

Biology Seminar



Western
UNIVERSITY • CANADA

12:30 - 1:30 pm
Friday, October 5, 2018
BGS 0153



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Special Seminar: Graduate Student Invited Speaker

Integrating plants, roots, and soil nematodes to restore northern prairie ecosystems

Global changes in climate and intensification of human land uses threaten grassland ecosystems around the world. However, evaluating restoration success of grasslands has largely focused on assessing the structure, diversity, and composition of plant communities above ground. Unlike other terrestrial ecosystems, the below ground structure of grasslands provides a key element of plant biomass that is fundamental to the function of restored communities. The focus of our research is to link changes in the structure, composition, and diversity of restored grasslands with traits of roots that measure their structure and function. We also use soil nematodes to evaluate restoration success and to examine changes in soil food webs following restoration. Our recent work illustrates that prairie plants and soil nematodes are intricately connected and that changes in the structure and function of roots may be key to evaluating and influencing restoration success in the northern grasslands. Working in collaboration with Parks Canada, our research focuses on long term chronosequences of restored northern prairie communities in western Canada and provides a unique insight into the below-ground function of northern prairie ecosystems. We hope that our work continues to inspire basic questions that relate the above- and below-ground assembly of grassland ecosystems and helps refine how restoration success is measured.

