

**Supplementary material**

**Local environmental conditions affecting anuran tadpoles' microhabitat choice and morphological adaptation**

*N. C. S. Marques*<sup>A,B,E</sup>, *L. Rattis*<sup>C</sup> and *F. Nomura*<sup>D</sup>

<sup>A</sup>PósGraduação em Ecologia e Evolução, Departamento de Ecologia, Instituto de Ciências Biológicas, Universidade Federal de Goiás, Goiânia, Goiás 74001970, Brazil.

<sup>B</sup>Instituto de Pesquisa Ambiental da Amazônia, Setor de Habitações Individuais Norte Centro de Atividades 5, Bloco J2, Sala 309, Lago Norte, Brasília, Distrito Federal 71503-505, Brazil.

<sup>C</sup>The Woods Hole Research Center, 149 Woods Hole Road, Falmouth, MA 02540, USA.

<sup>D</sup>Departamento de Ecologia, Universidade Federal de Goiás, Rodovia Nerópolis Goiânia quilômetro 5 Campus II, Samambaia CP 131, Goiânia, Goiás 74001970, Brazil.

<sup>E</sup>Corresponding author. Email: [marques.ncs@gmail.com](mailto:marques.ncs@gmail.com)

**Table S1. Environmental index collected in 10 cities of Brazilian Cerrado**

Values range from 0 to 1, where 0 represents the less value of environmental heterogeneity and 1 represents the higher value of environmental heterogeneity. Veg, Vegetation

Pond	City	Latitude	Longitude	Land use	Veg. margin	Veg. inside	Substrate	Margin type	Dimension (m)
1	Alto Paraíso de Goiás	-14.283112	-47.532672	0.8	0.48	0.07	0.225	0.55	18750
2	Alto Paraíso de Goiás	-14.292278	-47.629333	0.5	0.6	0.43	0.275	0.35	1365
3	Alto Paraíso de Goiás	-14.415833	-47.521917	0.5	0.56	0.33	0.225	0.45	216
4	Alto Paraíso de Goiás	-14.500389	-47.517444	0.6	0.6	0.5	0.375	0.5	7500
5	Alto Paraíso de Goiás	-14.483278	-47.591861	0	0.6	0.17	0.225	0.5	90
6	Alto Paraíso de Goiás	-14.478722	-47.578139	0.3	0.76	0.17	0.225	0.5	750
7	Aruanã	-14.87205556	-51.06838889	0.4	0.32	0.3	0	0.3	15000
8	Aruanã	-14.88897222	-51.07580556	0.4	0.48	0.2	0	0.3	3750
9	Aruanã	-14.80461111	-51.01588889	0	0.2	0.17	0	0.25	45
10	Aruanã	-14.73919444	-51.02155556	0	0.36	0.3	0.25	0.25	180
11	Aruanã	-14.77994444	-51.02394444	0	0.2	0.17	0	0.25	0.45
12	Aruanã	-14.8195	-51.02255556	0	0.4	0.17	0.1	0.25	112.5
13	Aruanã	-14.86747222	-51.04155556	0.5	0.32	0.13	0.125	0.25	30000
14	Aruanã	-14.92091667	-51.00069444	0.5	0.4	0.33	0.125	0.25	2048
15	Aruanã	-14.8755	-50.98183333	0.4	0.4	0.07	0.125	0.25	66.4
16	Aruanã	-14.93686111	-51.01291667	0.5	0.2	0.47	0.25	0.25	48000
17	Aruanã	-14.89705556	-50.91275	0.5	0.44	0.27	0.125	0.25	584
18	Aruanã	-14.67113889	-50.91275	0.5	0.6	0.37	0.125	0.25	65.7
19	Aruanã	-14.68308333	-50.91077778	0.5	0.56	0.23	0.125	0.45	293.85
20	Aruanã	-14.69419444	-50.91191667	0.5	0.24	0.17	0.125	0.25	447.25
21	Aruanã	-14.76358333	-50.96386111	0.5	0.56	0.13	0.125	0.25	975
22	Aruanã	-14.81922222	-50.97677778	0.5	0.48	0.3	0.125	0.25	1240
23	Aruanã	-14.94911111	-51.04225	0.5	0.36	0.3	0.125	0.55	32960
24	Aruanã	-14.85725	-50.9795	0.5	0.28	0.2	0.2	0.25	2050
25	Aruanã	-14.83166667	-51.04433333	0.5	0.4	0.23	0.125	0.45	20000
26	Aruanã	-14.71902778	-50.98869444	0.5	0.32	0.13	0.25	0.25	100
27	Aruanã	-14.75277778	-51.02238889	0.5	0.44	0.27	0.25	0.25	40000
28	Aruanã	-14.82605556	-51.04197222	0.5	0.24	0.33	0.125	0.5	8000
29	Aruanã	-14.80155556	-51.03113889	0.3	0.36	0.5	0.2	0.25	2250
30	Aruanã	-14.83141667	-51.04341667	0.4	0.28	0.07	0.25	0.25	140
31	Aruanã	-14.82658333	-51.02747222	0.4	0.4	0.23	0.35	0.25	750
32	Aruanã	-14.81505556	-51.02105556	0.4	0.48	0.33	0.2	0.25	500

33	Britânia	-15.45538889	-51.07013889	0.5	0.4	0.13	0.15	0.3	802.9
34	Britânia	-15.36622222	-51.12383333	0.5	0.2	0.13	0.15	0.25	130000
35	Caiapônia	-17.21066667	-51.46838889	0.9	0.2	0.17	0.225	0.3	6111
36	Caiapônia	-17.28936111	-51.96222222	0.4	0.36	0.17	0.4	0.45	7928.8
37	Caiapônia	-17.24072222	-51.46755556	0.5	0.2	0.3	0.25	0.5	1250
38	Caiapônia	-17.21555556	-51.44255556	0.5	0.32	0.33	0.15	0.25	28456
39	Chapadão do Céu	-18.23622222	-52.61333333	0.4	0.2	0.17	0.15	0.25	722
40	Chapadão do Céu	-18.2349444	-52.6062222	0.5	0.2	0.03	0.125	0.3	1025
41	Chapadão do Céu	-18.0543333	-52.6368889	0.1	0.2	0.1	0.175	0.25	100047
42	Chapadão do Céu	-18.11688138	-52.59325175	0	0.24	0.23	0.15	0.25	320
43	Chapadão do Céu	-18.0045907	-52.72455803	0.2	0.28	0.23	0.175	0.3	1093
44	Chapadão do Céu	-18.23320753	-52.5796822	0.6	0.2	0.1	0.125	0.3	238
45	Chapadão do Céu	-18.04381139	-52.66135421	0.3	0.2	0	0.15	0.3	304
46	PARNA Emas	-17921583	-52967694	0	0.44	0.27	0.175	0.25	4200
47	PARNA Emas	-17919389	-52967056	0	0.4	0.27	0.125	0.3	8000
48	PARNA Emas	-	-	0	0.2	0.23	0.125	0.3	11000
49	PARNA Emas	-17937611	-53081861	0	0.4	0.2	0.15	0.2	50000
50	PARNA Emas	-17887444	-53152694	0	0.2	0.17	0.125	0.25	1260
51	PARNA Sempre-Vivas	-17.89525	-43.76806389	0	0	0.13	0.125	0.55	0.075
52	PARNA Sempre-Vivas	-17.91672222	-43.78363056	0	0	0.1	0.275	0.5	8123
53	PARNA Sempre-Vivas	-17.92216667	-43.76475	0	0	0	0.125	0.3	30
54	PARNA Sempre-Vivas	-17.89111111	-43.80705556	0	0.28	0.33	0.125	0.25	22.5
55	PARNA Sempre-Vivas	-17.95730556	-43.78344444	0	0.2	0.07	0.125	0.25	1.8
56	PARNA Sempre-Vivas	-17.91352778	-43.78638889	0	0	0.23	0.2	0.5	20
57	PARNA Sempre-Vivas	-17.86291667	-43.76	0	0	0.27	0.075	0.25	56.25
58	PARNA Sempre-Vivas	-17.86291667	-43.76	0	0.2	0.17	0.225	0.25	18
59	Pires do Rio	-17.40161111	-48.35697222	0.5	0.32	0	0.25	0.3	864
60	Pires do Rio	-17.44069444	-48.40858333	0.5	0.4	0.47	0.25	0.55	490
61	Pires do Rio	-17.40372222	-48.38327778	0.4	0.36	0.37	0.125	0.3	349
62	Pires do Rio	-17.32286111	-48.43755556	0.5	0.48	0.33	0.125	0.5	491
63	Pires do Rio	-17.32713889	-48.45597222	0.4	0.24	0.4	0.125	0.3	1236
64	Pires do Rio	-17.30272222	-48.30889444	0.6	0.56	0.23	0.125	0.25	9539
65	Pontalina	-17.42066667	-49.34783333	0.9	0.48	0.5	0.275	0.35	1337
66	Pontalina	-17.47480556	-49.36352778	0.5	0.52	0.23	0.175	0.25	688.8
67	Pontalina	-17.49319444	-49.27661111	0.5	0.52	0.33	0.175	0.25	39071
68	Pontalina	-17.36844444	-49.32308333	0.5	0.6	0.07	0.125	0.3	380
69	Pontalina	-17.43722222	-49.47577778	0.5	0.24	0.33	0.125	0.25	294.5

70	Pontalina	-17.425703	-49.370136	0.6	0.48	0.4	0.15	0.1	1000
71	Pontalina	-17.4325	-49.343611	0.3	0.32	0.23	0.15	0.25	8400
72	São João da Aliança	-14.732806	-47.563139	0.2	0.2	0.3	0.125	0.25	900
73	São João da Aliança	-14.727667	-47.553639	0	0.68	0.47	0.225	0.25	1824
74	São João da Aliança	-14.612806	-47.541056	0.5	0.4	0.07	0.25	0.45	492.8
75	São João da Aliança	-14.659417	-47.526417	1	0.56	0.33	0.2	0.7	4560
76	São João da Aliança	-14.589833	-47.642472	0	0.72	0.5	0.275	0.35	3780
77	São João da Aliança	-14.555667	-47.628639	0	0.64	0.27	0.3	0.5	150
78	São João da Aliança	-14.662	-47.616944	0	0.68	0.13	0.5	0.6	3000
79	Serranópolis	-18.45033017	-52.08222597	0.5	0.4	0.33	0.225	0.45	131
80	Serranópolis	-18.45033017	-52.08222597	0.4	0.64	0.63	0.275	0.7	3527
81	Serranópolis	-18.455928	-52.07349283	0.5	0.72	0.47	0.45	0.5	12881
82	Serranópolis	-18.46905556	-52.23452778	0.5	0.4	0.33	0.125	1	860
83	Serranópolis	-18.32908359	-52.16260255	0.5	0.44	0.2	0.15	0.5	1857
84	Serranópolis	-18.31311111	-52.15761111	0	0.76	0.67	0.25	0.55	7200
85	Serranópolis	-18.35858333	-52.00863889	0.2	0.56	0.37	0.25	0.25	899
86	Serranópolis	-18.42683333	-52.18658333	0.5	0.56	0.47	0.275	0.7	21953

**Table S2. Environmental variables collected in 86 ponds from Brazilian Cerrado**

Dimension were measured in metres (m) and all others variables in percentage (0–100%). We transformed the percentage into a semiquantitative variable as follows: 0% = 0; 1–20% = 0.1; 21–40% = 0.3; 41–60% = 0.5; 61–80% = 0.7; 81–100% = 0.9. (–), missing values

Pond	City	Dimension			Margin type				Substrate								
		Length	Width	Depth	Cliffed	Plane	Sloped	Excavated	Rock	Stones	Coarse gravel	Gravel	Sand	Clay	Mud	Leaf litter	
1	Alto Paraíso de Goiás	250	50	1.5	0.3	0.9	0.7	0	0	0	0	0	0	0	0.9	0	0.7
2	Alto Paraíso de Goiás	70	15	1.3	0.5	0.3	0.3	0	0	0	0	0	0	0	0.5	0.5	0.9
3	Alto Paraíso de Goiás	30	6	1.2	0	0	0.7	0.9	0	0	0	0	0.9	0	0	0.7	0
4	Alto Paraíso de Goiás	100	50	1.5	0	0.9	0.9	0	0	0	0	0	0.9	0	0.9	0	0.9
5	Alto Paraíso de Goiás	20	15	0.3	0.3	0.5	0.9	0	0	0	0	0	0.9	0	0	0	0.7
6	Alto Paraíso de Goiás	25	20	1.5	0.9	0	0.9	0	0	0	0	0	0.9	0	0	0	0.7
7	Aruanã	100	100	1.5	0	0.5	0.5	0	0	0	0	0	0	0	0	0	0
8	Aruanã	150	50	0.5	0	0.5	0.5	0	0	0	0	0	0	0	0	0	0
9	Aruanã	15	10	0.3	0	0.9	0	0	0	0	0	0	0	0	0	0	0
10	Aruanã	20	15	0.6	0	0.3	0.5	0	0	0	0	0	0	0	0	0.9	0.9
11	Aruanã	2	1.5	0.2	0	0	0.9	0	0	0	0	0	0	0	0	0	0

Pond	City	Dimension			Margin type				Substrate							
		Length	Width	Depth	Cliffed	Plane	Sloped	Excavated	Rock	Stones	Coarse gravel	Gravel	Sand	Clay	Mud	Leaf litter
12	Aruanã	25	15	0.3	0	0.9	0	0	0	0	0	0	0	0	0	0.7
13	Aruanã	400	150	0.5	0	0.3	0.5	0	0	0	0	0	0.9	0	0	0
14	Aruanã	128	40	0.4	0	0	0.9	0	0	0	0	0	0	0.9	0	0
15	Aruanã	100	20	0	0	0	0.9	0	0	0	0	0	0	0.9	0	0
16	Aruanã	400	200	0.6	0	0	0.9	0	0	0	0	0	0	0	0.9	0.9
17	Aruanã	100	50	0.1	0	0.9	0	0	0	0	0	0	0	0.9	0	0
18	Aruanã	50	20	0.1	0	0.9	0	0	0	0	0	0	0	0.9	0	0
19	Aruanã	60	15	0.3	0.9	0	0.7	0	0	0	0	0	0	0.9	0	0
20	Aruanã	50	25	0.4	0	0	0.9	0	0	0	0	0	0	0.9	0	0
21	Aruanã	100	25	0.4	0	0	0.9	0	0	0	0	0	0	0	0.9	0
22	Aruanã	200	50	0.1	0	0.9	0	0	0	0	0	0	0	0	0.9	0
23	Aruanã	400	200	0.4	0.5	0.9	0.5	0	0	0	0	0	0	0	0.9	0
24	Aruanã	50	200	0.2	0	0	0.9	0	0	0	0	0	0.9	0	0	0.5
25	Aruanã	400	25	2	0.3	0.9	0.3	0	0	0	0	0	0.9	0	0	0
26	Aruanã	40	25	0.1	0	0.9	0	0	0	0	0	0	0.9	0	0	0.9
27	Aruanã	400	50	2	0	0.3	0.5	0	0	0	0	0	0.9	0	0	0.9
28	Aruanã	100	100	0.8	0	0.9	0.9	0	0	0	0	0	0.9	0	0	0
29	Aruanã	25	60	1.5	0	0.3	0.5	0	0	0	0	0	0.9	0	0	0.5
30	Aruanã	70	5	0.4	0	0	0.9	0	0	0	0	0.9	0.9	0	0	0
31	Aruanã	50	30	0.5	0	0.9	0	0	0	0	0	0	0.9	0.9	0	0.7
32	Aruanã	20	50	0.5	0	0.9	0	0	0	0	0	0	0	0.9	0	0.5
33	Britânia	62	37	0.4	0.3	0.7	0	0	0	0	0	0	0.5	0.5	0	0
34	Britânia	100	26	50	0.1	0	0.7	0	0	0	0	0	0.5	0.5	0	0
35	Caiapônia	70	45	-	0.3	0	0.7	0	0	0	0	0	0	0	0.7	0.9
36	Caiapônia	37.4	212	1	0.9	0	0.7	0	0	0	0	0.9	0.3	0	0.7	0.9
37	Caiapônia	65.7	27.2	0.7	0	0.9	0.9	0	0	0	0	0	0	0	0.9	0.9
38	Caiapônia	127.7	114.9	-	0.9	0	0	0	0	0	0	0	0	0	0.5	0.5
39	Chapadão do Céu	59.3	42	0.3	0	0.9	0	0	0	0	0	0.1	0.9	0	0	0
40	Chapadão do Céu	55.7	32.3	0.6	0	0.5	0.5	0	0	0	0	0	0.9	0	0	0
41	Chapadão do Céu	176.1	142	4	0.1	0	0.7	0	0	0.1	0	0	0.9	0	0	0.1
42	Chapadão do Céu	40	20	0.4	0.9	0	0	0	0	0.1	0	0	0.1	0	0	0.7
43	Chapadão do Céu	90	45	0.3	0	0.9	0.1	0	0	0	0	0.1	0.9	0	0	0.1
44	Chapadão do Céu	37.4	14.2	0.5	0	0.5	0.3	0.1	0	0	0	0	0.9	0	0	0
45	Chapadão do Céu	28.4	20.6	0.5	0	0.7	0	0.3	0	0	0	0	0.9	0	0.1	0
46	PARNA Emas	100	60	0.7	0.1	-	0.7	-	-	-	-	-	-	-	0.9	0.5
47	PARNA Emas	100	40	2	0.3	-	0.7	-	-	-	-	-	-	-	0.9	-
48	PARNA Emas	110	100	1	0.1	-	0.9	-	-	-	-	-	-	-	0.9	-
49	PARNA Emas	100	100	5	0.5	-	0.5	-	-	-	-	-	-	-	0.7	0.3

Pond	City	Dimension			Margin type						Substrate					
		Length	Width	Depth	Cliffed	Plane	Sloped	Excavated	Rock	Stones	Coarse gravel	Gravel	Sand	Clay	Mud	Leaf litter
50	PARNA Emas	70	30	0.6	-	-	0.9	-	-	-	-	-	-	-	0.9	-
51	PARNA Sempre-Vivas	1.5	1	0.1	0.7	0	0.3	0.9	0.9	0	0	0	0	0	0	0
52	PARNA Sempre-Vivas	-	-	-	0.5	0	0.3	0.9	0.7	0.3	0	0	0.9	0	0	0
53	PARNA Sempre-Vivas	100	1	0.3	0.5	0	0.5	0	0	0	0	0	0.9	0	0	0
54	PARNA Sempre-Vivas	25	3	0.3	0	0	0.9	0	0.9	0	0	0	0	0	0	0
55	PARNA Sempre-Vivas	3	2	0.3	0	0	0.9	0	0	0	0	0	0.9	0	0	0
56	PARNA Sempre-Vivas	20	2	0.5	0.9	0	0.9	0	0.5	0	0	0	0.9	0	0	0
57	PARNA Sempre-Vivas	25	15	0.2	0	0.9	0	0	0	0	0	0	0.5	0	0	0
58	PARNA Sempre-Vivas	20	3	0.3	0	0.9	0	0	0.9	0	0	0	0.7	0	0	0
59	Pires do Rio	36	30	0.8	0.3	0	0.7	0	0	0	0	0	0	0	0.9	0.9
60	Pires do Rio	50.5	26.3	0.4	0.9	0.5	0.5	0	0	0	0	0	0	0	0.9	0.9
61	Pires do Rio	23	31	0.5	0.7	0	0.3	0	0	0	0	0	0	0.9	0	0
62	Pires do Rio	140	42	0.5	0.9	0	0.9	0	0	0	0	0	0	0.9	0	0
63	Pires do Rio	44.4	50.7	0.6	0.3	0	0.7	0	0	0	0	0	0.9	0	0	0
64	Pires do Rio	52.2	91.4	2	0	0	0.9	0	0	0	0	0	0	0.9	0	0
65	Pontalina	79.6	42	0.4	0.3	0	0.9	0	0	0	0	0	0	0.5	0.5	0.9
66	Pontalina	41	28	0.6	0.9	0	0	0	0	0	0	0	0	0.7	0.5	0
67	Pontalina	265	76	-	0.9	0	0	0	0	0	0	0	0	0.7	0.5	0
68	Pontalina	38	20	0.5	0.3	0	0.7	0	0	0	0	0	0	0	0.9	0
69	Pontalina	31	19	0.5	0.9	0	0	0	0	0	0	0	0	0.9	0	0
70	Pontalina	100	20	0.5	0.9	0	0	0	0	0	0	0	0	0.5	0.5	0
71	Pontalina	20	10	42	0.7	0	0.1	0	0	0	0	0	0	0	0.7	0.3
72	São João da Aliança	120	50	0.2	0	0	0.9	0	0	0	0	0	0	0.9	0	0
73	São João da Aliança	114	100	0.2	0.3	0.5	0.5	0	0	0	0	0	0	0	0.9	0.7
74	São João da Aliança	40	11	1.1	0.9	0	0.7	0.9	0	0.9	0	0	0	0	0.9	0
75	São João da Aliança	80	38	1.5	0.9	0.7	0.9	0	0	0	0	0	0	0.5	0.9	0
76	São João da Aliança	90	35	1.2	0.5	0.3	0.3	0	0	0	0	0	0	0.5	0.5	0.9
77	São João da Aliança	100	5	0.3	0	0.9	0.9	0	0	0.7	0.5	0.9	0	0	0	0
78	São João da Aliança	80	25	1.5	0.7	0	0.9	0.5	0	0	0.9	0.9	0.9	0	0.9	0
79	Serranópolis	11.4	7.7	1.5	0	0.7	0.9	0	0	0	0	0	0.9	0	0.7	0
80	Serranópolis	133	68	0.4	0.9	0.9	0.7	0	0	0	0	0.9	0.3	0	0.7	0
81	Serranópolis	85.9	75	2	0.5	0.9	0.3	0	0	0	0	0.9	0.5	0	0.9	0.9
82	Serranópolis	47.1	30.4	0.6	0.9	0.9	0.9	0.9	0	0	0	0	0.9	0	0	0
83	Serranópolis	59	47	0.7	0.9	0.5	0.3	0	0	0	0	0	0.7	0	0	0.3
84	Serranópolis	90	40	2	0.3	0.9	0.7	0	0	0	0	0	0.9	0	0	0.9
85	Serranópolis	31	29	1	0	0	0.9	0	0	0	0	0	0.9	0	0	0.9
86	Serranópolis	113.3	64.6	3	0.9	0.9	0.7	0	0	0	0	0.9	0.7	0	0	0.3

**Table 2. (Cont.)**

Pond	Vegetation inside						Vegetation margin						Land use		
	None	Submerged	Floating	U. herbaceous	Shrub	Tree	<i>T.</i> <i>domingensis</i>	None	H. undergrowth	H. erect	Shrub	Arboreous	<i>T.</i> <i>domingensis</i>	Short crops	Pasture
1	0.9	0	0	0.3	0	0	0	0	0.9	0.5	0.3	0.3	0	0.5	0.9
2	0.5	0.9	0	0.5	0.9	0	0	0	0.9	0.7	0.5	0.5	0	0	0.9
3	0.9	0	0	0.9	0.9	0	0	0	0.7	0	0.9	0.9	0	0	0.9
4	0.9	0	0	0.9	0.9	0.9	0	0.9	0.7	0.5	0.7	0.7	0	0.5	0.5
5	0.7	0	0	0.9	0	0	0	0	0.9	0.9	0.9	0	0	0	0
6	0.9	0	0	0.9	0	0	0	0.9	0.7	0.9	0.9	0.9	0	0	0.5
7	0.3	0	0.3	0.3	0.9	0	0	0	0	0.3	0.3	0.7	0	0	0.7
8	0.3	0	0.5	0.5	0	0	0	0	0	0.5	0.9	0.7	0	0	0.7
9	0	0.9	0	0	0	0	0	0	0.3	0.5	0	0	0	0	0
10	0.9	0	0	0	0.7	0.9	0	0.9	0	0	0.7	0.9	0	0	0
11	0	0.9	0	0	0	0	0	0.9	0.3	0.5	0	0	0	0	0
12	0.9	0	0	0.9	0	0	0	0	0	0.5	0.3	0.9	0	0	0
13	0.3	0	0	0.3	0.3	0	0	0	0	0.7	0.3	0.3	0	0	0.9
14	0	0	0.9	0.9	0	0	0	0	0	0.9	0	0.9	0	0	0.9
15	0	0	0	0.3	0	0	0	0.9	0	0.7	0.7	0.3	0	0	0.7
16	0.3	0	0	0.9	0.9	0.7	0	0	0	0.9	0	0	0	0	0.9
17	0	0	0	0.5	0.9	0	0	0	0	0.7	0.3	0.9	0	0	0.9
18	0	0	0	0.7	0.3	0.9	0	0	0	0.9	0.9	0.9	0	0	0.9
19	0.3	0	0.9	0.3	0	0	0	0	0	0.7	0.9	0.9	0	0	0.9
20	0	0	0	0.9	0	0	0	0.5	0	0.7	0	0.3	0	0	0.9
21	0	0	0	0.7	0	0	0	0.9	0	0.7	0.9	0.9	0	0	0.9
22	0.3	0	0	0	0.9	0.7	0	0.5	0	0.3	0.9	0.9	0	0	0.9
23	0.9	0	0	0.3	0.3	0.9	0	0.9	0	0.3	0.3	0.9	0	0	0.9
24	0.3	0	0	0.3	0.3	0.3	0	0.5	0	0.5	0.3	0.3	0	0	0.9
25	0.5	0	0	0.3	0.9	0	0	0.5	0	0.5	0.3	0.9	0	0	0.9
26	0.5	0	0	0.7	0	0	0	0.9	0	0.7	0.3	0.3	0	0	0.9
27	0.3	0	0	0.9	0.5	0	0	0.7	0	0.3	0.7	0.9	0	0	0.9
28	0	0	0	0.9	0.9	0	0	0.9	0	0.7	0.3	0	0	0	0.9
29	0.5	0	0	0.9	0.9	0.9	0	0.5	0	0.9	0.3	0.3	0	0	0.5
30	0.7	0	0	0.3	0	0	0	0.7	0	0.3	0.9	0	0	0	0.7
31	0.5	0	0	0.5	0.3	0.3	0	0	0	0.9	0.5	0.3	0	0	0.7
32	0.9	0.7	0	0.7	0.3	0	0	0	0	0.7	0.5	0.9	0	0	0.7
33	0.5	0	0	0.5	0.3	0	0	0	0	0.9	0.9	0	0	0	0.9
34	0.1	0	0	0.5	0	0	0	0	0	0.9	0	0	0	0	0.9
35	0.7	0	0	0.9	0	0	0	0.9	0.5	0	0.3	0	0	0.7	0.9
36	0.9	0	0	0.9	0	0	0	0.9	0.7	0.9	0	0	0	0	0.7

Pond	Vegetation inside						Vegetation margin						Land use		
	None	Submerged	Floating	U. herbaceous	Shrub	Tree	<i>T.</i> <i>domingensis</i>	None	H. undergrowth	H. erect	Shrub	Arboreous	<i>T.</i> <i>domingensis</i>	Short crops	Pasture
37	0.9	0.9	0	0.7	0	0	0	0.9	0.9	0	0	0	0	-	0.9
38	0	0.9	0	0.9	0	0	0	0.9	0.5	0	0.9	0	0	0.3	0.5
39	0.1	0.3	0	0.5	0	0	0	0	0.1	0.7	0	0	0	0	0.7
40	0.9	0.1	0	0	0	0	0	0.1	0.9	0	0	0	0	0	0.9
41	0.5	0.1	0	0.1	0.1	0	0	0.1	0	0.3	0.3	0.1	0	0	0.1
42	0	0	0.1	0.7	0	0.3	0	0	0	0.3	0.3	0.3	0	0	0
43	0	0	0	0.7	0.5	0	0	0	0	0.7	0.3	0.1	0	0	0.3
44	0.5	0	0	0.5	0	0	0	0.1	0	0.9	0	0	0	0.7	0.3
45	0.9	0	0	0	0	0	0	0.1	0.9	0	0	0	0	0	0.5
46	-	-	-	0.5	0.5	0.3	-	0.9	-	0.9	0.9	0.5	-	-	-
47	-	-	-	0.9	0.3	0.1	-	0.9	-	0.7	0.5	0.5	-	-	-
48	-	-	-	0.9	0.3	-	-	0.9	-	0.9	-	-	-	-	-
49	-	-	-	0.7	0.3	0.1	-	0.9	-	0.5	0.5	0.9	-	-	-
50	-	-	-	0.9	-	-	-	0.1	-	0.9	-	-	-	-	-
51	0	0	0	0	0	0	0.7	0	0	0	0	-	-	-	0
52	0	0	0	0	0	0	0.5	0.5	0	0	0	-	-	-	0
53	0	0	0	0	0	0	0	0.9	0	0	0	-	-	-	0
54	0	0.9	0.9	0	0	0	0	0	0.3	0.9	0	-	-	-	0
55	0	0.3	0	0	0	0	0	0.7	0.9	0	0	-	-	-	0
56	0	0.3	0	0	0	0	0.9	0.3	0	0	0	-	-	-	0
57	0	0.9	0	0	0	0	0.5	0.9	0	0	0	-	-	-	0
58	0	0	0	0	0	0	0.9	0.9	0.9	0	0	-	-	-	0
59	0.9	0	0	0	0	0	0	0	0	0.5	0.5	0.3	0	0	0.9
60	0.3	0	0.9	0	0.9	0	0.7	0	0.9	0.9	0	0	0	0	0.9
61	0.3	0	0.5	0.5	0.9	0	0	0.5	0	0.3	0.3	0.9	0	0	0.7
62	0.9	0	0.9	0.9	0	0	0	0.3	0	0.7	0.5	0.9	0	0.5	0.3
63	0.7	0	0.9	0.3	0.9	0	0	0	0	0.5	0.5	0	0	0.7	0
64	0.7	0	0	0.3	0.9	0	0	0	0	0.7	0.9	0.9	0	0.5	0.5
65	0.7	0	0	0.9	0	0.9	0.9	0.5	0	0.3	0.9	0.9	0	0.7	0.9
66	0.3	0	0	0.3	0.9	0	0	0	0.7	0	0.9	0.9	0	0	0.9
67	0.9	0	0	0.9	0.9	0	0	0.9	0.3	0.7	0.3	0.9	0	0	0.9
68	0.7	0	0	0.3	0	0	0	0.5	0	0.9	0.9	0.9	0	0	0.9
69	0	0	0.9	0.9	0	0	0	0	0	0.3	0	0.7	0	0	0.9
70	0.5	0	0	0.9	0	0.9	0.3	0	0	0.9	0.3	0.9	0	0.3	0.7
71	0.3	0	0.1	0.3	0.7	0	0	0	0	0.3	0.7	0.3	0	0	0.5
72	0.9	0.3	0	0.9	0.3	0	0	0	0.9	0	0	0	0	0	0.3
73	0.9	0.5	0	0.5	0.5	0.9	0	0	0.7	0.7	0.9	0.7	0	0	0
74	0.7	0	0	0.3	0	0	0	0	0.7	0.7	0.3	0	0	0	0.9



Pond	Vegetation inside						Vegetation margin						Land use		
	None	Submerged	Floating	U. herbaceous	Shrub	Tree	None	H. <i>T. domingensis</i>	H. undergrowth	H. erect	Shrub	Arboreous	<i>T. domingensis</i>	Short crops	Pasture
75	0.9	0.5	0	0.3	0	0	0.9	0	0.7	0	0.9	0	0.9	0.9	0.9
76	0.9	0	0.5	0.5	0.7	0.9	0	0	0.7	0.7	0.9	0.9	0	0	0
77	0.3	0.7	0	0.7	0	0	0	0	0.9	0.5	0.5	0.9	0	0	0
78	0.7	0	0	0.7	0	0	0	0	0.7	0.7	0.7	0.9	0	0	0
79	0	0	0.9	0.9	0	0	0	0	0.9	0.9	0	0	0	0	0.9
80	0.9	0.9	0.9	0.9	0.3	0.3	0	0.9	0.7	0.3	0.9	0.9	0	0	0.7
81	0.9	0.9	0	0.3	0.3	0.9	0	0.9	0.9	0.5	0.9	0.9	0	0.3	0.5
82	0.9	0	0	0.9	0.9	0	0	0.9	0	0.9	0.9	0	0	0	0.9
83	0.9	0.3	0	0.3	0.3	0	0	0	0.9	0.3	0.7	0	0	0	0.9
84	0	0.9	0.9	0.9	0.9	0	0	0.9	0.9	0.7	0.9	0.9	0	0	0
85	0.9	0.7	0	0.3	0.9	0	0	0.9	0.9	0.7	0.9	0	0	0	0.3
86	0.3	0.3	0.9	0.3	0.9	0	0	0	0.9	0.3	0.9	0.3	0	0.9	0





