

Appendix S1. List of species present from community sampling data from isolated lagoons in the Upper Paraná River floodplain (n = 11) during 2000-2007 austral springs. Species above the dashed line represent the pool of species (n = 18) used in experimental treatments. Eighteen species represent 82% of the total abundance and 47% of total biomass of individuals with mean SL < 20 cm.

Species	Sum Rank Abundance	Total Abundance	Rank Biomass	Total Biomass (g)	Mean SL (cm)	Mean St Dev SL (cm)
<i>Serrapinnus</i> sp. 1*	1	1046 ^a	20 ^a	450 ^a	2.26	0.24
<i>Astyanax altiparanae</i>	2	778	4	2695	4.24	1.45
<i>Moenkhausia</i> aff. <i>forestii</i>	3	623	19	498	2.73	0.50
<i>Hyphessobrycon eques</i>	4	420	28	199	2.40	0.38
<i>Aphyocharax anisitsi</i>	5	575	26	264	2.62	0.36
<i>Steindachnerina insculpta</i>	6	444	3	3217	5.52	2.18
<i>Psellogrammus kennedyi</i> ‡	7	861 ^a	8 ^a	1626 ^a	3.04	0.60
<i>Loricariichthys platymetopon</i>	8	129	6	2327	9.38	6.16
<i>Roeboides descavadensis</i>	9	420	15	932	4.74	1.11
<i>Hoplias</i> aff. <i>malabaricus</i>	10	57	2	5938	14.70	7.18
<i>Serrapinnus</i> sp. 2¶	n/a	327	31	151	2.48	0.33
<i>Characidium</i> aff. <i>zebra</i>	11	82	39	37	2.69	0.64
<i>Serrapinnus notomelas</i> *	12	123 ^a	38 ^a	42 ^a	2.29	0.58
<i>Moenkhausia bonita</i> §	13	102 ^a	36 ^a	72 ^a	2.65	0.34
<i>Acestrorhynchus lacustris</i>	14	54	9	1555	11.67	3.85
<i>Aphyocharax dentatus</i> †	15	161	34	100	2.91	0.78
<i>Steindachnerina brevipinna</i>	16	165	11	1480	5.95	2.33
<i>Pyrhulina australis</i>	17	68	41	32	2.59	0.46
<i>Serrasalmus marginatus</i>	18	26	30	168	3.93	3.37
<i>Cichlasoma paranaense</i>	19	120	10	1545	5.17	2.18
<i>Bryconamericus stramineus</i>	20	219	25	286	4.13	0.63

<i>Hyphessobrycon</i> sp.	21	70	40	33	2.74	0.41
<i>Pimelodella gracilis</i>	22	85	24	328	6.38	1.74
<i>Leporinus lacustris</i>	23	32	22	377	5.72	3.09
<i>Brachyhypopomus</i> cf. <i>pinnicaudatus</i>	24	43	33	104	8.43	2.42
<i>Gymnotus</i> spp.	25	17	18	565	16.66	7.03
<i>Cyphocharax nagellii</i>	26	12	37	63	4.62	1.81
<i>Hoplosternum littoral</i>	27	23	5	2344	14.01	2.23
<i>Crenicichla britskii</i>	28	5	46	16	4.58	1.69
<i>Leporinus obtusidens</i>	29	6	14	1200	15.60	8.91
<i>Laetacara</i> sp.	30	55	32	127	3.51	0.81
<i>Aphyocharax</i> sp 1†	31	14	53	4	2.43	0.33
<i>Hoplerythrinus unitaeniatus</i>	32	6	16	921	18.33	4.04
<i>Satanoperca pappaterra</i>	33	35	45	16	1.92	0.45
<i>Astronotus crassipinnis</i>	34	4	7	1991	20.55	2.44
<i>Synbranchus marmoratus</i>	35	3	51	8	---	0.00
<i>Apareidon affinis</i>	36	3	56	2	3.10	0.95
<i>Characidium</i> sp.	37	3	57	1	2.37	0.76
<i>Catathyridium jenynsii</i>	38	3	27	218	7.33	7.94
<i>Pamphorichthys</i> sp.	39	5	58	1	1.90	0.57
<i>Prochilodus lineatus</i>	40	189	1	15106	13.09	2.15
<i>Eigenmannia trilineata</i>	41	4	43	24	12.75	3.15
<i>Sternopygus macrurus</i>	42	2	54	2	6.90	0.85
<i>Odontostilbe</i> sp.	43	6	55	2	2.15	0.64
<i>Astyanax schubarti</i>	44	2	44	17	6.40	0.85
<i>Hoplias</i> sp. 2	45	1	29	183	21.00	---
<i>Potamotrygon</i> cf. <i>motoro</i>	46	2	13	1303	22.00	1.41
<i>Astyanax</i> aff. <i>fasciatus</i>	47	2	50	9	7.60	0.00
<i>Myloplus tiete</i>	48	1	52	6	5.00	---

<i>Pterygoplichthys anisitsi</i>	49	1	17	677	32.20	---
<i>Serrasalmus maculatus</i>	50	1	23	328	19.60	---
<i>Cyphocharax modestus</i>	51	2	42	32	7.35	0.21
<i>Pseudoplatystoma corruscans</i>	52	3	12	1384	32.37	9.02
<i>Parauchenipterus galeatus</i>	53	1	48	11	6.70	---
<i>Hoplias</i> sp. 1	54	1	21	448	30.00	---
<i>Pimelodella avanhandavae</i>	55	1	49	9	9.00	---
<i>Salminus brasiliensis</i>	56	1	---	---	---	0.00
<i>Metynnis lippincottianus</i>	57	2	47	15	5.50	0.42
<i>Hypostomus ancistroides</i>	58	1	35	99	15.00	---

Nomenclature follows Graca, W. J. and C. S. Pavanelli, editors. 2007. Peixes da planície de inundação do alto rio Paraná e áreas adjacentes. Editora do Universidade Estadual de Maringá, Maringá, Brazil

* Taxonomic ambiguity among *Serrapinnus* species early in the data set likely caused misidentification between *Serrapinnus notomelas* and *Serrapinnus* sp. 1
Therefore, species exchanged positions based on current observed abundances in isolated lagoons

† Taxonomic ambiguity among *Aphyocharax* species early in the data set likely caused misidentification between *Aphyocharax dentatus* and *Aphyocharax* sp. 1
Therefore, species exchanged positions based on current observed abundances in isolated lagoons

‡ Replaced *Moenkhausia* aff. *intermedia* due to captive sensitivity of this species. *Psellogrammus kennedyi* is similar in ecology and size and currently found in and abundances similar to *Moenkhausia* aff. *intermedia*

§ Replaced *Hemigrammus marginatus* due to captive sensitivity of this species. *Moenkhausia bonita* is similar in ecology and size and currently found in and abundances similar to *Hemigrammus marginatus*

¶ Species removed for no longer found in isolated lagoons

^a Value is reflective of species it replaced

--- No information