Title: What linear feature characteristics relate to wildlife use?

1) Introduction and Methods

* Restoration of linear features – seismic lines, pipelines, and roads – is aimed at conserving woodland caribou through deterring use of linear features by predators and other ungulate prey. Understanding which linear feature characteristics are associated with wildlife use help identify which aspects of linear features should be targeted by restoration initiatives to support caribou conservation.
* We used wildlife track and sign data to investigate use of three different types of linear features by canines, bears, deer, elk, and moose in caribou ranges of west-central and north-western Alberta and British Columbia.

2) Conclusions (implications for conservation and management)

* Results varied by wildlife species, region, and linear feature type
  + Trails were associated with linear feature use for most taxa in at least one region or linear feature type
  + Predators were negatively associated with vegetation structure on seismic lines
  + Ungulates were positively associated with forage taxa like willow, birch, sedges, and forbs
* Trails, vegetation structure, and ungulate forage species would be effective targets for linear feature restoration aimed at caribou conservation.
* Identifying relationships between wildlife and linear feature characteristics links habitat structure to function and help to connect local restoration objectives to broader conservation goals.