https://doi.org/10.1590/1982-0224-2025-0165

TABLE S1 | Information on each sampling site.

Sites	Tributary name	Latitude	Longitude	Elevation (m)	Stream order
P_01	Gore stream	5.849444	-72.198611	711	1
P_02	Pauto River	5.849444	-72.198611	703	7
P_03	Vayagua stream	5.798800	-72.111376	457	7
P_04	Casanare River	6.205242	-71.477218	150	6
P_05	La Aracalina stream	6.177478	-71.486108	153	4
P_06	Xaguarapo stream	6.176556	-71.592324	166	4
P_07	Guamo stream	6.135694	-71.884694	469	3
P_08	Chire River	6.038035	-71.842031	306	4
P_09	Ariporo River	5.863907	-71.779998	172	6
P_10	Palmarito stream	5.877357	-71.809622	222	4
P_11	La Kruche stream	5.911478	-72.054377	449	5
P_12	La Aguada stream	5.902778	-71.983167	384	3
P_13	La Aguatoca strem	5.435833	-72.449444	476	6
P_14	Nunchía River	5.625560	-72.199170	366	5
P_15	Las Cañas stream	5.617833	-72.225417	364	5
P_16	Tocaría River	5.652694	-72.175280	406	6
P_17	Seco stream	5.066083	-71.975306	139	6
P_18	Cravo Sur River	5.067159	-71.972750	138	8
P_19	La quinchalera stream	4.818307	-73.031353	378	5
P_20	Upía_El secreto River	4.820222	-73.073102	306	6
P_21	Upia_Los mangos River	4.638444	-73.021389	268	6
P_22	Upía_cantaclaro River	4.427917	-72.807417	176	6
P_23	La Viscinaca stream	5.120694	-72.744194	437	4
P_24	Tributary of Caja River	5.043975	-72.752833	382	1
P_25	Caja River	5.044621	-72.753563	369	6
P_26	Cusiana River	4.586930	-71.964902	141	8
P_27	Matero stream	4.690465	-72.127759	189	4
P_28	Mohana stream	5.207699	-72.598028	345	5
P_29	Charte River	5.261083	-72.487167	292	7

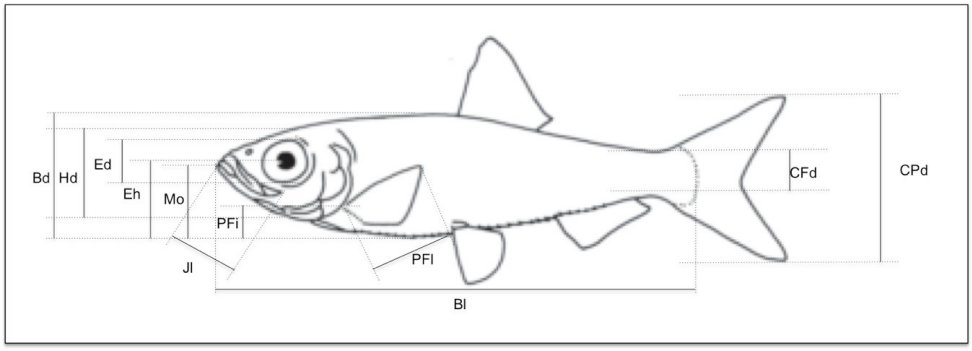

FIGURE S2 | Morphological measurements taken on each fish species. See the code names in Tab. S3.

TABLE S3 | Morphological measurements.

Code	Name	Protocol for measurement
Bl	Body length	Standard length (snout to caudal fin basis)
Bd	Body depth	Maximum body depth
Hd	Head depth	Head depth at the vertical of eye
CPd	Caudal peduncle depth	Minimum depth of the caudal peduncle
CFd	Caudal fin depth	Maximum depth of the caudal fin
Ed	Eye diameter	Vertical diameter of the eye
Eh	Eye position	Vertical distance between the centre of the eye to the bottom of the body
Mo	Oral gape position	Vertical distance from the top of the mouth to the bottom of the body
Jl	Maxillary jaw length	Length from snout to the corner of the mouth
PFl	Pectoral fin length	Length of the longest ray of the pectoral fin
PFi	Pectoral fin position	Vertical distance between the upper insertion of the pectoral fin to the bottom of the body

TABLE S4 | Functional traits related to locomotion and food acquisition.

Functional traits	Code	Formula	Potential link with fish functions
Standart length	LS	*Ls*	Size is linked to metabolism, trophic impacts, locomotion ability, nutrient cycling
Body elongation	BODY_E	*Bl/Bd*	Hydrodynamism
Eye vertical position	EYE_POS	*Eh/Bd*	Position of fish and/or of its prey in the water column
Relative Eye size	EYE_SIZE	*Ed/Hd*	Visual acuity
Oral gape position	ORAL_POS	*Mo/Bd*	Feeding position in the water column
Relative maxillary length	MAX_LEN	*Jl/Hd*	Size of mouth and strength of jaw
Body lateral shape	BODY_SHAP	*Hd/Bd*	Hydrodynamism and head size
Pectoral fin vertical position	PEC_FIN_POS	*PFi/Bd*	Pectoral fin use for swimming
Pectoral fin size	PEC_FIN_SIZE	*PFl/Bd*	Pectoral fin use for swimming
Caudal peduncle throttling	CAUDAL_THROT	*CFd/CPd*	Caudal propulsion efficiency through reduction of drag

TABLE S5 | Species list with taxonomic and functional information.

Order	Family	Species	Abreviature
Characiformes	Acestrorhynchidae	*Acestrorhynchus microlepis*	Ace_micr
Gymnotiformes	Apteronotidae	*Adontosternarchus devenanzii*	Ado_deve
Cichliformes	Cichlidae	*Aequidens metae*	Aeq_meta
Siluriformes	Auchenipteridae	*Ageneiosus magoi*	Age_mago
Siluriformes	Loricariidae	*Ancistrus triradiatus*	Anc_trir
Cichliformes	Cichlidae	*Andinoacara* sp.n.	And_sp.n
Siluriformes	Loricariidae	*Aphanotorolus ammophilus*	Aph_ammo
Siluriformes	Loricariidae	*Aphanotorolus emarginatus*	Aph_emar
Characiformes	Characidae	*Aphyocharax pusillus*	Aph_pusi
Cichliformes	Cichlidae	*Apistogramma macmasteri*	Api_macm
Cichliformes	Cichlidae	*Apistogramma viejita*	Api_viej
Gymnotiformes	Apteronotidae	*Apteronotus galvisi*	Apt_galv
Siluriformes	Astroblepidae	*Astroblepus* sp.	Ast_sp
Characiformes	Acestrorhamphidae	*Astyanax bimaculatus*	Ast_bima
Characiformes	Acestrorhamphidae	*Astyanax integer*	Ast_inte

TABLE S5 | (Continued)

Order	Family	Species	Abreviature
Characiformes	Acestrorhamphidae	*Astyanax metae*	Ast_meta
Characiformes	Acestrorhamphidae	*Astyanax superbus*	Ast_supe
Characiformes	Bryconidae	*Brycon whitei*	Bry_whit
Siluriformes	Aspredinidae	*Bunocephalus amaurus*	Bun_amau
Siluriformes	Heptapteridae	*Cetopsorhamdia orinoco*	Cet_orin
Siluriformes	Heptapteridae	*Cetopsorhamdia picklei*	Cet_pick
Siluriformes	Loricariidae	*Chaetostoma chimu*	Cha_chim
Siluriformes	Loricariidae	*Chaetostoma dorsale*	Cha_dors
Siluriformes	Loricariidae	*Chaetostoma formasae*	Cha_form
Siluriformes	Loricariidae	*Chaetostoma joropo*	Cha_joro
Characiformes	Crenuchidae	*Characidium boavistae*	Cha_boav
Characiformes	Crenuchidae	*Characidium chupa*	Cha_chup
Characiformes	Crenuchidae	*Characidium pteroides*	Cha_pter
Characiformes	Crenuchidae	*Characidium* sp. "G"	Cha_sp"G
Characiformes	Crenuchidae	*Characidium steindachneri*	Cha_stei
Characiformes	Crenuchidae	*Characidium zebra*	Cha_zebr
Characiformes	Characidae	*Charax apurensis*	Cha_apur
Characiformes	Characidae	*Charax metae*	Cha_meta
Characiformes	Characidae	*Charax notulatus*	Cha_notu
Characiformes	Characidae	*Cheirodontops geayi*	Che_geay
Characiformes	Lebiasinidae	*Copella eigenmanni*	Cop_eige
Siluriformes	Callichthyidae	*Corydora septentrionalis*	Cor_sept
Characiformes	Stevardiidae	*Corynopoma riisei*	Cor_riis
Characiformes	Stevardiidae	*Creagrutus atratus*	Cre_atra
Characiformes	Stevardiidae	*Creagrutus bolivari*	Cre_boli
Characiformes	Stevardiidae	*Creagrutus calai*	Cre_cala
Cichliformes	Cichlidae	*Crenicichla geayi*	Cre_geay
Characiformes	Acestrorhamphidae	*Ctenobrycon spilurus*	Cte_spil
Characiformes	Characidae	*Cyanogaster noctivaga*	Cya_noct
Characiformes	Curimatidae	*Cyphocharax oenas*	Cyp_oena
Siluriformes	Auchenipteridae	*Duringlanis romani*	Dur_roma
Gymnotiformes	Sternopygidae	*Eigenmannia macrops*	Eig_macr
Gymnotiformes	Sternopygidae	*Eigenmannia sayona*	Eig_sayo
Characiformes	Triportheidae	*Engraulisoma taeniatum*	Eng_taen
Siluriformes	Loricariidae	*Farlowella acus*	Far_acus
Siluriformes	Loricariidae	*Farlowella mariaelenae*	Far_mari
Siluriformes	Loricariidae	*Farlowella vittata*	Far_vitt
Characiformes	Stevardiidae	*Gephyrocharax valencia*	Gep_vale
Characiformes	Acestrorhamphidae	*Gymnocorymbus bondi*	Gym_bond
Characiformes	Stevardiidae	*Hemibrycon metae*	Hem_meta
Characiformes	Stevardiidae	*Hemigrammus barrigonae*	Hem_barr
Characiformes	Hemiodontidae	*Hemiodus argenteus*	Hem_arge
Characiformes	Erythrinidae	*Hoplerythrinus unitaeniatus*	Hop_unit
Characiformes	Erythrinidae	*Hoplias malabaricus*	Hop_mala
Siluriformes	Callichthyidae	*Hoplisoma axelrodi*	Hop_axel
Siluriformes	Callichthyidae	*Hoplisoma habrosus*	Hop_habr
Characiformes	Acestrorhamphidae	*Hyphessobrycon agulha*	Hyp_agul
Characiformes	Acestrorhamphidae	*Hyphessobrycon metae*	Hyp_meta
Characiformes	Acestrorhamphidae	*Hyphessobrycon ocoae*	Hyp_ocoa
Siluriformes	Loricariidae	*Hypoptopoma machadoi*	Hyp_mach
Siluriformes	Loricariidae	*Hypostomus niceforoi*	Hyp_nice
Siluriformes	Loricariidae	*Hypostomus plecostomoides*	Hyp_plec
Siluriformes	Heptapteridae	*Imparfinis pseudonemacheir*	Imp_pseu
Siluriformes	Heptapteridae	*Imparfinis robustus*	Imp_robu

TABLE S5 | (Continued)

Order	Family	Species	Abreviature
Characiformes	Stevardiidae	*Knodus alpha*	Kno_alph
Characiformes	Stevardiidae	*Knodus cismontanus*	Kno_cism
Characiformes	Stevardiidae	*Knodus deuterodonoides*	Kno_deut
Characiformes	Stevardiidae	*Knodus* sp.1	Kno_sp1
Siluriformes	Loricariidae	*Lamontichthys llanero*	Lam_llan
Siluriformes	Loricariidae	*Lasiancistrus tentaculatus*	Las_tent
Characiformes	Lebiasinidae	*Lebiasina erythrinoides*	Leb_eryt
Characiformes	Anostomidae	*Leporellus vittatus*	Lep_vitt
Characiformes	Anostomidae	*Leporinus friderici*	Lep_frid
Characiformes	Anostomidae	*Leporinus* sp.1	Lep_sp1
Characiformes	Anostomidae	*Leporinus striatus*	Lep_stri
Characiformes	Anostomidae	*Leporinus yophorus*	Lep_yoph
Siluriformes	Doradidae	*Leptodoras nelsoni*	Lep_nels
Siluriformes	Loricariidae	*Limatulichthys griseus*	Lim_gris
Siluriformes	Pseudopimelodidae	*Lophiosilurus apurensis*	Lop_apur
Siluriformes	Loricariidae	*Loricaria cataphracta*	Lor_cata
Siluriformes	Loricariidae	*Loricariichthys brunneus*	Lor_brun
Characiformes	Stevardiidae	*Markiana geayi*	Mar_geay
Siluriformes	Pimelodidae	*Megalonema platycephalum*	Meg_plat
Characiformes	Crenuchidae	*Melanocharacidium dispilomma*	Mel_disp
Siluriformes	Pseudopimelodidae	*Microglanis iheringi*	Mic_iher
Characiformes	Acestrorhamphidae	*Moenkhausia dichroura*	Moe_dich
Characiformes	Acestrorhamphidae	*Moenkhausia gracilima*	Moe_grac
Siluriformes	Loricariidae	*Nannoptopoma spectabile*	Nan_spec
Siluriformes	Trichomycteridae	*Ochmacanthus alternus*	Och_alte
Characiformes	Characidae	*Odontostilbe splendida*	Odo_sple
Siluriformes	Loricariidae	*Otocinclus vittatus*	Oto_vitt
Characiformes	Characidae	*Paragoniates alburnus*	Par_albu
Characiformes	Parodontidae	*Parodon apolinari*	Par_apol
Characiformes	Characidae	*Phenacogaster maculoblonga*	Phe_macu
Siluriformes	Heptapteridae	*Pimelodella gracilis*	Pim_grac
Siluriformes	Heptapteridae	*Pimelodella metae*	Pim_meta
Siluriformes	Heptapteridae	*Pimelodella* sp.1	Pim_sp1
Siluriformes	Pimelodidae	*Pimelodus albofasciatus*	Pim_albo
Siluriformes	Pimelodidae	*Pimelodus blochii*	Pim_bloc
Siluriformes	Pimelodidae	*Pimelodus ornatus*	Pim_orna
Siluriformes	Doradidae	*Platydoras armatulus*	Pla_arma
Cyprinodontiformes	Poeciliidae	*Poecilia caucana*	Poe_cauc
Characiformes	Acestrorhamphidae	*Poptella compressa*	Pop_comp
Characiformes	Prochilodontidae	*Prochilodus mariae*	Pro_mari
Siluriformes	Aspredinidae	*Pseudobunocephalus lundbergi*	Pse_lund
Siluriformes	Pimelodidae	*Pseudoplatystoma orinocoense*	Pse_orin
Siluriformes	Trichomycteridae	*Pseudostegophilus haemomyzon*	Pse_haem
Characiformes	Characidae	*Ramirizella newboldi*	Ram_newb
Siluriformes	Heptapteridae	*Rhamdia laukidi*	Rha_lauk
Siluriformes	Loricariidae	*Rineloricaria eigenmanni*	Rin_eige
Siluriformes	Loricariidae	*Rineloricaria lanceolata*	Rin_lanc
Characiformes	Bryconidae	*Salminus iquitensis*	Sal_iqui
Characiformes	Anostomidae	*Schizodon scotorhabdotus*	Sch_scot
Siluriformes	Trichomycteridae	*Schultzichthys bondi*	Sch_bond
Characiformes	Serrasalmidae	*Serrasalmus irritans*	Ser_irri
Siluriformes	Loricariidae	*Spatuloricaria terracanticum*	Spa_terr
Characiformes	Curimatidae	*Steindachnerina argentea*	Ste_arge

TABLE S5 | (Continued)

Order	Family	Species	Abreviature
Characiformes	Curimatidae	*Steindachnerina pupula*	Ste_pupu
Gymnotiformes	Sternopygidae	*Sternopygus macrurus*	Ste_macr
Siluriformes	Loricariidae	*Sturisoma tenuirostre*	Stu_tenu
Characiformes	Characidae	*Tetragonopterus argenteus*	Tet_arge
Characiformes	Gasteropelecidae	*Thoracocharax stellatus*	Tho_stel
Siluriformes	Auchenipteridae	*Trachelyopterus galeatus*	Tra_gale
Characiformes	Triportheidae	*Triportheus venezuelensis*	Tri_vene
Siluriformes	Trichomycteridae	*Vandellia beccarii*	Van_becc
Characiformes	Characidae	*Xenagoniates bondi*	Xen_bond

TABLE S6 | Results of the TITAN analysis by species. Species abbreviations are provided in Tab. S5.

	i env.cp	zenv.cp	freq	maxgrp	IndVal	zscore	5%	10%	50%	90%	95%	purity	reliability	z.median	filter
Aeq_meta	205.5	205.5	4	1	30.58	2.57	169.000	169.00	205.50	459.00	463.000	0.799	0.586	3.229.142	0
Anc_trir	472.5	205.5	7	1	21.33	0.10	141.000	162.35	325.50	453.00	453.000	0.549	0.336	1.839.289	0
And_sp.n	325.5	325.5	6	2	30.85	1.81	165.925	305.30	335.00	443.00	443.000	0.861	0.541	2.347.432	0
Aph_emar	145.5	151.5	3	1	75.00	10.59	144.500	145.50	150.00	169.00	174.000	0.968	0.807	8.516.415	0
Aph_pusi	151.5	151.5	7	1	94.70	7.43	147.000	151.50	174.00	257.00	257.000	1.000	0.996	7.810.818	1
Api_viej	245.0	245.0	4	1	40.00	4.15	169.000	171.90	245.00	264.00	268.000	0.989	0.803	4.239.493	0
Apt_galv	159.5	365.0	5	2	19.18	0.40	169.000	205.50	365.00	416.90	453.000	0.591	0.223	1.536.203	0
Ast_bima	145.5	174.0	15	1	44.79	0.73	140.000	140.00	245.00	383.00	453.000	0.795	0.563	2.210.826	0
Ast_inte	383.0	383.0	10	2	52.29	2.67	169.000	180.50	370.50	392.00	407.500	0.943	0.843	3.450.810	0
Ast_meta	373.5	380.0	11	2	68.60	5.08	287.000	287.00	373.50	421.50	427.500	1.000	0.998	5.742.685	2
Bun_amau	169.0	205.5	4	1	44.44	4.77	162.500	162.50	205.50	240.50	245.125	0.991	0.879	5.229.140	0
Cha_chim	280.0	280.0	5	2	27.78	1.70	257.000	257.00	367.50	453.00	472.500	0.908	0.544	2.570.752	0
Cha_dors	280.0	280.0	6	2	33.33	1.66	240.500	257.00	306.00	381.00	395.000	0.869	0.535	2.140.438	0
Cha_meta	205.5	205.5	4	2	20.00	0.82	199.000	205.50	335.00	382.00	421.500	0.616	0.197	1.473.796	0
Cha_pter	245.0	245.0	4	1	40.00	3.74	169.000	169.00	245.00	264.00	264.000	0.988	0.806	4.093.586	0
Cha_sp.G	169.0	245.0	7	1	59.27	4.63	140.000	144.50	245.00	325.50	325.500	1.000	0.977	5.799.773	1
Cha_stei	280.0	280.0	5	2	27.78	1.77	240.500	257.00	287.00	383.00	421.500	0.812	0.296	1.930.753	0
Che_geay	306.0	306.0	8	1	61.54	4.20	182.500	189.00	306.00	335.00	335.000	0.995	0.975	4.458.960	1
Cor_riis	354.5	354.5	8	2	40.84	2.30	287.000	299.00	354.50	420.60	443.000	0.911	0.694	2.619.679	0
Cre_boli	169.0	169.0	3	2	13.04	0.01	172.000	174.00	357.00	427.50	443.000	0.468	0.216	1.457.010	0
Cre_cala	245.0	245.0	10	2	52.63	2.81	228.500	228.50	299.00	374.00	443.000	0.937	0.888	3.077.037	0
Cre_geay	367.5	367.5	9	2	48.92	3.58	169.000	337.50	367.50	421.50	453.000	0.922	0.841	3.854.848	0
Cte_spil	169.0	245.0	7	1	70.00	6.21	157.925	163.00	245.00	264.00	264.000	1.000	0.994	7.137.308	1
Cya_noct	145.5	169.0	3	1	50.00	6.36	140.000	140.00	162.50	174.00	182.500	0.961	0.792	6.192.828	0
Cyp_oena	205.5	205.5	4	1	44.44	4.69	162.500	164.50	205.50	240.50	240.500	0.986	0.862	4.938.573	0
Far_acus	395.0	395.0	4	2	34.24	2.90	287.000	299.00	395.00	443.00	443.000	0.945	0.585	3.240.820	0
Far_mari	145.5	145.5	5	1	93.53	6.80	144.500	145.50	180.50	199.00	222.000	0.997	0.957	7.034.684	1
Far_vitt	145.5	145.5	6	1	52.82	3.19	140.000	140.00	174.00	375.50	395.000	0.883	0.688	3.334.412	0
Gep_vale	299.0	299.0	12	1	68.71	5.01	145.450	174.00	299.00	306.50	318.500	0.996	0.975	5.216.169	1
Hem_barr	159.5	380.0	6	2	22.43	0.33	182.500	228.50	377.25	463.00	463.000	0.605	0.405	1.739.772	0
Hem_meta	365.0	365.0	10	2	67.97	4.98	305.400	336.00	365.00	383.00	394.000	0.998	0.990	5.161.009	2
Hop_mala	169.0	205.5	6	1	27.55	1.11	159.500	169.00	205.50	383.00	437.000	0.749	0.452	1.907.107	0
Hyp_nice	169.0	169.0	6	1	30.10	1.31	162.500	169.00	205.50	406.00	449.200	0.760	0.459	1.985.073	0
Hyp_ocoa	280.0	280.0	9	1	51.94	3.06	145.975	162.50	280.00	299.00	373.500	0.943	0.804	3.143.402	0
Hyp_plec	205.5	205.5	5	1	42.33	3.64	140.000	146.00	205.50	280.70	380.000	0.967	0.731	4.002.576	0

TABLE S6 | (Continued)

	i.env.cp	z.env.cp	freq	maxgrp	IndVal	zscore	5%	10%	50%	90%	95%	purity	reliability	z.median	filter
Kno_alph	463.0	354.5	13	2	48.71	1.62	199.000	205.50	355.50	463.00	463.000	0.758	0.697	2.389.710	0
Kno_cism	145.5	145.5	5	1	22.76	0.20	140.000	140.00	354.50	453.00	453.000	0.509	0.442	1.913.061	0
Kno_deut	472.5	245.0	16	2	71.63	3.58	222.000	228.50	245.00	462.50	472.500	0.982	0.963	3.892.322	2
Kno_sp1	299.0	299.0	3	2	17.65	1.16	173.900	287.00	357.00	421.50	421.500	0.744	0.190	1.533.295	0
Las_tent	174.0	174.0	4	1	25.35	1.24	140.000	141.00	180.50	380.00	380.050	0.809	0.347	2.141.486	0
Leb_eryt	443.0	443.0	3	2	50.00	6.22	374.000	406.00	443.00	476.00	703.000	0.955	0.780	5.525.436	0
Lep_frid	169.0	245.0	4	1	40.00	4.25	139.975	162.50	177.50	257.00	268.000	0.987	0.822	5.090.936	0
Lor_brun	280.0	280.0	7	1	52.75	3.99	153.500	240.50	280.00	287.00	306.500	0.983	0.903	4.203.757	0
Mar_geay	174.0	205.5	5	1	55.56	5.28	171.000	171.00	205.50	239.00	245.000	0.995	0.941	5.852.136	0
Mic_iher	169.0	169.0	3	1	50.00	6.53	139.000	143.70	169.00	177.50	194.000	0.953	0.768	5.528.122	0
Moe_grac	174.0	169.0	5	1	65.66	7.17	140.000	140.00	174.00	194.00	197.000	0.995	0.960	7.225.536	1
Och_alte	169.0	280.0	7	1	40.74	2.54	162.500	169.00	280.00	367.50	372.000	0.957	0.732	3.167.782	0
Odo_sple	306.0	306.0	13	1	100.00	7.29	247.500	264.00	299.00	325.50	328.000	1.000	1.000	7.459.875	1
Oto_vitt	205.5	205.5	3	1	33.33	3.66	162.500	169.00	205.50	229.00	240.500	0.960	0.667	3.885.371	0
Par_albu	145.5	245.0	7	1	57.67	4.59	145.500	145.50	245.00	264.00	264.000	0.995	0.956	5.304.627	1
Par_apol	280.0	280.0	10	2	55.56	3.43	240.500	257.00	287.00	427.50	443.000	0.994	0.956	4.129.292	2
Pim_bloc	151.5	151.5	3	1	48.70	4.84	140.000	146.00	158.00	257.00	264.000	0.967	0.677	4.529.314	0
Pim_grac	145.5	145.5	3	1	65.82	5.49	140.000	140.00	151.50	199.00	205.500	0.959	0.734	5.484.609	0
Pim_meta	169.0	169.0	4	1	48.73	4.49	139.000	145.50	171.00	257.00	264.000	0.987	0.840	5.123.157	0
Poe_cauc	205.5	205.5	6	2	30.00	1.47	199.000	199.00	289.50	380.00	407.600	0.590	0.316	1.858.533	0
Pro_mari	159.5	159.5	4	1	30.48	1.65	145.500	156.50	171.00	373.50	375.500	0.877	0.391	2.398.278	0
Pse_lund	205.5	205.5	3	1	33.33	3.86	162.500	169.00	205.50	240.50	245.000	0.959	0.670	3.965.327	0
Rin_eige	169.0	169.0	5	1	64.27	5.95	140.000	141.00	171.00	228.50	240.500	0.994	0.952	6.663.336	1
Sal_iqui	325.5	325.5	3	1	21.43	2.16	151.500	151.50	325.50	335.00	336.000	0.867	0.288	2.085.254	0
Sch_bond	174.0	174.0	3	1	42.86	4.93	139.000	146.00	174.00	182.85	197.000	0.956	0.751	5.235.132	0
Spa_terr	145.5	145.5	4	1	98.73	8.19	144.500	145.50	150.00	189.00	199.000	0.991	0.895	7.520.387	0
Ste_arge	169.0	280.0	12	1	55.05	3.17	140.000	162.50	257.00	423.05	453.000	0.975	0.886	3.929.646	0
Ste_macr	174.0	174.0	4	1	23.57	1.14	171.000	174.00	220.00	383.00	395.000	0.671	0.337	1.821.902	0
Ste_pupu	174.0	174.0	8	1	83.19	6.71	164.500	169.50	174.00	280.00	280.000	0.999	0.989	6.902.090	1
Tho_stel	174.0	169.0	5	1	66.42	6.85	164.500	169.00	174.00	197.00	205.500	0.998	0.964	6.987.235	1
Xen_bond	174.0	174.0	6	1	70.53	6.14	140.000	164.50	177.50	257.00	264.000	0.999	0.979	6.949.645	1

Neotropical Ichthyology

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