



Saskatchewan  
Prairie Conservation  
Action Plan

# Prairie's Got the Goods Week!



## The influence of grazing management on plant community diversity and production across Western Canada

Friday March 22, 2019 at 3:00pm MST

Presenter: Jessica Grenke, PhD Student at the University of Alberta

Register for Free: <https://attendee.gotowebinar.com/register/160457625780055554>

More Information: SK PCAP: 306.352.0472 [pcap@sasktel.net](mailto:pcap@sasktel.net) or [www.pcap-sk.org](http://www.pcap-sk.org)

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## The influence of grazing management on plant community diversity and production across Western Canada

**Presenter:** Jessica Grenke, PhD Candidate at the University of Alberta

**Presentation Summary:**

Grazed grasslands are the most threatened ecosystem-type in the world and are key to maintaining biodiversity. As available land-area shrinks, grassland managers are under increasing pressure to modify their grazing in order to maximize both plant diversity and economic profit. However, large knowledge gaps remain in our understanding of how operational ranch management impacts plant community composition and above and below biomass. My research project addresses these gaps by: 1) determining how plant diversity and above and belowground biomass vary under different grazing management types; and 2) pinpointing which aspects of management drive these relationships. Research occurred at 36 ranches across Alberta, Saskatchewan, and Manitoba (spanning a 2,400 km<sup>2</sup> region). These ranches consist of 18 pairs of adjacent ranches with equivalent abiotic and biotic conditions, where one half of each pair practices a highly intensive adaptive ranch management style and one half practices ranch management typical for the region. Paired with surveys detailing individual aspects of grazing management for each ranch, these data also allow for assessment of interaction effects among individual components of grazing management across a massive scale over an understudied area.

**About Jessica Grenke:**

Jessica Grenke is a PhD student at the University of Alberta under the supervision of Dr. James Cahill Jr. and Mark Boyce. Originally from outside Edmonton, AB in Parkland County she is passionate about applying science to grazing management and more generally, the best ways to mix humans and nature. She has had the opportunity to practice this interest through work and scientific collaborations with county, provincial, and federal-level governments as well as the non-profit sector.