

**Table S1** Top ranking spatial capture-recapture models from the examined model set including the effect of site and sex on detectability and  $\sigma$ . D = density,  $p$  = detection probability,  $\sigma$  = scale parameter of decline in detectability ( $p$ ) with distance,  $\delta$  = landscape resistance parameter.

Model	K	AIC	$\Delta$ AIC	weight
D(site) $p$ (site + effort) $\sigma$ (~site) $\delta$ (-1 + forest cover)	18	2265.26	0.00	0.71
D(site) $p$ (site + effort + sex) $\sigma$ (~site) $\delta$ (-1 + forest cover)	19	2268.07	2.81	0.18
D(site) $p$ (site + effort + sex) $\sigma$ (~site + sex) $\delta$ (-1 + forest cover)	20	2269.10	3.84	0.11

**Table S2** Parameter estimates and their standard errors (SE) from the top ranked model. D,  $\sigma$ , and  $\delta$  are on the log scale and relate to density per grid cell, km, and relative landscape resistance, respectively.  $p$  and  $\psi$  are on the logit scale and are probabilities.

	Parameter	Estimate	SE
Detection ( $p$ )	Intercept	-0.437	0.209
	Site 2	-0.030	0.238
	Site 3	-0.334	0.189
	Site 4	1.116	0.343
	Effort	0.013	0.001
Sigma ( $\sigma$ )	Intercept	7.235	0.067
	Site 2	-0.304	0.096
	Site 3	-0.069	0.066
	Site 4	0.295	0.074
Density (D)	Intercept	-2.986	0.299
	Site 2	0.235	0.418
	Site 3	-0.774	0.505
	Site 4	-1.044	0.447
Landscape resistance ( $\delta$ )	Forest cover	-1.306	0.050
Probability of being a male ( $\psi$ )	Site 1	0.732	0.616
	Site 2	0.855	0.606
	Site 3	-0.683	0.865
	Site 4	-0.237	0.671