

Supplementary material

Influence of the water quality on the occurrence of the Neotropical otter (*Lontra longicaudis*) (Olfers, 1818) in a human-altered river basin

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Table S1. ID and location of the sampling points

Point	Latitude	Longitude	Location	Class
CB2	29°41'50.15"S	51°3'7.49"W	Campo Bom, Rio Grande do Sul, Brazil	4
CR1	29°47'35.59"S	50°26'42.68"W	Caraá, Rio Grande do Sul, Brazil	2
CR2	29°49'47.38"S	50°23'20.96"W	Caraá, Rio Grande do Sul, Brazil	2
CR3	29°48'32.00"S	50°20'22.35"W	Rio do Meio, Rio Grande do Sul, Brazil	2
CR4	29°45'31.38"S	50°22'48.23"W	Caraá, Rio Grande do Sul, Brazil	2
DAUTZ	29°44'5.02"S	51°5'11.23"W	São Leopoldo, Rio Grande do Sul, Brazil	4
JB	29°45'36.70"S	51°8'5.90"W	São Leopoldo, Rio Grande do Sul, Brazil	4
RL2	29°41'17.19"S	50°41'6.47"W	Rolante, Rio Grande do Sul, Brazil	3
RL3	29°39'35.12"S	50°38'25.18"W	Rolante, Rio Grande do Sul, Brazil	3
RL6	29°39'28.07"S	50°34'0.94"W	Rolante, Rio Grande do Sul, Brazil	3
RL7	29°38'48.84"S	50°31'10.39"W	Rolante, Rio Grande do Sul, Brazil	3
SG1	29°27'32.16"S	50°45'31.07"W	Três Coroas, Rio Grande do Sul, Brazil	SID
SG2	29°32'42.15"S	50°46'45.48"W	Igrejinha, Rio Grande do Sul, Brazil	SID
SG3	29°41'7.88"S	50°48'35.25"W	Taquara, Rio Grande do Sul, Brazil	SID
SG4	29°34'47.38"S	50°41'34.44"W	Rio da Ilha, Rio Grande do Sul, Brazil	SID
ZOO	29°47'41.65"S	51°11'12.59"W	Sapucaia do Sul, Rio Grande do Sul, Brazil	4

Table S2. Summary of the 16 generalised linear models (GLMs)

Class, water-quality classification (2, 3, 4 and NI (no known classification)); Flow, stream flow velocity; Canopy, percentage of canopy cover; Month, sampling season (January to August 2015)

GLMs	Estimate	s.e.	z-value	Pr(> z)
Null				
(Intercept)	-0.331	0.184	-1.802	0.072
Class				
(Intercept)	0.125	0.354	0.353	0.724
class3	1.219	0.579	2.103	0.035
class4	-1.958	0.645	-3.037	0.002
classNI	-1.398	0.555	-2.518	0.012
Class + Flow				
(Intercept)	-0.580	0.612	-0.947	0.344
class3	1.139	0.587	1.939	0.052
class4	-2.000	0.660	-3.029	0.003
classNI	-1.352	0.560	-2.416	0.016
flow	0.330	0.234	1.410	0.159
Class + Flow + Canopy				
(Intercept)	-1.692	0.901	-1.879	0.060
class3	1.228	0.608	2.022	0.043
class4	-2.183	0.674	-3.237	0.001
classNI	-1.035	0.586	-1.767	0.077
flow	0.378	0.241	1.567	0.117
canopy	0.017	0.010	1.722	0.085
Class + Canopy				
(Intercept)	-0.781	0.677	-1.154	0.248
class3	1.278	0.595	2.148	0.032
class4	-2.104	0.654	-3.219	0.001
classNI	-1.118	0.582	-1.921	0.055
canopy	0.015	0.010	1.572	0.116
Class + Canopy + Month				
(Intercept)	-0.628	0.956	-0.656	0.512
class3	1.574	0.672	2.344	0.019
class4	-2.847	0.808	-3.521	0.000
classNI	-1.524	0.695	-2.193	0.028
canopy	0.018	0.011	1.698	0.089
monthago	-1.409	0.988	-1.426	0.154
monthfev	-0.444	0.945	-0.470	0.638
monthjan	-1.392	0.991	-1.405	0.160
monthjul	-1.777	1.058	-1.678	0.093
monthjun	2.025	0.983	2.060	0.039
monthmai	1.141	0.953	1.198	0.231
monthmar	-0.183	0.957	-0.192	0.848
Class + Month				
(Intercept)	0.438	0.729	0.601	0.548
class3	1.497	0.649	2.305	0.022
class4	-2.643	0.788	-3.353	0.001
classNI	-1.867	0.669	-2.784	0.005
monthago	-1.380	0.977	-1.412	0.158
monthfev	-0.440	0.941	-0.468	0.640
monthjan	-1.366	0.981	-1.393	0.164
monthjul	-1.585	1.022	-1.551	0.121
monthjun	2.019	0.977	2.063	0.039
monthmai	1.170	0.942	1.242	0.214
monthmar	-0.100	0.940	-0.106	0.915

GLMs	Estimate	s.e.	z-value	Pr(> z)
Flow				
(Intercept)	-1.174	0.485	-2.419	0.016
flow	0.384	0.199	1.927	0.054
Flow + Canopy				
(Intercept)	-1.936	0.674	-2.874	0.004
flow	0.376	0.199	1.884	0.060
canopy	0.013	0.008	1.691	0.091
Flow + Canopy + Month				
(Intercept)	-2.646	0.979	-2.704	0.007
flow	0.653	0.248	2.633	0.009
canopy	0.016	0.009	1.848	0.065
monthago	-1.056	0.840	-1.258	0.209
monthfev	0.198	0.797	0.249	0.803
monthjan	-0.630	0.830	-0.760	0.447
monthjul	-1.665	0.900	-1.851	0.064
monthjun	1.536	0.827	1.857	0.063
monthmai	0.886	0.800	1.107	0.268
monthmar	-0.192	0.784	-0.245	0.806
Flow + Month				
(Intercept)	-1.729	0.811	-2.132	0.033
flow	0.644	0.244	2.639	0.008
monthago	-1.000	0.816	-1.226	0.220
monthfev	0.194	0.780	0.248	0.804
monthjan	-0.616	0.811	-0.759	0.448
monthjul	-1.516	0.874	-1.736	0.083
monthjun	1.497	0.811	1.845	0.065
monthmai	0.943	0.790	1.194	0.233
monthmar	-0.117	0.772	-0.152	0.879
Canopy				
(Intercept)	-0.979	0.7103	-1.379	0.168
canopy	0.015	0.008	1.800	0.072
monthago	-1.018	0.788	-1.291	0.197
monthfev	-0.282	0.752	-0.375	0.708
monthjan	-0.907	0.793	-1.144	0.253
monthjul	-1.357	0.840	-1.615	0.106
monthjun	1.256	0.790	1.590	0.112
monthmai	0.477	0.751	0.636	0.525
monthmar	-0.356	0.752	-0.473	0.636
Canopy + Month				
(Intercept)	-0.823	0.735	-1.120	0.263
canopy	0.012	0.009	1.351	0.177
monthago	-1.004	0.785	-1.279	0.201
monthfev	-0.279	0.748	-0.373	0.709
monthjan	-0.898	0.789	-1.138	0.255
monthjun	1.245	0.785	1.585	0.113
monthmai	0.486	0.747	0.650	0.516
Month				
(Intercept)	-0.134	0.518	-0.258	0.796
monthago	-0.965	0.775	-1.245	0.213
monthfev	-0.272	0.739	-0.368	0.713
monthjan	-0.878	0.780	-1.125	0.260
monthjul	-1.253	0.827	-1.514	0.130
monthjun	1.232	0.775	1.589	0.112
monthmai	0.539	0.739	0.730	0.466
monthmar	-0.272	0.739	-0.368	0.713