SM5. Mean and 95% credible intervals for each parameter estimate of the multispecies cooccurrence model. Estimates are on the logit scale.

Prey	Predator	Covariate	Parameter	Mean	Median	95% CI	
						Lower 2.5	Upper 97.5
Predator occupancy model							
	coyote		β_0	0.94	0.94	0.70	1.21
	badger		β_0	-0.02	-0.02	-0.26	0.24
	swift fox		β_0	-1.95	-1.95	-2.35	-1.53
	coyote		θ	-0.04	-0.04	-0.42	0.35
	badger		θ	0.81	0.80	0.36	1.27
	swift fox		θ	0.90	0.90	-0.17	2.01
Predator detection model							
	coyote		α_0	-0.25	-0.25	-0.34	-0.16
	badger		α_0	-1.03	-1.03	-1.18	-0.89
	swift fox		α_0	-1.64	-1.64	-2.11	-1.17
	coyote	vegHeight	α_1	-0.24	-0.24	-0.33	-0.16
	badger	vegHeight	α_1	-0.02	-0.02	-0.13	0.09
	swift fox	vegHeight	α_1	-0.80	-0.80	-1.12	-0.48
	coyote	prairie	α_2	-0.04	-0.04	-0.12	0.05
	badger	prairie	α_2	-0.51	-0.51	-0.63	-0.38
	swift fox	prairie	α_2	-0.26	-0.26	-0.50	-0.03
Predator-prey co-occurrence model							
jackrabbit	coyote		β_0 ind x site	1.53	1.50	0.76	2.48
cottontail	coyote		β_0 ind x site	0.02	0.01	-0.48	0.55
jackrabbit	badger		β_0 ind x site	1.41	1.40	0.73	2.18
cottontail	badger		β_0 ind x site	0.61	0.60	0.05	1.23
jackrabbit	swift fox		β_0 ind x site	1.09	1.05	-0.07	2.43
cottontail	swift fox		β_0 ind x site	0.19	0.19	-0.94	1.33
jackrabbit	coyote	prairie	β_1 ind x site	0.11	0.11	-0.63	0.86
cottontail	coyote	prairie	β_1 ind x site	-0.30	-0.30	-0.86	0.23

jackrabbit	badger	prairie	β_1 ind x site	0.46	0.46	-0.18	1.07
cottontail	badger	prairie	β_1 ind x site	-0.08	-0.08	-0.60	0.45
jackrabbit	swift fox	prairie	β_1 ind x site	-0.38	-0.39	-1.11	0.36
cottontail	swift fox	prairie	β_1 ind x site	0.03	0.03	-0.66	0.74
jackrabbit	coyote	vegHeight	β_2 ind x site	0.05	0.04	-0.78	0.94
cottontail	coyote	vegHeight	β_2 ind x site	0.03	0.02	-0.63	0.72
jackrabbit	badger	vegHeight	β_2 ind x site	1.08	1.06	0.25	2.03
cottontail	badger	vegHeight	β_2 ind x site	-0.07	-0.07	-0.67	0.52
jackrabbit	swift fox	vegHeight	β_2 ind x site	-0.46	-0.45	-1.41	0.44
cottontail	swift fox	vegHeight	β_2 ind x site	0.59	0.58	-0.31	1.53
jackrabbit	coyote	grass	β_3 ind x site	0.96	0.94	0.05	2.04
cottontail	coyote	grass	β_3 ind x site	-0.11	-0.10	-0.69	0.45
jackrabbit	badger	grass	β_3 ind x site	-0.01	-0.02	-0.74	0.73
cottontail	badger	grass	β_3 ind x site	-0.05	-0.05	-0.54	0.44
jackrabbit	swift fox	grass	β_3 ind x site	0.04	0.07	-1.40	1.35
cottontail	swift fox	grass	β_3 ind x site	-0.63	-0.61	-1.90	0.53
jackrabbit	coyote	forbs	β_4 ind x site	0.16	0.14	-0.56	0.96
cottontail	coyote	forbs	β_4 ind x site	-0.05	-0.05	-0.63	0.50
jackrabbit	badger	forbs	β_4 ind x site	0.00	0.00	-0.67	0.64
cottontail	badger	forbs	β_4 ind x site	-0.24	-0.23	-0.81	0.30
jackrabbit	swift fox	forbs	β_4 ind x site	0.74	0.76	-0.80	2.28
cottontail	swift fox	forbs	β_4 ind x site	1.12	1.05	-0.32	2.89
jackrabbit			θ	-0.30	-0.30	-0.85	0.21
cottontail			θ	1.17	1.17	0.71	1.62
jackrabbit	no predators		β_0 ind x site	-3.48	-3.45	-4.54	-2.61
cottontail	no predators		β_0 ind x site	-1.98	-1.97	-2.56	-1.46
jackrabbit	no predators	prairie	β_1 ind x site	0.26	0.26	-0.53	1.05
cottontail	no predators	prairie	β_1 ind x site	0.43	0.43	-0.11	0.99
jackrabbit	no predators	vegHeight	β_2 ind x site	-1.18	-1.16	-2.29	-0.18
cottontail	no predators	vegHeight	β_2 ind x site	0.01	0.01	-0.71	0.68
jackrabbit	no predators	grass	β_3 ind x site	-1.44	-1.42	-2.55	-0.49
cottontail	no predators	grass	β_3 ind x site	0.19	0.18	-0.36	0.76
jackrabbit	no predators	forbs	β_4 ind x site	-0.68	-0.66	-1.51	0.03

cottontail	no predators	forbs	β_4 ind x site	0.52	0.51	0.02	1.05
Prey detection model							
jackrabbit			α_0	-0.11	-0.11	-0.28	0.06
cottontail			α_0	0.07	0.07	-0.09	0.23
jackrabbit		vegHeight	α_1	-0.29	-0.29	-0.46	-0.12
cottontail		vegHeight	α_1	-0.17	-0.17	-0.34	0.00
jackrabbit		prairie	α_2	-0.06	-0.06	-0.20	0.07
cottontail		prairie	α_2	-0.22	-0.22	-0.41	-0.05