

# Biology Seminar



Western  
UNIVERSITY • CANADA

12:30 - 1:30 pm  
Friday, October 9, 2020  
Seminar to be held via ZOOM



**Graduate Student  
invited speaker**

**Isabel C Barrio**  
Faculty of Environmental and  
Forest Sciences  
Agricultural University of Iceland

## **Herbivores in the tundra: from caribou and caterpillars, to Icelandic sheep**

Plant-herbivore interactions are a main biotic interaction in tundra ecosystems. Herbivores influence plants, plant communities and ecosystem processes, but the impacts of herbivores largely depend on where and when the interaction takes place. Further, tundra herbivores range from small leaf-chewing insects to large grazing mammals. By feeding on certain plant species or targeting specific plant parts, herbivores affect plants differently, and the composition of herbivore communities can also influence the outcomes of herbivory. Herbivory is an active topic of research in arctic environments given the potential of herbivores to counteract some of the changes associated with ongoing environmental changes. Effectively addressing these questions requires coordinated data syntheses, field observations, and experiments. An emerging research initiative, the Herbivory Network, is filling this gap by laying the foundations for investigating the role of herbivory and herbivores in shaping Arctic and alpine ecosystems.

During the seminar I will introduce some of the research we have been doing within the Herbivory Network, in mapping herbivory research and the patterns of herbivore diversity in the Arctic and quantifying invertebrate herbivory across the tundra biome. I will also present some of the ongoing research on the impact of herbivores in Iceland.



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