

## **Annotated checklist of the primarily freshwater fishes of Guyana**

Authors: Taphorn, Donald C., Liverpool, Elford, Lujan, Nathan K., DoNascimento, Carlos, Hemraj, Devya D., et al.

Source: Proceedings of the Academy of Natural Sciences of Philadelphia, 168(1) : 1-96

Published By: The Academy of Natural Sciences of Philadelphia

URL: <https://doi.org/10.1635/053.168.0101>

---

BioOne Complete ([complete.BioOne.org](https://complete.BioOne.org)) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at [www.bioone.org/terms-of-use](https://www.bioone.org/terms-of-use).

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

---

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

## Annotated checklist of the primarily freshwater fishes of Guyana

DONALD C. TAPHORN

1822 N. Charles St. Belleville, IL, 62221, USA  
Email: taphorn@gmail.com

ELFORD LIVERPOOL

Department of Biology, Faculty of Natural Sciences, University of Guyana, Turkeyen, East Coast Demerara, 413741, Georgetown, Guyana. Email: elford.liverpool@uog.edu.gy

NATHAN K. LUJAN

Department of Natural History, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario, M5S 2C6, Canada and Department of Ecology and Evolutionary Biology, University of Toronto, 25 Willcocks Street, Toronto, Ontario, M5S 3B2, Canada  
Email: nlujan@rom.on.ca

CARLOS DoNASCIMIENTO

Universidad de Antioquia, Grupo de Ictiología, Instituto de Biología, Calle 67 No. 53-108, Medellín, Antioquia, Colombia  
Email: carlos.donascimento1@udea.edu.co

DEVYA D. HEMRAJ

Centre for the Study of Biological Diversity, Department of Biology, Faculty of Natural Sciences, University of Guyana, Turkeyen Campus, Greater Georgetown, Guyana Email: devya.hemraj@uog.edu.gy

WILLIAM G. R. CRAMPTON

Department of Biology, University of Central Florida, Orlando, FL, 32816-2368, U.S.A. Email: crampton@ucf.edu

MATTHEW A. KOLMANN

Department of Biology, University of Louisville, Louisville, KY, 40292, USA Email: matthew.kolmann@louisville.edu

JOÃO PEDRO FONTENELLE

University of Toronto, Institute of Forestry and Conservation, 33 Willcocks St. Office 4004, M5S 3E8, Toronto, ON, Canada  
Email: jp.fontenelle@utoronto.ca

LESLEY S. DE SOUZA

Field Museum of Natural History, 1400 S. Lake Shore, Chicago, IL, 60605 USA Email: ldesouza@fieldmuseum.org

DAVID C. WERNEKE

Department of Biological Sciences, 101 Rouse, Auburn University, Auburn, AL, 36849, USA Email: wernedc@auburn.edu

MARK RAM

Department of Biology, Faculty of Natural Sciences, University of Guyana, Turkeyen Campus, Greater Georgetown, Guyana  
Email: mark.ram@uog.edu.gy

---

Submitted: 14 March 2022, Accepted 19 Sept 2022.

©2022 by the Academy of Natural Sciences of Drexel University

## DEVIN D. BLOOM

*Department of Biological Sciences and Institute of the Environment & Sustainability, Western Michigan University, Kalamazoo, MI, 49008-5410, USA Email: devin.bloom@wmich.edu*

## BRIAN L. SIDLAUSKAS

*Oregon State University, Department of Fisheries, Wildlife and Conservation Sciences, 104 Nash Hall, Corvallis, Oregon, 97331-3803 USA and Department of Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, District of Columbia 20560 Email: brian.sidlauskas@oregonstate.edu*

## ERLING HOLM

*Department of Natural History, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario, M5S 2C6, Canada Email: erlingh@rom.on.ca*

## JOHN G. LUNDBERG

*The Academy of Natural Sciences of Drexel University, 1900 Benjamin Franklin Parkway, Philadelphia, PA, 19103, USA Email: johnlundb@gmail.com*

## MARK H. SABAJ

*The Academy of Natural Sciences of Drexel University, 1900 Benjamin Franklin Parkway, Philadelphia, PA, 19103, USA Email: mhs58@drexel.edu*

## CALVIN BERNARD

*Department of Biology, Faculty of Natural Sciences, University of Guyana, Turkeyen Campus, Greater Georgetown, Guyana Email: calvin.bernard@uog.edu.gy*

## JONATHAN W. ARMBRUSTER

*Department of Biological Sciences, 101 Rouse, Auburn University, Auburn, AL, 36849, USA Email: armbrjw@auburn.edu*

## HERNÁN LÓPEZ-FERNÁNDEZ

*Department of Ecology and Evolutionary Biology and Museum of Zoology, University of Michigan, 1105 North University Ave. Ann Arbor, MI, 48109, USA Email: hlopezf@umich.edu*

**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 km<sup>2</sup> 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 km<sup>2</sup>, 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 21<sup>st</sup> 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 Kuribong, 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 Uraricoera 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 Barron, 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

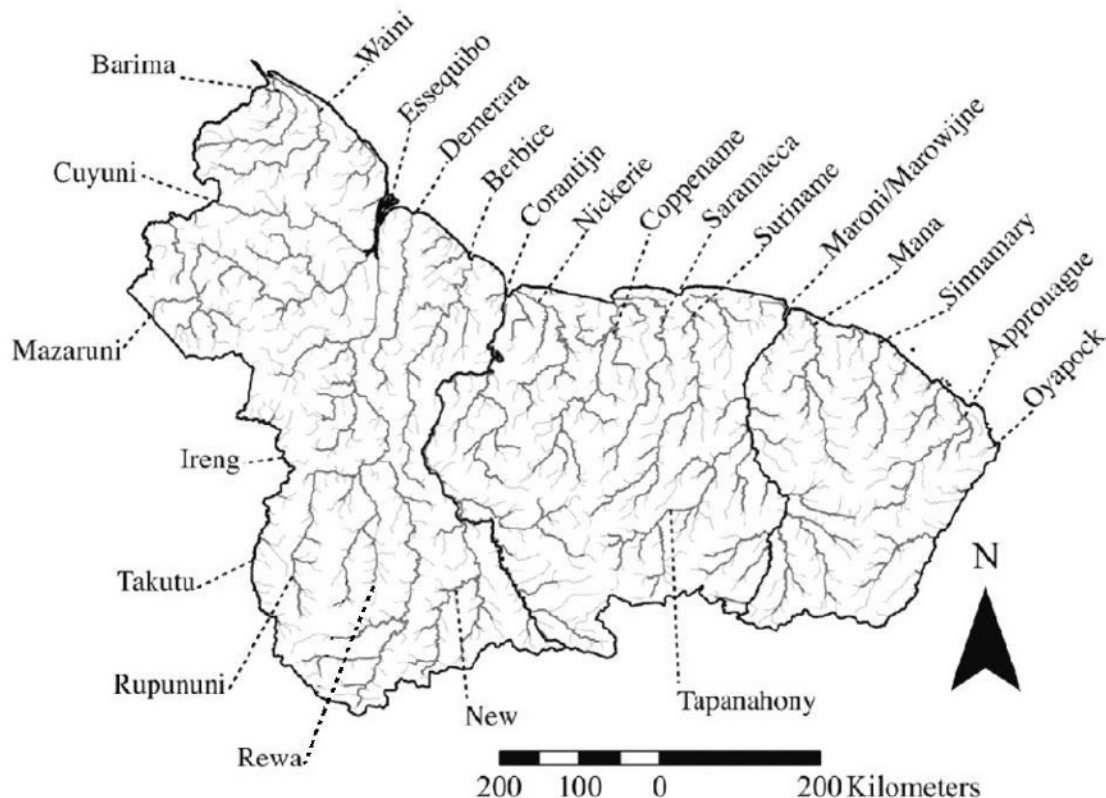


Figure 1. Major rivers of the Guianas modified from Sidlauskas and Vari (2012).

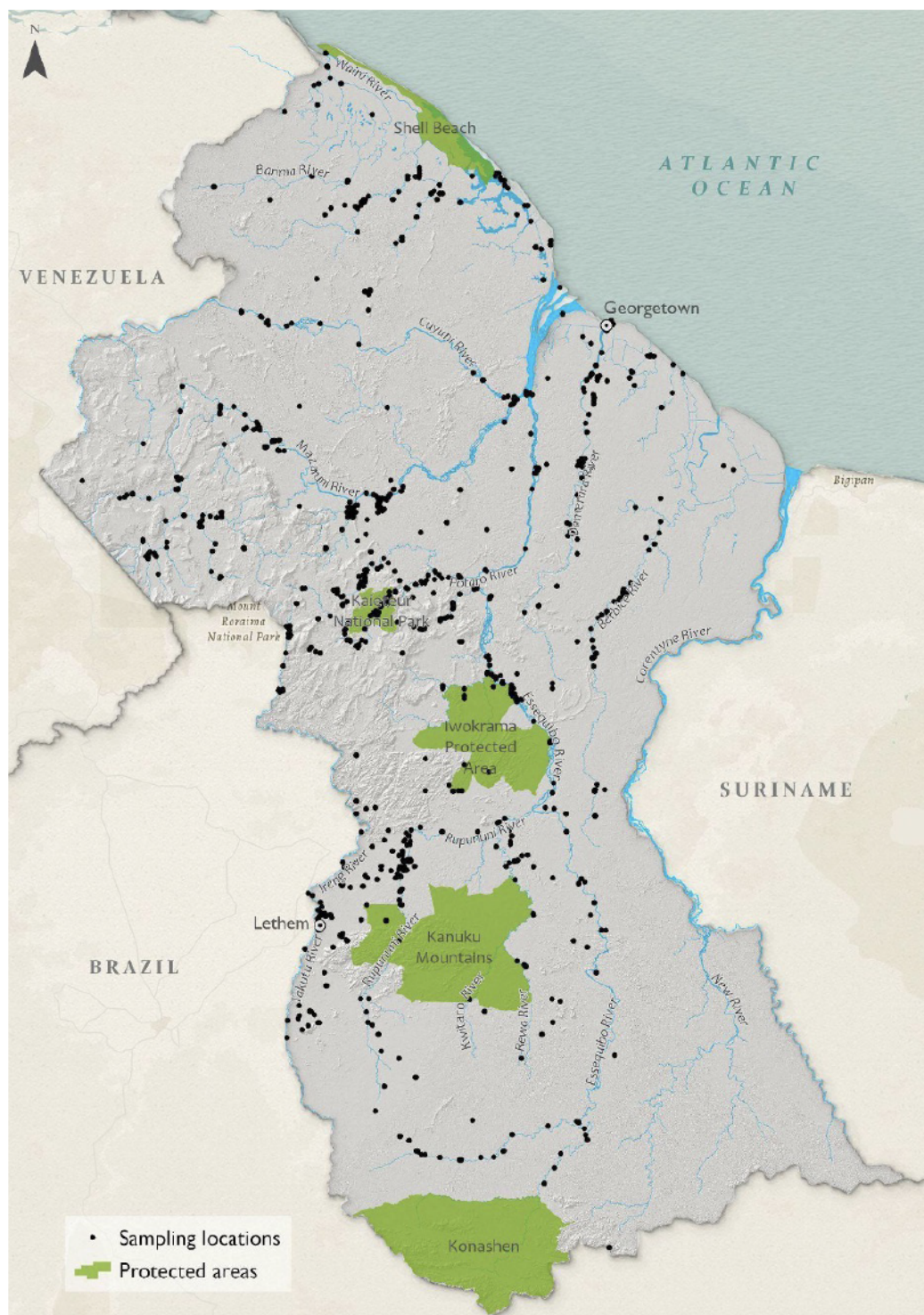


Figure 2. Fish sampling locations in Guyana based on Fishnet2 records (Courantyne locations not shown).



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](http://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, Manzanera 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 Tefé; 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* Garavella 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 (Garavella 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 chalceus, 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 avery* 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 avery* is found throughout the Orinoco and Amazon River Basins. NE.

*Aphyocharax erythrus* 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 huxwellianus* (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 Kuribong 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

—Spurtail 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 Amazonian 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 chalcus* 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, Potaro 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: Cyprinodontidae***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.

*Hoplerethrinus 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, Hour 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: Icanho, 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)  
—Orange-fin 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, Bolívar, 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. carsevevnnensis*, 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 Kuribong 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 Paruima) 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, Uatuma 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 gymnogynys* 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**

*Agoniatodes halecinus* Müller & Troschel 1845

—Dogtooth Characin  
Museum records: 19. ANSP 175392. Carnivore. Type locality: Guyana. 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 Juquã, 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. paleomeuensis* 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 &amp; 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. carseveimensis* 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—Earthater, 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 Earthater, 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. sphenozona* 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.



*Anchoiella 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.

*Anchoiella jamesi* (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.

*Anchoiella 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.

*Anchoiella 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.

*Anchoiella 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 (Acanthophaeus) 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 rupumuni* 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 agillae* (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 Guyana, 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: Apterontidae***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.

*Apterontus 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.

*"Apterontus" 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 Apterontidae (Ferraris et al., 2017). Rare. NE. First Record.

*Apterontus 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: Xeberos [Jeberos], Río Marañón 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: Río 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-Ray 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 area, 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, Bubblenest 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. polygrammus* (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 Anapiké/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 Hyanyary, 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 leporinus* (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 wessellii* (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* (Liljestrom 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 Mazara-hally 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. corantijnensis* 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: Amatuk, 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 monopolite* 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 Maraño, 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, Maraño 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: Syngnathiformes: Syngnathidae**

*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.

## ACKNOWLEDGMENTS

Systematic studies of biodiversity are time-consuming, labor-intensive tasks that are essential for understanding and conserving life on Earth. We are grateful to many people who helped facilitate this research, from indigenous communities, to porters, cooks, and guides in the field, to grant proposal and manuscript reviewers, and museum and university administrators. This work would not have been



possible without the support of several key institutional partners. First among these are Guyana's Environmental Protection Agency and Ministry of Amerindian Affairs who reviewed and approved much of the fieldwork that laid the foundation for this checklist. Also, the University of Guyana and the Centre for the Study of Biological Diversity have always been robust partners in research. Iwokrama Protected Area provided logistics support while collecting upriver on the Essequibo River. World Wildlife Foundation Guyana invited us to participate in the BAT program in various river systems of Guyana. Smithsonian Institution: Biological Diversity of the Guiana Shield Program allowed us to use of their house in Georgetown during various expeditions to Guyana, and funded the 2011 inventory of the Cuyuni River. Inter-American Development Bank and Amaila Falls Hydro Inc. helped fund and organize collecting expeditions to the Amaila and Kurubong rivers related to the proposed construction of the Amaila Hydroelectric Dam. North Rupununi District Development Board and South Rupununi District Council supported our field work in Region 9. Communities in the Rupununi, such as Yupukari, Annai, Surama, Rewa, Kwaimatta, Massara, Moco Moco, Sand Creek, Dadanawa Ranch, Aishalton, and Parabara, granted permission to camp and fish. Communities in the upper Mazaruni, such as Kamarang, Kako, Jwala and Phillipai, also granted permission to camp and fish. Kelly and Mary Kramer and their family provided many years of support and guidance during ROM and UMMZ work in the upper Mazaruni River. Collection managers Mariangeles Arce H. (ANSP), Caleb McMahan, Susan Mochel and Kevin Swagel (FMNH), Mary Burrige, Don Stacey, and Marg Zur (ROM), Douglas Nelson and Randy Singer (UMMZ), Kris Murphy, Lisa Palmer, Jeff Williams, Sandra Raredon, and Diane Pitassy (USNM) Katriina L. Ilves (CMN) for their help facilitating loans and sharing data and photos of specimens in their care. For taxonomic insights, we thank Juan Gabriel Albomoz-Garzón (*Creagrutus*), Marcelo Andrade (Serrasalminidae), Ricardo Britzke (*Apistogramma*), Uriel Buitrago Suárez and Michael Littman (Pimelodidae), Tiago Carvalho (Aspredinidae), Steven Grant (*Corydoras*), Fernando Marques (Potamotrygoninae), Armando Ortega Lara (Pseudopimelodidae), Bruno Melo (*Curimatopsis*), Mario C. C. de Pinna (Trichomycteridae), Tyson Roberts (Synbranchidae), Henrique Varella (*Crenicichla*), and Francisco Villa (Pimelodidae). For assistance with the field collection of specimens and data, we thank Carrie Allison, Karen Alofs, Sean Anderson, Whit Bronaugh, David Brooks, Michael Clementson, Tim Colston, Jabaun Correia, Aline Cotel, Avery Daggers, Kavita Dookram, Mahendra Doraisami, Andre Lytle, Diana Fernandes, Kimberly Foster, Michael Hardman, Cuddy Holder, Bankole Holder, Ashley Holland, Jonathan Hartsell, Sherica Isaacs, Aneesa Khan,

Jason Knouft, Flavio Lima, Stacy Lord, Javier Maldonado-Ocampo, Carmen Montaña, Thomas Morgan, Brice Noonan, Guillermo Ortí, Larry Page, Tiago Pessali, Michael Philander, Melissa Sooklall, Sarah Steele, Tulio Teixeira, Clydon Theirens, Michi Tobler, Ovid Williams, Kirk Winemiller, and Kristof Zyskowski. For providing fish photos, we thank Andrew Snyder, Steve Townson, Deokie Arjoon, Cynthia Watson, Chris Chin, Ashley, and Shannon Holland. Thanks to Gabo Yarleque of FMNH for assisting with the map of sampling locations of fishes in Guyana. Financial support to J. Armbruster came from National Geographic and NSF grants DEB-10107751 and DEB-0315963, to J. Armbruster and N. Lujan from the Coypu Foundation, to D. Bloom from NSF DEB-1754627, to W. Crampton from NSF grants DEB-1146374 and DEB-0614334, to J.P. Fontenelle from CNPq grant 207384/2014-2, and to H. López-Fernández from Discovery Grants awarded by the Natural Sciences and Engineering Research Council of Canada, the Royal Ontario Museum, and the University of Michigan.

#### 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. Alborno-Garzon, J. Garcia-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. Møller, 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. Röpké. 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: Apterontidae). *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 *Apterontus 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: Serrasalminae) 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/](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 essequebensis* (Pisces: 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 target tooth sawfish *Pristis pristis* in the Atlantic Ocean. *Aquatic Conservation: Marine and Freshwater Ecosystems* 24(4): 478–497.
- Fernández-Yépez, A. 1948. *Ichthyacrus 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 Caguire, 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 Mucujai, 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.
- Garavella, 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.
- Garavella, 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.
- Garavella, 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.
- Garavella 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, Haplochromidae, 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, Galaxiidae, 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 alleyni* 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: Linnologia 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 Längsbandalmmler *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: Labroidei), 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. Elbassiony, 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 *Roeboidea* grupo-*affinis* (Ostariophysi, Characiformes, Characidae). *Iheringia, Série Zoológica* (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 acestrorhynchid 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. *Cybio* 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. *Cybio* 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, *Cybio* 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 *Acestrorhynchus 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. Characínidos americanos nuevos 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. Fugé. 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. *Skiotharax 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 *Acestrotrichus* (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*, *Pyrhulina*, *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 thomycats (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 tertetzi* 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. *Cybius* 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 Südamerikas (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. *aqua, 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<br>Genus species                              | Author(s) Date             | Common Name(s)                                                   | Text page |
|--------------------------------------------------------------------|----------------------------|------------------------------------------------------------------|-----------|
| Chondrichthyes [Elasmobranchii]: Myliobatiformes: Potamotrygonidae |                            |                                                                  |           |
| <i>Paratrygon aiareba</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>Jurengraulius juruensis</i>                                     | (Boulenger 1898)           | Jurua Anchovy                                                    | 35        |
| <i>Lycengraulius batesii</i>                                       | (Günther 1868)             | Bates' Sabretooth Anchovy                                        | 35        |
| <i>Pterengraulius 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>                          | Garavento 2000            | Many-spotted Leporin, Daray                | 12 |
| <i>Petulanos plicatus</i>                               | (Eigenmann 1912)          | Small-spot Headstander                     | 12 |
| <i>Petulanos cf. spilochliron</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 avaray</i>                               | Fowler 1913               | Flametail Tetra                            | 13 |
| <i>Aphyocharax erythrus</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                 | Boesemani'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-tailfin 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 scolagaster</i>         | (Weitzman & Vari 1986)                   | Bellythorn Jupiaba Tetra  | 17 |
| <i>Knodus cf. cinarucensis</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 wanyapoik</i>                               | Armbruster, Lujan & Bloom 2021                               | Ireng River Tropical Darter, Wanyapoik         | 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)                     | Orange-fin 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                                                    | Oneline 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>Megadontosternarchus 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>Platyastacus 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>Pseudoauchenipterus 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>                                          | Sarmento-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 micropoetus</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, Komairu (name in Wapishana) | 49 |
| <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                                  | Pearlspeckled 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>Neblichthys brevibracchium</i>                       | Taphorn, Armbruster, López-Fernández & Bernard 2010 | Short-Finned Punk Pleco, Smoke Hassar                                     | 52 |
| <i>Neblichthys echinatus</i>                            | Taphorn, Armbruster, López-Fernández & Bernard 2010 | Prickly-Snout Punk Pleco, Smoke Hassar                                    | 52 |
| <i>Panaolus claustrifer</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 sp.</i>                               |                                                     | Whiptail Pleco, Whiptail Hassar                                           | 54 |
| <i>Sturisoma monpelte</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<br>2001          | Slender Shovelnose Catfish, Shovelhead<br>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<br>& 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>Pseudophallus 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 Earthater 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                                          | Earthater, Sandshifter, Sandshifter Patwa 33             |
| <i>Geophagus crocatus</i>                                     | Hauser & López-Fernández 2013                                     | Red-striped Earthater, 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 agillae</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 fourcroyi</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                                               | Author(s) Date                      |
|--------------------------------------------------------------------|-------------------------------------|
| <i>Genus species</i>                                               |                                     |
| 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 boliviari</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)                    |



|                                                             |                                     |
|-------------------------------------------------------------|-------------------------------------|
| <i>Semaprochilodus laticeps</i>                             | (Steindachner 1879)                 |
| Actinopterygii [Actinopteri]: Characiformes: Serrasalminae  |                                     |
| <i>Mylossoma albiscopum</i>                                 | (Cope 1872)                         |
| <i>Pygocentrus cariba</i>                                   | (Humboldt 1821)                     |
| <i>Serrasalmus altuvei</i>                                  | Ramírez 1965                        |
| <i>Serrasalmus elongatus</i>                                | Kner 1858                           |
| <i>Serrasalmus irritans</i>                                 | Peters 1877                         |
| <i>Serrasalmus medinae</i>                                  | Ramírez 1965                        |
| Actinopterygii [Actinopteri]: Characiformes: Triportheidae  |                                     |
| <i>Triportheus orinocensis</i>                              | Malabarba 2004                      |
| Actinopterygii [Actinopteri]: Gymnotiformes: Atherinidae    |                                     |
| <i>Adontosternarchus devenanzii</i>                         | Mago-Leccia, Lundberg & Baskin 1985 |
| <i>Adontosternarchus sachsii</i>                            | (Peters 1877)                       |
| <i>Atherinops apurensis</i>                                 | Fernández-Yépez 1968                |
| <i>Compsaraia compsus</i>                                   | (Mago-Leccia 1994)                  |
| <i>Sternarchella orthos</i>                                 | Mago-Leccia 1994                    |
| <i>Sternarchella sima</i>                                   | Starks 1913                         |
| <i>Sternarchella terminalis</i>                             | (Eigenmann & Allen 1942)            |
| <i>Sternarchogiton nattereri</i>                            | (Steindachner 1868)                 |
| <i>Sternarchogiton porcinum</i>                             | Eigenmann & Allen 1942              |
| <i>Sternarchorhamphus muelleri</i>                          | (Steindachner 1881)                 |
| <i>Sternarchorhynchus curvirostris</i>                      | (Boulenger 1887)                    |
| <i>Sternarchorhynchus roseni</i>                            | Mago-Leccia 1994                    |
| Actinopterygii [Actinopteri]: Gymnotiformes: Hypopomidae    |                                     |
| <i>Hypopygus neblinae</i>                                   | Mago-Leccia 1994                    |
| Actinopterygii [Actinopteri]: Gymnotiformes: Sternopygidae  |                                     |
| <i>Rhabdolichops zareti</i>                                 | Lundberg & Mago-Leccia 1986         |
| Actinopterygii [Actinopteri]: Siluriformes: Auchenipteridae |                                     |
| <i>Entomocorus gameroi</i>                                  | Mago-Leccia 1984                    |
| <i>Tatia galaxias</i>                                       | Mees 1974                           |
| Actinopterygii [Actinopteri]: Siluriformes: Cetopsidae      |                                     |
| <i>Cetopsis coecutiens</i>                                  | (Lichtenstein 1819)                 |
| Actinopterygii [Actinopteri]: Siluriformes: Doradidae       |                                     |
| <i>Agamyxis albomaculatus</i>                               | (Peters 1877)                       |
| <i>Megalodoras guayoensis</i>                               | Fernández-Yépez 1968                |
| <i>Pterodoras rivasi</i>                                    | Fernández-Yépez 1950                |
| Actinopterygii [Actinopteri]: Siluriformes: Loricariidae    |                                     |
| <i>Ancistrus triradiatus</i>                                | Eigenmann 1918                      |
| <i>Aphanotorulus ammophilus</i>                             | Armbruster & Page 1996              |
| <i>Farlowella vittata</i>                                   | Myers 1942                          |
| <i>Hypoptopoma machadoi</i>                                 | Aquino & Schaefer 2010              |
| <i>Hypostomus plecostomoides</i>                            | (Eigenmann 1922)                    |
| <i>Lamontichthys llanero</i>                                | Taphorn & Lilystrom 1984            |
| <i>Lasiancistrus guacharote</i>                             | (Valenciennes 1840)                 |
| <i>Pterygoplichthys gibbiceps</i>                           | (Kner 1854)                         |
| <i>Pterygoplichthys multiradiatus</i>                       | (Hancock 1828)                      |
| <i>Rineloricaria formosa</i>                                | Isbrücker & Nijssen 1979            |
| <i>Sturisoma tenuirostre</i>                                | (Steindachner 1910)                 |
| Actinopterygii [Actinopteri]: Siluriformes: Pimelodidae     |                                     |
| <i>Brachyplatystoma juruense</i>                            | (Boulenger 1898)                    |
| <i>Exallodontus aguanai</i>                                 | Lundberg, Mago-Leccia & Nass 1991   |
| <i>Pimelodina flavipinnis</i>                               | Steindachner 1876                   |

|                                                              |                                                                       |
|--------------------------------------------------------------|-----------------------------------------------------------------------|
| <i>Pimelodus altissimus</i>                                  | Eigenmann & Pearson 1942                                              |
| <i>Platynemataichthys 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 orinocoensis</i>                                   | Humboldt 1821                                                         |
| <i>Cichlasoma orinocoense</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



