

Table 1 - Frequency of fishing trips and of fishing gears (number of sampled fish landings) undertake by fishers from the two communities during the two seasons in five habitat categories. The total may be different than the total of fishing lands sampled, because some fishers visited more than one place during a fishing trip.

	Jarauá		Ebenezer	
	High	Low	High	Low
Habitats				
Lakes	130	60	18	10
Rivers	12	8	80	9
Channels	14	0	32	8
Flooded forest	7	0	39	0
Backwaters	3	37	5	7
Fishing gear				
Gillnet	0	31	149	10
Hand line	166	0	22	0
Spear	0	3	2	6
Spear + gillnet	0	67	0	9
Others ^a	0	3	4	16

^aIt includes trap nets, beach seine, long line and trident

Table 2 – Parameters derived from multiple regression analyses of CPUE in the two seasons, considering all fish species and only the ones with quota

(*significant at the level of 10%, **significant at the level of 5%).

Parameter	High water - general		Low water -general		High water – quota		Low water- quota	
	Estimate (SE)	t-ratio	Estimate (SE)	t-ratio	Estimate (SE)	t-ratio	Estimate (SE)	t-ratio
Intercept	1.12 (0.11)	10.39**	1.99 (0.12)	16.69**	1.19 (0.09)	13.89**	2.95 (0.34)	8.75**
Community	0.11 (0.07)	1.63	-0.24 (0.11)	-2.13**	0.14 (0.05)	2.83**	-0.62 (0.14)	-4.31**
Gear								
Spear			-0.29 (0.29)	-1	0.19 (0.15)	1.32	4.09 (0.52)	7.94**
Hand line	-0.14 (0.13)	-1.1			-0.09 (0.08)	-1.12		
Others			0.58 (0.35)	1.64				
Gillnet	-0.09 (0.11)	-0.85	0.11 (0.18)	0.59	-0.27 (0.12)	-2.33**		
Gillnet+Spear			0.14 (0.21)	0.69			-2.02 (0.29)	-7.00**
Environment								
Lake	-0.07 (0.06)	-1.17	0.26 (0.13)	1.96	-0.02 (0.06)	-0.26	0.13 (0.20)	0.68
Flooded forest	-0.16 (0.09)	-1.86**			-0.01 (0.07)	-0.08		
Small channels	-0.08 (0.14)	-0.56			0.22 (0.08)	2.8**		
Backwater	0.13 (0.14)	0.93	0.10 (0.14)	0.73	0.06 (0.15)	0.38	0.54 (0.21)	2.52**
River					-0.14 (0.07)	-2.05**		
r²	0.13		0.21		0.16		0.55	

Figure 1
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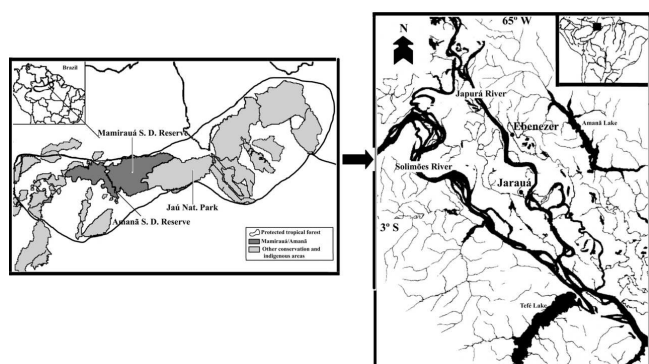


Figure 2a
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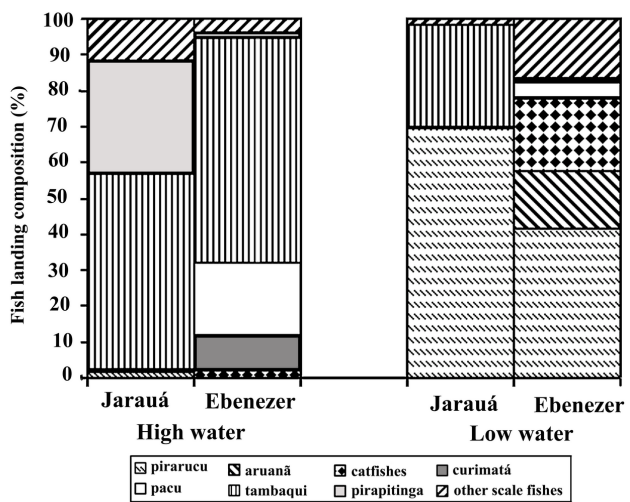


Figure 2b
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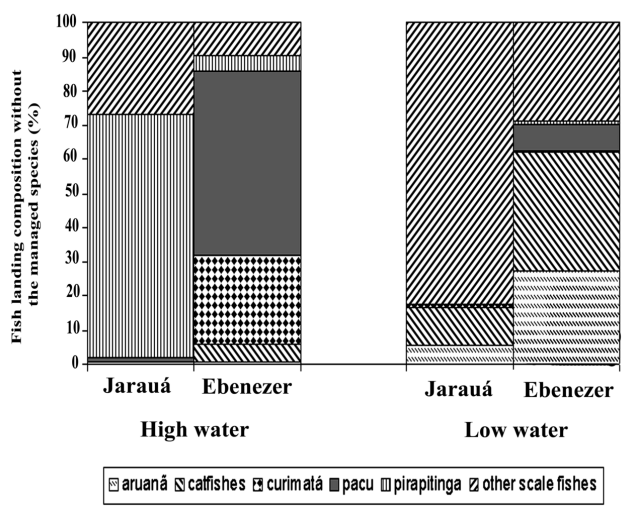
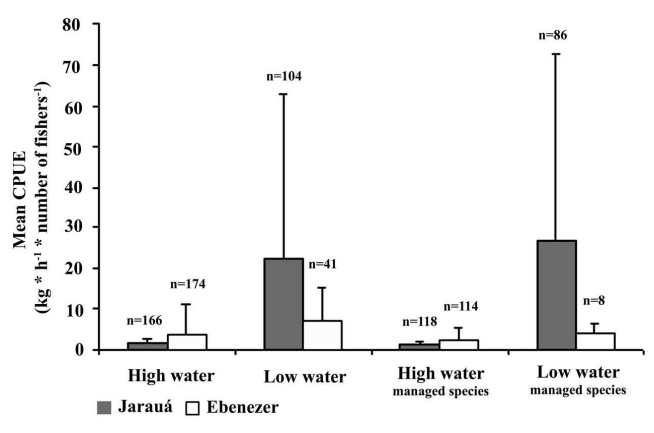


Figure 3

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Appendix 1 - Composition in biomass (kg) of fish landings (sorted by fish species or species groups) in Jarauá (Mamirauá Reserve) and Ebenezer (Amanã Reserve). NI = not identified. Identifications are based in our fish collections and in fish species list in Crampton (1999). Fishes are identified at the level of genus or families when the same common name includes several species or when the fish species could not be collected.

Fish species or species groups	Common Name	Jarauá		Ebenezer	
		High	Low	High	Low
Ageneiosidae					
<i>Ageneiosus ucayalensis</i>	Mandubé				7.5
Anostomidae					
<i>Schizodon fasciatus; Leporinus</i> spp	Aracus	2.2	0.6	49.0	0.7
Characidae					
<i>Brycon amazonicus; B. melanopterus</i>	Matrinchã	1.2		58.9	
<i>Triportheus</i> spp.	Sardinha			0.6	
Cichlidae					
<i>Chaetobranchius</i> spp; <i>Satanoperca jurupari; Acarichthys heckelii</i>	Cará		3.9		26.4
<i>Astronotus crassipinnis</i>	Acará Açú	11.2	4.0		0.5
<i>Cichla monoculus</i>	Tucunaré		213.7	1.0	58.8
<i>Heros</i> spp.	Acará Roxo				0.2
Clupeidae					
<i>Pellona castelnaeana</i>	Sardinhão			1.6	
Curimatidae					
<i>Potamorhina</i> spp.	Branquinha		53.4		
<i>Psectrogaster</i> spp.	Cascudinha				2.0
Cynodontidae					
<i>Acestrorhynchus</i> spp., <i>Rhaphiodon vulpinus</i> ,	Cachorro			0.9	

Doradidae

NI	Bacus			13.0
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Erythrinidae

<i>Hoplias malabaricus</i>	Traíra		2.8	0.7	1.0
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<i>Hoploerythrinus unitaeniatus</i>	Jeju	1.5	8.0		
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Hemiodontidae

<i>Anodus</i> spp.	Charuto			6.6	
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<i>Hemiodus</i> spp.	Cuiú		3.2		66.4
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Loricariidae

<i>Liposarcus pardalis</i>	Bodós		1.0	5.3	22.4
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Osteoglossidae

<i>Arapaima gigas</i>	Pirarucu	41.5	11928.0		969.0
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<i>Osteoglossum bicirrhosum</i>	Sulamba or Aruanã	5.0	19.4	3.8	374.8
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Pimelodidae

NI	Barba de Pena				5.2
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NI	Galeneoga				8.0
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NI	Melado				1.9
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<i>Brachyplatystoma</i> spp.	Dourado			4.0	
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<i>Brachyplatystoma</i> spp.	Piramutaba			3.0	
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<i>Brachyplatystoma filamentosum</i>	Filhote		23.5		
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<i>Calophysus macropterus</i>	Piracatinga				195.0
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<i>Leiarius</i> spp.	Jundiá		1.8		4.7
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<i>Paulicea luetkeni</i>	Jaú		2.0		1.0
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<i>Phractocephalus hemiliopterus</i>	Pirarara		17.0	21.0	5.0
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<i>Pinirampus pirinampu</i>	Barba Chata				23.6
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<i>Pseudoplatystoma tigrinum</i>	Caparari		0.1	9.5	56.2
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<i>Pseudoplatystoma</i> spp.	Surubins			45.5	168.8
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Prochilodontidae

<i>Prochilodus nigricans</i>	Curimatá	1.9	393.3	6.4
<i>Semaprochilodus</i> spp.	Jaraquis		11.8	206.0

Sciaenidae

<i>Plagioscion</i> spp.	Pescada			2.2
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Serrasalminidae

<i>Mylossoma</i> spp.; <i>Myleus</i> spp.	Pacu	13.0	0.2	827.0	105.6
<i>Colossoma macroporum</i>	Tambaqui	1242.4	4849.8	2545.9	
<i>Piaractus brachypomus</i>	Pirapitinga	729.7	0.6	67.1	12.5
<i>Serrasalmus</i> spp.					
<i>Pygocentrus nattereri</i>	Piranhas	255.1	3.9	2.9	0.2

Total		2302.8	17135.0	4076.2	2332.0
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