

SUPPLEMENTARY MATERIAL:

Variable habitat selection and movement patterns among Bullsnake (*Pituophis catenifer sayi*) populations in Saskatchewan

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TABLE S1. Top generalized linear model, null model, and all models with $\Delta\text{AIC} \leq 3$ evaluating the best predictor of Saskatchewan Bullsnake (*Pituophis catenifer sayi*) 50% kernel density core area size. Fixed effects included river valley (BMV is reference valley), distance to nearest anthropogenic structure (dist. a), snout to vent length (svl), and snake sex (M = male). Number of model parameters (K), AICc, difference in AICc from top model (ΔAIC), Akaike weights, parameter estimates, SE, upper and lower 95% CI, and importance values are presented. Factors with largest effect in bold.

Model		K	AICc	ΔAIC	Weights	
AIC model selection	Intercept only	1	176.53	6.79	0.02	
	valley + svl	2	169.74	0.00	0.50	
	valley	1	172.19	2.45	0.15	
Model averaging	Parameter	Estimate	SE	Lower 95% CI	Upper 95% CI	Importance values
	(Intercept)	3.13	1.38	0.82	5.44	NA
	FRV	1.87	0.63	0.82	2.93	0.96
	SSRV	1.61	0.54	0.69	2.53	0.96
	svl	-0.02	0.01	-0.04	0.00	0.79
	dist. a	0.00	0.00	0.00	0.00	0.24
	sexM	-0.06	0.24	-0.46	0.34	0.20

TABLE S2. Top generalized linear model, null model, and all models with $\Delta\text{AIC} \leq 2$ evaluating the best predictor of Saskatchewan Bullsnake (*Pituophis catenifer sayi*) minimum convex polygon home range size. Fixed effects included river valley (BMV is reference valley), distance to nearest anthropogenic structure (dist. a), snout to vent length (svl), and snake sex (M = male). Number of model parameters (K), AICc, difference in AICc from top model (ΔAIC), Akaike weights, parameter estimates, SE, upper and lower 95% CI, and importance values are presented. Factors with largest effect in bold.

Model		K	AICc	ΔAIC	Weights	
AIC model selection	Intercept only	1	295.94	4.67	0.04	
	valley	1	291.27	0.00	0.45	
	valley + sex	2	293.79	2.52	0.13	
	valley + dist. a	2	293.98	2.71	0.12	
	valley + svl	2	294.11	2.84	0.11	
Model averaging	Parameter	Estimate	SE	Lower 95% CI	Upper 95% CI	Importance values
	(Intercept)	2.96	0.58	1.97	3.95	NA
	FRV	1.20	0.57	0.25	2.15	0.90
	SSRV	1.06	0.50	0.22	1.90	0.90
	sexM	-0.04	0.16	-0.30	0.23	0.21
	dist. a	0.00	0.00	0.00	0.00	0.20
	svl	0.00	0.00	-0.01	0.01	0.19