
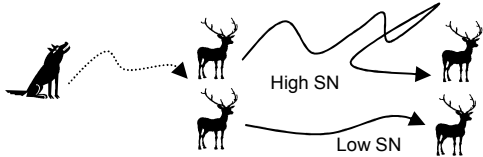


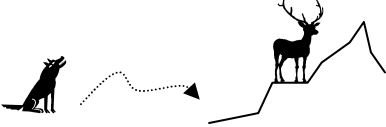



Table S1. Equations and illustrations of the habitat and movement metrics calculated from elk and cattle GPS-telemetry data during periods of wolf presence (treatment phase) and absence (pre- and post-phases) in home ranges and pastures, respectively, in southwest Alberta Canada.

<i>Metric</i>	<i>Equation</i>	<i>Illustration</i>
Speed (meters/hour)	<b>Eq. 1</b> $MR_i = \frac{d_i}{T_i}$ , where $i$ is the phase, $d_i$ is the path length traveled during phase $i$ , and $T_i$ is the duration of the phase $i$ .	
Sinuosity	<b>Eq. 2</b> $SN_i = \frac{d_{net_i}}{d_i}$ , where $d_{net_i}$ is the net displacement during phase $i$ .	
Average distance to Neighbours (meters) <i>Cattle only</i>	<b>Eq. 3</b> $DN_i = \sum_{r=1}^{R_i} \left( \frac{\sum_{c=1}^{n_{ir}} \sqrt{(x_r - x_{cr})^2 + (y_r - y_{cr})^2}}{n_{ir} - 1} \right)$ , where $x$ and $y$ are the UTM coordinates of animal locations, $r$ is an animal location, $R$ is the total number of animal locations ( $r$ ) during phase $i$ , $c$ is the location of a neighbouring animal in the same pasture, $n_f$ is the number of cattle in the same pasture,	
Percentage of Head Down <i>Cattle only</i>	<b>Eq. 4</b> $HD_i =$ percentage of the time spent Head Down during phase $i$ ,	

<p>Terrain Ruggedness Index</p>	<p><b>Eq. 5</b> <math>TRI_i = \frac{\sum_{r=1}^{R_i} \sqrt{\sum_{x'=x-1}^{x+1} \sum_{y'=y-1}^{y+1} (z_{x'y'} - z_{xy})^2}}{R_i}</math>, where <math>z_{xy}</math> is the elevation associated with location <math>r</math>, <math>z_{x'y'}</math> is the elevation of the eight adjacent pixels in the DEM, and <math>R</math> is the total number of animal locations (<math>r</math>).</p>	
<p>Slope (percent)</p>	<p><b>Eq. 6</b> <math>SL_i =</math> average of the slope value for each animal location obtained during phase <math>i</math>.</p>	
<p>Distance to Forest Cover (meters)</p>	<p><b>Eq. 7</b> <math>FC_i =</math> average distance between each animal location and the nearest patch of forest cover during a phase <math>i</math>.</p>	