Supplementary Material

Spatiotemporal responses of ungulates to hunting in a fenced multi-use area

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Supporting Information

Table S1. Model variables and their data types and definition used in the spatial analysis.

Variables	Data type	Definition
Elk	Integer	Number of elk events
Moose	Integer	Number of moose events
Deer	Integer	Number of deer events
Human	Integer	Number of human events
Temp	Numeric	Mean temperature during the week for a specific camera
Hunting	Factor	Whether it was the hunting period or not while the image was taken (Yes or no)
Closed	Numeric	The amount of vegetation within a 1500-meter radius from the camera
Water	Numeric	The amount of water within a 5100-meter radius from the camera
Trail	Factor	The location of the camera (Trail or No trail)
Parking lots	Numeric	Distance from camera to nearest parking lots
Site	Character	The camera ID

Table S2. Number of independent events in total and average per day during hunting period, non-hunting period and in total for all species across all camera sites.

Species	Scientific name	Hunting period		Non-hunting period		Total
		Total	**Per day**	**Total**	**Per day**	
Elk	*Cervus canadensis*	261	8.7	3258	9.73	3519
Moose	*Alces alces*	47	1.57	1106	3.30	1153
White-tailed deer	*Odocoileus virginianus*	234	7.8	2474	7.39	2708
Human	*Homo sapiens*	683	22.77	7423	22.16	8106

Table S3. Outcome of the Hermans-Rasson test (N: sample size, T: test statistic, *P*: probability value) and for all species during hunting and non-hunting season and the coefficients of temporal overlap (Δ: estimate of overlap, 95% CI: 95% confidence interval, *p*: probability value) between the two seasons captured in Cooking – Lake Blackfoot Provincial Area, Canada, 2017-2018. Significant P values are highlighted in bold

Species	Period	N	T	*P*	Δ	95% CI	*p*
Elk	Hunting	261	76.94	**0.0001**		0.64 –	
	Non-hunting	3258	892.22	**0.0001**	0.69	0.74	**<0.001**
Moose	Hunting	47	19.18	**0.0001**		0.54 –	
	Non-hunting	1106	249.68	**0.0001**	0.66	0.78	**<0.001**
Deer	Hunting	234	13.45	**0.0006**		0.81 –	
	Non-hunting	2474	278.46	**0.0001**	0.86	0.91	**<0.001**
Human	Hunting	683	396.61	**0.0001**		0.81 –	
	Non-hunting	7423	6630.74	**0.0001**	0.84	0.87	**<0.001**

Table S4. Temporal overlap estimates between humans and the other four species (elk, moose, deer, and coyote) for all four biological seasons.

Species	Spring	Summer	Fall	Winter
Elk	0.15	0.14	0.29	0.30
Moose	0.20	0.22	0.35	0.26
Deer	0.43	0.39	0.44	0.25