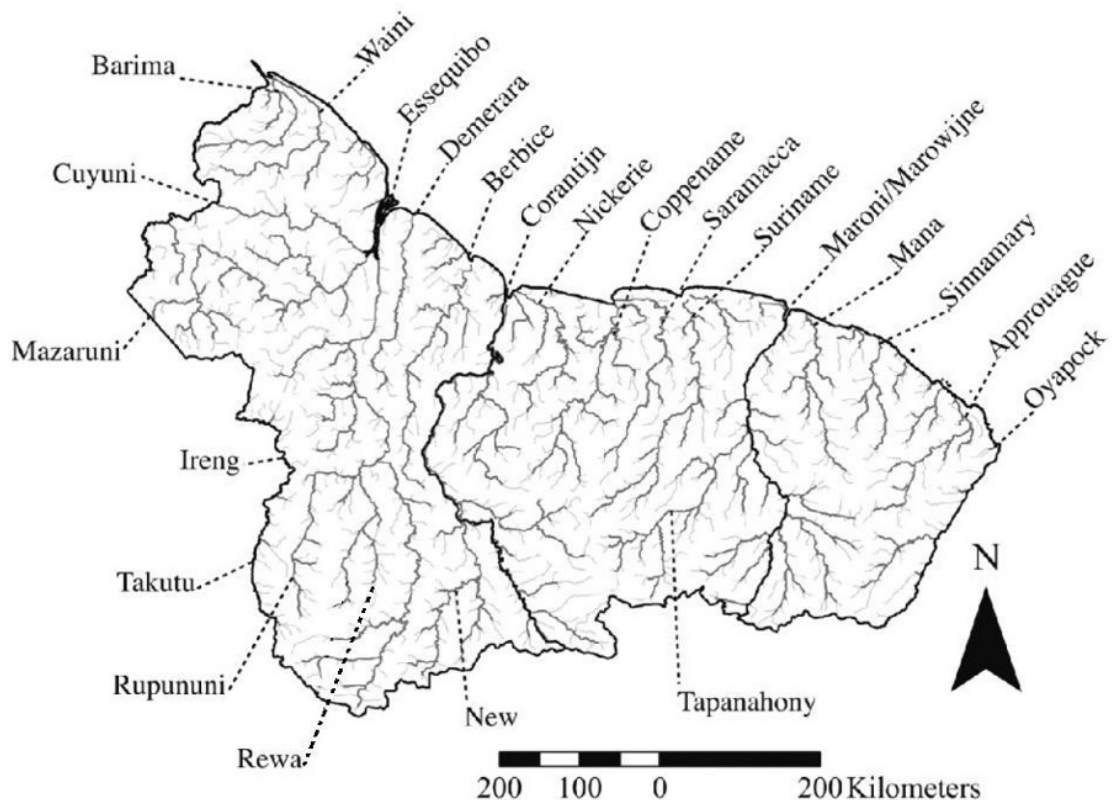


Figure 1. Major rivers of the Guianas modified from Sidlauskas and Vari (2012).

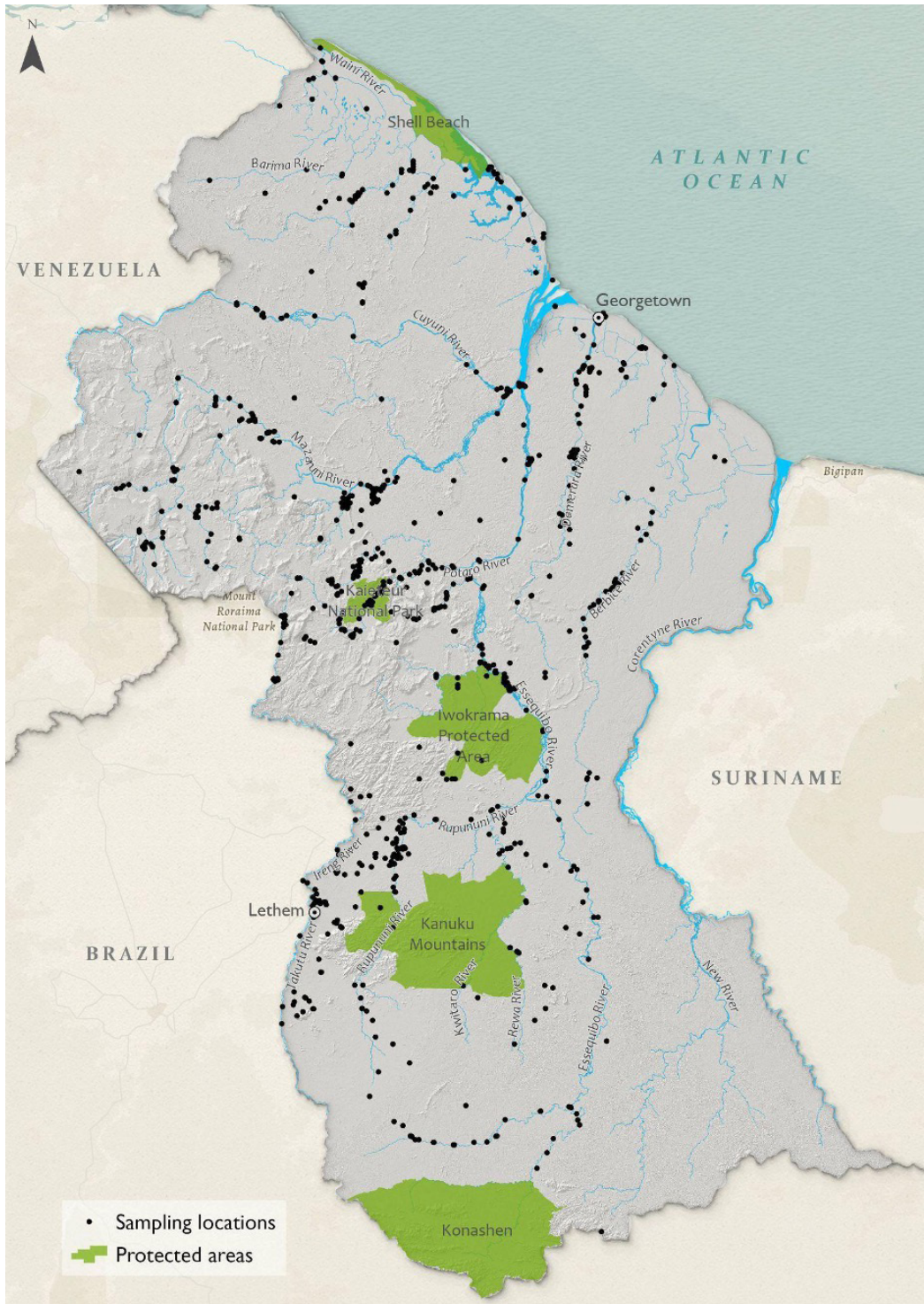


Figure 2. Fish sampling locations in Guyana based on Fishnet2 records (Courantyne locations not shown).

since their type specimens were collected by Eigenmann over a century ago. Such a long gap in observing these species, despite several ichthyological surveys specifically focused on the Potaro and Essequibo rivers where Eigenmann collected them, invites speculation that they have been locally extirpated or may now be extinct. Regardless of their status, the absence or scarcity of recent data for these and many other of Guyana's freshwater fishes illustrates the ease with which such biodiversity can disappear without notice. More research to understand the conservation status of Guyana's fishes is needed (Alofs et al., 2014), and personnel from the University of Guyana and the CSBD (C. Bernard, E. Liverpool, D. Hemraj, M. Ram) are actively engaged in this effort. Fortunately, and despite increasing logging and mining impacts, the incredibly diverse freshwater habitats and fish faunas of Guyana remain relatively intact in many parts of the country.

MATERIAL AND METHODS

In this list of mostly freshwater fishes, we have included definitive records based on at least one verified museum voucher specimen, credible photographs from Guyana not supported by museum vouchers, and/or literature reports in a few rare and unambiguous cases. Species listed in previous checklists as plausibly present in Guyana but without associated museum records are not included (e.g., *Hemiodus amazonum*, listed in Vari et al., 2009). Collections considered for this checklist are as follows (museum codes follow Sabaj, 2020), in descending order of their number of fish lots from Guyana: ROM (7638), AUM (5755), CSBD (3419), ANSP (3099), FMNH (2403), UMMZ (2123), USNM (2079), CAS (1392), MCZ (899), INHS (716), UF (373), UCM (260), OS (245), CMN (155), MNHN (94), YPM (55), TCWC (30), CUMV (26), NMV (25), ZMUC (21), MCNG (13), FSBC (7), KPM (6), SIO (5), LACM (4), UWFC (4), KU (3), NCSM (2), UT (1). Most museum records were accessed through the Fishnet2 Portal (www.fishnet2.org, accessed 28 May 2022). For each species, one museum lot is given as proof of occurrence.

Although inclusion in this list primarily indicates occurrence in Guyana, we also mention occurrence in other major drainages when known. Within the context of this paper, 'endemic' means endemic to the country of Guyana, and 'first record' means that this is the first published record of the species in Guyana. Taxonomic nomenclature, synonyms and general distribution ranges are taken from Eschmeyer's online Catalog of Fishes (Fricke et al., 2021). For each species, we provide a common name and brief notes on taxonomic status, distribution, diet, and relative abundance when available. In some cases, additional information is included if available. Relative abundance is

a subjective appraisal by the authors expressed simply as Common or Rare; however, the actual number of museum lots is also given for each species. Note that although a fish may be rare in museum collections, it could be common in nature but difficult to collect, preserve, or identify correctly. The IUCN conservation status is also given (Not Evaluated: NE, Data Deficient: DD, Least Concern: LC, Near Threatened: NT, Vulnerable: VU, Endangered: EN, Critically Endangered: CR, Extinct in the Wild: EW, Extinct: EX) as found on the IUCN website at: <https://www.iucnredlist.org/search?taxonomies=186157&searchType=species>.

RESULTS

Within each Class (Chondrichthyes and Actinopterygii), taxa are listed alphabetically by Order: Family: Genus: species (see also Appendix I). Classification based on Fricke et al. (2022).

Chondrichthyes: Myliobatiformes: Potamotrygonidae

Paratrygon aiereba (Müller & Henle 1841)

—River Stingray, Manzana Ray, Tenge-Ray

Museum records: 5. ROM 86530. Benthic carnivore - piscivore. Type locality: Brazil. This species, commonly identified in museums as *P. aiereba*, could instead be the proposed *Paratrygon* sp. 3 of Loboda (2016), which would be the former *Trygon strongyloptera* (Günther 1870). Genetic evidence recovers the Guyana *P. aiereba* as a different lineage from the Amazon Basin counterpart (Fontenelle et al., 2021b). It is possible that both species are present. Rare. DD.

Potamotrygon adamastor Fontenelle & Carvalho 2017

—Spotted River Stingray, Tenge-Ray

Museum records: 0. Included here based on photos from the Burro Burro River, Essequibo Basin. Benthic carnivore, possibly crustacevore. Type locality: Rio Urariquera, Branco River Basin, municipal district of Boa Vista, upper Amazon Basin, state of Roraima, Brazil, 3°22'51.9594"N, 60°35'44.1594"W. Upper Rio Branco system in Brazil and Essequibo River Basin in Guyana. Previously identified as *Potamotrygon scobina*. Rare. LC. First Record.

Potamotrygon marinae Deynat 2006

—River Stingray, River Tenge-Ray, Tenge-Ray

Museum records: 2. ROM 97210. Omnivore. Type locality: Maroni River, 3°28'58"N, 53°42'W, French Guiana. Also reported from Suriname and in Guyana from the Essequibo River Basin in the Potaro-Siparuni and Demerara-Mahaica regions. Rare. NT. First Record.

Potamotrygon motoro (Müller & Henle 1841)

—River Stingray, Tenge-Ray

Museum records: 2. ANSP 177972. Benthic carnivore - crustacevore. Type locality: Guaporé River, district of Vila Bela Santíssima Trindade, Mato Grosso State, Brazil (of lectotype). Considered the most widespread species of the genus *Potamotrygon*, it is found in almost every major river basin inhabited by the Potamotrygoninae. This species is currently considered part of a species complex comprising different lineages. Common. DD.

Potamotrygon orbignyi (Castelnau 1855)

—Smooth-back River Stingray, Tenge-Ray

Museum records: 20. ANSP 176052. Benthic carnivore - insectivore. Type locality: Rio Tocantins, Brazil. Probably part of a species complex comprising lineages with similar morphotypes. Molecular evidence suggests the existence of a new, undescribed endemic species for the Guianas, currently identified as *P. orbignyi*, sympatric with this species (Fontenelle et al., 2021a; 2021b). Reported from the Orinoco, Amazon, and the Guianas. In Guyana, found especially in the Essequibo basin. Common. LC.

Potamotrygon cf. *scobina* Garman 1913

—Whitespotted Freshwater Stingray, Tenge-Ray

Museum records: 0. Included here based on photos from the lower Demerara River. Benthic carnivore - crustacevore. Type locality: Tocantins River at Cametá, Pará, Brazil. Found in the Amazon River Basin in Brazil and possibly Peru and Ecuador. Rare. DD. First Record.

Actinopterygii: Acanthuriformes: Sciaenidae

Pachypops fourcroyi (Lacepede 1802)—Freshwater Drum

Museum records: 77. ROM 92760. Carnivore. Type locality: None (probably Suriname). It occurs in the Orinoco and Amazon River Basins and the Guianas. Common. LC.

Pachypops trifilis (Müller & Troschel 1849)

—Croaker, Freshwater Drum

Museum records: 4. AUM 48795. Type locality: Guyana. It occurs in the Amazon River Basin and the Guianas. It was described in the genus *Micropogon*. *Pachypops camposi* Fowler 1954, described from the Rupununi River in Guyana is a synonym. Rare. LC.

Petilipinnis grunniens (Jardine & Schomburgk 1843)

—Croaker, Freshwater Drum.

Museum records: 31. ANSP 176043. Carnivore. Type locality: Commaca Island, Essequibo River, Guyana. It occurs in the Amazon and Essequibo River Basins. It was first described in the genus *Corvina*. Common. DD.

Plagioscion auratus (Castelnau 1855)

—Black Curbinata, Black Croaker

Museum records: 9. ANSP 179115. Carnivore. Type locality: Río Ucayali, Amazon River Basin, Peru. It occurs in the Amazon and Orinoco River Basins and the Guianas. It was described in the genus *Johnius*. Rare. LC.

Plagioscion squamosissimus (Heckel 1840)

—South American Silver Croaker

Museum records: 37. ANSP 177421. Carnivore. Type locality: Negro and Branco Rivers (Amazon River Basin). It occurs in the Amazon and Orinoco River Basins and the Guianas. It was first described in the genus *Sciaena*. *Sciaena rubella* Jardine 1843, described from Guiana rivers, is a synonym. Common. LC.

Actinopterygii: Beloniformes: Belonidae

Potamorhaphis guianensis (Jardine 1843)

—Freshwater Needlefish, Needlefish

Museum records: 90. AUM 27797. Surface feeding piscivore. Type locality: Paduiri River, Guyana; reported from the Amazon and Orinoco River Basins and the Guianas. Feeds predominantly on insects and some small fishes (Goulding and Carvalho, 1983). Common. NE.

Pseudotylorus microps (Günther 1866)

—Freshwater Needlefish, Needlefish

Museum records: 21. AUM 36144. Surface feeding piscivore. Type locality: Suriname; reported from the Amazon and Orinoco Basins and the Guianas. Feeds on smaller fishes, like characoids (Goulding and Carvalho, 1983). Common. NE.

Actinopterygii: Beloniformes: Hemiramphidae

Hyporhamphus brederi (Fernández-Yépez 1948)

—Freshwater Halfbeak

Museum records: 3. ROM 8720. Type locality: Río Orinoco, Boca del Caño Orupe, between mouths of Río Meta and Río Apure, Venezuela. Amazon, Orinoco, and Essequibo. Feeding ecology unknown; some related halfbeaks are herbivorous (Carseldine and Tibbetts, 2005). Rare. NE. First Record.

Actinopterygii: Carangiformes: Achiridae

Achirus achirus (Linnaeus 1758)—Drab Sole

Museum records: 10. ROM 100411. Carnivore. Type locality: Suriname. It has been reported from coastal fresh, brackish, and marine waters from Venezuela to Brazil. It was first described in *Pleuronectes*. Rare in freshwater. LC.

Apionichthys dumerili Kaup 1858—Longtail Sole
Museum records: 2. ROM 100072. Carnivore. Type
locality: None. It occurs throughout fresh and brackish
waters of coastal northern South America. Rare. LC.

Apionichthys finis Eigenmann 1912—Freshwater Sole
Museum records: 29. AUM 49669. Carnivore. Type
locality: Tumatumari (upper Potaro River drainage),
Guyana. It occurs strictly in freshwater, in the Amazon and
Essequibo River Basins. It was first described in the genus
Soleonassus. Common. LC.

Hypoclinemus mentalis (Günther 1862)—Freshwater Sole
Museum records: 32. ROM 86359. Carnivore. Type
locality: Rio Capim or Capim, Pará State, Brazil. It occurs
in freshwater habitats throughout northern South America.
Common. LC.

Actinopterygii: Carangiformes: Paralichthyidae

Citharichthys spilopterus (Günther 1862)—Bay Whiff
Museum records: 2. UMMZ 216222. Carnivore. Type
locality: Atlantic. It occurs in fresh, estuarine, and marine
coastal waters of the Western Atlantic. In Guyana it is known
from the lower Essequibo basin near the confluence with the
Mazaruni and Cuyuni rivers. Rare. LC. First Record.

Actinopterygii: Characiformes: Acestrorhynchidae

Acestrorhynchus falcatus (Bloch 1794)—Dogfish,
Foxfish, Red-tailed Freshwater Barracuda, Pike Characin.
Museum records: 71. ANSP 175501. Piscivore (Dourado
et al., 2015). Type locality: Suriname. Amazon, Orinoco,
and the Guianas. Common. NE.

Acestrorhynchus falcirostris (Cuvier 1819)—Freshwater
Barracuda, Pike Characin, Dogfish, Foxfish
Museum records: 52. ROM 86204. Piscivore. Type locality:
Brazil. Amazon, Orinoco, and the Guianas. Common. NE.

Acestrorhynchus heterolepis (Cope 1878)—Freshwater
Barracuda, Pike Characin, Dogfish, Foxfish
Museum records: 10. ROM 86983. Piscivore (Dourado
et al., 2015). Type locality: Peruvian Amazon. Amazon,
Orinoco, and the Guianas. Rare. NE. First record.

Acestrorhynchus microlepis (Jardine 1841)—Freshwater
Barracuda, Pike Characin, Dogfish, Foxfish
Museum records: 158. ANSP 175507. Piscivore (Nico and
Taphorn, 1985). Type locality: Rio Negro, Rio Branco,
and Essequibo River. Amazon, Orinoco, and the Guianas.
Common. LC.

Acestrorhynchus minimus Menezes 1969—Freshwater
Barracuda, Pike Characin, Dogfish, Foxfish
Museum records: 7. AUM 38319. Piscivore. Type locality:
Lago Jacaré, Rio Trombetas, Amazon River Basin, Brazil.
Amazon, Orinoco and the Guianas. Rare. NE.

Acestrorhynchus nasutus Eigenmann 1912—Freshwater
Barracuda, Pike Characin, Dogfish, Foxfish
Museum records: 6. ROM 88613. Piscivore. Type locality:
Rockstone, Guyana. Amazon, Orinoco, and the Guianas.
Rare. NE.

Gnathocharax steindachneri Fowler 1913
—Bigjaw Characin
Museum records: 5. ROM 96034. Carnivore. Amazon,
Orinoco, and the Guianas. Insectivore (Santos et al.,
2021). Type locality: Igarapé de Candelaria, tributary of
Rio Madeira and about 2 miles distant, Brazil, 8°45'S,
63°54'W. Rare. NE.

Heterocharax macrolepis Eigenmann 1912
—Pygmy Characin
Museum records: 18. ROM 64737. Carnivore, terrestrial
insects and macrophytes (probably incidental) (Röpke et
al., 2014). Type locality: Rockstone, Guyana. Amazon,
Orinoco, and the Guianas. Rare. NE.

Lonchogenys ilisha Myers 1927
—Lancecheek Characin, Shad Tetra
Museum records: 1. ROM 84110. Carnivore. Type
locality: Sandbank on the Colombian border, Rio Negro,
Brazil. Amazon, Orinoco, and the Guianas. Rare. NE. First
Record.

Roestes ogilviei (Fowler 1914)—Dogtooth Characin
Museum records: 6. ROM 64107. Carnivore. Type
locality: Rupununi River, Guyana. Amazon, Orinoco and
the Guianas. Rare. NE.

Actinopterygii: Characiformes: Anostomidae

Abramites hypselonotus (Günther 1868)—Marbled
Headstander, High-backed Headstander
Museum records: 1. MHNG 2195.100. Omnivore. Type
locality, Xeberos, in the Peruvian upper Amazon. The
single known specimen from Guyana was collected
from the Rio Branco on the border with Brazil, from
an unspecified location. The species occurs widely
throughout the Amazon and Orinoco River Basins.
Rare. NE.

Anostomoides atrianalis Pellegrin 1909—Headstander
Museum records: 2. AUM 49849. Omnivore. Type locality: Orinoco River, Venezuela; also found in the Essequibo and Amazon basins. *Schizodontopsis laticeps* (now *Anostomoides laticeps*) was described by Eigenmann 1912 from Crab Falls on the Essequibo but is currently considered to be a synonym of *A. atrianalis*. Rare. NE.

Anostomus anostomus (Linnaeus 1758)

—Striped Headstander

Museum records: 80. ANSP 192878. Omnivore. Type locality, an unknown location in South America. This species occurs widely in the Amazon and Orinoco systems and the river systems of Guyana and central Suriname. In the Marowijne system and points further east, *Anostomus brevior* replaces it. Common. NE.

Anostomus ternetzi Fernández-Yépez 1949

—Ternetz' Headstander

Museum records: 22. ANSP 39788. Omnivore. Type locality: Palital, Estado Guárico, Venezuela. This species is known primarily from the Orinoco drainage but also occurs in the Guianas, with verified specimens known from the Essequibo and Marowijne systems. Common. NE.

Hypomasticus megalepis (Günther 1863)

—Bigscale Leporin, Jewel Spotted Anostomid

Museum records: 62. ROM 76805. Omnivore. Type locality: Essequibo River, Guyana. This species occurs commonly in the river systems of Guyana and Suriname, with populations also known from the Xingu and Branco rivers of Brazil. Museum specimens are commonly misidentified as *Leporinus granti*, which has a superficially similar color pattern. Common. NE.

Laemolyta proxima (Garman 1890)

—One-striped Headstander

Museum records: 14. ANSP 177010. Omnivore. Type locality: Villa Bella and Ueranduba, Brazil. This species ranges widely in the Amazon and also occurs in Guyana's Essequibo basin. In 2012 de Souza et al. reported *L. taeniata* from Guyana but those records were misidentified *L. proxima*. Rare. NE.

Leporellus vittatus (Valenciennes 1850)—Stripetail

Museum records: 7. ROM 96108. Omnivore. Type locality: Amazon River, Brazil. This species purportedly occurs throughout the Paraná, Orinoco, and Amazon River Basins and in the Takutu and Rupununi regions of Guyana. However, the genus needs revision and *Leporellus vittatus* probably represents a complex of similar species with more restricted geographic distributions. Rare. NE.

Leporinus agassizi Steindachner 1876

—Agassiz' Spotted Leporin, Daray

Museum records: 61. ANSP 176850. Omnivore. Type locality: Amazon River at Tabatinga and Teffe; River Iça, Brazil. *Leporinus agassizii* has been reported from the Amazon, Orinoco, and Essequibo drainages, but likely represents a complex of species with similar pigmentation. In the Guianas, *Leporinus friderici* replaces it in river systems further east than the Essequibo. Common. NE.

Leporinus arcus Eigenmann 1912

—Red-finned Three-stripes Leporin, Daray

Museum records: 39. ANSP 176696. Omnivore. Type locality: Tukeit, Guyana. Orinoco, Essequibo, Berbice and Courantyne basins. Common. LC.

Leporinus desmotes Fowler 1914—Leporin, Daray

Museum records: 9. AUM 35675. Omnivore. Type locality: Rupununi River, Guyana. This species has an unusual disjunct distribution in the Essequibo and the Tocantins River in Brazil. If further study shows those populations to represent separate species, then the representative in Guyana will retain this name. Rare. NE.

Leporinus fasciatus (Bloch 1794)—Barred Leporin,

Daray

Museum records: 46. ANSP 179670. Omnivore. Type locality, an unknown locality in Suriname. Fishes of the *L. fasciatus* species complex have been identified from most rivers in cis-Andean South America, but the alpha taxonomy remains unresolved. Common. NE.

Leporinus friderici (Bloch 1794)—Spotted Leporin,

Daray

Museum records: 61. ROM 86921. Omnivore. Type locality, an unknown locality in Suriname. Fishes of the *L. friderici* species complex have been reported from throughout South America, but the alpha taxonomy remains unresolved. Common. NE.

Leporinus granti Eigenmann 1912

—Many-spotted Leporin, Daray

Museum records: 22. ROM 96836. Omnivore. Type locality: Maripicru Creek, Guyana. *Leporinus granti* occurs commonly in the Branco, Essequibo, Corantijn, Marowijne and Approuage rivers of the Guianas and is also known from the Aripuanã river of Brazil. It has been reported from the Orinoco and various other Amazonian localities, but museum specimens assigned to this species are frequently misidentified members of other spotted species in *Leporinus* and *Hypomasticus* and some of these populations may represent undescribed species. Common. LC.

Leporinus maculatus Müller & Troschel 1844

—Barred Leporin, Daray

Museum records: 52. ROM 79087. Omnivore. Type locality, unspecified location in Guyana. This species occurs through the rivers of the Guianas and also inhabits the Amazon. Most previous records of this species were identified as *L. alternus* Eigenmann 1912, which is now considered a synonym. Common. NE.

Leporinus nigrotaeniatus (Jardine 1841)

—Slender Leporin, Daray

Museum records: 131. AUM 35688. Omnivore. Type locality: Rio Negro. This species inhabits the Rio Negro and Rio Branco systems of the Amazon and the Essequibo, Demerara, and Berbice rivers in Guyana. Common. LC.

Leporinus ortomaculatus Garavello 2000

—Many-spotted Leporin, Daray

Museum records: 21. ROM 88652. Omnivore. Type locality: Rio Surumu, Roraima, Brazil. This species commonly inhabits the Orinoco and northern tributaries of the Amazon, including the Rio Negro and Rio Branco. In Guyana, it is found only in the Takutu and Ireng rivers that connect to the Rio Branco but is common in those systems. Common. NE.

Petulanos plicatus (Eigenmann 1912)

—Small-spot Headstander

Museum records: 17. ANSP 179680. Omnivore. Type locality: Crab Falls, Essequibo River, Guyana. This species is known from the Essequibo to Courantyne rivers in Guyana. It has also been reported from the Mamoré and Iténez rivers of Bolivia, though those records may not represent the same species. Rare. NE.

Petulanos cf. spiloclistron (Winterbottom 1974)

—Spot-bar Headstander

Museum records: 7. ANSP 179671. Omnivore. Type locality: Fallawatra River, Suriname. Several specimens of a *Petulanos* resembling *P. spiloclistron* have been collected from the Takutu River of Guyana. If conspecific with that species this would be a range extension for a species otherwise known from the Nickerie River of Suriname. These specimens might also simply represent a color variant of *Petulanos plicatus*. Rare. EN.

Pseudanos trimaculatus (Kner 1858)

—Threespot Headstander

Museum records: 5. USNM 224797. Omnivore. Type locality, Brazil. This species ranges widely throughout the Amazon and Orinoco systems as well as in the Essequibo River of Guyana. *P. irinae* Winterbottom 1980 is a synonym. Rare. NE.

Schizodon fasciatus Spix & Agassiz 1829

—Deep-bodied Headstander

Museum records: 11. ANSP 179665. Omnivore. Type locality, Rivers of Brazil. This ubiquitous species in the Amazon Basin also occurs in the rivers of the Guianas but is much less common there. Records of *Schizodon vittatus* from the Essequibo system probably represent this species instead (Garavello et al., 2021). Rare. NE.

Synaptolaemus latofasciatus (Steindachner 1910)

—Red-banded Headstander

Museum records: 11. ANSP 39737. Omnivore. Type locality: Orinoco River, Venezuela. This species primarily occurs in the Orinoco and Xingu systems, though there are records from other Amazonian locations as well. In the Guianas it is known only from the Takutu River in southwestern Guyana. Rare. NE.

Actinopterygii: Characiformes: Bryconidae*Brycon amazonicus* (Spix & Agassiz 1829)

—Black-tailed Brycon, Kuti, Black-tail Kuti

Museum records: 3. ROM 83914. Omnivore. Type locality: Rio Trombetas, Igarapé Caxipacoré, Amazon River Basin, Pará, Brazil, circa 0°34'S, 56°45'W. Amazon, Orinoco and the Guianas. *Chalceus carpophaga* Valenciennes 1850 and *Brycon siebenthalae* Eigenmann 1912, both described from Guyana, are currently considered synonyms of this species. Rare. NE.

Brycon falcatus Müller & Troschel 1844—Kuti, Falcate Brycon
Museum records: 50. AUM 27995. Omnivore. Type locality: Guyana and Suriname. Although currently treated as a widespread, it is probably a complex of morphologically similar species, reported from northern cisandean South America (Lima 2017). *Brycon schomburgkii* Müller & Troschel 1844, described from Guyana, is considered a synonym. Common. NE.

Brycon pesu Müller & Troschel 1845

—Pesu Brycon, Basket fish

Museum records: 86. ANSP 39091. Omnivore. Type locality: Guiana. Amazon and Orinoco River Basins. Identified in old literature as *Holobrycon pesu*. Common. NE.

Actinopterygii: Characiformes: Chalceidae*Chalceus epakros* Zanata & Toledo-Piza 2004

—Red-tailed Chalceus, Red Tail

Museum records: 15. AUM 48781. Omnivore. Type locality: Rio Tapajós, São Luís, above Itaituba, 4°25'S, 56°10'W, Pará, Brazil. Amazon and Orinoco River Basins. Rare. NE.

Chalceus macrolepidotus Cuvier 1818

—Pinktail chalcus, Red Tail

Museum records: 47. ANSP 175371. Omnivore. Type locality: Brazil. Negro/Amazon and Orinoco River Basins, and the Guianas. *Chalceus ararapeera* Valenciennes 1850, now considered a synonym of this species, was described from the Essequibo River. Common. NE.

Actinopterygii: Characiformes: Characidae*Acanthocharax microlepis* Eigenmann 1912

—Bigeye Dogtooth Characin

Museum records: 34. ANSP 175575. Carnivore. Type locality: Tumatumari, Guyana (upper Potaro River drainage, 5.3638° N, 59.0064° W. Essequibo River Basin. Common. NE.

Acestrocephalus sardina (Fowler 1913)

—Needle-tooth Dogfish

Museum records: 5. ANSP 193555. Carnivore. Type locality: Rio Madeira, about 200 miles east of 62°20'W, Brazil. Amazon and Orinoco River Basins. Rare. NE.

Aphyocharacidium melandetum (Eigenmann 1912)

—Blackline Tetra

Museum records: 5. AUM 38320. Omnivore. Type locality: Guyana. Essequibo River Basin. Rare. VU.

Aphyocharax avaray Fowler 1913—Flametail Tetra

Museum records: 1. FMNH 97713. Omnivore. Type locality: Rio Madeira, Brazil, about 200 miles east of 62°20'W, Brazil. This record from Mangere Creek on Jaure Ranch, a Takutu/Branco/Amazon tributary was confirmed in Souza-Lima's thesis (2003) and is rare (but other specimens from Amazon tributaries are probably misidentified). *Aphyocharax avaray* is found throughout the Orinoco and Amazon River Basins. NE.

Aphyocharax erythrurus Eigenmann 1912

—Flametail Tetra

Museum records: 129. ROM 95971. Omnivore. Type locality: Rockstone sand-bank, Guyana. Amazon and Orinoco River Basins. Specimens belonging to *Aphyocharax* with a slenderer body have been collected in the country and might be a different species. Common. NE.

Aphyodite grammica Eigenmann 1912

—Dwarf Blackline Tetra

Museum records: 17. ROM 64760. Omnivore. Type locality: Konawaruk, Guyana. Rio Negro and Essequibo River basins. Rare. NE.

Astyanax bimaculatus (Linnaeus 1758)

—Two Spot Astyanax

Museum records: 90. ANSP 175625. Omnivore. Type locality: Suriname. This species is reported to be distributed from Panama to Uruguay. It will undoubtedly be broken into several species as research progresses. *Astyanax wappi* Valenciennes 1850, described from the Essequibo River, is currently considered to be a synonym. Common. NE.

Astyanax clavitaeniatus Garutti 2003

—Nailstripe Astyanax

Museum records: 6. AUM 37159. Omnivore. Type locality: Surumu, rio Surumu, about 3°30'N, 60°25'W, Roraima, Brazil (just over the border) and occurs in tributaries of the Branco in Guyana. Rare. NE. First record.

Astyanax rupununi Fowler 1914—Rupununi Astyanax

Museum records: 16. Omnivore. Type locality: Rupununi River, Guyana, 2°-3°N, 50°20'W. ANSP 39328. Rare. NE.

Brachyhalcinus orbicularis (Valenciennes 1850)

—Discus Tetra

Museum records: 27. ANSP 175621. Omnivore. Type locality: Essequibo River, Guyana. *Brachyhalcinus guianensis* Boeseman 1952, described from Itabu Creek, a tributary of the New River, which flows into the Courantyne, is a synonym. Common. NE.

Brittanichthys myersi Géry 1965—Red Heart Tetra

Museum records: 6. AUM 27808. Omnivore. Type locality: Rio Negro, unnamed inlet on shore, about 13 kilometers west of junction with Amazon, Brazil, about 3°10'S, 59°55'W. Rio Negro/Amazon. Rare. NE.

Bryconamericus cf. orinocoensis Román-Valencia 2003

—Wide-stripe Tetra

Museum records: 16. ROM 86034. Omnivore. Type locality: Río Orinoco in Esmeralda, about 2°53'06"N, 64°58'06"W, Amazonas State, Venezuela. Orinoco. Rare. NE. First record.

Bryconamericus hyphesson Eigenmann 1909

—Shoulder-bar Tetra

Museum records: 45. ROM 86165. Omnivore. Type locality: Tumatumari, Lower Potaro River, Guyana. Common. LC.

Charax gibbosus (Linnaeus 1758)

—Glass Headstander, Batfish

Museum records: 122. ANSP 101413. Carnivore. Type locality: Suriname. Allegedly present throughout most of South America. Common. NE.

Charax hemigrammus (Eigenmann 1912)

—Glass Headstander, Batfish

Museum records: 7. ROM 64112. Carnivore. Type locality: Gluck Island, Essequibo River, Guyana. It was originally placed in the genus *Asiphonichthys* because unlike most *Charax*, it has an incomplete lateral line. Rare. NE

Charax rupununi Eigenmann 1912

—Rupununi Glass Headstander, Batfish

Museum records: 6. FMNH 53664. Carnivore. Type locality: Rupununi River, but this species has now also been reported from Brazil in the Trombetas River drainage. Rare. LC.

Creagrutus cf. *machadoi* Vari & Harold 2001

—Buck-toothed Tetra

Museum records: 7. ROM 86019 Omnivore. Type locality: upper Caura River drainage (Orinoco Basin), Caño Yumucukenã, within 4 km of its mouth, Departamento Cedenó, Bolívar, Venezuela. *Creagrutus* cf. *machadoi* can be distinguished from *C. melanzonus* by having a noticeable, relatively large gap between the anteriormost premaxillary tooth and all remaining premaxillary teeth vs. gap absent in *Creagrutus melanzonus*, the only other congener in Guyana (pers. com. Juan Gabriel Albornóz-Garzón). NE. First record.

Creagrutus melanzonus Eigenmann 1909

—Buck-toothed Tetra

Museum records: 51. ANSP 176598. Omnivore. Type locality: Crab Falls, Essequibo River. It is now reported from Venezuela and the other Guianas as well. Records of *C. maxillaris* in de Souza et al. (2012) were redetermined as juvenile *C. melanzonus*. Common. NE.

Ctenobrycon spilurus (Valenciennes 1850)—Silver Tetra

Museum records: 85. ROM 85797. Omnivore. Type locality: Suriname, this species has also been reported from the Orinoco River and other Guianas. Specimens identified as this species from the Amazon basin tributaries in Guyana may instead be the similar *Ctenobrycon hauxwellianus* (Cope 1970). Common. NE.

Cynopotamus essequibensis Eigenmann 1912

—Essequibo Dogfish

Museum records: 21. ROM 101601. Carnivore. Type locality: Potaro Landing, Guyana. This species is found from Guyana through the other Guianas and into Amapá state of northeastern Brazil. Common. NE.

Deuterodon mutator (Eigenmann 1909)—Punkay

Museum records: 18. ROM 91355. Omnivore. Type locality: Savannah Landing, upper Potaro River, Guyana,

though most recent records are from the adjacent upper Kuribrong River. This species was originally described in *Astyanax*. Its placement in *Deuterodon* is tentative. Rare. VU. Endemic.

Deuterodon potaroensis Eigenmann 1909—Punkay

Museum records: 13. FMNH 52967. Omnivore. Type locality: Amatuk Cataract, lower Potaro River, Guyana. Its placement in *Deuterodon* is tentative. Rare. NE. Endemic.

Exodon paradoxus Müller & Troschel 1844

—Bigspot Bucktooth Tetra

Museum records: 49. ANSP 39725. Lepidophage/Omnivore. Type locality: Essequibo River, Guyana. Common. NE.

Galeocharax gulo (Cope 1870)—Dogfish

Museum records: 2. AUM 38841. Carnivore. Type locality: Pebas, Peru. This species reportedly occurs throughout much of South America in the Amazon and Orinoco basins and the Guianas. Rare. NE. First record.

Gephyrocharax valencia Eigenmann 1920

—Sputtail Tetra

Museum records: 1. ANSP 168012. Vanegas-Ríos (2016) reported this species from the Cuyuni River, a tributary of the Essequibo, from just over the border of Guyana in Venezuela. Omnivore. Type locality: Lake Valencia, Maracay, Venezuela, ca. 10°13'0.85"N, 67°37'11.82"W, altitude 448 m. This species occurs in the Orinoco River Basin, coastal Caribbean drainages of Venezuela and coastal drainages of the island of Trinidad (Vanegas-Ríos 2016). Rare. LC.

Gymnocorymbus bondi (Fowler 1911)

—Silver Tetra, Redfin Tetra

Museum records: 6. ROM 102179. Omnivore. Type locality: Corisál, Venezuela. This species has been misidentified throughout the years. It was originally described in the genus *Phenacogaster* from the Orinoco River Basin in Venezuela. It was also described as *Moenkhausia profunda* Eigenmann 1912 from coastal Guyana. *Gymnocorymbus socolofi* Géry 1964, from the Colombian Orinoco, is today considered a synonym. Rare. NE.

Gymnocorymbus thayeri Eigenmann 1908

—False Black Tetra

Museum records: 9. ROM 87247. Omnivore. Type locality: Amazonas, Tefé, Solimões River, Brazil. They are often confused with species of *Poptella*. Reported from the Amazon Basin, the Island of Trinidad, and the Guianas. Rare. NE.

Hemigrammus analis Durbin 1909—Shortfin Tetra
Museum records: 83. ANSP 175674. Omnivore. Type locality: Rockstone, Essequibo River. It has been reported from throughout the Amazon and Orinoco River Basins. Common. NE.

Hemigrammus bellottii (Steindachner 1882)
—Bellott's Tetra
Museum records: 74. ANSP 170192. Omnivore. Type locality: Tabatinga, Amazonas, Brazil. Reported from Amazon, Orinoco, and the Guianas. Common. NE. First record.

Hemigrammus boesemani Géry 1959—Boeseman's Tetra
Museum records: 29. ROM 90143. Omnivore. Type locality: Creek near Sinnamary, northern French Guiana. It has also been reported from the Amazon Basin and the other Guianas. Common. LC. First record.

Hemigrammus cylindricus Durbin 1909
—Cigar-shaped Tetra
Museum records: 74. ANSP 170200. Omnivore. Type locality: Tumatumari, lower Potaro River, Guyana. It has also been reported from the Orinoco and Amazon basins. Common. LC.

Hemigrammus erythrozonus Durbin 1909
—Glowlight Tetra
Museum records: 24. ROM 91459. Omnivore. Type locality: ErukinCreek, a Potaro River tributary above Amatuk, Guyana. Essequibo River Basin. Common. LC.

Hemigrammus geisleri Zarske & Géry 2007
—Geisler's Tetra
Museum records: 76. ROM 100509. Omnivore. Type locality: 35 kilometers northwest of Obidos Igarapé, Para, Brazil. Reported from the Amazon and Orinoco River Basins and the Guianas. Common. NE. First record.

Hemigrammus cf. gracilis (Lütken 1875)—Graceful Tetra
Museum records: 35. ROM 95998. Omnivore. Type locality: Lagoa Santa, 19°38'S, 43°53'W, Brazil. Originally identified as *Tetragonopterus*. This species is now thought to be endemic to the São Francisco River Basin in Brazil, so the similar form in Guyana may be distinct. Common. NE.

Hemigrammus iota Durbin 1909—I-beam Tetra
Museum records: 28. ROM 26197. Omnivore. Type locality: Gluck Island, Essequibo River. Common. LC. Endemic.

Hemigrammus levis Durbin 1908—Smooth Tetra
Museum records: 39. ROM 96282. Omnivore. Type locality: Lago Maximo [small lake near Parintins], Villa

Bella and Lake Jose Assu, Brazil. This species is nearly identical to *H. micropterus*. Perhaps *H. micropterus* is present in the coastal drainages, and *H. levis* in Amazon tributaries, but it is yet to be determined if both species are present in Guyana. Common. NE. First record.

Hemigrammus micropterus Meek 1907—Smallfin Tetra
Museum records: 12. ROM 67880. Omnivore. Type locality: Los Castillos (lower Orinoco River Basin, near the delta), Venezuela. Perhaps *H. micropterus* is present in the coastal drainages, and *H. levis* in Amazon tributaries, but it is yet to be determined if both species are present in Guyana. The species is also found throughout the Orinoco River Basin in Venezuela and Colombia. Rare. NE. First record.

Hemigrammus microstomus Durbin 1918
—Smallmouth Tetra
Museum records: 19. AUM 62886. Omnivore. Type locality: Santarém, Pará, Brazil (Amazon Basin). It is distributed in the Orinoco and the Guianas. Rare. NE. First record.

Hemigrammus ocellifer (Steindachner 1882)
—Head-and-tailfin Tetra
Museum records: 88. ANSP 167859. Omnivore. Type locality: Villa Bella and Cudajas, Amazon River. It has been reported from the Guianas as well. Common. NE.

Hemigrammus orthus Durbin 1909—Straightline Tetra
Museum records: 39. ROM 64709. Omnivore. Type locality: Tukeit, Potaro River drainage, Guyana. It has also been reported from the lower Tapajós River in Brazil. Common. LC.

Hemigrammus rodwayi Durbin 1909—Rodway's Tetra
Museum records: 63. AUM 37302. Omnivore. Type locality: Georgetown Trenches, Botanic garden, Aruka and Barima rivers, Guyana. *Hemigrammus armstrongi* Schultz & Axelrod 1955 is now considered a synonym. Common. LC.

Hemigrammus stictus (Durbin 1909)—Half-red Tetra
Museum records: 45. AUM 38333. Omnivore. Type locality: coastal Majaica River Basin near Georgetown at Lama Stop Off. It was first described in *Hyphessobrycon*, so several records still carry that name. Common. NE.

Hemigrammus unilineatus (Gill 1858)—Featherfin tetra
Museum records: 54. ROM 97296. Omnivore. Type locality: Island of Trinidad. It was described in the genus *Poecilurichthys* (now a subgenus of *Astyanax*). A species currently considered a synonym, *Hemigrammus unilineatus cayennensis* Géry 1959, was described from French Guiana. Common. NE.

Hemigrammus vorderwinkleri Géry 1963

—Vorderwinkler's Tetra

Museum records: 1. ROM 95910. Omnivore. Type locality: near Tapurucuara, upper Rio Negro, Brazil. It has also been reported from the Orinoco River Basin in Venezuela and Colombia. Rare. NE. First record.

Hyphessobrycon axelrodi (Travassos 1959)

—Calypso Tetra

Museum records: 3. ROM 67922. Omnivore. Type locality: near Piarco airport, Island of Trinidad. It was originally described in the genus *Aphyocharax*. Conde-Saldaña et al. (2019) and Lima et al. (2021) suggest that it may belong in *Pristella* instead. It has been reported from Venezuela and the Guianas. Rare. NT. First record.

Hyphessobrycon bentosi Durbin 1908—Bentosi's Tetra

Museum records: 74. AUM 50677. Omnivore. Type locality: Amazon River at Obidos, Pará, Brazil. Common. NT. First record.

Hyphessobrycon catableptus (Durbin 1909)

—Club-fin Tetra

Museum records: 4. FMNH 53553. Omnivore. Type locality: Tumatumari, above the falls, lower Potaro River drainage, Guyana. It was described in the genus *Dermatocheir*, a synonym of *Hyphessobrycon*. Its rudimentary fins consist of flaps of skin and lack apparent fin rays. Rare. DD. Endemic.

Hyphessobrycon eos Durbin 1909

—Dawn Tetra, Sunrise Tetra

Museum records: 34. ROM 96833. Omnivore. Type locality: Creek between Potaro Landing and Kangaruma, Guyana, upper Potaro River drainage. Common. LC. Endemic.

Hyphessobrycon minimus Durbin 1909—Tiny Tetra

Museum records: 30. ANSP 175703. Omnivore. Type locality: Grove Corner in coastal Guyana near Georgetown. Common. NE. Probably endemic, though there are dubious records from other drainages.

Hyphessobrycon minor Durbin 1909—Minor Tetra

Museum records: 100. AUM 37096. Omnivore. Type locality: pool at the mouth (with the Essequibo River) of the Konawaruk River, Guyana. Common. LC. Endemic.

Hyphessobrycon rosaceus Durbin 1909—Rosy Tetra

Museum records: 55. ANSP 170204. Omnivore. Type locality: Essequibo River at Gluck Island, Guyana (a river island at about 6°00' to 6°05'N, 58°36'W). It occurs in Guyana and Suriname. Common. LC.

Hyphessobrycon cf. *takasei* Géry 1964

—Coffeebean Tetra

Museum records: 7. USNM 402950. Type locality: Araguari River, Serra do Navio above Macapá, Amapá Territory, Lower Amazon basin, Brazil. It has also been reported from French Guiana. Rare. NE.

Jupiaba abramoides (Eigenmann 1909)—Two-spot *Jupiaba* Tetra

Museum records: 84. ROM 97412. Omnivore. Type locality: Tumatumari, lower Potaro River, Guyana. It has been reported from the Amazon and Orinoco basins and the other Guianas. Common. NE.

Jupiaba atypindi Zanata 1997—*Jupiaba* Tetra

Museum records: 16. AUM 37145. Omnivore. Type locality: Igarapé Jaramacaru, tributary of River Cuminá, Pará, Brazil. Rare. NE. First Record.

Jupiaba essequibensis (Eigenmann 1909)—Essequibo *Jupiaba* Tetra

Museum records: 57. ROM 95917. Omnivore. Type locality: Tumatumari, lower Potaro River, Guyana. It was described in the genus *Astyanax*. Common. NE. Endemic.

Jupiaba mucronata (Eigenmann 1909)—One-spot *Jupiaba* Tetra

Museum records: 22. AUM 62755. Type locality: Tumatumari, lower Potaro River drainage, Guyana. This fish was first described in *Astyanax*. Common. DD. Endemic.

Jupiaba pinnata (Eigenmann 1909)—Pinnate *Jupiaba* Tetra

Museum records: 73. ANSP 190532. Omnivore. Type locality: Amatuk, lower Potaro River drainage, Guyana. It was originally described in *Deuterodon*. It has also been reported from Suriname. Common. LC.

Jupiaba polylepis (Günther 1864)—Small-scale *Jupiaba* Tetra

Museum records: 162. ANSP 190464. Omnivore. Type locality: Guyana. It was originally placed in *Tetragonopterus*. It also occurs in the Orinoco River Basin of Colombia and Venezuela. Common. NE.

Jupiaba potaroensis (Eigenmann 1909)—Potaro *Jupiaba* Tetra

Museum records: 45. FMNH 52695. Omnivore. Type locality: Amatuk, lower Potaro River, Guyana. It was described in *Astyanax*. Common. NE. Endemic.

Jupiaba scologaster (Weitzman & Vari 1986)
—Bellythorn Jupiaba Tetra

Museum records: 8. AUM 27763. Omnivore. Type locality: Caño Manu, Río Negro, Amazonas, Venezuela, about 2°00'N, 66°57'W. It was described in *Astyanax*. It has been reported from much of the Amazon River Basin. Rare. NE. First record.

Knodus cf. cinarucoensis (Román-Valencia, Taphorn & Ruiz-C. 2008)—Cinaruco Knodus
Museum records: 5. AUM 38844. Omnivore. Type locality: Cinaruco River, Orinoco River Basin, Venezuela. Records from Guyana need to be re-examined. Rare. LC.

Knodus cf. heteresthes (Eigenmann 1908)—Tapajos Tetra
Museum records: 11. ROM 64675. Omnivore. Type locality: Tapajos River, Brazil. It has been reported from much of the Amazon River Basin. The form found in Guyana could be distinct. Rare. NE.

Makunaima guianensis (Eigenmann 1909)
—Guyana Tetra
Museum records: 55. ROM 96004. Omnivore. Type locality: Waraputa Falls, Essequibo River, Guyana, 5 15' 00"N, -58 50' 00"W. It has been reported from the Amazon and Orinoco River Basins. Common. NE.

Markiana geayi (Pellegrin 1909)—Red-belly Tetra
Museum records: 2. ROM 67733. Omnivore. Type locality: Río Apure, Orinoco River Basin, Venezuela. This fish was originally described in *Tetragonoperus*. LC. First record.

Microchemobrycon callops Böhlke 1953
—Dwarf Blackwater Tetra
Museum records: 13. ROM 86269. Omnivore. Type locality: Camanaos Rapids, Rio Negro, Brazil, about 0°10'S, 66°55'W. It has also been reported from the Orinoco River Basin. Species identification of *Microchemobrycon* is difficult, so identifications of all specimens listed here are questionable. NE. First record.

Microchemobrycon casiquiare Böhlke 1953
—Dwarf Blackwater Tetra
Museum records: 151. ANSP 168111. Omnivore. Type locality: São Gabriel Rapids at São Gabriel village, Rio Negro, Brazil, 0°08'03"S, 67°03'28"W. Common. NE. First record.

Microchemobrycon geisleri Géry 1973
—Dwarf Blackwater Tetra
Museum records: 3. ANSP 177069. Omnivore. Type locality: Igarapé, about 35 kilometers northwest from

Obidos, Rio Curuçamba drainage, lower Amazon basin, Brazil. It occurs in much of the Amazon River basin. Rare. NE. First record.

Microchemobrycon melanotus (Eigenmann 1912)
—Dwarf Blackwater Tetra
Museum records: 16. ANSP 177008. Omnivore. Type locality: Essequibo River at Rockstone sandbank, Guyana. It was first described in *Aphyocharax*. Rare. LC.

Moenkhausia browni Eigenmann 1909—Brown's Tetra
Museum records: 144. ROM 101075. Omnivore. Type locality: Aruataima Falls, upper Potaro River, Guyana. Common. LC.

Moenkhausia ceros Eigenmann 1908—Hook-fin Tetra
Museum records: 12. ROM 101907. Omnivore. Type locality: Lake Hyanuary, Amazonas, Brazil. Amazon Basin. Rare. NE. First record.

Moenkhausia chrysargyrea (Günther 1864)—Halo Tetra
Museum records: 111. ANSP 175604. Omnivore. Type locality: Essequibo River, Guyana. Amazon and Orinoco River basins, and the Guianas. Common. NE.

Moenkhausia collettii (Steindachner 1882)
—Collette's Tetra
Museum records: 218. ANSP 176906. Omnivore. Type locality: Hyavary, Brazil. This species is scarcely different and often confused with *M. copei*. Amazon and Orinoco River Basins and the Guianas. Common. NE.

Moenkhausia comma Eigenmann 1908—Comma Tetra
Museum records: 3. AUM 44418. Omnivore. The type locality is Lago Codajás in the Amazon River Basin, but Flavio Lima (pers. com.) stated that the species is found in forest streams. Rare. NE. First record.

Moenkhausia copei (Steindachner 1882)—Cope's Tetra
Museum records: 81. AUM 48423. Omnivore. Type locality: Santarém, Amazon River, Pará, Brazil. This species was originally described in *Tetragonopterus*. It has been reported from the Orinoco River Basin as well as the Amazon. It is very similar to *M. collettii*. Common. NE. First record.

Moenkhausia cotinho Eigenmann 1908—Red-eye Tetra
Museum records: 492. ROM 100497. Omnivore. Type locality: probably from around Manaus in the Amazon River Basin. This species is similar to *M. oligolepis*. It has been reported from many Amazon River drainages, as well as from the Orinoco and the Guianas. Common. NE.

Moenkhausia dichroua (Kner 1858)

—Slender Two-spot Tetra

Museum records: 61. ANSP 190616. Omnivore. Type locality: Brazil. This species was described in *Tetragonopterus*. It has been reported from the Amazon, Orinoco, and Paraguay River Basins, but may be a complex of cryptic species. Common. NE. First record.

Moenkhausia grandisquamis (Müller & Troschel 1845)

—Bigscale Tetra

Museum records: 34. ANSP 175605. Omnivore. Type locality: Suriname. This species was originally described in *Tetragonopterus*. Common. NE.

Moenkhausia jamesi Eigenmann 1908—James' Tetra

Museum records: 41. ANSP 190618. Omnivore. Type locality: Iça, Obidos, Lago do Maximo, Tajapuru, Amazon River, Brazil. NE. First record.

Moenkhausia lata Eigenmann 1908—Slender Tetra

Museum records: 1. INHS 49513. Omnivore. Type locality: northern part of Tapajós River drainage, Pará, Brazil. This species was originally described as a subspecies: *M. lepidurus latus*. It has been reported from the Amazon, Tapajós, Madeira and Oyapock river basins. Rare. NE.

Moenkhausia cf. lepidura (Kner 1858)—Slender Tetra

Museum records: 345. ANSP 175587. Omnivore. Type locality: Rio Guaporé, Rio Madeira, Rio Amazonas basin, Brazil. According to Marinho & Langeani (2016) there are no true *M. lepidura* in Guyana. The species is found in the Amazonas lowlands, including the Tocantins-Araguaia, Madeira, Negro, and lower portions of the Tapajós and Trombetas rivers, and the Orinoco River Basin. Lookalike species are found in most other river basins of South America. Common. NE.

Moenkhausia megalops (Eigenmann 1907)—Bigeye Tetra

Museum records: 48. ANSP 176991. Omnivore. Type locality: Itaituba, Tapajós River Basin, Brazil. This species was originally described in *Astyanax*. It has been reported from other Amazonian tributaries, the Orinoco, and the Guianas. Common. NE. First record.

Moenkhausia miangi Steindachner 1915

—Miangi Tetra, Curuku

Museum records: 0. Included based on occurrence in upper Branco River system. Omnivore. Type locality: Miang River on the border between Venezuela and Brazil. Rare. NE.

Moenkhausia oligolepis (Günther 1864)—Red-eye Tetra

Museum records: 216. AUM 38921. Omnivore. Type

locality: Guyana. This species was originally described in *Tetragonopterus*. It has been reported from throughout South America. Common. NE.

Moenkhausia shideleri Eigenmann 1909

—Shideler's Tetra

Museum records: 8. ANSP 177002. Omnivore. Type locality: lower Essequibo River at Bartica, Guyana. Rare. LC. Endemic.

Parapristella aubynei (Eigenmann 1909)

—Aubyne's Characin

Museum records: 60. ROM 96284. Omnivore. Type locality: Majaica River Basin, at Lama Stop-Off, in coastal Guyana. Common. NE. Endemic.

Phenacogaster carteri (Norman 1934)

—Carter's Characin

Museum records: 6. ROM 95953. Omnivore. Type locality: Forest stream tributary to the Cuyuni River, Guyana. This species was originally described in *Vesicatrux*. Identification of *Phenacogaster* species is complicated due to sexual dimorphism regarding size and presence of the humeral spot and interspecific individual variation. Rare. DD. Endemic.

Phenacogaster maculoblondus Lucena & Malabarba

2010—Oblong Spot Characin

Museum records: 1. ANSP 168092. Omnivore. Type locality: Caño Caballepe, 1 kilometer from Tumeremo, Rio Cuyuni/Essequibo system, 7°17'N, 61°30'W, Bolivar, Venezuela. There are doubtful records from the Orinoco River Basin in Venezuela and Colombia. Rare. NE. First record.

Phenacogaster megalostictus Eigenmann 1909

—Bigspot Characin

Museum records: 135. ROM 61442. Omnivore. Type locality: Tumatumari, Lower Potaro River, Essequibo Basin, Guyana. Common. LC. Endemic.

Phenacogaster microstictus Eigenmann 1909

—Smallspot Characin

Museum records: 96. ANSP 190567. Omnivore. Type locality: Tumatumari, Lower Potaro River, Essequibo Basin, Guyana. Common. LC. Endemic.

Phenacogaster simulata Lucena & Malabarba 2010

—Mimic Characin

Museum records: 6. ROM 72774. Omnivore. Type locality: Tukeit Falls, lower Potaro River drainage, near Mahdia, 5°12'18"N, 59°26'55"W, Potaro-Siparuni, Guyana. Rare. EN. Endemic.

Poptella brevispina Reis 1989

—Silver Quarter Characin, Silver Bait

Museum records: 21. AUM 59137. Omnivore. Type locality: Apeu Creek, Boa Vista, Castanhal, Pará, Brazil (upper Branco River drainage). It has also been reported from the Orinoco River Basin. Rare. NE.

Poptella compressa (Günther 1864)

—Silver Quarter Characin, Silver Bait

Museum records: 152. ANSP 175669. Omnivore. Type locality: Essequibo River, Guyana. It has also been reported from the Amazon and Orinoco River Basins. Common. NE.

Poptella longipinnis (Popta 1901)

—Silver Quarter Characin, Silver Bait

Museum records: 38. ROM 101777. Omnivore. Type locality: below Nickerie, between le Manilie-kreek and l'Arrawarra, Suriname. *Gymnocorymbus nemopterus* Fowler 1914, described from the Rupununi River in Guyana, is a synonym. Common. NE.

Pristella maxillaris (Ulrey 1894)—X-ray Tetra

Museum records: 121. ANSP 134928. Omnivore. Type locality: Brazil. This species was described originally in the genus *Aphyocara* (an error that should have been *Aphyocharax*). *Pristella riddlei* (originally in the genus *Holopristes*) Meek 1907, from the lower Orinoco River Basin in Venezuela, is currently considered to be a synonym. Common. LC.

Roeboides affinis (Günther 1868)—Scale-eater, Glassfish
Museum records: 1. USNM 224808. Lepidophage/Carnivore. Type locality: Río Huallaga, Amazon River Basin, Peru. The lone specimen identified as this species is from the Piara River near Lethem, an Amazon River tributary.

Roeboides thurni Eigenmann 1912

—Thurn's Scale-eater, Glassfish

Museum records: 98. ANSP 190572. Lepidophage/Carnivore. Type locality: Rockstone sandbank, Essequibo River Basin, Guyana. NE. Endemic.

Serrabrycon magoi Vari 1986—Mago's Characin

Museum records: 9. ROM 85402. Type locality: lower part of Caño Manu, tributary of Rio Negro, Amazon River Basin about 2°00'N, 66°57'W, Negro River Department, Amazonas State, Venezuela. It is also recorded from the Orinoco River Basin. Rare. NE. First record.

Serrapinnus gracilis (Géry 1960)—Slender Tetra

Museum records: 99. ROM 86498. Type locality: Sable Creek, upper Mana River drainage, French Guiana. This

species was described in the genus *Cheirodon* and later placed in *Odontostilbe*. Common. LC. First record.

Tetragonopterus argenteus Cuvier 1816—Silver Tetra

Museum records: 36. ANSP 190547. Type locality: No locality nor type specimens are known. It has been reported from many places in South America in the Amazon, Essequibo, Orinoco, Parnaíba, Jaguaribe, Paraguay and lower Paraná River Basins. Common. NE.

Tetragonopterus chalceus Spix & Agassiz 1829

—Copper Tetra

Museum records: 141. ANSP 195250. Type locality: lower Amazon River Basin, mouth of the Uruará Canal at Vira Sebo, Canaã Village, Prainha City, Pará State, Brazil, 01°53'33"S, 53°29'17"W. Amazon and Orinoco River Basins and the Guianas. Common. NE.

Tetragonopterus georgiae (Géry 1965)—Georgia's Tetra

Museum records: 8. ANSP 176998. Omnivore. Type locality: Middle Mana River, between "Saut-Chien" and "Saut-Topi-Topi", Suriname. It is also reported from the Orinoco River Basin in Venezuela, the Essequibo River Basin in Guyana, French Guiana and Amapá State, Brazil. Rare. LC. First record.

Tetragonopterus rarus (Zarske, Géry & Isbrücker

2004)—Rare Tetra

Museum records: 4. ANSP 177000. Type locality: air strip one day upstream of Oelemari Rapids in Oelemari River, Marowijne, Suriname. It occurs in the Courantyne River that forms the border between Guyana and Suriname, the Marowijne River Basin, the Rio Jari, and the Rio Paru of the Amazon River Basin in northern Brazil. In Guyana it has been found in the Siparuni, Rupununi and Kuyuwini River Basins. It was described in the genus *Moenkhausia*. Rare. NE. First Record.

Thrissobrycon sp.—Herring Tetra

Museum records: 1. ROM 64729. This is a tentative identification of the only collection from Guyana. *Thrissobrycon pectinifer* Böhlke 1953, described from the middle Rio Negro of Brazil (Amazon Basin) is the only known species in the genus. Rare. NE. First record.

Actinopterygii: Characiformes: Chilodontidae

Caenotropus labyrinthicus (Kner 1858)

—Labyrinth Headstander

Museum records: 50. ANSP 170184. Detritivore/Invertivore. Type locality: Rio Branco and mouth of River Negro, Amazon River Basin, Brazil. It was described in

the genus *Microdus*. *Chilodus labyrinthicus rupununi*, from the Rupununi River (Essequibo Basin) is currently considered a synonym. It occurs throughout the Essequibo, Orinoco, and Amazon River Basins. Common. NE.

Caenotropus maculosus (Eigenmann 1912)

—Spotted Headstander

Museum records: 52. ANSP 39695. Detritivore/Invertivore. Type locality: Creek below Potaro Landing, Guyana. It was described in the genus *Tylobronchus*. Widespread through all portions of the Guianas, and also occurring in Venezuela. Common. NE.

Chilodus punctatus Müller & Troschel 1844

—Spotted Headstander

Museum records: 45. AUM 48313. Detritivore/Invertivore. Type locality: Lake Amuku, upper Essequibo River system, Guyana. *Citherinus chilodus Valenciennes* 1850 is a synonym. Widespread in cis-Andean South America, including the Orinoco and Amazon River Basins. In the Guianas it occurs in the Essequibo through Courantyne basins. Common. NE.

Actinopterygii: Characiformes: Crenuchidae

Ammocryptocharax lateralis (Eigenmann 1909)

—Blackstripe Tropical Darter

Museum records: 11. ROM 97581. Benthic invertivore. Type locality: Amatuk, Potato River, Guyana. It is known from the Mazaruni, Potaro and Burro-Burro River drainages in Guyana. A report of *A. elegans* Weitzman & Kanazawa 1976 from Guyana (Lasso et al., 2008) is a misidentification of this species. Rare. Endemic. LC.

Ammocryptocharax minutus Buckup 1993

—Dwarf Tropical Darter

Museum records: 1. ROM 86318. Benthic invertivore. Type locality: Urubaxi River, beach near confluence with Rio Negro, Amazonas State, Brazil, 0°35'S, 64°45'W. It has also been reported from the upper Orinoco River in Venezuela and the upper Río Negro in Brazil. Rare. NE. First record.

Ammocryptocharax vintonae (Eigenmann 1909)

—Vinton's Tropical Darter

Museum records: 55. ROM 89718. Benthic invertivore. Type locality: Shrimp Creek, lower Potaro River drainage, Guyana. The spelling of this species was originally *A. vintoni*. It is found in the Potaro, Mazaruni, Burro-Burro and Uairen rivers of Guyana and Venezuela. Common. NE. Endemic.

Characidium amaila Lujan, Agudelo-Zamora, Taphorn, Booth & López-Fernández 2013—Amaila Tropical Darter. Museum records: 10. ROM 94986. Benthic invertivore. Type locality: confluence of the Amaila and Kuribrong rivers immediately above Amaila Falls, upper Kuribrong River drainage, Potaro River Basin, Region 8, Guyana, 5°22'33"N, 59°33'01"W. This species only occurs in the upper Kuribrong River, Guyana. Rare. NE but Endangered due to its small range and restricted habitat and potential impacts of gold mining and a planned dam at Amaila Falls. Endemic.

Characidium boavistae Steindachner 1915

—Boavista Tropical Darter

Museum records: 8. AUM 36964. Benthic invertivore. Type locality: Rio Branco, Amazon River Basin, northern Brazil. Rare. NE. First record.

Characidium crandellii Steindachner 1915

—Crandell's Tropical Darter

Museum records: 16. AUM 28184. Benthic invertivore. Type locality: Miang River, Cotingo-Tacutu River Basin, Roraima State, Brazil. It occurs in the upper Branco (Amazon) River Basin and tributaries in Guyana, the upper portions of right-bank (southern) tributaries of the Orinoco River, and the Essequibo River Basin. It was redescribed by Armbruster et al. (2021). Rare. NE. First Record.

Characidium duplicatum Armbruster, Lujan & Bloom

2021—Duplicate Tropical Darter

Museum records: 3. CSBD F3614. Benthic invertivore. Type locality: rapids at Grass Shoals, Kuribrong River, Potaro-Essequibo River Basin, Region 8 (Potaro-Siparuni), Guyana, 05.40791, -059.53179. Rare. Endemic. NE, but possibly endangered due to small range and gold mining impacts.

Characidium hasemani Steindachner 1915

—Haseman's Tropical Darter

Museum records: 26. AUM 28028. Benthic invertivore. Type locality: Surumi River at Serra do Melho, Brazil, and Rupununi River, Guyana. This species occurs in Amazon River tributaries in Brazil and Guyana. Common. NE. First Record.

Characidium pellucidum Eigenmann 1909

—Translucent Tropical Darter

Museum records: 12. ROM 102192. Benthic invertivore. Type locality: Gluck Island, Essequibo River, Guyana. It has also been reported from the Orinoco River Basin and the other Guianas. Rare. LC.

Characidium pteroides Eigenmann 1909

—Dwarf Tropical Sand Darter

Museum records: 82. ANSP 197725. Benthic invertivore. Type locality: Konawaruk, Essequibo River Basin, Guyana. It also occurs in the Amazon and Orinoco River Basins. Common. LC.

Characidium steindachneri Cope 1878

—Steindachner's Tropical Darter

Museum records: 94. AUM 49671. Benthic invertivore. Type locality: Amazon River, Peru. It is reported to have a widespread range in the Amazon, Orinoco and Essequibo River Basins. *Characidium catenatum* Eigenmann 1909, described from the Essequibo River at Waraputa Falls, Guyana is considered a synonym. Rare. NE.

Characidium wangyapoik Armbruster, Lujan & Bloom

2021—Ireng River Tropical Darter, Wangyapoik

Museum records: 13. CSBD F-3615. Benthic invertivore. Type locality: Ireng River, first shoal upriver of confluence with Sukwabi Creek, Amazon River Basin, Potaro-Siparuni (Region 8), Guyana (border with Brazil), 5.07711, -59.97423. Only known from upper Ireng River on the border between Guyana and Brazil (Amazon River Basin). NE.

Characidium zebra Eigenmann 1909

—Zebra Tropical Darter

Museum records: 64. ROM 85947. Benthic invertivore. Type locality: Maripicru Creek, Ireng River, Amazon River Basin, Guyana. This is a member of a species complex of tropical darters with vertical bars along the body. It has been reported from throughout tropical South America but will likely be split into many species as studies advance. Common. NE.

Crenuchus spilurus Günther 1863—Sailfin Tetra

Museum records: 77. ROM 100127. Carnivore. Type locality: Essequibo River, Guyana. It occurs in the Orinoco, Amazon and Essequibo River Basins and the Guianas. Common. NE.

Elachocharax geryi Weitzman & Kanazawa 1978

—Gery's Pygmy Tropical Darter

Museum records: 2. AUM 38409. Carnivore. Type locality: Lago Paricatuba, Rio Negro, Amazonas State, Brazil, 3°07'S, 60°30'W. It occurs in the Orinoco and Amazon River Basins. Rare. NE. First Record.

Elachocharax junki (Géry 1971)

—Junk's Pygmy Tropical Darter

Museum records: 5. AUM 50291. Carnivore. Type locality: Rio Novo, Madeira River Basin, Amazon River Basin,

Rondônia State, Brazil, 8°46'S, 63°30'W. It has also been reported from the Orinoco River Basin in Venezuela. Rare. NE. First Record

Melanocharacidium blennioides (Eigenmann 1909)

—Black Blenny Tropical Darter

Museum records: 39. ANSP 175442. Benthic invertivore. Type locality: Erugin River, tributary of Potaro River above Kangaruma, Essequibo River Basin, Mazaruni-Potaro District, Guyana. It occurs in the Essequibo River Basin and throughout the Guianas. Records from Bolivia are dubious. Rare. NE.

Melanocharacidium depressum Backup 1993

—Flat Black Tropical Darter

Museum records: 8. AUM 48539. Benthic invertivore. Type locality: Rio Uatuma, Amazon River Basin, Amazonas, Brazil, circa 2°10'S, 59°30'W. It also occurs in the Orinoco River Basin and throughout the Guianas. Rare. NE. First Record.

Melanocharacidium dispilomma Backup 1993

—Two-spot Black Tropical Darter

Museum records: 46. ANSP 175444. Benthic invertivore. Type locality: Cachoeira Morena, Rio Uatuma, Amazonas State, Brazil, circa 2°10'S, 59°30'W. It also occurs in the Orinoco River Basin and throughout the Guianas. Common. NE. First Record.

Melanocharacidium nigrum Backup 1993

—Black Tropical Darter

Museum records: 7. AUM 36963. Benthic invertivore. Type locality: Mucajaí River upstream of Paredao Island, Branco-Amazon River Basin, Roraima State, Brazil. It also occurs in the Orinoco River Basin and throughout the Guianas. Rare. NE. First Record.

Melanocharacidium pectorale Backup 1993

—Bigfin Black Tropical Darter

Museum records: 14. AUM 36960. Benthic invertivore. Type locality: Morena waterfall, Uatuma River, Amazonas Atate, Brazil, circa 2°10'S, 59°30'W. It also occurs in the Orinoco River Basin and throughout the Guianas. Rare. NE. First Record.

Microcharacidium eleotrioides (Géry 1960)

—Pygmy Tropical Darter

Museum records: 4. ROM 91461. Benthic invertivore. Type locality: Little brook between St. Patawa and St. Grand Bacou, Middle-Mana, French Guiana, between 4°N-5°N, 53°W-54°W. It occurs throughout the Guianas and in the Amazon River Basin. Rare. NE. First Record.

Poecilocharax bovaliorum Eigenmann 1909

—Black Morpho Tetra

Museum records: 67. ROM 91496. NE. Carnivore. Type locality: Creek at Savannah Landing, upper Potaro River drainage, Guyana. The original spelling of this species was *bovalii*. Common. VU. Endemic.

Skiocharax meizon Presswell, Weitzman & Bergquist

2000—Pink Tetra

Museum records: 23. ROM 83704. Carnivore. Type locality: upstream of Aruwai Falls, Mazaruni River drainage, Guyana, circa 6°18'46"N, 60°35'41"W. Although originally also reported from the lower Berbice River, it is unlikely this species occurs outside the upper Mazaruni River drainage. Rare. NE. Endemic.

Actinopterygii: Characiformes: Ctenoluciidae*Boulengerella cuvieri* (Spix & Agassiz 1829)

—Bicuda, Orange-Tailed Pike Characin, Swordfish

Museum records: 92. ANSP 175382. Carnivore. Type locality: Rivers of Brazil. It occurs in the Amazon and Orinoco River Basins and throughout the Guianas. Common. NE.

Boulengerella lucius (Cuvier 1816)

—Bicuda, Pike Characin, Swordfish

Museum records: 5. AUM 36760. Carnivore. Type locality: Brazil. Amazon, Orinoco, and the Guianas. Rare. NE. First Record.

Actinopterygii: Characiformes: Curimatidae*Curimata cyprinoides* (Linnaeus 1766)

—High-fin Curimata, Catacari, Katkari

Museum records: 91. ROM 96122. Detritivore. Type locality: unknown location in Brazil. This species is ubiquitous throughout cis-Andean South American, including throughout the Guianas. Common. NE.

Curimata roseni Vari 1989

—Rosen's Curimata, Catacari, Katkari

Museum records: 12. AUM 27921. Detritivore. Type locality: Cachoeira do Bem Querer, Rio Branco, Brazil. Widely distributed in the Amazon and Orinoco drainages. In the Guianas, known only from the Branco, Essequibo, and Demerara River Basins. Rare. NE.

Curimata vittata (Kner 1858)

—Barred Curimata, Catacari, Katkari

Museum records: 5. ANSP 176828. Detritivore. Type locality: Río Guaporé, Bolivia. Though this species

occurs widely throughout the Amazon and Orinoco River Basins, in the Guianas it is known from only a handful of collections in the Essequibo River Basin. Rare. NE.

Curimatella alburnus (Müller & Troschel 1844)

—Silvery Dwarf Curimata

Museum records: 17. ANSP 182223. Detritivore. Type locality: Lake Amucu, Guyana. This species is often incorrectly listed as *C. alburna*. In Guyana, this Amazonian species occurs only in the southwestern watersheds with a direct connection to the Rio Branco. Rare. NE.

Curimatella immaculata (Fernández-Yépez 1948)

—Spotless Dwarf Curimata

Museum records: 58. ANSP 175490. Detritivore. Type locality: Obidos in the Brazilian Amazon. This species is ubiquitous in the Amazon, Orinoco, and Essequibo River Basins. Common. NE.

Curimatopsis cryptica Vari 1982

—Redtail Dwarf Curimata

Museum records: 59. ROM 86011. Detritivore. Type locality: Stream 2 kilometers east of Lake Amucu, Rupununi District, Guyana. The species occurs commonly in the Amazon and Orinoco systems as well as throughout the Guianas. Museum specimens identified as *C. macrolepis* from the Essequibo and other coastal rivers in the Guianas are misidentifications of *C. cryptica*. According to Bruno Melo (pers. comm.) *C. macrolepis* is known from the Branco River in Brazil, so it may also occur in tributaries of that river in Guyana. Common. NE.

Cyphocharax festivus Vari 1992—Dwarf Curimata

Museum records: 84. ROM 63665. Detritivore. Type locality: Caños entering Río Nanay, northeast of Iquitos, Peru. This species has a purportedly wide geographic range spanning the Amazon and Orinoco as well as the Essequibo and Berbice systems in Guyana. Given the long distance to the type locality in the upper Amazon, there is some doubt as to whether the Guyanese and Peruvian fishes are truly conspecific. Common. NE.

Cyphocharax helleri (Steindachner 1910)

—Dwarf Curimata

Museum records: 24. ROM 101643. Detritivore. Type locality: upper Suriname River. This species is widely distributed throughout the Guianas, including Brazil's Amapá state and Venezuela's portion of the Cuyuni system. Common. NE.

Cyphocharax leucostictus (Eigenmann & Eigenmann 1889)—Whitespot Dwarf Curimata

Museum records: 3. AUM 36930. Detritivore. Type locality: Vicinity of Manaus, Rio Negro, Amazon system. This species is known primarily from the Amazon, but also occurs in coastal rivers of Amapá State in Brazil. In southwestern Guyana, three museum lots are known from the Takutu and Rupununi regions. Rare. NE.

Cyphocharax microcephalus (Eigenmann & Eigenmann 1889)—Dwarf Curimata

Museum records: 49. AUM 48316. Detritivore. Type locality, unknown location in Suriname. This species has been reported from many of the coastal rivers of Guyana and Suriname, where it appears limited to middle and downstream reaches. Its occurrence in French Guiana is unconfirmed. Common. NE.

Cyphocharax spilurus (Günther 1864)
—Spottail Dwarf Curimata

Museum records: 209. ROM 95903. Detritivore. Type locality: Essequibo River, Guyana. It has been reported, probably mistakenly in most cases, from throughout tropical South America. Common. NE.

Psectrogaster ciliata (Müller & Troschel 1844)
—Sawbelly Curimata

Museum records: 15. AUM 27753. Detritivore. Type locality: Essequibo River, Guyana. The species does not occur elsewhere in the Guianas but has been reported from throughout the Amazon and Orinoco River Basins. Rare. NE.

Psectrogaster essequibensis (Günther 1864)
—Essequibo Sawbelly Curimata

Museum records: 33. ROM 63601. Detritivore. Type locality: Essequibo River, Guyana. In Guyana it has also been reported from the Berbice system. Elsewhere it occurs widely in the Amazon, and there are a few records from the Orinoco and Cuyuni river systems in Venezuela. Common. NE.

Steindachnerina argentea (Gill 1858)
—Silvery Dwarf Curimata

Museum records: 3. ANSP 167886. Detritivore. Type locality: Trinidad Island. It has been reported from the Orinoco River Basin and other nearby coastal rivers of the region. The three museum lots assigned to this species from Guyana are all in the Essequibo system, including one at the border with Venezuela along the Cuyuni. Rare. LC. First record.

Steindachnerina guentheri (Eigenmann & Eigenmann 1889)—Guenther's Dwarf Curimata

Museum records: 48. ROM 86942. Detritivore. Type locality: Tabatinga, Amazonas, Brazil. This species is reported widely throughout the Amazon and Orinoco systems. In Guyana it occurs frequently in the Arau, Barama and Waini rivers of the extreme northwest, as well as the Berbice. There are a handful of records in the Essequibo. Common. NE.

Steindachnerina planiventris Vari & Williams Vari 1989—Flatbelly Dwarf Curimata

Museum records: 20. AUM 44643. Detritivore. Type locality: near the mouth of the Rio Machado, Rondônia, Brazil. This species is known primarily from the central Amazon, including the Negro and Branco rivers, but also inhabits the upper Essequibo of Guyana in the Rupununi region. Common. NE.

Actinopterygii: Characiformes: Cynodontidae

Cynodon gibbus (Spix & Agassiz 1829)
—Snub-nosed Payara, Dogtooth Characin

Museum records: 33. ROM 84002. Carnivore. Type locality: Lago Manacapuru, Amazonas State, Brazil. Amazon, Orinoco, and the Guianas. Common. NE.

Cynodon septenarius Toledo-Piza 2000
—Dogtooth Characin

Museum records: 2. ROM 101254. Carnivore. Type locality: Rio Tefé, supia-Pacu, between 3°40' and 4°20'S, 65°50' and 65°10'W, Amazonas, Brazil. This species is common in the Amazon and Orinoco River Basins and the Guianas. Rare. NE.

Hydrolycus armatus (Jardine 1841)—Biara, Payara
Museum records: 24. ANSP 175725. Carnivore. Type locality: Sandbars in vicinity of Maipuri campsite, 4°34'N, 58°35'W, Essequibo River, Guyana. It occurs in the Amazon and Orinoco River Basins. Common. NE.

Hydrolycus scomberoides (Cuvier 1819)—Biara, Payara
Museum records: 9. ANSP 179627. Carnivore. Type locality: Brazil. This species is only present in the Amazon River tributaries of Guyana. Rare. NE.

Hydrolycus tatauaia Toledo-Piza, Menezes & Santos 1999—Red-tailed Biara, Red-tailed Payara
Museum records: 15. ANSP 175724. Carnivore. Type locality: Rio Xingu, Belo Monte, 3°10'S, 51°50'W, Pará, Brazil. It has been reported from the Amazon and Orinoco River Basins and the Guianas. Rare. NE.

Rhaphiodon vulpinus Spix & Agassiz 1829—Biara Museum records: 2. ROM 76811. Carnivore. Type locality: Mouth of Uruará canal to Amazon River, at Vira Sebo community, Canaã Village, Prainha City, Pará State, Brazil, 01°53'33"S, 53°29'17"W. It occurs in the Amazon and Orinoco River Basins and throughout the Guianas. Rare. NE.

Actinopterygii: Characiformes: Erythrinidae

Erythrinus erythrinus (Bloch & Schneider 1801)
—Yarrow

Museum records: 89. ANSP 176712. Carnivore. Type locality: Suriname. This species has been reported from Argentina to Colombia. It is probably a complex of cryptic species. *Erythrinus longipinnis* Günther, described from the Essequibo River, is considered a synonym. Common. NE.

Hoplerythrinus unitaeniatus (Spix & Agassiz 1829)
—Yarrow, Black stripe Yarrow

Museum records: 48. ROM 96169. Carnivore. Type locality: Rio São Francisco, Brazil. This species has been reported from Argentina to Colombia. It is probably a complex of cryptic species. Common. NE.

Hoplias aimara (Valenciennes 1847)—Aimara Museum records: 63. ANSP 176725. Carnivore. Type locality: Cayenne, French Guiana. *Hoplias macrophthalmus* is a synonym. This species occurs throughout northeastern South America. Common. NE.

Hoplias curupira Oyakawa & Mattox 2009—Aimara Museum records: 17. FMNH 50115. Carnivore. Type locality: Rio Itacaiúas, Caldeirão, Serra dos Carajás, 5°45'S, 50°30'W, Tocantins River Basin, Pará State, Brazil. It has been reported from the Amazon and Orinoco River Basins and throughout the Guianas. Rare. NE.

Hoplias malabaricus (Bloch 1794)—Huri, Trahira, Hourí Museum records: 238. AUM 35195. Carnivore. Type locality: The originally published type locality of "Tranquebar" was an error, and it is now believed that it was probably Suriname (Paepke 1999). This species probably consists of several cryptic species. Common. LC.

Actinopterygii: Characiformes: Gasteropelecidae

Carnegiella strigata (Günther 1864)
—Marbled Hatchetfish, Hatchetfish

Museum records: 130. ANSP 176636. Carnivore. Type locality: None given, but Fraser-Brunner (1950) considered

the type specimens of Günther to be from the Amazon River Basin. This species is reported from all over South America. *Carnegiella strigata vesca* Fraser-Brunner 1950, described from the Mazaruni River, Guyana is considered a synonym. Common. NE.

Gasteropelecus sternicla (Linnaeus 1758)
—River Hatchetfish, Hatchetfish

Museum records: 67. ANSP 176636. Carnivore. Type locality: Suriname. This species is reported from all over South America. *Gasteropelecus sternicla morae* Hoedeman 1952, described from Mora Passage, Guyana, is considered a synonym. Common. NE.

Actinopterygii: Characiformes: Hemiodontidae

Argonectes longiceps (Kner 1858)
—False Hemiodus, Eartheater Hemiodus

Museum records: 8. ANSP 175425. Omnivore: insects, plant material, and detritus. Type locality: Icanno, Brazil. Widespread in South America. Rare. NE. First Record.

Bivibranchia bimaculata Vari 1985
—Twospot Bivibranchia

Museum records: 6. ANSP 200005. Omnivore: detritus. Type locality: Rocky pool in the center of Courantyne River at "Camp Hydro", Nickerie District, Suriname, circa 3°42'N, 57°58'W. Rare. NE. First record.

Bivibranchia fowleri (Steindachner 1908)
—Fowler's Bivibranchia

Museum records: 92. ROM 96067. Omnivore: detritus. Type locality: Amazon River Basin. In older literature this species is identified as *B. protractila* Eigenmann 1912 (type locality Bartica, Essequibo River) which is now considered a synonym. Reported from throughout tropical South America. Common. NE.

Hemiodus argenteus Pellegrin 1909—Silver Hemiodus Museum records: 29. ROM 95011. Omnivore: plant matter, detritus, algae, and meiofauna. Type locality: Orinoco River, Venezuela. It has been reported from throughout the Amazon Basin and the Guianas. Common. NE.

Hemiodus gracilis group Günther 1864
—Graceful Hemiodus

Museum records: 6. ANSP 200009. Omnivore: plant matter, detritus, algae, and meiofauna. Type locality: Cupai or Cupari River, Tapajós River Basin, Amazon basin, Pará State, Brazil. It has been reported from the Amazon and Orinoco basins and the Guianas. Rare. NE. First Record.

Hemiodus microlepis Kner 1858—Small-scale Hemiodus
Museum records: 30. ROM 88481. Omnivore: plant matter, detritus, algae, and meiofauna. Type locality: Guaporé in Mato Grosso or Manaus, Brazil. It occurs in the Amazon and Orinoco River Basins and the Guianas. Common. NE.

Hemiodus quadrimaculatus Pellegrin 1909
—Barred Hemiodus, Four-barred Hemiodus
Museum records: 61. AUM 62876. Omnivore: plant matter, detritus, algae, and meiofauna. Type locality: Camopi River in French Guiana. It has been reported from Guyana, Suriname and adjacent Brazil. Common. NE.

Hemiodus semitaeniatus Kner 1858—Halfline Hemiodus
Museum records: 37. AUM 38765. Omnivore: plant matter, detritus, algae, and meiofauna. Type locality: Rio Guaporé, Amazon system, Brazil. Reported from all over South America. Probably a group of cryptic species. Common. NE.

Hemiodus thayeria Böhlke 1955—Thayer's Hemiodus
Museum records: 8. ROM 86344. Omnivore: plant matter, detritus, algae, and meiofauna. Type locality: Negro River, Amazon River Basin, at Brazil-Colombia border, about 1°12'N, 66°51'W. It has been reported from the Orinoco River Basin and the Guianas. Rare. NE. First record.

Hemiodus unimaculatus (Bloch 1794)
—One-spot Hemiodus
Museum records: 113. ANSP 131530. Omnivore: plant matter, detritus, algae, and meiofauna. Type locality: Brazil, Suriname (probably upper Amazon River Basin). It has been reported from the Orinoco River Basin and the Guianas. It probably is a group of cryptic species as shown by Nogueira et al. (2020). Common. NE.

Hemiodus vorderwinkleri (Géry 1964)
—Vorderwinkler's Hemiodus, Three-bar Hemiodus
Museum records: 3. ROM 76804. Omnivore: plant matter, detritus, algae, and meiofauna. Type locality: upper Amazon River near Leticia, Colombia. Rare. NE.

Actinopterygii: Characiformes: Iguanodectidae

Bryconops affinis (Günther 1864)
—Orangefin Bryconops, Sardinia, Sardine
Museum records: 199. ANSP 176606. Omnivore. Type locality: Guyana. It is also reported from the Amazon and Orinoco River Basins and the other Guianas. Common. NE.

Bryconops alburnoides Kner 1858—Sardinia, Sardine
Museum records: 19. AUM 47841. Omnivore. Type

locality: Rio Guaporé, Rio Madeira basin, Brazil. It is also reported from the Amazon and Orinoco River Basins and the other Guianas. NE. First Record.

Bryconops caudomaculatus (Günther 1864)
—Tailspot Tetra, Sardinia, Sardine
Museum records: 159. AUM 62867. Omnivore. Type locality: probably Guyana. It has been reported from all over South America but probably is a group of cryptic species. Common. NE.

Bryconops colaroja Chernoff & Machado-Allison 1999
—Redtail Bryconops, Sardinia, Sardine
Museum records: 1. ROM 93572. Omnivore. Type locality: Río Carrao near base camp at Angel Falls, Bolivar, Venezuela (upper Caroní River, Orinoco River Basin). LC. First Record.

Bryconops giacopinii Fernández-Yépez 1950
—Giacopini's Bryconops, Sardinia, Sardine
Museum records: 9. ROM 95993. Omnivore. Type locality: Raudal de Pereza, southwest of Cerro Autana, Río Autana, about 8 km above confluence with the Sipapo River, about 4°44'N, 67°37'W, Amazonas, Venezuela. It has also been reported from the Amazon River Basin. Rare. NE.

Bryconops magoi Chernoff & Machado-Allison 2005
—Mago's Bryconops, Sardinia, Sardine
Museum records: 4. ROM 83994. Omnivore. Type locality: Río Moquete at Paso Bajito, Orinoco River Basin, Anzoátegui State, Venezuela. It has also been reported from the Amazon River Basin. Rare. NE. First Record.

Bryconops melanurus (Bloch 1794)
—Blacktail Bryconops, Sardinia, Sardine
Museum records: 91. ANSP 126399. Omnivore. Type locality: Suriname. This species also occurs in the Amazon River Basin and throughout the Guianas. Common. NE.

Iguanodectes spilurus (Günther 1864)—Spot-tail Sardine
Museum records: 76. AUM 60690. Omnivore. Type locality: Cupai or Cupari River, Tapajós River drainage, Amazon River Basin, Pará State, Brazil. It also occurs in the Orinoco River Basin and the Guianas. This species was identified as *I. tenuis* by Eigenmann 1912, but that species is now considered a synonym. Common. NE.

Piabucus dentatus (Koelreuter 1763)—Toothy Piabucu
Museum records: 22. ROM 67410. Omnivore. Type locality: Brazil. This species occurs in coastal rivers of the Atlantic coast of NE South America in the Guianas and Brazil. Common. LC.

Actinopterygii: Characiformes: Lebiasinidae

Copella arnoldi (Regan 1912)—Arnold's Splash tetra
Museum records: 24. ROM. 66276. Carnivore. Amazon and Orinoco River Basins and the Guianas. Hardman et al. (2002) identified this species as *C. carsevennensis*, now considered a synonym. Common. NE.

Copella eigenmanni Regan 1912

—Eigenmann's Splash Tetra

Museum records: 2. FMNH 53441. Carnivore. Type locality: probably the Meta River drainage (reported in description as from Bogotá, Colombia, where it does not occur). It is reported from the Orinoco River Basin and the Guianas. One of our Guyana specimens is from the Aruka River, a tributary of the Orinoco River Delta. Rare. NE.

Copella nattereri (Steindachner 1876)

—Spotted Splash Tetra

Museum records: 10. Carnivore. Type locality: mouth of Negro River near Obidos, Brazil. It also occurs in other parts of the Amazon basin, the Orinoco River Basin and the other Guianas. Rare. NE.

Derhamia hoffmannorum Géry & Zarske 2002

—Hoffmans' Derhamia

Museum records: 30. ROM 83702. Carnivore. Type locality: Sandbank at the confluence of the Kamarang River and Mazaruni River, north of Roraima Tepui, NW Guyana. Endemic to the upper Mazaruni River, Guyana. Common. VU. Endemic.

Lebiasina ardilai Netto-Ferreira, López-Fernández,

Taphorn & Liverpool 2013—Ardila's Lebiasina

Museum records: 30. ROM 83711. Omnivore. Type locality: Waruma Creek at campsite, Mazaruni River drainage, Essequibo River Basin, Guyana, 5°28'40.3"N, 60°46'45.3"W. Only verified to occur in the upper Mazaruni River drainage, although a similar species or conspecific population (*Lebiasina* cf. *ardilai*) is known from the nearby upper Kuribrong River drainage (Lujan et al., 2020). Common. VU. Endemic.

Lebiasina unitaeniata (Günther 1864)

—One-spot Lebiasina

Museum records: 1. AUM 35584. Omnivore. Type locality: Guyana. It is found in the Roraima area of Guyana and may be present in adjacent Venezuela and Brazil. Rare. NE.

Lebiasina cf. *uruyensis* Fernández-Yépez 1967

—Uruyen Lebiasina

Museum records: 1. CSBD F-3620. Type locality: Río Uruyén near Auyantepui, Caroní River drainage, Bolívar,

Venezuela. This species, found in tributaries of the Potaro River in Guyana, is very similar if not the same as *L. uruyensis* from neighboring rivers in Venezuela. Rare. NE. First Record.

Nannostomus beckfordi Günther 1872—Golden Pencilfish
Museum records: 11. AUM 28169. Carnivore. Type locality: Coast of Demerara, Guyana and has been reported from the other Guianas and the lower Amazon River Basin. Rare. NE.

Nannostomus digrammus Fowler 1913

—Two-stripe Pencilfish

Museum records: 8. ROM 86513. Carnivore. Type locality: Rio Madeira about 200 miles east of 62°20'W, Brazil. Records from Guyana may be misidentified. It has been reported from many countries in the Amazon River Basin. Rare. NE.

Nannostomus eques Steindachner 1876

—Diptail Pencilfish, Brown Pencilfish

Museum records: 34. ANSP 193254. Carnivore. Type locality: Tabatinga Brazil and Peruvian Amazon. Reported from throughout the Amazon and Orinoco River Basins and the Guianas. Common. NE.

Nannostomus erythrus (Eigenmann 1909)

—Red-finned Banded Pencilfish

Museum records: 17. ROM 86104. Carnivore. Type locality: Rockstone on the Essequibo River, Guyana. It was considered a synonym of *N. trifasciatus* by Weitzman (1966) but revalidated by Zarske (2013). It has been reported from many places in South America, but further study is required to verify specimens from outside the Essequibo River Basin. Rare. NE.

Nannostomus espei (Meinken 1956)—Barred Pencilfish
Museum records: 14. ANSP 73873. Carnivore. Type locality: originally: South America, but Weitzman (1966) selected a lectotype from the Paruma (also spelled Paruma) River in the upper Mazaruni River drainage, Guyana. However, several recent intensive collecting efforts in the upper Mazaruni failed to collect any *Nannostomus* species. The species has been recently collected, however, in the middle Mazaruni. Rare. LC. Endemic.

Nannostomus harrisoni (Eigenmann 1909)

—Blackstripe Pencilfish

Museum records: 41. ANSP 73268. Carnivore. Type locality: canal in Linden (then Christianburg), Guyana. It is also reported, probably erroneously, from the Amazon and Orinoco River Basins. Common. LC. Endemic.

Nannostomus marginatus Eigenmann 1909
—Dwarf Pencilfish

Museum records: 99. AUM 49791. Carnivore. Type locality: Maduni Creek, Majaica River drainage, Guyana. It has been reported from all over South America but is probably a complex of cryptic species. Common. NE.

Nannostomus minimus Eigenmann 1909—Least Pencilfish
Museum records: 28. ROM 91370. Carnivore. Type locality: Erukin, a site above Amatuk, lower Potaro River, Guyana. Only known from the Potaro and Mazaruni River drainages in the Essequibo River Basin. Common. NE. Endemic.

Nannostomus trifasciatus Steindachner 1876
—Three-stripe Pencilfish

Museum records: 42. ROM 65418. Carnivore. Type locality: Amazon River near mouth of Negro River at Tabatinga, Brazil. It has also been reported from the Orinoco River Basin. Common. NE.

Nannostomus unifasciatus Steindachner 1876
—Oneline pencilfish

Museum records: 83. ANSP 193505. Carnivore. Type locality: near mouth of Negro River, Amazon River Basin, Brazil. It has also been reported from the Orinoco River Basin. Common. NE.

Pyrrhulina filamentosa Valenciennes 1847
—Threadfin Pyrrhulina

Museum records: 143. LC. ROM 91485. Carnivore. Type locality: Suriname. It has also been reported from the Orinoco River Basin and French Guiana. Common. LC.

Pyrrhulina stoli Boeseman 1953—Stol's Pyrrhulina
Museum records: 80. ROM 95872. Carnivore. Type locality: coastal rivers in the Wai Wai reserve and the Marowini River Basin, Suriname. It also occurs in French Guiana. Common. LC.

Actinopterygii: Characiformes: Parodontidae

Apareiodon agmatos Taphorn, López-Fernández & Bernard 2008—Broken-line Scrapetooth

Museum records: 24. ROM 93427. Benthic Omnivore. Type locality: Sandy beach on left bank of Mazaruni River, downstream from village of Kamarang, Guyana, 5°56'10"/1°N, 60°36'53.8"W. Endemic to the upper Mazaruni River drainage, Guyana. Rare. NE. Endemic.

Parodon bifasciatus Eigenmann 1912—Two-line Scrapetooth
Museum records: 14. ROM 96231. Benthic Omnivore. Type locality: Maripicru Creek, a tributary of the Ireng

River between Wontyke and Karakara above Karona Falls, Amazon River Basin, Guyana. Possibly endemic to the upper Branco River Basin. Rare. NE.

Parodon guyanensis Géry 1960—Guyana Scrapetooth
Museum records: 24. ANSP 176857. Benthic Omnivore. Type locality: Crique Deux-Branches, Upper Mana, French Guiana. It has also been reported from Suriname and the Orinoco River Basin. Common. NE.

Actinopterygii: Characiformes: Prochilodontidae

Prochilodus nigricans Spix & Agassiz 1829

—Black Prochilodus, Black Flannelmouth, Yakutu

Museum records: 3. ROM 96101. Detritivore. Type locality, Lago Janauacá, along the Rio Solimões, Amazon basin. Though ubiquitous in the Amazon River Basin, in Guyana this species is known only from three specimens lots at ROM, all collected since 2008 in Amazon tributaries in the Rupununi region. Rare. NE. First Record.

Prochilodus rubrotaeniatus Jardine 1841—Red-banded Prochilodus, Red-banded Flannelmouth, Yakutu

Museum records: 78. ANSP 180192. Detritivore. Type locality: Rio Branco, Rio Negro, and Essequibo River, South America. Described originally from a wide geographic swath including the Branco, Negro, and Essequibo Rivers, specimens matching the morphological concept of this species have also been collected in the easterly rivers of the Guianas, including the Courantyne and Marowijne drainages. Molecular phylogenetic analysis (Melo et al., 2016) suggests that the present concept of *P. rubrotaeniatus* is polyphyletic, in that specimens from the latter two river systems form a distinct and distantly related clade that may merit species-level recognition. Common. NE.

Semaprochilodus insignis (Jardine 1841)—Flagtail

Museum records: 2. AUM 36944. Detritivore. Type locality: Branco River, Amazon River Basin, Brazil. It is widespread throughout the Orinoco and Amazon River Basins. In Guyana, it occurs only in the southwestern rivers with a direct connection to the Amazon basin. Rare. NE.

Actinopterygii: Characiformes: Serrasalminae

Catoprion absconditus Mateussi, Melo & Oliveira 2020—Wimple piranha, Pirai

Museum records: 36. AUM 44757. Lepidophage/Carnivore. *Catoprion absconditus* occurs in the Amazon basin, including the Branco, Negro, Japurá, Uatumã, Nhamundá, Trombetas, Tapajós and lower Xingu Rivers, and in the Essequibo basin. Common. NE.

Catoprion mento (Cuvier 1819)—Wimple piranha, Pirai Museum records: 1 ROM 67842. Lepidophage/Carnivore. It feeds on scales and mucus (Nico and Taphorn, 1988). Type locality: Brazil. It was recently divided into two taxa, *C. mento* and *C. absconditus* (Mateussi et al., 2020a). In Guyana it is present in the Orinoco Delta tributaries in the NW corner of the country. It also is reported from the Paraguay, Araguaia, Madeira, Purus, and Orinoco River Basins. Common. NE.

Colossoma macropomum (Cuvier 1816)

—Tambaqui, Tambaque

Museum records: 1. Herbivore. Type locality: Brazil. This fish was introduced to Guyana from Brazil as a food fish, however its natural occurrence in NW Guyana is possible. It occurs in the Amazon and Orinoco River Basins. Rare. NE.

Metynnis altidorsalis Ahl 1923—Silver Dollar Museum records: 4. ROM 64597. Omnivore. Type locality: Paramaribo, Suriname. It is widespread throughout rivers in Suriname and Guyana as well as the Orinoco and Amazon River Basins. Rare. NE.

Metynnis hypsauchen (Müller & Troschel 1844)

—Deep-body Silver Dollar, Silver Dollar

Museum records: 39. ANSP 175747. Omnivore. Type locality: Guyana. It is reported from the Amazon, Orinoco, and Paraguay River Basins. Common NE.

Metynnis lippincottianus (Cope 1870)

—Lippincott's Silver dollar, Silver Dollar

Museum records: 2. AUM 36153. Omnivore: algae, insects, plankton, and plant matter. Type locality: Pará, Brazil. It is widespread throughout rivers in the Guianas, Orinoco, Paraná, Paranaíba, São Francisco, and Amazon rivers. Common. NE. First Record.

Metynnis luna (Cope 1878)

—Fullmoon Silver Dollar, Silver Dollar

Museum records: 16. ROM 86118. Planktivore. Type locality: Amazon River Basin, Peru. It is widespread throughout rivers in the Guianas, Orinoco (by way of Casiquiare & Cuyuni Rivers), and Amazon basins. Rare. NE.

Metynnis cf. orinocensis (Steindachner 1908)

—Orinoco Silver Dollar, Silver Dollar

Museum records: 1. UMMZ 250692. Herbivore. Type locality: Orinoco River at Ciudad Bolívar, Venezuela. Syntypes for this species were presumably lost (Zarske & Géry 1999). It has been reported from the Orinoco River Basin. Some authors consider this species to be a synonym

of *M. hypsauchen*, but further examination is needed (Ota, 2015). Rare. DD. First Record.

Mylesinus schomburgkii Valenciennes 1850—Banded

Silver Dollar, Schomburgk's Silver Dollar, Catabac Museum records: 1. MNHN A-9855 (head). Type locality: Essequibo River, Guyana. This species was described using just a drawing, and the holotype is just a head. No specimens from Guyana have been identified as this species so the reported type locality may be in error. Rare. NE.

Myleus pacu (Jardine 1841)

—Pacu, Packu, Red Pacu, Freshwater Pacu

Museum records: 23. ROM 78720. Herbivore. Type locality: Essequibo River, Guyana, but no types from the original description are known. It has been reported from the Essequibo River, Guyana. The status of this species is questionable, originally described from Schomburgk's drawings by Jardine (1841), synonyms of this taxon may be *Myleus setiger* or *Tometes trilobatus* (Eigenmann 1912) (Andrade et al., 2019b). Jégu and Santos (2002) suggested that *M. pacu* is doubtfully valid. Common. NT. Endemic.

Myleus planquettei (Jégu, Keith & Le Bail 2003)

—Catabac

Museum records: 1. ANSP 179808. Herbivore. Type locality: Maroni River, Twenke, French Guiana. It is reported from northern Guiana Shield basins, including the Essequibo and Marowijne Rivers. This species was formerly placed in *Myloplus* but was recently reassigned to *Myleus* (Kolmann et al., 2020). Rare. VU.

Myleus setiger Müller & Troschel 1844—Catabac

Museum records: 11. UMMZ 215625. Omnivore. Type locality: Guiana. Widespread throughout the Amazon, Orinoco, north and eastern Guiana Shield basins. This taxon presumably holds cryptic diversity, given its broad distribution and signals of molecular divergences among these populations (Machado et al., 2018; Kolmann et al., 2020). *Myletes divaricatus* Valenciennes 1850, described from the Essequibo River is a synonym. Rare. NE

Myloplus asterias (Müller & Troschel 1844)

—Catabac, Starry Catabac

Museum records: 3. ROM 101267. Omnivore. Type locality: Essequibo River, Guyana. Distributed in the Amazon, north and eastern Guiana Shield River Basins. *M. asterias* is the type species for the genus *Myloplus*. *Myletes ellipticus* Günther, described from Guyana, is a synonym. Common. NE.

Myloplus rubripinnis (Müller & Troschel 1844)

—Catabac, Redhook, Pacu

Museum records: 48. ANSP 177319. Omnivore. Type locality: Guyana. Distributed in the Amazon, Orinoco, north and eastern Guiana Shield River Basins. There are presumably cryptic species within *M. rubripinnis*, which is widespread (Machado et al., 2018). *Myletes luna* Valenciennes 1850, described from French Guiana, is a synonym. Common. NE.

Myloplus torquatus (Kner 1858)

—Catabac, Collared Catabac

Museum records: 2. ROM 102709. Omnivore. Type locality: Rio Branco, Marabitanos, Amazonas, Brazil. Distributed in the Amazon, Orinoco, north and eastern Guiana Shield River Basins. Common. NE.

Mylossoma aureum (Spix & Agassiz 1829)

—Golden Morrocut, Silver Morrocut

Museum records: 1. AUM 44625. Omnivore: fruits, seeds, and other plant matter as adults (Goulding, 1980). Type locality: lower Amazon River Basin. Distributed in the Amazon and Orinoco River Basins. Rare. NE

Paramyloplus taphorni (Andrade, López-Fernández & Liverpool 2019)—Taphorn's Catabac

Museum records: 2. CSBD 3611. Omnivore. Type locality: Mazaruni River at mouth of Kurupung River, Guyana, 6°12.8'N, 60°09.4'W. Only known from one tributary of the middle Mazaruni river. Originally described as *Myloplus taphorni*, phylogenomic analyses found it sister to *Paramyloplus ternetzi* and was reassigned to that genus by Kolmann et al. (2020). Rare. NE. Endemic.

Piaractus orinoquensis Escobar L., Ota, Machado-Allison, Andrade-López, Farias & Hrbek 2019

—Morrocut

Museum records: 0. Omnivore. Type locality: Caño Falcón, nearby Camaguan, Laguna La Raya, Guárico, Venezuela, 8°07'N, 67°37'W. This species was reported by Lowe McConnell (1964) to be a favorite food fish in Guyana, and we have photographic records of it, but no museum specimens. In the older literature it was called *P. brachypomus*, a species from the Amazon River Basin (Loubens & Panfili 2001), now reassigned to *P. orinoquensis* in Guyana. Rare. NE.

Prosimyleus rhomboidalis (Cuvier 1818)—Catabac

Museum records: 71. ANSP 177308. Omnivore: fruits, seeds, plants, insects. Type locality: Brazil. Distributed in the Amazon, Orinoco, north and eastern Guiana Shield river basins. It may fill the niche of large frugivorous pacus

where they do not occur in northern and eastern Guiana Shield. Common. NE.

Pygocentrus nattereri Kner 1858

—Red-bellied Piranha, Red Pirai, Cashew Pirai

Museum records: 32. ROM 56229. Carnivore. Type locality: Cuiabá and Mato Grosso, Brazil. Distributed in the Amazon, Paraguay-Paraná, and Essequibo River Basins and northeastern Brazilian coastal rivers. Common. NE.

Pygopristis denticulata (Cuvier 1819)

—Lobed-Toothed Piranha, Pirai

Museum records: 58. UMMZ 249553. Omnivore. Type locality: unspecified locale in Guyana. Distributed in the lower Amazon, Orinoco, northern and eastern Guiana Shield river basins. Aptly named for the double flanking cusplets on their teeth. *Pygopristis fumarius* Müller & Troschel 1844, and *Serrasalmus punctatus* Jardine 1841, both described from Guyana, are synonyms. Common. NE

Serrasalmus altispinis Merckx, Jégu & Mendes 2000

—Pirai, Piranha

Museum records: 3. UMMZ 250776. Carnivore. Type locality: Quarenta Ilhas rapids, Pitinga River, Uatumã basin, Amazonas, Brazil. Distributed in the Amazon River Basin. This species can be mistaken with juvenile *S. rhombeus*; *S. altispinis* has a more concave forehead and taller abdominal serrae profile than *S. rhombeus*. Rare. NE. First Record.

Serrasalmus aureus (Spix & Agassiz 1829)

—Pirai, Piranha

Museum records: 13. UCM 762. Carnivore. Type locality: lower Amazon River Basin. There is some doubt as to whether this species, known from the Amazon, is present in Guyana. The species was previously placed in *Pristobrycon*, which is now considered a synonym of *Serrasalmus* (Kolmann et al., 2020). *Serrasalmus gymnogenys* Günther 1864, described from Guyana, is a synonym. Rare. NE.

Serrasalmus calmoni (Steindachner 1908)—Pirai, Piranha

Museum records: 7. ROM 67439. Carnivore. Type locality: Pará River, Brazil. Distributed in the Amazon, Orinoco, north and eastern Guiana Shield River Basins. Recent molecular phylogenies place *S. calmoni* nested within the *Serrasalmus* clade, requiring its relocation to that genus (Thompson et al., 2014; Kolmann et al., 2020). *Pygocentrus bilineatus* Eigenmann 1909, described from the Aruka River in Guyana, is a synonym. Rare. NE.

Serrasalmus eigenmanni Norman 1929—Pirai, Piranha Museum records: 48. ROM 86351. Carnivore. Type locality: Rockstone, Essequibo River, Guyana. Distributed in the Amazon, Orinoco and north and eastern Guiana Shield River Basins. This taxon presumably holds cryptic diversity, given its broad distribution and molecular divergences among these populations (Kolmann et al., 2020; 2021). Common. NE.

Serrasalmus rhombeus (Linnaeus 1766)

—Redeye piranha, Black piranha, Black Pirai
Museum records: 158. Carnivore. Type locality: This abundant piranha is supposedly present in most major river basins in South America (Hubert et al., 2007a; 2007b), but probably is instead a complex of morphologically similar species. *Serrasalmus niger* Jardine 1841, described from Guyana, is a synonym. Common. NE.

Serrasalmus stagnatilis Jardine 1841—Pirai

Museum records: 0. Although no museum specimens were found for this species, its type locality was given as the upper Essequibo River in Guyana. Because there are no type specimens its identity remains unknown. Rare. NE.

Serrasalmus striolatus (Steindachner 1908)

—Banded False Piranha, Catabac

Museum records: 39. AUM 46494. Omnivore. Type locality: Rio Pará, Brazil. It is reported from the Amazon and Orinoco River Basins and northern and eastern Guiana Shield rivers. It is sister to *Catoprion* and *Pygopristis* and needs a new generic assignment since *Pristobrycon* is paraphyletic (sensu Kolmann et al., 2020), so we have placed the genus in quotation marks. Cryptic species might exist within this taxon, which has a wide distribution (Machado et al., 2018). *Serrasalmus scapularis* Günther 1864, described from the Essequibo River in Guyana is a synonym. Common. NE.

Actinopterygii: Characiformes: Triportheidae

Agoniates halecinus Müller & Troschel 1845

—Dogtooth Characin

Museum records: 19. ANSP 175392. Carnivore. Type locality: Guiana. Widely distributed in the Amazon and Orinoco River Basins. Rare. NE.

Triportheus angulatus (Spix & Agassiz 1829)

—Silver Bait, Basket Fish

Museum records: 6. ANSP 178468. Omnivore. Type locality: lower Amazon River at Ilha do Pregó, opposite Alvarães, Amazonas, Brazil, 3°10'37"S, 64°48.1'W. Although there are records of this species from the Essequibo River, a recent DNA study (Mariguela et al., 2015) shows that it is probably restricted to the Amazon River Basin. Rare. NE.

Triportheus auritus (Valenciennes 1850)

—Silver Bait, Basket Fish

Museum records: 24. USNM 66157. Omnivore. Type locality: Anavilhanas, rio Negro, Amazonas, Brazil, 2°42'S, 60°45'W. It has been reported as well from the Orinoco River Basin and Trinidad. Common. NE.

Triportheus brachipomus (Valenciennes 1850)

—Silver Bait, Basket Fish

Museum records: 57. ROM 86995. Omnivore. Type locality: Mana, French Guiana and Essequibo River, Guyana. This species occurs in the Guianas and is the most common species in Guyana. Common. NE.

Triportheus rotundatus (Jardine 1841)

—Silver Bait, Basket Fish

Museum records: 66. ANSP 176915. Omnivore. Type locality: Amazon River Basin. We suspect that most records of this species from the Essequibo are misidentifications of *T. brachipomus*. Common. LC.

Triportheus venezuelensis Malabarba 2004

—Silver Bait, Basket Fish

Museum records: 2. AUM 47937. Omnivore. Type locality: Barinas, Río Masparro, Apure drainage, 5 kilometers northwest of Libertad on road to Barinas, Venezuela, 8°20'N, 69°39'W. Orinoco River Basin. Rare. NE.

Actinopterygii: Cichliformes: Cichlidae

Acarichthys heckelii (Müller & Troschel 1849)

—Threadfin Acara

Museum records: 71. UMMZ 215534. Omnivore. Type locality: Guyana. Distributed in the Amazon and Essequibo River Basins. Common, especially in southern Guyana. NE.

Acaronia nassa (Heckel 1840)—Bigeye Cichlid, Patwa
Museum records: 106. UMMZ 213633. Omnivore. Type locality: Boca de Juquiá, Rio Guaporé, Mato Grosso State, Brazil. Widespread in the Amazon River and Essequibo River Basins. Common. NE.

Aequidens potaroensis Eigenmann 1912—Krobia, Patwa
Museum records: 96. ROM 61375. Omnivore. Type locality: Amatuk, Potaro River, Essequibo River Basin, Guyana. This species is only found in the Pakaraima Mountains and nearby highlands of Guyana. The species is poorly studied, with phylogenetic analyses suggesting that *A. potaroensis* and the Surinamese *A. paloemeuensis* are nested within *Krobia* (Musilová et al., 2008; 2009, López-Fernández et al., 2010). Common. NE. Endemic.

Aequidens tetramerus (Heckel 1840)

—Saddle Cichlid, Patwa

Museum records: 69. ROM 96138. Omnivore. Type locality: Branco River, Brazil. This species has been reported from throughout tropical South America, but the alpha taxonomy of what is probably a species complex remains unresolved. Common. NE.

Apistogramma gossei Kullander 1982

—Gosse's Dwarf Cichlid

Museum records: 10. ROM 87275. Omnivore. Type locality: Oyapock River Basin, which forms the border between French Guiana and Amapá State, Brazil. Distributed in the Guianas and Amapá, Brazil. Rare. NE. First Record.

Apistogramma ortmanni (Eigenmann 1912)

—Ortmann's Dwarf Cichlid

Museum records: 112. ROM 91296. Omnivore. Type locality: Erukin Creek, a tributary of the Potaro River, Guyana. This species is often confused with *A. steindachneri*, so museum records are often in error. It was described from the Essequibo River Basin and has been reported from the Courantyne River in the border between Guyana and Suriname. Common. LC.

Apistogramma rupununi Fowler 1914

—Two-spot Apistogramma

Museum records: 45. ROM 86002. Omnivore. Type locality: Rupununi River, Guyana, 2°-3°N, 50°20'W. It was originally described as a subspecies of *A. ortmanni* but is now recognized as a valid distinct species found in the Rupununi Savannah region in Guyana and the Branco River Basin of neighboring Brazil. Common. NE.

Apistogramma steindachneri (Regan 1908)

—Steindachner's Dwarf Cichlid

Museum records: 146. ROM 97371. Omnivore. Type locality: Demerara River at Georgetown. It is widespread in Guyana and can be found in the Courantyne-Nickerie basins in Suriname as well. Two species are considered synonyms of this species: *A. ornatipinnis* Ahl 1936, which was described from Guyana based on just the single holotype, and *A. wickleri* Meinken 1960, described from the neighboring Orinoco River Basin. Common. NE.

Apistogramma wapisana Römer, Hahn & Conrad 2006

—Wapishana Dwarf Cichlid

Museum records: 6. ROM 98151. Omnivore. Type locality: small forest stream, less than 1 km behind the bridge of the road running eastwards from Boa Vista, Roraima State, Brazil. Rare. NE.

Biotodoma cupido (Heckel 1840)

—Green-streaked Eartheater

Museum records: 83. UMMZ 216490. Omnivore. Type locality: Rio Negro and Rio Guaporé, Mato Grosso, Brazil. First described in the genus *Geophagus*, this species has been reported from the Amazon River from Peru to the lower Amazon in Brazil and the Essequibo basin. Common. NE.

Caquetaia kraussii (Steindachner 1878)

—Basketmouth Cichlid

Museum records: 0. Carnivore. Type locality: swamp in the Magdalena River Basin, Colombia. This exotic species is included here based on photographs from fish culture ponds on an island in the mouth of the Essequibo River. Rare. NE. First Record.

Caquetaia spectabilis (Steindachner 1875)

—Spectacular Basketmouth Cichlid

Museum records: 7. ROM 96102. Carnivore. Type locality: Gurupa and Obidos, Amazon River, Brazil. Distributed in the Amazon River Basin; in Guyana it is relatively rare and apparently restricted to the Rupununi region of southern Guyana. Rare. NE.

Chaetobranchius flavescens Heckel 1840

—Giant Basketmouth Cichlid

Museum records: 21. ROM 100348. Planktivore/Omnivore. Type locality: Rio Guaporé, tributary of Rio Negro, Mato Grosso, Brazil. *Chaetobranchius robustus* Günther 1862 and *Centrarchus cyanopterus* Jardine & Schomburgk 1843 were both described from the Essequibo River in Guyana but are now considered to be synonyms of *C. flavescens*. Common. NE.

Cichla cataractae Sabaj, López-Fernández, Willis,

Hemraj, Taphorn & Winemiller 2020—Falls Lukanani

Museum records: 21. UMMZ 250942. Carnivore. Type locality: near Manaho Lagoon, Rupununi River, Guyana, 3°59'33.8"N, 58°44'45.8"W. Endemic to the Essequibo River Basin in Guyana, where it occurs in main river channels near rocks and rapids. Common. NE. Endemic.

Cichla ocellaris Bloch & Schneider 1801

—Peacock Cichlid, Lukanani, Peacock Bass

Museum records: 111. ROM 101961. Carnivore. Type locality: Suriname. It has been reported from the Guianas and parts of the Amazon River Basin and has been introduced in many reservoirs throughout the world (see Winemiller et al., 2021). This is the most common Lukanani (peacock bass) in Guyana. Common. NE.

Cichla temensis Humboldt 1821—Lukanani, Peacock Bass
Museum records: 2. ROM 86127. Carnivore. Type
locality: Temi River, Venezuela. It is only found in the
Amazon-flowing upper tributaries of the Rio Branco basin
in southern Guyana. *Cychla flavomaculata* Jardine and
Schomburgk 1843, described from Guyana, is a synonym.
Rare. NE.

Cichlasoma amazonarum Kullander 1983

—Black Patwa, Patwa

Museum records: 3. ROM 96045. Omnivore. Type locality:
Sacarita del Tuyé, right bank tributary of Ampiyacu River
upstream of Pebas, Loreto, Peru. In Guyana it is only found
in tributaries of the Amazon River. Rare. NE.

Cichlasoma bimaculatum (Linnaeus 1758)

—Black Patwa, Black Acara, Patwa, Common Patwa

Museum records: 64. ROM 66576. Omnivore. Type locality:
Brazil. Distributed in the Essequibo River Basin and
Guianas, usually most common in coastal areas and lower
stretches of Atlantic-flowing tributaries. Common. NE.

Cleithracara maronii (Steindachner 1881)

—Keyhole cichlid

Museum records: 20. ROM 100343. Omnivore. Type
locality: Maroni River, French Guiana. Common across
the Guianas, possibly also in the Orinoco River delta.
Common. NE.

Crenicara punctulata (Günther 1863)

—Checkerboard Cichlid

Museum records: 2. FMNH 93483. Type locality:
Essequibo River, Guyana. This record is enigmatic.
Eigenmann reported one site (Rockstone) for this species
in Guyana, and to our knowledge, it has not been collected
in the intervening 125 years. Modern reports of this species
are from the western Amazon River Basin in Peru and
Ecuador. Rare. NE.

Crenicichla alta Eigenmann 1912

—Millet Sunfish, Sunfish, Common Sunfish

Museum records: 180. ROM 96103. Carnivore. Type
locality: Gluck Island, Essequibo River near Linden,
Guyana. *Crenicichla alta* is part of the *C. saxatilis* group
(see below) and has been reported from both the Amazon
and Orinoco River Basins as well as the Essequibo and
other rivers of the Guianas. There are three synonyms of
this species described from Guyana or nearby: *Crenicichla*
cardiostigma Ploeg 1991 from the Rio Branco in Brazil, *C.*
pteroграмма Fowler from the Rupununi River in Guyana
and *C. vaillanti* Pellegrin 1903 from French Guiana and the
Essequibo River in Guyana. The alpha taxonomy of *C. alta*

remains poorly resolved and likely includes unrecognized
diversity. Common. NE.

Crenicichla johanna Heckel 1840

—Dwarf Sunfish, Sunfish

Museum records: 28. ROM 101969. Carnivore. Type
locality: Rio Guaporé in Mato Grosso, Brazil. Further
studies might reveal more diversity within this species
than currently recognized. Synonyms of this species from
Guyana or nearby include: *C. carsevensensis* Pellegrin
1905 from French Guiana, *Cychla fasciata* Jardin 1843
from Guyana, *C. obtusirostris* from the Capim River in
Brazil. Reports of *C. acutirostris* Günther 1862 from
Guyana are misidentifications (Henrique Varela, pers.
com.). Common. NE.

Crenicichla lugubris Heckel 1840—Sunfish

Museum records: 56. ROM 95975. Carnivore. Type
locality: Rio Negro, Brazil. Distributed in the Amazon
and Orinoco River Basins and the Guianas. Further studies
might reveal more diversity within this species than
currently recognized. *Cychla rutilens* Jardin 1843 from the
upper rio Branco in Brazil is a synonym. Common. NE.

Crenicichla reticulata (Heckel 1840)—Sunfish

Museum records: 21. ROM 92730. Carnivore. Type
locality: Manaus, Brazil. Present in the Amazon and
Essequibo River Basins. *Batrachops punctulatus*,
described from the Essequibo River in Guyana is currently
considered a synonym to this species, which was described
from Manaus, Brazil. Rare. NE.

Crenicichla saxatilis (Linnaeus 1758)

—Ringtail Pike Cichlid, Sunfish

Museum records: 82. ROM 66556. Carnivore. Type
locality: Suriname. The taxonomy of the widespread *C.*
saxatilis species group, spanning lowland basins from
the Paraná-La Plata to the Orinoco and the Guianas,
is incompletely resolved, with both synonyms and
unrecognized taxa from Uruguay to Suriname. Reports
of *C. albopunctata* Pellegrin 1904 are misidentifications
(Henrique Varela, pers. com.) Common. NE.

Crenicichla strigata Günther 1862

—Spotted Sunfish, Sunfish

Museum records: 13. ROM 95951. Carnivore. Type
locality: uncertain but one of the following: Rio Capim [=
Capim], Pará State, Brazil; Rio Cupai [= Rio Cupari], Rio
Tapajós basin, Amazon River drainage, Pará state, Brazil.
It is reported from the Amazon River Basin. This species
was first described as a subspecies of *C. johanna*. Rare.
NE. First Record.

Crenicichla wallacii Regan 1905

—Dwarf Sunfish, Sunfish

Museum records: 112. ROM 95939. Carnivore. Type locality: Essequibo River, Guyana. It has been reported from the Orinoco River Basin, but the true extent of its range remains uncertain. *Crenicichla nanus* Regan 1913, described from Guyana, is a synonym. Common. NE.

Geophagus cf. *brachybranchus* Kullander & Nijssen

1989—Eartheater, Sandshifter, Sandshifter Patwa

Museum records: 230. ROM 85735. Benthic Omnivore. Type locality: above Blanche Marie Valen, Nickerie District, Suriname. *Geophagus brachybranchus* sensu stricto is restricted to the Nickerie and Courantyne Rivers in Suriname. Kullander and Nijssen (1989) speculated that the species range probably extended west into Guyana. Ongoing taxonomic and phylogenetic work (López-Fernández et al., unpubl.) indicates several unrecognized species of *Geophagus* from Guyana. Common. NE.

Geophagus crocatus Hauser & López-Fernández 2013—

Red-striped Eartheater, Sandshifter, Sandshifter Patwa

Museum records: 25. ROM 97180. Benthic Omnivore. Type locality: Berbice River, about 14 air km upstream of Kwakwani at Mappa Lagoon camp, East Berbice, Guyana, 5.17456°N 58.16336°W. It is endemic to the Berbice River in Guyana. Common. NE.

Guianacara cuyunii López-Fernández, Taphorn &

Kullander 2006—Patwa

Museum records: 13. USNM 403755. Benthic Omnivore. Type locality: Creek tributary to Venamo River, upstream from Apanao Rapids, Cuyuni River Basin, Bolívar, Venezuela, 6.6667°N, 61.1667°W. It is found in the Cuyuni River and its tributaries in Guyana and Venezuela. Rare. NE

Guianacara dacrya Arbour & López-Fernández 2011

—Patwa

Museum records: 89. ROM 96277. Benthic Omnivore. Type locality: Water Dog Falls, Burro Burro River, Essequibo River drainage, Potaro-Siparuni (Region 8), Guyana, 4°40'48"N, 58°50'46"W. It is found throughout the highlands of the Essequibo River and its tributaries in Guyana but does not reach the higher elevation of the Pakaraima Mountains. Previous reports of *G. spheozona* Kullander & Nijssen 1989 are misidentifications of this species. Common. NE.

Heros notatus (Jardine 1843)—Severum, Disk Patwa

Museum records: 21. ROM 61866. Omnivore. Type locality: unknown, but presumably in Guyana. It is known from the Demerara and Essequibo Rivers. Common. NE.

Ivanacara bimaculata (Eigenmann 1912)—Patwa

Museum records: 26. ROM 95031. Omnivore. Type locality: Erukin, tributary of lower Potaro River, Guyana. This species occurs only in the Essequibo River Basin and is known from above and below the Guiana Shield escarpment. This species was first described in the genus *Nannacara*. Common. VU.

Krobia guianensis (Regan 1905)—Patwa

Museum records: 48. ROM 98148. Omnivore. Type locality: Guiana. Kullander and Nijssen (1989) listed it as present in Suriname and Guyana (see Kullander 2003). Eigenmann (1912) mistakenly identified some of his specimens of this as *Aequidens vittatus*, which is now *Bujurquina vittata* (Heckel 1840) which occurs in the Paraná River Basin. As currently understood, *Krobia guianensis* occurs in Guyana and Suriname, but additional, unnamed similar species may be present in both countries, as well as in French Guiana and Amapá State, NW Brazil (Kullander and Nijssen 1989, Keith et al., 2000; Steele et al., 2013, T.D. Morgan, unpubl.). Common. LC.

Krobia petitella Steele, Liverpool & López-Fernández

2013—Patwa

Museum records: 10. ROM 87070. Omnivore. Type locality: East Berbice River, upstream of Kwakwani, Guyana, 5°14'57.8"N; 58°05'11.5"W. This species is found only in the Berbice River in Guyana. Rare. NE. Endemic.

Mazarunia charadrica López-Fernández, Taphorn &

Liverpool 2012—Patwa, Red Patwa

Museum records: 37. ROM 83693. Omnivore. Type locality: upper Mazaruni River, Waruma Creek, 5°28'31.8"N, 60°46'46.812"W, Cuyuni-Mazaruni (Region 7), Guyana. All *Mazarunia* are endemic to the upper Mazaruni River in Guyana. Common. NE. Endemic.

Mazarunia mazarunii Kullander 1990—Patwa

Museum records: 14. ROM 93426. Omnivore. Type locality: upper Mazaruni River near town of Kamarang, Guyana. Rare. NE. Endemic.

Mazarunia pala López-Fernández, Taphorn & Liverpool

2012—Gold Nugget Patwa, Purple Patwa

Museum records: 7. ROM 83753. Omnivore. Type locality: upper Mazaruni River, near mouth of Kamarang River, Guyana. Rare. NE. Endemic.

Mesonauta guyanae Schindler 1998—Flag Cichlid, Patwa

Museum records: 164. UMMZ 250561. Omnivore. Type locality: Rockstone, Essequibo River, Guyana. Many

specimens from Guyana's coastal rivers were in the past identified as *M. festivus* (Heckel 1840), but we here assume those to be *M. guyanae*. *Mesonauta festivus* is now thought to occur only in the Amazon and Paraguay River Basins (Kullander and Silfvergrip 1991). *Mesonauta egregius* and *M. insignis* could be found in the Orinoco tributaries of NW Guyana since they are common in that basin. Common. NE.

Nannacara anomala Regan 1905—Goldeneye Cichlid
Museum records: 48. UMMZ 232083. Omnivore. Type locality: Essequibo River, Guyana. This species occurs in coastal rivers of the Guianas. Common. NE.

Oreochromis and *Sarotherodon* spp. and hybrids—Tilapia
Museum records: 2. Omnivore. These exotic species were introduced from fish culture ponds to coastal streams. Because these are most likely hybrids, no attempt at specific names was made. NE.

Pterophyllum leopoldi Gosse 1963
—Freshwater Angelfish
Museum records: 2. ROM 61855. Carnivore. Type locality: Furo du village de Cuia, left bank of Rio Solimões, about 90 kilometers upstream of Manacapuru, Brazil. Amazon and Essequibo River Basins. Rare. NE.

Pterophyllum scalare (Schultze 1823)
—Freshwater Angelfish
Museum records: 17. FMNH 53848. Carnivore. Type locality: lower Amazon River Basin. This popular aquarium fish occurs in the Amazon and Essequibo River Basins. Rare. NE.

Satanoperca jurupari (Heckel 1840)
—Earthater, Sandshifter, Sandshifter Patwa, Mouth Brooding Earthater
Museum records: 46. ROM 86112. Benthic Omnivore. Type locality: mouth of Rio Negro, Brazil. It has been reported from throughout the Amazon River Basin and the Guianas. In Guyana, apparently limited to Amazon tributaries in the Rupununi district. Common. NE.

Satanoperca leucosticta (Müller & Troschel 1849)
—Whitespot Earthater, Sandshifter, Sandshifter Patwa
Museum records: 111. ROM 91221. Benthic Omnivore. Type locality: probably the Rupununi River, Guyana. It is found in the Essequibo basin and in basins east into Suriname. *Satanoperca macrolepis* Günther 1862, described from the Demerara River, is presumed to be a synonym. Common. NE.

Actinopterygii: Cichliformes: Polycentridae

Polycentrus schomburgkii Müller & Troschel 1849
—Guyana Leafish
Museum records: 25. AUM 27971. Carnivore. Type locality: Essequibo River, Guyana. It occurs on the Island of Trinidad, adjacent Venezuela and the Guianas and coastal Brazil. *Labrus punctatus* Linnaeus 1758 and *Mesonauta surinamensis* Sauvage 1882 both from Suriname, are synonyms. Common. NE.

Actinopterygii: Clupeiformes: Dorosomatidae

Rhinosardinia amazonica (Steindachner 1879)
—Amazon Spinejaw Sprat, Herring
Museum records: 15. INHS 490090. Carnivore. Type locality: Amazon River at Pará, Brazil. Eigenmann (1912) described *R. serrata* from Morawhanna, Guyana, but that species is now considered to be a synonym of *R. amazonica*. Rare. LC.

Actinopterygii: Clupeiformes: Engraulidae

Amazonsprattus scintilla Roberts 1984—Pygmy Anchovy
Museum records: 7. AUM 38218. Planktivore. Type locality: Rio Jufari between Castanheiro Grande and Santa Fe, Brazil. It occurs in the Amazon River Basin. Rare. LC. First Record.

Anchovia surinamensis (Bleeker 1865)—Surinam Anchovy
Museum records: 24. ROM 88716. Planktivore. Type locality: Suriname. It occurs in coastal streams of NW South America from Venezuela to the mouth of the Amazon River. Rare. LC.

Anchoviella brevirostris (Günther 1868)
—Surinam Anchovy
Museum records: 1. ROM 85704. Planktivore. Type locality: Paraguaçu River in Bahia Brazil. Most museum specimens of *Anchoviella* are not identified to species and were not identified by engraulid experts, which must be kept in mind when reviewing the *Anchoviella* species included in this list. Rare. NE.

Anchoviella carrikeri (Fowler 1940)
—Carriker's Anchovy
Museum Records: 32. MZUSP 113515. Planktivore. Type locality: Mouth of Río Chapare, Cochabamba, Bolivia. This species is known from the Amazon and Orinoco River Basins and apparently occurs in the Essequibo; however, the taxonomic status is unclear and it is likely part of a species complex. Common. NE.

Anchoviella guianensis (Eigenmann 1912)

—Guyana Anchovy

Museum records: 111. ROM 86846. Planktivore. Type locality: Bartica rocks, Essequibo River, Guyana. It has been reported from the Orinoco River to the mouth of the Amazon along the coast of NW South America. It was first placed in the genus *Stolephorus*. It is likely a species complex. Common. NE.

Anchoviella jamei (Jordan & Seale 1926)

—James' Anchovy

Museum records: 4. ROM 64618. Planktivore. Type locality: Rio Jutahy, tributary of the Solimões River, Amazonas State, Brazil. This species has been reported from the Amazon and Orinoco River Basins. Rare. NE. First Record.

Anchoviella juruasanga (Loeb 2012)

—Juruasanga Anchovy

Museum records: 9. ANSP 177407. Planktivore. Type locality: Rio Trombetas, upstream from the mouth of Lago do Jacaré at Reserva Biológica de Trombetas, Pará State, Brazil, 1°20'S, 56°51'W. This species has been reported from the Amazon, Orinoco, Casiquiare, and Essequibo River Basins. Rare. NE. First record.

Anchoviella lepidontostole (Fowler 1911)

—Broadband Anchovy

Museum records: 7. ROM 66191. Planktivore. Type locality: Suriname. It occurs from Venezuela to Brazil, in fresh, brackish or marine waters. This species was originally described in the genus *Anchovia*. Rare. NE.

Anchoviella manamensis Cervigón 1982

—Manamo Anchovy

Museum records: 36. ROM 92768. Planktivore. Type locality: Caño Mánamo, near Tucupita, Orinoco Delta, Venezuela. This species was described from the Orinoco River delta and is confirmed from Guyana in the lower Essequibo and Mazaruni, and possibly occurs in Suriname. Rare. NE.

Jurengraulis juruensis (Boulenger 1898)—Juru Anchovy

Museum records: 7. ROM 86117. Planktivore. Type locality: Juruá River, Brazil. This species occurs in the Amazon River Basin. Rare. LC. First record.

Lycengraulis batesii (Günther 1868)

—Bates' Sabretooth Anchovy

Museum records: 9. ROM 66182. Carnivore. Type locality: Pará River, Brazil. This species has been reported from the Amazon, Orinoco and Parnaíba River Basins and the Guianas. Common. LC.

Pterengraulis atherinoides (Linnaeus 1766)

—Wingfin Anchovy

Museum records: 6. ROM 66174. Carnivore. Type locality: Suriname. Widespread along the Atlantic coast of South America, mostly coastal, lower river reaches and estuaries. Common. LC.

Actinopterygii: Clupeiformes: Pristigasteridae

Pellona castelnaeana Valenciennes 1847

—Amazon Pellona

Museum records: 4. USNM RAD100516. Carnivore. Type locality: mouth of Amazon River, Brazil. It is reported from the Orinoco River Basin and the Guianas. Rare. LC. First Record.

Pellona flavipinnis (Valenciennes 1837)

—Yellowfin River Pellona

Museum records: 4. ROM 66171. Carnivore. Type locality: Buenos Aires, Argentina. Widespread in South America. Rare. LC.

Actinopterygii: Cyprinodontiformes: Poeciliidae

Poecilia (Micropoecilia) bifurca (Eigenmann 1909)

—Guppy, Kaka-belly

Museum records: 17. INHS 49110. Rare. Type locality: Leiden, Guyana (formerly Christianburg). It occurs in coastal streams and swamps from Venezuela to French Guiana. Some museum records still use the old name of *Acanthophaelus bifurcus* for this species. They are similar to the more common guppy, *P. reticulata*. Rare. NE.

Poecilia (Micropoecilia) parae Eigenmann 1894

—Guppy, Kaka-belly

Museum records: 3. AUM 40224. Omnivore. Type locality: ditches at Rua das Mongubas in Para state, Brazil, Amazon River Basin. It was first described as a subspecies: *Poecilia vivipara parae*. Eigenmann (1909) described what he believed to be a different species, *Acanthophaelus melanzonus* from the trenches in Georgetown, Guyana. The latter is currently considered a synonym of *P. parae*. *Poecilia parae* is often found in sympatry with guppies, *P. reticulata*. Rare. NE.

Poecilia (Micropoecilia) picta Regan 1913

—Swamp Guppy, Guppy, Kaka-belly

Museum records: 18. AUM 40223. Omnivore. Type locality: Demerara River, Guyana. It can be found in both fresh and brackish streams and swamps from Venezuela to NE Brazil; often found in sympatry with both *P. reticulata* and *P. parae*. Rare. NE.

Poecilia (Acanthophaecelus) reticulata Peters 1859

—Guppy, Kaka-belly

Museum records: 30. AUM 40226. Carnivore. Type locality: Guayre (Guaira) River near Caracas, Venezuela. Its natural distribution is thought to have been from Trinidad and Venezuela to Guyana, but it occurs in many places throughout the world; introduced by aquarium enthusiasts and for mosquito larvae control. Common. LC.

Poecilia (Poecilia) vivipara Bloch & Schneider 1801

—Guppy, Kaka-belly

Museum records: 19. AUM 28167. Omnivore. Type locality: Suriname. It occurs from Venezuela to Brazil along the coast and has been introduced elsewhere. Rare. NE.

Tomeurus gracilis Eigenmann 1909

—Knifetail Livebearer, Longbody Livebearer

Museum records: 37. UMMZ 177383. Type locality: Mud Creek in the Aruka River drainage, Guyana. This unusual species is the only one in the genus and has been reported from Venezuela, Guyana, Suriname, and Brazil. Common. NE.

Actinopterygii: Cyprinodontiformes: Rivulidae*Anablepsoides holmiae* (Eigenmann 1909)

—Holmia Killifish

Museum records: 10. ROM 97463. Carnivore. Type locality: Creek near Holmia in upper Potaro River drainage, Guyana. This species may be endemic to the upper Potaro River drainage but has been reported from elsewhere. Without mature males, it is difficult to identify species of *Anablepsoides*. Rare. NE. Endemic.

Anablepsoides immaculatus (Thomerson, Nico & Taphorn 1991)—Spotted Killifish, Mountain Killifish

Museum records: 2. ROM 89650. Carnivore. Type locality: La Mejicana, between Ed Dorado and Santa Elena de Uairen, Bolivar, Venezuela. This species occurs in the uppermost headwaters of the Mazaruni River in Guyana, and adjacent regions of Venezuela. Rare. NT.

Anablepsoides lanceolatus (Eigenmann 1909)

—Lancetail Killifish

Museum records: 2. UMMZ 216529. Carnivore. Type locality: Rockstone, Essequibo River, Guyana. Rare. NE. Endemic.

Anablepsoides mazaruni (Myers 1924)

—Mazaruni Killifish

Museum records: 1. ROM 92780. Carnivore. Type locality: Mutusi Hole, Mazaruni River, Guyana. This species has

only been found in the Mazaruni River Basin. NE. Rare. Endemic.

Anablepsoides stagnatus (Eigenmann 1909)

—Lowland Killifish

Museum records: 13. AUM 38354. Carnivore. Type locality: Demerara River Basin near Linden (Christianberg), Guyana. It is a lowland species of the Essequibo River Basin and coastal Guyana. NE. Rare. Endemic.

Anablepsoides waimacui (Eigenmann 1909)

—Waimacui Killifish

Museum records: 43. ROM 95055. Carnivore. Type locality: Shrimp Creek, near Kaieteur Falls, upper Potaro River drainage, Guyana. This upland species occurs only in the upper Potaro River Basin, Essequibo River Basin of Guyana. NE. Common. Endemic.

Austrofundulus rupununi Hrbek, Taphorn & Thomerson 2005—Rupununi Austro

Museum records: 3. FMNH 108226. Carnivore. Type locality: Arapari area on Louis Orella's Manari Ranch, about 4 miles due west of ranch house, 9th District, Guyana. This is the only species of *Austrofundulus* found in the Amazon River Basin, in the rivers that drain the Rupununi Savannah, tributaries of the Branco River. Rare. NE. Endemic.

Laimosemion agilae (Hoedeman 1954)

—Agila Redthroat Killifish

Museum records: 10. ROM 66491. Carnivore. Type locality: Agila, rivulet between Agila at Suriname River and Berlijn at Para River, Suriname. This lowland species lives near the Atlantic coast in Guyana, Suriname, and French Guiana. Common. LC.

Laimosemion breviceps (Eigenmann 1909)

—Shorthead Redthroat Killifish

Museum records: 14. AUM 62944. Carnivore. Type locality: Shrimp Creek, near base of Kaieteur Falls, Potaro River drainage, Guyana. A similar species or conspecific population has been reported from the upper Ireng River (Lujan et al., 2020) and the species has been reported from the Amazon Basin in Brazil. Rare. NE. Endemic.

Laimosemion frenatum (Eigenmann 1912)

—Bridled Redthroat Killifish

Museum records: 1. FMNH 53538. Carnivore. Type locality: Gluck Island, in the Essequibo River, Guyana. A lowland species found in Guyana and Suriname coastal waters. Rare. NE. Endemic.

Laimosemion mabura Valdesalici & García Gil 2015
—Mabura Redthroat Killifish

Museum records: 3. CSBD F1700. Carnivore. Type locality: Stream on the main track to Mahdia at the 10 miles point from Mabura Hill, Essequibo River drainage, central Guiana, 5°19.367'N, 58°48.951'W. It occurs in central Guyana. Rare. NE. Endemic.

Laimosemion mahdiaense Suijker & Collier 2006
—Mahdia Redthroat Killifish

Museum records: 3. FMNH 113583. Carnivore. Type locality: Blackwater creek, tributary of Potaro River, on 5 miles from Mahdia crossing the road from Mahdia to Garroway Stream, 5°21'11"N, 59°08'48"W, Mazaruni-Potaro District, Guyana. It is found in the Mazaruni-Potaro district of central Guyana. Rare. NE. Endemic.

Laimosemion paryagi Vermeulen Suijker & Collier 2012—Paryag's Redthroat Killifish

Museum records: 2. ZMA 124.896. Carnivore. Type locality: upper Mazaruni River, about 7 miles downstream from Kamarang, 5°43'50"N, 60°30'55"W, upper Mazaruni District, Guyana, elevation about 495 meters. This upland species is found only in the upper Mazaruni River drainage of Guyana. Rare. NE. Endemic.

Laimosemion torrenticola (Vermeulen & Isbrücker 2000)—Torrent Redthroat Killifish

Museum records: 13. ZMA 123.467. Carnivore. Type locality: Little creek at right bank of the Kamarang River, upper Mazaruni Reserve near Kamarang village, Guyana, 05°50'20"N, 60°30'58"W. This upland species occurs only in the upper Mazaruni River drainage. Rare. NE. Endemic, although possibly present in adjacent Venezuelan streams of upper Mazaruni River drainage.

Moema cf. nudifrontata Costa 2003—Rupununi Moema
Museum records: 2. CSBD 2102. Carnivore. Type locality: Branco River floodplains near Carneiro Island, about 1°30'N, 61°10'W, Roraima state, Brazil. This annual species was found in a pond near the town of Surama. The identification is tentative. Rare. NE.

Actinopterygii: Gobiiformes: Eleotridae

Dormitator gymnocephalus Eigenmann 1912—Essequibo Sleeper

Museum records: 2. FMNH 53922. Type locality: mouth of Konawaruk River (about 190 km up the Essequibo River from the sea), Guyana. It is known from only the types. Rare. NE.

Dormitator maculatus (Bloch 1792)—Fat Sleeper
Museum records: 2. UMMZ 160261. Carnivore. Type locality: None. This species occurs mostly in freshwater, but also in estuaries from the eastern USA to southeastern Brazil. Rare. LC.

Eleotris amblyopsis (Cope 1871)

—Large-scaled Spinycheek Sleeper

Museum records: 13. ROM 66481. Carnivore. Found in coastal areas of the Western Atlantic, in fresh, brackish, and marine water. Carnivore. Rare. LC.

Eleotris pisonis (Gmelin 1789)—Sleeper

Museum records: 3. AMNH 14420. Carnivore. Type locality: South America. It is reported from coastal areas of the southeastern USA to Brazil in fresh, brackish, and marine waters. In Guyana they have been caught in the Essequibo River as far upstream as Rockstone (about 120km up from the sea). *Eleotris belizanus* Sauvage 1880 is a synonym (Pezold and Cage 2002). Rare. LC.

Microphilypnus ternetzi Myers 1927—Dwarf River Goby
Museum records: 8. ROM 101989. Carnivore. Type locality: Quiribana Creek near Caicara, Venezuela (Orinoco River Basin). This strictly freshwater species is widespread in the Orinoco and Amazon River Basins. *Microphilypnus amazonicus* Myers 1927, from the rio Negro in Brazil, is a synonym. Rare. NE. First record.

Actinopterygii: Gobiiformes: Gobiidae

Awaous flavus (Valenciennes 1837)—Candy Cane Goby
Museum records: 29. ROM 87231. Carnivore. Type locality: Suriname. This species occurs in fresh, brackish and marine coastal waters from the Island of Trinidad and adjacent Venezuela to the mouth of the Amazon (Pezold et al., 2015) Common. LC.

Gobioides broussonnetii Lacépède 1800

Museum records: 1. BMNH 1984.8.8.262. Carnivore. Type locality: None, but probably Suriname. This species is listed for Guyana by Palmer and Wheeler (1955). Present in fresh, brackish, and marine waters of the eastern coasts of North, Central and South America. Common. NE.

Gobioides grahamae Palmer & Wheeler 1955

Museum records: 1. BMNH 1959.3.17.161. Carnivore. Type locality: Marajo Island (Amazon River mouth), Brazil. This species occurs in fresh, brackish, and marine waters, especially river mouths of the Atlantic coast of South America. Palmer and Wheeler (1955) list this species from the Demerara River in Guyana. Rare. NE. First Record.

Actinopterygii: Gymnotiformes: Apterodontidae*Adontosternarchus* sp.—Snubnosed Knifefish

Museum records: 1. ROM 97151. Carnivore: Aquatic invertebrates. It occurs in river bottoms of the Essequibo River drainage. See Mago-Leccia et al. (1985) (revision of genus). Rare. NE. First Record.

Apterodontus albifrons (Linnaeus 1766)

—Black Ghost Knifefish

Museum records: 30. ROM 88701. Carnivore: aquatic invertebrates. Type locality: Suriname. It occurs in small streams and river bottoms of the Demerara, Berbice Takutu, and Essequibo River drainages. Common. NE.

"Apterodontus" bonapartii (Castelnau 1855)

—Ghost Knifefish

Museum records: 2. ANSP 180284. Carnivore. Type locality: Lake emptying into Río Ucayali, Peru. It occurs in river bottoms of the Essequibo River drainage. It was regarded as *incertae sedis* in Apterodontidae (Ferraris et al., 2017). Rare. NE. First Record.

Apterodontus leptorhynchus (Ellis 1912)

—Brown Ghost Knifefish

Museum records: 9. FMNH 53294. Carnivore: aquatic invertebrates. Type locality: Amatuk, Potaro River, Guyana. It occurs in small streams of the Essequibo River drainage. Rare. NE.

Megadontognathus cuyuniense Mago-Leccia 1994

—Ghost Knifefish

Museum records: 0. Carnivore: aquatic invertebrates. Type locality (holotype MBUCV-V 9499): Río Cuyuni at Paruruvaca rapids, Bolivar, Venezuela. Included here because this species was described from the Cuyuni River, but in Venezuela ca. 100 km upstream from the border with Guyana, and so is presumably present in Cuyuni River in Guyana. Rare. NE. First Record.

Platyrosteronarchus crypticus De Santana & Vari 2009

—Ghost Knifefish

Museum records: 12. CU 93433. Carnivore: aquatic invertebrates. Type locality: Moco-Moco Creek, upper Takutu River, Guyana. It occurs in small streams of the Takutu River drainage (Amazon River Basin). Rare NE. Endemic.

Platyrosteronarchus macrostoma (Günther 1870)

—Ghost Knifefish

Museum records: 10. ANSP 175946. Carnivore: aquatic invertebrates. Type locality: Xebros [Jeberos], Río Maraño drainage, Amazon River system, Peru. It has

been found from river bottoms in the Essequibo River drainage. NE. Rare.

Porotergus gymnotus Ellis 1912—Ghost knifefish

Museum records: 11. FMNH 53291 Carnivore: aquatic invertebrates. Type locality: Amatuk, Potaro River, Guyana. It has been found in rapids and tributaries of the Essequibo River Basin. NE. Rare. Endemic.

Sternarchorhynchus freemani de Santana & Vari 2010

—Ghost knifefish

Museum records: 5. CAS 72246. Carnivore: aquatic invertebrates. Type locality: Amatuk, Potaro River, Guyana. It is found in river shallows and rapids of the Essequibo River Basin. NE. Rare. Endemic.

Actinopterygii: Gymnotiformes: Gymnotidae*Electrophorus electricus* (Linnaeus 1766)—Electric Eel

Museum records: 26. ANSP 1127. Carnivore: aquatic invertebrates, fish, other small aquatic vertebrates. Type locality: Suriname. It occurs in rivers, streams, floodplains and swamps of the Demerara, Essequibo and Takutu River drainages. Common. LC.

Gymnotus (Lamontianus) anguillaris Hoedeman 1962

—Logologo, Banded/Naked-Back Knifefish

Museum records: 26. ANSP 175949. Carnivore: aquatic invertebrates. Type locality: Coropina Creek, Suriname. It has been collected from small streams in the Demerara, Essequibo and Mazaruni River drainages. Museum lots of this species are sometimes misidentified *G. coropinae*, a more common species that is similar to juvenile *G. anguillaris* (juveniles of *G. anguillaris* very similar to adult *G. coropinae* except by precaudal vertebrae number and minor pigmentation differences (Crampton and Albert 2003)). Common. NE.

Gymnotus (Gymnotus) carapo Linnaeus 1758

—Logologo, Banded/Naked-Back Knifefish

Museum records: 72. ANSP 134785. Carnivore: aquatic invertebrates. Type locality: South America. It occurs in small streams, floodplains, swamps, and river margins in the Barima, Berbice, Corantijn-New, Demerara, Essequibo, Mazaruni and Pomeroon River drainages. Common. LC.

Gymnotus (Tigrinus) coropinae Hoedeman 1962

—Logologo, Banded/Naked-Back Knifefish

Museum records: 11. ANSP 179126. Carnivore: aquatic invertebrates. Type locality: Coropina Creek, Suriname. It has been found in small streams of the Berbice, Demerara, Essequibo, Mazaruni and Takutu River drainages. Rare. NE.

Actinopterygii: Gymnotiformes: Hypopomidae

Akawaio penak Maldonado-Ocampo, López-Fernández, Taphorn, Bernard, Crampton & Lovejoy 2014

—Logologo, Knifefish

Museum records: 15. CSBD 1654. Carnivore: aquatic invertebrates. Type locality: Zone 7, Kamarang, Mazaruni River, Guyana, 5°56'10.1"N, 60°36'53.8"W. It occurs in streams and small rivers of the upper Mazaruni River drainage. Rare. NE. Endemic.

Brachyhypopomus batesi Crampton, de Santana, Waddell & Lovejoy 2017—Logologo, Bluntnose Knifefish

Museum records: 6. BMNH 1972.7.27.458-518. Carnivore: aquatic invertebrates. Type locality: Igarapé Xidarini, affluent lago Tefé (mouthbay of rio Tefé), Amazonas drainage, Amazonas, Brazil, 03°23'52"S, 64°41'17"W. It is found in small streams of the Takutu River drainage. Rare. NE.

Brachyhypopomus beebei (Schultz 1944)

—Logologo, Bluntnose Knifefish

Museum records: 23. ANSP 192059. Carnivore: aquatic invertebrates. Type locality: Río Caripe near Caripito, Estado Monagas, Venezuela (a tributary of the San Juan River that independently runs into the Gulf of Paria, north of the Orinoco River Delta). In Guyana it has been reported from small streams, swamps, floodplains, and river margins of the Barima, Demerara, Mazaruni, Essequibo, and Takutu River drainages. It also occurs in the Amazon and Orinoco River Basins, Suriname and French Guiana. Common. NE.

Brachyhypopomus brevirostris (Steindachner 1868)

—Logologo, Bluntnose Knifefish

Museum records: 35. ROM 86803. Carnivore: aquatic invertebrates. Type locality: Guaporé River, Brazil. In Guyana it is found in small streams, swamps, floodplains, and river margins of the Berbice, Demerara, Essequibo, Mahaica and Takutu River drainages. It also occurs in the Amazon and Orinoco River Basins, Suriname, and French Guiana. Common. NE.

Brachyhypopomus bullocki Sullivan & Hopkins 2009

—Logologo, Bluntnose Knifefish

Museum records: 11. ROM 62548. Carnivore: aquatic invertebrates. Type locality: "Flor Amarillo" (Río Metica-Meta drainage), Rancho Llano Grande, north of Mozambique Ranch, 4.033°N, 73.050°W, Meta State, Colombia. In Guyana, it occurs in river margins, swamps and floodplains of the Branco-Takutu and upper Essequibo River drainages. It also occurs in the Amazon and Orinoco River Basins. Rare. NE.

Brachyhypopomus hendersoni Crampton, de Santana, Waddell & Lovejoy 2017

—Logologo, Bluntnose Knifefish

Museum records: 5. INHS 49276. Carnivore: aquatic invertebrates. Type locality: Amanã Lake, Igarapé Juá Grande Creek, Japurá River drainage, municipality Maraã, Amazonas drainage, Amazonas, Brazil, 02°28'50"S, 64°48'50"W. In Guyana this species is found in river margins and floodplains of the Essequibo River drainage. It also occurs in the Amazon River Basin. Rare. NE.

Brachyhypopomus regani Crampton, de Santana, Waddell & Lovejoy 2017—Logologo, Bluntnose Knifefish

Museum records: 10. UF 177360. Carnivore: aquatic invertebrates. Type locality: Mamirauá Reserve, cano do lago Rato, Rio Solimões-Japurá floodplain, Amazonas drainage, Amazonas, Brazil, 03°02'41"S, 64°51'26"W. In Guyana it is found in large streams, river margins and floodplains of the Takutu River drainage. It also occurs in the Amazon and Orinoco River Basins. Rare. NE.

Brachyhypopomus sullivanii Crampton, de Santana, Waddell & Lovejoy 2018

—Logologo, Bluntnose Knifefish

Museum records: 3. ANSP 175954. Carnivore: aquatic invertebrates. Type locality: Stream near Jenaro Herrera, affluent río Ucayali, municipality Requena, Amazonas drainage, Loreto, Peru, 04°54'39"S, 73°39'29"W. In Guyana this species occurs in small streams of the Essequibo River drainage. It also occurs in the Amazon and Orinoco River Basins. Rare. NE.

Brachyhypopomus walteri Sullivan, Zuanon & Cox Fernandes 2013—Logologo, Bluntnose Knifefish

Museum records: 2. ANSP 185107. Carnivore: aquatic invertebrates. Type locality: Floating meadow alongside of lake in the Paraná do Paracuúba, near mouth of Rio Negro and entrance to Lago Janauari, approx. 15 km due south of Manaus, 03°12.6'S, 059°59.4'W, Amazonas, Brazil. In Guyana this species occurs in large streams, river margins and floodplains of the Essequibo River Basin. It also occurs in the Amazon River Basin. Rare. NE.

Hypopomus artedi (Kaup 1856)

—Logologo, Bluntnose Knifefish

Museum records: 46. ANSP 177489. Carnivore: aquatic invertebrates. Type locality: La Mana River, French Guiana. In Guyana this species occurs in streams and small rivers of the Berbice, Courantyne-New, Cuyuni, Demerara, Essequibo and Mazaruni River drainages. It also occurs in Suriname and French Guiana and has been reported from the Amazon River Basin. Common. NE.

Microsternarchus bilineatus Fernández-Yépez 1968

—Logologo, Bluntnose Knifefish

Museum records: 9. ANSP 177497. Carnivore: aquatic invertebrates. Type locality: Río San Bartolo, tributary of River Guariquito, southwest of Calabozo, Venezuela. In Guyana it occurs in small streams of the Essequibo River Basin. It also occurs in the upper Orinoco River Basin and the Negro River, Amazon Basin. Rare. NE. First Record.

Actinopterygii: Gymnotiformes: Rhamphichthyidae*Gymnorhamphichthys bogardusae* Lundberg 2005

—Sand Knifefish, Thermometer Knifefish

Museum records: 19. ANSP 175932. Carnivore: aquatic invertebrates. Type locality: 114 nautical miles upstream from sea buoy, in Boca Grande navigation channel, 8°36'N, 61°45'W, Río Orinoco, Delta Amacuro State, Venezuela. In Guyana, this species is found in river bottoms of the Cuyuni, Essequibo and Takutu River drainages. It also occurs in the Orinoco River Basin. This species was originally described as *Gymnorhamphichthys bogardusi*. Rare. NE. First record.

Gymnorhamphichthys hypostomus Ellis 1912

—Sand Knifefish, Thermometer Knifefish

Museum records: 10. AUM 28070. Carnivore: aquatic invertebrates. Type locality: San Joaquín, Bolivia. In Guyana this species is found in river bottoms of the Cuyuni River drainage of the Essequibo River Basin. It also occurs in the Amazon and Orinoco River Basins. Rare. NE.

Gymnorhamphichthys rondoni (Miranda Ribeiro 1920)

—Sand Knifefish, Thermometer Knifefish

Museum records: 11. ANSP 39805. Carnivore: aquatic invertebrates. Type locality: Rio 17 de Fevereiro, tributary of Alto Cautário, Amazonas, Brazil. In Guyana, this species occurs in streams of the Essequibo and Takutu River drainages. It also occurs in the Amazon Orinoco and Paraná River Basins, and coastal rivers of the Guianas. Rare. NE.

Gymnorhamphichthys rosamariae Schwassmann 1989

—Sand Knifefish, Thermometer Knifefish

Museum records: 2. INHS 49681. Carnivore: aquatic invertebrates. Type locality: upper Rio Negro at Rosa Maria, Amazonas, 0.5°S, 64°W, Brazil. In Guyana it occurs in river bottoms and streams of the Essequibo and Takutu River drainages. It also occurs in the Negro River drainage (Amazon River Basin), Brazil. Rare. NE.

Hypopygus lepturus Hoedeman 1962

—Banded Knifefish, Thintail Knifefish

Museum records: 101. ANSP 175972. Carnivore:

aquatic invertebrates. Type locality: Maroni River Basin, Suriname. In Guyana it occurs in small streams in the Berbice, Demerara, Essequibo, Pomeroon, Takutu, and Waini River drainages. It also occurs in the Amazon, Orinoco and Paraguay River Basins, and coastal rivers of the Guianas. Common. NE.

Rhamphichthys apurensis (Fernández-Yépez 1968)

—Band Fish

Museum records: 3. USNM 404246. Carnivore: aquatic invertebrates. Type locality: Río Bucaral, Paso Don Pancho, tributary of Río Apure, Orinoco basin, Estado Apure, Venezuela. In Guyana it occurs in river bottoms of the Essequibo River drainage. It also occurs in the Orinoco River Basin. Rare. NE. First Record.

Rhamphichthys marmoratus Castelnau 1855—Band Fish

Museum records: 6. AUM 48696. Carnivore: aquatic invertebrates. Type locality: Rio Araguay, Brazil. In Guyana it occurs in river bottoms of the upper Takutu and upper Essequibo River drainages. It also occurs in the Amazon River Basin. Rare. NE.

Rhamphichthys rostratus (Linnaeus 1766)—Band Fish

Museum records: 3. UMMZ 216489. Carnivore: aquatic invertebrates. Type locality: America. In Guyana it occurs in river bottoms of the Demerara and Essequibo River drainages. It also occurs in the Amazon River Basin, and the Guianas. Carvalho (2013) lists *R. schneideri* Kaup 1856 from French Guiana, and *R. schomburgkii* Kaup 1856 from the Demerara River in Guyana as synonyms. Rare. NE.

Steatogenys elegans (Steindachner 1880)

—Barred Knifefish, Centipede Knifefish

Museum records: 17. ANSP 177450. Carnivore: aquatic invertebrates. Type locality: mouth of the Negro River, Brazil. In Guyana it occurs in river bottoms of the Berbice, Demerara, Essequibo and Takutu River drainages. It also occurs in the Amazon and Orinoco River Basins. Common. LC.

Steatogenys ocellatus Crampton, Thorsen & Albert

2004—Ocellated Knifefish

Museum records: 1. UMMZ 250629. Carnivore. Type locality: Mouth of Rio Baré, Municipality of Maraã, 2°09'54"S, 64°42'48"W, Lago Amanã, Rio Japurá, Amazonas, Brazil. This species was recently found in the Rewa River in Guyana. It also occurs in the upper Amazon River of Brazil Peru and Colombia. NE. First Record.

Actinopterygii: Gymnotiformes: Sternopygidae

Distocyclus conirostris (Eigenmann & Allen 1942)
—Rattail Knifefish

Museum records: 2. INHS 49459. Carnivore: aquatic invertebrates. Type locality: Iquitos, Amazon system, Peru. In Guyana, it occurs in river bottoms of the Essequibo River drainage. It also occurs in the Amazon River Basin. Rare. NE.

Comments on Eigenmannia.—Many museum specimens of *Eigenmannia* across the range of this genus are incorrectly labeled as *E. virescens*. Peixoto et al. (2015) proposed that *E. virescens* was described from type material originating from the R. Paraná-R. Paraguay drainage and restricted its range to within this system.

Eigenmannia limbata (Schreiner & Miranda Ribeiro 1903)—Glass Knifefish

Museum records: 5. ANSP 191494. Carnivore: aquatic invertebrates. Type locality: Amazonas, Brazil. In Guyana it occurs in river bottoms of the Demerara and Essequibo River drainages. It also occurs in the Amazon and Orinoco River Basins. Rare. NE.

Eigenmannia macrops (Boulenger 1897)
—Glass Knifefish

Museum records: 90. USNM 402673. Carnivore: aquatic invertebrates. Type locality: upper Potaro River, Guyana. In Guyana it occurs in river bottoms of the Corantijn-New, Cuyuni, Demerara, Essequibo and Takutu River drainages. It also occurs in the Orinoco River Basin. Common. NE.

Eigenmannia nigra Mago-Leccia 1994—Glass Knifefish
Museum records: 4. ANSP 39755. Carnivore: aquatic invertebrates. Type locality: Caño Urama, above Santa Lucía, Río Negro system, Amazonas, Venezuela. In Guyana it occurs in river channels of the Berbice, Essequibo and Mazaruni River drainages. Rare. NE.

Japigny kirschbaum Meunier, Jégu & Keith 2011
—Glass Knifefish

Museum records: 5. FMNH 50185. Carnivore: aquatic invertebrates. Type locality: Saut Fracas, Mana River, French Guiana. It occurs in the rivers of the Corantijn-New River Basin. Rare. NE.

Rhabdolichops eastwardi Lundberg & Mago-Leccia 1986—Glass Knifefish

Museum records: 4. USNM 402690. Carnivore: aquatic invertebrates. Type locality: Río Orinoco, old shipping channel south of Isla Portuguesa, Delta Amacuro Territory,

Venezuela, 8°37'N, 61°48'W. In Guyana it occurs in river bottoms of the Cuyuni River drainages. It occurs in the Orinoco, Amazon and Essequibo River Basins. Rare. NE. First Record.

Rhabdolichops electrogrammus Lundberg & Mago-Leccia 1986—Glass Knifefish

Museum records: 2. USNM 40260. Carnivore: aquatic invertebrates. Type locality: Río Orinoco, near the southern shore of Caño Araguaito, Delta Amacuro, Venezuela, 8°40'N, 61°59'W. In Guyana it occurs in river bottoms of the Essequibo and Takutu River drainages. It also occurs in the Amazon River Basin (Negro and Branco River drainages). Rare. NE. First Record.

Rhabdolichops troscheli (Kaup 1856)—Glass Knifefish
Museum records: 1. ZMB 4085. Carnivore: aquatic invertebrates. Type locality: Guyana. In Guyana, this species is possibly found in river bottoms of the Takutu River drainages. Lundberg and Mago-Leccia (1986) speculate that the type material described by Kaup may have originated from the Takutu River drainage, given the occurrence of this species in the Amazon River Basin. There are no records of this species from collections elsewhere in Guyana. Rare. NE.

Sternopygus macrurus (Bloch & Schneider 1801)
—Longtail Knifefish

Museum records: 125. UMMZ 13054. Carnivore: aquatic invertebrates. Most *Sternopygus* material from Guyana, and indeed most of tropical South America, is identified as *S. macrurus*, whose type locality is simply 'Brazil.' In Guyana *Sternopygus* has been found in streams and river bottoms of the Barima, Berbice, Corantijn-New, Demerara, Essequibo, Mahaica, Pomeroon and Takutu River drainages. Common. NE.

Actinopterygii: Mugiliformes: Mugilidae

Dajaus monticola (Bancroft 1834)—Mountain mullet
Museum records: 16. ROM 92776. Omnivore: insects, prawns, fruits, and algae (Philip 1993). Type locality: Jamaica. It occurs in coastal streams of Central America and many Caribbean Islands. Rare. NE.

Actinopterygii: Osteoglossiformes: Arapaimidae

Arapaima cf. *arapaima* (Valenciennes 1847)—Arapaima
Museum records: 5. YPM ICH 027926. Carnivore. Type locality: Rupununi River, British Guiana, South America. Until recently all *Arapaima* from South America were identified as *A. gigas* (Schinz 1822) but findings by D.

Stewart and associates have shown that there is more diversity, and that the species in Guyana is distinct from ones found in the Amazon Basin (Stewart 2013). The species appears to be restricted to floodplain lakes and adjacent channels of the Rewa, Rupununi, and Essequibo rivers at least as far north as Iwokrama. Rare. CE.

Actinopterygii: Osteoglossiformes: Osteoglossidae

Osteoglossum bicirrhosum (Cuvier 1829)—Arowana
Museum records: 48. ANSP 177355. Carnivore. Type locality: Brazil. It occurs in the Amazon River Basin and the Guianas. *Osteoglossum arowana* Jardine in Schomburgk 1841 was described from Guyana but is today considered a synonym of this species. Common. NE.

Actinopterygii: Siluriformes: Aspredinidae

Amaralia hypsiura (Kner 1855)—Two-Rayed Banjo Catfish
Museum records: 6. AUM 47874. Carnivore. Type locality: Branco River, Brazil. It also occurs in the Amazon River Basin. Rare. LC.

Aspredinichthys filamentosus (Valenciennes 1840)

—Seven-barbed Banjo Catfish

Museum records: 8. ANSP 117600. Carnivore. Type locality: Cayenne, French Guiana. It occurs in lower river courses and estuaries from Venezuela to Brazil in northern South America. Rare. LC.

Aspredinichthys tibicen (Valenciennes 1840)

—Ten-Barbed Banjo Catfish

Museum records: 17. ROM 87369. This species occurs in the lower stretches of coastal rivers and estuaries from Venezuela to Brazil. Rare. LC.

Aspredo aspredo (Linnaeus 1758) —Banjo Catfish

Museum records: 19. ROM 100395. Carnivore. Type locality: Suriname. It is found in the lower course of coastal rivers and estuaries from Trinidad to Brazil. Rare. LC.

Bunocephalus amaurus Eigenmann 1912—Banjo Catfish
Museum records: 38. ANSP 175823. Carnivore. Type locality: Konawaruk, near its confluence with the Essequibo River, Guyana. It has been reported from the Orinoco and Amazon River Basins and the Guianas but may include several cryptic species. Common. LC.

Bunocephalus chamaizelus Eigenmann 1912

—Banjo Catfish

Museum records: 18. ROM 83653. Carnivore. Type locality: Erukin Creek, a tributary of the Potaro River, Guyana. It

occurs only in the Essequibo River Basin. In a molecular phylogenetic analysis of Aspredinidae by Carvalho et al. (2018), *B. chamaizelus* was not closely related to other species of *Bunocephalus*. Common. NE. Endemic.

Bunocephalus verrucosus (Walbaum 1792)

—Banjo Catfish

Museum records: 35. ANSP 177203. Carnivore. Type locality: None. This species is somewhat enigmatic, since there are no type specimens, and the type locality is unknown. It has been reported throughout the Amazon River Basin and the Guianas. Common. LC.

Ernstichthys sp.

—Little Banjo Catfish, Bumblebee Banjo Catfish

Museum records: 2. ROM 97134. Carnivore. Just two specimens of this genus are known from Guyana, one from the Amazon tributaries and the other from the Essequibo Basin, so they may be two distinct taxa. They live buried in gravel or coarse sand in riffles. Rare. NE. First Record.

Hoplomyzon sp.

—Little Banjo Catfish, Bumblebee Banjo Catfish

Museum records: 2. AUM 35859. Carnivore. Just two specimens of this small catfish (maximum size about 4cm total length) are known from Guyana. They live buried in gravel or coarse sand in riffles. Rare. NE. First Record.

Platystacus cotylephorus Bloch 1794

—Banded Banjo Catfish

Museum records: 4. ROM 100388. Carnivore. Type locality: None. This species lives in lower courses of rivers and estuaries from Venezuela to Brazil. Rare. LC.

Pterobunocephalus sp.—Flathead Banjo Catfish

Museum records: 2. ANSP 180019. The identification of these specimens, both from the Takutu River, is uncertain. Other species of the genus are reported from the Amazon River Basin. Rare.

Xyliphius sp.—Deepwater Banjo Catfish

Museum records: 1. AUM 35900. Carnivore. This demersal catfish lives buried in the substrate on the bottom of swift water rivers. Rare. NE. First Record.

Actinopterygii: Siluriformes: Auchenipteridae

Ageneiosus dentatus Kner 1858

—Slopehead Catfish, Dawalla

Museum records: 5. ROM 62535. Carnivore. Type locality: Suriname. It also occurs in the other Guianas and the Orinoco and Amazon River Basins. *Ageneiosus guianensis*

Eigenmann 1912, described from the Demerara River near Wismar (now Linden), Guyana is a synonym. Rare. NE.

Ageneiosus inermis (Linnaeus 1766)

—Slopehead Catfish, Dawalla

Museum records: 52. ROM 88443. Carnivore. Type locality: Suriname. This species is widespread in South America. Common. NE.

Ageneiosus ucayalensis Castelnau 1855

—Slopehead Catfish, Dawalla

Museum records: 41. ROM 101259. Carnivore. Type locality: Lake near Río Ucayali, Peru. It occurs throughout the Amazon River Basin. Common. NE.

Auchenipterichthys coracoideus (Eigenmann & Allen 1942)—Neckfin Catfish, Midnight Catfish

Museum records: 4. ANSP 175842. Carnivore. Type locality: Iquitos, Peru. It occurs throughout the Amazon River Basin. Rare. LC.

Auchenipterus ambyiacus Fowler 1915

—Ambyiacu Neckfin Catfish

Museum records: 12. ROM 66361. Carnivore. Type locality: Ambyiacu or Ampiyacu River, upper Amazon River Basin, Peru. Its occurrence in Guyana was confirmed by Ferraris (1999) in the Waini River, an Orinoco tributary in NW coastal Guyana. Species identification of *Auchenipterus* is difficult, so all the species recorded here need review. Rare. NE.

Auchenipterus brevior Eigenmann 1912—Short-barbel Neckfin Catfish

Museum records: 25. ROM 86847. Carnivore. Type locality: Tumatumari, Potaro River, Guyana. It occurs in the Essequibo River and adjacent basins in Guyana. Common. NE. Endemic.

Auchenipterus demerarae Eigenmann 1912

—Demerara Neckfin Catfish

Museum records: 57. ANSP. 177395. Carnivore. Type locality: Demerara River near Wismar (now Linden), Guyana. It occurs but is also present in the Essequibo River and its tributaries in Guyana and Venezuela. Common. NE.

Auchenipterus dentatus Valenciennes 1840

—Toothy Neckfin Catfish

Museum records: 1. ROM 100037. Carnivore. Type locality: near Paramaribo, Suriname. It occurs in coastal rivers throughout the Guianas. Rare. NE.

Auchenipterus nuchalis (Spix & Agassiz 1829)

—Neckfin Catfish

Museum records: 8. ROM 102174. Carnivore. Type locality: Rio Capim, near São Domingos do Capim, at Igarapé Pirajauara in the lower Amazon River Basin, Pará, Brazil, circa 1°41'S, 47°47'W. It is also found throughout the Guianas. Rare. NE.

Centromochlus carolae (Vari & Ferraris 2013)

—Carol's Spinefin Catfish

Museum records: 5. USNM 401514. Carnivore. Type locality: Cuyuni-Mazaruni, Cuyuni River, midriver sand island just downstream from Kurutuku, Guyana, 6°54'N, 60°18'W. It occurs in the Essequibo River drainage. Rare. NE. Endemic.

Centromochlus heckelii (De Filippo 1853)

—Heckel's Spinefin Catfish

Museum records: 3. ANSP 175837. Carnivore. Type locality: Río Napo, Amazon River system, Peru. It occurs in the Amazon and Orinoco River Basins and Guyana. Rare. NE.

Gelanoglanis sp.—Smiling Woodcat

Museum records: 3. AUM 35908. Carnivore. Rare. NE. First Record.

Gephyromochlus leopardus (Hoedeman 1961)

—Spotted Spinefin Catfish

Museum records: 10. MNHN 1989-43. Carnivore. Type locality: Aloiké Village, Litany River, French Guiana. This species occurs throughout the Guianas. Rare. NE.

Pseudauchenipterus nodosus (Bloch 1794)

—Cocosoda Catfish

Museum records: 32. ROM 66359. Carnivore. Type locality: the original locality (India) was in error, it is now only given as South America. It occurs in lower stretches of rivers and estuaries from Venezuela to Brazil. Common. NE.

Tatia aulopygia (Kner 1858)—Tatia

Museum records: 10. ANSP 179425. Carnivore. Type locality: Guaporé River, Brazil. In Guyana there are specimens from the Demerara and Cuyuni River; it also has been reported from many areas of the Amazon and Orinoco River Basins but is probably a complex of cryptic species. Rare. LC.

Tatia intermedia (Steindachner 1877)—Tatia

Museum records: 34. ANSP 175834. Carnivore. Type locality: Marabitanos, Pará, Brazil. It has been reported from the Amazon and Orinoco River Basins as well as the Guianas, and probably is a complex of cryptic species. Common. NE.

Tatia meesi Sarmiento-Soares & Martins-Pinheiro 2008
—Mees' Tatia

Museum records: 6. ROM 91449. Carnivore. Type locality: lower Potaro River at Waratuk Cataract, Potaro-Siparuni, Guyana, 5°15'31.9"N, 59°24'01.0"W. It has been reported from the Essequibo River Basin in Guyana and there is one dubious record from the Orinoco River Basin in Venezuela. Rare. NE. Endemic.

Tatia reticulata Mees 1974—Reticulate Woodcat
Museum records: 1. RMNH.PIS 26722 (paratypes). Carnivore. Type locality: Karanambo, Rupununi Savannah, Guyana. It also has been reported from the Amazon River Basin. Rare. NE.

Trachelyichthys decaradiatus Mees 1974
—Ten-ray Driftwood Catfish
Museum records: 1. USNM 224807. Carnivore. Type locality: Karanambo area, Rupununi Savannah, Guyana. It has also been reported from the Amazon, Orinoco, and Tapajos River Basins. Rare. NE.

Trachelyopterus galeatus (Linnaeus 1766)
—Wood Catfish, Brown Boot
Museum records: 65. AUM 48701. Omnivore. Type locality: South America, without specific locality. It is widespread in South America in the Orinoco and Amazon River Basins. *Auchenipterus glaber* Steindachner 1877 from the Demerara River in Guyana is a synonym. Common. NE.

Trachelyopterus robustus (Günther 1864)—Boot
Museum records: 1. Known only from the holotype: BMNH 2005.9.12.3. Omnivore. Type locality: Demerara River. It was listed as a *species inquirenda* by Ferraris in Reis et al. (2003). No other specimens have been identified as such. It may be a synonym of *T. galeatus* (Linnaeus 1766), for which the type locality is vague, but possibly Suriname. Rare. NE.

Trachycorystes trachycorystes (Valenciennes 1840)
—Boot, Black Boot
Museum records: 10. ANSP 78079. Omnivore. Type locality: Amazon River Basin, Brazil. It has also been reported from the other Guianas. *Trachycorystes obscurus* (Günther 1863), described from the Essequibo River, is assumed to be a synonym of *T. trachycorystes*. Common. NE.

Tympanopleura piperata Eigenmann 1912—Dwarf Slopehead Catfish, Dwarf Dawalla, Small Dawalla
Museum records: 27. AUM 49638. Carnivore. Type locality: Crab Falls, Essequibo River, Guyana. It is also

reported from the Amazon River Basin. This genus was for a long time considered to be a synonym of *Ageneiosus*, so many museum records still use that name. Common. NE.

Actinopterygii: Siluriformes: Callichthyidae

Callichthys callichthys (Linnaeus 1758)—Hassar, Bush Hassar, Armored Catfish, Bubblesnest Catfish
Museum records: 50. AUM 67160. Omnivore. Type locality: The type series of this species is still under investigation although Knaack (2008) designated a neotype from Suriname. Type locality remains undetermined pending location of possible syntypes. It has been reported from throughout South America. Common. NE.

Corydoras aeneus (Gill 1858)
—Bronze Corydoras, Green Cory
Museum records: 3. CAS SU 51298. Benthic Omnivore. Type locality: Trinidad Island, West Indies. In Guyana, it occurs in the northwest corner in rivers draining towards the Orinoco River Delta. It has also been reported from much of South America east of the Andes. Rare. NE.

Corydoras bicolor Nijssen & Isbrücker 1967
—Bicolor Corydoras
Museum records: 2. ANSP 180693. Benthic Omnivore. Type locality: Sipaliwini River near the border with Brazil, Corantijn River Basin, Paru Savanna, Nickerie, Suriname. It occurs throughout the Guyanas. Rare. NE. First Record.

Corydoras blochi Nijssen 1971
—Spot-back Corydoras, Bloch's Corydoras
Museum records: 8. ROM 97291. Benthic Omnivore. Type locality: Moco-Moco Creek near Lethem, a tributary of the Tacutu/Branco/Amazon River, 3°18'N, 59°46'W, Guyana. It is also reported from northern Brazil and Venezuela. Rare. NE.

Corydoras bondi Gosline 1940
—Black-stripe Corydoras, Bond's Corydoras
Museum records: 39. ROM 99956. Benthic Omnivore. Type locality: Yuruari River, tributary of the Cuyuni/Essequibo, 3 kilometers east of El Callao Bolivar, Venezuela, 7°18'N, 61°50'W. It is also reported from the Courantyne River in Suriname and the Rupununi River in Guyana. Common. NE.

Corydoras breei Isbrücker & Nijssen 1992
—Bree's Corydoras
Museum records: 4. ANSP 180699. Benthic Omnivore. Type locality: Avanavero Falls, Kabalebo River, Courantyne River Basin, Suriname. Rare. NE.

Corydoras brevirostris Fraser-Bruner 1947

—Short-nose Corydoras

Museum records: 4. INHS 49644. NE. Benthic Omnivore. Type locality: Orinoco River, Venezuela (aquarium specimen). This species was first described as a subspecies of *C. melanistius*, but later recognized as a distinct species. It occurs from Venezuela to Suriname in coastal drainages. Rare. NE. First Record.

Corydoras deweyeri Meinken 1957

—Deweyer's Corydoras

Museum records: 2. Only known from the lectotype (ZMH H1186) and paralectotype (ZMH H1187). Benthic Omnivore. Type locality: Guyana. It was first described as a subspecies of *C. griseus* Holly 1940 from Guyana, but Grant (2021) recognized it as valid. Rare. NE. Endemic. First Record.

Corydoras griseus Holly 1940—Gray Corydoras

Museum records: 6. AUM 62878. Benthic Omnivore. Type locality: aquarium specimens. This species is problematic because the type locality is unknown and the holotype was lost in WWII (Grant 2021). Rare. NE.

Corydoras melanistius Regan 1912—Blackfin Corydoras

Museum records: 85. ANSP 177171. Benthic Omnivore. Type locality: Essequibo River, Guyana. It is reported from throughout the Guianas. Records from Colombia are likely misidentifications of *Corydoras brevirostris* and those from the Amazon River Basin are likely misidentifications of *C. ambiacus*. Common. NE.

Corydoras oxyrhynchus Nijssen & Isbrücker 1967

—Longnosed Corydoras

Museum records: 1. AUM 35950. Benthic Omnivore. Type locality: Gojo Creek, a tributary of the Saramacca River, 6 kilometers south of Posoegroenoe, Brokopondo, Suriname. The specimen from Guyana is from the Yuora River, a tributary of the Ireng, Amazon Basin. Rare. NE.

Corydoras potaroensis Myers 1927—Potaro Corydoras

Museum records: 17. ROM 61345. Benthic Omnivore. Type locality: creek tributary to Potaro River downstream of Potaro Landing, Essequibo River Basin, Guyana 5°20'N, 59°05'W. Plate XX in Eigenmann (1912) identified as *C. punctatus* is actually *C. potaroensis* (Myers 1927). Common. NE. Endemic.

Corydoras septentrionalis Gosline 1940

—Northern Corydoras

Museum records: 1. CAS 51309. Benthic Omnivore. Type locality: Río Piña, 6 kilometers north of Maturín,

River Guarapiché system, Monagas, Venezuela, 9°45'N, 63°10'W. Reported from Orinoco River tributaries in NW Guyana. Rare. LC. First Record.

Corydoras sipaliwini Hoedeman 1965

—Sipaliwini Corydoras

Museum records: 4. AUM 48718. Benthic Omnivore. Type locality: Sipaliwini River at Paru Savannah, Suriname. In Guyana it occurs in the Takutu, Essequibo and Rupununi Rivers. Rare. NE.

Hoplosternum littorale (Hancock 1828)

—Hassar, Common Hassar

Museum records: 22. ANSP 179582. Omnivore. Type locality: Demerara River, Guyana. It has been reported from throughout South America. There are five synonyms reported from localities near Guyana: *Callichthys albidus* Valenciennes 1840 from Cayenne, French Guiana; *Hoplosternum thoracatum cayennae* Hoedeman 1961 from Cayenne Island, French Guiana; *Hoplosternum littorale daillyi* Hoedeman 1952 from Paramaribo, Suriname; *Hoplosternum stevardii* Gill 1858 from Trinidad Island; and *Callichthys subulatus* Valenciennes 1840, also from Cayenne, French Guiana. Common. NE.

Megalechis picta (Müller & Troschel 1849)—Hassar

Museum records: 9. AUM 49758. Omnivore. Type locality: Guyana. It has been reported from the Orinoco and Essequibo River Basins. *Hoplosternum oronocoi* Fowler 1915, described from the lower Orinoco River Basin, is a synonym as is *Callichthys sulcatus* Kner 1855, described from the Rio Branco, Brazil. Rare NE.

Megalechis thoracata (Valenciennes 1840)

—Spotted Hoplo, Hassar

Museum records: 49. ANSP 175813. Omnivore. Type locality: Mana River, French Guiana. It has been reported from throughout South America as well as Trinidad Island. *Callichthys exaratus* Müller & Troschel 1849, described from Guyana, is a synonym (Reis et al., 2005). Other synonyms include: *Callichthys longifilis* Valenciennes 1840, from Cayenne, French Guiana, and *Hoplosternum thoracatum surinamensis* 1952 from Suriname. Common. NE.

Actinopterygii: Siluriformes: Cetopsidae*Cetopsidium minutum* (Eigenmann 1912)

—Baby Whale Catfish

Museum records: 5. ANSP 175839. Carnivore. Type locality: Amatuk Cataract, Potaro River, Guyana. It occurs in the middle stretch of the Essequibo River in Guyana, and some tributaries, like the Potaro. Rare. NE. Endemic.

Cetopsidium pemon Vari, Ferraris & de Pinna 2005

—Baby Whale Catfish

Museum records: 1. ANSP 180959. Carnivore. Type locality: Mouth of Claro River, Caroni River drainage, Bolivar, Venezuela, 7°54'45"N, 63°02'35"W. It occurs in the Orinoco, Amazon, and Essequibo River Basins in Colombia, Venezuela, Guyana, and Brazil. Rare. NE.

Cetopsidium roae Vari, Ferraris & de Pinna 2005

—Rosemary's Baby Whale Catfish

Museum records: 10. ROM 81222. Carnivore. Type locality: Karanambo, Rupununi River, Guyana, 3°45'N, 58°18'W. It is known only from the Rupununi region in Guyana. Rare. NE. Endemic.

Cetopsidium soniae Vari & Ferraris 2009

—Sonia's Baby Whale Catfish

Museum records: 1. ROM 96106. Carnivore. Type locality: Main channel of the Manari River, Takutu/Branco/Amazon system, along road between Lethem and Annai, near Lethem, Central Rupununi (Region 9), Guyana, 3°26.590'N, 59°44.578'W. It is probably present in adjacent Brazil. Rare. NE. Endemic.

Cetopsis aspis Abrahão, Mol & De Pinna 2019

—Whale Catfish

Museum records: 10. ROM 81222. Carnivore. Type locality: Mauricie Creek, tributary of upper Tempati River, upper Commewijne River basin, Sipaliwini District, Suriname, 05°06'12.9"N, 54°35'24.9"W. It occurs in central and northern Guyana and northern Suriname. Rare. NE.

Denticetopsis iwokrama Vari, Ferraris & de Pinna 2005

—Baby Whale Catfish

Museum records: 3. AUM 48066. Carnivore. Type locality: Siparuni River at Tumble Creek, Essequibo River Basin, Guyana. It is known only from the Essequibo River Basin. Rare. NE. Endemic.

Denticetopsis macilentia (Eigenmann 1912)

—Baby Whale Catfish

Museum records: 5. AUM 48211. Carnivore. Type locality: Creek below Potaro Landing, Potaro River drainage, Essequibo River Basin, Guyana, 5°23'N, 59°08'W. It is probably endemic to Guyana, but it is reported from Venezuela. Rare. NE.

Helogenes marmoratus Günther 1863

—Blackwater Whale Catfish

Museum records: 112. AUM 62901. Omnivore. Type locality: Essequibo River, Guyana. It has been reported from throughout the Guianas, Amazon, and Orinoco River Basins. Common. NE.

Actinopterygii: Siluriformes: Doradidae*Acanthodoras cataphractus* (Linnaeus 1758)

—Spiny Catfish, Thorny Catfish

Museum records: 24. ANSP 179852. Benthic Omnivore. Type locality: America. It has been reported from throughout the Amazon River Basin and the Guianas. Common. NE.

Acanthodoras polygramma (Kner 1853)—Thorny Catfish
Museum records: 3. ANSP 177258. Benthic Omnivore. Type locality: unknown. Species-level taxonomy of *Acanthodoras* remains unclear. Jardine (in Schomburgk, 1841) described two species assignable to *Acanthodoras*: *Doras brunescens* from the upper Essequibo and *Doras castaneo-ventris* from the "Pasawiri River". Both species are likely synonymous with *A. spinosissimus* (Eigenmann & Eigenmann, 1888), the name commonly applied to deep-scuted specimens from Guyana (vs. shallow-scuted *A. cataphractus*). However, *A. polygramma* (Kner 1853) is also a deep-scuted species and this name has priority over *A. spinosissimus* if both refer to the same species. Both Jardine names have priority over *A. polygrammus*, but their identities are problematic due to the absence of type specimens. Rare. NE. First Record.

Amblydoras affinis (Kner 1855)—Thorny Catfish

Museum records: 103. ANSP 179791. Benthic Omnivore. Type locality: Rio Branco, Rio Guaporé, Brazil. It occurs in the Amazon River Basin as well as the Essequibo. Common. NE.

Doras carinatus (Linnaeus 1766)

—Thorny Catfish, Zip Fish

Museum records: 102. ANSP 178704. Benthic Omnivore. Type locality: Lawa River, Maroni River drainage, about 8 kilometers south-southwest of Anapáike/Kawemhakan, Sipakawini, Suriname, 3°19'31"N, 54°03'48"W. In Guyana it has been found in the Essequibo River Basin. It also occurs in French Guiana. Common. NE.

Doras micropoeus (Eigenmann 1912)

—Thorny Catfish, Zip Fish

Museum records: 43. ANSP 177880. Benthic Omnivore. Type locality: Demerara River at Wismar (today's Linden), Guyana. It occurs in the Essequibo, Courantyne, and other coastal rivers of the Guianas. Common. NE.

Hassar orestis (Steindachner 1875)

—Thorny Catfish, Zip Fish

Museum records: 29. ANSP 175876. Benthic Omnivore. Type locality: Rio Iça, upper Amazon River Basin, Brazil.

It also occurs in the Orinoco and Essequibo River Basins. *Hemiodoras notospilus* Eigenmann 1912, described from Crab Falls on the Essequibo, is currently considered a synonym of *H. orestis*. Common. NE.

Leptodoras hasemani (Steindachner 1915)

—Thorny Catfish, Zip Fish

Museum records: 24. ANSP 175884. Benthic Omnivore. Type locality: Rio Branco at Boa Vista, Brazil (just over the border from Lethem). It has also been reported from other parts of the Amazon Basin, as well as the Orinoco. Common. NE.

Leptodoras linnelli Eigenmann 1912

—Thorny Catfish, Zip Fish

Museum records: 113. ANSP 177271. Benthic Omnivore. Type locality: Tumatumari, Potaro River, Mazaruni-Potaro, Guyana. It also occurs in the Amazon and Orinoco River Basins. Common. NE.

Megalodoras uranoscopus (Eigenmann & Eigenmann 1888)—Thorny Catfish, Zip Fish

Museum records: 1. CAS 20735. Benthic omnivore. Type locality: Lake Hyanuay, Amazonas, Brazil. It also occurs in the Tocantins, Amazon, and Essequibo River Basins. *Megalodoras irwini* Eigenmann 1925, described from Kartabo, near Bartica on the Essequibo River, is a synonym. Rare. NE.

Nemadoras trimaculatus (Boulenger 1898)

—Threespot Thorny Catfish

Museum records: 10. ANSP 179630. Benthic Omnivore. Type locality: Juruá River, Amazon River Basin. It has been reported throughout that system. *Leptodoras trimaculatus* Fowler 1914 and *Opsodoras ogilviei* Fowler 1958, both from the Rupununi River in Guyana, are synonyms. Rare. NE.

Oxydoras niger (Valenciennes 1821)

—Ripsaw Catfish, Zip Fish

Museum records: 8. AUM 35508. Benthic omnivore. Type locality: America, probably Río Saint Francis, Brazil. First described in *Doras*, this species was also previously identified as *Pterodoras niger*. It occurs in the Amazon and Essequibo River Basins. Rare. NE.

Physopyxis ananas Sousa & Rapp Py-Daniel 2005

—Dwarf Thorny Cat

Museum records: 16. ANSP 177255. Benthic Omnivore. Type locality: Rio Jutai, Rio Solimões basin, Amazonas State, Brazil, 2°45'40"S, 66°47'59"W. This tiny doradid was described from the Amazon Basin and is reported from throughout the lowlands of that basin and the Essequibo. Rare. NE.

Platyodoras costatus (Linnaeus 1758)

—Raphael Catfish, Policeman

Museum records: 17. ROM 62626. Benthic Omnivore. Type locality: South America. It has been reported from the Amazon, Orinoco, Tocantins, Parnaíba, and Essequibo River Basins, and throughout the Guianas; may actually be limited to Suriname. Rare. NE.

Platyodoras hancockii (Valenciennes 1840)

—Thorny Catfish

Museum records: 53. ANSP 180286. Benthic Omnivore. Type locality: Demerara River, Guyana. Common. NE.

Pterodoras sp.—Thorny Catfish

Museum records: 0. Benthic Herbivore/Omnivore. Included in this list based on photographs from fishermen that we have identified as a species of *Pterodoras* from the Essequibo River in Guyana. Its taxonomic status is under investigation.

Rhinodoras armbrusteri Sabaj 2008

—Armbruster's Thorny Catfish

Museum records: 16. ANSP 179095. Benthic Insectivore. Type locality: Branco River drainage, St. Ignatius, 1.9 miles NNE of Lethem, Takutu River, Rupununi, Guyana, 3°21'21"N, 059°48'19"W. It probably also occurs in adjacent Brazil. Rare. NE.

Rhynchodoras cf. *woodsii* Glodek 1976

—Woods' Thorny Catfish

Museum records: 1. ROM 62601. Benthic Insectivore. Type locality: Río Bobonaza at Moreta, between Sarayacu and Montalvo, upper Amazon River Basin, Ecuador. It has been reported from the Tocantins and Essequibo River Basins as well. Rare. NE.

Tenellus leporhinus (Eigenmann 1912)—Thorny Catfish

Museum records: 27. ANSP 175874. Benthic Omnivore. Type locality: Tumatumari, lower Potaro River, Essequibo River Basin, Guyana. Reported from the Orinoco and Amazon River Basins. Common. NE.

Tenellus ternetzi (Eigenmann 1925)

—Ternetz's Thorny Catfish

Museum records: 3. ANSP 179203. Benthic Omnivore. Type locality: Tapajos River at Santarém, Amazon River Basin. It occurs throughout the Amazon River Basin. Rare. NE.

Trachydoras brevis (Kner 1853)

—Hard-Nosed Thorny Catfish

Museum records: 10. ANSP 175869. Benthic Omnivore. Type locality: Negro River, Brazil. Reported from other drainages of the Amazon River Basin. Rare. NE.

Trachydoras gepharti Sabaj & Arce H. 2017

—Gephart's Hard-Nosed Thorny Catfish

Museum records: 1. AUM 44572. Benthic Omnivore. Type locality: Ventuari River, rapids downstream of Tencua Falls, 56 km east-southeast of San Juan de Manapiare, Amazonas State, Venezuela, 5°2'59"N, 65°37'38"W. Reported from the Amazon. Rare. NE.

Trachydoras microstomus (Eigenmann 1912)

—Smallmouth Hard-Nosed Thorny Catfish

Museum records: 25. ANSP 170203. Benthic Omnivore. Type locality: Rockstone, Essequibo River, Guyana. Reported from the Amazon and Orinoco River Basins. Common. NE.

Trachydoras nattereri (Steindachner 1881)

—Natterer's Hard-Nosed Thorny Catfish

Museum records: 1. ANSP 179855. Benthic Omnivore. Type locality: Nanay River, left bank beach near village of Pampa Chica, ca. 4.5 km west of Iquitos center, Amazon River Basin, Brazil, 3°45'09"S, 73°17'0"W. Reported from the upper Amazon River Basin in Brazil. Rare. NE.

Actinopterygii: Siluriformes: Heptapteridae*Brachyglanis frenata* Eigenmann 1912

—Bridled Three-Barbeled Catfish, Cassie

Museum records: 4. ROM 62392. Benthic Omnivore. Type locality: Amatuk, Potaro River, Guyana. Although it has also been reported from the Negro and Orinoco River Basins, it is likely endemic to Guyana. Rare. NE. Endemic.

Brachyglanis melas Eigenmann 1912

—Three-Barbeled Catfish, Cassie

Museum records: 11. ROM 91434. Benthic Omnivore. Type locality: Essequibo River at Crab Falls. Known only from the Essequibo River Basin. Rare. NE. Endemic.

Brachyglanis sp.—Three-Barbeled Catfish, Cassie

Museum records: 3. ROM 94950. Reported from the upper Kuribrong and Potaro rivers in the molecular phylogeny of Faustino-Fuster et al. (2021). Rare. NE. Endemic.

Brachyglanis phalacra Eigenmann 1912

—Bald-Headed Three-Barbeled Catfish, Cassie

Museum records: 1. FMNH 53216. Benthic Omnivore. Type locality: Amatuk Cataract, Potaro River, Guyana. Known only from the Essequibo River Basin. NE. Rare. Endemic.

Brachyrhamdia heteropleura (Eigenmann 1912)

—Sidespot Three-Barbeled Catfish, Cassie

Museum records: 27. ROM 85799. Benthic Omnivore. Type locality: Rupununi area, Guyana. Reported from

the Courantyne River in Suriname and the Rio Negro in Brazil. Common. NE.

Cetopsorhamdia insidiosa (Steindachner 1915)

—Insidious Three-Barbeled Catfish, Cassie

Museum records: 3. ANSP 179707. Benthic Omnivore. Type locality: Branco River at Bem Querer, Brazil. It occurs in Guyana in tributaries that drain into the Branco/Amazon system. Rare. NE. First Record.

Chasmocranus brevior Eigenmann 1912

—Short Three-Barbeled Catfish, Cassie

Museum records: 11. ROM 91373. Benthic Omnivore. Type locality: Waratuk, Potaro River, Guyana. Reported from Suriname and French Guiana. Rare. NE.

Chasmocranus longior Eigenmann 1912

—Long Three-Barbeled Catfish, Cassie

Museum records: 45. ANSP 177246. Benthic Omnivore. Type locality: Amatuk Cataract, Potaro River, Guyana. Reported from Brazil, Suriname, and Venezuela. Common. NE.

Goeldiella eques (Müller & Troschel 1849)

—Horsehead Three-Barbeled Catfish, Cassie

Museum records: 25. AUM 47869. Benthic Omnivore. Type locality: Guyana. Reported from throughout South America in the Amazon and Orinoco River Basins. Common. NE.

Imparfinis hasemani Steindachner 1915

—Haseman's Three-Barbeled Catfish, Cassie

Museum records: 50. ROM 85943. Benthic Omnivore. Type locality: Three localities are given in the original description: Rio Surumu near Serra do Mello, Rio Branco at Bem Querer, Rio Tapajós near Santarém, Para State, Brazil. Reported from Amazon and Tapajós River Basins. Common. NE. First Record.

Leptorhamdia essequibensis (Eigenmann 1912)

—Essequibo Three-Barbeled Catfish, Cassie

Museum records: 9. FMNH 53331. Benthic Omnivore. Type locality: Crab Falls, Essequibo River, Guyana. Reported from Amazon, Essequibo, Orinoco, and Tocantins River Basins. It was first described in *Leptoglanis*. It has not been collected in Guyana since Eigenmann (1908) collected the types. Rare. NE.

Mastiglanis asopos Bockmann 1994

—Asopos's Three-Barbeled Catfish, Cassie

Museum records: 60. ROM 101900. Benthic Drift-Capturing Omnivore. Type locality: Igarapé Saracazinho, tributary of Rio Trombetas, near Porto Trombetas, Pará State, Brazil. Reported from the Orinoco and Amazon River Basins. Common. NE. First Record.

Myoglanis sp.—Three-Barbeled Catfish, Cassie
Museum records: 2. ROM 96929. Reported from the Konawaruk and Mazaruni Rivers in the multilocus molecular phylogeny by Faustino-Fuster et al. (2021). Rare. NE. Endemic.

Myoglanis potaroensis Eigenmann 1912
—Speartail Three-Barbeled Catfish, Cassie
Museum records: 26. ROM 61370. Benthic Omnivore.
Type locality: creek tributary to Potaro River near Tukeit, Guyana. Reported only from the Essequibo River Basin. Rare. NE. Endemic.

Phenacorhamdia tenuis (Mees 1986)
—Thin Three-Barbeled Catfish, Cassie
Museum records: 13. UMMZ 250764. Benthic Omnivore.
Type locality: Cascade Moyen Creek, Maroni River Basin, French Guiana. In Guyana, it is found in the Rewa River. Reported from the Guianas, and possibly Venezuela. Rare. Endemic. First Record.

Pimelodella altipinnis (Steindachner 1864)
—High-Fin Three-Barbeled Catfish, Cassie
Museum records: 1. NMW 45601. Benthic Omnivore.
Type locality: Demerara River, Guyana. It was originally described in the genus *Pimelodus*. Only known from the type specimens. Rare. NE. Probably Endemic.

Pimelodella cristata (Müller & Troschel 1849)
—False-Crested Three-Barbeled Catfish, Cassie, Komairu (name in Wapishana)
Museum records: 203. ROM 86862. Benthic Omnivore.
Type locality: Takutu and Mahu rivers, Guyana. It has been reported, probably mistakenly in many cases, from many places in South America in the Amazon and Orinoco River Basins. Common. NE.

Pimelodella leptosoma (Fowler 1914)
—Slender Three-Barbeled Catfish, Cassie
Museum records: 7. ANSP 39340. Benthic Omnivore.
Type locality: Rupununi River, Guyana, 2°–3°N, 50°20'W. Previously placed in *Rhamdella*. Rare. NE. Endemic.

Pimelodella macturki Eigenmann 1912
—McTurk's Three-Barbeled Catfish, Cassie
Museum records: 44. ANSP 175778. Benthic Omnivore.
Type locality: a creek in Mora Passage, Orinoco River Basin, coastal Guyana. Reported from Venezuela, Suriname, and French Guiana. Common. LC.

Pimelodella megalops Eigenmann 1912
—Big-Eyed Three-Barbeled Catfish, Cassie
Museum records: 89. ROM 86150. Benthic Omnivore.

Type locality: Tumatumari, Potaro River, Guyana. Reported from French Guiana. Records from Colombia are probably in error. Common. NE.

Pimelodella wesseli (Steindachner 1877)
—Wessel's Three-Barbeled Catfish, Cassie
Museum records: NMW 79188 (unique Holotype). Benthic Omnivore. Type locality: Essequibo River, Guyana. Reported only from the Essequibo River Basin, Guyana. Eigenmann (1912) considered this species to be a synonym of *P. cristata*, but it is now considered a valid species (Bockmann & Guazzelli 2003). Rare. NE. Endemic.

Rhamdia foina (Müller & Troschel 1849)
—Polecat Three-Barbeled Catfish, Cassie
Museum records: 9. ANSP 180025. Benthic Omnivore. Type locality: Takutu River, Guyana. It is thought to occur in the upper Branco, Negro, Tocantins, and Trombetas River Basins but alpha taxonomy of *Rhamdia* is still under investigation and at least sixteen distinct cis-Andean lineages have been revealed by genetic analysis of populations formerly placed within *Rhamdia quelen* (Silfvergrip, A. 1996, Ríos et al., 2017). Rare. NE.

Rhamdia laukidi (Müller & Troschel 1849)—Cassie
Museum records: 10. ANSP 177357. Benthic Omnivore.
Type locality: first Casiquiare River creek, about 5 minutes from the confluence of the Casiquiare with the Orinoco River, left side, Amazonas State, Venezuela. Reported from the Amazon, Orinoco, and Essequibo River Basins. *Pimelodus holomelas* Günther 1863, from the Essequibo River in Guyana, and *Rhamdia tenella* Eigenmann & Eigenmann 1888, from Lago Cudajas, Amazon River Basin, Amazonas, Brazil, are considered synonyms. Rare. NE.

Rhamdia muelleri (Günther 1864)
—Mueller's Three-Barbeled Catfish, Cassie
Museum records: 2. ROM 66432. Benthic Omnivore. Type locality: Rio Capim, Pará, Brazil. In Guyana, it is found only in the Waini River, a tributary of the Orinoco River delta. Reported from the Amazon and Orinoco River Basins. Rare. NE.

Rhamdia schomburgkii Bleeker 1858
—Schomburgk's Three-Barbeled Catfish, Cassie
Museum records: 0. Benthic Omnivore. Although we have no specimens, we include this taxon here because this name was proposed as a replacement name for the preoccupied, and thus invalid name *Pimelodus (Bagrus) maculatus* Jardine in Schomburgk 1841, which was reported to be found in most of the rivers in Guyana. Type locality: Most rivers of Guyana, also Rio Negro and Amazon River. Schomburgk (1858) included just a crude drawing (43), so it is a *species inquirenda* in Pimelodidae. Rare. NE

Rhamdia sp.—Three-Barbeled Catfish, Cassie Museum records: 71. ANSP 177233. Benthic Omnivore. This species was formerly identified as *Rhamdia quelen* (Quoy & Gaimard 1824), but a recent study (Koerber and Reis, 2020) showed that the conclusions of Silfvergrip (1996) about the type locality were mistaken and that it is found only in coastal rivers near Rio de Janeiro, Brazil. Common. NE.

Actinopterygii: Siluriformes: Loricariidae

Ancistrus kelleriae de Souza, Taphorn, and Armbruster 2019—Keller's Bristlenose, Bushymouth Catfish, Bearded Catfish

Museum records: 22. AUM 62849. Records for this and subsequent species of *Ancistrus* include only those verified in de Souza et al. (2019). Benthic herbivore/detritivore. Type locality: rapids at Grass Shoals, Kuribrong River, Potaro River drainage, Region 8 (Potaro/Siparuni), Guyana, 5.4079°, -59.5318°. Recently identified material at ROM indicates a range that includes much of the lower Potaro River Basin. Rare. LC. Endemic.

Ancistrus leucostictus (Günther 1864)—White-Spotted Bristlenose Pleco, Bushymouth Catfish, Bearded Catfish Museum records: 16. AUM 35629. Benthic herbivore/detritivore. Type locality: Essequibo River, Guyana. The species account in de Souza et al. (2019) was based on the type specimen (BMNH 1864.1.21.85), but there is question as to whether that specimen is the one observed and described by Günther (1864) (Fisch Muller 2003). Distributed throughout the Essequibo River system. Common. LC. Endemic.

Ancistrus lithurgicus Eigenmann 1912—Stone Bristlenose Pleco, Bushymouth Catfish, Bristlenose, Bearded Catfish Museum records: 16. AUM 37941. Benthic herbivore/detritivore. Type locality: Crab Falls, Essequibo River, Guyana, circa 5.403128, -58.820068. Distributed throughout the Essequibo and Berbice river systems. Common. LC. Endemic.

Ancistrus nudiceps (Müller & Troschel 1849)

—Bushymouth Catfish, Bristlenose, Bearded Catfish Museum records: 43. AUM 35628. Benthic herbivore/detritivore. Type locality: Takutu River, Amazon River Basin, Guyana. Distributed throughout the Essequibo and Takutu river systems. Common. LC.

Ancistrus saudades de Souza, Taphorn, and Armbruster 2019—Bushymouth Catfish, Bristlenose, Bearded Catfish Museum Records: 12. AUM 35631. Type locality: Creek at second wooden bridge from Moco-Moco power station, Amazon/Branco/Takutu River, Region 9, Rupununi, Guyana,

3.30318°, -59.65038°. Distributed in the Takutu River system of Guyana as well as the upper Ventuari, Caroni, and Caura rivers of Venezuela; likely also present throughout the upper Branco Drainage of Brazil. Common. LC.

Aphanotorulus emarginatus (Valenciennes 1840)

—Red Fin Thresher Pleco, Smoke Hassar

Museum records: 59. AUM 35535. Benthic Detritivore. Type locality: Probably Brazil. It occurs in the Orinoco, Amazon, and Essequibo River Basins. *Hypostoma squalinum* Jardine 1841, described from the Rio Branco, Rio Negro, and Essequibo rivers, is a synonym. Common. NE.

Corymbophanes ameliae Lujan, Armbruster, Werneke, Teixeira, and Lovejoy 2019

—Amelia's Shield Pleco, Smoke Hassar

Museum Records: 15. AUM 53676. Benthic Omnivore. Type locality: Kuribrong River at rapids about 15 min upstream of upstream Kuribrong Camp, upper Potaro River drainage, Region 8 (Potaro-Siparuni), Guyana, 05.33766°, -059.56615°, elevation 454 meters. Found in rocky habitats throughout the upper Kuribrong River system above Amaila Falls. Rare. EN. Endemic.

Corymbophanes andersoni Eigenmann 1912

—Anderson's Shield Pleco, Smoke Hassar

Museum records: 3. AUM 28149. Benthic Omnivore. Type locality: Aruataima Falls, upper Potaro River, Guyana, 5°00'05"N, 59°37'33"W. Known only from the Potaro River and its tributaries above Kaieteur Falls, Guyana. Rare. EN. Endemic.

Corymbophanes kaiei Armbruster & Sabaj 2000

—Kaie's Shield Pleco, Smoke Hassar

Museum records: 18. AUM 28163. Benthic Omnivore. Type locality: Oung Creek, Chenapou River, upper Potaro River drainage, Guyana. It is only known from the upper Potaro River drainage. Rare. LC. Endemic.

Cteniloricaria platystoma (Günther 1868)

—Flat-Mouthed Whiptail Pleco, Whiptail Hassar

Museum records: 24. ROM 85921. Benthic Omnivore. Type locality: probably Suriname. Reported from Suriname and French Guiana. *Parasturisoma maculata* Boeseman 1971, described from the upper Courantyne River, is a synonym. Common. NE.

Farlowella amazonum (Günther 1864)

—Amazonian Stick Catfish, Whiptail Hassar

Museum records: 4. ANSP 175902. Herbivore/Detritivore. Type locality: Amazon River at Santarem, Para State, Brazil. It has also been reported from the Tocantins River Basin. Rare. NE.

Farlowella nattereri Steindachner 1910

—Natterer's Stick Catfish, Whiptail Hassar

Museum records: 14. AUM 47955. Herbivore/Detritivore. Type locality: middle Amazon River Basin, Brazil. *Farlowella hargreavesi* Eigenmann 1912, described from Guyana, is considered a synonym based on morphology and color pattern. Rare. NE.

Farlowella oxyrryncha (Kner 1853)

—Sharp-Snout Stick Catfish, Whiptail Hassar

Museum records: 1 ANSP 179765. Herbivore/Detritivore. Type locality: Mamoré River, Brazil. It has been reported throughout the Amazon and Orinoco River Basins and coastal rivers of northern Brazil. Rare. NE.

Farlowella reticulata Boeseman 1971

—Reticulate Stick Catfish, Whiptail Hassar

Museum records: 10. AUM 48459. Herbivore/Detritivore. Type locality: Maka Creek, tributary of Lawa River, 10 kilometers south of Stoelmanseiland, Marowijne River basin, Suriname. It is reported from the Essequibo, Marowijne and Oyapock River Basins. Rare. NE.

Farlowella rugosa Boeseman 1971

—Rough Stick Catfish, Whiptail Hassar

Museum records: 28. ANSP 177285. Herbivore/Detritivore. Type locality: Kamaloea (or Saloea) Creek, right tributary of Marowijne River, 9 kilometers southeast of the outlet of Gran Creek, French Guiana. It occurs in the Essequibo River Basin and coastal rivers of Suriname and French Guiana. Common. NE.

Guyanancistrus brevispinis (Heitmans, Nijssen &

Isbrücker 1983)—Short-Spine Guiana Pleco

Museum records: 1. MCZ 30196. Benthic Omnivore. Type locality: Fallawatra River, rapid 5 kilometers southwest of Stondansie Fall, Nickerie District, Suriname. It occurs in Suriname and French Guiana. Rare. NE.

Harttia sp. 'Ireng'—Ireng Whiptail Pleco, Whiptail Hassar

Museum records: 3. AUM 67191. Benthic Omnivore. Reported from the upper Ireng River by Lujan et al. (2020). Rare. NE.

Hemiodontichthys acipenserinus (Kner 1853)

—Knobnose Whiptail Catfish, Whiptail Hassar

Museum records: 8. AUM 44413. Benthic Omnivore. Type locality: Guaporé River, Rondônia, Brazil. Described from Rondonia State, Brazil, and has been reported from the Amazon, Paraguay, and Oiapoque River Basins. Rare. NE.

Hypancistrus margaritatus Tan & Armbruster 2016

—Pearlspotted Angel Pleco, Smoke Hassar

Museum records: 1. CSBD F1701/AUM 35610. Benthic Omnivore. Type locality: Takutu River ca. 2.75 km W of Saint Ignatius, Rio Branco, Amazon River Basin, Guyana, 3.35500°N, 59.83077°W. It has been reported only from the Takutu River, a tributary of the Branco/Amazon. It is only known from the holotype. Rare. NE.

Hypoptopoma guianense Boeseman 1974

—Guiana Flathead Dwarf Pleco

Museum records: 77. AUM 38973. Benthic Omnivore. Type locality: Left tributary of Nickerie River, a few kilometers upstream from Stondansie Falls, Suriname. It is reported from the Essequibo and Nickerie River Basins. Common. NE.

Hypostomus hemiurus (Eigenmann 1912)

—Half-Tailed Pleco, Smoke Hassar

Museum records: 89. AUM 67205. Benthic Omnivore. Type locality: Amatuk, Potaro River, Guyana. It occurs only in the Essequibo River Basin. Common. LC. Endemic.

Hypostomus macushi Armbruster & de Souza 2005

—Macushi Pleco, Smoke Hassar

Museum records: 23. AUM 38884. Benthic Omnivore. Type locality: Ireng River, 6.9 kilometers west-southwest of Karasabai, Takutu River drainage, Negro River Basin, Guyana at border with Brazil, 04.01957°N, 059.60170°W. It occurs in the Rupununi River and other Essequibo tributaries, and probably throughout the upper Branco River drainage in Brazil. Common. NE.

Hypostomus plecostomus (Linnaeus 1758)

—Common Pleco, Suckermouth Catfish, Smoke Hassar

Museum records: 12. ROM 64808. Benthic Omnivore. Type locality: Suriname River. As with many older fish names, the type locality is uncertain. A lectotype (NRM 32) has been designated from Suriname (Weber et al., 2012). It occurs in the lowlands of the Orinoco River Basin and the Guianas in coastal rivers. Rare. NE.

Hypostomus taphorni (Lilyestrom 1984)

—Taphorn's Pleco, Smoke Hassar

Museum records: 77. AUM 35522. Benthic Omnivore. Type locality: Río Botanamo, Río Cuyuni drainage, near bridge on the road to Bochínche, Bolívar State, Venezuela, 7°25'N, 61°11'W. It occurs in the Essequibo and Orinoco River Basins. Common. NE.

Hypostomus watwata Hancock 1828

—Watwata Pleco, Smoke Hassar

Museum records: 5. FMNH 53106. Benthic Omnivore. Type locality: Berbice River, Guyana. It occurs in coastal waters from Venezuela to French Guiana. Rare. NE.

Lasiancistrus schomburgkii (Günther 1864)—
Schomburgk's Whisker-Cheeked Pleco, Smoke Hassar
Museum records: 5. AUM 48161. Type locality: Guyana.
It occurs in the Amazon River Basin as well as in the
upper Orinoco and Essequibo basins although it is rarely
collected in Guyana. Benthic Omnivore. Rare. LC.

Limatulichthys griseus (Eigenmann 1909)
—Gray Whiptail Pleco, Whiptail Hassar
Museum records: 89. AUM 35698. Benthic Omnivore.
Type locality: Konawaruk River, Guyana. It occurs in the
Orinoco and Amazon River Basins. Common. NE.

Lithogenes villosus Eigenmann 1909
—Stoneborn Shield Pleco
Museum records: 7. AUM 62934. Benthic Omnivore. Type
locality: upper Potaro River at Aruataima Falls, Guyana.
Rare. It is only known from torrential rapids habitats in the
upper Potaro River above Kaieteur Falls, Guyana. Rare.
EN. Endemic.

Lithoxus lithoides Eigenmann 1912
—Granite Flatrock Pleco, Smoke Hassar
Museum records: 46. AUM 70113. Benthic Omnivore. Type
locality: Amatuk, Potaro River, Guyana. It occurs throughout
the Essequibo River Basin, Guyana. Common. LC. Endemic.

Loricaria cataphracta Linnaeus 1758
—Armored Whiptail Pleco, Whiptail Hassar
Museum records: 62. AUM 48272. Benthic Omnivore.
Type locality: Mouth of Marowijne River, Suriname. It
occurs in the Amazon and Orinoco River Basins and the
Guianas. Common. NE.

Loricaria cf. simillima Regan 1904
—False Armored Whiptail Pleco, Whiptail Hassar
Museum records: 7. AUM 35709. Benthic Omnivore. Type
locality: Canelos, upper Amazon, eastern Ecuador; also re-
ported from the Orinoco and La Plata River Basins. Rare. NE.

Loricaria cuffyi Londoño-Burbano, Urbano-Bonilla &
Thomas 2020—Cuffy's Whiptail Pleco, Whiptail Hassar
Museum records: 9. AUM 39843. Benthic Omnivore. Type
locality: Ireng River, Branco River drainage, Amazon
River Basin, Guyana. It also occurs in Orinoco River
Basin. Rare. NE.

Loricariichthys brunneus (Hancock 1828)
—Smooth-Lipped Whiptail Pleco, Whiptail Hassar
Museum records: 25. AUM 44433. Benthic Omnivore.
Type locality: Orinoco and Demerara rivers, no types
known. Common. NE.

Loricariichthys microdon (Eigenmann 1909)
—Small-Toothed Whiptail Pleco, Whiptail Hassar
Museum records: 47. AUM 49615. Benthic Omnivore.
Type locality: Rupununi River, Essequibo River Basin,
Guyana. Common. NE. Endemic.

Nannoxyropsis ephippia (Aquino & Sabaj 2016)—
Saddle-Backed Dwarf Pleco
Museum records: 14. ANSP 177381. Benthic Omnivore.
Type locality: Deer Falls, Burro-Burro River, Essequibo
River Basin, Guyana. It also occurs in the Branco River
drainage, Amazon River Basin. Previously it was classified
in *Oxyropsis*. Rare. NE. Endemic.

Neblinichthys brevibracchium Taphorn, Armbruster,
López-Fernández & Bernard 2010
—Short-Finned Punk Pleco, Smoke Hassar
Museum records: 20. ROM 83772. Benthic Omnivore. Type
locality: lower Kukui River at Jawalla, upper Mazaruni
River drainage, Guyana. Common. Endemic. EN.

Neblinichthys echinasus Taphorn, Armbruster, López-
Fernández & Bernard 2010
—Prickly-Snout Punk Pleco, Smoke Hassar
Museum records: 3. AUM 49999. Benthic Omnivore.
Type locality: Kukui River near the town of Philipai, upper
Mazaruni River drainage, Guyana. Rare. Endemic. EN.

Panaqolus clautellifer Tan, de Souza & Armbruster
2016—Bloodred Tiger Pleco, Smoke Hassar
Museum records: 3. AUM 65708. Benthic Omnivore.
Type locality: Amazon - Takutu River near Lethem,
Branco River drainage, Guyana, 3.47043°, -059.80993°.
Rare. NE.

Paralithoxus bovallii (Regan 1906)
—Bovalius' Flatrock Pleco, Smoke Hassar
Museum records: 19. AUM 67206. Benthic Omnivore.
Type locality: Kaat River, tributary of the Ireng, Branco
River drainage, Amazon River Basin, Guyana. It is
currently known from the Ireng and Essequibo Rivers,
and is possibly present in the Courantyne although these
populations may represent a distinct species. Previously
classified in *Lithoxus*. Rare. NE. Endemic.

Rhinotocinclus britskii (Boeseman 1974)
—Britski's Dwarf Pleco
Museum records: 78. AUM 49775. Benthic Omnivore.
Type locality: Coppename River tributary, Suriname. It
also occurs in the Orinoco River Basin and the Guianas.
Common. NE.

Rhinotocinclus collinsae (Schmidt & Ferraris 1985)

—Collins's Dwarf Pleco

Museum records: 16. AUM 62879. Benthic Omnivore. Type locality: tributary of the Takutu River about 2 mi from Mazarahally Takutu lumber camp in Takutu Mountains, Branco River drainage, Amazon River Basin, Guyana. It occurs throughout the Essequibo River Basin in Guyana. Common. NE. Endemic.

Rhinotocinclus hardmani (Lehmann, Lujan & Reis

2022)—Hardman's Dwarf Pleco

Museum records: 11. AUM 62850. Benthic Omnivore. Type locality: Kuribrong River, Potaro River drainage, Essequibo River Basin, Guyana. It is only known from the lower Potaro River Basin, Guyana. Rare. NE. Endemic.

Paulasquama callis Armbruster & Taphorn 2011

—Cobblestone Pleco, Smoke Hassar

Museum records: 15. AUM 50000. Benthic Omnivore. Type locality: Waruma River, upper Mazaruni River drainage, Guyana. It occurs only in the upper Mazaruni River drainage, Guyana. Rare. Endemic. NT.

Peckoltia braueri (Eigenmann 1912)

—Brauer's Pleco, Wormline Pleco, Smoke Hassar

Museum records: 20. AUM 47718. Benthic Omnivore. Type locality: Takutu River, Guyana; it also has been reported from the Branco and Negro rivers in Brazil. Common. NE.

Peckoltia cavatica Armbruster & Werneke 2005

—Dusky Wormline Pleco, Smoke Hassar

Museum records: 6. AUM 44812. Benthic Omnivore. Type locality: Rupununi River, Guyana. It occurs only in the Rupununi area of Guyana. Rare. Endemic. NT.

Peckoltia sabaji Armbruster 2003

—Sabaj's Pleco, Para Pleco, Smoke Hassar

Museum records: 19. AUM 44329. Benthic Omnivore. Type locality: 5.9 kilometers west-southwest of village of Sand Creek, Essequibo River Basin, Rupununi (Region 9), Guyana, 02.96656°, -059.56943°. Reported from the Orinoco and Amazon River Basins. Common. LC.

Pseudacanthicus leopardus (Fowler 1914)

—Leopard Cactus Pleco, Smoke Hassar

Museum records: 10. AUM 35538. Benthic Omnivore. Type locality: Rupununi River, Essequibo River Basin, Guyana. Rare. NE. Endemic.

Pseudacanthicus serratus (Valenciennes 1840)

—Mustang Cactus Pleco, Smoke Hassar

Museum records: 2. AMNH 72951. Benthic Omnivore. Type locality: near to Paramaribo, Suriname. Known

in Guyana from only two specimens collected near the confluence of the Cuyuni and Mazaruni rivers. Rare. NE.

Pseudancistrus barbatus (Valenciennes 1840)

—Bearded Pleco, Wreath Pleco, Smoke Hassar

Museum records: 16. AUM 39002. Benthic Omnivore. Type locality: La Mana River, French Guiana. Reported from the upper Essequibo; however, the type locality of *P. corantijniensis* is geographically closer to the upper Essequibo population. Essequibo specimens key to *P. barbatus* but taxonomy of these populations need to be reexamined. *Hypostomus guttatus* Valenciennes 1840, from Suriname, and *Ancistrus barbatus* Steindachner 1911, from the Tapajos River in Brazil, are synonyms. Rare. NE.

Pseudancistrus guentheri (Regan 1904)

—Guenther's Pleco, Smoke Hassar

Museum records: 1 (Holotype) BMNH 1978.3.2.1. Benthic Omnivore. Type locality: Guyana. This species remains an enigma and is only known from the holotype. Rare. NE.

Pseudancistrus megacephalus (Günther 1868)

—Bighead Pleco, Smoke Hassar

Museum records: 2. AUM 37923. Benthic Omnivore. Type locality: probably Suriname. Identified from Guyana and Suriname but has not been collected in Guyana for over 100 years and Suriname for 150 years suggesting that the species may be extinct. *Chaetostoma macrops* Lütken 1874, from Suriname, is a synonym. Rare. CR, possibly extinct.

Pseudancistrus nigrescens Eigenmann 1912

—Headspotted Stream Pleco, Smoke Hassar

Museum records: 19. AUM 45299. Benthic Omnivore. Type locality: Amatu, Potaro River, Guyana. It occurs only in the Essequibo River Basin, Guyana. Common. LC. Endemic.

Pseudoloricaria laeviscula (Valenciennes 1840)

—Smoothbodied Whiptail Pleco, Whiptail Hassar

Museum records: 25. Benthic Omnivore. There is no type locality for this species, which has been reported from the lower and middle Amazon River Basin in Brazil, including the Branco and Negro River drainages, and the Takutu River, Guyana. Common. NE.

Pterygoplichthys pardalis (Castelnau 1855)

—Suckermouth Catfish, Sailfin Catfish, Smoke Hassar

Museum records: 0. Included here based on photographs provided by Mr. Audwin Anthony of specimens captured in the Berbice River. The type locality is the Amazon River; however, Rafael Covain (pers. com.) states that the species was released in 2010 around Paramaribo, Suriname, where it has become established, and is now found there in fish markets. It appears to have spread westward to the Berbice River in Guyana. Rare. NE.

Rhadinoloricaria macromystax (Günther 1869)

—Mustachioed Whiptail Pleco, Whiptail Hassar

Museum records: 2. AUM 35755. Benthic Omnivore. Type locality: upper Amazon basin, Peru. Known from the Ireng River, Branco River drainage, Guyana. Rare. NE.

Rineloricaria fallax (Steindachner 1915)

—Headspot Whiptail Pleco, Whiptail Hassar

Museum records: 87. AUM 49798. Benthic Omnivore. Type locality: Igarapé de Carauná, Amazon Basin, Brazil. It occurs in the upper Rupununi and Branco River drainages. This species was previously placed in the genus *Hemiloricaria*. Common. NE.

Rineloricaria lanceolata (Günther 1868)

—Racing-Striped Whiptail Pleco, Whiptail Hassar

Museum records: 40. AUM 49666. Benthic Omnivore. Type locality: Xeberos, upper Amazon of Peru. Reported from throughout the Amazon basin. In Guyana, it is known from the Rupununi and Branco River drainages. Common. NE.

Rineloricaria platyura (Müller & Troschel 1849)

—Flat-Tailed Whiptail Pleco, Whiptail Hassar

Museum records: 9. ROM 64785. Benthic Omnivore. Type locality: Rupununi River, Essequibo Basin, Guyana. Reported from coastal rivers near the mouth of the Amazon, the Guianas and Venezuela. *Loricaria submarginatus* Eigenmann 1909, described from the Potaro River in Guyana, is a synonym. Rare. NE.

Rineloricaria stewarti (Eigenmann 1909)

—Stewart's Whiptail Pleco, Whiptail Hassar

Museum records: 12. AUM 49797. Benthic Omnivore. Type locality: Chipoo Creek, Ireng River, Branco River drainage, Amazon River Basin, Guyana. Reported from the upper Branco River in Brazil and throughout the Guianas. Rare. NE.

Spatuloricaria sp.—Whiptail Pleco, Whiptail Hassar
Museum records: 17. AUM 48269. Benthic Omnivore. Specimens are most similar to *S. eucanthogenys*, but a taxonomic revision should be completed. Rare. NE.

Sturisoma monopolte Fowler 1914

—Shielded Whiptail Pleco, Whiptail Hassar

Museum records: 47. AUM 35795. Benthic Omnivore. Type locality: Rupununi River, Essequibo River Basin, Guyana. Common. NE. Endemic.

Yaluwak primus Lujan, Armbruster, and Werneke 2019

—Yaluwak, Smoke Hassar

Museum Records: 2. AUM 67193. Benthic Omnivore. Type locality: Sukwabi Creek, East Fork, downstream of

Wotowanda Falls, upper Ireng River drainage, Region 8 (Potaro–Siparuni), Guyana, 05.09°, -059.97°, 634 meters. Found in rocky cobble and bedrock habitat in upper Ireng River. Rare. EN. Endemic.

Actinopterygii: Siluriformes: Pimelodidae*Brachyplatystoma filamentosum* (Lichtenstein 1819)

—Lau-Lau Catfish

Museum records: 1. ROM 100364. Carnivore. Type locality: Brazil. It occurs in the Amazon and Orinoco River Basins and the Guianas and coastal rivers of NE Brazil. Rare. NE.

Brachyplatystoma rousseauxii (Castelnau 1855)

—Lau-Lau Catfish

Museum records: 0. Included here based on photographs from fishermen. Carnivore. Type locality: Amazon River, Brazil. Present in the Amazon and Orinoco River Basins and the Guianas and coastal rivers of NE Brazil. Rare. NE.

Brachyplatystoma vaillantii (Valenciennes 1840)

—Lau-Lau Catfish

Museum records: 12. ROM 100398. Carnivore. Type locality: specimens in the type series were apparently from Suriname, French Guiana, and Colombia. Found in the Orinoco and Amazon River Basins, the Guianas, and coastal rivers of NE Brazil. Common. NE.

Calophysus macropterus (Lichtenstein 1819)

—Vulture Catfish

Museum records: 1. MNHM 0000-1202. Omnivore. Type locality: Brazil. This species occurs in the Amazon and Orinoco River Basins. Rare. NE.

Hemisorubim platyrhynchos (Valenciennes 1840)

—Porthole Shovelnose Catfish, Shovelhead Catfish, Large Shovelhead Catfish

Museum records: 31. ANSP 177803. Carnivore. Type locality: unknown. Present in the Amazon, Orinoco, Paraná River Basins and the Guianas. Common. NE.

Hypophthalmus marginatus Valenciennes 1840

—Highwaterman Catfish, Highwater Catfish

Museum records: 16. ROM 86436. Zooplanktivore. Type locality: French Guiana. Present in the Guianas and the Orinoco River Basin. *Hypophthalmus longifilis* Valenciennes 1840, described from Suriname, is a synonym. Common. NE.

Hypophthalmus oremaculatus Nani & Fuster de Plaza

1947—Highwaterman Catfish, Highwater Catfish

Museum records: 2. AUM 48426. Zooplanktivore. Type locality: Paraná River, Argentina; also found in the

Amazon, Orinoco, and the Guianas. In Guyana, it is known from a few specimens from the Rupununi area. Rare. LC.

Leiarius longibarbis (Castelnau 1855)

—Marbled Pim, Marbled Sailfin Catfish, Sailfin Pim

Museum records: 0. Carnivore. Type locality: Amazon River. Included here based on pers. com. from Michael Littmann who reviewed photos from sport fishermen in Guyana and also informed us that *L. marmoratus* Gill 1870 is a synonym of *L. longibarbis*. Common. NE. Common. NE.

Leiarius pictus (Müller & Troschel 1849)

—Painted Catfish, Sailfin Pim, Saddle Catfish

Museum records: 3. ANSP 177345. Carnivore. Type locality: unknown. Reported from the Orinoco and Amazon River Basins. Rare. NE.

Megalonema amaxanthum Lundberg & Dahdul 2008

—Cassie

Museum records: 9. ANSP 180494. Carnivore. Type locality: Río Tahuamanu from Boca Nareuda to below Cachuelita, 11°18'S, 68°44'W, Pando State, Bolivia. Occurs in Guyana in the Amazon River tributaries like the Takutu; also found throughout the Amazon River Basin from Bolivia to Colombia. Rare. NE.

Megalonema platycephalum Eigenmann 1912—Cassie
Museum records: 30. ANSP 179458. Carnivore. Type locality: Tumatumari, Potaro River, Guyana. Present throughout the Essequibo River and its tributaries and reported from the Orinoco and Amazon River Basins. However, those populations show some genetic divergence from those in Guyana (Lundberg et al., 2011). Common. NE. Endemic.

Phractocephalus hemiliopterus (Bloch & Schneider 1801)—Redtail Catfish

Museum records: 5. ANSP 175797. Carnivore. Type locality: Maranhão River in Brazil. It occurs in the Amazon and Orinoco River Basins, and the Guianas. Common. NE.

Pimelodus albofasciatus Mees 1974—Whitestripe Cassie
Museum records: 68. ANSP 39832. Carnivore. Type locality: Sipaliwini, Suriname. It occurs in the Amazon, Orinoco, and the Guianas. Common. NE.

Pimelodus blochii Valenciennes 1840

—Bloch's Catfish, Cassie

Museum records: 141. ANSP 179716. Benthic Omnivore. Type locality: Suriname. This name encompasses a group of very similar species reported from throughout South America. Common. NE.

Pimelodus ornatus Kner 1858—Ornate Pim

Museum records: 50. ANSP 179701. Benthic Omnivore. Type locality: Suriname, Negro and Cuiabá Rivers, Brazil. Reported the Amazon and Orinoco River Basins, and the Guianas. *Megalonema rhabdostigma* Fowler 1914, described from the Rupununi River in Guyana, is a synonym. Common. NE.

Pinirampus pirinampu (Spix & Agassiz 1829)

—Flat-Whiskered Catfish

Museum records: 13. ANSP 177353. Carnivore. Type locality: rivers of Brazil, without a specific locality. Reported from throughout tropical South America in the Orinoco, Paraná, Essequibo, and Amazon River Basins. Common. NE.

Pseudoplatystoma fasciatum (Linnaeus 1766)

—Barred Sorubim, Tiger Catfish, Culet

Museum records: 31. ANSP 179560. Carnivore. Type locality (based on neotype): Mazaruni and Potaro River, Essequibo River Basin, Guyana, 5°31'39.5"N, 58°37'43.6"W. Also reported from the coastal rivers in Guyana, Suriname, and French Guiana. Common. NE.

Pseudoplatystoma punctifer (Castelnau 1855)

—Tiger Catfish, Culet

Museum records: 1. ROM 91227. Carnivore. Type locality: Amazon River, Brazil. Reported from throughout the Amazon River Basin and, in Guyana, is restricted to Amazon Basin tributaries. Rare. NE.

Pseudoplatystoma tigrinum (Valenciennes 1840)

—Tiger Catfish, Culet

Museum records: 0. Carnivore. Included here based on photographs from Mr. Ashley Holland who caught this species from the Rewa River, Essequibo River Basin. Also reported from the Amazon Basin. Rare. NE.

Sorubim elongatus Littmann, Burr, Schmidt & Isern

2001—Slender Shovelnose Catfish, Shovelhead Catfish

Museum records: 16. ANSP 39818. Carnivore. Type locality: Río Itaya drainage, 50 meters upstream of confluence with Moena Creek, Amazon River Basin, Ullpa Caño, Maynas Province, Loreto Department, Peru, circa 3°46'20"S, 73°14'17"W. Reported from the Orinoco and Essequibo River Basins as well. Common. NE.

Sorubim lima (Bloch & Schneider 1801)

—Shovelhead Catfish

Museum records: 2. AUM 45084. Carnivore. Type locality: Maranhão River, Brazil. Reported from the Amazon, Orinoco, Paraná, Parnaíba, and Essequibo River Basins. Rare. NE.

Zungaro zungaro (Humboldt 1821)—Yellow Catfish, Jau Museum records: 0. Included in this list based on photographs from fishermen. Carnivore. Type locality: Near Tomependa, Río Marañon, Amazon River Basin, Peru. Reported from the Amazon and Orinoco River Basins and the Guianas. Common. NE.

Actinopterygii: Siluriformes: Pseudopimelodidae

Batrochoglanis villosus (Eigenmann 1912)—Toad catfish Museum records: 42. ROM 97373. Carnivore. Type locality: Potaro Landing, Potaro River, Guyana. Reported from many other localities in the Amazon and Orinoco River Basins and the Guianas. Reports of other species, such as *B. raninus* from Guyana are assumed to be errors, since that species hails from near Rio de Janeiro in coastal rivers of Brazil. Common. NE.

Lophiosilurus albomarginatus (Eigenmann 1912)

—Toad Catfish, Monkfish Catfish

Museum records: 12. ROM 82902. Carnivore. Type locality: Tukeit, Potaro River, Guyana. It was first described in *Pseudopimelodus*. Probably endemic to the Essequibo River Basin in Guyana but there are a couple of records from the Orinoco River delta in Venezuela. Rare. NE.

Microglanis poecilus Eigenmann 1912

—Dwarf Marbled Catfish, Bumblebee Catfish

Museum records: 61. ROM 91520. Carnivore. Type locality: Rupununi Region, below Pacu (Packoo or Packeoo) Falls. Reported from the Orinoco and Amazon River Basins, as well as the Guianas. Common. NE.

Microglanis secundus Mees 1974

—Dwarf Marbled Catfish, Bumblebee Catfish

Museum records: 17. ANSP177239. Carnivore. Type locality: Sipaliwini River, Suriname. Reported from the Orinoco River Basin, as well as the Amazon. Rare. NE.

Pseudopimelodus bufonius (Valenciennes 1840)

—Toad Catfish

Museum records: 7. AUM 36063. Carnivore. Type locality: Stated as French Guiana, but may have instead been Paramaribo, Suriname. Reported from northern South America from Lake Maracaibo in Venezuela to eastern Brazil. It is reported to be a group of cryptic species (Rangel-Medreño et al., 2020). Rare. NE.

Actinopterygii: Siluriformes: Trichomycteridae

Haemomaster venezuelae Myers 1927

—Stripe-Tailed Skin-Feeding Candiru

Museum records: 14. Parasitic, lepidophagous and

muciphagous. Type locality: Playa Matepalma, upper Orinoco River Basin, Venezuela. Reported from Colombia, Venezuela, and Guyana. Rare. NE. First Record.

Henonemus punctatus (Boulenger 1887)

—Spot-Bodied Skin-Feeding Candiru

Museum records: 29. ANSP 179966. Parasitic, lepidophagous and muciphagous. Type locality: Canelos, Marañon River drainage, Amazon River Basin, Ecuador. Originally described in the genus *Stegophilus* from. Reported from throughout the Amazon River Basin. Common. NE.

Henonemus taxistigma (Fowler 1914)

—Spot-Sided Skin-Feeding Candiru

Museum records: 28. ANSP 179953. Parasitic, lepidophagous and muciphagous. Type locality: Rupununi River, Guyana, 2°-3°N, 50°20'W. It may be endemic to the Essequibo River Basin. Common. NE.

Ituglanis gracilior (Eigenmann 1912)

—Gracile Pencil Catfish

Museum records: 7. ROM 95873. Invertivorous. Type locality: Erukin, Potaro River drainage, Guyana. Reported from Guyana and Venezuela. Originally described in the genus *Pygidium*. Rare. NE.

Ochmacanthus flabelliferus Eigenmann 1912

—Fan-Tailed Skin-Feeding Candiru

Museum records: 53. ROM 86486. Parasitic, lepidophagous and muciphagous. confluence of the Konawaruk and Potaro rivers, Essequibo River Basin, Guyana. Reported from throughout the Essequibo River Basin in Guyana and Venezuela. Common. NE.

Ochmacanthus sp.—Tadpole Skin-Feeding Candiru

Museum records: 2. ROM 61978. Parasitic, lepidophagous and muciphagous. Distinguished from *O. flabelliferus* in part by having a thin stripe through middle of caudal fin, usually contiguous with spot at caudal-fin base (vs. isolated spot at caudal-fin base); distinct longitudinal broken stripe or series of blotches along lateral midline starting at or before dorsal-fin origin and extending to spot at caudal-fin base (vs. dispersed or loosely aggregated pigment along flank, never aggregated to form stripe); and complete absence of pigmentation from ventral half of flank and entire venter (vs. pigment only absent from venter anterior to pelvic fins, otherwise present as loosely aggregated melanocytes throughout ventral half of flank and on venter posterior to pelvic fins). Common. NE. Endemic. First Record.

Paracanthopoma parva Giltay 1935

—Pygmy Blood-Feeding Candiru

Museum records: 9. ROM 86291. Parasitic, hematophagous. Type locality: upper Rio Catrimani, affluent of Rio Branco, Roraima, Brazil. Recent redescription and morphology-based review of available material (Henschel et al., 2022) indicates this species is distributed across the upper Branco, Essequibo, and Berbice River Basin. Rare. NE.

Paravandellia alleyni Henschel, Bernt, Baskin, Schmidt & Lujan 2021 —Allen's Blood-Feeding Candiru

Museum records: 5. ROM 86302. Parasitic, hematophagous. Type locality: Confluence of Mazaruni and Cuyuni Rivers at Kartabo Point, Essequibo River basin, Cuyuni-Mazaruni, Guyana, 6°22'56"N, 58°41'36"W. Reported from the Mazaruni and Cuyuni Rivers, Guyana, and upper Branco River, Brazil. Rare. NE.

Potamoglanis wapixana (Henschel 2016)

—Wapishana Pygmy Pencil Catfish

Museum records: 7. AUM 35892. Invertivorous. Type locality: Flooded areas in the Takutu River drainage, Branco River drainage, Amazonas River Basin, Município de Bonfim, Estado de Roraima, Brazil, 03°24'07"N, 59°56'23"W, elevation circa 110 meters. Reported from the Branco River, Brazil, and Essequibo River Basin, Guyana. Rare. NE.

Pseudostegophilus sp.—Skin-Feeding Candiru

Museum records: 16. ROM 82826. Parasitic, feeds on scales and mucus. Rare. NE.

Pygidianops cf. *eigenmanni* Myers 1944

—Eigenmann's Sand-Dwelling Pencil Catfish

Museum records: 2. AUM 38251. Invertivorous. Type locality: rock pools (buried in sand) below São Gabriel Rapids, Rio Negro, Brazil. In Guyana, this genus is known from the Takutu River, Branco River drainage, Amazon River Basin, though this population may represent an undescribed species. Rare. NE.

Sarcoglanis cf. *simplex* Myers & Weitzman 1966

—Simple-Finned Sand-Dwelling Pencil Catfish

Museum records: 10. AUM 38878. Invertivorous. Type locality: rock pools (buried in sand) below São Gabriel Rapids, Rio Negro, Brazil. In Guyana, this genus is known from the Takutu and Rewa rivers, Branco and Essequibo River drainages, though these populations may represent one or more undescribed species. Rare. NE.

Schultzichthys bondi (Myers 1942)

—Bond's Skin-Feeding Candiru

Museum records: 6. ROM 86177. Parasitic, lepidophagous and muciphagous. Type locality: San Fernando de Apure,

Apure River drainage, Orinoco River Basin, Venezuela. First described in the genus *Acanthopoma*. Reported from the Amazon and Orinoco River Basins. Rare. NE.

Trichomycterus conradi (Eigenmann 1912)

—Conrad's Pencil Catfish

Museum records: 6. FMNH 53721. Invertivorous. Type locality: Amatuk, Potaro River, Guyana. Known from the Potaro, Kuribrong, and Ireng Rivers, Essequibo River Basin, Guyana and Venezuela. Rare. NE.

Trichomycterus guianensis (Eigenmann 1909)

—Guiana Highlands Pencil Catfish

Museum records: 4. AUM 63677. Invertivorous. Type locality: Aruataima Falls, upper Potaro River, Guyana. Described from the upper Potaro River drainage in Guyana. Reported from the Guianas and adjacent Venezuela; however, it is likely restricted to the upper Potaro River drainage about Kaieteur Falls, and it is far less common than *T. cf. guianensis*. Rare. NE.

Trichomycterus sp. 'cf. *guianensis*'

—False Guiana Highlands Pencil Catfish

Museum records: 48. AUM 62902. Invertivorous. Known from the upper Potaro, Kuribrong, and Mazaruni Rivers in Guyana where it is the most common *Trichomycterus* species (Hayes et al., 2020). Common. NE. Endemic.

Trichomycterus sp. 'Ireng Spotted'

—Ireng Spotted Pencil Catfish

Museum records: 10. AUM 67129. Invertivorous. Found in the upper Ireng River on the border of Brazil and Guyana, and it appears to be similar and sister to *T. guianensis* (Hayes et al., 2020). Rare. NE. Endemic.

Trichomycterus sp. 'Mazaruni Gray'

—Mazaruni Gray Pencil Catfish

Museum records: 11. ROM 83791. Invertivorous. This undescribed species is likely sister to *T. cf. guianensis*. It is found with it in the upper Mazaruni River Basin (Hayes et al., 2020). Rare. NE. Endemic.

Trichomycterus sp. 'Potaro Elongate'

—Potaro Elongate Pencil Catfish

Museum records: 2. AUM 62949. Invertivorous. Collected in slack water in the headwaters of the Potaro River, this species resembles *Ituglanis* but molecular data group it with *Trichomycterus* (Hayes et al., 2020). Rare. Endemic.

Typhlobelus sp.—Sand-Dwelling Pencil Catfish

Museum records: 1. AUM 35802. Carnivore. This tiny catfish lives buried in the sand of shallow areas in large rivers. In Guyana, only known from the Ireng River. Rare. NE.

Vandellia beccarii di Caporiacco 1935

—Beccari's Blood-Feeding Candiru

Museum records: 70. ROM 61967. Parasitic, hematophagous. Type locality: Rockstone, Essequibo River, Guyana. Reported from the Orinoco and Essequibo River Basins. A review of *Vandellia* museum specimens conducted by M. de Pinna (pers. com.), but not published, find that in addition to the two species listed here, there is one additional undescribed species. Common. NE.

Vandellia sanguinea Eigenmann 1917

—Common Blood-Feeding Candiru

Museum records: 28. AUM 50329. Parasitic, hematophagous. Type locality: San Antonio de Rio Madeira, Brazil. Reported for the Amazon, Orinoco, and Essequibo River Basins. Common. NE.

Actinopterygii: Synbranchiformes: Synbranchidae*Synbranchus marmoratus* Bloch 1795—Marbled Swamp Eel, Common Eel, Gutter eel, Trench Eel

Museum records: 61. ANSP 179476. Type locality: Suriname. Reported from southern North America, Central and South America. According to T. Roberts (pers. com.) there are several unrecognized species under this name. According to a genetic analysis by Sabaj et al. (2022), an unnamed *Synbranchus* from the Rupununi River (AUM 36222) is not closely related to nominal *S. marmoratus*. Common. LC.

Actinopterygii: Synnathiformes: Synnathidae*Microphis lineatus* (Kaup 1856)—Opossum Pipefish

Museum records: 28. ROM 92788. Carnivore. Type locality: Veracruz, Mexico. Reported from coastal fresh, brackish, and marine waters of the Western Atlantic, from Texas to Brazil. Rare. DD.

Pseudophallus mindii (Meek & Hildebrand 1923)

—Freshwater Pipefish

Museum records: 1. UMMZ 216068. Carnivore. Type locality: Rio Tocantins, Igarapé Inó, Faro de Panaquera, Pará, Brazil, 1°52'S, 49°10'W. Reported from fresh waters near the coast of Central and northern South America. Rare. DD.

Syngnathus scovelli (Evermann & Kendall 1896)

—Gulf Pipefish

Museum records: 1. ROM 87356. Carnivore. Type locality: Shamrock Point, Corpus Christi, Texas, U.S.A. In Guyana there are two collections from near the mouth of the Cuyuni River near Bartica. Reported from Western

Atlantic coastal waters from Florida to Brazil, usually in marine or brackish waters, but sometimes entering freshwater. Originally described in the genus *Siphostoma*. Rare. LC.

Actinopterygii: Tetraodontiformes: Tetraodontidae*Colomesus asellus* (Müller & Troschel 1849)

—Freshwater Pufferfish

Museum records: 74. ROM 85408. Omnivore. Type locality: Barama River, Orinoco River Basin, northwest Guyana. Found throughout the Amazon and Orinoco River Basins and the Guianas. Common. NE.

Colomesus psittacus (Bloch & Schneider 1801)

—Banded Puffer

Museum records: 42. ROM 66472. Omnivore. Type locality: In error the original type locality was given as Indian Ocean. Found along the Western Atlantic coast in marine, brackish and often fresh waters. Common. LC.

DISCUSSION

In this list we document 657 fish species that can be found in the freshwaters of Guyana. These species are also available in Appendix I. The list would increase by up to 40 additional species if we included all the estuarine species that are sometimes found in freshwaters along the coast, and in the lower sections of rivers under tidal influence, but here we have included only the estuarine species frequently found in freshwaters. This list is no doubt incomplete. In Appendix II we list 107 additional species found in the Orinoco River delta in Venezuela (Lasso et al., 2009; 2011), many of which we expect are also present in the coastal rivers of northwest Guyana such as the Barima and Waini. In Appendix III we list 44 species found in the Courantyne River, along Guyana's eastern border with Suriname, that probably also occur in Guyanese tributaries of that river, which are mostly unexplored. In total, these plus undescribed species suggest that the total richness of fishes occurring in the freshwaters of Guyana is over 850 species.

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LITERATURE CITED

Note: This list includes references cited within the text of the current paper and other references not cited here, but relevant to the fishes of Guyana.

- Abe, K., T. Mariguela, G. Avelino, R. Castro, and C. Oliveira. 2013. Multilocus molecular phylogeny of Gasteropelecidae (Ostariophysi: Characiformes) reveals the existence of an unsuspected diversity. *Molecular Phylogenetics and Evolution* 69(3): 1209–1214.
- Abe, K., T. Mariguela, G. Avelino, F. Foresti, and C. Oliveira. 2014. Systematic and historical biogeography of the Bryconidae (Ostariophysi: Characiformes) suggesting a new rearrangement of its genera and an old origin of Mesoamerican ichthyofauna. *BMC Evolutionary Biology* 14: 152.
- Acero, A. 2003. Ariidae, p. 831–852. In: K.E. Carpenter (ed.), *The living marine resources of the Western Central Atlantic. Volume 2: Bony fishes part 1 (Acipenseridae to Grammatidae)*. FAO species identification guide for fishery purposes and American Society of Ichthyologists and Herpetologists Special Publication No. 5. FAO, Rome. v. 2: i–vii + 602–1373.
- Aguilar, C., and P. Galetti Junior. 2008. Chromosome mapping of 5S rRNA genes differentiates Brazilian populations of *Leporellus vittatus* (Anostomidae, Characiformes). *Genetics and Molecular Biology* 31(1): 188–194.
- Ahl, E. 1934. Beschreibungen zweier neuer Süßwasserfische aus Südamerika. *Sitzungsberichte der Gesellschaft Naturforschender Freunde zu Berlin* 1934 (4–7): 238–241.

- Albert, J., and W. Crampton. 2003. Seven new species of the Neotropical electric fish *Gymnotus* (Teleostei, Gymnotiformes) with a redescription of *G. carapo* (Linnaeus). *Zootaxa* 287: 1–54.
- Albrecht, M.M., Ferreira, and E. Caramaschi. 2001. Anatomical features and histology of the digestive tract of two related Neotropical omnivorous fishes (Characiformes; Anostomidae). *Journal of Fish Biology* 58(2): 419–430.
- Alofs, K., E. Liverpool, D. Taphorn, C. Bernard, and H. López-Fernández. 2014. Mind the (information) gap: the importance of exploration and discovery for assessing conservation priorities for freshwater fish. *Diversity and Distributions* 20(1): 107–113.
- Andrade, M.C., D.B. Fitzgerald, K.O. Winemiller, P.S. Barbosa, and T. Giarizzo. 2019. Trophic niche segregation among herbivorous serrasalmids from rapids of the lower Xingu River, Brazilian Amazon. *Hydrobiologia* 829(1): 265–280.
- Andrade, M.C., H. López-Fernández and E.A. Liverpool. 2019. New *Myloplus* from Essequibo River Basin, Guyana, with discussion on the taxonomic status of *Myleus pacu* (Characiformes: Serrasalminae). *Neotropical Ichthyology* 17 (4): e190026 [1–9].
- Antunes, R., V. Gomes, S. Prioli, R. Prioli, H. Júlio Jr., L. Prioli, C. Agostinho, and A. Prioli. 2010. Molecular characterization and phylogenetic relationships among species of the genus *Brycon* (Characiformes: Characidae) from four hydrographic basins in Brazil. *Genetics and Molecular Research* 9(2): 674–684.
- Aquino, A., and M. Sabaj. 2016. *Oxyropsis ephippia*, a new hypoptopomatine catfish (Siluriformes: Loricariidae) from Guyana. *Zootaxa* 4136(1): 129–140.
- Aquino, A.E., and S.A. Schaefer. 2010. Systematics of the genus *Hypoptopoma* Günther, 1868 (Siluriformes, Loricariidae). *Bulletin of the American Museum of Natural History* 336: 1–110.
- Arbour, J.H., and H. López-Fernández. 2011. *Guianacara dacrya*, a new species from the rio Branco and Essequibo River drainages of the Guiana Shield (Perciformes: Cichlidae). *Neotropical Ichthyology* 9: 87–96.
- Armbruster, J. 2003. *Peckoltia sabaji*, a new species from the Guyana Shield (Siluriformes: Loricariidae). *Zootaxa* 344: 1–12.
- Armbruster, J., and L.S. de Souza. 2005. *Hypostomus macushi*, a new species of the *Hypostomus cochliodon* group (Siluriformes: Loricariidae) from Guyana. *Zootaxa* 920: 1–12.
- Armbruster, J., and D. Taphorn. 2011. A new genus and species of weakly armored catfish from the upper Mazaruni River, Guyana (Siluriformes: Loricariidae). *Copeia* 2011(1): 46–52.
- Armbruster, J., and D. Werneke. 2005. *Peckoltia cavatica*, a new loricariid catfish from Guyana and a redescription of *P. braueri* (Eigenmann 1912) (Siluriformes). *Zootaxa* 882: 1–14.
- Armbruster, J., N. Lujan and D. Bloom. 2021. Redescription of the Guiana Shield darter species *Characidium crandellii* and *C. declivirostre* (Crenuchidae) with descriptions of two new species. *Ichthyology & Herpetology* 109(1): 102–122.
- Benine, R.C., T.C. Mariguela, and C. Oliveira. 2009. New species of *Moenkhausia* Eigenmann, 1903 (Characiformes: Characidae) with comments on the *Moenkhausia oligolepis* species complex. *Neotropical Ichthyology* 7(2): 161–168.
- Benzaquem, D., C. Oliveira, J. da Silva Batista, J. Zuanon, and J. Porto. 2015. DNA barcoding in pencil fishes (Lebiasinidae: *Nannostomus*) reveals cryptic diversity across the Brazilian Amazon. *PloS ONE* 10(2).
- Berrangé, J.P. 1975. The geomorphology of southern Guyana with special reference to the development of planation surfaces. *Anais Décima Conferência Geológica Interguianas* 1: 804–824.
- Bian, F., X. Yang, Z. Ou, J. Luo, B. Tan, M. Yuan, T. Chen, and R. Yang. 2019. Morphological Characteristics and Comparative Transcriptome Analysis of Three Different Phenotypes of *Pristella maxillaris*. *Frontiers in Genetics* 10: 698.
- Birindelli, J. 2014. Phylogenetic relationships of the South American Doradoidea (Ostariophysi: Siluriformes). *Neotropical Ichthyology* 12: 451–564.
- Bloch, M. 1794. *Naturgeschichte der ausländischen Fische*. Berlin. 8: i-iv + 1-174, Pls. 361–396.
- Bloch, M., and J. Schneider. 1801. *M. E. Blochii, Systema Ichthyologiae Iconibus ex Illustratum. Post obitum auctoris opus inchoatum absolvit, correxit, interpolavit Jo. Gottlob Schneider, Saxo. Berolini. Sumtibus Auctoris Impressum et Bibliopolio Sanderiano Commisum*. i-lx + 1–584, Pls. 1–110.
- Bockmann, F.A. 1994. Description of *Mastiglanis asopos*, a new pimelodid catfish from northern Brazil, with comments on phylogenetic relationships inside the subfamily Rhamdiinae (Siluriformes: Pimelodidae). *Proceedings of the Biological Society of Washington* 107(4): 760–777.
- Bockmann, F.A. 1998. Análise filogenética da família Heptapteridae (Teleostei, Ostariophysi, Siluriformes) e redefinição de seus gêneros. Ph.D. thesis. Universidade de São Paulo, São Paulo.
- Bockmann, F.A., and G.M. Guazzelli. 2003. Family Heptapteridae (Heptapterids), p. 406–431. In: R.E. Reis, S.O. Kullander, and C.J. Ferraris, Jr. (eds), *Check list of the freshwater fishes of South and Central America*. CLOFFSCA. EDIPUCRS, Porto Alegre.

- Boeseman, M. 1982. The South American mailed catfish genus *Lithoxus* Eigenmann, 1910, with the description of three new species from Surinam and French Guyana and records of related species (Siluriformes, Loricariidae). *Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen (Series C, Biological and Medical Sciences)* 85(1): 41–58, Pls. 1–5.
- Böhlke, J. 1953. A minute new herring-like characid fish genus adapted for plankton feeding, from the Rio Negro. *Stanford Ichthyological Bulletin* 5(2): 168–170.
- Böhlke, J. 1953. Studies on fishes of the family Characidae. No. 4. A review of the genus *Microschemobrycon* with descriptions of two new species. *Annals and Magazine of Natural History* 6(71): 841–849.
- Böhlke, J. 1955. Studies on fishes of the family Characidae. 90. Notes on the distribution, variation and type locality of *Gnathocharax steindachneri* Fowler. *Notulae Naturae* 277: 1–14.
- Boulenger, G.A. 1897. Description of a new gymnotine fish of the genus *Sternopygus*. *Annals and Magazine of Natural History* 6: 305.
- Breder, C., and D. Rosen. 1966. *Modes of reproduction in fishes*. T.F.H. Publications, Neptune City, New Jersey. 941 p.
- Britski, H., K. Silimon, and B. Lopes. 2007. *Peixes do Pantanal: manual de identificação*, 2 ed. re. ampl. Brasília, DF: Embrapa Informação Tecnológica. 227 p.
- Brosset, A. 1997. Aggressive mimicry by the characid fish *Erythrinus erythrinus*. *Ethology* 103(11): 926–934.
- Brown, G., J. Godin, and J. Pedersen. 1999. Fin-flicking behaviour: a visual antipredator alarm signal in a characin fish, *Hemigrammus erythrozonus*. *Animal Behaviour* 58(3): 469–75.
- Buckup, P. 1992. Redescription of *Characidium fasciatum*, type species of the Characidiinae (Teleostei, Characiformes). *Copeia* 1992(4): 1066–1073.
- Burgess, W. 1977. *Pristella maxillaris*, a new name for an old favorite. *Tropical Fish Hobbyist* 25(6): 45.
- Camargo, M., T. Giarrizzo, and V. Isaac. 2015. Population and biological parameters of selected fish species from the middle Xingu River, Amazon Basin. *Brazilian Journal of Biology* 75(3): 112–124.
- Carseldine, L., and I.R. Tibbetts. 2005. Dietary analysis of the herbivorous hemiramphid *Hyporhamphus regularis ardelio*: an isotopic approach. *Journal of Fish Biology*, 66(6): 1589–1600.
- Carvalho, T.P. 2013. Systematics and evolution of the toothless knifefishes Rhamphichthyoidea Mago-Leccia (Actinopterygii: Gymnotiformes): Diversification in South American freshwaters. Ph.D. Dissertation. University of Louisiana at Lafayette, Lafayette.
- Carvalho, T.P., and J.S. Albert. 2015. A new species of *Rhamphichthys* (Gymnotiformes: Rhamphichthyidae) from the Amazon basin. *Copeia* 103: 34–41.
- Carvalho, T.P., M. Arce H., R.E. Reis and M.H. Sabaj. 2018. Molecular phylogeny of banjo catfishes (Ostariophysi: Siluriformes: Aspredinidae): a continental radiation in South American freshwaters. *Molecular Phylogenetics and Evolution* 127: 459–467.
- Cavallaro, M., and R. Castro. 2010. Análise filogenética e revisão taxonômica do gênero *Microschemobrycon* Eigenmann, 1915 (Characiformes: Characidae). Tese Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto da USP.
- Cella-Ribeiro, A., M. Hauser, L. Nogueira, C. Doria, and G. Torrente-Vilara. 2015. Length-weight relationships of fish from Madeira River, Brazilian Amazon, before the construction of hydropower plants. *Journal of Applied Ichthyology* 31: 939–945.
- Cervigón, F., R. Cipriani, W. Fischer, L. Garibaldi, M. Hendrickx, A. Lemus, R. Márquez, J. Poutiers, G. Robaina, and B. Rodriguez. 1992. FAO species identification sheets for fishery purposes. Field guide to the commercial marine and brackish water species of the northern coast of South America. FAO, Rome. 513 p.
- Chernoff, B., and A. Machado-Allison. 1999. *Bryconops colaroja* and *B. colanegra*, two new species from the Cuyuní and Caroní drainages of South America (Teleostei: Characiformes). *Ichthyological Exploration of Freshwaters* 10(4): 355–370.
- Chernoff, B., and A. Machado-Allison. 2005. *Bryconops magoi* and *Bryconops colletti* (Characiformes: Characidae), two new freshwater fish species from Venezuela, with comments on *B. caudomaculatus* (Günther). *Zootaxa* 1094: 1–23.
- Chernoff, B., A. Machado-Allison, P.A. Buckup, and R.R. Leon. 1994. Systematic status and neotype designation for *Autanichthys giacopinii* Fernández-Yépez with comments on the morphology of *Bryconops melanurus* (Bloch). *Copeia*: 238–242.
- Collette, B. 1974. *Potamorhaphis petersi*, a new species of freshwater needlefish (Belonidae) from the upper Orinoco and Rio Negro. *Proceedings of the Biological Society of Washington* 87(5): 31–40.
- Collette, B. 1974. South American freshwater needlefishes (Belonidae) of the genus *Pseudotylotus*. *Zoologische Mededelingen* 48(16): 169–186.
- Collette, B. 2003. Hemiramphidae (Halfbeaks), p. 589–590 *In*: R.E. Reis, S.O. Kullander and C.J. Ferraris, Jr. (eds.), *Checklist of the Freshwater Fishes of South and Central America*. Porto Alegre: EDIPUCRS, Brasil.

- Collette, B. 2016. Order Beloniformes. Belonidae, p. 2118–2126 *In*: K.E. Carpenter and N. De Angelis (eds.), The living marine resources of the Eastern Central Atlantic. Volume 3. Bony fishes part 1 (Elopiformes to Scorpaeniformes). FAO Species Identification Guide for Fishery Purposes, Rome, FAO.
- Collette, B., and K. Bemis. 2018. Family Hemiramphidae. Order Beloniformes: Needlefishes, Sauries, Halfbeaks, and Flyingfishes: Part 10. Rome, FAO. p. 89.
- Collins, R., A. Bifi, R. de Oliveira, E. Ribeiro, N. Lujan, L. Rapp Py-Daniel and T. Hrbek. 2018. Biogeography and species delimitation of the rheophilic suckermouth catfish genus *Pseudolithoxus* (Siluriformes: Loricariidae), with the description of a new species from the Brazilian Amazon. *Systematics and Biodiversity* 16(6): 538–550.
- Compagno, L. 2003. Sharks, p. 357–505 *In*: K.E. Carpenter (ed.), The living marine resources of the Western Central Atlantic. Volume 1. Introduction, molluscs, crustaceans, hagfishes, sharks, baroid fishes, and chimaeras. FAO species identification guide for fishery purposes and American Society of Ichthyologists and Herpetologists Special Publication No. 5. FAO, Rome. v. 1: i–xiv + 1–599.
- Conde-Saldaña, C., J. Albornoz-Garzón, J. García-Melo, F. Villa-Navarro, M. Mirande, and F. Lima. 2019. A New *Pristella* (Characiformes: Characidae) from the Río Orinoco Basin, Colombia, with a Redefinition of the Genus. *Copeia* 107(3): 439–446.
- Cope, E. 1878. Synopsis of the fishes of the Peruvian Amazon, obtained by Professor Orton during his expeditions of 1873 and 1877. *Proceedings of the American Philosophical Society* 17(101): 673–701.
- Correa, S.B., W.G.R. Crampton, and J.S. Albert. 2006. Three new species of the Neotropical electric fish *Rhabdolichops* (Gymnotiformes: Sternopygidae) from the Central Amazon basin *Copeia* 2006: 27–42.
- Correa, S., J. Araujo, J. Penha, C. da Cunha, P. Stevenson, and J. Anderson. 2015. Overfishing disrupts an ancient mutualism between frugivorous fishes and plants in Neotropical wetlands. *Biological Conservation* 191: 159–167.
- Correa, S., and K. Winemiller. 2014. Niche partitioning among frugivorous fishes in response to fluctuating resources in the Amazonian floodplain forest. *Ecology* 95(1): 210–224.
- Covain, R., and S. Fisch-Muller. 2007. The genera of the Neotropical armored catfish subfamily Loricariinae (Siluriformes: Loricariidae): a practical key and synopsis. *Zootaxa* 1462: 1–40.
- Covain, R., S. Fisch-Muller, J. Montoya-Burgos, J. Mol, P. Le Bail, and S. Dray. 2012. The Harttiini (Siluriformes, Loricariidae) from the Guianas: a multi-table approach to assess their diversity, evolution, and distribution. *Cybio* 36: 115–61.
- Craig, J.M., L.Y. Kim, V.A. Tagliacollo, and J.S. Albert. 2019. Phylogenetic revision of Gymnotidae (Teleostei: Gymnotiformes) with descriptions of six subgenera. *PLoS ONE* 14: e0224599.
- Crampton, W.G.R. 2007. Diversity and adaptation in deep channel Neotropical electric fishes, p. 283–339 *In*: P. Seibert, D. W. Onyango, and B. G. Kapoor (eds.), Fish life in special environments. Science Publishers, Enfield, NH.
- Crampton, W.G.R., A. Rodríguez-Cattaneo, N.R. Lovejoy, and A.A. Caputi. 2013. Proximate and ultimate causes of signal diversity in the electric fish *Gymnotus*. *Journal of Experimental Biology* 216: 2523–2541.
- Crampton, W.G.R., and J.S. Albert. 2003. Redescription of *Gymnotus coropinae* (Gymnotiformes, Gymnotidae) an often misidentified species of Neotropical electric fish, with notes on natural history and electric signals. *Zootaxa* 348: 1–20.
- Crampton, W.G.R., and J.S. Albert. 2006. Evolution of electric signal diversity in gymnotiform fishes, p. 647–731 *In*: F. Ladich, S. P. Collin, P. Moller, and B. G. Kapoor (eds.), Communication in fishes. Science Publishers, Enfield, NH.
- Crampton, W.G.R., C.D. de Santana, J.C. Waddell, and N.R. Lovejoy. 2016a. Phylogenetic systematics, biogeography, and ecology of the electric knifefish genus *Brachyhypopomus* (Ostariophysi: Gymnotiformes). *PLoS ONE* 11: e0161680 [1–66].
- Crampton, W.G.R., C.D. de Santana, J.C. Waddell, and N.R. Lovejoy. 2016b. A taxonomic revision of the Neotropical electric fish genus *Brachyhypopomus* (Ostariophysi: Gymnotiformes: Hypopomidae), with descriptions of 15 new species. *Neotropical Ichthyology* 14: 639–790.
- Crampton, W.G.R., D.H. Thorsen, and J.S. Albert. 2004. *Steatogenys ocellatus*, a new species of Neotropical electric fish (Gymnotiformes: Hypopomidae) from the lowland Amazon basin. *Copeia* 2004: 78–91.
- Cuvier, G. 1816. Le Règne Animal distribué d'après son organisation pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée. Les reptiles, les poissons, les mollusques et les annélides. Edition 1, vol. 2.
- Cuvier, G. 1818. Sur les poissons du sous-genre *Mylètes*. *Mémoires du Muséum d'Histoire Naturelle, Paris* v. 4: 444–456, Pls. 21–22.
- Cuvier, G. 1819. Sur les poissons du sous-genre *Hydrocyn* [sic], sur deux nouvelles espèces de *Chalceus*, sur trois nouvelles espèces du *Serrasalmes*, et sur l'*Argentina glossodonta* de Forskahl, qui est l'*Albula gonorhynchus* de Bloch. *Mémoires du Muséum National d'Histoire Naturelle, Paris* (N. S.) (Série A) *Zoologie* 5: 351–379, Pls. 26–28.

- Cuvier, G., and A. Valenciennes. 1847. Histoire naturelle des poissons. Tome dix-neuvième. Suite du livre dix-neuvième. Brochets ou Lucioïdes. Livre vingtième. De quelques familles de Malacoptérygiens, intermédiaires entre les Brochets et les Clupes. P. Bertrand, Paris. 19: i–xix + 1–544 + 6 pp. Pls. 554–590.
- Cuvier, G., and A. Valenciennes. 1850. Histoire naturelle des poissons. Tome vingt-deuxième. Suite du livre vingt-deuxième. Suite de la famille des Salmonoïdes. Table générale de l'Histoire Naturelle des Poissons 22.
- Dary, E., E. Ferreira, J. Zuanon, and C. Röpke. 2017. Diet and trophic structure of the fish assemblage in the mid-course of the Teles Pires River, Tapajós River Basin, Brazil. *Neotropical Ichthyology* 15(4).
- De Chambrier, S., and J.I. Montoya-Burgos 2008. *Pseudancistrus corantijnensis*, a new species from the Guyana Shield (Siluriformes: Loricariidae) with a molecular and morphological description of the *Pseudancistrus barbatus* group. *Zootaxa* 1918: 45–58.
- de Lima, F.P., A.B. Nobile, D.F. Souza, E.D. Carvalho, and A.P. Vidotto-Magnoni. 2016. Feeding ecology of *Rhinodoras dorbignyi* (Kner 1855) (Siluriformes: Doradidae) in the Paranapanema River, SP, Brazil. *Biotemas* 29(1): 67–73.
- de Pinna, M., and P. Keith. 2019. *Mastiglanis durantoni* from French Guyana, a second species in the genus (Siluriformes: Heptapteridae), with a CT scan survey of phylogenetically-relevant characters. *Cybio* 43(2): 125–135.
- de Pinna, M.C.C., and P. Keith. 2003. A new species of the catfish genus *Ituglanis* from French Guyana (Osteichthyes: Siluriformes: Trichomycteridae). *Proceedings of the Biological Society of Washington* 116(4): 873–882.
- de Santana, C.D., and W. Crampton. 2010. Review of the Neotropical electric fish genus *Porotergus* (Gymnotiformes: Apterodontidae). *Copeia* 2010: 165–175.
- de Santana, C.D., and W. Crampton. 2011. Phylogenetic interrelationships, taxonomy, and reductive evolution in the Neotropical electric fish genus *Hypopygus* (Teleostei, Ostariophysi, Gymnotiformes). *Zoological Journal of the Linnean Society* 163: 1096–1156.
- de Santana, C.D., and R. Vari. 2010. Electric fishes of the genus *Sternarchorhynchus* (Teleostei, Ostariophysi, Gymnotiformes); phylogenetic and revisionary studies. *Zoological Journal of the Linnean Society* 159: 223–371.
- de Santana, C.D., and R. Vari. 2013. Brown ghost electric fishes of the *Apterodontus leptorhynchus* species-group (Ostariophysi, Gymnotiformes); monophyly, major clades, and revision. *Zoological Journal of the Linnean Society* 168: 564–596.
- de Souza, L., D. Taphorn and J. Armbruster. 2019. Review of *Ancistrus* (Siluriformes: Loricariidae) from the northwestern Guiana Shield, Orinoco Andes, and adjacent basins with description of six new species. *Zootaxa* 4552: 1–67.
- Dourado, E., J. Nunes, and N. Piorski. 2015. Ecomorphology and diet of two species of *Acestrorhynchus* from Brazilian Northeast. *Cybio* 39(1): 11–19.
- Durbin, M. 1909. Reports on the expedition to British Guiana of the Indiana University and the Carnegie Museum, 1908. Report No. 2. A new genus and twelve new species of tetragonopterid characins. *Annals of the Carnegie Museum* 6(1): 55–72.
- Dutra, G.M., C.D. de Santana, R.P. Vari, and W.B. Wosiacki. 2014. The South American electric glass knifefish genus *Distocyclus* (Gymnotiformes: Sternopygidae): Redefinition and revision. *Copeia* 2014: 345–354.
- Dutra, G.M., L.A.W. Peixoto, V.P. Abrahão, W.B. Wosiacki, N.A. Menezes, and C.D. de Santana. 2021. Morphology-based phylogeny of Eigenmanniinae Mago-Leccia, 1978 (Teleostei: Gymnotiformes: Sternopygidae), with a new classification. *Journal of Zoological Systematics and Evolutionary Research* 59(8): 2010–2059.
- Edmond, J.M., M.R. Palmer, C.I. Measures, B. Grant, and R.F. Stallard. 1995. The fluvial geochemistry and denudation rate of the Guayana Shield in Venezuela, Colombia, and Brazil. *Geochimica et Cosmochimica Acta* 59: 3301–3325.
- Eigenmann, C.H. 1908. Preliminary descriptions of new genera and species of tetragonopterid characins. (Zoological Results of the Thayer Brazilian expedition.). *Bulletin of the Museum of Comparative Zoology* 52(6): 91–106.
- 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.
- Eigenmann, C.H. 1912. The freshwater fishes of British Guiana, including a study of the ecological grouping of species, and the relation of the fauna of the plateau to that of the lowlands. *Memoirs of the Carnegie Museum* v. 5 (no. 1): i–xxii + 1–578, Pls. 1–103.
- Eigenmann, C.H. 1915. The Cheirodontinae, a subfamily of minute characid fishes of South America, *Memoirs of the Carnegie Museum* 7(1): 1–99, Pls. 1–17.
- Eigenmann, C.H. 1917. The American Characidae [Part 1]. *Memoirs of the Museum of Comparative Zoology* 43(1): 1–102, 16 pls.
- Eigenmann, C.H. 1918. The American Characidae [Part 2]. *Memoirs of the Museum of Comparative Zoology* 43(2): 103–208, Pls. 3, 8–11, 13, 16–29, 33, 78–80, 93, 101.

- Eigenmann, C.H., and W.R. Allen. 1942. Fishes of western South America. University of Kentucky, Lexington.
- Eigenmann, C.H., and R. Eigenmann. 1889. A revision of the edentulous genera of Curimatinae. *Annals of the New York Academy of Sciences* 4(12): 409–440.
- Ellis, M.M. 1913. The gymnotid eels of tropical America. *Memoirs of the Carnegie Museum* v. 6 (no. 3): 109–195, Pls. 15–23.
- Encyclopedia Britannica, webpage visited March 25 2019. <https://www.britannica.com/place/Demerara-River>.
- Escobar L.M., R. Ota, A. Machado-Allison, J. Andrade-López, I. Farias and T. Hrbek. 2019. A new species of *Piaractus* (Characiformes: Serrasalminidae) from the Orinoco Basin with a redescription of *Piaractus brachipomus*. *Journal of Fish Biology* 95(2): 411–427.
- Esguícero, A., and R. Castro. 2017. Taxonomic revision of the genus *Aphyodite*, with description of two new species (Teleostei: Characidae). *Copeia* 105(4): 753–764.
- Evans, K.M., M.J. Bernt, M.A. Kolmann, K.L. Ford, and J.S. Albert. 2019. Why the long face? Static allometry in the sexually dimorphic phenotypes of Neotropical electric fishes. *Zoological Journal of the Linnean Society* 186(3): 633–649.
- FAO Food and Agriculture Office of the United Nations web page visited March 25, 2019. http://www.fao.org/nr/water/aquastat/countries_regions/GUY/
- Faustino-Fuster, D.R., V. Meza-Vargas, N.R. Lovejoy, and N.K. Lujan. 2021. Multi-locus phylogeny with dense Guiana Shield sampling supports new suprageneric classification of the Neotropical three-barbeled catfishes (Siluriformes: Heptapteridae). *Molecular Phylogenetics and Evolution* 162: 107186.
- Fernandes, C.C., and A. Williston. 2017. Redescription of *Microsternarchus bilineatus* (Fernández-Yépez, 1968). *Proceedings of the Academy of Natural Sciences of Philadelphia* 165: 105–115.
- Fernández, C., M. Pouilly, and D. Rojas. 2013. Variation in the diet of *Psectrogaster essequeibensis* (Piscis: Curimatidae) in the Bolivian Amazon basin. *Revista Boliviana de Ecología y Conservación Ambiental* 29.
- Fernandez Carvalho, J., J.L. Imhoff, V.V. Faria, J.K. Carlson, and G.H. Burgess. 2014. Status and the potential for extinction of the largetooth sawfish *Pristis pristis* in the Atlantic Ocean. *Aquatic Conservation: Marine and Freshwater Ecosystems* 24(4): 478–497.
- Fernández-Yépez, A. 1948. *Ichthyacus brederi* nuevo género y especie de pez syntognatho, de los ríos de Sur América. *Evencias* No. 4. 3 p.
- Fernández-Yépez, A. 1948. Los curimatidos (peces fluviales de Sur América). *Catálogo descriptivo con nuevas adiciones genéricas y específicas. Boletín Taxonómico del Laboratorio de Pesquería de Caiguire, Venezuela* 1: 1–79.
- Fernández-Yépez, A. 1950. Algunos peces del Río Autana. *Novedades Científicas, Contribuciones Ocasionales del Museo de Historia Natural La Salle, Serie Zoológica* 2: 1–18, Pls. 1–3.
- Ferraris, C.J., C.D. de Santana, and R.P. Vari. 2017. Checklist of Gymnotiformes (Osteichthyes: Ostariophysi) and catalogue of primary types. *Neotropical Ichthyology* 15: e160067.
- Ferreira, E., G. dos Santos, and M. Jégu. 1988. Aspectos ecológicos da ictiofauna do rio Mucujá, na área da ilha Paredao, Roraima, Brasil. *Amazoniana* 10(3): 339–352.
- Fink, W.L. 1993. Revision of the piranha genus *Pygocentrus* (Teleostei, Characiformes). *Copeia*: 665–687.
- Fink, W.L., and M.L. Zelditch. 1997. Shape analysis and taxonomic status of *Pygocentrus* piranhas (Ostariophysi, Characiformes) from the Paraguay and Paraná River Basins of South America. *Copeia*: 179–182.
- Fisch-Muller, S., J.H.A. Mol, and R. Covain. 2018. An integrative framework to reevaluate the Neotropical catfish genus *Guyanancistrus* (Siluriformes: Loricariidae) with particular emphasis on the *Guyanancistrus brevispinis* complex. *PLoS ONE* 13: e0189789.
- Flecker, A., D. Taphorn, J.A. Lovell, and B. Feifarek. 1991. Drift of characin larvae, *Bryconamericus deuterodonoides*, during the dry season from Andean piedmont streams. *Environmental Biology of Fishes* 31(2): 197–202.
- Fontenelle, J.P., and M. de Carvalho. 2017. Systematic revision of the *Potamotrygon scobina* Garman, 1913 species-complex (Chondrichthyes: Myliobatiformes: Potamotrygonidae), with the description of three new freshwater stingray species from Brazil and comments on their distribution and biogeography. *Zootaxa* 4310(1): 1–63.
- Fontenelle, J.P., F.P.L. Marques, M. Kolmann, and N. Lovejoy. 2021a. Biogeography of the Neotropical freshwater stingrays (Myliobatiformes: Potamotrygoninae) reveals effects of continent-scale paleogeographic change and drainage evolution. *Journal of Biogeography* 48(6): 1406–1419.
- Fontenelle, J.P., N. Lovejoy, M. Kolmann, and F.P.L. Marques. 2021b. Molecular phylogeny for the Neotropical freshwater stingrays (Myliobatiformes: Potamotrygoninae) reveals limitations of traditional taxonomy. *Biological Journal of the Linnean Society* 134(2): 381–401.
- Fowler, H. 1911. Some fishes from Venezuela. *Proceedings of the Academy of Natural Sciences of Philadelphia* 63: 419–437.
- Fowler, H. 1913. Fishes from the Madeira River, Brazil. *Proceedings of the Academy of Natural Sciences of Philadelphia* 65: 517–579.

- Fowler, H. 1914. Fishes from the Rupununi River, British Guiana. *Proceedings of the Academy of Natural Sciences of Philadelphia* 66: 229–284.
- Fraser-Brunner, A. 1950. A revision of the fishes of the family Gasteropelecidae. *Annals and Magazine of Natural History* (Series 12) 3 (35) (art. 87): 959–970.
- Freitas, T., A. De Paula, H. Leão, N. Benone, and L. Montag. 2019. Length–weight relationships of 11 fish species from streams of Anapu River Basin, State of Pará, eastern Amazon, Brazil. *Journal of Applied Ichthyology* 35(3): 793–795.
- Fricke, R., W.N. Eschmeyer, and R. Van der Laan (eds). 2022. *Eschmeyer's Catalog of Fishes: Genera, Species, References*. (<http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>). Electronic version.
- Garavello, J. 1990. A new species of the anostomid genus *Leporinus* Spix from Suriname, with redescrptions of two related species (Pisces, Characiformes, Anostomidae). *Bulletin Zoologisch Museum, Universiteit van Amsterdam* 12(11): 161–170.
- Garavello, J. 2000. Two new species of *Leporinus* Spix with a review of the blotched species of the Río Orinoco system and redescription of *Leporinus muyscorum* Steindachner (Characiformes: Anostomidae). *Proceedings of the Academy of Natural Sciences of Philadelphia* 150: 193–201.
- Garavello, J., and H. Britski. 2003. Anostomidae (Headstanders), p. 71–84. *In*: R.E. Reis, S.O. Kullander and C.J. Ferraris, Jr. (eds.), *Checklist of the Freshwater Fishes of South and Central America*. Porto Alegre: EDIPUCRS, Brasil.
- Garnier, H.F. 1966. Derangement of the Rio Caroni, Venezuela. *Revue de Géomorphologie Dynamique* 16: 54–83.
- Garnier, H.F. 1967. Rivers in the making. *Scientific American* 216: 84–94.
- Garnier, H.F. 1974. *The Origin of Landscapes: A Synthesis of Geomorphology*. Oxford University Press, New York.
- Garrone Neto, D., and L. Carvalho. 2011. Nuclear-follower foraging associations among Characiformes fishes and Potamotrygonidae rays in clean waters environments of Teles Pires and Xingu rivers basins, Midwest Brazil. *Biota Neotropica* 11(4): 359–362.
- Garavello J., J. Ramirez, A.K. Oliveira, H. Britski, J. Birindelli, and P. Galetti, Jr. 2021. Integrative taxonomy reveals a new species of Neotropical headstanding fish in genus *Schizodon* (Characiformes: Anostomidae). *Neotropical Ichthyology* 19(4): e210016.
- Garutti, V. 2003. Revalidação de *Astyanax rupununi* Fowler, 1914 (Teleostei, Characidae) e descrição de duas espécies novas para o gênero. *Papéis Avulsos de Zoologia, Museu de Zoologia da Universidade de São Paulo* 43(1): 1–9.
- Géry, J. 1960. Contributions to the study of the characoid fishes, No. 6. New Cheirodontinae from French Guiana. *Senckenbergiana Biologica* 41(1/2): 15–39, Pl. 2.
- Géry, J. 1962. Essai sur les affinités phylogénétiques des *Agoniates* et l'origine des Characidae, à propos de la description d'une forme nouvelle de l'Amazonie péruvienne: *Agoniates ladigesi*. *Mitteilungen aus den Hamburgischen Zoologischen Museum und Institut Hamburg* 60: 265–284.
- Géry, J. 1964. Poissons characoides de l'Amazonie péruvienne. *Beiträge zur Neotropischen Fauna* 4(1): 1–44.
- Géry, J. 1965. A new genus from Brazil—*Brittanichthys*. *Tropical Fish Hobbyist* 13(6): 13–24, 61–69.
- Géry, J. 1965. Notes on characoid fishes collected in Surinam by Mr. H. P. Pijpers, with descriptions of new forms. *Bijdragen tot de Dierkunde* 35(1): 101–126, Pls. 1–2.
- Géry, J. 1972. Corrected and supplemented descriptions of certain characoid fishes described by Henry W. Fowler, with revisions of several of their genera. *Studies on Neotropical Fauna and Environment* 7(1): 1–35.
- Géry, J. 1973. New and little-known Aphroditeina (Pisces, Characidae) from the Amazon Basin. *Studies of the Neotropical Fauna* 8: 81–137.
- Géry, J. 1977. *Characoids of the world*. TFH Publications, Neptune City, New Jersey.
- Géry, J., and P. de Rham. 1981. Un nouveau Poisson Characidé endémique du bassin du Rio Tumbès au nord du Pérou, *Chilobrycon deuterodon* n. sp. (Characidae). *Revue française d'aquariologie* 8: 7–12.
- Géry, J., and A. Zarske. 2002. *Derhamia hoffmannorum* gen. et sp. n. a new pencil fish (Teleostei, Characiformes, Lebiasinidae) endemic from the Mazaruni River in Guyana. *Zoologische Abhandlungen-Staatliches Museum für Tierkunde in Dresden* 52(1): 35–47.
- Giarrizzo, T., and U. Krumme. 2009. Temporal patterns in the occurrence of selected tropical fishes in mangrove creeks: implications for the fisheries management in north Brazil. *Brazilian Archives of Biology and Technology* 52(3): 679–688.
- Giarrizzo, T., R. de Sena Oliveira, M. Andrade, A. Gonçalves, T. Barbosa, A. Martins, D. Marques, J. dos Santos, R. de P. da S. Frois, T. de Albuquerque, L. de A. Montag, M. Camargo and L. de Sousa. 2015. Length-weight and length-length relationships for 135 fish species from the Xingu River (Amazon Basin, Brazil). *Journal of Applied Ichthyology* 31: 514–524.
- Gibbs, A., and C. Barron. 1983. The Guiana shield reviewed. *Episodes Journal of International Geoscience* 6(2): 7–14.

- Gill, T. 1884. Synopsis of the plectognath fishes. Proceedings of the United States National Museum 7 (26–27) (art. 448): 411–427.
- Gill, T. 1896. The Nomenclature of the Fishes of the Characinoid Genus *Tetragonopterus*. Proceedings of the United States National Museum 18(1061): 225–227.
- Gill, T. 1896. Notes on characinoid fishes with ctenoid scales, with a description of a new *Psectrogaster*. Proceedings of the United States National Museum 18(1055): 199–203.
- Gotto-Ruiz, W., and O. Shibatta. 2011. Two new species of *Microglanis* (Siluriformes: Pseudopimelodidae) from the upper-middle rio Araguaia basin, Central Brazil. Neotropical Ichthyology 9(4): 697–707.
- Goulding, M. 1980. The fishes and the forest: explorations in Amazonian natural history. University of California Press, Berkeley.
- Goulding M., and M.L. Carvalho. 1982. Life history and management of the tambaqui (*Colossoma macropomum*, Characidae): an important Amazonian food fish. Revista Brasileira de Zoologia 1: 107–133.
- Goulding, M., and M.L. Carvalho. 1983. Ecology of Amazonian needlefishes (Belonidae). Revista Brasileira de Zoologia 2(3): 99–111.
- Goulding, M., M. Leal Carvalho, and E. Ferreira. 1988. Rio Negro, Rich Life in Poor Water: Amazonian Diversity and Foodchain Ecology as Seen Through Fish Communities. The Hague: SPB Academic Publishing. 200 p.
- Grant, S. 2021. *Corydoras deweyeri* Meinken, 1957 – a valid lineage 8 species, with comments on the identity and type locality of *C. griseus* Holly, 1940. Journal of the Catfish Study Group 22(3): 16–20.
- Günther, A. 1864. Catalogue of the fishes in the British Museum. Catalogue of the Physostomi, containing the families Siluridae, Characinidae, Haplochitonidae, Sternoptychidae, Scopelidae, Stomiatidae in the collection of the British Museum 5: i–xxii + 1–455.
- Günther, A. 1866. Catalogue of fishes in the British Museum. Catalogue of the Physostomi, containing the families Salmonidae, Percopsidae, Galaxidae, Mormyridae, Gymnarchidae, Esocidae, Umbridae, Scombresocidae, Cyprinodontidae, in the collection of the British Museum 6: i–xv + 1–368
- Günther, A. 1872. On a new genus of characinoid fishes from Demerara. Proceedings of the Zoological Society of London 1872 (pt. 1) (art. 5): 146.
- Hainfellner, P., R. Kuradomi, T. de Souza, R. Sato, D. Figueiredo Arikí, G. Antônio de Freitas, L. Queiroz, W.C. Valenti, P. Valenti, W. Ge, and S. Batlouni. 2019. Reproductive cycle of the Amazonian planktivorous catfish *Hypophthalmus marginatus* (Siluriformes, Pimelodidae). Aquaculture Research 50(11): 3382–3391.
- Hammond, D.S. (ed.). 2005. Tropical forests of the Guiana Shield: ancient forests in a modern world. CABI.
- Hardy, J.D., Jr. 1978. Development of fishes of the mid-Atlantic bight. Vol. II. Anguillidae through Syngnathidae. FWS/OBS-78/12, U. S. Fish and Wildlife Service, Biological Service Program. 458 p.
- Hauser, F., E. and H. López-Fernández 2013. *Geophagus crocatus*, a new species of geophagine cichlid from the Berbice River, Guyana, South America (Teleostei: Cichlidae). Zootaxa 3731 (2): 279–286.
- Hawkes, M., and J. Wall. 1993. The Commonwealth and Government of Guyana Rain Forest Programme, Phase I, Site Resource Survey. Main Report. Natural Resources Institute, Chatham, UK.
- Henschel, E., and N. Lujan. 2021. Range extension of the miniature pencil-catfish *Potamoglanis wapixana* (Siluriformes: Trichomycteridae) into the Essequibo River Basin, Guyana. Journal of Fish Biology 99 (5): 1741–1745 [1–5].
- Henschel, E., M.J. Bernt, J.N. Baskin, R.E. Schmidt, N.K. Lujan. 2022. Osteology-focused redescription and description of two Guiana Shield candirus: *Paracanthopoma parva* and *Paravandellia alleynei* n. sp. (Trichomycteridae: Vandelliinae). Journal of Fish Biology 100: 161–174.
- Hilsdorf, S., C. Oliveira, F. Lima, and C. Matsumoto. 2008. A phylogenetic analysis of *Brycon* and *Henochilus* (Characiformes, Characidae, Bryconinae) based on the mitochondrial gene 16S rRNA. Genetics and Molecular Biology 31(1): 366–371.
- Hilton, E.J., and C.C. Fernandes. 2006. Sexual dimorphism in *Apteronotus bonapartii* (Gymnotiformes: Apteronotidae). Copeia 2006: 826–833.
- Hoedeman, J. 1952. Notes on the Ichthyology of Surinam (Dutch Guiana). 2. The Surinam representatives of *Gasteropelecus* and *Carnegiella*, with remarks on the tribe Gasteropelecidi. Beaufortia, 2(20): 1–16.
- Hoedeman, J.J. 1962a. Notes on the ichthyology of Surinam and other Guianas. 9. New records of gymnotid fishes. Bulletin of Aquatic Biology, Amsterdam 3: 53–60.
- Hoedeman, J.J. 1962b. Notes on the ichthyology of Surinam and other Guianas. 11. New gymnotoid fishes from Surinam and French Guiana, with additional records and a key to the groups and species from Guiana. Bulletin of Aquatic Biology 3: 97–107.
- Hojo, R., G. Santos and N. Bazzoli. 2004. Revista Reproductive biology of *Moenkhausia intermedia* (Eigenmann) (Pisces, Characiformes) in Itumbiara Reservoir, Goiás, Brazil. Brasileira de Zoologia 21(3): 519–524.

- Hubert, N., F. Duponchelle, J. Nunez, C. Garcia-Davila, D. Paugy, and J.F. Renno. 2007. Phylogeography of the piranha genera *Serrasalmus* and *Pygocentrus*: implications for the diversification of the Neotropical ichthyofauna. *Molecular Ecology* 16(10): 2115–2136.
- Hulen, K.G. 2004. Phylogenetic Systematics of the Neotropical Electric Knifefish *Sternopygus* (Gymnotiformes: Sternopygidae). Master's Thesis. University of Florida, Gainesville, FL.
- Javonillo, R., J. Burns, and S. Weitzman. 2007. Reproductive morphology of *Brittanichthys axelrodi* (Teleostei: Characidae), a miniature inseminating fish from South America. *Journal of Morphology* 268(1): 23–32.
- Jégu, M., P. Keith and P. Le Bail. 2003. *Myloplus planquettei* sp. n. (Teleostei, Characidae), une nouvelle espèce de grand Serrasalminae phytophage du bouclier guyanais. *Revue Suisse de Zoologie* 110(4): 833–853.
- Kner, R. 1858. Beiträge zur Familie der Characinen. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe 30(13): 75–80.
- Kner, R. 1858. Zur Familie der Characinen. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe 32 (22): 163–168.
- Knöppel, H. 1972. Zur Nahrung tropischer Süßwasserfische aus Südamerika—Einige ausgewählte Arten der Anostomidae, Curimatidae, Hemiodidae und Characidae (Pisces, Characoidei). *Amazoniana: Limnologia et Oecologia Regionalis Systematis Fluminis Amazonas* 3(2): 231–246.
- Koelreuter, I.T. 1763. *Piscium rariorum e Museo Petropolitano exceptorum descriptiones. Novi Commentarii Academiae Scientiarum Imperialis Petropolitanae* 8(1760–1761): 404–430, Pl. 14.
- Koerber, S., and R.E. Reis. 2020. Evidence for the true type-locality of *Rhamdia quelen* (Siluriformes: Heptapteridae), and the geographical origin and invalid neotype designation of four of its synonyms. *Neotropical Ichthyology* 18(1): e190117.
- Kolmann, M.A., L.C. Hughes, L.P. Hernandez, D. Arcila, R. Betancur-R., M.H. Sabaj, H. López-Fernández, and G. Ortí. 2020. Phylogenomics of piranhas and pacus (Serrasalminae) uncovers how dietary convergence and parallelism obfuscate traditional morphological taxonomy. *Systematic Biology* 70(3): 576–592.
- Kolmann, M.A., M. Kalacska, O. Lucanus, L. Sousa, D. Wainwright, J.P. Arroyo-Mora, and M.C. Andrade. 2021. Hyperspectral data as a biodiversity screening tool can differentiate among diverse Neotropical fishes. *Scientific Reports* 11(1): 1–15.
- Kolmann, M.A., F.P.L. Marques, J.C. Weaver, M.N. Dean, J.P. Fontenelle, and N.R. Lovejoy. 2022. Ecological and Phenotypic Diversification after A Continental Invasion in Neotropical Freshwater Stingrays. *Integrative and Comparative Biology*. <https://doi.org/10.1093/icb/icac019>
- Krumme, U., H. Keuthen, U. Saint-Paul, and W. Villwock. 2007. Contribution to the feeding ecology of the banded puffer fish *Colomesus psittacus* (Tetraodontidae) in north Brazilian mangrove creeks. *Brazilian Journal of Biology* 67(3): 383–392.
- Kuenzer, P. 1982. Äquivalenzkämpfe, verhaltensbedingte Umfärbungen und soziale Organisation beim Längsbandsalmler *Nannostomus beckfordi* (Teleostei, Lebiasinidae). *Zeitschrift für Tierpsychologie* 58(2): 89–118.
- Kullander, S. 1990. *Mazarunia mazarunii* (Teleostei: Cichlidae), a new genus and species from Guyana, South America. *Ichthyological Exploration of Freshwaters* 1(1): 3–14.
- Kullander, S.O., and H. Nijssen. 1989. The cichlids of Surinam (Teleostei: Labroidae), New York, Brill, 256p.
- Lasso, C., P. Sánchez-Duarte, O. Lasso-Alcalá, R. Martín, H. Samudio, K. González-Oropeza, J. Hernández-Acevedo, and L. Mesa. 2009. Lista de los peces del delta del río Orinoco, Venezuela. *Biota Colombiana*, 10(1-2), pp.123-148.
- Lasso, C., and P. Sánchez-Duarte. 2011. Los peces del delta del Orinoco. Diversidad, bioecología, uso y conservación. Fundación La Salle de Ciencias Naturales y Chevron C.A. Venezuela. Caracas. 500 p.
- Lasso, C., and D. Taphorn. 2000. A new species of *Acestrocephalus* (Characiformes: Characidae) from Venezuela. *Revista de Biología Tropical* 48(2–3): 443–447.
- Lasso, C.A., J. Hernández-Acevedo, E. Alexander, J. Señaris, L. Mesa, H. Samudio, A. Shushu, E. Mauruwanaru and R. Shoni. 2008. Abundance matrix of fish species collected during the 2006 RAP survey in the Acarai Mountains, Sipu, Kamao and Essequibo Rivers, Konashen Indigenous District of Southern Guyana, 73-77 In: A Rapid Biological Assessment of the Konashen Community Owned Conservation Area, Southern Guyana. RAP Bulletin of Biological Assessment. L. Alonso, J. McCullough, P. Naskrecki, E. Alexander and H. Wright (Eds.)
- Lehmann A., P., N.K. Lujan, and R.E. Reis. 2022. A new species of armored catfish (Loricariidae: Hypoptopomatinae) syntopic and superficially similar to *Parotocinclus collinsae*, from the Potaro River Basin, Guyana. *Ichthyology & Herpetology* 110(1): 69–76.

- Lehmberg, E.S., A.A. Elbassiouny, D.D. Bloom, H. López-Fernández, W.G.R. Crampton, and N.R. Lovejoy. 2018. Fish biogeography in the “Lost World” of the Guiana Shield: Phylogeography of the weakly electric knifefish *Gymnotus carapo* (Teleostei: Gymnotidae). *Journal of Biogeography* 45: 815–825.
- Lemopoulos, A., and R. Covain. 2018. Biogeography of the freshwater fishes of the Guianas using a partitioned parsimony analysis of endemism with reappraisal of ecoregional boundaries. *Cladistics* 35: 106–124.
- Lichtenstein, M. 1819 Über einige neue Arten von Fischen aus der Gattung *Silurus*. *Zoologisches Magazin* (Wiedemann) 1819, 1(3): 57–63.
- Lima, F. 2003. Subfamily Bryconinae, p. 174–181 *In*: R.E. Reis, S.O. Kullander and C. Ferraris, Jr. (eds.), *Check List of the Freshwater Fishes of South and Central America*. Porto Alegre: EDIPUCRS.
- Lima, F. 2017. A revision of the cis-Andean species of the genus *Brycon* Müller & Troschel (Characiformes: Characidae). *Zootaxa* 4222(1): 1–189.
- Lima, F., and L. Sousa. 2009. A new species of *Hemigrammus* from the upper rio Negro basin, Brazil, with comments on the presence and arrangement of anal-fin hooks in *Hemigrammus* and related genera (Ostariophysi: Characiformes: Characidae). *aqua: International Journal of Ichthyology* 15(3): 153–169.
- Lima, F. 2001. Revisão taxonômica do gênero *Brycon* Müller & Troschel, 1844, dos rios da América do Sul cisandina (Pisces, Ostariophysi, Characiformes, Characidae). Master's Thesis. Universidade de São Paulo, São Paulo.
- Lima, F., R. Caires, C. Conde-Saldanha, J. Miranda, and F. Carvalho. 2021. A new miniature *Pristella* (Actinopterygii: Characiformes: Characidae) with reversed sexual dimorphism from the rio Tocantins and rio São Francisco basins, Brazil. *Canadian Journal of Zoology*, 99(5):339–348.
- Linnaeus, C. 1758. *Systema Naturae*, Ed. X. (*Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Tomus I. Editio decima, reformata*. Holmiae. v. 1: i–ii + 1–824.
- Linnaeus, C. 1766. *Systema naturae sive regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Laurentii Salvii, Holmiae*. 12th ed. (1): 1–532
- Littmann, M. 2007. Systematic review of the Neotropical shovelnose catfish genus *Sorubim* Cuvier (Siluriformes: Pimelodidae). *Zootaxa* 1422: 1–29.
- Loboda, T. 2016. Revisão taxonômica e morfológica do gênero *Paratrygon* Duméril, 1865 (Chondrichthyes: Myliobatiformes: Potamotrygonidae). Ph.D. Thesis. São Paulo: Universidade de São Paulo.
- Loboda, T., and M. Carvalho. 2013. Systematic revision of the *Potamotrygon motoro* (Müller & Henle, 1841) species complex in the Paraná–Paraguay basin, with description of two new ocellated species (Chondrichthyes: Myliobatiformes: Potamotrygonidae). *Neotropical Ichthyology* 11: 693–737.
- Londoño-Burbano, A., M. Barreira Mendonça and R. Reis. 2021. The distribution of *Cteniloricaria* (Siluriformes: Loricariidae): known and new records in Brazil suggest headwater captures as drivers of disjoint distribution. *Neotropical Ichthyology* 19(2): e210018.
- Londoño-Burbano, A., S. Lefebvre and N. Lujan. 2014. A new species of *Limatulichthys* Isbrücker & Nijssen (Loricariidae, Loricariinae) from the western Guiana Shield. *Zootaxa* 3884(4): 360–370.
- Londoño-Burbano, A., A. Urbano-Bonilla, Y. Rojas-Molina, H. Ramírez-Gil, and S. Prada-Pederos. 2018. A New Species of *Spatuloricaria* Schultz, 1944 (Siluriformes: Loricariidae), from the Orinoco River Basin, Colombia. *Copeia* 106(4): 611–621.
- López-Fernández, H., D. Taphorn and S. Kullander. 2006. Two new species of *Guianacara* from the Guiana Shield of eastern Venezuela (Perciformes: Cichlidae). *Copeia* 2006(3): 384–395.
- López-Fernández, H., D. Taphorn and E. Liverpool. 2012. Phylogenetic diagnosis and expanded description of the genus *Mazarunia* Kullander, 1990 (Teleostei: Cichlidae) from the upper Mazaruni River, Guyana, with description of two new species. *Neotropical Ichthyology* 10(3): 465–486.
- López-Fernández, H., and K. Winemiller. 2003. Morphological variation in *Acestrorhynchus microlepis* and *A. falcatus* (Characiformes: Acestrorhynchidae), reassessment of *A. apurensis* and distribution of *Acestrorhynchus* in Venezuela. *Ichthyological Exploration of Freshwaters* 14(3): 193–208.
- López-Fernández, H., and K. Winemiller. 2000. A review of Venezuelan species of *Hypophthalmus* (Siluriformes: Pimelodidae). *Ichthyological Exploration of Freshwaters* 11(1): 35–46.
- Loubens, G., and J. Panfili. 2001. Biologie de *Piaractus brachipomus* (Teleostei: Serrasalminae) dans le bassin du Mamoré (Amazonie bolivienne). *Ichthyological Exploration of Freshwaters* 12(1): 51–64.
- Lovejoy, N.R., K. Lester, W.G.R. Crampton, F.P.L. Marques, and J.S. Albert. 2010. Phylogeny, biogeography, and electric signal evolution of Neotropical knifefishes of the genus *Gymnotus* (Osteichthyes: Gymnotidae). *Molecular Phylogeny and Evolution* 54: 278–290.
- Lovejoy, N.R., and M.L.G. De Araújo. 2000. Molecular systematics, biogeography and population structure of Neotropical freshwater needlefishes of the genus *Potamorhaphis*. *Molecular Ecology* 9(3): 259–268.

- Lowe-McConnell, R. 1964. The fishes of the Rupununi savanna district of British Guiana, South America. Part 1. Ecological groupings of fish species and effects of the seasonal cycle on the fish. *Journal of the Linnean Society (Zoology)* 45(304): 103–144.
- Lowe-McConnell, R. 1969. The cichlid fishes of Guyana, South America, with notes on their ecology and breeding behaviour. *Zoological Journal of the Linnean Society* 48(2): 255–302.
- Lowe-McConnell, R.H. 1975. *Fish Communities in Tropical Freshwaters, their Distribution, Ecology and Evolution*. 337 p. London: Longman.
- Lowe-McConnell, R.H. 1987. *Ecological Studies in Tropical Fish Communities*. 382 p. Cambridge: Cambridge Univ. Press.
- Lucena, C., and N. Menezes. 1998. A phylogenetic analysis of *Roestes* Günther and *Gilbertolus* Eigenmann, with a hypothesis on the relationships of the Cynodontidae and Acestrorhynchidae (Teleostei: Ostariophysi: Characiformes), p. 261–278. *In*: L. Malabarba, R. Reis, R. Vari, Z. Lucena and C. Lucena (eds.), *Phylogeny and classification of Neotropical fishes*. Edipucrs, Porto Alegre.
- Lucena, C., and N. Menezes. 2003. Subfamily Characinae (Characins, tetras), p. 200–208 *In*: R.E. Reis, S.O. Kullander and C.J. Ferraris, Jr. (eds.), *Checklist of the Freshwater Fishes of South and Central America*. Porto Alegre: EDIPUCRS, Brasil.
- Lucena, C. 2007. Revisão taxonômica das espécies do gênero *Roebooides* grupo-*affinis* (Ostariophysi, Characiformes, Characidae). *Iheringia, Série Zoologia* (Porto Alegre) 97(2): 117–136.
- Lujan, N.K. 2008. Description of a new *Lithoxus* (Siluriformes: Loricariidae) from the Guayana Highlands with a discussion of Guiana Shield biogeography. *Neotropical Ichthyology* 6(3): 413–418.
- Lujan, N., H. Agudelo-Zamora, D. Taphorn, P. Booth and H. López-Fernández. 2013. Description of a new, narrowly endemic South American darter (Characiformes: Crenuchidae) from the central Guiana Shield highlands of Guyana. *Copeia* 2013(3): 454–463.
- Lujan, N.K., J. Armbruster and N. Lovejoy. 2018. Multilocus phylogeny, diagnosis and generic revision of the Guiana Shield endemic suckermouth armoured catfish tribe Lithoxini (Loricariidae: Hypostominae). *Zoological Journal of the Linnean Society* 184(4): 1169–1186.
- Lujan, N.K., J. Armbruster, D. Werneke, T. Teixeira, and N. Lovejoy. 2020. Phylogeny and biogeography of the Brazilian–Guiana Shield endemic *Corymbophanes* clade of armoured catfishes (Loricariidae). *Zoological Journal of the Linnean Society* 188(4): 1213–1235.
- Lundberg, J.G. 2005. *Gymnorhamphichthys bogardusi*, a new species of sand knifefish (Gymnotiformes: Rhamphichthyidae) from the Río Orinoco, South America. *Notulae Naturae* 479: 1–4.
- Lundberg, J.G., and F. Mago-Leccia. 1986. A review of *Rhabdolichops* (Gymnotiformes, Sternopygidae), a genus of South American freshwater fishes, with description of four new species. *Proceedings of the Academy of Natural Sciences of Philadelphia* 138: 53–85.
- Lundberg, J., and A. Akama. 2005. *Brachyplatystoma capapretum*: a new species of Goliath catfish from the Amazon basin, with a reclassification of allied catfishes (Siluriformes: Pimelodidae). *Copeia* 2005(3): 492–516.
- Machado, V.N., R.A. Collins, R.P. Ota, M.C. Andrade, I.P. Farias and T. Hrbek. 2018. One thousand DNA barcodes of piranhas and pacus reveal geographic structure and unrecognised diversity in the Amazon. *Scientific Reports* 8(1): 1–12.
- Machado-Allison, A., P.A. Buckup, B. Chernoff and R. Royero. 1993. Las especies del género *Bryconops* Kner, 1858 en Venezuela (Teleostei, Characiformes). *Acta Biologica Venezuelica* 14(3): 1–20.
- Mago-Leccia, F. 1994. Electric fishes of the continental waters of America. *Biblioteca de la Academia de Ciencias Físicas, Matemáticas y Naturales*, Caracas, Caracas.
- Mago-Leccia, F., J.G. Lundberg, and J.N. Baskin. 1985. Systematics of the South American freshwater fish genus *Adontosternarchus* (Gymnotiformes, Apterontidae). *Contributions in Science, Natural History Museum of Los Angeles County* 358: 1–19.
- Malabarba, L. 1998. Monophyly of the Cheirodontinae, characters and major clades (Ostariophysi: Characidae), p. 193–233 *In*: L. Malabarba, R. Reis, R. Vari, Z. Lucena and C. Lucena (eds.), *Phylogeny and classification of Neotropical fishes*. Edipucrs, Porto Alegre. 603 p.
- Malabarba, M.C.S.L. 2004. Revision of the Neotropical genus *Triportheus* Cope, 1872 (Characiformes: Characidae). *Neotropical Ichthyology* 2(4): 167–204.
- Maldonado-Ocampo, J., H. López-Fernández, D. Taphorn, C. Bernard, W. Crampton, and N. Lovejoy. 2014. *Akawaio penak*, a new genus and species of Neotropical electric fish (Gymnotiformes, Hypopomidae) endemic to the upper Mazaruni River in the Guiana Shield. *Zoologica Scripta* 43: 24–33.
- Maldonado-Ocampo, J., and H. Ramírez. 2006. Hábitos alimenticios de *Pygocentrus cariba* y *Chalceus epakros* (Pisces, Characiformes: Characidae) en dos localidades de la baja Orinoquia colombiana. *Memorias de la Fundación La Salle de Ciencias Naturales* 164: 129–141.
- Marceniuk, A.P., R. Betancur-R and J. Muriel-Cunha. 2012. Review of the genus *Cathorops* (Siluriformes: Ariidae) from the Caribbean and Atlantic South America, with description of a new species. *Copeia* 2012(1): 77–97.

- Marinho, M. 2014. Relações filogenéticas e revisão taxonômica das espécies do gênero *Copella* Myers, 1956 (Characiformes: Lebiasinidae). Ph.D. Thesis. Universidade Estadual Paulista Julio de Mesquita Filho, Instituto de Biociências, Letras e Ciências Exatas.
- Marinho, M., and N. Menezes. 2017. Taxonomic review of *Copella* (Characiformes: Lebiasinidae) with an identification key for the species. PLoS ONE 12 (8): e0183069 [1–53].
- Martins-Queiroz, M.F., L.A.F. Mateus, V. Garutti and P.C. Venere. 2008. Reproductive biology of *Triportheus trifurcatus* (Castelnau, 1855) (Characiformes: Characidae) in the middle rio Araguaia, MT, Brazil. Neotropical Ichthyology 6(2): 231–236.
- Mateussi, N.T., B.F. Melo, and C. Oliveira. 2020. Molecular delimitation and taxonomic revision of the wimple piranha *Catoprion* (Characiformes: Serrasalminae) with the description of a new species. Journal of Fish Biology 97(3): 668–685.
- Mateussi, N.T., B.F. Melo, R.P. Ota, F.F. Roxo, L.E. Ochoa, F. Foresti, and C. Oliveira. 2020. Phylogenomics of the Neotropical fish family Serrasalminae with a novel intrafamilial classification (Teleostei: Characiformes). Molecular Phylogenetics and Evolution 153: 106945.
- Mathubara, K., and M. Toledo-Piza. 2020. Taxonomic study of *Moenkhausia cotinho* Eigenmann, 1908 and *Hemigrammus newboldi* (Fernández-Yépez, 1949) with the description of two new species of *Moenkhausia* (Teleostei: Characiformes: Characidae). Zootaxa 4852 (no. 1): 1–40.
- Matos, E., P. Matos, L. Corral and C. Azevedo. 2000. Estrutura fina do espermatózoide de *Acestrorhynchus falcatus* Bloch (Teleostei, Characidae) da região norte do Brasil. Revista Brasileira de Zoologia 17(3): 747–751.
- Mattox, G., M. Hoffmann, and P. Hoffmann. 2014. Ontogenetic development of *Heterocharax macrolepis* Eigenmann (Ostariophysi: Characiformes: Characidae) with comments on the form of the yolk sac in the Heterocharacinae. Neotropical Ichthyology 12(2): 353–363.
- Mattox, G., M. Toledo-Piza and O. Oyakawa. 2006. Taxonomic study of *Hoplias aimara* (Valenciennes, 1846) and *Hoplias macrophthalmus* (Pellegrin, 1907) (Ostariophysi, Characiformes, Erythrinidae). Copeia 2006 (3): 516–528.
- Mattox, G., and M. Toledo-Piza. 2012. Phylogenetic study of the Characinae (Teleostei: Characiformes: Characidae). Zoological Journal of the Linnean Society 165(4): 809–915.
- Mautari, K., and N. Menezes. 2006. Revision of the South American freshwater fish genus *Laemolyta* Cope, 1872 (Ostariophysi: Characiformes: Anostomidae). Neotropical Ichthyology 4(1): 27–44.
- McConnell, R.B. 1959. Fossils in the North Savannas and their significance in the search for oil in British Guiana. Timehri: J. Roy. Agric. Comm. Soc. British Guiana 38: 65–85.
- McConnell, R.B. 1968. Planation surfaces in Guyana. Geographical Journal 134: 506–520.
- McEachran, J., and M.R. de Carvalho. 2003. Batoid Fishes, p. 507–589. In: K.E. Carpenter (ed.) The living marine resources of the Western Central Atlantic. Volume 1. Introduction, molluscs, crustaceans, hagfishes, sharks, baroid fishes, and chimaeras. FAO species identification guide for fishery purposes and American Society of Ichthyologist and Herpetologists Special Publication No. 5. FAO, Rome. v. 1: i–xiv + 1–599.
- Mees, G. 1974. The Auchenipteridae and Pimelodidae of Suriname (Pisces, Nematognathi). Zoologische Verhandelingen (Leiden) 132: 1–256, Pls. 1–15.
- Meinken, H. 1975. *Microschemobrycon meyburi* n. sp. aus dem Rio Xeriuini (Pisces: Characoidei: Aphroditeina). Senckenbergiana Biologica 56 (4/6): 217–220.
- Melo, B., R. Benine, G. Silva, G. Avelino, and C. Oliveira. 2016. Molecular phylogeny of the Neotropical fish genus *Tetragonopterus* (Teleostei: Characiformes: Characidae). Molecular Phylogenetics and Evolution 94: 709–717.
- Melo, B., B. Sidlauskas, K. Hoekzema, R. Vari, and C. Oliveira. 2014. The first molecular phylogeny of Chilodontidae (Teleostei: Ostariophysi: Characiformes) reveals cryptic biodiversity and taxonomic uncertainty. Molecular Phylogenetics and Evolution 70: 286–295.
- Melo, B.F., B.L. Sidlauskas, K. Hoekzema, B.W. Frable, R.P. Vari, and C. Oliveira. 2016. Molecular phylogenetics of the Neotropical fish family Prochilodontidae (Teleostei: Characiformes). Molecular Phylogenetics and Evolution 102: 189–201.
- Méndez-López, A., and A. Urbano-Bonilla. 2019. *Moenkhausia hemigrammoides* Géry, 1965 (Characidae, Stethaprioninae) in Colombia: new records and comments on morphology. Check List 15: 867.
- Menezes, N.A. 1969. Systematics and evolution of the tribe Acestrorhynchini (Pisces, Characidae). Arquivos de Zoologia 18(1–2): 1–150.
- Menezes, N. 1992. Redefinição taxonômica das espécies de *Acestrorhynchus* do grupo lacustris com a descrição de uma espécie (Osteichthyes, Characiformes, Characidae). Comun. Mus. Ciênc. PUCRS, Sér. Zool. 5: 39–54.
- Menezes, N. 2003. Family Acestrorhynchidae (Acestrorhynchids), p. 231–233. In: R.E. Reis, S.O. Kullander and C.J. Ferraris, Jr. (eds.), Checklist of the Freshwater Fishes of South and Central America. Porto Alegre: EDIPUCRS, Brasil.

- Menezes, N. 2006. Description of five new species of *Acestrocephalus* Eigenmann and redescription of *A. sardina* and *A. boehlkei* (Characiformes: Characidae). *Neotropical Ichthyology* 4(4): 385–400.
- Menezes, N. 2007. A new species of *Cynopotamus* Valenciennes, 1849 (Characiformes, Characidae) with a key to the species of the genus. *Zootaxa* (1635): 55–61.
- Menezes, N., and J. Géry. 1983. Seven new acistorhynchid characid species (Osteichthyes, Ostariophysi, Characiformes) with comments on the systematics of the group. *Revue Suisse de Zoologie* 90 (3): 563–592.
- Menezes N., and C. Lucena. 2014. A taxonomic review of the species of *Charax* Scopoli, 1777 (Teleostei: Characidae: Characinae) with description of a new species from the rio Negro bearing superficial neuromasts on body scales, Amazon basin, Brazil. *Neotropical Ichthyology* 12(2): 193–228.
- Merckx, A., M. Jégu and G. dos Santos. 2000. Une nouvelle espèce de *Serrasalmus* (Teleostei: Characidae: Serrasalminae), *S. altispinis* n. sp. décrite du Rio Uatumã (Amazonas, Brésil) avec une description complémentaire de *S. rhombeus* (Linnaeus, 1766) du plateau guyanais. *Cybiu* 24(2):181–201.
- Mérigoux, S., and D. Ponton. 1998. Body shape, diet and ontogenetic diet shifts in young fish of the Sinnamary River, French Guiana, South America. *Journal of Fish Biology* 52(3): 556–569.
- Meunier, F.J., M. Jégu, and P. Keith. 2011. A new genus and species of Neotropical electric fish, *Japigny kirschbaum* (Gymnotiformes: Sternopygidae) from French Guiana. *Cybiu* 35: 47–53.
- Mol, J. H. 2012. *The Freshwater Fishes of Suriname*, Boston: Brill, 889 p.
- Mol, J.H., R.P. Vari, R. Covain, P.W. Willink, and S. Fisch-Muller, S. 2012. Annotated checklist of the freshwater fishes of Suriname, *Cybiu* 36:263–292.
- Montaigne, F. 2002. Catfish Hunters. *National Geographic* (May): 68–71.
- Montaña, C., E. Liverpool, D. Taphorn, and C. Schalk. 2021. The cost of gold: Mercury contamination of fishes in a Neotropical river food web. *Neotropical Ichthyology* 19(3): e200155.
- Müller, J., and F. Troschel. 1844. Synopsis Generum et Specierum Familiae Characinarum (Prodromus Descriptionis Novorum Generum et Specierum). *Archiv für Naturgeschichte*, Berlin 10(11): 81–98.
- Müller, J., and F. Troschel. 1845. *Horae Ichthyologicae*. Beschreibung und Abbildung neuer Fische. Die Familie der Characinen. Erstes und Zweites Heft. Viet & Comp. Berlin (1,2): 1–40, Pls. 1–11.
- Myers, G.S. 1927. An analysis of the genera of Neotropical killifishes allied to *Rivulus*. *Annals and Magazine of Natural History* (Series 9) 19(109): 115–129.
- Nelson, S., and C. Kerkorian. 1976. The dynamics of parental care of *Copeina arnoldi* (Pisces, Characidae). *Behavioral Biology* 17(4): 507–518.
- Netto-Ferreira, A., H. López-Fernández, D. Taphorn and E. Liverpool. 2013. New species of *Lebiasina* (Ostariophysi: Characiformes: Lebiasinidae) from the upper Mazaruni River drainage, Guyana. *Zootaxa* 3652(5): 562–568.
- Netto-Ferreira, A., and M. Marinho. 2013. New species of *Pyrrhulina* (Ostariophysi: Characiformes: Lebiasinidae) from the Brazilian Shield, with comments on a putative monophyletic group of species in the genus. *Zootaxa*, 3664(3):369–376.
- Neuberger, A., E. Marques, C. Agostinho, and R. Oliveira. 2007. Reproductive biology of *Rhaphiodon vulpinus* (Ostariophysi: Cynodontidae) in the Tocantins River Basin, Brazil. *Neotropical Ichthyology* 5(4): 479–484.
- Nico, L.G. 1991. Trophic ecology of piranhas (Characidae: Serrasalminae) from savanna and forest regions in the Orinoco River Basin of Venezuela. Ph.D. Dissertation. Univ. of Florida, Gainesville.
- Nico, L., and D.C. Taphorn. 1985. Diet of *Acestrochynchus microlepis* (Pisces: Characidae) in the low llanos of Venezuela. *Copeia* 1985(3): 794–796.
- Nico, L., and D. Taphorn. 1988. Food habits of piranhas in the low llanos of Venezuela. *Biotropica*: 311–321.
- Nijssen, H. 1970. Revision of the Surinam catfishes of the genus *Corydoras* Lacépède, 1803 (Pisces, Siluriformes, Callichthyidae), *Beaufortia* 18:1–75.
- Nogueira, A., C. Oliveira, F. Langeani, and A. Netto-Ferreira. 2021. Overlooked biodiversity of mitochondrial lineages in *Hemiodus* (Ostariophysi, Characiformes). *Zoologica Scripta* 50(3):337–351.
- Norman, J. 1929. The South American characid fishes of the subfamily Serrasalmoninae, with a revision of the genus *Serrasalmus*, Lacépède. *Proceedings of the Zoological Society of London* [98] (pt 4) (no. 52)(art. 30) (for 1928): 781–829, Pl. 1.
- Ohara, W., F. Jerep, and M. Cavallaro. 2019. A new species of *Microchemobrycon* (Characiformes: Characidae) from Rio Xingu basin, Brazil. *Zootaxa* 4576(2): 326–336.
- Oliveira, C., G. Avelino, K. Abe, T. Mariguela, R. Benine, G. Ortí, R. Vari, and R. Castro. 2011. Phylogenetic relationships within the speciose family Characidae (Teleostei: Ostariophysi: Characiformes) based on multilocus analysis and extensive ingroup sampling. *BMC Evolutionary Biology* 11(1): 275.

- Ota, R.P. 2015. Revisão taxonômica e filogenia morfológica de *Metynnis* Cope, 1878 (Characiformes: Serrasalminae). Ph.D. Thesis. Biologia de Água Doce e Pesca Interior – BADPI. Instituto Nacional de Pesquisas da Amazônia, Brasil.
- Ouboter, P.E., G.A. Landburg, J.H.M. Quik, J.H.A. Mol and F. van der Lugt. 2012. Mercury levels in pristine and gold mining impacted aquatic ecosystems of Suriname, South America. *Ambio* 41(8): 873–882.
- Ouboter, P.E., and J.H. Mol. 1993. The fish fauna of Suriname. The freshwater ecosystems of Suriname, Springer, 133–154.
- Oyakawa, O., and G. Mattox. 2009. Revision of the Neotropical trahiras of the *Hoplias lacerdae* species-group (Ostariophysi: Characiformes: Erythrinidae) with descriptions of two new species. *Neotropical Ichthyology* 7(2): 117–140.
- Paepke, H. 1999. Bloch's fish collection in the Museum für Naturkunde der Humboldt Universität zu Berlin: an illustrated catalog and historical account. Ruggell (Liechtenstein). Theses Zoologicae 32: 1–216. Pls. 1–32.
- Palmer, G., and A. Wheeler 1955. VIII.—Further notes on the fishes of the genus *Gobioides*, *Annals and Magazine of Natural History Series* 12, vol. 8(85): 67–68.
- Passarge, S. 1931. Das Rio Branco-Essequeibo-problem. *Petermanns Geographische Mitteilungen* 77: 135–137.
- Peixoto, L.A.W., G.M. Dutra, and W.B. Wosiacki. 2015. The electric glass knifefishes of the *Eigenmannia trilineata* species-group (Gymnotiformes: Sternopygidae): mono-phyly and description of seven new species. *Zoological Journal of the Linnean Society* 175: 384–414.
- Pellegrin, J. 1909. Characinidés américains nouveaux de la collection du Muséum d'Histoire naturelle. *Bulletin du Muséum National d'Histoire Naturelle (Série 1)* 14(7)[1908]: 342–347.
- Pereira, J.O., M.T. Silva, L.J.S. Vieira, and R. Fugl. 2011. Effects of flood regime on the diet of *Triporthicus curtus* (Garman, 1890) in an Amazonian floodplain lake. *Neotropical Ichthyology* 9(3): 623–628.
- Pezold, F., J. van Tassell, L. Tornabene, K.A. Aiken, and J.-L. Bouchereau. 2015. *Awaous flavus*. The IUCN Red List of Threatened Species 2015: e.T195512A2382909. Accessed on 17 January 2022.
- Pezold, F., J. van Tassell, L. Tornabene, K. Aiken, and J.-L. Bouchereau. 2019. *Awaous banana*. The IUCN Red List of Threatened Species 2019: e.T192933A2180099. Accessed on 17 January 2022.
- Phillip, D.A.T. 1993. Reproduction and feeding of the mountain mullet, *Agonostomus monticola*, in Trinidad, West Indies. *Environmental Biology of Fishes* 37: 47–55.
- Phillip, D.A., D.C. Taphorn, E. Holm, J.F. Gilliam, B.A. Lamphere, and H. López-Fernández. 2013. Annotated list and key to the stream fishes of Trinidad & Tobago. *Zootaxa* 3711: 1–64.
- Planquette, P., P. Keith, and P. Le Bail. 1996. Atlas des poissons d'eau douce de Guyane, 1. Collection du Patrimoine Naturel, 22. Paris: Institut d'Ecologie et de Gestion de la Biodiversité du Muséum National d'Histoire Naturelle. Institut National de la Recherche Agronomique, Conseil Supérieur de la Pêche.
- Popta, C. 1901. *Tetragonopterus longipinnis*, n. sp. Notes from the Leyden Museum 23(2): 85–90.
- Presswell, B., S. Weitzman and T. Bergquist. 2000. *Skiocharax meizon*, a new genus and species of fish from Guyana with a discussion of its relationships (Characiformes: Crenuchidae). *Ichthyological Exploration of Freshwaters* 11(2): 175–192.
- Provenzano, F., C.A. Lasso and V. Ponte. 1995. *Neblinichthys roraima*, a new species of armored catfish (Siluriformes: Loricariidae) from río Kukenan, Venezuela, with considerations about the biogeography of the Guyana Shield. *Ichthyological Exploration of Freshwaters* 6(3): 243–254.
- Pretti, V., D. Calcagnotto, M. Toledo-Piza, and L. de Almeida-Toledo. 2009. Phylogeny of the Neotropical genus *Acestrorhynchus* (Ostariophysi: Characiformes) based on nuclear and mitochondrial gene sequences and morphology: A total evidence approach. *Molecular Phylogenetics and Evolution* 52(2): 312–320.
- Ramirez, J., and P. Galetti, Jr. 2015. DNA barcode and evolutionary relationship within *Laemolyta* Cope 1872 (Characiformes: Anostomidae) through molecular analyses. *Molecular Phylogenetics and Evolution*, 93: 77–82.
- Rangel-Medrano, J.D., A. Ortega-Lara, and E.J. Márquez. 2020. Ancient genetic divergence in bumblebee catfish of the genus *Pseudopimelodus* (Pseudopimelodidae: Siluriformes) from northwestern South America. *PeerJ* 8:e9028.
- Rapp Py-Daniel, L., and E. Oliveira 2001. Seven new species of *Harttia* from the Amazonian-Guyana region (Siluriformes: Loricariidae). *Ichthyological Exploration of Freshwaters* 12(1): 79–96.
- Ray, C.K., and J.W. Armbruster. 2016. The genera *Isorineloricaria* and *Aphanotorulus* (Siluriformes: Loricariidae) with description of a new species. *Zootaxa* 4072(5): 501–539.
- Regan, C. 1912. A revision of the South American characid fishes of the genera *Chalceus*, *Pyrrhulina*, *Copeina*, and *Pogonocharax*. *Annals and Magazine of Natural History (Series 8)* 10(58): 387–395.

- Reis, R. 1989. Systematic revision of the Neotropical characid subfamily Stethaproninae (Pisces, Characiformes). *Comunicações do Museu de Ciências da PUCRS, Série Zoologia* 2(6): 3–86.
- Reis, R.E., P.-Y. Le Bail and J.H.A. Mol. 2005. New arrangement in the synonymy of *Megalechis* Reis, 1997 (Siluriformes: Callichthyidae). *Copeia* 2005(3): 678–682.
- Riehl, R., and H. Baensch. 1991. *Aquarien Atlas*. Band. 1. Melle: Mergus, Verlag für Natur-und Heimtierkunde, Germany. 992 p.
- Reis, R.E., P. Lehmann A. 2022. A new genus of armored catfish (Siluriformes: Loricariidae) from the Greater Amazon, with a review of the species and description of five new species. *Neotropical Ichthyology* 20(2): e220002.
- Ríos, N., C. Bouza, V. Gutiérrez, and G. García. 2017. Species complex delimitation and patterns of population structure at different geographic scales in Neotropical silver catfish (*Rhamdia*: Heptapteridae). *Environmental Biology of Fishes* 100(9): 1047–1067.
- Röpke, C., E. Ferreira and J. Zuanon. 2014. Seasonal changes in the use of feeding resources by fish in stands of aquatic macrophytes in an Amazonian floodplain, Brazil. *Environmental Biology of Fishes* 97(4): 401–414.
- Sabaj, M. 2005. Taxonomic assessment of *Leptodoras* (Siluriformes: Doradidae) with descriptions of three new species. *Neotropical Ichthyology* 3(4): 637–678.
- Sabaj, M. 2014. On the identity of Catesby's fish in armour, "*Cataphractus Americanus*" (Siluriformes: Doradidae). *Proceedings of the Academy of Natural Sciences of Philadelphia* 163: 119–132.
- Sabaj, M. 2020. Codes for natural history collections in ichthyology and herpetology. *Copeia* 108(3): 593–669.
- Sabaj, M., and M. Arce H. 2017. Taxonomic assessment of the hard-nosed thornycats (Siluriformes: Doradidae: *Trachydoras* Eigenmann 1925) with description of *Trachydoras gepharti*, n. sp. *Proceedings of the Academy of Natural Sciences of Philadelphia* 166 (1): 1–53.
- Sabaj, M.H., and M. Arce H. 2021. Towards a complete classification of the Neotropical thorny catfishes (Siluriformes: Doradidae). *Neotropical Ichthyology* 19(4): e210064.
- Sabaj, M., M. Arce H. L. de Sousa and J. Birindelli. 2014. *Nemadoras cristinae*, new species of thorny catfish (Siluriformes: Doradidae) with redescription of its congeners. *Proceedings of the Academy of Natural Sciences of Philadelphia* 163:133–178.
- Sabaj, M.H., M. Arce H., D. Donahue, A. Cramer and L.M. Sousa. 2022. *Synbranchus* of the Middle to Lower Xingu Basin, Brazil, with the description of a new rheophilic species, *S. royal* (Synbranchiformes: Synbranchidae). *Proceedings of the Academy of Natural Sciences of Philadelphia* 163: [1–23].
- Sabaj, M., J. Armbruster and L. Page. 1999. Spawning in *Ancistrus* (Siluriformes: Loricariidae) with comments on the evolution of snout tentacles as a novel reproductive strategy: larval mimicry. *Ichthyological Exploration of Freshwaters* 10(3): 217–229.
- Sabaj, M., and J. Birindelli. 2008. Taxonomic revision of extant *Doras* Lacepède, 1803 (Siluriformes: Doradidae) with descriptions of three new species. *Proceedings of the Academy of Natural Sciences of Philadelphia* 157: 189–234.
- Sabaj, M., H. López-Fernández, S. Willis, D. Hemraj, D. Taphorn and K. Winemiller. 2020. *Cichla cataractae* (Cichliformes: Cichlidae), new species of peacock bass from the Essequibo Basin, Guyana and Venezuela. *Proceedings of the Academy of Natural Sciences of Philadelphia* 167: 69–86.
- Sant'Anna, V.B., M.L.S. Delapieve and R.E. Reis. 2012. A new species of *Potamorhaphis* (Beloniformes: Belonidae) from the Amazon basin. *Copeia* 2012(4): 663–669.
- Santos, G., and P. Rosa. 1998. Alimentação de *Anostomus ternetzi* e *Synaptolaemus cingulatus*, duas espécies de peixes amazônicos com boca superior. *Revista Brasileira de Biologia* 58: 255–262.
- Santos, R., S. Amadio, and E. Ferreira. 2010. Patterns of energy allocation to reproduction in three Amazonian fish species. *Neotropical Ichthyology* 8(1): 155–162.
- Santos, S. 2005. Relações tróficas entre *Carnegiella marthae* Myers, 1927, *C. strigata* (Günther, 1864) e *Gnathocharax steindachneri* Fowler, 1913 (Osteichthyes: Characiformes) em igarapés próximo ao Lago Amanã-Amazonas-Brasil. Master's Thesis. Universidade Federal do Amazonas (UFAM), Programa Integrado de posgraduacao em Biologia Tropical e Recursos Naturais. Manaus. 52 p.
- Santos, S.M., P.H.R. Aride, J. Pantoja-Lima, A.T. Oliveira, and J.A.S. Zuanon. 2021. Trophic relationships among three species of ornamental fish from the region of Lake Amanã, Amazon. *Brazilian Journal of Biology* 82.
- Sa-Oliveira, J., R. Angelini, and V. Isaac-Nahum. 2014. Diet and niche breadth and overlap in fish communities within the area affected by an Amazonian reservoir (Amapá, Brazil). *Anais da Academia Brasileira de Ciências* 86(1): 383–406.
- Schaefer, S., and F. Provenzano. 1993. The Guyana Shield *Parotocinclus*: systematics, biogeography, and description of a new Venezuelan species (Siluroidei: Loricariidae). *Ichthyological Exploration of Freshwaters* 4(1): 39–56.

- Schindler, I. 1996. Ergänzende Beschreibung von *Lithoxus bovalli* (Regan, 1906) aus Guyana (Siluriformes, Loricariidae). *Zeitschrift für Fischkunde* 3(2): 223–233.
- Schindler, I. 1998. *Mesonauta guyanae* spec. nov. a new cichlid fish from the Guyana Shield, South America (Teleostei: Cichlidae). *Zeitschrift für Fischkunde* 5(1): 3–12.
- Schmidt, R. 1987. Redescription of *Vandellia beccarii* (Siluriformes: Trichomycteridae) from Guyana. *Copeia* 1987(1): 234–237.
- Schmidt, R., and C. Ferraris, Jr. 1985. A new species of *Parotocinclus* (Pisces: Loricariidae) from Guyana. *Proceedings of the Biological Society of Washington* 98(2): 341–346.
- Schneider, C. 2007. Análise da variabilidade genética do peixe ornamental *Carnegiella strigata* (Characiformes, Gasteropelecidae) de três rios de água preta da Amazônia Central. Master Thesis. Universidade Federal do Amazonas (UFAM), Programa Integrado de posgraduacao em Biologia Tropical e Recursos Naturais. Manaus. 72 p.
- Schomburgk, R. 1841. The Natural history of fishes of Guiana. Part I. In: W. Jardine (ed.) *The Naturalists' Library*. Vol. 3. W. H. Lizars, Edinburgh.
- Schomburgk, R. 1843. The natural history of fishes of Guiana. Part II. In: W. Jardine (ed.) *The Naturalists' Library*. Vol. 5. W. H. Lizars, Edinburgh.
- Schreiner, C., and A. de Miranda Ribeiro. 1903. A coleção de peixes do Museu Nacional do Rio de Janeiro. *Arquivos do Museu Nacional do Rio de Janeiro* 12: 67–107.
- Schultz, L. 1944. The fishes of the family Characinidae from Venezuela, with descriptions of seventeen new forms. *Proceedings of the United States National Museum* 95(3181): 235–367.
- Schwassmann, H.O. 1989. *Gymnorhamphichthys rosamariae*, a new species of knife fish (Rhamphichthyidae, Gymnotiformes) from the upper Rio Negro, Brazil. *Studies On Neotropical Fauna and Environment* 24: 57–167.
- Shibatta, O. 1998. Sistemática e evolução da família Pseudopimelodidae (Ostariophysi, Siluriformes), com a revisão taxonômica do gênero *Pseudopimelodus*. Ph.D. Thesis. Universidade Federal de São Carlos, São Carlos, Brasil.
- Shipp, R. 2003. Tetraodontidae, p. 1988–2006 In: K.E. Carpenter (ed.), *The living marine resources of the Western Central Atlantic*. Volume 3: Bony fishes part 2 (Opistognathidae to Molidae). FAO species identification guide for fishery purposes and American Society of Ichthyologists and Herpetologists Special Publication No. 5. FAO, Rome. v. 3: i–vi + 1375–2127.
- Sidlauskas, B., and R. Vari. 2012. Diversity and distribution of anostomoid fishes (Teleostei: Characiformes) throughout the Guianas. *Cybum* 36(1): 71–103.
- Sidlauskas, B., B. Chernoff, and A. Machado-Allison. 2006. Geographic and environmental variation in *Bryconops* sp. cf. *melanurus* (Ostariophysi: Characidae) from the Brazilian Pantanal. *Ichthyological Research* 53(1): 24–33.
- Silfvergrip, A. 1996. A systematic revision of the Neotropical catfish genus *Rhamdia* (Teleostei, Pimelodidae). Stockholm. 1–156, Pls. 1–8.
- Silva, G., B. Melo, C. Oliveira, and R. Benine. 2016. Revision of the South American genus *Tetragonopterus* Cuvier, 1816 (Teleostei: Characidae) with description of four new species. *Zootaxa* 4200(1): 1–46.
- Silva, G.S.C., F.F. Roxo, B.F. Melo, L.E. Ochoa, F.A. Bockmann, M.H. Sabaj, F.C. Jerup, F. Foresti, R.C. Benine and C. Oliveira. 2021. Evolutionary history of Heptapteridae catfishes using ultraconserved elements (Teleostei, Siluriformes). *Zoologica Scripta* 50: 543–554.
- Silva, J., A. El-Deir, G. Moura, R. Alves, and U. Albuquerque. 2014. Traditional ecological knowledge about dietary and reproductive characteristics of *Tupinambis merianae* and *Hoplias malabaricus* in Semiarid Northeastern Brazil. *Human Ecology* 42(6): 901–911.
- Silva, J., and M. Carvalho. 2015. Systematics and morphology of *Potamotrygon orbignyi* (Castelnau, 1855) and allied forms (Chondrichthyes: Myliobatiformes: Potamotrygonidae). *Zootaxa* 3982(1): 1–82.
- Sinha, N.K.P. 1968. Geomorphic evolution of the Northern Rupununi Basin, Guyana. McGill University Savanna Research Project, Savanna Research Series 11, McGill University, Montreal.
- Sioli, H. 1984. The Amazon: limnology and landscape ecology of a mighty tropical river and its basin. Dordrecht, Netherlands: Springer.
- Soares, B., N. Benone, D. Rosa, D. and L. Montag. 2020. Do local environmental factors structure the trophic niche of the splash tetra, *Copella arnoldi*? A test in an Amazonian stream system. *Acta Amazonica* 50(1): 54–60.
- Soares, I., V. Azevedo-Santos, and R. Benine. 2017. Redescription of *Moenkhausia megalops* (Eigenmann, 1907), a widespread tetra from the Amazon basin (Characiformes, Characidae). *Zoosystematics and Evolution* 93: 255.
- Spillman, T., C. Jernigan, and L. Scott. 1998. Water resources assessment of Guyana. United States Army Corps of Engineers.
- Spix, J. von, and L. Agassiz. 1829–31. *Selecta genera et species piscium quos in itinere per Brasiliam annis MDCCCXVII–MDCCCXX jussu et auspiciis Maximiliani Josephi I. collegit et pingendos curavit Dr J. B. de Spix. Monachii*. Part 1: i–xvi + i–ii + 1–6 + 1–82, Pls. 1–48, Part 2: 83–138, Pls. 49–101.

- Steele, S., E. Liverpool and H. López-Fernández. 2013. *Krobia petiella*, a new species of cichlid fish from the Berbice River in Guyana (Teleostei: Cichlidae). *Zootaxa* 3693(2): 152–162.
- Steindachner, F. 1876. [Der dritte] Theil einer Abhandlung über die Süßwasserfische des südöstlichen Brasiliens. Anzeiger der Kaiserlichen Akademie der Wissenschaften, Wien, Mathematisch-Naturwissenschaftliche Classe v. 13 (no. 24) (for 16 Nov. 1876): 191.
- Steindachner, F. 1876. Ichthyologische Beiträge (V). [Subtitles i-v.]. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe v. 74 (1. Abth.): 49–240, Pls. 1–15.
- Steindachner, F. 1876. Süßwasserfische des südöstlichen Brasiliens (dritter Theil). Anzeiger der Kaiserlichen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftlichen Classe v. 13 (no. 4): 191.
- Steindachner, F. 1876. Beiträge zur Kenntniss der Characinen des Amazonenstromes. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe 72(1): 6–24, Pls. 1–2.
- Steindachner, F. 1876. Ichthyologische Beiträge (IV). Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe 72(1): 551–616, Pl. 1–13.
- Steindachner, F. 1882. Beiträge zur Kenntniss der Flussfische Südamerika's (IV). Anzeiger der Kaiserlichen Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftlichen Klasse 19(19): 175–180.
- Steindachner, F. 1908. Über eine neue Hemiodus-Art aus dem Stromgebiete des Amazonas, *Hemiodus fowleri*. Anzeiger der Kaiserlichen Akademie der Wissenschaften, Wien, Mathematisch-Naturwissenschaftliche Klasse 45(10): 131–132.
- Steindachner, F. 1910. Über einige neue Characinenarten aus dem Orinoco und dem oberen Surinam. Anzeiger der Kaiserlichen Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftlichen Klasse 47(17): 265–270.
- Steindachner, F. 1915. Beiträge zur Kenntniss der Flußfische Südamerikas. V. Denkschriften der Kaiserlichen Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftliche Klasse 93: 15–106, Pls. 1–13.
- Suijker, W., and G. Collier. 2006. *Rivulus mahdiaensis*, a new killifish from central Guyana (Cyprinodontiformes: Rivulidae). *Zootaxa* 1246: 1–13.
- Sullivan, J., J. Zuanon, and C. Fernandes. 2013. Two new species and a new subgenus of toothed *Brachyhypopomus* electric knifefishes (Gymnotiformes, Hypopomidae) from the central Amazon and considerations pertaining to the evolution of a monophasic electric organ discharge. *ZooKeys* 327: 1–34.
- Taphorn, D., J. Armbruster, H. López-Fernández and C. Bernard. 2010. Description of *Neblinichthys brevibracchium* and *N. echinasus* from the upper Mazaruni River, Guyana (Siluriformes: Loricariidae), and recognition of *N. roraima* and *N. yaravi* as distinct species. *Neotropical Ichthyology* 8(3): 615–624.
- Taphorn, D., H. López-Fernández and C. Bernard. 2008. *Apareiodon agmatos*, a new species from the upper Mazaruni River, Guyana (Teleostei: Characiformes: Parodontidae). *Zootaxa* 1925: 31–38.
- Taphorn, D., and J. Thomerson. 1978. A revision of the South American cyprinodont fishes of the genera *Rachovia* and *Austrofundulus*, with the description of a new genus. *Acta Biologica Venezuelica* 9(4): 377–452.
- Taphorn, D., J. Armbruster, H. López-Fernández and C. Bernard. 2010. Description of *Neblinichthys brevibracchium* and *N. echinasus* from the upper Mazaruni River, Guyana (Siluriformes: Loricariidae), and recognition of *N. roraima* and *N. yaravi* as distinct species. *Neotropical Ichthyology* 8(3): 615–624.
- Teixeira, T. 2010. Revisão taxonômica das espécies de *Hyphessobrycon* Durbin do grupo rosacéo pingo-de-sangue (Ostariophysi; characiformes; Characidae): comentários sobre a biologia reprodutiva do grupo. Dissertação (mestrado). INPA, Manaus. 144 p.
- Thompson, A.W., R. Betancur-R, H. López-Fernández and G. Ortí. 2014. A time-calibrated, multi-locus phylogeny of piranhas and pacus (Characiformes: Serrasalminidae) and a comparison of species tree methods. *Molecular Phylogenetics and Evolution* 81: 242–257.
- Toledo-Piza, M. 2000. Two new *Heterocharax* species (Teleostei: Ostariophysi: Characidae), with a redescription of *H. macrolepis*. *Ichthyological Exploration of Freshwaters* 11(4): 289–304.
- Toledo-Piza, M. 2007. Phylogenetic relationships among *Acestrorhynchus* species (Ostariophysi: Characiformes: Acestrorhynchidae). *Zoological Journal of the Linnean Society* 151(4): 691–757.
- Toledo-Piza, M., and N.A. Menezes. 1996. Taxonomic redefinition of the species of *Acestrorhynchus* of the *microlepis* group: with the description of *Acestrorhynchus apurensis*, a new species from Venezuela (Ostariophysi, Characiformes, Characidae). *American Museum Novitates* 3160.
- Toledo-Piza, M., N. Menezes and G. dos Santos. 1999. Revision of the Neotropical fish genus *Hydrolycus* (Ostariophysi: Cynodontinae) with the description of two new species. *Ichthyological Exploration of Freshwaters* 10(3): 255–280.

- Tooth, S. 2015. The Augrabies Falls Region: A Fluvial Landscape Divided in Flow but Magnificent in Spectacle, p 65–73 *In*: Grab, S. and J. Knight (eds.). Landscapes and Landforms of South Africa. Springer International Publishing Switzerland.
- Tooth, S., and T.S. McCarthy. 2004. Anabranching in mixed bedrock-alluvial rivers: the example of the Orange River above Augrabies Falls, Northern Cape Province, South Africa. *Geomorphology* 57: 235–262.
- Torrente-Vilara, G., J. Zuanon, S. Amadio, and C. Doria. 2008. Biological and ecological characteristics of *Roestes molossus* (Teleostei: Cynodontidae), a night hunting characiform fish from upper Madeira River, Brazil. *Ichthyological Exploration of Freshwaters* 19(2): 103–110.
- Ugwu-Oju, O. 2018. Clinothems of the Cretaceous Berbice Canyon, Offshore Guyana. Master's Thesis. Colorado School of Mines.
- Vari, R. 1982. Systematics of the Neotropical characoid genus *Curimatopsis* (Pisces: Characoidei). *Smithsonian Contributions to Zoology* 373: i–iii + 1–28.
- Vari, R. 1983. Phylogenetic relationships of the families Curimatidae, Prochilodontidae, Anostomidae, and Chilodontidae (Pisces: Characiformes). *Smithsonian Contributions to Zoology* 378: 1–60.
- Vari, R. 1984. Two new fish species of the genus *Curimata* (Pisces: Curimatidae) from Venezuela. *Acta Biologica Venezuelica* 11(4): 27–43.
- Vari, R. 1985. A new species of *Bivibranchia* (Pisces: Characiformes) from Surinam, with comments on the genus. *Proceedings of the Biological Society of Washington* 98(2): 511–522.
- Vari, R. 1986. *Serrabrycon magoi*, a new genus and species of scale-eating characid (Pisces: Characiformes) from the upper Rio Negro. *Proceedings of the Biological Society of Washington* 99(2): 328–334.
- Vari, R. 1989. Systematics of the Neotropical characiform genus *Curimata* Bosc (Pisces: Characiformes). *Smithsonian Contributions to Zoology* 474: i–iii + 1–63.
- Vari, R. 1991. Systematics of the Neotropical Characiform genus *Steindachnerina* Fowler (Pisces, Ostariophysi). *Smithsonian Contributions to Zoology* 507: 1–118.
- Vari, R. 1992. Systematics of the Neotropical Characiform genus *Cyphocharax* Fowler (Pisces, Ostariophysi). *Smithsonian Contributions to Zoology* 529: i–iv + 1–137.
- Vari, R. 1995. The Neotropical fish family Ctenoluciidae (Teleostei: Ostariophysi: Characiformes): Supra and intrafamilial phylogenetic relationships, with a revisionary study. *Smithsonian Contributions to Zoology* 564: i–iv + 1–97.
- Vari, R., R.M.C. Castro, and S. Raredon. 1995. The Neotropical fish family Chilodontidae (Teleostei: Characiformes): a phylogenetic study and a revision of *Caenotropus* Günther. *Smithsonian Contributions to Zoology* 577.
- Vari, R., and C. Ferraris, Jr. 2009. New species of *Cetopsidium* (Siluriformes: Cetopsidae: Cetopsinae) from the upper rio Branco system in Guyana. *Neotropical Ichthyology* 7(3): 289–293.
- Vari, R.P., and C.J. Ferraris, Jr. 2009. Fishes of the Guiana Shield, p. 9–18 *In*: R.P. Vari, C.J. Ferraris, Jr. A. Radosavljevic and V.A. Funk (eds.), Checklist of the freshwater fishes of the Guiana Shield. *Bulletin of the Biological Society of Washington* 17.
- Vari, R., and A. Harold. 2001. Neotropical fishes of the genus *Creagrutus* (Teleostei: Ostariophysi: Characiformes): A phylogenetic study and a revision of the species east of the Andes. *Smithsonian Contributions to Zoology* 613.
- Vari, R., B. Sidlauskas and P. Le Bail. 2012. New species of *Cyphocharax* (Ostariophysi: Characiformes: Curimatidae) from Suriname and French Guiana and a discussion of curimatid diversity on the Guiana Shield. *Cybio* 36(1): 63–69.
- Vari, R., and A. Williams Vari. 1989. Systematics of the *Steindachnerina hypostoma* complex (Pisces, Ostariophysi, Curimatidae), with the description of three new species. *Proceedings of the Biological Society of Washington* 102(2): 468–482.
- Vermeulen, F. 2015. The Killi's of the Lost World, New World Killi Series Vol. 1. Pastelaria Studios Productions, Editions, Lisbon 158p.
- Vermeulen, F., and I. Isbrücker. 2000. *Rivulus torrenticola* n. sp. (Actinopterygii: Cyprinodontiformes: Rivulidae), a new killifish from highlands in the Guyana Shield. *Beaufortia* 50(10): 185–190.
- Vermeulen, F., W. Suijker and G. Collier. 2012. *Laimosemion paryagi* (Cyprinodontiformes: Aplocheiloidei: Rivulidae), a new species from the upper Mazaruni river drainage of Western Guyana. *International Journal of Ichthyology* 18(4): 181–190.
- Waddell, J., A. Rodríguez-Cattaneo, A. Caputi, and W. Crampton. 2016. Electric organ discharges and near-field spatiotemporal patterns of the electromotive force in a sympatric assemblage of Neotropical electric fish. *Journal of Physiology (Paris)* 110: 164–181.
- Waddell, J.C., and W.G.R. Crampton. 2020. Environmental correlates of circannual breeding periodicity in a multi-species assemblage of Amazonian electric fishes. *Environmental Biology of Fishes* 103: 233–250.
- Waddell, J.C., and W.G.R. Crampton. 2021. Reproductive effort and terminal investment in a multi-species assemblage of Amazon electric fish. *Ecological Monographs*: e1499 (<https://doi.org/10.1002/ecm.1499>).

- Weitzman, S. 1954. The osteology and relationship of the South American characoid fishes of the subfamily Gasteropelecinae. *Stanford Ichthyological Bulletin* 4(1): 213–263.
- Weitzman, S., and R. Kanazawa. 1976. *Ammocryptocharax elegans*, a new genus and species of riffle-inhabiting characoid fish (Teleostei: Characidae) from South America. *Proceedings of the Biological Society of Washington* 89(26): 325–346.
- Weitzman, S., and R. Kanazawa. 1978. The South American fish genus *Elachocharax* Myers with a description of a new species (Teleostei: Characidae). *Proceedings of the Biological Society of Washington* 91(1): 158–183.
- Weitzman, S., and L. Palmer. 1997. A new species of *Hyphessobrycon* (Teleostei: Characidae) from the Neblina region of Venezuela and Brazil, with comments on the putative ‘rosy tetra clade’. *Ichthyological Exploration of Freshwaters* 7(3): 209–242.
- Whitehead, P.J.P. 1973. The clupeoid fishes of the Guianas. *Bulletin of the British Museum of Natural History (Zool.)*, Suppl. 5: 1–227.
- Williams, J.D. 1995. Ecology of large piscivorous fishes in Guri Reservoir, Venezuela, with notes on fish community structure. Ph.D. Dissertation, Texas A&M University.
- Willis, S., H. López-Fernández, C. Montaña, I. Farias and G. Ortí. 2012. Species-level phylogeny of ‘Satan’s perches’ based on discordant gene trees (Teleostei: Cichlidae: *Satanoperca* Günther 1862). *Molecular Phylogenetics and Evolution* 63: 798–808.
- Winemiller, K., and D. Taphorn. 1989. La evolución de las estrategias de vida en los peces de los llanos occidentales de Venezuela. *Biollania* 6(1989): 77–122.
- Winemiller, K.O., L.C. Kelso-Winemiller, and C. Montaña. 2021. *Peacock Bass: Diversity, Ecology and Conservation*. Academic Press.
- Yang, W., and A. Escalona. 2011. Basin modeling and source rock evaluation in the Guyana Basin. *First Break* 29(10).
- Zanata, A. 1997. *Jupiaba*, um novo gênero de Tetragonopterinae com osso pélvico em forma de espinho (Characidae, Characiformes). *Iheringia, Série Zoologia (Porto Alegre)* 83: 99–136.
- Zanata, A. 2000. Estudo das relações filogenéticas do gênero *Brycon* Müller & Troschel, 1844 (Characidae; Characiformes). Ph.D. dissertation, Universidade de São Paulo, São Paulo. 358 p.
- Zanata, A., and M. Toledo-Piza. 2004. Taxonomic revision of the South American fish genus *Chalceus* Cuvier (Teleostei: Ostariophysi: Characiformes) with the description of three new species. *Zoological Journal of the Linnean Society* 140(1): 103–135.
- Zonneveld, J. 1972. Sulas and sula complexes. *Göttinger Geographische Abhandlungen (Hans-Poser-Festschrift)* 60: 93–102.
- Zuanon, J., and E. Ferreira. 2008. Feeding ecology of fishes in the Brazilian Amazon—a naturalistic approach, p. 1–34 *In*: J.E. Cyrino, D. Bureau and B. Kapoor (eds.), *Feeding and Digestive Functions of Fishes*. Science Publishers Inc. USA, 589p.

Appendix I.

List of primarily freshwater fishes of Guyana. Classification and arrangement of Orders based on Fricke et al. (2022).

Asterisk denotes introduced species.

Class: Order: Family			
<i>Genus species</i>	Author(s) Date	Common Name(s)	Text page
Chondrichthyes [Elasmobranchii]: Myliobatiformes: Potamotrygonidae			
<i>Paratrygon aiereba</i>	(Müller & Henle 1841)	River Stingray, Manzana Ray, Tenge-Ray	8
<i>Potamotrygon adamastor</i>	Fontenelle & Carvalho 2017	Spotted River Stingray, Tenge-Ray	8
<i>Potamotrygon marinae</i>	Deynat 2006	River Stingray, River Tenge-Ray, Tenge-Ray	8
<i>Potamotrygon motoro</i>	(Müller & Henle 1841)	River Stingray, Tenge-Ray	9
<i>Potamotrygon orbignyi</i>	(Castelnau 1855)	Smooth-back River Stingray, Tenge-Ray	9
<i>Potamotrygon cf. scobina</i>	Garman 1913	Whitespotted Freshwater Stingray, Tenge-Ray	9
Actinopterygii [Actinopteri]: Osteoglossiformes: Arapaimidae			
<i>Arapaima cf. arapaima</i>	(Valenciennes 1847)	Arapaima	41
Actinopterygii [Actinopteri]: Osteoglossiformes: Osteoglossidae			
<i>Osteoglossum bicirrhosum</i>	(Cuvier 1829)	Arowana	42
Actinopterygii [Actinopteri]: Clupeiformes: Dorosomatidae			
<i>Rhinosardinia amazonica</i>	(Steindachner 1879)	Amazon Spinejaw Sprat, Herring	34
Actinopterygii [Actinopteri]: Clupeiformes: Engraulidae			
<i>Amazonsprattus scintilla</i>	Roberts 1984	Pygmy Anchovy	34
<i>Anchovia surinamensis</i>	(Bleeker 1865)	Surinam Anchovy	34
<i>Anchoviella brevirostris</i>	(Günther 1868)	Surinam Anchovy	34
<i>Anchoviella carrikeri</i>	(Fowler 1940)	Carriker's Anchovy	34
<i>Anchoviella guianensis</i>	(Eigenmann 1912)	Guyana Anchovy	35
<i>Anchoviella jamesi</i>	(Jordan & Seale 1926)	James' Anchovy	35
<i>Anchoviella juruasanga</i>	(Loeb 2012)	Juruasanga Anchovy	35
<i>Anchoviella lepidentostole</i>	(Fowler 1911)	Broadband Anchovy	35
<i>Anchoviella manamensis</i>	Cervigón 1982	Manamo Anchovy	35
<i>Jurengraulis juruensis</i>	(Boulenger 1898)	Jurua Anchovy	35
<i>Lycengraulis batesii</i>	(Günther 1868)	Bates' Sabretooth Anchovy	35
<i>Pterengraulis atherinoides</i>	(Linnaeus 1766)	Wingfin Anchovy	35
Actinopterygii [Actinopteri]: Clupeiformes: Pristigasteridae			
<i>Pellona castelnaeana</i>	Valenciennes 1847	Amazon Pellona	35
<i>Pellona flavipinnis</i>	(Valenciennes 1837)	Yellowfin River Pellona	35
Actinopterygii [Actinopteri]: Characiformes: Acestrorhynchidae			
<i>Acestrorhynchus falcatus</i>	(Bloch 1794)	Dogfish, Foxfish, Red-tailed Freshwater Barracuda, Pike Characin	10
<i>Acestrorhynchus falcirostris</i>	(Cuvier 1819)	Freshwater Barracuda, Pike Characin, Dogfish, Foxfish	10
<i>Acestrorhynchus heterolepis</i>	(Cope 1878)	Freshwater Barracuda, Pike Characin, Dogfish, Foxfish	10
<i>Acestrorhynchus microlepis</i>	(Jardine 1841)	Freshwater Barracuda, Pike Characin, Dogfish, Foxfish	10
<i>Acestrorhynchus minimus</i>	Menezes 1969	Freshwater Barracuda, Pike Characin, Dogfish, Foxfish	10
<i>Acestrorhynchus nasutus</i>	Eigenmann 1912	Freshwater Barracuda, Pike Characin, Dogfish, Foxfish	10
<i>Gnathocharax steindachneri</i>	Fowler 1913	Bigjaw Characin	10
<i>Heterocharax macrolepis</i>	Eigenmann 1912	Pygmy Characin	10
<i>Lonchogenys ilisha</i>	Myers 1927	Lancecheek Characin, Shad Tetra	10
<i>Roestes ogilviei</i>	(Fowler 1914)	Dogtooth Characin	10
Actinopterygii [Actinopteri]: Characiformes: Anostomidae			
<i>Abramites hypselonotus</i>	(Günther 1868)	Marbled Headstander, High-backed Headstander	10
<i>Anostomoides atrianalis</i>	Pellegrin 1909	Headstander	11

<i>Anostomus anostomus</i>	(Linnaeus 1758)	Striped Headstander	11
<i>Anostomus ternetzi</i>	Fernández-Yépez 1949	Ternetz' Headstander	11
<i>Hypomasticus megalepis</i>	(Günther 1863)	Bigscale Leporin, Jewel Spotted Anostomid	11
<i>Laemolyta proxima</i>	(Garman 1890)	One-striped Headstander	11
<i>Leporellus vittatus</i>	(Valenciennes 1850)	Stripetail	11
<i>Leporinus agassizi</i>	Steindachner 1876	Agassiz' Spotted Leporin, Daray	11
<i>Leporinus arcus</i>	Eigenmann 1912	Red-finned Three-stripes Leporin, Daray	11
<i>Leporinus desmotes</i>	Fowler 1914	Leporin, Daray	11
<i>Leporinus fasciatus</i>	(Bloch 1794)	Barred Leporin, Daray	11
<i>Leporinus friderici</i>	(Bloch 1794)	Spotted Leporin, Daray	11
<i>Leporinus granti</i>	Eigenmann 1912	Many-spotted Leporin, Daray	11
<i>Leporinus maculatus</i>	Müller & Troschel 1844	Barred Leporin, Daray	12
<i>Leporinus nigrotaeniatus</i>	(Jardine 1841)	Slender Leporin, Daray	12
<i>Leporinus ortomaculatus</i>	Garavello 2000	Many-spotted Leporin, Daray	12
<i>Petulanos plicatus</i>	(Eigenmann 1912)	Small-spot Headstander	12
<i>Petulanos cf. spiloclistron</i>	(Winterbottom 1974)	Spot-bar Headstander	12
<i>Pseudanos trimaculatus</i>	(Kner 1858)	Threespot Headstander	12
<i>Schizodon fasciatus</i>	Spix & Agassiz 1829	Deep-bodied Headstander	12
<i>Synaptolaemus latofasciatus</i>	(Steindachner 1910)	Red-banded Headstander	12
Actinopterygii [Actinopteri]: Characiformes: Bryconidae			
<i>Brycon amazonicus</i>	(Spix & Agassiz 1829)	Black-tailed Brycon, Kuti, Black-tail Kuti	12
<i>Brycon falcatus</i>	Müller & Troschel 1844	Kuti, Falcate Brycon	12
<i>Brycon pesu</i>	Müller & Troschel 1845	Pesu Brycon, Basket fish	12
Actinopterygii [Actinopteri]: Characiformes: Chalceidae			
<i>Chalceus epakros</i>	Zanata & Toledo-Piza 2004	Red-tailed Chalceus, Red Tail	12
<i>Chalceus macrolepidotus</i>	Cuvier 1818	Pinktail chalceus, Red Tail	13
Actinopterygii [Actinopteri]: Characiformes: Characidae			
<i>Acanthocharax microlepis</i>	Eigenmann 1912	Bigeye Dogtooth Characin	13
<i>Acestrocephalus sardina</i>	(Fowler 1913)	Needle-tooth Dogfish	13
<i>Aphyocharacidium melandetum</i>	(Eigenmann 1912)	Blackline Tetra	13
<i>Aphyocharax avary</i>	Fowler 1913	Flametail Tetra	13
<i>Aphyocharax erythrurus</i>	Eigenmann 1912	Flametail Tetra	13
<i>Aphyodite grammica</i>	Eigenmann 1912	Dwarf Blackline Tetra	13
<i>Astyanax bimaculatus</i>	(Linnaeus 1758)	Two Spot Astyanax	13
<i>Astyanax clavitaeniatus</i>	Garutti 2003	Nailstripe Astyanax	13
<i>Astyanax rupununi</i>	Fowler 1914	Rupununi Astyanax	13
<i>Brachyhalcinus orbicularis</i>	(Valenciennes 1850)	Discus Tetra	13
<i>Brittanichthys myersi</i>	Géry 1965	Red Heart Tetra	13
<i>Bryconamericus cf. orinocoensis</i>	Román-Valencia 2003	Wide-stripe Tetra	13
<i>Bryconamericus hypheoson</i>	Eigenmann 1909	Shoulder-bar Tetra	13
<i>Charax gibbosus</i>	(Linnaeus 1758)	Glass Headstander, Batfish	13
<i>Charax hemigrammus</i>	(Eigenmann 1912)	Glass Headstander, Batfish	14
<i>Charax rupununi</i>	Eigenmann 1912	Rupununi Glass Headstander, Batfish	14
<i>Creagrutus cf. machadoi</i>	Vari & Harold 2001	Buck-toothed Tetra	14
<i>Creagrutus melanzonus</i>	Eigenmann 1909	Buck-toothed Tetra	14
<i>Ctenobrycon spilurus</i>	(Valenciennes 1850)	Silver Tetra	14
<i>Cynopotamus essequibensis</i>	Eigenmann 1912	Essequibo Dogfish	14
<i>Deuterodon mutator</i>	(Eigenmann 1909)	Punkay	14
<i>Deuterodon potaroensis</i>	Eigenmann 1909	Punkay	14
<i>Exodon paradoxus</i>	Müller & Troschel 1844	Bigspot Bucktooth Tetra	14
<i>Galeocharax gulo</i>	(Cope 1870)	Dogfish	14
<i>Gephyrocharax valencia</i>	Eigenmann 1920	Spurtail Tetra	14
<i>Gymnocorymbus bondi</i>	(Fowler 1911)	Silver Tetra, Redfin Tetra	14
<i>Gymnocorymbus thayeri</i>	Eigenmann 1908	False Black Tetra	14
<i>Hemigrammus analis</i>	Durbin 1909	Shortfin Tetra	15
<i>Hemigrammus bellottii</i>	(Steindachner 1882)	Bellott's Tetra	15
<i>Hemigrammus boesemani</i>	Géry 1959	Boeseman's Tetra	15

<i>Hemigrammus cylindricus</i>	Durbin 1909	Cigar-shaped Tetra	15
<i>Hemigrammus erythrozonus</i>	Durbin 1909	Glowlight Tetra	15
<i>Hemigrammus geisleri</i>	Zarske & Géry 2007	Geisler's Tetra	15
<i>Hemigrammus cf. gracilis</i>	(Lütken 1875)	Graceful Tetra	15
<i>Hemigrammus iota</i>	Durbin 1909	I-beam Tetra	15
<i>Hemigrammus levis</i>	Durbin 1908	Smooth Tetra	15
<i>Hemigrammus micropterus</i>	Meek 1907	Smallfin Tetra	15
<i>Hemigrammus microstomus</i>	Durbin 1918	Smallmouth Tetra	15
<i>Hemigrammus ocellifer</i>	(Steindachner 1882)	Head-and-tailight Tetra	15
<i>Hemigrammus orthus</i>	Durbin 1909	Straightline Tetra	15
<i>Hemigrammus rodwayi</i>	Durbin 1909	Rodway's Tetra	15
<i>Hemigrammus stictus</i>	(Durbin 1909)	Half-red Tetra	15
<i>Hemigrammus unilineatus</i>	(Gill 1858)	Featherfin tetra	15
<i>Hemigrammus vorderwinkleri</i>	Géry 1963	Vorderwinkler's Tetra	16
<i>Hyphessobrycon axelrodi</i>	(Travassos 1959)	Calypso Tetra	16
<i>Hyphessobrycon bentosi</i>	Durbin 1908	Bentosi's Tetra	16
<i>Hyphessobrycon catableptus</i>	(Durbin 1909)	Club-fin Tetra	16
<i>Hyphessobrycon eos</i>	Durbin 1909	Dawn Tetra, Sunrise Tetra	16
<i>Hyphessobrycon minimus</i>	Durbin 1909	Tiny Tetra	16
<i>Hyphessobrycon minor</i>	Durbin 1909	Minor Tetra	16
<i>Hyphessobrycon rosaceus</i>	Durbin 1909	Rosy Tetra	16
<i>Hyphessobrycon cf. takasei</i>	Géry 1964	Coffeebean Tetra	16
<i>Jupiaba abramoides</i>	(Eigenmann 1909)	Two-spot Jupiaba Tetra	16
<i>Jupiaba atypindi</i>	Zanata 1997	Jupiaba Tetra	16
<i>Jupiaba essequibensis</i>	(Eigenmann 1909)	Essequibo Jupiaba Tetra	16
<i>Jupiaba mucronata</i>	(Eigenmann 1909)	One-spot Jupiaba Tetra	16
<i>Jupiaba pinnata</i>	(Eigenmann 1909)	Pinnate Jupiaba Tetra	16
<i>Jupiaba polylepis</i>	(Günther 1864)	Small-scale Jupiaba Tetra	16
<i>Jupiaba potaroensis</i>	(Eigenmann 1909)	Potaro Jupiaba Tetra	16
<i>Jupiaba scologaster</i>	(Weitzman & Vari 1986)	Bellythorn Jupiaba Tetra	17
<i>Knodus cf. cinarucoensis</i>	(Román-Valencia, Taphorn & Ruiz-C. 2008)	Cinaruco Knodus	17
<i>Knodus cf. heteresthes</i>	(Eigenmann 1908)	Tapajos Tetra	17
<i>Makunaima guianensis</i>	(Eigenmann 1909)	Guyana Tetra	17
<i>Markiana geayi</i>	(Pellegrin 1909)	Red-belly Tetra	17
<i>Microchemobrycon callops</i>	Böhlke 1953	Dwarf Blackwater Tetra	17
<i>Microchemobrycon casiquiare</i>	Böhlke 1953	Dwarf Blackwater Tetra	17
<i>Microchemobrycon geisleri</i>	Géry 1973	Dwarf Blackwater Tetra	17
<i>Microchemobrycon melanotus</i>	(Eigenmann 1912)	Dwarf Blackwater Tetra	17
<i>Moenkhausia browni</i>	Eigenmann 1909	Brown's Tetra	17
<i>Moenkhausia ceros</i>	Eigenmann 1908	Hook-fin Tetra	17
<i>Moenkhausia chrysargyrea</i>	(Günther 1864)	Halo Tetra	17
<i>Moenkhausia collettii</i>	(Steindachner 1882)	Collette's Tetra	17
<i>Moenkhausia comma</i>	Eigenmann 1908	Comma Tetra	17
<i>Moenkhausia copei</i>	(Steindachner 1882)	Cope's Tetra	17
<i>Moenkhausia cotinho</i>	Eigenmann 1908	Red-eye Tetra	17
<i>Moenkhausia dichroua</i>	(Kner 1858)	Slender Two-spot Tetra	18
<i>Moenkhausia grandisquamis</i>	(Müller & Troschel 1845)	Bigscale Tetra	18
<i>Moenkhausia jamesi</i>	Eigenmann 1908	James' Tetra	18
<i>Moenkhausia lata</i>	Eigenmann 1908	Slender Tetra	18
<i>Moenkhausia cf. lepidura</i>	(Kner 1858)	Slender Tetra	18
<i>Moenkhausia megalops</i>	(Eigenmann 1907)	Bigeye Tetra	18
<i>Moenkhausia miangi</i>	Steindachner 1915	Miangi Tetra, Curuku	18
<i>Moenkhausia oligolepis</i>	(Günther 1864)	Red-eye Tetra	18
<i>Moenkhausia shideleri</i>	Eigenmann 1909	Shideler's Tetra	18
<i>Parapristella aubyni</i>	(Eigenmann 1909)	Aubyn's Characin	18
<i>Phenacogaster carteri</i>	(Norman 1934)	Carter's Characin	18

<i>Phenacogaster maculoblongus</i>	Lucena & Malabarba 2010	Oblong Spot Characin	18
<i>Phenacogaster megalostictus</i>	Eigenmann 1909	Bigspot Characin	18
<i>Phenacogaster microstictus</i>	Eigenmann 1909	Smallspot Characin	18
<i>Phenacogaster simulata</i>	Lucena & Malabarba 2010	Mimic Characin	18
<i>Poptella brevispina</i>	Reis 1989	Silver Quarter Characin, Silver Bait	19
<i>Poptella compressa</i>	(Günther 1864)	Silver Quarter Characin, Silver Bait	19
<i>Poptella longipinnis</i>	(Popta 1901)	Silver Quarter Characin, Silver Bait	19
<i>Pristella maxillaris</i>	(Ulrey 1894)	X-ray Tetra	19
<i>Roeboides affinis</i>	(Günther 1868)	Scale-eater, Glassfish	19
<i>Roeboides thurni</i>	Eigenmann 1912	Thurn's Scale-eater, Glassfish	19
<i>Serrabrycon magoi</i>	Vari 1986	Mago's Characin	19
<i>Serrapinnus gracilis</i>	(Géry 1960)	Slender Tetra	19
<i>Tetragonopterus argenteus</i>	Cuvier 1816	Silver Tetra	19
<i>Tetragonopterus chalcus</i>	Spix & Agassiz 1829	Copper Tetra	19
<i>Tetragonopterus georgiae</i>	(Géry 1965)	Georgia's Tetra	19
<i>Tetragonopterus rarus</i>	(Zarske, Géry & Isbrücker 2004)	Rare Tetra	19
<i>Thrissobrycon</i> sp.		Herring Tetra	19
Actinopterygii [Actinopteri]: Characiformes: Chilodontidae			
<i>Caenotropus labyrinthicus</i>	(Kner 1858)	Labyrinth Headstander	19
<i>Caenotropus maculosus</i>	(Eigenmann 1912)	Spotted Headstander	20
<i>Chilodus punctatus</i>	Müller & Troschel 1844	Spotted Headstander	20
Actinopterygii [Actinopteri]: Characiformes: Crenuchidae			
<i>Ammocryptocharax lateralis</i>	(Eigenmann 1909)	Blackstripe Tropical Darter	20
<i>Ammocryptocharax minutus</i>	Buckup 1993	Dwarf Tropical Darter	20
<i>Ammocryptocharax vintonae</i>	(Eigenmann 1909)	Vinton's Tropical Darter	20
<i>Characidium amaila</i>	Lujan, Agudelo-Zamora, Taphorn, Booth & López-Fernández 2013	Amaila Tropical Darter	20
<i>Characidium boavistae</i>	Steindachner 1915	Boavista Tropical Darter	20
<i>Characidium crandellii</i>	Steindachner 1915	Crandell's Tropical Darter	20
<i>Characidium duplicatum</i>	Armbruster, Lujan & Bloom 2021	Duplicate Tropical Darter	20
<i>Characidium hasemani</i>	Steindachner 1915	Haseman's Tropical Darter	20
<i>Characidium pellucidum</i>	Eigenmann 1909	Translucent Tropical Darter	20
<i>Characidium pteroides</i>	Eigenmann 1909	Dwarf Tropical Sand Darter	21
<i>Characidium steindachneri</i>	Cope 1878	Steindachner's Tropical Darter	21
<i>Characidium wangyapoik</i>	Armbruster, Lujan & Bloom 2021	Ireng River Tropical Darter, Wangyapoik	21
<i>Characidium zebra</i>	Eigenmann 1909	Zebra Tropical Darter	21
<i>Crenuchus spilurus</i>	Günther 1863	Sailfin Tetra	21
<i>Elachocharax geryi</i>	Weitzman & Kanazawa 1978	Géry's Pygmy Tropical Darter	21
<i>Elachocharax junki</i>	(Géry 1971)	Junk's Pygmy Tropical Darter	21
<i>Melanocharacidium blennioides</i>	(Eigenmann 1909)	Black Blenny Tropical Darter	21
<i>Melanocharacidium depressum</i>	Buckup 1993	Flat Black Tropical Darter	21
<i>Melanocharacidium dispilomma</i>	Buckup 1993	Two-spot Black Tropical Darter	21
<i>Melanocharacidium nigrum</i>	Buckup 1993	Black Tropical Darter	21
<i>Melanocharacidium pectorale</i>	Buckup 1993	Bigfin Black Tropical Darter	21
<i>Microcharacidium eleotrioides</i>	(Géry 1960)	Pygmy Tropical Darter	21
<i>Poecilocharax bovaliorum</i>	Eigenmann 1909	Black Morpho Tetra	22
<i>Skiotocharax meizon</i>	Presswell, Weitzman & Bergquist 2000	Pink Tetra	22
Actinopterygii [Actinopteri]: Characiformes: Ctenoluciidae			
<i>Boulengerella cuvieri</i>	(Spix & Agassiz 1829)	Bicuda, Orange-Tailed Pike Characin, Swordfish	22
<i>Boulengerella lucius</i>	(Cuvier 1816)	Bicuda, Pike Characin, Swordfish	22
Actinopterygii [Actinopteri]: Characiformes: Curimatidae			
<i>Curimata cyprinoides</i>	(Linnaeus 1766)	High-fin Curimata, Catacari, Katkari	22
<i>Curimata roseni</i>	Vari 1989	Rosen's Curimata, Catacari, Katkari	22
<i>Curimata vittata</i>	(Kner 1858)	Barred Curimata, Catacari, Katkari	22
<i>Curimatella alburnus</i>	(Müller & Troschel 1844)	Silvery Dwarf Curimata	22

<i>Curimatella immaculata</i>	(Fernández-Yépez 1948)	Spotless Dwarf Curimata	22
<i>Curimatopsis cryptica</i>	Vari 1982	Redtail Dwarf Curimata	22
<i>Cyphocharax festivus</i>	Vari 1992	Dwarf Curimata	22
<i>Cyphocharax helleri</i>	(Steindachner 1910)	Dwarf Curimata	22
<i>Cyphocharax leucostictus</i>	(Eigenmann & Eigenmann 1889)	Whitespot Dwarf Curimata	23
<i>Cyphocharax microcephalus</i>	(Eigenmann & Eigenmann 1889)	Dwarf Curimata	23
<i>Cyphocharax spilurus</i>	(Günther 1864)	Spottail Dwarf Curimata	23
<i>Psectrogaster ciliata</i>	(Müller & Troschel 1844)	Sawbelly Curimata	23
<i>Psectrogaster essequibensis</i>	(Günther 1864)	Essequibo Sawbelly Curimata	23
<i>Steindachnerina argentea</i>	(Gill 1858)	Silvery Dwarf Curimata	23
<i>Steindachnerina guentheri</i>	(Eigenmann & Eigenmann 1889)	Guenther's Dwarf Curimata	23
<i>Steindachnerina planiventris</i>	Vari & Williams Vari 1989	Flatbelly Dwarf Curimata	23
Actinopterygii [Actinopteri]: Characiformes: Cynodontidae			
<i>Cynodon gibbus</i>	(Spix & Agassiz 1829)	Snub-nosed Payara, Dogtooth Characin	23
<i>Cynodon septenarius</i>	Toledo-Piza 2000	Dogtooth Characin	23
<i>Hydrolycus armatus</i>	(Jardine 1841)	Biara, Payara	23
<i>Hydrolycus scomberoides</i>	(Cuvier 1819)	Biara, Payara	23
<i>Hydrolycus tatauaia</i>	Toledo-Piza, Menezes & Santos 1999	Red-tailed Biara, Red-tailed Payara	23
<i>Rhaphiodon vulpinus</i>	Spix & Agassiz 1829	Biara	24
Actinopterygii [Actinopteri]: Characiformes: Erythrinidae			
<i>Erythrinus erythrinus</i>	(Bloch & Schneider 1801)	Yarrow	24
<i>Hoplerethrinus unitaeniatus</i>	(Spix & Agassiz 1829)	Yarrow, Black stripe Yarrow	24
<i>Hoplias aimara</i>	(Valenciennes 1847)	Aimara	24
<i>Hoplias curupira</i>	Oyakawa & Mattox 2009	Aimara	24
<i>Hoplias malabaricus</i>	(Bloch 1794)	Huri, Trahira, Houri	24
Actinopterygii [Actinopteri]: Characiformes: Gasteropelecidae			
<i>Carnegiella strigata</i>	(Günther 1864)	Marbled Hatchetfish, Hatchetfish	24
<i>Gasteropelecus sternicla</i>	(Linnaeus 1758)	River Hatchetfish, Hatchetfish	24
Actinopterygii [Actinopteri]: Characiformes: Hemiodontidae			
<i>Argonectes longiceps</i>	(Kner 1858)	False Hemiodus, Eartheater Hemiodus	24
<i>Bivibranchia bimaculata</i>	Vari 1985	Twospot Bivibranchia	24
<i>Bivibranchia fowleri</i>	(Steindachner 1908)	Fowler's Bivibranchia	24
<i>Hemiodus argenteus</i>	Pellegrin 1909	Silver Hemiodus	24
<i>Hemiodus gracilis</i>	group Günther 1864	Graceful Hemiodus	24
<i>Hemiodus microlepis</i>	Kner 1858	Small-scale Hemiodus	25
<i>Hemiodus quadrimaculatus</i>	Pellegrin 1909	Barred Hemiodus, Four-barred Hemiodus	25
<i>Hemiodus semitaeniatus</i>	Kner 1858	Halfline Hemiodus	25
<i>Hemiodus thayeria</i>	Böhlke 1955	Thayer's Hemiodus	25
<i>Hemiodus unimaculatus</i>	(Bloch 1794)	One-spot Hemiodus	25
<i>Hemiodus vorderwinkleri</i>	(Géry 1964)	Vorderwinkler's Hemiodus, Three-bar Hemiodus	25
Actinopterygii [Actinopteri]: Characiformes: Iguanodectidae			
<i>Bryconops affinis</i>	(Günther 1864)	Orangefin Bryconops, Sardinia, Sardine	25
<i>Bryconops alburnoides</i>	Kner 1858	Sardinia, Sardine	25
<i>Bryconops caudomaculatus</i>	(Günther 1864)	Tailspot Tetra, Sardinia, Sardine	25
<i>Bryconops colaroja</i>	Chernoff & Machado-Allison 1999	Redtail Bryconops, Sardinia, Sardine	25
<i>Bryconops giacopinii</i>	Fernández-Yépez 1950	Giacopini's Bryconops, Sardinia, Sardine	25
<i>Bryconops magoi</i>	Chernoff & Machado-Allison 2005	Mago's Bryconops, Sardinia, Sardine	25
<i>Bryconops melanurus</i>	(Bloch 1794)	Blacktail Bryconops, Sardinia, Sardine	25
<i>Iguanodectes spilurus</i>	(Günther 1864)	Spot-tail Sardine	25
<i>Piabucus dentatus</i>	(Koelreuter 1763)	Toothy Piabucu	25
Actinopterygii [Actinopteri]: Characiformes: Lebiasinidae			
<i>Copella arnoldi</i>	(Regan 1912)	Arnold's Splash tetra	26
<i>Copella eigenmanni</i>	Regan 1912	Eigenmann's Splash Tetra	26

<i>Copella nattereri</i>	(Steindachner 1876)	Spotted Splash Tetra	26
<i>Derhamia hoffmannorum</i>	Géry & Zarske 2002	Hoffmans' Derhamia	26
<i>Lebiasina ardilai</i>	Netto-Ferreira, López-Fernández, Taphorn & Liverpool 2013	Ardila's Lebiasina	26
<i>Lebiasina unitaeniata</i>	(Günther 1864)	One-spot Lebiasina	26
<i>Lebiasina cf. uruyensis</i>	Fernández-Yépez 1967	Uruyen Lebiasina	26
<i>Nannostomus beckfordi</i>	Günther 1872	Golden Pencilfish	26
<i>Nannostomus digrammus</i>	Fowler 1913	Two-stripe Pencilfish	26
<i>Nannostomus eques</i>	Steindachner 1876	Diptail Pencilfish, Brown Pencilfish	26
<i>Nannostomus erythrus</i>	(Eigenmann 1909)	Red-finned Banded Pencilfish	26
<i>Nannostomus espeii</i>	(Meinken 1956)	Barred Pencilfish	26
<i>Nannostomus harrisoni</i>	(Eigenmann 1909)	Blackstripe Pencilfish	26
<i>Nannostomus marginatus</i>	Eigenmann 1909	Dwarf Pencilfish	27
<i>Nannostomus minimus</i>	Eigenmann 1909	Least Pencilfish	27
<i>Nannostomus trifasciatus</i>	Steindachner 1876	Three-stripe Pencilfish	27
<i>Nannostomus unifasciatus</i>	Steindachner 1876	Online pencilfish	27
<i>Pyrrhulina filamentosa</i>	Valenciennes 1847	Threadfin Pyrrhulina	27
<i>Pyrrhulina stoli</i>	Boeseman 1953	Stol's Pyrrhulina	27
Actinopterygii [Actinopteri]: Characiformes: Parodontidae			
<i>Apareiodon agmatos</i>	Taphorn, López-Fernández & Bernard 2008	Broken-line Scrapetooth	27
<i>Parodon bifasciatus</i>	Eigenmann 1912	Two-line Scrapetooth	27
<i>Parodon guyanensis</i>	Géry 1960	Guyana Scrapetooth	27
Actinopterygii [Actinopteri]: Characiformes: Prochilodontidae			
<i>Prochilodus nigricans</i>	Spix & Agassiz 1829	Black Prochilodus, Black Flannelmouth, Yakutu	27
<i>Prochilodus rubrotaeniatus</i>	Jardine 1841	Red-banded Prochilodus, Red-banded Flannelmouth, Yakutu	27
<i>Semaprochilodus insignis</i>	(Jardine 1841)	Flagtail	27
Actinopterygii [Actinopteri]: Characiformes: Serrasalminae			
<i>Catopryon absconditus</i>	Mateussi, Melo & Oliveira 2020	Wimple piranha, Pirai	27
<i>Catopryon mento</i>	(Cuvier 1819)	Wimple piranha, Pirai	28
* <i>Colossoma macropomum</i>	(Cuvier 1816)	Tambaqui, Tambaque	28
<i>Metynnis altidorsalis</i>	Ahl 1923	Silver Dollar	28
<i>Metynnis hypsauchen</i>	(Müller & Troschel 1844)	Deep-body Silver Dollar, Silver Dollar	28
<i>Metynnis lippincottianus</i>	(Cope 1870)	Lippincott's Silver dollar, Silver Dollar	28
<i>Metynnis luna</i>	(Cope 1878)	Fullmoon Silver Dollar, Silver Dollar	28
<i>Metynnis cf. orinocensis</i>	(Steindachner 1908)	Orinoco Silver Dollar, Silver Dollar	28
<i>Mylesinus schomburgkii</i>	Valenciennes 1850	Banded Silver Dollar, Schomburgk's Silver Dollar, Catabac	28
<i>Myleus pacu</i>	(Jardine 1841)	Pacu, Packu, Red Pacu, Freshwater Pacu	28
<i>Myleus planquettei</i>	(Jégu, Keith & Le Bail 2003)	Catabac	28
<i>Myleus setiger</i>	Müller & Troschel 1844	Catabac	28
<i>Myloplus asterias</i>	(Müller & Troschel 1844)	Catabac, Starry Catabac	28
<i>Myloplus rubripinnis</i>	(Müller & Troschel 1844)	Catabac, Redhook, Pacu	29
<i>Myloplus torquatus</i>	(Kner 1858)	Catabac, Collared Catabac	29
<i>Mylossoma aureum</i>	(Spix & Agassiz 1829)	Golden Morrocut, Silver Morrocut	29
<i>Paramyloplus taphorni</i>	(Andrade, López-Fernández & Liverpool 2019)	Taphorn's Catabac	29
<i>Piaractus orinoquensis</i>	Escobar L., Ota, Machado-Allison, Andrade-López, Farias & Hrbek 2019	Morrocut	29
<i>Prosimyleus rhomboidalis</i>	(Cuvier 1818)	Catabac	29
<i>Pygocentrus nattereri</i>	Kner 1858	Red-bellied Piranha, Red Pirai, Cashew Pirai	29
<i>Pygopristis denticulata</i>	(Cuvier 1819)	Lobed-Toothed Piranha, Pirai	29
<i>Serrasalmus altispinis</i>	Merckx, Jégu & Mendes 2000	Pirai, Piranha	29
<i>Serrasalmus aureus</i>	(Spix & Agassiz 1829)	Pirai, Piranha	29

<i>Serrasalmus calmoni</i>	(Steindachner 1908)	Pirai, Piranha	29
<i>Serrasalmus eigenmanni</i>	Norman 1929	Pirai, Piranha	30
<i>Serrasalmus rhombeus</i>	(Linnaeus 1766)	Redeye piranha, Black piranha, Black Pirai	30
<i>Serrasalmus stagnatilis</i>	Jardine 1841	Pirai	30
<i>Serrasalmus striolatus</i>	(Steindachner 1908)	Banded FALSE Piranha, Catabac	30
Actinopterygii [Actinopteri]: Characiformes: Triportheidae			
<i>Agoniatos halecinus</i>	Müller & Troschel 1845	Dogtooth Characin	30
<i>Triportheus angulatus</i>	(Spix & Agassiz 1829)	Silver Bait, Basket Fish	30
<i>Triportheus auritus</i>	(Valenciennes 1850)	Silver Bait, Basket Fish	30
<i>Triportheus brachipomus</i>	(Valenciennes 1850)	Silver Bait, Basket Fish	30
<i>Triportheus rotundatus</i>	(Jardine 1841)	Silver Bait, Basket Fish	30
<i>Triportheus venezuelensis</i>	Malabarba 2004	Silver Bait, Basket Fish	30
Actinopterygii [Actinopteri]: Gymnotiformes: Apterodontidae			
<i>Adontosternarchus</i> sp.		Snubnosed Knifefish	38
<i>Apterodontus albifrons</i>	(Linnaeus 1766)	Black Ghost Knifefish	38
<i>"Apterodontus" bonapartii</i>	(Castelnau 1855)	Ghost Knifefish	38
<i>Apterodontus leptorhynchus</i>	(Ellis 1912)	Brown Ghost Knifefish	38
<i>Megadontognathus cuyuniense</i>	Mago-Leccia 1994	Ghost Knifefish	38
<i>Platyrosteronarchus crypticus</i>	De Santana & Vari 2009	Ghost Knifefish	38
<i>Platyrosteronarchus macrostoma</i>	(Günther 1870)	Ghost Knifefish	38
<i>Porotergus gymnotus</i>	Ellis 1912	Ghost knifefish	38
<i>Sternarchorhynchus freemani</i>	de Santana & Vari 2010	Ghost knifefish	38
Actinopterygii [Actinopteri]: Gymnotiformes: Gymnotidae			
<i>Electrophorus electricus</i>	(Linnaeus 1766)	Electric Eel	38
<i>Gymnotus (Lamontianus) anguillaris</i>	Hoedeman 1962	Logologo, Banded/Naked-Back Knifefish	38
<i>Gymnotus (Gymnotus) carapo</i>	Linnaeus 1758	Logologo, Banded/Naked-Back Knifefish	38
<i>Gymnotus (Tigrinus) coropinae</i>	Hoedeman 1962	Logologo, Banded/Naked-Back Knifefish	38
Actinopterygii [Actinopteri]: Gymnotiformes: Hypopomidae			
<i>Akawaio penak</i>	Maldonado-Ocampo, López-Fernández, Taphorn, Bernard, Crampton & Lovejoy 2014	Logologo, Knifefish	39
<i>Brachyhypopomus batesi</i>	Crampton, de Santana, Waddell & Lovejoy 2017	Logologo, Bluntnose Knifefish	39
<i>Brachyhypopomus beebei</i>	(Schultz 1944)	Logologo, Bluntnose Knifefish	39
<i>Brachyhypopomus brevirostris</i>	(Steindachner 1868)	Logologo, Bluntnose Knifefish	39
<i>Brachyhypopomus bullocki</i>	Sullivan & Hopkins 2009	Logologo, Bluntnose Knifefish	39
<i>Brachyhypopomus hendersoni</i>	Crampton, de Santana, Waddell & Lovejoy 2017	Logologo, Bluntnose Knifefish	39
<i>Brachyhypopomus regani</i>	Crampton, de Santana, Waddell & Lovejoy 2017	Logologo, Bluntnose Knifefish	39
<i>Brachyhypopomus sullivanii</i>	Crampton, de Santana, Waddell & Lovejoy 2018	Logologo, Bluntnose Knifefish	39
<i>Brachyhypopomus walteri</i>	Sullivan, Zuanon & Cox Fernandes 2013	Logologo, Bluntnose Knifefish	39
<i>Hypopomus artedi</i>	(Kaup 1856)	Logologo, Bluntnose Knifefish	39
<i>Microsternarchus bilineatus</i>	Fernández-Yépez 1968	Logologo, Bluntnose Knifefish	40
Actinopterygii [Actinopteri]: Gymnotiformes: Rhamphichthyidae			
<i>Gymnorhamphichthys bogardusae</i>	Lundberg 2005	Sand Knifefish, Thermometer Knifefish	40
<i>Gymnorhamphichthys hypostomus</i>	Ellis 1912	Sand Knifefish, Thermometer Knifefish	40
<i>Gymnorhamphichthys rondoni</i>	(Miranda Ribeiro 1920)	Sand Knifefish, Thermometer Knifefish	40
<i>Gymnorhamphichthys rosamariae</i>	Schwassmann 1989	Sand Knifefish, Thermometer Knifefish	40
<i>Hypopygus lepturus</i>	Hoedeman 1962	Banded Knifefish, Thintail Knifefish	40
<i>Rhamphichthys apurensis</i>	(Fernández-Yépez 1968)	Band Fish	40
<i>Rhamphichthys marmoratus</i>	Castelnau 1855	Band Fish	40
<i>Rhamphichthys rostratus</i>	(Linnaeus 1766)	Band Fish	40
<i>Steatogenys elegans</i>	(Steindachner 1880)	Barred Knifefish, Centipede Knifefish	40
<i>Steatogenys ocellatus</i>	Crampton, Thorsen & Albert 2004	Ocellated Knifefish	40

Actinopterygii [Actinopteri]: Gymnotiformes: Sternopygidae

<i>Distocyclus conirostris</i>	(Eigenmann & Allen 1942)	Rattail Knifefish	41
<i>Eigenmannia limbata</i>	(Schreiner & Miranda Ribeiro 1903)	Glass Knifefish	41
<i>Eigenmannia macrops</i>	(Boulenger 1897)	Glass Knifefish	41
<i>Eigenmannia nigra</i>	Mago-Leccia 1994	Glass Knifefish	41
<i>Japigny kirschbaum</i>	Meunier, Jégu & Keith 2011	Glass Knifefish	41
<i>Rhabdolichops eastwardi</i>	Lundberg & Mago-Leccia 1986	Glass Knifefish	41
<i>Rhabdolichops electrogrammus</i>	Lundberg & Mago-Leccia 1986	Glass Knifefish	41
<i>Rhabdolichops troscheli</i>	(Kaup 1856)	Glass Knifefish	41
<i>Sternopygus macrurus</i>	(Bloch & Schneider 1801)	Longtail Knifefish	41

Actinopterygii [Actinopteri]: Siluriformes: Aspredinidae

<i>Amaralia hypsiura</i>	(Kner 1855)	Two-Rayed Banjo Catfish	42
<i>Aspredinichthys filamentosus</i>	(Valenciennes 1840)	Seven-barbed Banjo Catfish	42
<i>Aspredinichthys tibicen</i>	(Valenciennes 1840)	Ten-Barbed Banjo Catfish	42
<i>Aspredo aspredo</i>	(Linnaeus 1758)	Banjo Catfish	42
<i>Bunocephalus amaurus</i>	Eigenmann 1912	Banjo Catfish	42
<i>Bunocephalus chamaizelus</i>	Eigenmann 1912	Banjo Catfish	42
<i>Bunocephalus verrucosus</i>	(Walbaum 1792)	Banjo Catfish	42
<i>Ernstichthys</i> sp.		Little Banjo Catfish, Bumblebee Banjo Catfish	42
<i>Hoplomyzon</i> sp.		Little Banjo Catfish, Bumblebee Banjo Catfish	42
<i>Platystacus cotylephorus</i>	Bloch 1794	Banded Banjo Catfish	42
<i>Pterobunocephalus</i> sp.		Flathead Banjo Catfish	42
<i>Xyliphius</i> sp.		Deepwater Banjo Catfish	42

Actinopterygii [Actinopteri]: Siluriformes: Auchenipteridae

<i>Ageneiosus dentatus</i>	Kner 1858	Slopehead Catfish, Dawalla	42
<i>Ageneiosus inermis</i>	(Linnaeus 1766)	Slopehead Catfish, Dawalla	43
<i>Ageneiosus ucayalensis</i>	Castelnau 1855	Slopehead Catfish, Dawalla	43
<i>Auchenipterichthys coracoideus</i>	(Eigenmann & Allen 1942)	Neckfin Catfish, Midnight Catfish	43
<i>Auchenipterus ambyiacus</i>	Fowler 1915	Ambyiacu Neckfin Catfish	43
<i>Auchenipterus brevior</i>	Eigenmann 1912	Short-barbel Neckfin Catfish	43
<i>Auchenipterus demerarae</i>	Eigenmann 1912	Demerara Neckfin Catfish	43
<i>Auchenipterus dentatus</i>	Valenciennes 1840	Toothy Neckfin Catfish	43
<i>Auchenipterus nuchalis</i>	(Spix & Agassiz 1829)	Neckfin Catfish	43
<i>Centromochlus carolae</i>	(Vari & Ferraris 2013)	Carol's Spinefin Catfish	43
<i>Centromochlus heckelii</i>	(De Filippo 1853)	Heckel's Spinefin Catfish	43
<i>Gelanoglanis</i> sp.		Smiling Woodcat	43
<i>Gephyromochlus leopardus</i>	(Hoedeman 1961)	Spotted Spinefin Catfish	43
<i>Pseudauchenipterus nodosus</i>	(Bloch 1794)	Cocosoda Catfish	43
<i>Tatia aulopygia</i>	(Kner 1858)	Tatia	43
<i>Tatia intermedia</i>	(Steindachner 1877)	Tatia	43
<i>Tatia meesi</i>	Sarmiento-Soares & Martins-Pinheiro 2008	Mees' Tatia	44
<i>Tatia reticulata</i>	Mees 1974	Reticulate Woodcat	44
<i>Trachelyichthys decaradiatus</i>	Mees 1974	Ten-ray Driftwood Catfish	44
<i>Trachelyopterus galeatus</i>	(Linnaeus 1766)	Wood Catfish, Brown Boot	44
<i>Trachelyopterus robustus</i>	(Günther 1864)	Boot	44
<i>Trachycorystes trachycorystes</i>	(Valenciennes 1840)	Boot, Black Boot	44
<i>Tympanopleura piperata</i>	Eigenmann 1912	Dwarf Slopehead Catfish, Dwarf Dawalla, Small Dawalla	44

Actinopterygii [Actinopteri]: Siluriformes: Callichthyidae

<i>Callichthys callichthys</i>	(Linnaeus 1758)	Hassar, Bush Hassar, Armored Catfish, Bubblenest Catfish	44
<i>Corydoras aeneus</i>	(Gill 1858)	Bronze Corydoras, Green Cory	44
<i>Corydoras bicolor</i>	Nijssen & Isbrücker 1967	Bicolor Corydoras	44
<i>Corydoras blochi</i>	Nijssen 1971	Spot-back Corydoras, Bloch's Corydoras	44
<i>Corydoras bondi</i>	Gosline 1940	Black-stripe Corydoras, Bond's Corydoras	44

<i>Corydoras breei</i>	Isbrücker & Nijssen 1992	Bree's Corydoras	44
<i>Corydoras brevirostris</i>	Fraser-Bruner 1947	Short-nose Corydoras	45
<i>Corydoras deweyeri</i>	Meinken 1957	Deweyer's Corydoras	45
<i>Corydoras griseus</i>	Holly 1940	Gray Corydoras	45
<i>Corydoras melanistius</i>	Regan 1912	Blackfin Corydoras	45
<i>Corydoras oxyrhynchus</i>	Nijssen & Isbrücker 1967	Longnosed Corydoras	45
<i>Corydoras potaroensis</i>	Myers 1927	Potaro Corydoras	45
<i>Corydoras septentrionalis</i>	Gosline 1940	Northern Corydoras	45
<i>Corydoras sipaliwini</i>	Hoedeman 1965	Sipaliwini Corydoras	45
<i>Hoplosternum littorale</i>	(Hancock 1828)	Hassar, Common Hassar	45
<i>Megalechis picta</i>	(Müller & Troschel 1849)	Hassar	45
<i>Megalechis thoracata</i>	(Valenciennes 1840)	Spotted Hoplo, Hassar	45
Actinopterygii [Actinopteri]: Siluriformes: Cetopsidae			
<i>Cetopsidium minutum</i>	(Eigenmann 1912)	Baby Whale Catfish	45
<i>Cetopsidium pemon</i>	Vari, Ferraris & de Pinna 2005	Baby Whale Catfish	46
<i>Cetopsidium roae</i>	Vari, Ferraris & de Pinna 2005	Rosemary's Baby Whale Catfish	46
<i>Cetopsidium soniae</i>	Vari & Ferraris 2009	Sonia's Baby Whale Catfish	46
<i>Cetopsis aspis</i>	Abrahão, Mol & De Pinna 2019	Whale Catfish	46
<i>Denticetopsis iwokrama</i>	Vari, Ferraris & de Pinna 2005	Baby Whale Catfish	46
<i>Denticetopsis macilenta</i>	(Eigenmann 1912)	Baby Whale Catfish	46
<i>Helogenes marmoratus</i>	Günther 1863	Blackwater Whale Catfish	46
Actinopterygii [Actinopteri]: Siluriformes: Doradidae			
<i>Acanthodoras cataphractus</i>	(Linnaeus 1758)	Spiny Catfish, Thorny Catfish	46
<i>Acanthodoras polygramma</i>	(Kner 1853)	Thorny Catfish	46
<i>Amblyodoras affinis</i>	(Kner 1855)	Thorny Catfish	46
<i>Doras carinatus</i>	(Linnaeus 1766)	Thorny Catfish, Zip Fish	46
<i>Doras micropoews</i>	(Eigenmann 1912)	Thorny Catfish, Zip Fish	46
<i>Hassar orestis</i>	(Steindachner 1875)	Thorny Catfish, Zip Fish	46
<i>Leptodoras hasemani</i>	(Steindachner 1915)	Thorny Catfish, Zip Fish	47
<i>Leptodoras linnelli</i>	Eigenmann 1912	Thorny Catfish, Zip Fish	47
<i>Megalodoras uranoscopus</i>	(Eigenmann & Eigenmann 1888)	Thorny Catfish, Zip Fish	47
<i>Nemadoras trimaculatus</i>	(Boulenger 1898)	Threespot Thorny Catfish	47
<i>Oxydoras niger</i>	(Valenciennes 1821)	Ripsaw Catfish, Zip Fish	47
<i>Physopyxis ananas</i>	Sousa & Rapp Py-Daniel 2005	Dwarf Thorny Cat	47
<i>Platyodoras costatus</i>	(Linnaeus 1758)	Raphael Catfish, Policeman	47
<i>Platyodoras hancockii</i>	(Valenciennes 1840)	Thorny Catfish	47
<i>Pterodoras</i> sp.		Thorny Catfish	47
<i>Rhinodoras armbrusteri</i>	Sabaj 2008	Armbruster's Thorny Catfish	47
<i>Rhynchodoras</i> cf. <i>woodsii</i>	Glodek 1976	Woods' Thorny Catfish	47
<i>Tenellus leporinus</i>	(Eigenmann 1912)	Thorny Catfish	47
<i>Tenellus ternetzi</i>	(Eigenmann 1925)	Ternetz's Thorny Catfish	47
<i>Trachydoras brevis</i>	(Kner 1853)	Hard-Nosed Thorny Catfish	47
<i>Trachydoras gepharti</i>	Sabaj & Arce H. 2017	Gephart's Hard-Nosed Thorny Catfish	48
<i>Trachydoras microstomus</i>	(Eigenmann 1912)	Smallmouth Hard-Nosed Thorny Catfish	48
<i>Trachydoras nattereri</i>	(Steindachner 1881)	Natterer's Hard-Nosed Thorny Catfish	48
Actinopterygii [Actinopteri]: Siluriformes: Heptapteridae			
<i>Brachyglanis frenata</i>	Eigenmann 1912	Bridled Three- Barbeled Catfish, Cassie	48
<i>Brachyglanis melas</i>	Eigenmann 1912	Three-Barbeled Catfish, Cassie	48
<i>Brachyglanis</i> sp.		Three-Barbeled Catfish, Cassie	48
<i>Brachyglanis phalacra</i>	Eigenmann 1912	Bald-Headed Three-Barbeled Catfish, Cassie	48
<i>Brachyrhamdia heteropleura</i>	(Eigenmann 1912)	Sidespot Three-Barbeled Catfish, Cassie	48
<i>Cetopsorhamdia insidiosa</i>	(Steindachner 1915)	Insidious Three-Barbeled Catfish, Cassie	48
<i>Chasmocranus brevior</i>	Eigenmann 1912	Short Three- Barbeled Catfish, Cassie	48
<i>Chasmocranus longior</i>	Eigenmann 1912	Long Three- Barbeled Catfish, Cassie	48
<i>Goeldiella eques</i>	(Müller & Troschel 1849)	Horsehead Three-Barbeled Catfish, Cassie	48
<i>Imparfinis hasemani</i>	Steindachner 1915	Haseman's Three-Barbeled Catfish, Cassie	48
<i>Leptorhamdia essequibensis</i>	(Eigenmann 1912)	Essequibo Three-Barbeled Catfish, Cassie	48

<i>Mastiglanis asopos</i>	Bockmann 1994	Asopos's Three- Barbeled Catfish, Cassie	48
<i>Myoglanis</i> sp.		Three-Barbeled Catfish, Cassie	49
<i>Myoglanis potaroensis</i>	Eigenmann 1912	Speartail Three-Barbeled Catfish, Cassie	49
<i>Phenacorhamdia tenuis</i>	(Mees 1986)	Thin Three- Barbeled Catfish, Cassie	49
<i>Pimelodella altipinnis</i>	(Steindachner 1864)	High-Fin Three-Barbeled Catfish, Cassie	49
<i>Pimelodella cristata</i>	(Müller & Troschel 1849)	False- Crested Three-Barbeled Catfish, Cassie,	49
		Komairu (name in Wapishana)	
<i>Pimelodella leptosoma</i>	(Fowler 1914)	Slender Three- Barbeled Catfish, Cassie	49
<i>Pimelodella macturki</i>	Eigenmann 1912	McTurk's Three- Barbeled Catfish, Cassie	49
<i>Pimelodella megalops</i>	Eigenmann 1912	Big-Eyed Three-Barbeled Catfish, Cassie	49
<i>Pimelodella wesseli</i>	(Steindachner 1877)	Wessel's Three-Barbeled Catfish, Cassie	49
<i>Rhamdia foina</i>	(Müller & Troschel 1849)	Polecat Three- Barbeled Catfish, Cassie	49
<i>Rhamdia laukidi</i>	(Müller & Troschel 1849)	Cassie	49
<i>Rhamdia muelleri</i>	(Günther 1864)	Mueller's Three- Barbeled Catfish, Cassie	49
<i>Rhamdia schomburgkii</i>	Bleeker 1858	Schomburgk's Three-Barbeled Catfish, Cassie	49
<i>Rhamdia</i> sp.		Three-Barbeled Catfish, Cassie	50
Actinopterygii [Actinopteri]: Siluriformes: Loricariidae			
<i>Ancistrus kellerae</i>	de Souza, Taphorn, and Armbruster 2019	Keller's Bristlenose, Bushymouth Catfish, Bearded Catfish	50
<i>Ancistrus leucostictus</i>	(Günther 1864)	White-Spotted Bristlenose Pleco, Bushymouth Catfish, Bearded Catfish	50
<i>Ancistrus lithurgicus</i>	Eigenmann 1912	Stone Bristlenose Pleco, Bushymouth Catfish, Bristlenose, Bearded Catfish	50
<i>Ancistrus nudiceps</i>	(Müller & Troschel 1849)	Bushymouth Catfish, Bristlenose, Bearded Catfish	50
<i>Ancistrus saudades</i>	de Souza, Taphorn, and Armbruster 2019	Bushymouth Catfish, Bristlenose, Bearded Catfish	50
<i>Aphanotorulus emarginatus</i>	(Valenciennes 1840)	Red Fin Thresher Pleco, Smoke Hassar	50
<i>Corymbophanes ameliae</i>	Lujan, Armbruster, Werneke, Teixeira, and Lovejoy 2019	Amelia's Shield Pleco, Smoke Hassar	50
<i>Corymbophanes andersoni</i>	Eigenmann 1912	Anderson's Shield Pleco, Smoke Hassar	50
<i>Corymbophanes kaiei</i>	Armbruster & Sabaj 2000	Kaie's Shield Pleco, Smoke Hassar	50
<i>Cteniloricaria platystoma</i>	(Günther 1868)	Flat-Mouthed Whiptail Pleco, Whiptail Hassar	50
<i>Farlowella amazonum</i>	(Günther 1864)	Amazonian Stick Catfish, Whiptail Hassar	50
<i>Farlowella nattereri</i>	Steindachner 1910	Natterer's Stick Catfish, Whiptail Hassar	51
<i>Farlowella oxyrryncha</i>	(Kner 1853)	Sharp-Snout Stick Catfish, Whiptail Hassar	51
<i>Farlowella reticulata</i>	Boeseman 1971	Reticulate Stick Catfish, Whiptail Hassar	51
<i>Farlowella rugosa</i>	Boeseman 1971	Rough Stick Catfish, Whiptail Hassar	51
<i>Guyanancistrus brevispinis</i>	(Heitmans, Nijssen & Isbrücker 1983)	Short-Spine Guiana Pleco	51
<i>Harttia</i> sp. 'Ireng'		Ireng Whiptail Pleco, Whiptail Hassar	51
<i>Hemiodontichthys acipenserinus</i>	(Kner 1853)	Knobnose Whiptail Catfish, Whiptail Hassar	51
<i>Hypancistrus margaritatus</i>	Tan & Armbruster 2016	Pearlspotted Angel Pleco, Smoke Hassar	51
<i>Hypoptopoma guianense</i>	Boeseman 1974	Guiana Flathead Dwarf Pleco	51
<i>Hypostomus hemiurus</i>	(Eigenmann 1912)	Half-Tailed Pleco, Smoke Hassar	51
<i>Hypostomus macushi</i>	Armbruster & de Souza 2005	Macushi Pleco, Smoke Hassar	51
<i>Hypostomus plecostomus</i>	(Linnaeus 1758)	Common Pleco, Suckermouth Catfish, Smoke Hassar	51
<i>Hypostomus taphorni</i>	(Lilyestrom 1984)	Taphorn's Pleco, Smoke Hassar	51
<i>Hypostomus watwata</i>	Hancock 1828	Watwata Pleco, Smoke Hassar	51
<i>Lasiancistrus schomburgkii</i>	(Günther 1864)	Schomburgk's Whisker-Cheeked Pleco, Smoke Hassar	52
<i>Limatulichthys griseus</i>	(Eigenmann 1909)	Gray Whiptail Pleco, Whiptail Hassar	52
<i>Lithogenes villosus</i>	Eigenmann 1909	Stoneborn Shield Pleco	52
<i>Lithoxus lithoides</i>	Eigenmann 1912	Granite Flatrock Pleco, Smoke Hassar	52
<i>Loricaria cataphracta</i>	Linnaeus 1758	Armored Whiptail Pleco, Whiptail Hassar	52

<i>Loricaria cf. simillima</i>	Regan 1904	False Armored Whiptail Pleco, Whiptail Hassar	52
<i>Loricaria cuffyi</i>	Londoño-Burbano, Urbano-Bonilla & Thomas 2020	Cuffy's Whiptail Pleco, Whiptail Hassar	52
<i>Loricariichthys brunneus</i>	(Hancock 1828)	Smooth- Lipped Whiptail Pleco, Whiptail Hassar	52
<i>Loricariichthys microdon</i>	(Eigenmann 1909)	Small- Toothed Whiptail Pleco, Whiptail Hassar	52
<i>Nannoxyropsis ephippia</i>	(Aquino & Sabaj 2016)	Saddle- Backed Dwarf Pleco	52
<i>Neblinichthys brevibracchium</i>	Taphorn, Armbruster, López-Fernández & Bernard 2010	Short-Finned Punk Pleco, Smoke Hassar	52
<i>Neblinichthys echinasus</i>	Taphorn, Armbruster, López-Fernández & Bernard 2010	Prickly-Snout Punk Pleco, Smoke Hassar	52
<i>Panaqolus claustellifer</i>	Tan, de Souza & Armbruster 2016	Bloodred Tiger Pleco, Smoke Hassar	52
<i>Paralithoxus bovallii</i>	(Regan 1906)	Bovalius' Flatrock Pleco, Smoke Hassar	52
<i>Rhinotocinclus britskii</i>	(Boeseman 1974)	Britski's Dwarf Pleco	52
<i>Rhinotocinclus collinsae</i>	(Schmidt & Ferraris 1985)	Collins's Dwarf Pleco	53
<i>Rhinotocinclus hardmani</i>	(Lehmann, Lujan & Reis 2022)	Hardman's Dwarf Pleco	53
<i>Paulasquama callis</i>	Armbruster & Taphorn 2011	Cobblestone Pleco, Smoke Hassar	53
<i>Peckoltia braueri</i>	(Eigenmann 1912)	Brauer's Pleco, Wormline Pleco, Smoke Hassar	53
<i>Peckoltia cavatica</i>	Armbruster & Werneke 2005	Dusky Wormline Pleco, Smoke Hassar	53
<i>Peckoltia sabaji</i>	Armbruster 2003	Sabaj's Pleco, Para Pleco, Smoke Hassar	53
<i>Pseudacanthicus leopardus</i>	(Fowler 1914)	Leopard Cactus Pleco, Smoke Hassar	53
<i>Pseudacanthicus serratus</i>	(Valenciennes 1840)	Mustang Cactus Pleco, Smoke Hassar	53
<i>Pseudancistrus barbatus</i>	(Valenciennes 1840)	Bearded Pleco, Wreath Pleco, Smoke Hassar	53
<i>Pseudancistrus guentheri</i>	(Regan 1904)	Guenther's Pleco, Smoke Hassar	53
<i>Pseudancistrus megacephalus</i>	(Günther 1868)	Bighead Pleco, Smoke Hassar	53
<i>Pseudancistrus nigrescens</i>	Eigenmann 1912	Headspotted Stream Pleco, Smoke Hassar	53
<i>Pseudoloricaria laeviuscula</i>	(Valenciennes 1840)	Smoothbodied Whiptail Pleco, Whiptail Hassar	53
<i>Pterygoplichthys pardalis</i>	(Castelnau 1855)	Suckermouth Catfish, Sailfin Catfish, Smoke Hassar	53
<i>Rhadinoloricaria macromystax</i>	(Günther 1869)	Mustachioed Whiptail Pleco, Whiptail Hassar	54
<i>Rineloricaria fallax</i>	(Steindachner 1915)	Headspot Whiptail Pleco, Whiptail Hassar	54
<i>Rineloricaria lanceolata</i>	(Günther 1868)	Racing-Striped Whiptail Pleco, Whiptail Hassar	54
<i>Rineloricaria platyura</i>	(Müller & Troschel 1849)	Flat- Tailed Whiptail Pleco, Whiptail Hassar	54
<i>Rineloricaria stewarti</i>	(Eigenmann 1909)	Stewart's Whiptail Pleco, Whiptail Hassar	54
<i>Spatuloricaria</i> sp.		Whiptail Pleco, Whiptail Hassar	54
<i>Sturisoma monopelte</i>	Fowler 1914	Shielded Whiptail Pleco, Whiptail Hassar	54
<i>Yaluwak primus</i>	Lujan, Armbruster, and Werneke 2019	Yaluwak, Smoke Hassar	54
Actinopterygii [Actinopteri]: Siluriformes: Pimelodidae			
<i>Brachyplatystoma filamentosum</i>	(Lichtenstein 1819)	Lau-Lau Catfish	54
<i>Brachyplatystoma rousseauxii</i>	(Castelnau 1855)	Lau- Lau Catfish	54
<i>Brachyplatystoma vaillantii</i>	(Valenciennes 1840)	Lau- Lau Catfish	54
<i>Calophysus macropterus</i>	(Lichtenstein 1819)	Vulture Catfish	54
<i>Hemisorubim platyrhynchos</i>	(Valenciennes 1840)	Porthole Shovelnose Catfish, Shovelhead Catfish, Large Shovelhead Catfish	54
<i>Hypophthalmus marginatus</i>	Valenciennes 1840	Highwaterman Catfish, Highwater Catfish	54
<i>Hypophthalmus oremaculatus</i>	Nani & Fuster de Plaza 1947	Highwaterman Catfish, Highwater Catfish	54
<i>Leiarius longibarbis</i>	(Castelnau 1855)	Marbled Pim, Marbled Sailfin Catfish, Sailfin Pim	55
<i>Leiarius pictus</i>	(Müller & Troschel 1849)	Painted Catfish, Sailfin Pim, Saddle Catfish	55
<i>Megalonema amaxanthum</i>	Lundberg & Dahdul 2008	Cassie	55
<i>Megalonema platycephalum</i>	Eigenmann 1912	Cassie	55

<i>Phractocephalus hemiliopterus</i>	(Bloch & Schneider 1801)	Redtail Catfish	55
<i>Pimelodus albofasciatus</i>	Mees 1974	Whitestripe Cassie	55
<i>Pimelodus blochii</i>	Valenciennes 1840	Bloch's Catfish, Cassie	55
<i>Pimelodus ornatus</i>	Kner 1858	Ornate Pim	55
<i>Pinirampus pinirampu</i>	(Spix & Agassiz 1829)	Flat- Whiskered Catfish	55
<i>Pseudoplatystoma fasciatum</i>	(Linnaeus 1766)	Barred Sorubim, Tiger Catfish, Culet	55
<i>Pseudoplatystoma punctifer</i>	(Castelnau 1855)	Tiger Catfish, Culet	55
<i>Pseudoplatystoma tigrinum</i>	(Valenciennes 1840)	Tiger Catfish, Culet	55
<i>Sorubim elongatus</i>	Littmann, Burr, Schmidt & Isern 2001	Slender Shovelnose Catfish, Shovelhead Catfish	55
<i>Sorubim lima</i>	(Bloch & Schneider 1801)	Shovelhead Catfish	55
<i>Zungaro zungaro</i>	(Humboldt 1821)	Yellow Catfish, Jau	56
Actinopterygii [Actinopteri]: Siluriformes: Pseudopimelodidae			
<i>Batrochoglanis villosus</i>	(Eigenmann 1912)	Toad catfish	56
<i>Lophiosilurus albomarginatus</i>	(Eigenmann 1912)	Toad Catfish, Monkfish Catfish	56
<i>Microglanis poecilus</i>	Eigenmann 1912	Dwarf Marbled Catfish, Bumblebee Catfish	56
<i>Microglanis secundus</i>	Mees 1974	Dwarf Marbled Catfish, Bumblebee Catfish	56
<i>Pseudopimelodus bufonius</i>	(Valenciennes 1840)	Toad Catfish	56
Actinopterygii [Actinopteri]: Siluriformes: Trichomycteridae			
<i>Haemomaster venezuelae</i>	Myers 1927	Stripe-Tailed Skin-Feeding Candiru	56
<i>Henonemus punctatus</i>	(Boulenger 1887)	Spot-Bodied Skin-Feeding Candiru	56
<i>Henonemus taxistigma</i>	(Fowler 1914)	Spot-Sided Skin- Feeding Candiru	56
<i>Ituglanis gracilior</i>	(Eigenmann 1912)	Gracile Pencil Catfish	56
<i>Ochmacanthus flabelliferus</i>	Eigenmann 1912	Fan-Tailed Skin-Feeding Candiru	56
<i>Ochmacanthus</i> sp.		Tadpole Skin-Feeding Candiru	56
<i>Paracanthopoma parva</i>	Giltay 1935	Pygmy Blood- Feeding Candiru	57
<i>Paravandellia alleyni</i>	Henschel, Bernt, Baskin, Schmidt & Lujan 2021	Allen's Blood-Feeding Candiru	57
<i>Potamoglanis wapixana</i>	(Henschel 2016)	Wapishana Pygmy Pencil Catfish	57
<i>Pseudostegophilus</i> sp.		Skin-Feeding Candiru	57
<i>Pygidianops</i> cf. <i>eigenmanni</i>	Myers 1944	Eigenmann's Sand-Dwelling Pencil Catfish	57
<i>Sarcoglanis</i> cf. <i>simplex</i>	Myers & Weitzman 1966	Simple-Finned Sand-Dwelling Pencil Catfish	57
<i>Schultzichthys bondi</i>	(Myers 1942)	Bond's Skin-Feeding Candiru	57
<i>Trichomycterus conradi</i>	(Eigenmann 1912)	Conrad's Pencil Catfish	57
<i>Trichomycterus guianensis</i>	(Eigenmann 1909)	Guiana Highlands Pencil Catfish	57
<i>Trichomycterus</i> sp. 'cf. <i>guianensis</i> '		False Guiana Highlands Pencil Catfish	57
<i>Trichomycterus</i> sp. 'Ireng Spotted'		Ireng Spotted Pencil Catfish	57
<i>Trichomycterus</i> sp. 'Mazaruni Gray'		Mazaruni Gray Pencil Catfish	57
<i>Trichomycterus</i> sp. 'Potaro Elongate'		Potaro Elongate Pencil Catfish	57
<i>Typhlobelus</i> sp.		Sand-Dwelling Pencil Catfish	57
<i>Vandellia beccarii</i>	di Caporiacco 1935	Beccari's Blood- Feeding Candiru	58
<i>Vandellia sanguinea</i>	Eigenmann 1917	Common Blood- Feeding Candiru	58
Actinopterygii [Actinopteri]: Syngnathiformes: Syngnathidae			
<i>Microphis lineatus</i>	(Kaup 1856)	Opossum Pipefish	58
<i>Pseudopallus mindii</i>	(Meek & Hildebrand 1923)	Freshwater Pipefish	58
<i>Syngnathus scovelli</i>	(Evermann & Kendall 1896)	Gulf Pipefish	58
Actinopterygii [Actinopteri]: Gobiiformes: Eleotridae			
<i>Dormitator gymnocephalus</i>	Eigenmann 1912	Essequibo Sleeper	37
<i>Dormitator maculatus</i>	(Bloch 1792)	Fat Sleeper	37
<i>Eleotris amblyopsis</i>	(Cope 1871)	Large-scaled Spinycheek Sleeper	37
<i>Eleotris pisonis</i>	(Gmelin 1789)	Sleeper	37
<i>Microphilypnus ternetzi</i>	Myers 1927	Dwarf River Goby	37
Actinopterygii [Actinopteri]: Gobiiformes: Gobiidae			
<i>Awaous flavus</i>	(Valenciennes 1837)	Candy Cane Goby	37
<i>Gobioides broussonnetii</i>	Lacépède 1800		37
<i>Gobioides grahamae</i>	Palmer & Wheeler 1955		37

Actinopterygii [Actinopteri]: Synbranchiformes: Synbranchidae		
<i>Synbranchus marmoratus</i>	Bloch 1795	Marbled Swamp Eel, Common Eel, Gutter eel, Trench Eel 58
Actinopterygii [Actinopteri]: Carangiformes: Achiridae		
<i>Achirus achirus</i>	(Linnaeus 1758)	Drab Sole 9
<i>Apionichthys dumerili</i>	Kaup 1858	Longtail Sole 10
<i>Apionichthys finis</i>	Eigenmann 1912	Freshwater Sole 10
<i>Hypoclinemus mentalis</i>	(Günther 1862)	Freshwater Sole 10
Actinopterygii [Actinopteri]: Carangiformes: Paralichthyidae		
<i>Citharichthys spilopterus</i>	(Günther 1862)	Bay Whiff 10
Actinopterygii [Actinopteri]: Cichliformes: Cichlidae		
<i>Acarichthys heckelii</i>	(Müller & Troschel 1849)	Threadfin Acara 30
<i>Acaronia nassa</i>	(Heckel 1840)	Bigeye Cichlid, Patwa 30
<i>Aequidens potaroensis</i>	Eigenmann 1912	Krobia, Patwa 30
<i>Aequidens tetramerus</i>	(Heckel 1840)	Saddle Cichlid, Patwa 31
<i>Apistogramma gossei</i>	Kullander 1982	Gosse's Dwarf Cichlid 31
<i>Apistogramma ortmanni</i>	(Eigenmann 1912)	Ortmann's Dwarf Cichlid 31
<i>Apistogramma rupununi</i>	Fowler 1914	Two-spot Apistogramma 31
<i>Apistogramma steindachneri</i>	(Regan 1908)	Steindachner's Dwarf Cichlid 31
<i>Apistogramma wapisana</i>	Römer, Hahn & Conrad 2006	Wapishana Dwarf Cichlid 31
<i>Biotodoma cupido</i>	(Heckel 1840)	Green-streaked Eartheater 31
* <i>Caquetaia kraussii</i>	(Steindachner 1878)	Basketmouth Cichlid 31
<i>Caquetaia spectabilis</i>	(Steindachner 1875)	Spectacular Basketmouth Cichlid 31
<i>Chaetobranchius flavescens</i>	Heckel 1840	Giant Basketmouth Cichlid 31
<i>Cichla cataractae</i>	Sabaj, López-Fernández, Willis, Hemraj, Taphorn & Winemiller 2020	Falls Lukanani 31
<i>Cichla ocellaris</i>	Bloch & Schneider 1801	Peacock Cichlid, Lukanani, Peacock Bass 31
<i>Cichla temensis</i>	Humboldt 1821	Lukanani, Peacock Bass 32
<i>Cichlasoma amazonarum</i>	Kullander 1983	Black Patwa, Patwa 32
<i>Cichlasoma bimaculatum</i>	(Linnaeus 1758)	Black Patwa, Black Acara, Patwa, Common Patwa 32
<i>Cleithracara maronii</i>	(Steindachner 1881)	Keyhole cichlid 32
<i>Crenicara punctulata</i>	(Günther 1863)	Checkerboard Cichlid 32
<i>Crenicichla alta</i>	Eigenmann 1912	Millet Sunfish, Sunfish, Common Sunfish 32
<i>Crenicichla johanna</i>	Heckel 1840	Dwarf Sunfish, Sunfish 32
<i>Crenicichla lugubris</i>	Heckel 1840	Sunfish 32
<i>Crenicichla reticulata</i>	(Heckel 1840)	Sunfish 32
<i>Crenicichla saxatilis</i>	(Linnaeus 1758)	Ringtail Pike Cichlid, Sunfish 32
<i>Crenicichla strigata</i>	Günther 1862	Spotted Sunfish, Sunfish 32
<i>Crenicichla wallacii</i>	Regan 1905	Dwarf Sunfish, Sunfish 33
<i>Geophagus cf. brachybranchus</i>	Kullander & Nijssen 1989	Eartheater, Sandshifter, Sandshifter Patwa 33
<i>Geophagus crocatus</i>	Hauser & López-Fernández 2013	Red-striped Eartheater, Sandshifter, Sandshifter Patwa 33
<i>Guianacara cuyunii</i>	López-Fernández, Taphorn & Kullander 2006	Patwa 33
<i>Guianacara dacrya</i>	Arbour & López-Fernández 2011	Patwa 33
<i>Heros notatus</i>	(Jardine 1843)	Severum, Disk Patwa 33
<i>Ivanacara bimaculata</i>	(Eigenmann 1912)	Patwa 33
<i>Krobia guianensis</i>	(Regan 1905)	Patwa 33
<i>Krobia petitella</i>	Steele, Liverpool & López-Fernandez 2013	Patwa 33
<i>Mazarunia charadrica</i>	López-Fernández, Taphorn & Liverpool 2012	Patwa, Red Patwa 33
<i>Mazarunia mazarunii</i>	Kullander 1990	Patwa 33
<i>Mazarunia pala</i>	López-Fernández, Taphorn & Liverpool 2012	Gold Nugget Patwa, Purple Patwa 33

<i>Mesonauta guyanae</i>	Schindler 1998	Flag Cichlid, Patwa	33
<i>Nannacara anomala</i>	Regan 1905	Goldeneye Cichlid	34
* <i>Oreochromis</i> and <i>Sarotherodon</i> spp. and hybrids		Tilapia	34
<i>Pterophyllum leopoldi</i>	Gosse 1963	Freshwater Angelfish	34
<i>Pterophyllum scalare</i>	(Schultze 1823)	Freshwater Angelfish	34
<i>Satanoperca jurupari</i>	(Heckel 1840)	Eartheater, Sandshifter, Sandshifter Patwa, Mouth Brooding Eartheater	34
<i>Satanoperca leucosticta</i>	(Müller & Troschel 1849)	Whitespot Eartheater, Sandshifter, Sandshifter Patwa	34
Actinopterygii [Actinopteri]: Cichliformes: Polycentridae			
<i>Polycentrus schomburgkii</i>	Müller & Troschel 1849	Guyana Leaf-fish	34
Actinopterygii [Actinopteri]: Cyprinodontiformes: Poeciliidae			
<i>Poecilia (Micropoecilia) bifurca</i>	(Eigenmann 1909)	Guppy, Kaka-belly	35
<i>Poecilia (Micropoecilia) parae</i>	Eigenmann 1894	Guppy, Kaka-belly	35
<i>Poecilia (Micropoecilia) picta</i>	Regan 1913	Swamp Guppy, Guppy, Kaka-belly	35
<i>Poecilia (Acanthophaecelus) reticulata</i>	Peters 1859	Guppy, Kaka-belly	36
<i>Poecilia (Poecilia) vivipara</i>	Bloch & Schneider 1801	Guppy, Kaka-belly	36
<i>Tomeurus gracilis</i>	Eigenmann 1909	Knifetail Livebearer, Longbody Livebearer	36
Actinopterygii [Actinopteri]: Cyprinodontiformes: Rivulidae			
<i>Anablepsoides holmiae</i>	(Eigenmann 1909)	Holmia Killifish	36
<i>Anablepsoides immaculatus</i>	(Thomerson, Nico & Taphorn 1991)	Spotted Killifish, Mountain Killifish	36
<i>Anablepsoides lanceolatus</i>	(Eigenmann 1909)	Lancetail Killifish	36
<i>Anablepsoides mazaruni</i>	(Myers 1924)	Mazaruni Killifish	36
<i>Anablepsoides stagnatus</i>	(Eigenmann 1909)	Lowland Killifish	36
<i>Anablepsoides waimacui</i>	(Eigenmann 1909)	Waimacui Killifish	36
<i>Austrofundulus rupununi</i>	Hrbek, Taphorn & Thomerson 2005	Rupununi Austro	36
<i>Laimosemion agila</i>	(Hoedeman 1954)	Agila Redthroat Killifish	36
<i>Laimosemion breviceps</i>	(Eigenmann 1909)	Shorthead Redthroat Killifish	36
<i>Laimosemion frenatum</i>	(Eigenmann 1912)	Bridled Redthroat Killifish	36
<i>Laimosemion mabura</i>	Valdesalici & García Gil 2015	Mabura Redthroat Killifish	37
<i>Laimosemion mahdiaense</i>	Suijker & Collier 2006	Mahdia Redthroat Killifish	37
<i>Laimosemion paryagi</i>	Vermeulen Suijker & Collier 2012	Paryag's Redthroat Killifish	37
<i>Laimosemion torrenticola</i>	(Vermeulen & Isbrücker 2000)	Torrent Redthroat Killifish	37
<i>Moema cf. nudifrontata</i>	Costa 2003	Rupununi Moema	37
Actinopterygii [Actinopteri]: Beloniformes: Belonidae			
<i>Potamorhaphis guianensis</i>	(Jardine 1843)	Freshwater Needlefish, Needlefish	9
<i>Pseudotylorus microps</i>	(Günther 1866)	Freshwater Needlefish, Needlefish	9
Actinopterygii [Actinopteri]: Beloniformes: Hemiramphidae			
<i>Hyporhamphus brederi</i>	(Fernández-Yépez 1948)	Freshwater Halfbeak	9
Actinopterygii [Actinopteri]: Mugiliformes: Mugilidae			
<i>Dajaus monticola</i>	(Bancroft 1834)	Mountain mullet	41
Actinopterygii [Actinopteri]: Acanthuriformes: Sciaenidae			
<i>Pachypops fourcroi</i>	(Lacepede 1802)	Freshwater Drum	9
<i>Pachypops trifilis</i>	(Müller & Troschel 1849)	Croaker, Freshwater Drum	9
<i>Petilipinnis grunniens</i>	(Jardine & Schomburgk 1843)	Croaker, Freshwater Drum	9
<i>Plagioscion auratus</i>	(Castelnau 1855)	Black Curbinata, Black Croaker	9
<i>Plagioscion squamosissimus</i>	(Heckel 1840)	South American Silver Croaker	9
Actinopterygii [Actinopteri]: Tetraodontiformes: Tetraodontidae			
<i>Colomesus asellus</i>	(Müller & Troschel 1849)	Freshwater Pufferfish	58
<i>Colomesus psittacus</i>	(Bloch & Schneider 1801)	Banded Puffer	58

Appendix II.

Primarily freshwater fishes found in the Orinoco River Delta in Venezuela (Lasso et al., 2009; 2011) that may occur in coastal rivers of northwest Guyana such as the Barima and Waini (i.e., species not listed in main text and in Appendix I).

Class: Order: Family	Genus species	Author(s) Date
Chondrichthyes [Elasmobranchii]: Myliobatiformes: Potamotrygonidae		
	<i>Potamotrygon schroederi</i>	Fernández-Yépez 1958
Actinopterygii [Actinopteri]: Characiformes: Anostomidae		
	<i>Laemolyta fernandesi</i>	Myers 1950
	<i>Laemolyta orinocensis</i>	(Steindachner 1879)
	<i>Schizodon scotorhabdotus</i>	Sidlauskas, Garavello & Jellen 2007
Actinopterygii [Actinopteri]: Characiformes: Characidae		
	<i>Charax apurensis</i>	Lucena 1987
	<i>Charax notulatus</i>	Lucena 1987
	<i>Creagrutus bolivari</i>	Schultz 1944
	<i>Creagrutus ephippiatus</i>	Vari & Harold 2001
	<i>Hemibrycon metae</i>	Myers 1930
	<i>Hemigrammus marginatus</i>	Ellis 1911
	<i>Hemigrammus newboldi</i>	(Fernández-Yépez 1949)
	<i>Odontostilbe pulchra</i>	(Gill 1858)
	<i>Paragoniates alburnus</i>	Steindachner 1876
	<i>Roeboides dientonito</i>	Schultz 1944
	<i>Roeboides myersi</i>	Gill 1870
	<i>Xenagoniates bondi</i>	Myers 1942
Actinopterygii [Actinopteri]: Characiformes: Ctenoluciidae		
	<i>Boulengerella maculata</i>	(Valenciennes 1850)
	<i>Boulengerella xyrekes</i>	Vari 1995
Actinopterygii [Actinopteri]: Characiformes: Curimatidae		
	<i>Curimata cerasina</i>	Vari 1984
	<i>Curimata incompta</i>	Vari 1984
	<i>Curimatella dorsalis</i>	(Eigenmann & Eigenmann 1889)
	<i>Curimatopsis macrolepis</i>	(Steindachner 1876)
	<i>Cyphocharax oenas</i>	Vari 1992
	<i>Potamorhina altamazonica</i>	(Cope 1878)
	<i>Steindachnerina bimaculata</i>	(Steindachner 1876)
Actinopterygii [Actinopteri]: Characiformes: Gasteropelecidae		
	<i>Carnegiella marthae</i>	Myers 1927
	<i>Thoracocharax stellatus</i>	(Kner 1858)
Actinopterygii [Actinopteri]: Characiformes: Hemiodontidae		
	<i>Anodus orinocensis</i>	(Steindachner 1887)
	<i>Hemiodus immaculatus</i>	Kner 1858
Actinopterygii [Actinopteri]: Characiformes: Lebiasinidae		
	<i>Pyrrhulina brevis</i>	Steindachner 1876
	<i>Pyrrhulina lugubris</i>	Eigenmann 1922
Actinopterygii [Actinopteri]: Characiformes: Prochilodontidae		
	<i>Prochilodus mariae</i>	Eigenmann 1922
	<i>Semaprochilodus kneri</i>	(Pellegrin 1909)

- Semaprochilodus laticeps* (Steindachner 1879)
- Actinopterygii [Actinopteri]: Characiformes: Serrasalminae
- Mylossoma albiscopum* (Cope 1872)
- Pygocentrus cariba* (Humboldt 1821)
- Serrasalmus altuvei* Ramírez 1965
- Serrasalmus elongatus* Kner 1858
- Serrasalmus irritans* Peters 1877
- Serrasalmus medinae* Ramírez 1965
- Actinopterygii [Actinopteri]: Characiformes: Triportheidae
- Triportheus orinocensis* Malabarba 2004
- Actinopterygii [Actinopteri]: Gymnotiformes: Apterontidae
- Adontosternarchus devenanzii* Mago-Leccia, Lundberg & Baskin 1985
- Adontosternarchus sachi* (Peters 1877)
- Apterontus apurensis* Fernández-Yépez 1968
- Compsaraia compsus* (Mago-Leccia 1994)
- Sternarchella orthos* Mago-Leccia 1994
- Sternarchella sima* Starks 1913
- Sternarchella terminalis* (Eigenmann & Allen 1942)
- Sternarchogiton nattereri* (Steindachner 1868)
- Sternarchogiton porcinum* Eigenmann & Allen 1942
- Sternarchorhamphus muelleri* (Steindachner 1881)
- Sternarchorhynchus curvirostris* (Boulenger 1887)
- Sternarchorhynchus roseni* Mago-Leccia 1994
- Actinopterygii [Actinopteri]: Gymnotiformes: Hypopomidae
- Hypopygus neblinae* Mago-Leccia 1994
- Actinopterygii [Actinopteri]: Gymnotiformes: Sternopygidae
- Rhabdolichops zareti* Lundberg & Mago-Leccia 1986
- Actinopterygii [Actinopteri]: Siluriformes: Auchenipteridae
- Entomocorus gameroi* Mago-Leccia 1984
- Tatia galaxias* Mees 1974
- Actinopterygii [Actinopteri]: Siluriformes: Cetopsidae
- Cetopsis coecutiens* (Lichtenstein 1819)
- Actinopterygii [Actinopteri]: Siluriformes: Doradidae
- Agamyxis albomaculatus* (Peters 1877)
- Megalodoras guayoensis* Fernández-Yépez 1968
- Pterodoras rivasi* Fernández-Yépez 1950
- Actinopterygii [Actinopteri]: Siluriformes: Loricariidae
- Ancistrus triradiatus* Eigenmann 1918
- Aphanotorulus ammophilus* Armbruster & Page 1996
- Farlowella vittata* Myers 1942
- Hypoptopoma machadoi* Aquino & Schaefer 2010
- Hypostomus plecostomoides* (Eigenmann 1922)
- Lamontichthys llanero* Taphorn & Lilyestrom 1984
- Lasiancistrus guacharote* (Valenciennes 1840)
- Pterygoplichthys gibbiceps* (Kner 1854)
- Pterygoplichthys multiradiatus* (Hancock 1828)
- Rineloricaria formosa* Isbrücker & Nijssen 1979
- Sturisoma tenuirostre* (Steindachner 1910)
- Actinopterygii [Actinopteri]: Siluriformes: Pimelodidae
- Brachyplatystoma juruense* (Boulenger 1898)
- Exallodontus aguanai* Lundberg, Mago-Leccia & Nass 1991
- Pimelodina flavipinnis* Steindachner 1876

<i>Pimelodus altissimus</i>	Eigenmann & Pearson 1942
<i>Platynematichthys notatus</i>	(Jardine & Schomburgk 1841)
<i>Platysilurus mucosus</i>	(Vaillant 1880)
<i>Propimelodus</i> sp.	
<i>Pseudoplatystoma metaense</i>	Buitrago-Suárez & Burr 2007
<i>Pseudoplatystoma orinocoense</i>	Buitrago-Suárez & Burr 2007
<i>Sorubimichthys planiceps</i>	(Spix & Agassiz 1829)
Actinopterygii [Actinopteri]: Siluriformes: Trichomycteridae	
<i>Ochmacanthus alternus</i>	Myers 1927
<i>Pseudostegophilus nemurus</i>	(Günther 1869)
Actinopterygii [Actinopteri]: Cichliformes: Cichlidae	
<i>Apistogramma guttata</i>	Antonio C., Kullander & Lasso A. 1989
<i>Apistogramma hoignei</i>	Meinken 1965
<i>Apistogramma hongloi</i>	Kullander 1979
<i>Astronotus mikoljii</i>	Pérez Lozano, Lasso-Alcalá, Bittencourt, Taphorn, Perez & Farias 2022
<i>Biotoecus dicentrarchus</i>	Kullander 1989
<i>Bujurquina mariaae</i>	(Eigenmann 1922)
<i>Cichla orinocensis</i>	Humboldt 1821
<i>Cichlasoma orinocense</i>	Kullander 1983
<i>Cichlasoma taenia</i>	(Bennett 1831)
<i>Crenicichla frenata</i>	Gill 1858
<i>Crenicichla geayi</i>	Pellegrin 1903
<i>Geophagus abalios</i>	López-Fernández & Taphorn 2004
<i>Heros severus</i>	Heckel 1840
<i>Hoplichthys psittacus</i>	(Heckel 1840)
<i>Mesonauta egregius</i>	Kullander & Silfvergrip 1991
<i>Mesonauta insignis</i>	(Heckel 1840)
<i>Mikrogeophagus ramirezi</i>	(Myers & Harry 1948)
<i>Nannacara quadrispinnae</i>	Staeck & Schindler 2004
<i>Satanoperca mapiritensis</i>	(Fernández-Yépez 1950)
Actinopterygii [Actinopteri]: Cyprinodontiformes: Rivulidae	
<i>Rachovia fransvermeuleni</i>	Berkenkamp 2020
<i>Rachovia maculipinnis</i>	(Radda 1964)
<i>Rivulus deltaphilus</i>	Seegers 1983
<i>Rivulus hartii</i>	(Boulenger 1890)

Appendix III.

Primarily freshwater fishes found in the Courantyne River Basin in Suriname that probably occur in Guyanese tributaries to that basin (i.e., species not listed in main text and in Appendix I).

Class: Order: Family	Author(s) Date
<i>Genus species</i>	
Chondrichthyes [Elasmobranchii]: Myliobatiformes: Potamotrygonidae	
<i>Potamotrygon boesemani</i>	Rosa, Carvalho & Almeida Wanderley 2008
Actinopterygii [Actinopteri]: Characiformes: Anostomidae	
<i>Leporinus apollo</i>	Sidlauskas, Mol & Vari 2011
<i>Leporinus nijsseni</i>	Garavello 1990
Actinopterygii [Actinopteri]: Characiformes: Characidae	
<i>Hemigrammus lunatus</i>	Durbin in Eigenmann 1918
<i>Hyphessobrycon georgettae</i>	Géry 1961

- Hyphessobrycon roseus* (Géry 1960)
Jupiaba keithi (Géry, Planquette & Le Bail 1996)
Jupiaba meunieri (Géry, Planquette & Le Bail 1996)
Jupiaba ocellata (Géry, Planquette & Le Bail 1996)
Moenkhausia hemigrammoides Géry 1965
Moenkhausia moisae Géry, Planquette & Le Bail 1995
Moenkhausia surinamensis Géry 1965
Phenacogaster wayana Le Bail & Lucena 2010
Roeboexodon guyanensis (Géry 1959)
- Actinopterygii [Actinopteri]: Characiformes: Hemiodontidae
Hemiodus ocellatus (Vari 1982)
- Actinopterygii [Actinopteri]: Characiformes: Serrasalminae
Paramyloplus ternetzi (Norman 1929)
- Actinopterygii [Actinopteri]: Siluriformes: Callichthyidae
Corydoras baderi Geisler 1969
Corydoras boesemani Nijssen & Isbrücker 1967
Corydoras filamentosus Nijssen & Isbrücker 1983
Corydoras guianensis Nijssen 1970
Corydoras sanchesii Nijssen & Isbrücker 1967
Corydoras surinamensis Nijssen 1970
- Actinopterygii [Actinopteri]: Siluriformes: Heptapteridae
Imparfinis stictionotus (Fowler 1940)
Imparfinis pipersi (Hoedeman 1961)
Pimelodella geryi Hoedeman 1961
- Actinopterygii [Actinopteri]: Siluriformes: Loricariidae
Hypostomus corantijni Boeseman 1969
Hypostomus crassicauda Boeseman 1968
Hypostomus macrophthalmus Boeseman 1968
Hypostomus pseudohemius Boeseman 1968
Loricaria nickeriensis Isbrücker 1979
Loricariichthys maculatus (Bloch 1794)
Metaloricaria nijsseni (Boeseman 1976)
Otocinclus mariae Fowler 1940
Paralithoxus stocki (Nijssen & Isbrücker 1990)
Paralithoxus surinamensis (Boeseman 1982)
Pseudancistrus corantijniensis De Chambrier & Montoya-Burgos 2008
- Actinopterygii [Actinopteri]: Siluriformes: Pseudopimelodidae
Lophosilurus nigricauda (Mees 1974)
- Actinopterygii [Actinopteri]: Siluriformes: Trichomycteridae
Potamoglanis hasemani (Eigenmann 1914)
- Actinopterygii [Actinopteri]: Cichliformes: Cichlidae
Crenicichla nickeriensis Ploeg 1987
Crenicichla sipaliwini Ploeg 1987
Guianacara owroewefi Kullander & Nijssen 1989
Guianacara sphenozona Kullander & Nijssen 1989
Krobia itanyi (Puyo 1943)
- Actinopterygii [Actinopteri]: Acanthuriformes: Sciaenidae
Pachyurus schomburgkii Günther 1860

