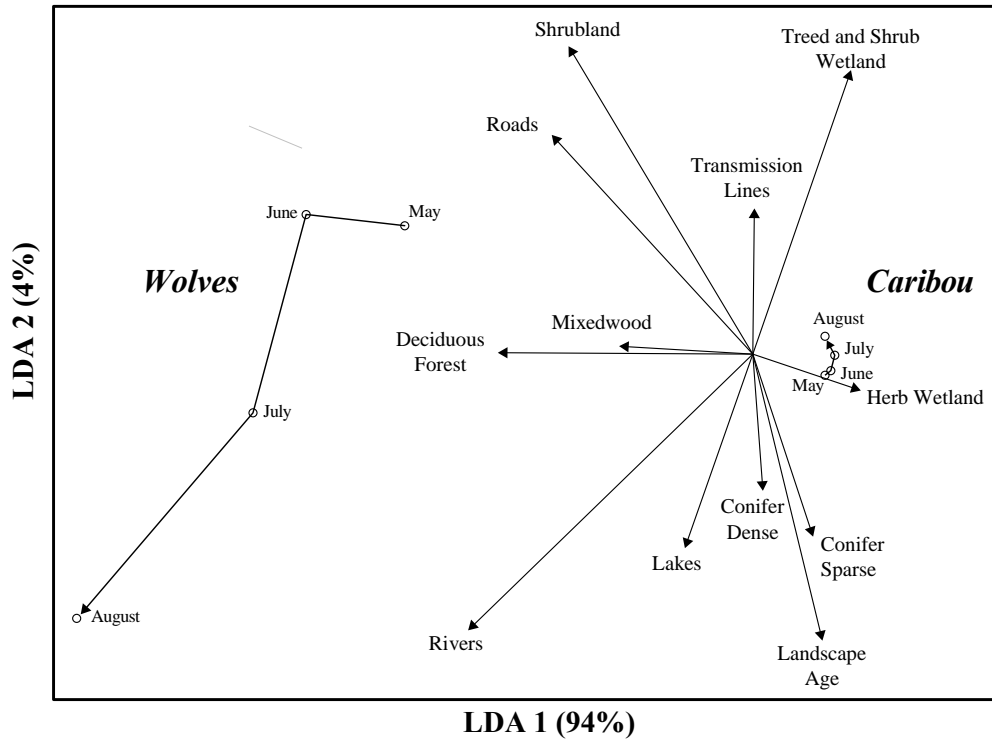
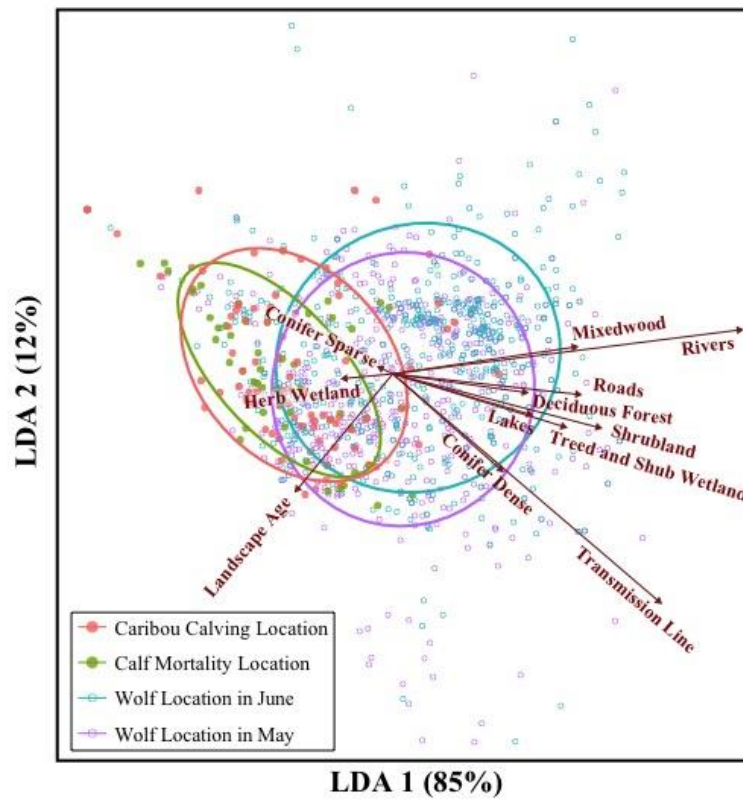


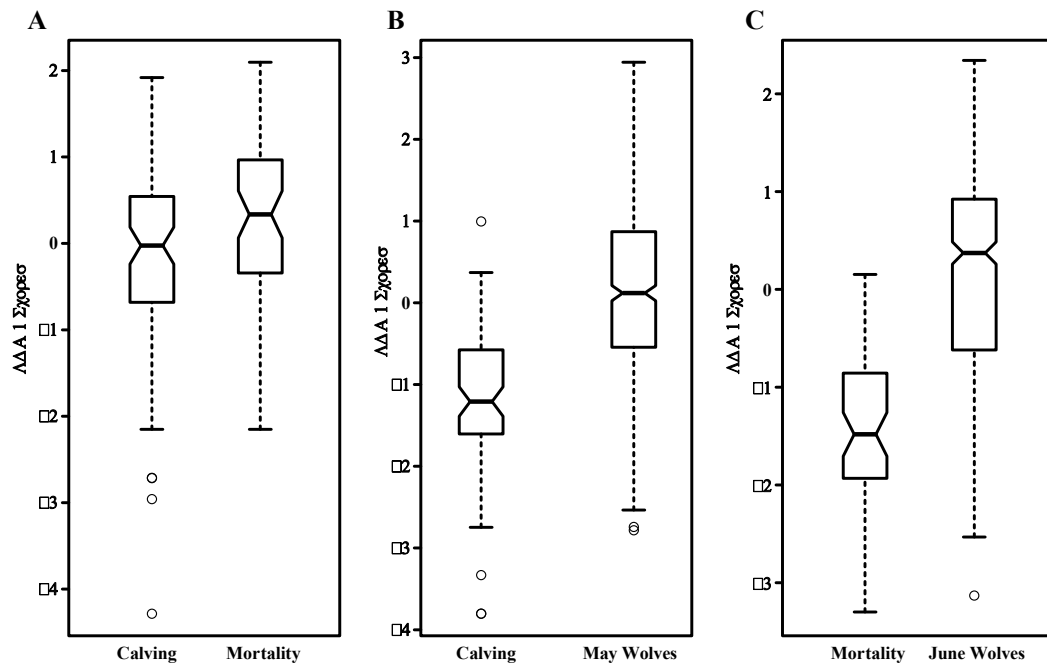
Example of the individual-based method of inferring parturition and offspring survival status in female woodland caribou described in DeMars et al. (2013). The black line illustrates the daily movement pattern of and from May 15<sup>th</sup> to June 30<sup>th</sup> 2016 (the caribou calving period), that gave birth ~ May 13<sup>th</sup> and lost her calf ~ May 25<sup>th</sup>. The red horizontal line represents the mean step length. The vertical dashed red lines represent the estimated break points in the time series. This animal has two break points, indicating that the female calved and then lost the calf. The lower mean step length between the two vertical lines represents the depression in mean step length while the female is with her calf, as the mean step length of a calf is significantly lower than an adult female.



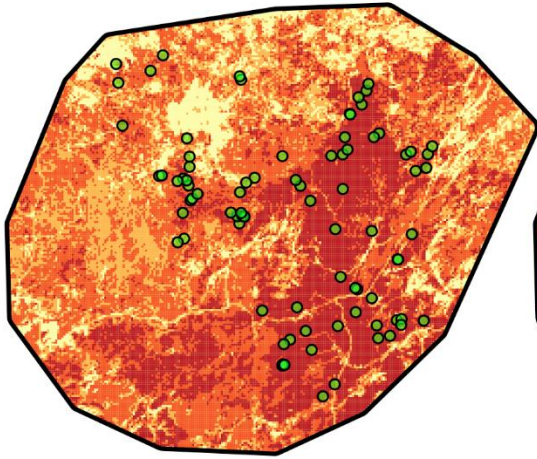
Example of Linear Discriminant Analysis of all wolf and caribou cells in the ALCES 1 km database for the study area grouped by species and month. Graph shows component scores aggregated by species and month (i.e. monthly centroids). These are connected as trajectories over time. Structure correlations for variables used in discrimination are presented.



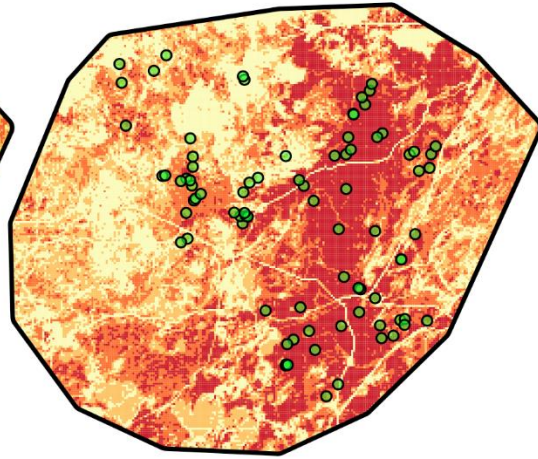
Example of Linear Discriminant Analysis of habitat locations (cells from ALCES 1 km database) where caribou calving and mortality occurred (from the step analysis) and landscape cell locations utilized by wolves in May and in June (concurrent with calving and mortality respectively). Structure correlations of the variables with the canonical axes are provided.



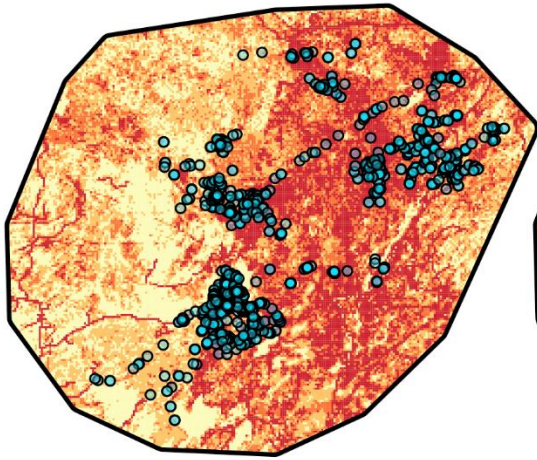
Example - Linear Discriminant Analysis boxplots summarizing scores on the canonical variate axis. (A) Comparison of calving vs. mortality habitat (not significant, see text); (B) calving vs May wolf habitat use, and; (C) habitat in which a calf mortality occurred vs June wolf habitat use (the latter two were significant, see text).



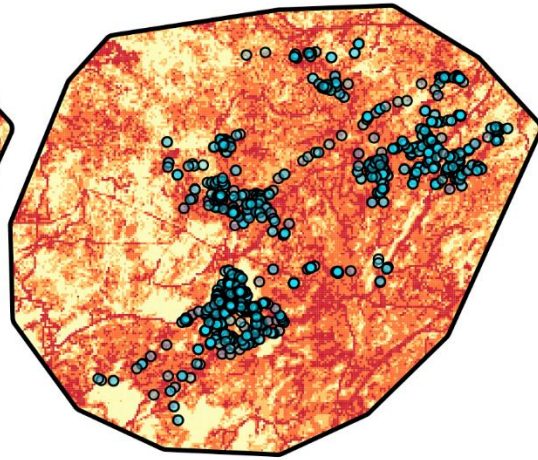
**Caribou RSF**



**Caribou LDA**

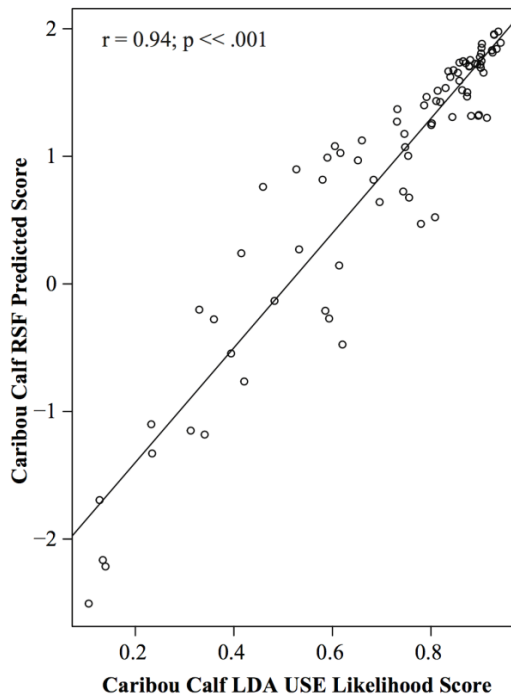
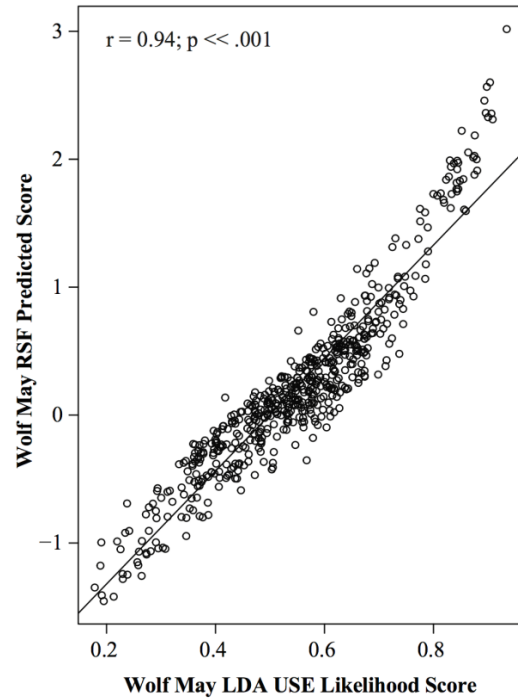


**Wolf RSF**



**Wolf LDA**

Resource selection maps of the study area for the caribou calving period. Caribou maps are based on the RSF and LDA approaches using the step analysis locations for calving and all cells occupied by wolves during the May calving period.

**A****B**

Example - Comparison of predicted RSF selection vs likelihood score for “USE” for (A) the caribou calving model and (B) the wolf May habitat model. Correlations between model outputs are significant, the least-squares fit line is provided for reference.