TABLE S1 | Taxonomic classification and life-history attributes of fish species from the Madeira River. The table includes habitat use maximum standard length (SL_Max), and population-level size at 50% maturity (L_{50} pop). Parental care categories follow Winemiller (1989), ranging from no parental care (score 1) to prolonged care by one or both parents (score 6). An asterisk indicates the first recorded maximum length for a given species. NA indicates data not available, and NI indicates traits that were not possible to measure.

Order	Family	Species	Catalog numbers of voucher specimens	Trophic category	Trophic level	SL_Max	SL_Max_Female	SL_Max_Male	L50_pop	L50_fem	L50_male
Characiformes	Acestrorhynchidae	*Acestrorhynchus* cf. *pantaneiro*	UFRO-I 1705, 1735, 1859, 1996	Piscivore	3.0	302.00	282.00	302.00	NI	182.00	180.00
Characiformes	Acestrorhynchidae	*Acestrorhynchus falcirostris*	UFRO-I 1823, 2025 e 3407	Piscivore	3.0	450.00	450.00	336.00	NI	209.00	172.00
Characiformes	Acestrorhynchidae	*Acestrorhynchus heterolepis*	UFRO-I 1389, 3144	Piscivore	3.0	408.00	408.00	323.00	NI	162.00	192.00
Characiformes	Acestrorhynchidae	*Acestrorhynchus microlepis*	UFRO-I 1964, 2020, 2051	Piscivore	3.0	315.00	295.00	315.00	100.1	100.00	139.00
Characiformes	Alestidae	*Chalceus epakros*	UFRO-I 8573, 8593	Insectivore	2.0	151.00	142.00	151.00		NA	NA
Characiformes	Alestidae	*Chalceus guaporensis*	UFRO-I 258, 762	Insectivore	2.0	174.00	172.00	157.00	NI	136.00	107.00
Characiformes	Anostomidae	*Laemolyta proxima*	UFRO-I 7693	Herbivore	1.0	285.00	270.00	285.00	114.8	105.00	162.00
Characiformes	Anostomidae	*Laemolyta taeniata*	UFRO-I 439	Omnivore	1.5	245.00	245.00	189.00		179.00	156.00
Characiformes	Anostomidae	*Leporinus fasciatus*	UFRO-I 7702	Omnivore	1.5	305.00	305.00	245.00		198.00	100.00
Characiformes	Anostomidae	*Leporinus friderici*	UFRO-I 43, 7698	Herbivore	1.0	330.00	322.00	330.00	116.6	100.00	108.00
Characiformes	Anostomidae	*Rhytiodus argenteofuscus*	UFRO-I 109	Perifitivore	1.0	328.00	328.00	272.00	NI	230.00	NA
Characiformes	Anostomidae	*Rhytiodus microlepis*	UFRO-I 1754	Herbivore	1.0	332.00	309.00	315.00		284.00	NA
Characiformes	Anostomidae	*Schizodon fasciatus*	UFRO-I 1079	Herbivore	1.0	370.00	370.00	317.00	119.9	136.00	120.00
Characiformes	Bryconidae	*Brycon amazonicus*	UFRO-I 346–47, 603, 2153, 5476, 6775, 6777, 7241, 7247, 7411, 7422, 8404, 9603, 9980, 14045	Omnivore	1.5	406.00	406.00	362.00		320.00	342.00
Characiformes	Bryconidae	*Brycon melanopterus*	UFRO-I 1109, 1245, 8283, 9756, 9825, 9968	Omnivore	1.5	380.00	352.00	380.00		250.00	228.00
Characiformes	Bryconidae	*Bryconops alburnoides*	UFRO-I 253, 776, 1052, 1239, 3511, 3561, 4187, 5538, 5544, 6716, 6896–97, 8279, 8733, 8754, 12186, 12829, 12924	Insectivore	2.0	150.00	150.00	129.00	NI	85.00	116.00
Characiformes	Characidae	*Roeboides affinis*	UFRO-I 801, 7122, 7295, 8541, 12623	Piscivore	3.0	108.00	103.00	100.00		76.00	NA
Characiformes	Characidae	*Roeboides myersi*	UFRO-I 365, 8268, 9823, 10103, 10115, 12548	Piscivore	3.0	167.00	167.00	152.00	NI	132.00	127.00
Characiformes	Ctenoluciidae	*Boulengerella cuvieri*	UFRO-I 4961, 8513	Piscivore	3.0	444.00	352.00	350.00		NA	NA
Characiformes	Ctenoluciidae	*Boulengerella maculata*	UFRO-I 8514, 9092	Piscivore	3.0	299.00	280.00	299.00	NI	235.00	229.00
Characiformes	Curimatidae	*Curimata roseni*	UFRO-I 8329, 8331, 8339, 8343	Detritivore	1.0	195.00	190.00	195.00	NI	159.00	110.00

TABLE S1 | (Continued)

Order	Family	Species	Catalog numbers of voucher specimens	Trophic category	Trophic level	SL_Max	SL_Max_Female	SL_Max_Male	L50_pop	L50_fem	L50_male
Characiformes	Curimatidae	*Curimata vittata*	UFRO-I 2041	Detritivore	1.0	196.00	196.00	182.00		86.00	112.00
Characiformes	Curimatidae	*Curimatella alburna*	UFRO-I 8333, 8344, 8345, 8347	Detritivore	1.0	195.00	188.00	195.00	NI	66.00	68.00
Characiformes	Curimatidae	*Curimatella meyeri*	UFRO-I 4496	Detritivore	1.0	172.00	165.00	166.00		112.00	82.00
Characiformes	Curimatidae	*Cyphocharax notatus*	UFRO-I 901	Detritivore	1.0	147.00	147.00	132.00		70.00	111.00
Characiformes	Curimatidae	*Potamorhina altamazonica*	UFRO-I 1243, 3388	Detritivore	1.0	252.00	250.00	232.00	108.9	113.00	116.00
Characiformes	Curimatidae	*Potamorhina latior*	UFRO-I 1989, 8348	Detritivore	1.0	240.00	240.00	216.00	98.6	112.00	117.00
Characiformes	Curimatidae	*Psectrogaster amazonica*	UFRO-I 1746, 2015	Detritivore	1.0	213.00	198.00	213.00	NI	112.00	100.00
Characiformes	Curimatidae	*Psectrogaster rutiloides*	UFRO-I 3451	Detritivore	1.0	221.00	173.00	221.00	87.6	102.00	102.00
Characiformes	Curimatidae	*Steindachnerina bimaculata*	UFRO-I 805, 8341	Detritivore	1.0	173.00	173.00	172.00	NI	93.00	94.00
Characiformes	Cynodontidae	*Cynodon gibbus*	UFRO-I 8124, 8129, 8699	Piscivore	3.0	350.00	322.00	350.00	NI	170.00	142.00
Characiformes	Cynodontidae	*Hydrolycus armatus*	UFRO-I 9078, 10279	Piscivore	3.0	750.00	750.00	620.00		750.00	200.00
Characiformes	Cynodontidae	*Hydrolycus scomberoides*	UFRO-I 10157, 10479	Piscivore	3.0	467.00	467.00	286.00	NI	190.00	181.00
Characiformes	Cynodontidae	*Rhaphiodon vulpinus*	UFRO-I 518, 520	Piscivore	3.0	919.00	846.00	919.00	NI	245.00	264.00
Characiformes	Cynodontidae	*Roestes molossus*	UFRO-I 6535	Carnivore	2.5	216.00	216.00	192.00		139.00	105.00
Characiformes	Erythrinidae	*Hoplias malabaricus*	UFRO-I 2536, 7119, 7920	Piscivore	3.0	403.00	382.00	352.00	NI	200.00	286.00
Characiformes	Hemiodontidae	*Anodus elongatus*	UFRO-I 458–9, 905, 1219, 1763, 1780, 7823, 7825–26, 7828–29	Omnivore	1.5	260.00	260.00	260.00	NI	189.00	163.00
Characiformes	Hemiodontidae	*Anodus orinocensis*	UFRO-I 1235, 3838	Planctivore	2.0	284.00	267.00	284.00	NI	142.00	181.00
Characiformes	Hemiodontidae	*Hemiodus immaculatus*	UFRO-I 4547, 7822	Herbivore	1.0	220.00	217.00	220.00	NI	162.00	145.00
Characiformes	Hemiodontidae	*Hemiodus microlepis*	UFRO-I 904, 1495	Perifitivore	1.0	213.00	213.00	200.00	NI	116.00	113.00
Characiformes	Hemiodontidae	*Hemiodus* sp. "rabo de fogo"	UFRO-I 34, 1263, 7821	Omnivore	1.5	219.00	219.00	219.00		129.00	153.00
Characiformes	Hemiodontidae	*Hemiodus unimaculatus*	UFRO-I 708, 4454, 7813	Perifitivore	1.0	250.00	250.00	192.00	97.2	108.00	NA
Characiformes	Prochilodontidae	*Prochilodus nigricans*	UFRO-I 1951, 8773	Detritivore	1.0	382.00	358.00	382.00	138.9	149.00	186.00
Characiformes	Prochilodontidae	*Semaprochilodus insignis*	UFRO-I 1952, 9883, 10029	Detritivore	1.0	290.00	290.00	258.00	NI	164.00	169.00
Characiformes	Prochilodontidae	*Semaprochilodus taeniurus*	UFRO-I 1764, 8644, 9637	Detritivore	1.0	224.00	219.00	224.00		185.00	169.00
Characiformes	Serrasalmidae	*Metynnis guaporensis*	UFRO-I 407, 759, 924, 1692, 3238, 4188, 5396, 5399, 6835, 8221	Herbivore	1.0	160.00	160.00	143.00	NI	100.00	90.00
Characiformes	Serrasalmidae	*Metynnis lippincottianus*	UFRO-409	Herbivore	1.0	164.00	164.00	142.00	NI	116.00	112.00
Characiformes	Serrasalmidae	*Metynnis luna*	UFRO-I 410, 1683, 2384, 4548, 4960, 4979, 5184, 5393, 5452, 6537, 7399, 8282, 8472	Herbivore	1.0	129.00	129.00	113.00		105.00	80.00

TABLE S1 | (Continued)

Order	Family	Species	Catalog numbers of voucher specimens	Trophic category	Trophic level	SL_Max	SL_Max_Female	SL_Max_Male	L50_pop	L50_fem	L50_male
Characiformes	Serrasalmidae	*Myleus setiger*	UFRO-I 2979, 3245, 3472, 3475, 4255, 4282, 4946, 4948, 4957, 4959, 4963–64, 4966, 4969, 4971–73, 4976, 5397, 5655–56	Herbivore	1.0	230.00	230.00	170.00		133.00	129.00
Characiformes	Serrasalmidae	*Myloplus asterias*	UFRO-I 1055, 1067, 4283, 4292, 4945, 4949, 4961, 4965, 4974–75, 5080–81, 6735	Herbivore	1.0	191.00	178.00	174.00		145.00	143.00
Characiformes	Serrasalmidae	*Mylossoma albiscopum*	UFRO-I 1082, 1258, 3447, 4941–44, 4951, 4955–56, 4958, 5144, 5315, 5392	Herbivore	1.0	254.00	249.00	230.00	82.5	114.00	105.00
Characiformes	Serrasalmidae	*Mylossoma aureum*	UFRO-I 1137, 3464, 4552, 4553, 4747, 4954, 4970, 4980, 5451, 8689, 9080, 13555	Herbivore	1.0	262.00	262.00	157.00	NI	116.00	99.00
Characiformes	Serrasalmidae	*Piaractus brachypomus*	UFRO-I 1958	Herbivore	1.0	547.00	165.00	547.00		130.00	NA
Characiformes	Serrasalmidae	*Pygocentrus nattereri*	UFRO-I 1957, 2934, 3560, 4125, 5082, 5341, 5346, 6929, 6976, 7063, 8136, 8719, 8953, 13074	Piscivore	3.0	215.00	215.00	209.00	92.1	106.00	105.00
Characiformes	Serrasalmidae	*Serrasalmus compressus*	UFRO-I 13325	Piscivore	3.0	188.00	188.00	162.00	NI	128.00	130.00
Characiformes	Serrasalmidae	*Serrasalmus eigenmanni*	UFRO-I 382	Piscivore	3.0	196.00	196.00	176.00		120.00	99.00
Characiformes	Serrasalmidae	*Serrasalmus elongatus*	UFRO-I 1807, 2034, 3541, 3717, 3725, 3728, 5465, 7147, 8040, 8088, 8792, 13266	Piscivore	3.0	260.00	260.00	260.00		105.00	105.00
Characiformes	Serrasalmidae	*Serrasalmus hollandi*	UFRO-I 8222, 10097	Piscivore	3.0	172.00	172.00	158.00		122.00	112.00
Characiformes	Serrasalmidae	*Serrasalmus maculatus*	UFRO-I 1128, 3919, 9389, 9850	Piscivore	3.0	188.00	188.00	181.00		107.00	92.00
Characiformes	Serrasalmidae	*Serrasalmus rhombeus*	UFRO-I 3671, 8746, 13252	Piscivore	3.0	310.00	300.00	310.00	88	107.00	102.00
Characiformes	Serrasalmidae	*Serrasalmus spilopleura*	UFRO-I 3242	Piscivore	3.0	190.00	178.00	173.00		111.00	117.00
Characiformes	Triportheidae	*Triportheus albus*	UFRO-I 1410, 1487, 1493, 1517, 3618, 3697, 4113, 4748, 5471, 6851, 6995, 13941	Insectivore	2.0	239.00	220.00	239.00	88.3	100.00	122.00

TABLE S1 | (Continued)

Order	Family	Species	Catalog numbers of voucher specimens	Trophic category	Trophic level	SL_Max	SL_Max_Female	SL_Max_Male	L50_pop	L50_fem	L50_male
Characiformes	Triportheidae	*Triportheus angulatus*	UFRO-I 1436, 2017, 3617, 3679, 4173, 5113, 5518, 5532, 5557, 5584, 5590, 6858, 7054, 8680, 8716, 10462, 10475.	Omnivore	1.5	235.00	235.00	195.00	101.4	77.00	70.00
Characiformes	Triportheidae	*Triportheus auritus*	UFRO-I 5582, 5289, 6733, 10056	Omnivore	1.5	310.00	297.00	310.00	92.1	125.00	131.00
Cichliformes	Cichlidae	*Astronotus crassipinnis*	UFRO-I 758, 1132, 1704, 1802, 2232, 3790	Omnivore	1.5	225.00	225.00	210.00		71.00	NA
Cichliformes	Cichlidae	*Biotodoma cupido*	UFRO-I 4310, 10177, 13533	Invertivore	2.0	181.00	181.00	117.00		86.00	NA
Cichliformes	Cichlidae	*Chaetobranchus flavescens*	UFRO-I 1715	Planctivore	2.0	207.00	160.00	195.00		95.00	168.00
Cichliformes	Cichlidae	*Cichla pleiozona*	UFRO-I 390, 1790, 1804, 7874, 7886	Piscivore	3.0	442.00	360.00	442.00	NI	193.00	187.00
Cichliformes	Cichlidae	*Geophagus megasema*	UFRO-I 7883	Omnivore	1.5	222.00	189.00	222.00	NI	122.00	129.00
Cichliformes	Cichlidae	*Heros spurius*	UFRO-I 7847, 7868, 7885, 8003, 8007, 8258	Omnivore	1.5	150.00	138.00	150.00	NI	105.00	133.00
Cichliformes	Cichlidae	*Mesonauta festivus*	UFRO-I 2315, 2469, 8011, 8017, 8019–23	Omnivore	1.5	121.00	112.00	121.00		69.00	NA
Cichliformes	Cichlidae	*Satanoperca jurupari*	UFRO-I 785556, 7869, 7872, 7877, 7881–82, 7884	Invertivore	2.0	184.00	169.00	184.00	NI	97.00	119.00
Clupeiformes	Engraulidae	*Jurengraulis juruensis*	UFRO-I 72, 1229, 7682	Carnivore	2.5	155.00	154.00	155.00		120.00	130.00
Clupeiformes	Engraulidae	*Lycengraulis batesii*	UFRO-I 1221, 7680, 7681	Carnivore	2.5	182.00	176.00	160.00		124.00	NA
Clupeiformes	Pristigasteridae	*Ilisha amazonica*	UFRO-I 1138, 1220, 1246	Carnivore	2.5	197.00	197.00	160.00		147.00	142.00
Clupeiformes	Pristigasteridae	*Pellona castelnaeana*	UFRO-I 1061, 4868, 7685–86	Piscivore	3.0	609.00	609.00	495.00		160.00	150.00
Clupeiformes	Pristigasteridae	*Pellona flavipinnis*	UFRO-I 814, 1690, 4865	Piscivore	3.0	443.00	443.00	435.00		210.00	163.00
Gymnotiformes	Rhamphichthyidae	*Rhamphichthys pantherinus**	UFRO-I 552, 840, 1812, 2048, 6363, 8686, 9076, 10043, 10162, 10217, 10448, 10500, 10704, 11311, 12208, 12224–26, 12370, 12976, 13058, 13341	Invertivore	2.0	990.00	800.00	920.00		NA	NA
Perciformes	Sciaenidae	*Plagioscion squamosissimus*	UFRO-I 886, 1081, 1227	Piscivore	3.0	425.00	425.00	415.00	NI	175.00	201.00
Pleuronectiformes	Achiridae	*Hypoclinemus mentalis*	UFRO-I 1532, 337	Carnivore	2.5	216.00	216.00	153.00	NI	152.00	108.00
Siluriformes	Auchenipteridae	*Ageneiosus inermis*	UFRO-I 8711	Piscivore	3.0	450.00	450.00	362.00	NI	245.00	145.00
Siluriformes	Auchenipteridae	*Ageneiosus ucayalensis*	UFRO-I 8717	Piscivore	3.0	350.00	343.00	350.00	NI	170.00	142.00
Siluriformes	Loricariidae	*Aphanotorulus* cf. *emarginatus*	UFRO-I 491, 1163	Detritivore	1.0	365.00	302.00	364.00	NI	282.00	NA

TABLE S1 | (Continued)

Order	Family	Species	Catalog numbers of voucher specimens	Trophic category	Trophic level	SL_Max	SL_Max_Female	SL_Max_Male	L50_pop	L50_fem	L50_male
Siluriformes	Loricariidae	*Aphanotorulus unicolor*	UFRO-I 493, 494, 6096, 6097, 6099, 6100–07	Detritivore	1.0	135.00	135.00	126.00		191.00	117.00
Siluriformes	Auchenipteridae	*Auchenipterichthys thoracatus*	UFRO-I 141, 143, 153, 732, 1959, 5197	Omnivore	1.5	350.00	248.00	350.00	69.6	75.00	70.00
Siluriformes	Auchenipteridae	*Auchenipterus ambyiacus*	UFRO-I 149, 942, 5879, 6064, 6198	Insectivore	2.0	256.00	213.00	256.00	NI	145.00	147.00
Siluriformes	Auchenipteridae	*Auchenipterus nuchalis*	UFRO-I 151, 764, 907, 1224, 1791, 3439, 3572	Insectivore	2.0	227.00	227.00	200.00	NI	159.00	147.00
Siluriformes	Pimelodidae	*Brachyplatystoma filamentosum*	UFRO-I 9582	Piscivore	3.0	860.00	860.00	NA	NI	1150.00	730.00
Siluriformes	Pimelodidae	*Brachyplatystoma rousseauxii*	UFRO-I 12324	Piscivore	3.0	790.00	790.00	600.00	733.3	740.00	710.00
Siluriformes	Pimelodidae	*Brachyplatystoma vaillantii*	UFRO-I 9872	Piscivore	3.0	440.00	440.00	407.00	NI	330.00	250.00
Siluriformes	Pimelodidae	*Calophysus macropterus*	UFRO-I 5299	Piscivore	3.0	386.00	386.00	340.00	190	180.00	NA
Siluriformes	Auchenipteridae	*Centromochlus heckelii*	UFRO-I 31, 1691, 1696, 1818, 5343, 6277	Insectivore	2.0	139.00	139.00	118.00	NI	85.00	104.00
Siluriformes	Cetopsidae	*Cetopsis coecutiens*	UFRO-I 5534	Carnivore	3.0	262.00	260.00	262.00		144.00	150.00
Siluriformes	Doradidae	*Hemidoras boulengeri*	UFRO-I 594, 701, 731, 816, 949, 2080, 3291, 3211, 3376, 6346, 6559, 7742, 9933, 10385–407, 11465, 13309	Invertivore	2.0	198.00	198.00	167.00		NA	NA
Siluriformes	Doradidae	*Hemidoras stenopeltis*	UFRO-I 71, 419, 1357, 1719, 1753, 2560, 2897, 6234–35, 6568, 9942, 9946, 10345–50, 10352–54	Herbivore	1.0	194.00	194.00	180.00		131.00	NA
Siluriformes	Pimelodidae	*Hypophthalmus edentatus*	UFRO-I 10040	Planctivore	2.0	434.00	434.00	335.00	NI	240.00	NA
Siluriformes	Pimelodidae	*Hypophthalmus fimbriatus*	UFRO-I 3479	Planctivore	2.0	260.00				NA	NA
Siluriformes	Pimelodidae	*Hypophthalmus marginatus*	UFRO-I 10045	Planctivore	2.0	470.00	470.00	406.00	NI	132.00	265.00
Siluriformes	Loricariidae	*Hypoptopoma incognitum*	UFRO-I 486–7, 1086, 1153, 1792–94, 1817, 1956, 1980	Perifitivore	1.0	110.00	110.00	102.00	NI	80.00	82.00
Siluriformes	Loricariidae	*Hypostomus pyrineusi*	UFRO-I 599, 677, 1060, 1063, 1203, 1212, 1408, 1541, 1587, 2224, 2721, 2994–95, 3497–98, 3730, 6531, 6545, 11116, 11680, 12519	Detritivore	1.0	216.00	178.00	211.00		164.00	203.00

TABLE S1 | (Continued)

Order	Family	Species	Catalog numbers of voucher specimens	Trophic category	Trophic level	SL_Max	SL_Max_Female	SL_Max_Male	L50_pop	L50_fem	L50_male
Siluriformes	Loricariidae	*Loricaria cataphracta*	UFRO-I 74, 502, 700, 1068, 1168, 1604, 1706, 2076, 2629, 3252, 3418, 3428, 6121, 6123–46, 6150–52, 6193–94, 6200–05, 9647, 10654, 10658, 10662, 10665, 10672, 10681, 10699, 10722, 10724, 10735, 10739, 10787	Detritivore	1.0	266.00	266.00	220.00		206.00	145.00
Siluriformes	Loricariidae	*Loricariichthys* sp. 3	UFRO -I 911, 1482, 6233	Detritivore	1.0	252.00	240.00	232.00		212.00	NA
Siluriformes	Doradidae	*Nemadoras humeralis*	UFRO-I 56, 418, 718, 872, 1099, 1216, 1222, 1249, 1306, 2299, 3327, 6305, 8741, 9941, 9943, 10420–21	Invertivore	2.0	183.00	183.00	152.00	NI	107.00	97.00
Siluriformes	Doradidae	*Oxydoras niger*	UFRO-I 944, 3244, 9359, 10160, 10220, 10280–81, 12857, 13292	Omnivore	1.5	570.00	570.00	450.00		NA	NA
Siluriformes	Pimelodidae	*Pimelodus blochii*	UFRO-I 8795	Omnivore	1.5	220.00	215.00	220.00	92.3	115.00	127.00
Siluriformes	Pimelodidae	*Pinirampus pirinampu*	UFRO-I 10219	Piscivore	3.0	540.00	540.00	395.00	NI	NA	NA
Siluriformes	Pimelodidae	*Pseudoplatystoma punctifer*	UFRO-I 1155	Piscivore	3.0	560.00	498.00	560.00	NI	684.00	469.00
Siluriformes	Doradidae	*Pterodoras granulosus*	UFRO-I 3341, 3431, 6362, 6417–35, 8615	Herbivore	1.0	430.00	430.00	200.00	NI	164.00	NA
Siluriformes	Loricariidae	*Pterygoplichthys lituratus*	UFRO-I 943, 1201, 1422, 1707, 1740, 1800, 1946, 2231, 3189, 3495, 4910, 4912	Detritivore	1.0	360.00	360.00	365.00	NI	245.00	262.00
Siluriformes	Doradidae	*Scorpiodoras liophysus**	UFRO-I 3471, 3473, 7893	Invertivore	2.0	175.00	165.00	129.00		NA	NA
Siluriformes	Pimelodidae	*Sorubim elongatus*	UFRO-I 9838	Piscivore	3.0	373.00	373.00	296.00		275.00	240.00
Siluriformes	Pimelodidae	*Sorubim lima*	UFRO-I 5291	Piscivore	3.0	385.00	380.00	327.00		138.00	245.00
Siluriformes	Pimelodidae	*Sorubim maniradii*	UFRO-I 7212	Piscivore	3.0	357.00	357.00	256.00		244.00	200.00
Siluriformes	Auchenipteridae	*Tatia aulopygia*	UFRO-I 150, 1186, 1695, 5357	Invertivore	2.0	153.00	114.00	126.00		87.00	75.00
Siluriformes	Auchenipteridae	*Trachelyopterus galeatus*	UFRO-I 152, 1251, 2069, 4483	Omnivore	1.5	250.00	230.00	250.00		102.00	114.00
Siluriformes	Doradidae	*Trachydoras paraguayensis*	UFRO-I 828, 848, 974	Invertivore	2.0	138.00	138.00	110.00		82.00	NA
Siluriformes	Auchenipteridae	*Tympanopleura atronasus*	UFRO-I 665, 6090	Piscivore	3.0	149.00	149.00	129.00		140.00	87.00

TABLE S1 | (Continued)

Order	Family	Species	Smaller mature individual	Oocyte size	Parental care	Life-history strategies	Habitat use	Migration	References
Characiformes	Acestrorhynchidae	*Acestrorhynchus* cf. *pantaneiro*		1.1	1	Periodic-large	Nectobenthic	Short-distance migration	1, 2, 3, 4, 9, 11, 17
Characiformes	Acestrorhynchidae	*Acestrorhynchus falcirostris*		1.1	1	Periodic-large	Nectobenthic	Short-distance migration	3, 4, 9, 11, 17
Characiformes	Acestrorhynchidae	*Acestrorhynchus heterolepis*		1.09	1	Periodic-large	Nectobenthic	Short-distance migration	3, 4, 9, 11, 17
Characiformes	Acestrorhynchidae	*Acestrorhynchus microlepis*		0.9	1	Periodic-small	Nectobenthic	Short-distance migration	3, 4, 9, 11, 17
Characiformes	Alestidae	*Chalceus epakros*		1.0	1	Periodic-small	Nectonic	Resident	9, 10, 11, 13, 22
Characiformes	Alestidae	*Chalceus guaporensis*		1.1	1	Periodic-small	Nectonic	Resident	3, 4, 9, 11, 13, 17, 22
Characiformes	Anostomidae	*Laemolyta proxima*		1.1	1	Periodic-small	Nectobenthic	Short-distance migration	3, 4, 9, 10, 11, 13, 17, 22
Characiformes	Anostomidae	*Laemolyta taeniata*	*	1.4	1	Periodic-small	Nectobenthic	Short-distance migration	3, 4, 7, 9, 10, 11, 13, 17, 22
Characiformes	Anostomidae	*Leporinus fasciatus*	*	1.2	1	Periodic-large	Nectobenthic	Median-distance migration	9, 10, 11, 12, 15, 17
Characiformes	Anostomidae	*Leporinus friderici*		1.0	1	Periodic-small	Nectobenthic	Median-distance migration	3, 4, 9, 11, 15, 17
Characiformes	Anostomidae	*Rhytiodus argenteofuscus*		1.0	1	Periodic-large	Nectobenthic	Median-distance migration	4, 9, 11, 12, 17
Characiformes	Anostomidae	*Rhytiodus microlepis*	*	NA	1	Periodic-large	Nectobenthic	Median-distance migration	9, 10, 11, 12
Characiformes	Anostomidae	*Schizodon fasciatus*		1.0	1	Periodic-small	Nectobenthic	Median-distance migration	4, 9, 11, 12, 17, 22, 38
Characiformes	Bryconidae	*Brycon amazonicus*	*	1.5	1	Periodic-large	Nectobenthic	Long-distance migration	9, 10, 11, 15, 17, 22, 38
Characiformes	Bryconidae	*Brycon melanopterus*	*	1.5	1	Periodic-large	Nectobenthic	Long-distance migration	9, 10, 11, 12, 15, 17, 22, 38
Characiformes	Bryconidae	*Bryconops alburnoides*		0.9	1	Periodic-small	Nectobenthic	Resident	4, 9, 11, 12, 13, 17
Characiformes	Characidae	*Roeboides affinis*	*	0.88	1	Periodic-small	Nectobenthic	Resident	9, 11, 14, 17, 22
Characiformes	Characidae	*Roeboides myersi*		0.71	1	Periodic-small	Nectobenthic	Resident	4, 9, 11, 17
Characiformes	Ctenoluciidae	*Boulengerella cuvieri*		0.79	1	Periodic-large	Nectonic	Short-distance migration	9, 11, 13, 22, 35
Characiformes	Ctenoluciidae	*Boulengerella maculata*		0.7	1	Periodic-large	Nectonic	Short-distance migration	4, 9, 11, 13, 17, 22
Characiformes	Curimatidae	*Curimata roseni*		1.0	1	Periodic-small	Nectobenthic	Short-distance migration	4, 9, 11, 17
Characiformes	Curimatidae	*Curimata vittata*	*	NA	1	Periodic-small	Nectobenthic	Short-distance migration	9, 10, 11, 12, 22
Characiformes	Curimatidae	*Curimatella alburna*	*	1.0	1	Periodic-small	Nectobenthic	Short-distance migration	4, 9, 10, 11, 17, 22
Characiformes	Curimatidae	*Curimatella meyeri*	*	NA	1	Periodic-small	Nectobenthic	Short-distance migration	9, 10, 11, 22
Characiformes	Curimatidae	*Cyphocharax notatus*	*	NA	1	Periodic-small	Nectobenthic	Short-distance migration	9, 11, 13, 22
Characiformes	Curimatidae	*Potamorhina altamazonica*		1.0	1	Periodic-small	Nectobenthic	Median-distance migration	4, 9, 10, 11, 12, 15, 17, 22

TABLE S1 | (Continued)

Order	Family	Species	Smaller mature individual	Oocyte size	Parental care	Life-history strategies	Habitat use	Migration	References
Characiformes	Curimatidae	*Potamorhina latior*		1.0	1	Periodic-small	Nectobenthic	Median-distance migration	4, 9, 10, 11, 12, 15, 17, 22
Characiformes	Curimatidae	*Psectrogaster amazonica*		1.0	1	Periodic-small	Nectobenthic	Short-distance migration	4, 9, 10, 11, 12, 15, 17, 22
Characiformes	Curimatidae	*Psectrogaster rutiloides*		1.0	1	Periodic-small	Nectobenthic	Short-distance migration	4, 9, 10, 11, 12, 15, 17, 22
Characiformes	Curimatidae	*Steindachnerina bimaculata*		1.0	1	Periodic-small	Nectobenthic	Short-distance migration	4, 9, 11, 17
Characiformes	Cynodontidae	*Cynodon gibbus*		1.0	1	Periodic-large	Nectonic	Median-distance migration	4, 9, 10, 11, 17, 22, 29
Characiformes	Cynodontidae	*Hydrolycus armatus*	*	1.0	1	Periodic-large	Nectobenthic	Median-distance migration	9, 10, 11, 13, 17, 22
Characiformes	Cynodontidae	*Hydrolycus scomberoides*	*	1.0	1	Periodic-large	Nectobenthic	Median-distance migration	4, 9, 11, 10, 13, 17, 22
Characiformes	Cynodontidae	*Rhaphiodon vulpinus*		1.0	1	Periodic-large	Nectonic	Median-distance migration	4, 9, 11, 12, 17
Characiformes	Cynodontidae	*Roestes molossus*	*	0.92	1	Periodic-small	Nectobenthic	Resident	9, 17, 33
Characiformes	Erythrinidae	*Hoplias malabaricus*		1.8	3	Intermediate	Nectobenthic	Resident	4, 9, 11, 15, 17, 22
Characiformes	Hemiodontidae	*Anodus elongatus*		1.0	1	Periodic-small	Nectonic	Short-distance migration	4, 9, 11, 12, 17, 22
Characiformes	Hemiodontidae	*Anodus orinocensis*		1.0	1	Periodic-large	Nectonic	Short-distance migration	4, 9, 11, 12, 17, 22
Characiformes	Hemiodontidae	*Hemiodus immaculatus*		1.2	1	Periodic-small	Nectobenthic	Median-distance migration	4, 9, 11, 12, 13, 17, 22
Characiformes	Hemiodontidae	*Hemiodus microlepis*		0.9	1	Periodic-small	Nectobenthic	Median-distance migration	4, 9, 11, 12, 13, 17, 22
Characiformes	Hemiodontidae	*Hemiodus* sp. "rabo de fogo"	*	1.2	1	Periodic-small	Nectobenthic	Median-distance migration	9, 17, 22
Characiformes	Hemiodontidae	*Hemiodus unimaculatus*		1.2	1	Periodic-small	Nectobenthic	Median-distance migration	4, 9, 11, 12, 13, 17, 22
Characiformes	Prochilodontidae	*Prochilodus nigricans*		1.0	1	Periodic-large	Nectobenthic	Long-distance migration	4, 9, 10, 11, 12, 15, 17, 22, 38
Characiformes	Prochilodontidae	*Semaprochilodus insignis*	*	1.0	1	Periodic-large	Nectobenthic	Long-distance migration	4, 9, 11, 12, 15, 17, 22, 38
Characiformes	Prochilodontidae	*Semaprochilodus taeniurus*	*	1.0	1	Periodic-large	Nectobenthic	Long-distance migration	9, 10, 11, 12, 15, 17, 22, 38
Characiformes	Serrasalmidae	*Metynnis guaporensis*	*	NA	2	Intermediate	Nectonic	Median-distance migration	9, 22
Characiformes	Serrasalmidae	*Metynnis lippincottianus*		1.4	2	Intermediate	Nectobenthic	Median-distance migration	4, 9, 11, 17, 22
Characiformes	Serrasalmidae	*Metynnis luna*	*	NA	2	Intermediate	Nectonic	Median-distance migration	9, 19, 22
Characiformes	Serrasalmidae	*Myleus setiger*	*	2.0	2	Intermediate	Nectobenthic	Median-distance migration	4, 7, 9, 11, 17, 22

TABLE S1 | (Continued)

Order	Family	Species	Smaller mature individual	Oocyte size	Parental care	Life-history strategies	Habitat use	Migration	References
Characiformes	Serrasalmidae	*Myloplus asterias*	*	1.8	1	Periodic-small	Nectobenthic	Median-distance migration	7, 9, 11, 13, 17, 22, 31
Characiformes	Serrasalmidae	*Mylossoma albiscopum*		1.3	1	Periodic-small	Nectonic	Median-distance migration	4, 9, 11, 12, 15, 17
Characiformes	Serrasalmidae	*Mylossoma aureum*		1.3	1	Periodic-small	Nectonic	Median-distance migration	4, 9, 11, 12, 15, 17
Characiformes	Serrasalmidae	*Piaractus brachypomus*	*	NA	1	Periodic-large	Nectonic	Median-distance migration	7, 9, 11, 12, 15, 22, 32, 38
Characiformes	Serrasalmidae	*Pygocentrus nattereri*		1.7	3	Intermediate	Nectonic	Resident	4, 9, 11, 12, 17, 22
Characiformes	Serrasalmidae	*Serrasalmus compressus*		2.0	2	Intermediate	Nectobenthic	Resident	4, 7, 9, 11, 15, 17
Characiformes	Serrasalmidae	*Serrasalmus eigenmanni*	*	NA	2	Intermediate	Nectobenthic	Resident	7, 9, 11, 15, 22
Characiformes	Serrasalmidae	*Serrasalmus elongatus*	*	1.7	2	Intermediate	Nectobenthic	Resident	9, 10, 11, 15, 17, 22
Characiformes	Serrasalmidae	*Serrasalmus hollandi*	*	NA	2	Intermediate	Nectobenthic	Resident	9, 10, 11, 15, 31
Characiformes	Serrasalmidae	*Serrasalmus maculatus*	*	NA	2	Intermediate	Nectobenthic	Resident	9, 10, 11, 15, 31
Characiformes	Serrasalmidae	*Serrasalmus rhombeus*		2.0	2	Intermediate	Nectobenthic	Resident	4, 9, 11, 15, 17, 22
Characiformes	Serrasalmidae	*Serrasalmus spilopleura*	*	1.8	2	Intermediate	Nectobenthic	Resident	7, 9, 11, 15, 17, 22
Characiformes	Triportheidae	*Triportheus albus*		1.0	1	Periodic-small	Nectobenthic	Short-distance migration	4, 9, 11, 12, 15, 17
Characiformes	Triportheidae	*Triportheus angulatus*		1.0	1	Periodic-small	Nectobenthic	Short-distance migration	4, 9, 11, 15, 17
Characiformes	Triportheidae	*Triportheus auritus*		1.0	1	Periodic-small	Nectobenthic	Short-distance migration	4, 9, 11, 12, 15, 17
Cichliformes	Cichlidae	*Astronotus crassipinnis*	*	2.4	6	Equilibrium-small	Nectobenthic	Resident	5, 6, 9, 11, 17, 22, 40
Cichliformes	Cichlidae	*Biotodoma cupido*	*	NA	4	Equilibrium-small	Nectobenthic	Resident	3, 7, 8, 9, 11, 22
Cichliformes	Cichlidae	*Chaetobranchus flavescens*	*	1.2	4	Equilibrium-small	Nectobenthic	Resident	3, 9, 11, 17
Cichliformes	Cichlidae	*Cichla pleiozona*		2.5	6	Equilibrium-large	Nectobenthic	Resident	4, 9, 11, 15, 17, 22
Cichliformes	Cichlidae	*Geophagus megasema*		2.7	6	Equilibrium-small	Nectobenthic	Resident	3, 4, 7, 9, 11, 13, 17, 22
Cichliformes	Cichlidae	*Heros spurius*		1.5	6	Equilibrium-small	Nectobenthic	Resident	4, 9, 11, 17, 22
Cichliformes	Cichlidae	*Mesonauta festivus*	*	1.3	6	Equilibrium-small	Nectobenthic	Resident	9, 22, 34
Cichliformes	Cichlidae	*Satanoperca jurupari*		2.0	6	Equilibrium-small	Nectobenthic	Resident	4, 9, 11, 17, 22
Clupeiformes	Engraulidae	*Jurengraulis juruensis*		NA	1	Periodic-small	Nectonic	Short-distance migration	3, 4, 9
Clupeiformes	Engraulidae	*Lycengraulis batesii*	*	0.55	1	Periodic-small	Nectonic	Short-distance migration	3, 4, 9, 17
Clupeiformes	Pristigasteridae	*Ilisha amazonica*	*	1.0	1	Periodic-small	Nectonic	Short-distance migration	9, 17, 22, 39

TABLE S1 | (Continued)

Order	Family	Species	Smaller mature individual	Oocyte size	Parental care	Life-history strategies	Habitat use	Migration	References
Clupeiformes	Pristigasteridae	*Pellona castelnaeana*	*	0.79	1	Periodic-large	Nectonic	Median-distance migration	9, 10, 11, 12, 15, 17, 22
Clupeiformes	Pristigasteridae	*Pellona flavipinnis*	*	0.9	1	Periodic-small	Nectonic	Median-distance migration	9, 10, 11, 12, 13, 15, 17, 22, 38
Gymnotiformes	Rhamphichthyidae	*Rhamphichthys pantherinus**		NA	1	Periodic-large	Nectobenthic	Resident	9, 12, 36, 37
Perciformes	Sciaenidae	*Plagioscion squamosissimus*		0.8	1	Periodic-large	Nectobenthic	Resident	4, 9, 10, 11, 15, 17, 22, 38
Pleuronectiformes	Achiridae	*Hypoclinemus mentalis*		0.37	1	Periodic-small	Benthic	Resident	4, 9, 11, 17
Siluriformes	Auchenipteridae	*Ageneiosus inermis*		1.6	1	Periodic-large	Nectonic	Short-distance migration	4, 9, 11, 17, 22
Siluriformes	Auchenipteridae	*Ageneiosus ucayalensis*		1.6	1	Periodic-large	Nectonic	Short-distance migration	4, 9, 11, 17, 22
Siluriformes	Loricariidae	*Aphanotorulus* cf. *emarginatus*		NA	4	Equilibrium-small	Nectobenthic	Resident	4, 9, 11, 25
Siluriformes	Loricariidae	*Aphanotorulus unicolor*	*	NA	4	Equilibrium-small	Nectobenthic	Resident	3, 9, 11
Siluriformes	Auchenipteridae	*Auchenipterichthys thoracatus*		1.5	2	Intermediate	Benthic	Resident	4, 7, 9, 11, 17, 27
Siluriformes	Auchenipteridae	*Auchenipterus ambyiacus*		1.03	2	Intermediate	Nectobenthic	Short-distance migration	4, 9, 11, 17, 22
Siluriformes	Auchenipteridae	*Auchenipterus nuchalis*		1.6	2	Intermediate	Nectonic	Short-distance migration	4, 9, 11, 17, 22
Siluriformes	Pimelodidae	*Brachyplatystoma filamentosum*		NA	1	Periodic-large	Benthic	Long-distance migration	4, 9, 11, 15, 22, 38
Siluriformes	Pimelodidae	*Brachyplatystoma rousseauxii*		NA	1	Periodic-large	Benthic	Long-distance migration	4, 9, 11, 15, 23, 38
Siluriformes	Pimelodidae	*Brachyplatystoma vaillantii*		NA	1	Periodic-large	Benthic	Long-distance migration	4, 9, 11, 15, 24, 38
Siluriformes	Pimelodidae	*Calophysus macropterus*		NA	1	Periodic-large	Benthic	Median-distance migration	4, 9, 11, 16, 22, 38
Siluriformes	Auchenipteridae	*Centromochlus heckelii*		1.04	2	Intermediate	Nectonic	Resident	4, 9, 11, 17, 22
Siluriformes	Cetopsidae	*Cetopsis coecutiens*	*	0.83	1	Periodic-small	Benthic	Resident	7, 9, 11, 17
Siluriformes	Doradidae	*Hemidoras boulengeri*		0.66	1	Periodic-small	Benthic	Resident	3, 9, 17, 22
Siluriformes	Doradidae	*Hemidoras stenopeltis*	*	NA	1	Periodic-small	Benthic	Resident	9, 18, 28
Siluriformes	Pimelodidae	*Hypophthalmus edentatus*		1.0	1	Periodic-large	Nectonic	Median-distance migration	4, 9, 10, 11, 12, 15, 17
Siluriformes	Pimelodidae	*Hypophthalmus fimbriatus*		0.4	1	Periodic-large	Nectonic	Median-distance migration	4, 9, 10, 11, 12, 13, 15, 18, 38
Siluriformes	Pimelodidae	*Hypophthalmus marginatus*		1.0	1	Periodic-large	Nectonic	Median-distance migration	4, 9, 10, 11, 12, 15, 17
Siluriformes	Loricariidae	*Hypoptopoma incognitum*		1.46	2	Intermediate	Benthic	Resident	4, 9, 11, 17, 22
Siluriformes	Loricariidae	*Hypostomus pyrineusi*	*	3.82	4	Equilibrium-large	Benthic	Resident	9, 17, 22
Siluriformes	Loricariidae	*Loricaria cataphracta*	*	2.24	4	Equilibrium-small	Benthic	Resident	4, 7, 9, 11, 17, 22, 30

TABLE S1 | (Continued)

Order	Family	Species	Smaller mature individual	Oocyte size	Parental care	Life-history strategies	Habitat use	Migration	References
Siluriformes	Loricariidae	*Loricariichthys* sp. 3	8.00	2.48	4	Equilibrium-large	Nectobenthic	Resident	3, 9, 35, 41
Siluriformes	Doradidae	*Nemadoras humeralis*		0.9	1	Periodic-small	Benthic	Resident	4, 9, 10, 11, 17
Siluriformes	Doradidae	*Oxydoras niger*		NA	1	Periodic-large	Benthic	Resident	7, 9, 11, 12, 22
Siluriformes	Pimelodidae	*Pimelodus blochii*		0.6	1	Periodic-small	Nectobenthic	Median-distance migration	4, 9, 11, 15, 17, 22
Siluriformes	Pimelodidae	*Pinirampus pirinampu*		0.8	1	Periodic-large	Benthic	Median-distance migration	4, 9, 10, 11, 12, 13, 15, 22
Siluriformes	Pimelodidae	*Pseudoplatystoma punctifer*		NA	1	Periodic-large	Benthic	Median-distance migration	4, 9, 11, 15, 22
Siluriformes	Doradidae	*Pterodoras granulosus*		NA	1	Periodic-large	Benthic	Median-distance migration	4, 9, 11, 22
Siluriformes	Loricariidae	*Pterygoplichthys lituratus*		NA	4	Equilibrium-large	Benthic	Resident	4, 9, 11, 22
Siluriformes	Doradidae	*Scorpiodoras liophysus**		NA	1	Periodic-small	Benthic	Resident	4, 9
Siluriformes	Pimelodidae	*Sorubim elongatus*	*	1.2	1	Periodic-large	Benthic	Median-distance migration	9, 10, 11, 17
Siluriformes	Pimelodidae	*Sorubim lima*	*	1.2	1	Periodic-large	Benthic	Median-distance migration	9, 10, 11, 17
Siluriformes	Pimelodidae	*Sorubim maniradii*	*	0.62	1	Periodic-large	Benthic	Median-distance migration	9, 10, 17
Siluriformes	Auchenipteridae	*Tatia aulopygia*	*	1.38	2	Intermediate	Benthic	Resident	9, 17, 21, 22
Siluriformes	Auchenipteridae	*Trachelyopterus galeatus*	*	1.13	2	Intermediate	Benthic	Resident	9, 17, 20, 26
Siluriformes	Doradidae	*Trachydoras paraguayensis*	*	NA	1	Periodic-small	Benthic	Resident	9, 22, 23, 24
Siluriformes	Auchenipteridae	*Tympanopleura atronasus*	*	1.6	1	Periodic-small	Nectonic	Short-distance migration	9, 17, 22

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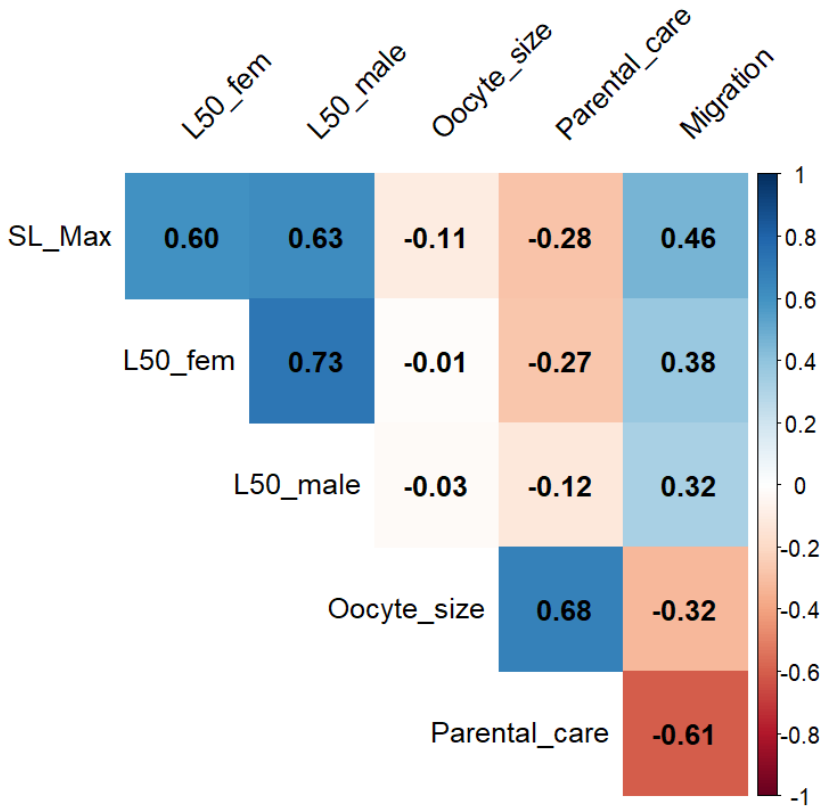

FIGURE S2 | Spearman correlation matrix among attributes of Amazonian fishes (n = 78). Colors represent the strength and direction of correlations: blue indicates negative correlations, and red indicates positive correlations. Numbers inside the squares indicate correlation coefficients (ρ), with significant correlations ($p < 0.05$) shown in bold. Only strong correlations ($|\rho| > 0.60$) are interpreted in the results.

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