

SUPPLEMENTARY MATERIAL:

Habitat selection by Common Gartersnakes (*Thamnophis sirtalis*) is affected by vegetation structure but not by location of Northern Leopard Frog (*Lithobates pipiens*) prey WILLIAM D. HALLIDAY and GABRIEL BLOUIN-DEMERS

TABLE S1. Model selection and final model output for general linear mixed effects models examining the presence/absence of Common Gartersnakes (*Thamnophis sirtalis*; Ts) based on habitat features and the presence/absence or abundance of Northern Leopard Frogs (*Lithobates pipiens*; Lp). k is the number of parameters in a model, AIC is the Akaike Information Criterion, Δ AIC is the difference between the AIC for the model and the AIC of the model with the lowest AIC, and w is the Akaike weight.

Model	k	AIC	Δ AIC	w
Ts = Forb + Grass + Year	5	231.66	0.00*	1.00
Ts = Forb + Grass + Year + Lp	6	232.33	0.67*	0.72
Ts = Forb + Grass	4	232.71	1.05*	0.59
Ts = Forb + Grass + Fern + Year	6	233.44	1.78*	0.41
Ts = Forb + Grass + Year + Water Depth + % Water + Lp	8	234.55	2.89	0.24
Ts = Cedar + Forb + Shrub + Grass + Cattail + Horsetail + Fern + Year	10	234.69	3.03	0.22
Parameter	Estimate	S.E.	z	p
Intercept	-2.09	0.50	4.17	< 0.01
Forb	0.87	0.42	2.04	0.04
Grass	-0.77	0.38	2.04	0.04
Year	0.37	0.44	1.74	0.08
Fern	-0.34	0.73	0.47	0.64
Lp	-0.60	0.52	1.14	0.25

*denotes a competing model that was included in the final model output via model averaging.

TABLE S2. Model selection and final model output for general linear mixed effects models examining the abundance of Common Gartersnakes (*Thamnophis sirtalis*; Ts) in study grids over two years near Ottawa, Ontario, Canada. We also included the abundance of Northern Leopard Frogs (*Lithobates pipiens*; Lp) as a predictor in the model. k is the number of parameters in a model, AICc is the bias-corrected Akaike Information Criterion, Δ AICc is the difference between the AICc for the model and the AICc of the model with the lowest AIC, and w is the Akaike weight.

Model	k	AICc	Δ AICc	w
Ts = Grid + Year	7	126.19	0.00*	1.00
Ts = Grid + Year + Lp	8	127.77	1.68*	0.43
Ts = Grid + Year + Lp + Grid:Year	13	137.97	11.88	0.00
Ts = Grid + Year + Lp + Grid:Year + Lp:Year	14	141.49	15.30	0.00
Parameter	Estimate	S.E.	z	p
Intercept	-1.71	0.74	2.30	0.02
Grid 2	1.25	0.80	1.56	0.12
Grid 3	0.67	0.84	0.80	0.42
Grid 4	-0.01	0.91	0.01	0.99
Grid 5	2.16	0.74	2.94	< 0.01
Grid 6	1.65	0.78	2.13	0.04
Year 2015	0.98	0.31	3.21	< 0.01
Lp	0.04	0.03	1.17	0.24

*denotes a competing model that was included in the final model output via model averaging.

TABLE S3. Habitat use versus habitat availability for Common Gartersnakes (*Thamnophis sirtalis*, top) and Northern Leopard Frogs (*Lithobates pipiens*, bottom) selecting habitats near Ottawa, Ontario, Canada. Availability refers to the proportion of sectors across all six, 1-hectare grids that were dominated by each vegetation type; proportions do not sum to 1.00 because some sectors were dominated by two vegetation types (e.g., grass and forb).

		<i>Thamnophis sirtalis</i>	
Vegetation	Availability	2014	2015
Cattail	0.41	0.25	0.33
Cedar	0.03	0.00	0.00
Horestail	0.07	0.00	0.00
Fern	0.04	0.15	0.06
Forb	0.25	0.65	0.39
Grass	0.57	0.20	0.42
Shrub	0.47	0.50	0.58
		<i>Lithobates pipiens</i>	
Vegetation	Availability	2014	2015
Cattail	0.41	0.33	0.33
Cedar	0.03	0.01	0.00
Horsetail	0.07	0.02	0.00
Fern	0.04	0.07	0.06
Forb	0.25	0.68	0.67
Grass	0.57	0.49	0.67
Shrub	0.47	0.29	0.22

TABLE S4. Model selection and final model output for general linear mixed effects models examining the presence/absence of Northern Leopard Frogs (*Lithobates pipiens*; Lp) based on different habitat features. k is the number of parameters in a model, AIC is the Akaike Information Criterion, Δ AIC is the difference between the AIC for the model and the AIC of the model with the lowest AIC, and w is the Akaike weight.

Model	k	AIC	Δ AIC	w
Lp = Year	3	214.10	0.00	1.00
Lp = Year + Water Depth + % Water	5	216.98	2.88	0.24
Lp = Cedar + Forb + Shrub + Grass + Cattail + Horsetail + Fern + Year	10	221.39	7.29	0.03
Parameter	Estimate	S.E.	z	p
Intercept	-1.08	0.59	1.83	0.07
Year	-2.39	0.46	5.23	< 0.01

TABLE S5. Model selection and final model output for general linear mixed effects models examining the abundance of Northern Leopard Frogs (*Lithobates pipiens*; Lp) in different study grids over two years near Ottawa, Ontario, Canada. k is the number of parameters in a model, AICc is the bias-corrected Akaike Information Criterion, Δ AICc is the difference between the AICc for the model and the AICc of the model with the lowest AICc, and w is the Akaike weight.

Model	k	AICc	Δ AICc	w
Lp = Grid + Year	7	164.64	0.00	1.00
Lp = Grid	6	224.76	60.12	0.00
Lp = Year	2	402.16	237.52	0.00
Parameter	Estimate	S.E.	z	p
Intercept	0.52	0.41	1.26	0.21
Grid 2	-0.69	0.71	0.98	0.33
Grid 3	-0.32	0.54	0.59	0.55
Grid 4	-1.33	0.71	1.88	0.06
Grid 5	1.03	0.45	2.27	0.02
Grid 6	2.49	0.42	5.95	< 0.01
Year 2015	-1.64	0.25	6.53	< 0.01