

Appendix

Model selection tables for abundance (glm)

Table 1 : Summary of the outcome for the model selection of the glm's for each species.

Species	Models	Df	logLik	AIC	delta	weight
<i>Rana temporaria</i>	m3	5	-208.620	429.5	0.00	0.758
	m6	5	-209.989	432.2	2.74	0.193
	m7	6	-209.851	434.9	5.47	0.049
	m1	4	-222.067	453.6	24.10	0.000
	m4	5	-234.188	480.6	51.14	0.000
	m5	5	-242.777	497.8	68.31	0.000
	m0	3	-247.383	501.6	72.13	0.000
	m2	4	-246.320	502.1	72.61	0.000
<i>Bufo bufo</i>	m1	4	-70.816	151.1	0.00	0.233
	m2	4	-70.871	151.2	0.11	0.221
	m4	5	-69.522	151.3	0.20	0.210
	m5	5	-69.725	151.7	0.61	0.172
	m6	6	-68.903	153.0	1.98	0.087
	m3	5	-70.515	153.3	2.19	0.078
	m0	3	-94.721	196.3	45.21	0.000
<i>Pelophylax sp.</i>	m5	5	-466.712	945.6	0.00	0.806
	m4	6	-466.634	948.5	2.85	0.194
	m6	5	-539.430	1091.1	145.43	0.000
	m7	6	-539.157	1093.5	147.90	0.000
	m3	5	-559.489	1131.2	185.55	0.000
	m2	5	-601.600	1215.4	269.78	0.000
	m0	3	-667.222	1341.3	395.62	0.000
	m1	3	-668.573	1344.0	398.33	0.000
<i>Lissotriton helveticus</i>	m0	3	-35.906	78.6	0.00	0.990
	m7	6	-36.452	88.1	9.50	0.009
	m6	5	-39.564	91.3	12.71	0.002
	m1	4	-43.440	96.3	17.67	0.000
	m3	5	-43.394	99.0	20.37	0.000
	m2	4	-47.082	103.6	24.95	0.000
	m4	5	-46.504	105.2	26.59	0.000
	m5	5	-46.855	105.9	27.29	0.000
<i>Ichthyosaura alpestris</i>	m4	6	-358.605	732.4	0.00	1
	m3	5	-383.220	778.7	46.22	0
	m5	5	-397.246	806.7	74.27	0
	m2	4	-405.168	819.8	87.32	0
	m1	4	-407.369	824.2	91.73	0
	m6	5	-416.981	846.2	113.74	0
	m0	3	-425.315	857.5	125.02	0
	m7	4	-437.123	883.7	151.23	0

Model selection table for occupancy models

Table 2 : Summary of the outcome for the model selection of occupancy.

Species	Models	nPars	AIC	Delta	AICwt	cumltwt	Rsq
<i>Rana temporaria</i>	m7	5	117.61	0.000	0.130	0.13	0.12101
	m6	4	117.69	0.086	0.124	0.25	0.06136
	m1	3	117.71	0.103	0.123	0.38	0.00000
	m3	4	117.74	0.135	0.121	0.50	0.05993
	m2	4	118.17	0.567	0.098	0.60	0.04705
	m13	3	119.25	1.648	0.057	0.65	-0.04961
	m4	4	119.47	1.861	0.051	0.71	0.00755
	m8	5	119.47	1.866	0.051	0.76	0.06784
	m11	5	119.55	1.945	0.049	0.81	0.06550
	m12	4	119.57	1.962	0.049	0.85	0.00442
	m9	5	119.68	2.072	0.046	0.90	0.06177
	m5	4	119.70	2.089	0.046	0.95	0.00044
	m1.3	8	120.90	3.298	0.025	0.97	0.19286
	m10	7	121.58	3.971	0.018	0.99	0.12181
m1.2	10	122.55	4.944	0.011	1.00	0.25085	
<i>Bufo bufo</i>	m1	3	113.93	0.00	0.174	0.17	0.0e+00
	m2.6	4	114.26	0.33	0.148	0.32	5.1e-02
	m2.7	4	114.48	0.55	0.132	0.45	4.5e-02
	m2.13	4	114.82	0.88	0.112	0.57	3.5e-02
	m2.4	4	115.53	1.60	0.078	0.64	1.3e-02
	m2.8	4	115.57	1.64	0.077	0.72	1.1e-02
	m2.10	5	115.86	1.92	0.067	0.79	6.3e-02
	m2.5	4	115.93	2.00	0.064	0.85	1.1e-05
	m2.11	5	116.12	2.18	0.058	0.91	5.6e-02
	m2.9	5	117.57	3.64	0.028	0.94	1.1e-02
	m2.12	7	118.06	4.13	0.022	0.96	1.2e-01
	m2.2	8	118.30	4.36	0.020	0.98	1.6e-01
m2.3	8	118.30	4.36	0.020	1.00	1.6e-01	
<i>Pelophylax</i> sp.	m6	4	107.04	0.00	0.246	0.25	0.1419
	m8	5	108.16	1.11	0.141	0.39	0.1658
	m11	5	108.42	1.38	0.124	0.51	0.1588
	m9	5	108.88	1.84	0.098	0.61	0.1464
	m7	5	108.95	1.91	0.095	0.70	0.1444
	Null	3	109.86	2.82	0.060	0.76	0.0000
	m2	4	109.95	2.91	0.058	0.82	0.0588
	m1.3	8	110.13	3.09	0.052	0.87	0.2668
	m4	4	110.99	3.95	0.034	0.91	0.0272
	m10	7	111.33	4.29	0.029	0.94	0.1876
	m5	4	111.71	4.67	0.024	0.96	0.0048

	m3	4	111.77	4.73	0.023	0.98	0.0028
	m1.2	10	112.44	5.39	0.017	1.00	0.3057
<i>Lissotriton helveticus</i>	mm2	4	59.27	0.00	0.5906	0.59	0.26278
	mm1.3	8	61.73	2.45	0.1731	0.76	0.40739
	mm10	7	63.90	4.63	0.0584	0.82	0.30091
	mm3	4	64.34	5.06	0.0470	0.87	0.10776
	Null	3	65.45	6.17	0.0269	0.90	0.00000
	mm1.2	10	65.70	6.42	0.0238	0.92	0.40819
	mm11	5	66.28	7.01	0.0177	0.94	0.10949
	mm7	5	66.34	7.06	0.0173	0.95	0.10779
	mm4	4	66.54	7.26	0.0156	0.97	0.03257
	mm5	4	67.41	8.13	0.0101	0.98	0.00144
	mm6	4	67.44	8.17	0.0099	0.99	0.00017
	mm8	5	68.53	9.26	0.0058	1.00	0.03278
	mm9	5	69.40	10.13	0.0037	1.00	0.00164
<i>Ichthyosaura alpestris</i>	m11	5	102.22	0.00	0.286	0.29	0.18246
	m10	7	104.21	1.99	0.106	0.39	0.23395
	m6	4	104.46	2.24	0.093	0.49	0.06310
	Null	3	104.50	2.28	0.092	0.58	0.00000
	m8	5	104.76	2.54	0.080	0.66	0.11275
	m4	4	104.84	2.62	0.077	0.74	0.05171
	m2	4	105.80	3.57	0.048	0.78	0.02220
	m9	5	106.05	3.83	0.042	0.83	0.07544
	m5	4	106.11	3.89	0.041	0.87	0.01219
	m1.3	8	106.21	3.99	0.039	0.91	0.23400
	m7	5	106.45	4.23	0.035	0.94	0.06334
	m3	4	106.49	4.27	0.034	0.97	0.00011
	m1.2	10	106.99	4.77	0.026	1.00	0.31014

Sites description

1 – Bottens

Coordinates: X: 541531, Y: 163709

Sampled beaver territory size: 293.61 m

Canopy: 70 %

Vegetation coverage inside the pond 0

Vegetation outside the pond: 30 %



Type of landscape, in reference to the book: « Guide des milieux de Suisse (Delarze et al. 2015): **1** (Free water), **2** (Shores and wetlands), **5** (Heaths, margins and meadows) , **6** (Forest), **8** (Plantations, fields and crops), **9** (constructed environments)

Dam age: 1 year

Ponds: 1 big pond, 6 “ponds” / flooded areas, stagnant water due to dam

Ponds size: 67 x 40 m large / 12.58 x 1.71 m / 15.72 x 2 m/ 16.50 x 4 m/ 7.87 x 3.30 m/ 10.24 x 3.10 m / 9.07 x 1.90 m

Presence of fish: Absent

Other amphibian reproduction site distance: 629 m

Water type: Wide stream, multiple beaver ponds (small patches)

Water level variation: lower

Additional information: additional natural already existing pond extended by the beaver dam less occupied than beaver ponds



2- Bois du Jorat, Froideville, petites côtes



Coordinates: X: 2541955, Y: 1159600

Sampled beaver territory size: 100 m

Canopy: 50 %

Vegetation coverage inside: 5 % with some algae

Vegetation outside the pond: 30 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 1 and 6 years old

Ponds: four stagnant waters behind dam, no real pond and 2 small ponds next to dams

Ponds size: 28 x 2.3 m / 21 x 2.6 m / (8 x 1 m, 4 x 1 m)

Presence of fish: present

Other amphibian reproduction site distance: 270 m

Water type: small river, head water stream

Water level: same, 2 small ones nearly dry by 3rd visit

Additional information: beaver pond next to a beaver dam that retains water and part of this water follows a path/channel created by the beavers to fill and supply another pond

3 – Champ bonjour, Bercher

Coordinates: X: 543196, Y: 170823

Sampled territory size: 200 m

Canopy: 30 %

Vegetation coverage inside the pond: 5 %

Vegetation coverage outside: 40 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 2 years

Ponds: 3 stagnant waters by dam

Ponds size: 21.70 x 2.70 m / 9.70 x 2.60 m / 16.48 x 1.52 m

Presence of fish: absent

Other amphibian reproduction site distance: none

Water type: small creek

Water level at 3rd visit: a bit lower



4- Molondin, Ruisseau de Pra-Long

Coordinates: X: 546567, Y: 177612

Sampled territory size: 230 m

Canopy: 60 %

Vegetation coverage inside the pond: 25 %

Vegetation coverage outside: 50 %

Type of landscape: forest **1,2,5,6**

Dam age: 6 and 1 year

Ponds: 3, two from beavers the other not

Ponds size: 7 x 25 m, small one where eggs were 2 x 2 m, 4 x 1.60 m / 7 x 1.30 m

Presence of fish: present

Other amphibian reproduction site distance: none

Water type: small river, water stream + small pond

Water level: same

5 – Champtauroz

Coordinates X: 550302, Y: 178114

Sampled beaver territory size: 64 m

Canopy: 50 %

Vegetation coverage inside the pond: 5 %

Vegetation coverage outside: 50 %

Type of landscape: **1,2,5,6,8**

Dam age: 1 year

Ponds: 3

Non beaver ponds: 2, size: 30 x 18 m / 21 x 18 m

Ponds size: 17 x 30 m / 6.40 x 6.30 m / 16.28 x 1.60 m

Presence of fish: no

Other amphibian reproduction site distance: 203 m

Water type: forest river, head water stream

Water level: same

Additional information: species more attracted to the multiple beaver ponds (small patches) rather than the two other artificial ponds for amphibians



6- Grandson, Canal de la Poissine

Coordinates: X: 541357, Y: 186538

Sampled beaver territory size: 173 m

Canopy: 30 %

Vegetation coverage inside the pond: 15 %

Vegetation outside: 25 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 3 and 5 years

Ponds: 1 big one, 2 by the dams

Ponds size: 58 x 38 m / 21.8 x 1.4 m / 12 x 1 m / 16 x 1.20 m

Presence of fish: present

Other amphibian reproduction site distance: 822 m, 900 m

Water type: small river and big artificial pond

Water level: slightly lower

Additional information: big artificial pond next to the beaver dams less occupied



7- Frasses

Coordinates: X: 556554, Y: 185948

Sampled territory size: 176 m

Canopy: 35 %

Vegetation coverage inside the pond: 40 %

Vegetation coverage outside: 35 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 1 and 9 years old

Ponds: 1 small one + 3 of dams

Ponds size: 30 x 9 m // 15 x 8.6 m /15.60 x 3 m // 28.30 x 6 m / 21.30 x 10 m

Presence of fish: present

Other amphibian reproduction site distance: 340 m

Water type: small river

Water level: same, small pond dryer



8- Bussy FR

Coordinates: X: 557659, Y: 186735

Sampled territory size: 364 + 196 m, 560 m

Canopy: 50 %

Vegetation coverage inside the pond: 0

Vegetation coverage outside: 30 %

Type of landscape: **1,2,5,8,9**

Dam age: 1, 9 and 16 years old

Ponds: 5 from dam, stagnant water

Ponds size: 60 x 2.60 m, 3 x 2.60 m each

Presence of fish: present

Other amphibian reproduction site distance: none

Water type: small river, canal

Water level: a bit lower

Additional information: some parts had no beaver activity and looked abandoned.



9 - Fossé Neuf

Coordinates: X: 559647, Y: 186546

Sampled territory size: 94.8 m

Canopy: 5 %

Vegetation coverage inside the pond: 30 %

Vegetation coverage outside: 30 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 5 years

Ponds: 2

Ponds size: 60 x 3.84m

Presence of fish: absent

Other amphibian reproduction site distance: 393 m

Water type: canal

Water level: same



10 – La Banderette

Coordinates: X: 559529, Y:186908

Sampled territory size: 417 m

Canopy: 0

Vegetation coverage inside the pond: 20 %

Vegetation coverage outside: 25 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 1 and 5 years

Ponds: 1 big no beaver dam, 1 of dam

Ponds size: 34.60 x 1.40 m / 8.17 x 4.72 m

Presence of fish: absent

Other amphibian reproduction site distance: 400 m

Water type: canal

Water level: same



Additional information: mainly occupied by a high number of *Pelophylax* sp.

11 - L'Eau Noire, Avenches

Coordinates: X: 193426, Y: 569783

Sampled territory size: 54 m

Canopy: 40 %

Vegetation coverage inside the pond: 5 %

Vegetation coverage outside: 45 %

Type of landscape: **1,2,5,8,9**

Dam age: 8 years

Ponds: 1

Ponds size: 54 x 2,50m

Presence of fish: absent

Other amphibian reproduction site distance: 184 m, 1,4 km

Water type: canal next to water treatment plant

Water level: same, no variation, just vegetation around grew a lot

12 - Pré des Fouines

Coordinates: X: 192131, Y: 192131

Sampled territory size: 64 m + 33 m + 17 m

Canopy: 30 %

Vegetation coverage inside: 35 %

Vegetation coverage outside: 40 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 1 year

Ponds: 1 without beaver dam, another yes

Ponds size: 28.8 x 10 m / 18.5 x 4.5 m / 9.40 x 1.70 m / 25 x 1.70 m / 10.50 x 1.70 m

Presence of fish: absent

Other amphibian reproduction site distance: 460 m / 1.2 km

Water type: small river, head water stream

Water level: from small pond lowered, nearly dry, other level a bit down

13 - Les Dailles, Ruisseau des Echelles

Coordinates: X: 574349, Y: 192353

Sampled territory size: 152.39 m

Canopy: 70 %

Vegetation coverage inside: 25 %

Vegetation coverage outside: 60 %

Type of landscape: **1,2,5,6,8**

Dam age: 6 years

Ponds: 3

Ponds size: 1.6 x 4.4 m / 1.6 x 7 m / 5.60 x 4.60 m

Presence of fish: absent

Other amphibian reproduction site distance: 77 m, 916 m

Water type: forest river, head water stream

Water level: same, just a little bit lower



14 - Schmitten (FR), Ried, Franislismoos

Coordinates: X: 583673, Y: 187444

Sampled territory size: 249.7 m

Canopy: 0

Vegetation coverage inside: 85 %

Vegetation coverage outside: 90 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 6 and 9 years

Ponds: 2 or 3

Ponds size: 12 x 5.3m / 13 x 3.34 m

Presence of fish: absent

Other amphibian reproduction site distance: 373 m, 810 m, 848 m

Water type: mog

Water level: decreased because of one removed dam and the other lowered (broken by human)

Additional information: centre not accessible only the edges checked.



15 – Cressier FR 1

Coordinates: X: 576475, Y: 192876

Sampled territory size: 1.5 km

Canopy: 10 %

Vegetation coverage inside: 10 %

Vegetation coverage outside: 60 %

Type of landscape: **1,2,5,6,8,9**

Dams age: 9, 13, 15 and 17 years old

Ponds: multiple beaver ponds/stagnant water

Ponds size: 1980.76 m² (pond) / 34 x 2.80 m / 46 x 2.70 m / 60 x 2.70 m / 120 x 3.90 m (3) and more

Presence of fish: present

Other amphibian reproduction site distance: 1.1 km, 1.3 km, others >1 km

Water type: small river, canal

Water level: same



16 – Cressier FR 2

Sampled territory size: 1.01 km

Canopy: 10 %

Vegetation coverage inside: 10 %

Vegetation coverage outside: 60 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 9, 13, 15 and 17 years old

Ponds: multiple beaver ponds

Ponds size: 81 x 7.30 m / 80 x 6.30 m / 120 x 6 m / 87 x 4.60 m

Presence of fish: absent

Other amphibian reproduction site distance: 1.4 km others >1 km

Water type: small river

Water level: same

Additional information: surrounded by agricultural landscape, same for previous one



17- Gurmels, Prazang

Coordinates: X: 578523, Y: 192658

Sampled territory size: 242 m

Canopy: 70 %

Vegetation coverage inside: 10 %

Vegetation coverage outside: 30 %

Type of landscape: **1,2,5,6,8,**

Dam age: 1 and 2 years old

Ponds: 6

Ponds size: large 1.2 m, length variable (7,14,20 m)

Presence of fish: present

Other amphibian reproduction site distance: none

Water type: small river, stream

Water level: same



18 - Löwenberg

Coordinates: X: 577663, Y: 198455

Sampled territory size: 117 m

Canopy: 10 %

Vegetation coverage inside: big one: 15 %, small one 70 %, other 5 %

Vegetation coverage outside: 15 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 1 and 11 years old

Ponds: 3

Ponds size: 41 x 14.5 m (big), 8 x 4.72 m (upper), 11.83 x 3.22 m

Presence of fish: absent

Other amphibian reproduction site distance: 230 m, 1.5 km

Water type: small river, stream water, creek,

Water level: same

Additional information: artificial amphibian pond next to a beaver dam that retains water and part of this water follows a path/channel created by the beavers to fill and supply the pond

19 - Usserhubel, Aegelseegraben, Haslibach

Coordinates: X: 583902, Y: 204841

Sampled territory size: 298 m

Canopy: 40

Vegetation coverage inside: first visit 5 %, last visit-> 30 %

Vegetation coverage outside: 50 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 4, 5, 6, 8 and 9 years old

Ponds: one big flooded area, flooded forest

Ponds size: 256 x 35 m

Presence of fish: absent

Other amphibian reproduction site distance: 900 m, 1.4 km

Water type: big canal

Water level: edges lowered a lot, newt area dry with more external vegetation



20 - Oltigen

Coordinates: X: 586024, Y: 204144

Sampled territory size: 220 m

Canopy: 0

Vegetation coverage inside: 20 % (reeds)

Vegetation coverage outside: 50 %

Type of landscape: **1,2,5,8,9**

Dam age: 7 years old

Ponds: 1 from the dam

Ponds size: 61 x 3.5 m

Presence of fish: absent

Other amphibian reproduction site distance: 169 m, 215 m, 884 m

Water type: small canal by agricultural landscape, small bog

Water level: same

21 - Märfeldingen 1

Coordinates: X: 586273, Y: 201407

Sampled territory size: 428 m

Canopy: 40 %

Vegetation coverage inside: 10 %

Vegetation coverage outside: 40 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 13, 10, 8, 4 and 1 years old

Ponds: 1 big one, others flooded stagnant water from dams

Ponds size: 17.4 x 23 m / 43.50 x 6.30 m / 25.60 x 8 m

Presence of fish: present

Other amphibian reproduction site distance: 1.47 km,
836 m

Water type: small river, water stream

Water level: lowered just a little bit



22 - Märfeldingen 2

Coordinates: X: 587029, Y: 201291

Sampled territory size: 364 m

Canopy: 70 %

Vegetation coverage % inside: 10 %

Vegetation coverage outside: 70 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 16, 8 and 1 year old

Ponds: multiple "small ponds" from beaver dams (4)

Ponds size: 18.80 x 5.30 m / 47.94 m² / 17.30 x 4.50 m
/ 17.50 x 5.30 m / 14 x 5.60 m

Presence of fish: present

Other amphibian reproduction site distance: 836 m, 1.2 km

Water type: small river, stream

Water level: lowered a little bit



23 – Lignières (NE)

Coordinates: X: 572835, Y:215032

Sampled territory size: 576.7 m total

Canopy: 10 %

Vegetation coverage inside: 10 %

Vegetation coverage outside: 15 %

Type of landscape: **1,2,5,8**

Dam age: 6 and 1 year old

Ponds : “2”

Ponds size: 117 x 2.7 m / 72 x 2 m / 20 x 6 m

Presence of fish: absent

Other amphibian reproduction site distance: 492 m, 695 m, 690, 664 m, 1.2 km

Water type: canal

Water level: in one part lower because the dam was removed (partly) by the human, affected mostly the newts

24 - Munsigen

Coordinates: X: 608336, Y:192016

Sampled territory size: 166.7 m

Canopy: 25 %

Vegetation coverage inside: 30 %

Vegetation coverage outside: 35 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 4 and 1 year old

Ponds: 2

Ponds size: 9.9 x 6.9 m (pond) / 12.4 x 3.90 m / 7.60 x 2.2 m

Presence of fish: present

Other amphibian reproduction site distance: 376 m, 970 m, 1 km

Water type: small river, water stream

Water level: same

Additional information: maybe the ponds were slightly too big, there was not enough convenient space to lay the eggs (shallow edges), too much aquatic vegetation, presence of predators (same for site 25)

25 - Neufundland

Coordinates: X: 591851, Y: 218345

Sampled territory size: 190 m

Canopy: 10 %

Vegetation coverage % inside: 20 %

Vegetation coverage outside: 40 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 3 and 1 year old

Ponds: 3 from beaver dams

Ponds size: 16.2 x 24.6 m / 20.4 x 4.7 m / 17.7 x 4.3 m

Presence of fish: present

Other amphibian reproduction site distance: none

Water type: canal

Water level: lowered a little bit



26 – Äglere

Coordinates: X: 594315, Y: 224471

Sampled territory size: 227 m

Canopy: 30 %

Vegetation coverage inside: 30 %

Vegetation coverage outside: 60 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 17,15 and 3 years old

Ponds: 2-3 beaver ponds

Ponds size: 36 x 4.8 m / 15.32 x 8 m / 15 x 3.95 m

Presence of fish: present

Other amphibian reproduction site distance: 186 m,
564 m, 513 m

Water type: small river stream water

Water level: lower, a lot, because one dam
broke naturally



27 - Halten - Drei Höfe, Talmatt

Coordinates: X: 2614211, Y: 1223906

Sampled territory size: 160 m

Canopy: 55 %

Vegetation coverage inside: 30 %

Vegetation coverage outside: 40 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 9, 5 and 1 year old

Ponds: multiple beaver ponds (4)

Ponds size: 28.60 x 13.60 / 565.45 m² / 53 x 8 m /

21.50 x 4.50 m

Presence of fish: absent

Other amphibian reproduction site distance: 147 m, 1.2 km

Water type: small river stream / canal

Water level: lowered a little bit

Additional information: surrounded by agricultural landscape



28 - Drei Höfe, Hersiwil

Coordinates: X: 614574, Y: 224151

Sampled territory size: 433 m

Canopy: 50 %

Vegetation coverage inside: 20 %

Vegetation coverage outside: 40 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 1 year old

Ponds: 2 from beaver dams

Ponds size: 3.,6 x10 m / 1833.84 m² / 212.46 m²

Presence of fish: absent

Other amphibian reproduction site distance: 698 m, 635 m

Water type: small river stream, canal

Water level: same



29 - Wiedlisbach, Müli

Coordinates: X: 618264, Y: 231834

Sampled territory size: 30 m + 30 m

Canopy: 50 %

Vegetation coverage inside: 10 % (reeds mostly)

Vegetation coverage outside: 60 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 12, 8 years old

Ponds: 1 and other but inaccessible

Ponds size: 86 x 6 m

Presence of fish: absent

Other amphibian reproduction site distance: none

Water type: mog

Water level: same

Additional information: difficult access inside the mog, maybe egg masses missed or more amphibian species.

30 - Unterwald

Coordinates: X: 621545, Y: 228143

Sampled territory size: 218 m + 90 m

Canopy: 50 %

Vegetation coverage inside: 45 %

Vegetation coverage outside: 60 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 13, 8, 3 and 1 year old

Ponds: 5 from beaver dams

Ponds size: 27 x 4.25 (outside), 100 x 15 m / 22 x 16 m /

70 x 55 (middle) / 23 x 7 m

Presence of fish: absent

Other amphibian reproduction site distance: 1.6 km / 704 m

Water type: flooded forest

Water level: lower, a lot, part of the pond where there were eggs was dry, other side lower as well

Additional information: train passing nearby



31 - Riedmatte

Coordinates: X: 622312, Y: 228175

Sampled territory size: 328 m

Canopy: 30 %

Vegetation coverage inside: 10 %

Vegetation coverage outside: 40 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 8 and 3 years old

Ponds: 2 and 1 bigger filled by water coming from the beaver dam

Ponds size: 15.60 x 18 m (pond) / 151.03 m² / 63 x 3 m

Presence of fish: absent

Other amphibian reproduction site distance: 730 m

Water type: canal

Water level: decreased a lot, pond nearly dry with much less newts

Additional information: beaver pond next to a beaver dam that retains water and part of this water follows a path/channel created by the beavers to fill and supply another pond. However, this pond was nearly dry at the last visit.

32 - Grossmatt

Coordinates: X: 630948, Y: 229709

Sampled territory size: 391 m

Canopy: 10 %

Vegetation coverage % inside: 5 %

Vegetation coverage outside: 40 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 4 years old

Ponds: 3 from beaver dams

Ponds size: 1.55 m large x 52.70 m

Presence of fish: absent

Other amphibian reproduction site distance: 247 m, 645 m, 700 m, 604 m, 933 m

Water type: small water stream, canal

Water level: same, but stronger water flow, maybe due to one beaver dam less

Additional information: dams present but no many stagnant water behind, high river flow and suspicion of abandoned site with no recent beaver activity.

33 – Zingge

Coordinates: X: 634987, Y: 230248

Sampled territory size: 197 m

Canopy: 20 %

Vegetation coverage inside: 5 %

Vegetation coverage outside: 40 %

Type of landscape: **1,2,5,6,8,9**

Dam age: 5 and 1 year old

Ponds: 2 + 1 from the beaver dam

Ponds size: 36 x 8.8 m / 17.65 x 7 m / 17 x 4 m

Presence of fish: absent

Other amphibian reproduction site distance: 63 m, 667 m, 771 m

Water type: canal, small water stream

Water level: same, and one additional beaver dam, so filled with more water

References

DELARZE R.; GONSETH Y.; EGGENBERG S.; VUST M. (2015). Guide des milieux naturels de Suisse. 3e éd. Rossolis. Bussigny. 456 p

All pictures were taken by me, Patricia Bolle