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Updated 16 April 2024 🖃 COMMENTS

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Campylomormyrus christyi. From: Boulenger, G. A. 1920. Poissons recueillis au Congo Belge par l'expédition du Dr. C. Christy. Zoologie. Série I. Matériaux pour la Faune du Congo. Annales du Musee du Congo Belge (Serie 1) 2 (fasc. 4): 1–38, Pls. 23–25.

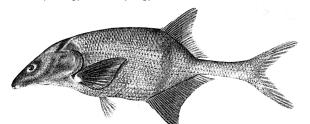
#### Subfamily MORMYRINAE Bonaparte 1831

# Boulengeromyrus

Taverne & Géry 1968

in honor of Belgian-born British ichthyologist-herpetologist George A. Boulenger (1858–1937), British Museum (Natural History), who described 70 currently valid species of mormyrids; *-myrus*, conventional termination for generic names of elephantfishes, abridgement of *Mormyrus*, type genus of family

**Boulengeromyrus knoepffleri Taverne & Géry 1968** in honor of friend and colleague Louis-Philippe Knoepffler (1926–1984), for contributions to the herpetology and ichthyology of Gabon

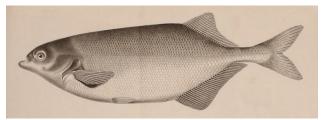


Boulengeromyrus knoepffleri, paratype, 210 mm SL. From: Taverne, L. and J. Géry. Un nouveau genre de Mormyridae (Poissons Ostéoglossomorphes): Boulengeromyrus knoepffleri gen. sp. nov. Revue de Zoologie et de Botanique Africaines 78 (1–2): 98–106.

# Brevimyrus Taverne 1971

brevis (L.), short, referring to moderately short body compared with Brienomyrus; -myrus, conventional termination for generic names of elephantfishes, abridgement of Mormyrus, type genus of family

**Brevimyrus niger** (Günther 1866) Latin for dark, described as having indistinct and irregular darkish cross bands and black head, back and fins (coloration is actually golden to silver above, silver below, with light speckles above and on the sides)



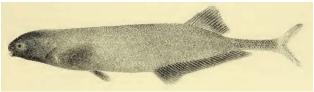
Possibly first-published image of *Brevimyrus niger* (as *Mormyrus Ihuysi*, a synonym). From: Steindachner, F. 1870. Zur Fischfauna des Senegal. Dritte Abtheilung. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe 61 (1. Abth.): 533–583, Pls. 1–8.

# Brienomyrus Taverne 1971

in honor of Belgian zoologist Paul Brien (1894–1975), professor emeritus, Université libre de Bruxelles; *-myrus*, conventional termination for generic names of elephantfishes, abridgement of *Mormyrus*, type genus of family

**Brienomyrus brachyistius (Gill 1862)** short-sailed, from *brachýs* (Gr. βραχύς), short, and *histíon* (Gr. iστίον), sail (i.e., dorsal fin), referring to its short dorsal fin

Brienomyrus longianalis (Boulenger 1901) longus (L.), long; analis (L.), pertaining to anal fin, which is 2.0–2.5 times longer than dorsal fin



Brienomyrus longianalis. Illustration by Pierre Jacques Smit. From: Boulenger, G. A. 1901. On the fishes collected by Dr. W. J. Ansorge in the Niger Delta. Proceedings of the Zoological Society of London 1 (1) (art. 1): 4–10, PIs. 2–4.

# Campylomormyrus

Bleeker 1874

campylo-, from kampýlos (Gr. καμπύλος), bent or curved, i.e., a Mormyrus with a downward-pointing snout

**Campylomormyrus alces** (Boulenger 1920) Latin for elk or deer, allusion not explained, perhaps referring to deer-like coloration, dark brown above and silvery white below

*Campylomormyrus bredoi* (Poll 1945) in honor of Belgian explorer Hans J. Brédo (1903–1991), who collected holotype

**Campylomormyrus compressirostris Pellegrin 1924** compressus (L.), squeezed or pressed together; rostris, Neo-Latin scientific adjective of rostrum (L.), snout, referring to its snout, "extended into a long tube, strongly compressed laterally" (translation) [treated as synonym of *C. rhynchophorus* by some workers]

*Campylomormyrus cassaicus* (Poll 1967) -*icus* (L.), belonging to: Kasai (spelled Cassai in Angola) River drainage, which includes Luachimo River, type locality

*Campylomormyrus christyi* (Boulenger 1920) in honor of Cuthbert Christy (1863–1932), English physician (specializing in sleeping sickness), zoologist, explorer, and Director of the Congo Museum (Tervuren, Belgium), who collected holotype

Campylomormyrus curvirostris (Boulenger 1898) curvus (L.), curved; rostris, Neo-Latin scientific adjective of rostrum (L.), snout, referring to nearly vertical downward-pointing snout

Campylomormyrus elephas (Boulenger 1898) Latin for elephant, probably referring to its long, elephant trunk-like snout

*Campylomormyrus luapulaensis* (David & Poll 1937) -*ensis*, Latin suffix denoting place: upper Luapula River, Congo River basin, Zaire (now Democratic Republic of the Congo), type locality

Campylomormyrus mirus (Boulenger 1898) Latin for wonderful, allusion not explained, possibly referring to the striking appearance of its markedly elongate barbel, up to ¾ length of snout

*Campylomormyrus numenius* (Boulenger 1898) named for the curlew genus *Numenius*, wading birds whose long, slender, downcurved bills are similar to the snout of this fish

*Campylomormyrus orycteropus* **Poll, Gosse & Orts 1982** named for the aardvark *Orycteropus afer*, referring to the aardvark-like shape of its nose

**Campylomormyrus phantasticus (Pellegrin 1927)** from *phantastikós* (Gr. φανταστικός), imaginary, allusion not explained, probably referring to the downward-pointing snout of this "curieux Poisson" (curious fish)

**Campylomormyrus rhynchophorus (Boulenger 1898) s**nout-bearing, from *rhýnchos* (Gr. ῥύγχος), snout, and *phoreús* (Gr. φορεύς), bearer or carrier, referring to its prominent snout, twice as large as the postocular part of its head

**Campylomormyrus tamandua** (Günther 1864) genus name for the edentate anteaters of tropical America, from the Portuguese *tamanduá*, derived from the Tupí *taa*, ant, and *mundeu*, trap or catch, presumably referring to long and nearly straight tubular snout, resembling that of an anteater

*Campylomormyrus tshokwe* (Poll 1967) etymology not explained but probably referring to the Tschokwe (also spelled Chokwe) peoples of central Africa, where this species occurs

# Cryptomyrus

# Sullivan, Lavoué & Hopkins 2016

*crypto*, Latinized from *kryptós* (Gr. κρυπτός), secret or hidden, referring to the rarity of these fishes in collections; *-myrus*, conventional termination for generic names of elephantfishes, abridgement of *Mormyrus*, type genus of family



Cryptomyrus ogoouensis, holotype, female, 112 mm SL. From: Sullivan, J. P., S. Lavoué and C. D. Hopkins. 2016. Cryptomyrus: a new genus of Mormyridae (Teleostei, Osteoglossomorpha) with two new species from Gabon, West-Central Africa. ZooKeys 561: 117–150.

*Cryptomyrus ogoouensis* Sullivan, Lavoué & Hopkins 2016 -*ensis*, Latin suffix denoting place: Ogooué River, Gabon, where it is endemic

*Cryptomyrus ona* Sullivan, Lavoué & Hopkins 2016 in honor of Marc Ona Essangui, Gabonese environmental and civic activist, founder and executive director of the NGO Brainforest and recipient of the 2009 Goldman Environmental Prize, for his efforts to protect Gabon's equatorial forests and wetlands [presumably a noun in apposition, without the patronymic "*i*"]

# Cyphomyrus Myers 1960

cypho, from kyphós (Gr. κυφός), hunchbacked, referring to their convex predorsal profile; -myrus, conventional termination for generic names of elephantfishes, abridgement of Mormyrus, type genus of family

*Cyphomyrus aelsbroecki* (Poll 1945) in honor of R. P. Van Aelsbroeck, Musée du Congo Belge (Tervuren, Belgium), who collected holotype

*Cyphomyrus cubangoensis* (Pellegrin 1936) -*ensis*, Latin suffix denoting place: Cubango (now Okavango) River basin, Angola, type locality

**Cyphomyrus discorhynchus (Peters 1852)** round-snouted, from *dískos* (Gr δίσκος), any flat or circular plate, and *rhýnchos* (Gr. ῥύγχος), snout, allusion not explained, perhaps referring to its rounded snout

*Cyphomyrus grahami* (Norman 1928) in honor of fisheries biologist Michael Graham (1898–1972), who collected holotype during a "fishing survey" of Lake Victoria and presented it to the British Museum (Natural History)

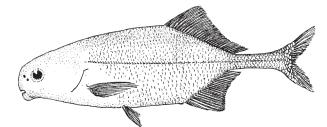
*Cyphomyrus lufirae* Mulelenu, Manda, Decru, Manda & Vreven 2020 of the lower and middle Lufira River basin, Democratic Republic of the Congo, where it appears to be endemic

**Cyphomyrus macrops (Boulenger 1909)** macro-, from makrós (Gr. μακρός), long or large; *δ̄ps* (Gr.  $\tilde{\omega}\psi$ ), eye, referring to its large eyes, twice as long as snout

*Cyphomyrus petherici* (Boulenger 1898) in honor of Welsh trader and explorer John Petherick (1813–1882), who collected holotype

**Cyphomyrus psittacus** (Boulenger 1897) from *psittakós* (Gr. ψιττακός), parrot, allusion not explained, perhaps its silver and dark grey coloration is similar to that of the African Grey Parrot *Psittacus erithacus* 

*Cyphomyrus weeksii* (Boulenger 1902) in honor of John Henry Weeks (1861–1924), Baptist missionary, ethnographer, explorer and diarist, who collected holotype at his mission station in Monsembe, upper Congo River, Zaire (now Democratic Republic of the Congo)



Cyphomyrus aelsbroecki, holotype, 86 mm TL. From: Poll, M. 1945. Descriptions de Mormyridae et de Characidae nouveaux du Congo belge avec une étude du genre Stomatorhinus et des genres de Characidae nains africains. Revue de Zoologie et de Botanique Africaines 39 (1): 36–77.



Genyomyrus donnyi, holotype, 45 cm TL. Illustration by Pierre Jacques Smit. From: Boulenger, G. A. 1898. Matériaux pour la faune du Congo. Poissons nouveaux du Congo. Première Partie. Mormyres. Annales du Musee du Congo (Ser. Zoology) 1 (fasc. 1): 1–20, Pls. 1–9.

*Cyphomyrus wilverthi* (Boulenger 1898) in honor of Belgian army officer Étienne Christophe Bernard Eugène Wilverth (1866–1916), who collected numerous fishes, including this one, from the Congo under the auspices of the Société d'Études Coloniales

# Genyomyrus

# Boulenger 1898

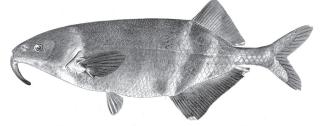
*génys* (Gr. γένυς), jaw (usually the lower jaw in ichthyology), allusion not explained but possibly referring to small, rasp-like teeth in jaws; -myrus, conventional termination for generic names of elephantfishes, abridgement of Mormyrus, type genus of family

*Genyomyrus donnyi* Boulenger 1898 in honor of Gen. Albert-Ernest Donny (1841–1923), president of the Société d'Études Coloniales, which sponsored the first major collection of fishes from the Congo

# Gill 1863

gnáthos (Gr. γνάθος), jaw; nḗma (Gr. νῆμα), thread or yarn, referring to lower jaw of G. petersii with a "conical flap or barbel"

Gnathonemus barbatus Poll 1967 Latin for bearded, referring to its long chin barbel



Gnathonemus barbatus, holotype, 181 mm TL. Illustration by P. Mertens. From: Poll, M. 1967. Contribution à la faune ichthyologique de l'Angola. Publicações Culturais, Companhia de Diamantes de Angola (DIAMANG). Lisboa No. 75: 1–381, Pls. 1–20.

**Gnathonemus echidnorhynchus Pellegrin 1924** echidna-snouted, from échidna (Gr. ἕχιδνα), viper, but here referring to echidnas (spiny anteaters), and *rhýnchos* (Gr. ῥύγχος), snout, referring to its prolonged snout, which vaguely resembles that of an echidna

Gnathonemus longibarbis (Hilgendorf 1888) longus (L.), long; barbis (scientific Neo-Latin), barbel, referring to its longer barbels (nearly equal to snout length) compared with *Mormyrus* (=*Marcusenius*) ussheri, its presumed congener at the time

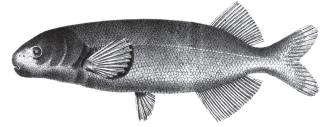
**Gnathonemus petersii (Günther 1862)** patronym not identified but probably in honor of Wilhelm Peters (1815–1883), German herpetologist and explorer who traveled to Africa and returned to Berlin with an enormous collection of natural history specimens

# Heteromormyrus Steindachner 1866

héteros (Gr. ἕτερος), another or different, proposed as a subgenus of *Mormyrus* in which the anal fin of *H. pauciradiatus* is longer than the dorsal fin, unlike its presumed congeners at the time

Heteromormyrus ansorgii (Boulenger 1905) in honor of English explorer and collector William John Ansorge (1850–1913), who collected holotype

Hippopotamyrus longilateralis (Kramer & Swartz 2010) longus (L.), long; lateralis (L.), of the side, referring to its longer lateral line (more



Heteromormyrus pauciradiatus. From: Steindachner, F. 1866. Ichthyologische Mittheilungen. (IX.) Verhandlungen der K.-K. zoologisch-botanischen Gesellschaft in Wien 16: 761–796, Pls. 13–18.

scales) compared with other members of H. ansorgii species complex

*Hippopotamyrus pappenheimi* (Boulenger 1910) in honor of German zoologist Paul Pappenheim (1878–1945), curator of fishes, Königliche Zoologische Museum (Berlin), for his contributions to the knowledge of mormyrids

*Heteromormyrus pauciradiatus* Steindachner 1866 *paucus* (L.), few; *radiatus* (L.), rayed, referring to significantly fewer dorsal and anal fin rays compared with the similarly round-nosed *Mormyrus* (=*Cyphomyrus*) *discorhynchus*, its presumed congener at the time

*Hippopotamyrus szaboi* (Kramer, van der Bank & Wink 2004) in honor of the late Thomas Szabo (1924–1993), Laboratoire de Neurophysiologie Sensorielle Comparée, one of the founding fathers of the field of electroreception and mentor and friend to senior author

*Hippopotamyrus tavernei* (Poll 1972) in honor of Belgian ichthyologist Louis Taverne, Musée Royal de L'Afrique Centrale (Tervuren, Belgium), whose osteological studies have considerably advanced the classification of mormyrid fishes



referring to its lower median teeth, which, in their direction and length, correspond to those of the lower jaw of a hippopotamus; *-myrus*, conventional termination for generic names of elephantfishes, abridgement of *Mormyrus*, type genus of family

*Hippopotamyrus castor* Pappenheim 1906 Latin for beaver, referring to the median teeth which protrude from lower jaw like the incisors of a beaver

*Hippopotamyrus paugyi* Lévêque & Bigorne 1985 in honor of the authors' colleague Didier Paugy, ichthyologist-hydrobiologist, ORSTOM (Office de la Recherche Scientifique et Technique d'Outre-Mer), with whom this species was collected

Hippopotamyrus pictus (Marcusen 1864) Latin for painted or colored, probably referring to the dark bow tie-like ("Querbinde") marking across its body

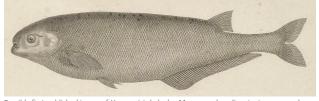


Illustration upon which Marcusen's description of *Petrocephalus* (now *Hippopotamyrus*) pictus was based. From: Heuglin, M. T. von. 1852. Reisebericht aus Chartum vom 25. October 1852. Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften 9 (5): 915–921, Pls. 59–60.

# Hyperopisus Gill 1862

hypero-, from hypér (Gr. ὑπέρ), beyond, over, above or very; pisus, grammatically bent into shape from pisum (L.), pea, referring to pisiform (pea-shaped) palatal (on roof of mouth) teeth

Hyperopisus bebe (Lacepède 1803) named for a place in Egypt where this species is abundant and/or where images of this fish (ancient Egyp-



Possibly first-published image of *Hyperopisis bebe* (as *Mormyrus dorsalis*, a junior synonym). From: Geoffroy St. Hilaire, E. 1809–1829. Poissons du Nil, de la mer Rouge et de la Méditerranée. *In*: Description de l'Egypte ou recueil des observations et des recherches qui ont été faites en Égypte pendant l'expedition de l'Armée français, publié par les ordres de sa Majesté-L'Empereur Napoléon le Grand. (Imprimerie Impériale). Paris. Histoire Naturelle. v. 1 (part 1). Poissons PIs. 1–17

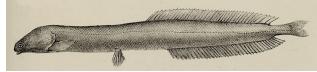
tians considered mormyrids sacred) can be seen in the ruins of temple of Isis (Egyptian goddess of fertility)

Hyperopisus bebe occidentalis Günther 1866 Latin for western, presumably a West African variant of the nilotic H. b. bebe

#### Isichthys Gill 1863

is-, from isos (Gr. ἴσος), equal, allusion not explained, probably referring to the "comparative proportions" of its elongated dorsal and anal fins; ichthýs (Gr. ἰχθύς), fish

*Isichthys henryi* Gill 1863 in honor of Gill's friend Joseph Henry (1797– 1878), first Secretary of the Smithsonian Institution (Washington, D.C.), "to whom I have been so much indebted for the privileges of studying the rich collections of the Institution, and especially of investigating the class to which the present species belongs"



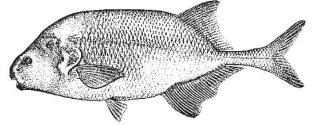
Possibly first-published image of *Isichthys henryi*. Illustration by Charles Delahaye. From: Sauvage, H.-E. 1884. Notice sur une collection de reptiles et de poissons recueillie à Majumba, Congo. Bulletin de la Société Zoologique de France 9: 199–208, Pl. 6.

# Ivindomyrus Taverne & Géry 1975

named for Ivindo River, Gabon, type locality of *I. opdenboschi*; -*myrus*, conventional termination for generic names of elephantfishes, abridgement of *Mormyrus*, type genus of family

*Ivindomyrus marchei* (Sauvage 1879) in honor of French explorer and naturalis Antonine-Alfred Marche (1844–1898), who collected specimens (including holotype of this species) from the Ogooué (Ogowe) River in Gabon under the command of French explorer Pierre Savorgnan de Brazza

*Ivindomyrus opdenboschi* Taverne & Géry 1975 in honor of Armand Opdenbosch (1929–1977), chief technician and taxidermist, Musée Royal de l'Afrique Centrale, for his invaluable technical aid in the study of mormyrid systematics



Ivindomyrus opdenboschi, holotype, 274 mm SL. From: Taverne, L. and J. Géry. 1975. Un nouveau genre de Mormyridae du Gabon: Ivindomyrus opdenboschi gen. nov., sp. nov. (Pisces Ostéoglossomorphes). Revue de Zoologie et de Botanique Africaines 89 (3): 555–563.

# Marcusenius Gill 1862

 -ius (L.), pertaining to: patronym not identified but clearly in honor of Baltic German physician-ichthyologist Johann Marcusen (1817–1894), who wrote the first systematic studies of mormyrids in 1854

# The "Gordian knot" of mormyrid taxonomy

According to Eschmeyer's Catalog of Fishes (ECoF), Mormyrus cyprinoides Linnaeus 1758 is the type species of Mormyrus. But the ECoF entry for Mormyrus cyprinoides places the species in Marcusenius (as it's placed here). Likewise, ECoF delineates Mormyrus anguilloides Linnaeus 1758 as the type species of Marcusenius, yet the species is placed in Mormyrops (as it's placed here). How is it that these type species — which, by definition, are fixed to the genera they represent — are no longer in the genera they represent? Such is the "Gordian knot" of mormyrid taxonomy, as lamented by ichthyologist George S. Myers in 1960, "which will take the utmost care to disentangle." The reasons for the taxonomic tangle are too convoluted to discuss here. Contemporary mormyrid taxonomists deal with the discrepancies by simply ignoring them, assigning the affected species to the genera where they are now universally accepted to belong.

Sixty-plus years after Myers acknowledged the Gordian knot, "mormyrophile" John P. Sullivan has taken on the onerous task of disentangling it. He has written the draft of a petition to the International Commission of Zoological Nomenclature (ICZN) to clarify mormyrid nomenclature but is "on the fence" about submitting it. If the ICZN accepts the petition, then new type species will be designated and all will be right in mormyrid nomenclature. But if the ICZN rejects the petition, then taxonomists would be forced to reassign over 60 binomial combinations, thus entangling the Gordian knot even more.

You can read Dr. Sullivan's draft petition, and explore the wonderful world of weakly electric fishes at his superb website: https://mormyrids.myspecies.info/en

*Marcusenius abadii* (Boulenger 1901) in honor of Capt. George Howard Fanshawe Abadie (1873–1904), British Army, who collected fishes along the Niger River and contributed a single specimen of this elephantfish to the British Museum

*Marcusenius altisambesi* Kramer, Skelton, van der Bank & Wink 2007 *alti-*, from *altus* (L.), high; *sambesi*, Zambezi, referring to distribution in Upper Zambezi River (Namibia), at section ending at Victoria Falls

*Marcusenius angolensis* (Boulenger 1905) -*ensis,* Latin suffix denoting place: Angola (Quanza River), type locality

*Marcusenius annamariae* (Parenzan 1939) matronym not identified nor can identity be inferred from available evidence

*Marcusenius bentleyi* (Boulenger 1897) in honor of Baptist missionary William Holman Bentley (1855–1905), who acquired holotype at Stanley (Boyoma) Falls, Democratic Republic of the Congo

*Marcusenius brucii* (Boulenger 1910) in honor of Major G. E. Bruce, possibly George Evans Bruce (1867–1949), who obtained specimen and presented it to the British Museum

*Marcusenius caudisquamatus* Maake, Gon & Swartz 2014 *cauda* (L.), tail; *squamatus* (L.), scaled, referring to high number of circumpeduncular scales relative to congeners in South Africa

Marcusenius cuangoanus (Poll 1967) - anus (L.), belonging to: Cuango



Marcusenius desertus, holotype, male, 19.6 cm SL. Photograph by Bernd Kramer. From: Kramer, L. B., F. H. van der Bank, and M. Wink. 2016. Marcusenius desertus sp. nov. (Teleostei: Mormyridae), a mormyrid fish from the Namib desert. African Journal of Aquatic Science 41 (1): 1–18 + 2 unnumbered pages.

River drainage (Angola), type locality

**Marcusenius cyprinoides (Linnaeus 1758)** -oides, Neo-Latin from  $e^{\tilde{l}}dos$  (Gr.  $\epsilon\tilde{l}\delta\circ\varsigma$ ), form or shape: cyprinus, from kyprinos (Gr.  $\kappa u\pi\rho\tilde{v}vo\varsigma$ ), carp, probably referring to its carp-like shape compared with the elongate shape of *Mormyrops anguilloides*, its presumed congener at the time

*Marcusenius deboensis* (Daget 1954) -*ensis*, Latin suffix denoting place: Lake Debo, Niger, type locality

*Marcusenius desertus* Kramer, van der Bank & Wink 2016 Latin for desert, named for the Skeleton Coast desert, Skeleton Coast National Park (Namibia), type locality

*Marcusenius devosi* Kramer, Skelton, van der Bank & Wink 2007 in honor of Belgian ichthyologist Luc De Vos (1957–2003), late curator of fishes at Nairobi Museum, for his contributions to African ichthyology and promotion of ichthyology in East Africa

*Marcusenius dundoensis* (Poll 1967) *-ensis*, Latin suffix denoting place: Dundo, Angola, near Sanga River, tributary of Luachimo River, type locality

*Marcusenius elegans* Fricke & Kramer 2022 Latin for elegant, referring to its slender body [replacement name for *M. gracilis* Kramer 2013, preoccupied by *M. senegalensis gracilis*]

*Marcusenius friteli* (Pellegrin 1904) in honor of paleobiologist and scientific illustrator Paul-Honoré Fritel (1867–1927), Pellegrin's colleague at Muséum National d'Histoire Naturelle (Paris)

Marcusenius furcidens (Pellegrin 1920) furcatus (L.), forked; dens (L.), tooth, probably referring to its markedly indented teeth

Marcusenius fuscus (Pellegrin 1901) Latin for dusky, dark or swarthy, referring to its uniformly chocolate-brown color

*Marcusenius ghesquierei* (Poll 1945) in honor of Belgian botanist-entomologist Jean Ghesquière (1888–1982), who collected holotype

*Marcusenius greshoffii* (Schilthuis 1891) in honor of Anton Greshoff (1856–1905), Dutch trader and collector who presented several species from the Congo to the Zoological Museum of Utrecht University, including holotype of this one

*Marcusenius intermedius* Pellegrin 1924 *inter* (L.), between; *medius* (L.), middle, presumed to be a "forme intermediaire" between *Marcusenius* and *Gnathonemus* 

Marcusenius kainjii Lewis 1974 of Lake Kainji, an artificial lake in lower Niger River, Nigeria, where only known specimen was collected

*Marcusenius kaninginii* Kisekelwa, Boden, Snoeks & Vreven 2016 in honor of Boniface Kaningini Mwenyimali, Director of UERHA (Unité d'Enseignement et de Recherche en Hydrobiologie Appliquée) and Rector of Institut Supérieur Pédagogique de Bukavu (Democratic Republic of the Congo); he "supported in various ways" the sampling expeditions of the first author in the Lowa River Basin (DCR), where this species occurs

*Marcusenius krameri* Maake, Gon & Swartz 2014 in honor of German ichthyologist Leo Bernd Kramer, Zoological Institute of the University of Regensburg (Germany), for his contributions to the systematics of southern African mormyrids

Marcusenius kutuensis (Boulenger 1899) -ensis, Latin suffix denoting

place: Kutu Island, Zaire (now Democratic Republic of the Congo), type locality

*Marcusenius lambouri* (Pellegrin 1904) in honor of Jean-Baptiste Lambour, a *préparateur* in the herpetology department (1891–1924) of the Muséum National d'Histoire Naturelle (Paris), where Pellegrin worked

*Marcusenius leopoldianus* (Boulenger 1899) -*anus* (L.), belonging to: Lake Leopold (now Lake Mai-Ndombe), Democratic Republic of the Congo, type locality

*Marcusenius livingstonii* (Boulenger 1899) in honor of Charles Livingstone (1821–1873, brother of Scottish missionary and explorer David Livingstone), who collected holotype

*Marcusenius lucombesi* Maake, Gon & Swartz 2014 of Lucombe River, a tributary of the Ruvuma River system in the Niassa Game Reserve, Mozambique, type locality

**Marcusenius macrolepidotus (Peters 1852)** macro-, from makrós (Gr. μακρός), long or large; *lepidōtós* (Gr. λεπιδωτός), scaly, referring to larger scales compared with the similar *Mormyrus geoffroyi* (=*niloticus*), its presumed congener at the time

**Marcusenius macrophthalmus** (Pellegrin 1924) big-eyed, from *makrós* (Gr. μακρός), long or large, and *ophthalmós* (Gr. ὀφθαλμός), eye, referring to its enormous ("énorme") eye, almost twice length of snout and included just 2.66 times in length of head

*Marcusenius mento* (Boulenger 1890) from the Latin *mentum*, chin, which is "strongly swollen"

Marcusenius meronai Bigorne & Paugy 1990 in honor of the authors' friend and colleague, fish ecologist Bernard de Merona

*Marcusenius monteiri* (Günther 1873) in honor of Portuguese mining engineer and entomologist Joachim J. Monteiro (1833–1878), who collected holotype

*Marcusenius moorii* (Günther 1867) in honor of Thomas John Moore (1824–1892), curator, Free Public Museum of Liverpool, who loaned to Günther specimens collected by R. B. N. Walker in Gabon

*Marcusenius multisquamatus* Kramer & Wink 2013 *multi-* (L.), many; *squamatus* (L.), scaled, referring to higher number of lateral-line scales compared with most specimens in the *M. macrolepidotus* species complex

*Marcusenius ntemensis* (Pellegrin 1927) -*ensis*, Latin suffix denoting place: Ntem River, Cameroon, type locality

Marcusenius pongolensis (Fowler 1934) -ensis, Latin suffix denoting place: Pongola River, Paulpietersburg district, South Africa, type locality

Marcusenius sanagaensis Boden, Teugels & Hopkins 1997 -ensis, Latin suffix denoting place: Sanaga River basin (Cameroon), type locality

*Marcusenius schilthuisiae* (Boulenger 1899) in honor of Dutch ichthyologist-herpetologist Lubbina "Louise" Schilthuis, curator at the Museum of Zoology at the University of Utrecht, who reported this species as *Mormyrus grandisquamis* (=*Marcusenius moorii*) in 1891

Marcusenius senegalensis (Steindachner 1870) -ensis, suffix denoting place: Taoué and Dagana, Senegal, co-type localities

Marcusenius senegalensis gracilis (Pellegrin 1922) Latin for thin or slender, referring to its more elongate body compared with the nominate form

Marcusenius senegalensis pfaffi (Fowler 1958) in honor of Swedish ichthyologist Johannes Rasch Pfaff (d. 1959), who described this taxon in 1933 but used a preoccupied name (Gnathonemus elongatus, secondarily preoccupied by Mormyrus elongatus Rüppell 1832, a junior synonym of Marcusenius cyprinoides)

Marcusenius stanleyanus (Boulenger 1897) -anus (L.), belonging to: Stanley (Boyoma) Falls, Democratic Republic of the Congo, type locality

*Marcusenius thomasi* (Boulenger 1916) in honor of British anthropologist Northcote W. Thomas (1868–1936), who collected holotype

#### 6 · The ETYFish Project

*Marcusenius ussheri* (Günther 1867) in honor of Herbert Taylor Ussher (1836–1880), Deputy Assistant Commissary-General, Lagos, on the Bossumprah River, Gold Coast (now Ghana), who collected holotype

*Marcusenius verheyenorum* Mambo Baba, Kisekelwa, Mizani, Decru & Vreven 2020 in honor of zoologists Walter Verheyen (1932–2005), University of Antwerp, and his son Eric Verheyen, University of Antwerp and Royal Belgian Institute of Natural Sciences, for their commitment to the training of Congolese researchers in general and those of the University of Kisangani and the Centre de Surveillance de la Biodiversité in particular

Marcusenius victoriae (Worthington 1929) of Lake Victoria, East Africa, one of the type localities

*Marcusenius wamuinii* Decru, Sullivan & Vreven 2019 in honor of Soleil Wamuini Lunkayilakio, Institut Supérieur Pédagogique de Mbanza-Ngungu (Democratic Republic of the Congo), for his "great" contribution to the sampling effort that resulted in the discovery of this species (he helped collect holotype), and to recognize him as one of the first Congolese ichthyologists

# Mormyrops

**Müller 1843** ópsis (Gr. ὄψις), appearance, presumably referring to its similarity to and/or affinity with *Mormyrus* 

#### Subgenus Mormyrops

**Mormyrops anguilloides (Linnaeus 1758)** -oides, Neo-Latin from eidos (Gr. είδος), form or shape: anguilla (L.), eel, probably referring to its elongate shape compared with the deeper-bodied, carp-like shape of Marcusenius cyprinoides, its presumed congener at the time

*Mormyrops attenuatus* Boulenger 1898 Latin for drawn-out or tapered, referring to its elongate shape, in which body height is contained in 8½ times the body length

*Mormyrops batesianus* Boulenger 1909 -*anus* (L.), belonging to: American farmer and amateur ornithologist George Latimer Bates (1863–1940), who collected specimens for the Natural History Museum (London) in Cameroon, including holotype of this species

*Mormyrops breviceps* Steindachner 1894 *brevis* (L.), short; *-ceps* (L.), headed, referring to low, compressed and short head, slightly more than two times longer than high

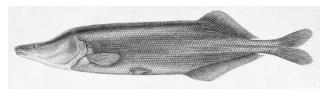
**Mormyrops caballus Pellegrin 1927** Latinized from *kabállēs* (Gr. καβάλλης), nag or horse, referring to the equine shape of its snout [not to be confused with *Mormyrus caballus*]

*Mormyrops citernii* Vinciguerra **1912** in honor of Capt. Carlo Citerni (1873–1918), who led expedition to mark boundary between Italian Somalia and Ethiopia in 1910–1911, during which holotype was collected

*Mormyrops curtus* Boulenger 1899 Latin for short, referring to body height contained in less than five times the body length

*Mormyrops curviceps* Roman 1966 *curvus* (L.), curved; *-ceps* (L.), headed, etymology not explained, perhaps referring to its more depressed head compared with *M. deliciosus* (*=anguilloides*)

**Mormyrops engystoma Boulenger 1898** engýs (Gr. ἐγγύς), near or close at hand but often used in the sense of narrow; stóma (Gr. στόμα), mouth, allusion not explained, perhaps referring to width of mouth "barely" (translation) ¾ length of snout



Mormyrops curviceps, holotype, 255 mm SL. From: Roman, B. 1966. Les poissons des hautbassins de la Volta. Annales, Musée Royal de l'Afrique Centrale, Tervuren, Série in 8°, Sciences Zoologiques No. 150: 1–191, Pls. 1–7. *Mormyrops furcidens* Pellegrin 1900 *furcatus* (L.), forked; *dens* (L.), tooth, referring to deeply indented teeth, which resemble a fork with two branches

*Mormyrops intermedius* Vinciguerra 1928 *inter* (L.), between; *medius* (L.), middle, allusion not explained, presumably intermediate in form between *M. attenuatus, M. furcidens, M. mariae* and *M. microstoma* 

*Mormyrops lineolatus* **Boulenger 1898** Latin for marked with fine lines, referring to dark longitudinal lines on sides of body

*Mormyrops mariae* (Schilthuis 1891) matronym not identified, nor can identity be inferred from available information

*Mormyrops masuianus* Boulenger 1898 -*anus* (L.), belonging to: Lt. Jean-Baptiste Théodore Masui (1863–?, Belgian Army, secretary-general of the Brussels-Tervueren Exhibition to the Congo (who later rose to become Director of the Musée du Congo [now Musée Royal d'Afrique Centrale] in Tervuren)

**Mormyrops microstoma Boulenger 1898** micro-, from mikrós (Gr. μικρός), small; stóma (Gr. στόμα), mouth, its width ½ length of snout

*Mormyrops nigricans* Boulenger 1899 Latin for swarthy or blackish, referring to its dorsal coloration

*Mormyrops oudoti* Daget 1954 in honor of M. (Monsieur) Oudot (no other information available), who obtained holotype and several other "rare and interesting species" (translation) while shopping in Bamako, Mali, on the Niger River

*Mormyrops parvus* Boulenger 1899 Latin for little, allusion not explained, perhaps referring to its very small ("trés petit") eyes

**Mormyrops sirenoides Boulenger 1898** -oides, Neo-Latin from e*i*dos (Gr. είδος), form or shape: *Siren*, genus of aquatic salamanders, allusion not explained, probably referring to its *Siren*-like shape

# Subgenus Oxymormyrus

#### Bleeker 1874

oxýs (Gr. ὀξύς), sharp or pointed, referring to pointed snout of *M. zanclirostris; Mormyrus*, type genus of family [treated as a full genus by some workers]

*Mormyrops boulengeri* Pellegrin 1900 in honor of Belgian-born British ichthyologist-herpetologist George A. Boulenger (1858–1937), British Museum (Natural History), who provisionally named this species "*Mormyrops tubirostris*" after examining specimens at the Muséum National d'Histoire Naturelle (Paris)

*Mormyrops zanclirostris* (Günther 1867) *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, allusion not explained, possibly referring to resemblance of its snout to that of the Moorish Idol *Zanclus cornutus* 

# Mormyrus

# Linnaeus 1758

Ancient Greek name for the Striped Sea Bream *Lithognathus mormyrus* (Linnaeus 1758), which Linnaeus applied to *M. caschive* and *Mormyrops anguilloides* without explanation or seeming relevance, perhaps derived from the Greek μορμύρω (*mormýrō*), a "fish rushing through the water," or from μαρμαίρω (*marmaírō*), to flash, sparkle or gleam,<sup>1</sup> neither of which seem to apply to mormyrids

*Mormyrus bernhardi* Pellegrin 1926 in honor R. P. Bernhard (no other information available), who collected holotype near Nairobi, Kenya

**Mormyrus caballus Boulenger 1898** Latinized from *kabállēs* (Gr. καβάλλης), nag or horse, probably referring to the equine shape of its head [not to be confused with *Mormyrops caballus*]

*Mormyrus caballus asinus* Boulenger 1915 Latin for ass, referring to its resemblance to *M. caballus* (named for a horse)

*Mormyrus caballus bumbanus* Boulenger 1909 - *anus* (L.), belonging to: Bumba River at Assobam, southern Cameroon, type locality

<sup>1</sup> Possible etymologies of *Mormyrus* provided by Holger Funk, pers. comm.

*Mormyrus caballus lualabae* Reizer 1964 of the Lualaba (Zaire) River and Upemba Lake system, Democratic Republic of the Congo, where it occurs

*Mormyrus casalis* Vinciguerra 1922 -*is*, Latin genitive singular of: in memory of Capt. Ugo Casale, Italian Army offer and a resident of Afgoi, Somalia, who collected holotype and sent it to the Museo Civico di Storia Naturale di Genova

Mormyrus caschive Linnaeus 1758 Arabic vernacular for Mormyrops anguilloides, previously thought to be a senior synonym of this species

**Mormyrus cyaneus Roberts & Stewart 1976** from kýanos (Gr. κύανος), dark blue (but often used as a general term for blue), referring to uniformly light blue coloration on body and dark- or blackish-blue head

Mormyrus felixi Pellegrin 1939 in honor of French botanist and explorer Henri Jacques-Félix (1907–2008), who collected holotype in Cameroon

*Mormyrus goheeni* Fowler 1919 in honor of Methodist medical missionary Sylvanus McIntyre E. Goheen (1813–1851), the first person to collect fishes (for science) in Liberia

*Mormyrus hasselquistii* Valenciennes 1847 in honor of Swedish naturalist Fredric Hasselquist (1722–1752), the first to describe a mormyrid (*Mormyrus caschive*) but in a pre-Linnaean publication (1757)

*Mormyrus hasselquistii guentheri* Boulenger 1899 in honor of Germanborn British ichthyologist-herpetologist Albert Günther (1830–1914), who recorded this taxon as *M. hasselquistii* in 1866

*Mormyrus hildebrandti* Peters 1882 in honor of German botanist and explorer Johannes Maria Hildebrandt (1847–1881), who collected holotype

**Mormyrus iriodes Roberts & Stewart 1976** -oides, Neo-Latin from eldos (Gr. είδος), form or shape: lris (Gr. ίρις), rainbow, referring to the delicate pinkish, violaceous and bluish-green reflections on live specimens

Mormyrus kannume Fabricius 1775 Arabic name for this fish [authorship often given as Forsskål 1775]

*Mormyrus lacerda* Castelnau 1861 in honor of the Portuguese explorer and astronomer Francisco José Maria de Lacerda (1753–1798) [presumably a noun in apposition, without the patronymic "*j*"]

Mormyrus longirostris Peters 1852 longus (L.), long; rostris, Neo-Latin scientific adjective of rostrum (L.), snout, referring to its produced snout, as long as or slightly shorter than postocular part of head

**Mormyrus macrocephalus Worthington 1929** big-headed, from *makrós* (Gr. μακρός), long or large, and *kephalé* (Gr. κεφαλή), head, referring to its longer head compared with *M. hasselquistii* 

**Mormyrus macrophthalmus Günther 1866** big-eyed, from *makrós* (Gr. μaκρός), long or large, and *ophthalmós* (Gr. ὀφθαλμός), eye, referring to its large eyes, 3/ length of head

*Mormyrus niloticus* (Bloch & Schneider 1801) -*icus* (L.), belonging to: Nile River (described from upper Egypt)

Mormyrus ovis Boulenger 1898 Latin for sheep, referring to how its head (one quarter longer than high in profile and bent sharply higher) resembles that of a sheep

*Mormyrus proboscirostris* Boulenger 1888 *proboscis* (L.), snout or elephant trunk; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, referring to its snout, "very long, reminiscent of a trunk" (translation) [treated as a synonym or subspecies of *M. rume* by some workers]

Mormyrus rume Valenciennes 1847 vernacular used by Senegalese fishermen for this species

*Mormyrus subundulatus* Roberts 1989 *sub* (L.), less or under; *undulatus* (L.), wavy, referring to much less pronounced EOD (electric organ discharge) wave form compared with the sympatric *M. rume* 

*Mormyrus tapirus* Pappenheim 1905 Latinization of tapir, allusion not explained, presumably referring to its tapir-like snout



Mormyrus proboscirostris, holotype, 570 mm TL. Illustration by J. Green. From: Boulenger, G. A. 1898. Matériaux pour la faune du Congo. Poissons nouveaux du Congo. Première Partie. Mormyres. Annales du Musee du Congo (Ser. Zoology) 1 (fasc. 1): 1–20, Pls. 1–9.

*Mormyrus tenuirostris* Peters 1882 *tenuis* (L.), thin or slender; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, referring to its attenuate snout

*Mormyrus thomasi* Pellegrin 1938 in honor of the late Jean Thomas (1890–1932), fisheries scientist who collected for the Muséum National d'Histoire Naturelle (Paris) in French Equatorial Africa, and who collected holotype during his last expedition in 1929–1930

# Myomyrus Boulenger 1898

etymology not explained, perhaps myós (Gr. μυός), genitive of mús (μῦς), mouse, possibly referring to median pair of large incisor-shaped (i.e., mouse-like) teeth of *M. macrodon; -myrus*, conventional termination for generic names of elephantfishes, abridgement of *Mormyrus*, type genus of family

**Myomyrus macrodon Boulenger 1898** macro-, from makrós (Gr. μακρός), long or large; *odon*, Latinized and grammatically adjusted from the Greek nominative ἀδούς (*odoús*), tooth, presumably referring to median pair of large incisor-shaped teeth



Myomyrus macrodon, 240 mm TL. Note mouse-like teeth, hence the genus name. Illustration by J. Green. From: Boulenger, G. A. 1898. Matériaux pour la faune du Congo. Poissons nouveaux du Congo. Première Partie. Mormyres. Annales du Musee du Congo (Ser. Zoology) 1 (fasc. 1): 1–20, Pis. 1–9.

**Myomyrus macrops Boulenger 1914** macro-, from makrós (Gr. μακρός), long or large; *δ̄ps* (Gr.  $\tilde{\omega}\psi$ ), eye, referring to larger eye compared with *M. macrodon* 

*Myomyrus pharao* Poll & Taverne 1967 Latin for pharaoh, title of Egyptian kings, referring to short barbel that adorns chin, presumably similar to false beard of a pharaoh

# **Paramormyrops**

Taverne, Thys van den Audenaerde & Heymer 1977 pará (Gr.  $\pi\alpha\rho\alpha$ ), near, referring to resemblance of *P. gabonensis* to

Mormyrops in general form but with shorter body and head

**Paramormyrops batesii** (Boulenger 1906) in honor of American farmer and amateur ornithologist George Latimer Bates (1863–1940), who collected specimens for the Natural History Museum (London) in Cameroon, including holotype of this species

Paramormyrops curvifrons (Taverne, Thys van den Audenaerde, Heymer & Géry 1977) curvus (L.), bent; frons (L.), face, brow or forehead, referring to the slightly concave profile of its head

Paramormyrops gabonensis Taverne, Thys van den Audenaerde & Heymer 1977 - ensis, Latin suffix denoting place: Gabon, where type locality (lvindo River, near M'Passa, Makokou) is situated

*Paramormyrops hopkinsi* (Taverne & Thys van den Audenaerde 1985) in honor of neurobiologist and mormyrid researcher Carl D. Hopkins (b. 1944), Cornell University (Ithaca, New York, USA), who collected

# Mary Henrietta Kingsley: A Victorian lady in unexplored Africa

What if you decided to leave your home and family to collect fishes in Africa? And what if you had no idea how to get around Africa and didn't speak any of its languages? And what if you had no formal education in the sciences? And what if you lived during Victorian times, when travel to places like Africa was fraught with extreme danger — long sea voyages, disease, violent natives, venomous creatures in the bush?

And what if you were a woman, traveling alone?

None of this daunted Mary Henrietta Kingsley. Born in England in 1862, she refused to live the life of a genteel Victorian lady. Instead, when her ailing parents died within months of each other, she took her modest inheritance and booked a two-week steamboat trip to Sierra Leone in 1893.

Mary lived with the locals, who taught her survival skills for life in the wilderness. (Confused to see a white woman traveling alone, they often asked where her husband was.) She returned to England in December and spent the next year acquiring the supplies and financial support to mount a more elaborate expedition. She wanted to collect. Reptiles, insects, shells, grasses, ethnographic artifacts. But mostly fishes.

While many remained skeptical of Kingsley's skills and ambitions, Albert Günther of the British Museum was clearly impressed. Knowing that she was planning to visit the interior of Gabon, he suggested that she focus on the "mighty" Ogowe River. And she did. Günther later reported:



The means of preserving and transporting the specimens were naturally limited, as Miss Kingsley travelled alone with a native crew; besides, whilst traversing the region of the rapids, which extends over some hundred of miles, the upsetting of her canoe was a matter of frequent occurrence. Nevertheless she succeeded in bringing home in excellent condition a collection of eighteen species of Reptiles and about sixty-five species of Fishes, which will be enumerated or described in this paper, besides a number of other, especially entomological, specimens.

Günther named five fishes after her, three of which remain valid today: the mormyrid *Paramormyrops kingsleyae*, the African tetra *Brycinus kingsleyae*, and the climbing gourami *Ctenopoma kingsleyae*. Boulenger named two cichlids after Kingsley: *Chromidotilapia kingsleyae* in 1898 and *Pelmatolapia mariae* in 1899. In 2013, Decru, Vreven & Snoeks added to Kingsley's legacy by naming *Hepsetus kingsleyae*, an African pike characoid, in her honor.

Kingsley became something of a celebrity upon her return to England. She wrote two bestselling books about her travels. She gave lectures. And she angered the Church of England by criticizing missionaries for their attempts to corrupt African religions. Her lectures and writings helped Europeans better understand the impact (both good and bad) of British imperialism in Africa and the little-known lives of native Africans.

Kingsley returned to Africa in 1899 to collect fishes from the Orange River in South Africa. Shortly thereafter, the Boer War broke out. Horrified by the war, which she regarded as imperialism run mad, Kingsley volunteered to work as a nurse in Cape Town, tending to injured Boer prisoners of war.

"All this work here, the stench, the washing, the enemas, the bedpans, the blood, is my world," she wrote to a friend. The confines of a prison hospital proved more hazardous than the dangers of the wild. Two months later she contracted typhoid fever. On 3 June 1900, Mary Kingsley died at the age of 37.

# holotype in 1975

*Paramormyrops jacksoni* (Poll 1967) in honor of British ichthyologist Peter B. N. Jackson (1924–2007), author of *Fishes of Northern Rhodesia* (1961) [possibly an emaciated *Pollimyrus* cf. *castelnaui*<sup>2</sup>]

*Paramormyrops kingsleyae* (Günther 1896) in honor of British ethnographer, scientific writer and explorer Mary Henrietta Kingsley (1862– 1900), who collected holotype [see essay above]

Paramormyrops longicaudatus (Taverne, Thys van den Audenaerde, Heymer & Géry 1977) longus (L.), long; caudatus (L.), tailed, referring to

#### elongate caudal peduncle

**Paramormyrops ntotom Rich, Sullivan & Hopkins 2017** word for mormyrid fish in the language of the Fang people from northern Gabon (where it occurs), Equatorial Guinea and southern Cameroon

*Paramormyrops retrodorsalis* (Nichols & Griscom 1917) *retro-* (L.), back or backward; *dorsalis* (L.), of the back, referring to posterior position of dorsal fin compared with *P. sphekodes* 

**Paramormyrops sphekodes (Sauvage 1879)** -o[*i*]*des*, Neo-Latin from eldos (Gr. είδος), form or shape: *sphēkós* (Gr. σφηκός), genitive of *sphḗx* (σφήξ), wasp, i.e., wasp-like, allusion not explained nor evident

<sup>&</sup>lt;sup>2</sup> Miller, S. and J. Sullivan. 2022. Paramormyrops jacksoni (Poll, 1967). Mormyridae - African Weakly Electric Fishes. Accessed at https://mormyrids.myspecies.info/en/taxonomy/term/342 on 3 July 2022.



Paramormyrops ntotom, holotype, 178 mm SL. Scale bar = 1 cm. Photo by John P. Sullivan. From: Rich, M., J. P. Sullivan and C. D. Hopkins. 2017. Rediscovery and description of Paramormyrops sphekodes (Sauvage, 1879) and a new cryptic Paramormyrops (Mormyridae: Osteoglossiformes) from the Ogooué River of Gabon using morphometrics, DNA sequencing and electrophysiology. Zoological Journal of the Linnean Society 180 (3): 613–646.

# Pollimyrus Taverne 1971

in honor of Taverne's professor and friend, Belgian ichthyologist Max Poll (1908–1991); -myrus, conventional termination for generic names of elephantfishes, abridgement of *Mormyrus*, type genus of family

Pollimyrus adspersus (Günther 1866) Latin for besprinkled, referring to brown dots all over its body

**Pollimyrus brevis** (Boulenger 1913) Latin for short, referring to short body compared with *Marcusenius ihuysi* (=*Brevimyrus niger*), its presumed congener at the time

**Pollimyrus castelnaui (Boulenger 1911)** in honor of French naturalist Francis de Castelnau (1810–1880), who described a number of new fishes from Lake Ngami (Bechuanaland, now Botswana), type locality

*Pollimyrus cuandoensis* Kramer, van der Bank & Wink 2013 - *ensis*, Latin suffix denoting place: Kwando (Cuando) River, Namibia, only known area of occurrence

Pollimyrus eburneensis Bigorne 1991 -ensis, Latin suffix denoting place: eburn, ivory, referring Ivory Coast, to type locality

Pollimyrus fasciaticeps (Boulenger 1920) fascia (L.) band or stripe; -ceps (L.), headed, referring to brown stripe on head

**Pollimyrus guttatus (Fowler 1936)** Latin for spotted or speckled, referring to conspicuous close-set blackish-brown spots on head and body, one to each scale on trunk and tail

*Pollimyrus isidori* (Valenciennes 1847) in honor of French zoologist Isidore Geoffroy Saint-Hilaire (1805–1861), whose collection supplied holotype

**Pollimyrus macroterops (Boulenger 1920)** macro-, from makrós (Gr. makrós), long or large; teres (L.), rounded;  $\delta ps$  (Gr.  $\tilde{\omega} \psi$ ), eye, allusion not explained, perhaps referring to its considerably larger eye compared with *P. tumifrons* 

**Pollimyrus maculipinnis (Nichols & La Monte 1934)** macula (L.), spot, stain or mark; *pinnis*, Neo-Latin adjective of *pinna* (L.), fin, referring to "vague, blackish blotch" in front of dorsal and anal fins and at base of caudal fin

Pollimyrus marianne Kramer, van der Bank, Flint, Sauer-Gürth & Wink 2003 in honor of Marianne Elfriede Kramer, the senior author's mother

Pollimyrus nigricans (Boulenger 1906) Latin for swarthy or blackish, referring to its uniform blackish brown color

Pollimyrus nigripinnis (Boulenger 1899) niger (L.), dark; pinnis, Neo-



Pollimyrus cuandoensis, holotype. Photograph by Bernd Kramer. From: Kramer, L. B., F. H. van der Bank and M. Wink. 2013. Marked differentiation in a new species of dwarf stonebasher, Pollimyrus cuandoensis sp. nov. (Mormyridae: Teleostei), from a contact zone with two sibling species of the Okavango and Zambezi rivers. Journal of Natural History 48 (7-39; [1–35] 429–463. [First published online in 2013; printed volume number and pages added in 2014.] Latin adjective of pinna (L.), fin, referring to its blackish fins

**Pollimyrus osborni (Nichols & Griscom 1917)** in honor of American zoologist Henry Fairfield Osborn (1857–1935), President of the American Museum of Natural History (New York), whose "continuing and inspiring support" led to the "great success" of the authors' Congo Expedition

**Pollimyrus pedunculatus (David & Poll 1937)** Latin for peduncled, referring to the long caudal peduncle of the holotype, its depth 25% of its length (specimens from other locations have shorter, deeper peduncles)

**Pollimyrus petricolus (Daget 1954)** pétra (Gr. πέτρα), rock or stone; -colus (L.), living among, referring to capture of type specimens among falls and rocky stream bottoms

**Pollimyrus plagiostoma (Boulenger 1898)** plágios (Gr. πλάγιος), sideways or oblique; stóma (Gr. στόμα), mouth, allusion not explained, possibly referring to how mouth is located at an angle below front edge of eye

*Pollimyrus pulverulentus* (Boulenger 1899) *pulvereus* (L.), dusty; *-lentus* (L. suffix), full of, referring to olive-brown body speckled with black

**Pollimyrus schreyeni** Poll 1972 in honor of André Schreyen, "collaborateur" (and nephew) of aquarium-fish exporter Pierre Brichard (1921–1990), who collected holotype

*Pollimyrus stappersii* (Boulenger 1915) in honor of Belgian physicianbiologist Jean Hubert Louis Stappers (1883–1916), head of the Belgian mission to the Congo, who led an expedition to lakes Tanganyika and Moero in 1911–1913 and collected holotype

Pollimyrus stappersii kapangae (David 1935) of Kapanga (also spelled Katanga), Zaire (now Shaba, Democratic Republic of the Congo), type locality

**Pollimyrus tumifrons (Boulenger 1902)** *tumi-*, artificially derived from *tumeo* (L.), to swell or be swollen; *frons* (L.), face or brow, probably referring to rounded snout, which strongly projects beyond mouth

# Stomatorhinus Boulenger 1898

stómatos (Gr. στόματος), genitive of stóma (στόμα), mouth; rhinus, from rhinós (Gr. ῥινός), genitive of rhís (ῥίς), nose or snout, referring to posterior nostrils close to rictus of mouth (in all other mormyrid genera posterior nostrils are remote from mouth)

Stomatorhinus ater Pellegrin 1924 Latin for black, presumably referring to the uniform dark-brown coloration of its body and fins

**Stomatorhinus corneti** Boulenger 1899 in honor of Belgian physiciannaturalist Jules Cornet (1865–1929), for his work on the fauna and geology of the Congo

Stomatorhinus fuliginosus Poll 1941 Latin for sooty, probably referring to the uniformly brown coloration of its body and fins

Stomatorhinus humilior Boulenger 1899 Latin for lower or humbler, allusion not explained, perhaps referring to its being smallest species in genus (8 cm TL) known to Boulenger

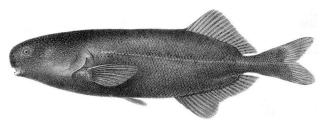
Stomatorhinus ivindoensis Sullivan & Hopkins 2005 -ensis, Latin suffix denoting place: Ivindo River of Gabon, where it is endemic

*Stomatorhinus kununguensis* Poll 1945 *-ensis*, Latin suffix denoting place: Kunungu, Congo River basin, Zaire (now Democratic Republic of the Congo), type locality

**Stomatorhinus microps Boulenger 1898** micro-, from mikrós (Gr μικρός), small; *δ̄ps* (Gr.  $\tilde{\omega}\psi$ ), eye, referring to its extremely small eye

*Stomatorhinus patrizii* Vinciguerra **1928** in honor of Italian entomologist Saverio Patrizi (1902–1957), who collected holotype, and for donating specimens from his Congo expedition to the Museum Civico di Storia Naturale de Genova

Stomatorhinus polli Matthes 1964 in honor of "le grand" Belgian ichthyologist Max Poll (1908–1991), for his guidance of and generous



Stomatorhinus polylepis, holotype. Illustration by Pierre Jacques Smit. From: Boulenger, G. A. 1899. Matériaux pour la faune du Congo. Zoologie.--Série I. Poissons nouveaux du Congo. Quatrième Partie. Polyptères, Clupes, Mormyres, Characins. Annales du Musee du Congo (Ser. Zoology) 1 (fasc. 4): 59–96, Pls. 30–39.

#### assistance to Matthes' work

**Stomatorhinus polylepis Boulenger 1899** polý (Gr. πολύ), many; *lepis* (Gr. λεπίς), scale, referring to greater number of scales on caudal peduncle (20–22) compared with congeners examined by Boulenger

Stomatorhinus puncticulatus Boulenger 1899 Latin for dotted, referring to purplish brown dots over body

*Stomatorhinus schoutedeni* Poll 1945 in honor of Belgian zoologist Henri Schouteden (1881–1972), who collected many new species in the Belgian Congo, including holotype of this one

Stomatorhinus walkeri (Günther 1867) in honor of Robert Bruce Napoleon Walker (1832–1901), English trader, explorer and collector of zoological specimens, who collected holotype

#### Subfamily PETROCEPHALINAE Gill 1862

# Petrocephalus Marcusen 1854

pétra (Gr. πέτρα), rock or stone; *cephalus*, Latinized from *kephalé* (Gr. κεφαλή), head, Latin translation of Arabic vernacular *ras el hagar* ("stonehead"), possibly referring to the short, well-rounded (i.e., stone-like) snout of *P. bane* and *P. bove* 

*Petrocephalus ansorgii* Boulenger 1903 in honor of English explorer and collector William John Ansorge (1850–1913), who collected holotype

**Petrocephalus arnegardi Lavoué & Sullivan 2014** in honor of friend and colleague Matthew E. Arnegard (b. 1967), for contributions to the study of mormyrid evolution and diversification; in addition, Arnegard is a member of the "*Mintotom* Team" of researchers associated with the Carl D. Hopkins Laboratory (Cornell University), who have conducted field studies on African weakly electric fishes for more than 15 years (*Mintotom* is the plural form of the word for mormyrid fish in the Fang language of West Central Africa)

**Petrocephalus balayi** Sauvage 1883 in honor of French explorer and colonial administrator Noel Eugene Balay (1847–1902), who collected holotype

Petrocephalus bane (Lacepède 1803) Arabic name for this species

Petrocephalus bane comoensis de Merona 1979 -ensis, Latin suffix denoting place: Comoé River, Gansé, Ivory Coast, type locality

Petrocephalus bane tchadensis Blache & Miton 1961 -ensis, Latin suffix denoting place: Tchad (French for Chad), referring to Lake Chad basin, type locality

**Petrocephalus binotatus Pellegrin 1924** *bi-*, from *bis* (L.), two; *notatus* (L.), marked, probably referring to dark, round spot at top of dorsal fin and blackish crescents at base of tail

Petrocephalus boboto Lavoué & Sullivan 2014 Lingala (language spoken at type locality) word meaning peace, alluding to the right of all people of the Democratic Republic of the Congo to live in peace and safety

Petrocephalus bovei (Valenciennes 1847) in honor of Nicolas Bové (1812–1841), Luxembourgian gardener, botanist and collector who supplied type material to the Muséum National d'Histoire Naturelle (Paris)

Petrocephalus bovei guineensis Reizer, Mattei & Chevalier 1973 -ensis, Latin suffix denoting place: Guinean region of west Africa, where it is endemic to coastal rivers

**Petrocephalus catostoma (Günther 1866)** cato-, from katá (Gr. κατά), downwards, beneath, below or under; stóma (Gr. στόμα), mouth, probably referring to how cleft of mouth is at lower side of snout

*Petrocephalus christyi* **Boulenger 1920** in honor of Cuthbert Christy (1863–1932), English physician (specializing in sleeping sickness), zoologist, explorer, and Director of the Congo Museum (Tervuren, Belgium), who collected holotype

*Petrocephalus congicus* David & Poll 1937 -*icus* (L.), belonging to: Congo River basin of Zaire (now Democratic Republic of the Congo), where it is endemic

Petrocephalus cunganus Boulenger 1910 - anus (L.), belonging to: cunga, referring to Quanza River at Cunga, Angola, type locality

*Petrocephalus degeni* Boulenger 1906 in honor of Swiss ornithologist Edward Degen (1852–1923), who "utilized his leisure" while serving as an assistant to Prof. E. A. Minchin in Uganda and collected holotype

**Petrocephalus frieli** Lavoué 2012 in honor of ichthyologist John P. Friel, then-curator of the Cornell University Museum of Vertebrates (Ithaca, New York, USA), for his contribution to African ichthyology and for his care of the large collection of African electric fishes at CUMV; he also helped collect holotype

**Petrocephalus gliroides (Vinciguerra 1897)** -oides, Neo-Latin from *eidos* (Gr. είδος), form or shape: *gliris*, genitive of *glis* (L.), dormouse, allusion not explained but with some imagination this fish can be said to resemble a European dormouse *Glis glis* 

**Petrocephalus grandoculis Boulenger 1920** grandis (L.), large; oculus (L.), eye, the diameter of which is included three times in the head length and equal to interocular width

Petrocephalus haullevillii Boulenger 1912 in honor of Alphonse de Haulleville (1860–1938), director, Congo Museum (Tervuren, Belgium)

**Petrocephalus hutereaui (Boulenger 1913)** in honor of Belgian army officer Armand Hutereau (1875–1914), head of a Belgian ethnographic mission to the Congo, who supplied this "beautiful little fish" (translation)

*Petrocephalus keatingii* Boulenger 1901 in honor of British military surgeon Henry Porringer Keatinge (1861–1928), Director of the Government School of Medicine, Cairo

**Petrocephalus leo Lavoué 2016** in honor of Lavoué's son, Léo [presumably a noun in apposition, without the patronymic "i"]

**Petrocephalus levequei Bigorne & Paugy 1990** in honor of French ichthyologist-hydrobiologist Christian Lévêque, ORSTOM (Office de la Recherche Scientifique et Technique d'Outre-Mer), who initiated a research program on the freshwater fishes of west Africa

*Petrocephalus longianalis* Kramer, Bills, Skelton & Wink 2012 *longus* (L.), long; *analis* (L.), anal, referring to higher number of anal-fin rays (30–35) compared with congeners covered in the authors' study

Petrocephalus longicapitis Kramer, Bills, Skelton & Wink 2012 longus (L.), long; capitis (L.), of the head, referring to long head length (25.8–29.6% of SL)

Petrocephalus magnitrunci Kramer, Bills, Skelton & Wink 2012 magnus (L.), great; trunci, from truncus, trunk (i.e., body), described as roundedoval with an egg-like shape

Petrocephalus magnoculis Kramer, Bills, Skelton & Wink 2012 magnus (L.), great; oculus (L.), eye, referring to its large eye diameter (25.9–32.9% of head length)

Petrocephalus mbossou Lavoué, Sullivan & Arnegard 2010 vernacular for Petrocephalus species in the Lingala language, Congo River basin

Petrocephalus microphthalmus Pellegrin 1908 small-eyed, from mikrós

(Gr. μικρός), small, and *ophthalmós* (Gr. ὀφθαλμός), eye, referring to its small eye, 21–24% head length

*Petrocephalus odzalaensis* Lavoué, Sullivan & Arnegard 2010 - *ensis*, Latin suffix denoting place: Odzala National Park, Republic of the Congo, type locality

**Petrocephalus okavangensis Kramer, Bills, Skelton & Wink 2012** -ensis, Latin suffix denoting place: Okavango River drainage, Botswana and Namibia, where it is endemic

Petrocephalus pallidomaculatus Bigorne & Paugy 1990 pallid[us] (L.), pale; maculatus (L.), spotted, referring to barely visible sub-dorsal spot

**Petrocephalus pellegrini Poll 1941** in honor of French ichthyologist Jacques Pellegrin (1873–1944), author of *Poissons des eaux douces de l'Afrique occidentale* 

**Petrocephalus petersi Kramer, Bills, Skelton & Wink 2012** in honor of German zoologist and explorer Wilhelm Peters (1815–1883), who conducted the first major fish survey of the lower Zambezi region (1842–1848) and discovered many endemics and other more-wide-spread species

**Petrocephalus pulsivertens Lavoué, Sullivan & Arnegard 2010** pulsus (L.), impulse or beating; vertens (L.), turning or exchanging, referring to the inverted appearance of its EOD (electric organ discharge) waveform, unique among all *Petrocephalus* recorded to date

**Petrocephalus sauvagii (Boulenger 1887)** in honor of French zoologist Henri Émile Sauvage (1842–1917), "who has added much to our knowledge of the fishes of tropical Africa"

**Petrocephalus schoutedeni Poll 1954** in honor of Belgian zoologist Henri Schouteden (1881–1972), who collected many new species in the Belgian Congo, for the "tireless work he displayed during his long career in the service of science" (translation)

Petrocephalus similis Lavoué 2011 Latin for like or resembling, referring to its resemblance to P. sullivani

Petrocephalus simus Sauvage 1879 Latin for flat- or blunt-nosed, referring to its obliquely truncated snout

**Petrocephalus soudanensis Bigorne & Paugy 1990** -ensis, Latin suffix denoting place: Soudan, French for Sudan, referring to its occurrence in the Sudan geographic region of West Africa

**Petrocephalus squalostoma (Boulenger 1915)** etymology not explained, possibly squalus (L.), a sea-fish, usually applied to sharks; *stóma* (Gr.  $\sigma \tau \delta \mu \alpha$ ), mouth, referring to its mouth, "located under the middle of the eye" (translation), like that of many sharks

Petrocephalus steindachneri Fowler 1958 in honor of Austrian ichthyologist Franz Steindachner (1834–1919), who described this species in 1914 but used a preoccupied name, *P. affinis* Sauvage 1879 (=*Stomatorhinus walkeri*)



Petrocephalus sullivani, live specimen, 109 mm SL. Photograph by Carl D. Hopkins. From: Lavoué, S., C. D. Hopkins and A. Kamdem Toham. 2004. The *Petrocephalus* (Pisces, Osteoglos-somorpha, Mormyridae) of Gabon, Central Africa, with description of a new species. Zoosystema 26 (3): 511–535.

**Petrocephalus stuhlmanni Boulenger 1909** in honor of German zoologist and explorer Franz Ludwig Stuhlmann (1863–1928), who, with Emin Pascha, led the German East Africa Expedition (1889–1892), during which holotype was collected

*Petrocephalus sullivani* Lavoué, Hopkins & Kamdem Toham 2004 in honor of colleague and friend John P. Sullivan (b. 1965), Cornell University Museum of Vertebrates (Ithaca, New York, USA), for his contributions to mormyrid systematics

*Petrocephalus tanensis* Whitehead & Greenwood 1959 -*ensis*, Latin suffix denoting place: Tana River, Kenya, type locality

*Petrocephalus tenuicauda* (Steindachner 1894) *tenuis* (L.), thin or slender; *cauda* (L.), tail, referring to its long and slender caudal peduncle

**Petrocephalus valentini Lavoué, Sullivan & Arnegard 2010** in honor of Valentin Mbossi, *pinassier* [boatman] *extraordinaire* at Odzala National Park (Republic of the Congo), for field assistance, which is "as important as laboratory bench work and analysis when it comes to investigations of electric fish taxonomy, behavior and evolution" (his first name was selected to avoid confusion with *P. mbossou*)

**Petrocephalus wesselsi Kramer & van der Bank 2000** in honor of Pierre Wessels (Johannesburg, South Africa), participant in the authors' expeditions to Caprivi, Namibia, "nature conservationist and good friend"

**Petrocephalus zakoni Lavoué, Sullivan & Arnegard 2010** in honor of zoologist Harold H. Zakon, University of Texas (USA), for his many contributions to neuroethology, inspiring "a new area of research on genes that underlie electrolocation and electrical communication in gymnotiform and mormyroid fishes"