

Table S1. Spearman correlation matrix for covariates on occupancy probability showing correlation coefficients and p-values. Data corresponds to covariate values collected at camera-trap station locations.

	Elevation	Terrain ruggedness index	Least-cost path	Slope	Roughness
Correlation coefficients					
Elevation		0.5318	0.0316	0.5578	0.5542
Terrain ruggedness index	0.5318		-0.2342	0.9950	0.9950
Least-cost path	0.0316	-0.2342		-0.2048	-0.2231
Slope	0.5578	0.9950	-0.2048		0.9961
Roughness	0.5542	0.9950	-0.2231	0.9961	
P-values					
Elevation		7.67E-07	0.7862	1.66E-07	2.07E-07
Terrain ruggedness index	7.67E-07		0.0417	0	0
Least-cost path	0.7862	0.0417		0.0760	0.0527
Slope	1.66E-07	0	0.0760		0
Roughness	2.07E-07	0	0.0527	0	

Table S2. Summary of the top model, including mean estimates, standard error, standard deviation, 95% Bayesian confidence intervals and Rhat. The top model included elevation and least-cost path on occupancy probability and camera effort on detection probability. Both elevation and least-cost path have strong support (95% Bayesian confidence intervals do not overlap zero). We assessed convergence with Rhat (all Rhat statistics = 1).

	mean	SE(mean)	sd	2.50%	97.50%	Rhat
Occupancy						
(Intercept)	-3.8968	0.0137	0.9357	-6.062	-2.3893	1
Elevation	1.5356	0.0072	0.5928	0.5196	2.8415	1
Least-cost path	-1.6839	0.0108	0.7682	-3.4713	-0.5062	1
Detection						
(Intercept)	-1.9992	0.0222	1.4632	-5.3091	0.3995	1
effort	0.1139	0.0045	0.2985	-0.38	0.7851	1

Figure S1. Elevation and least-cost path ranges in camera-trapping areas in Virachey National Park, sorted by mean value. Jitter shows elevation values at camera-trap stations.

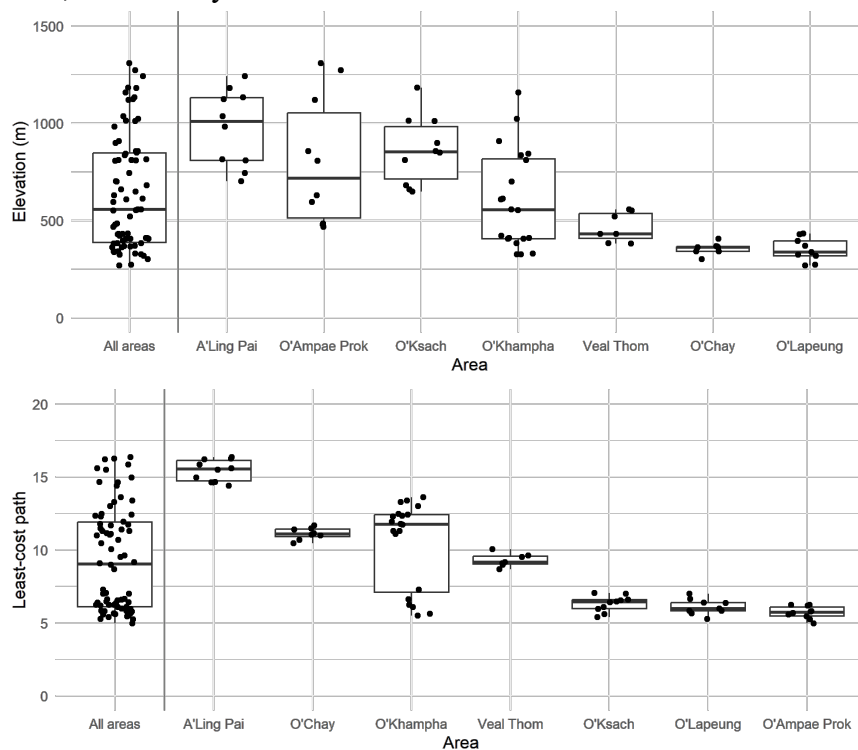


Figure S2. Model fit.

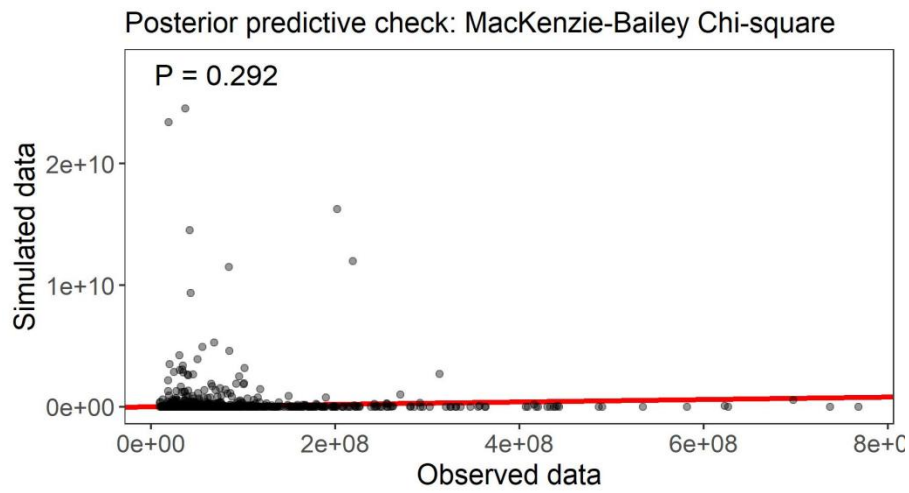


Figure S3. Covariates used in the final model across Virachey National Park.

