

Does defoliation affect carbon flow in rangelands?

PROJECT DESCRIPTION

Grazing has been shown to be an important driver of carbon (C) cycling in grasslands. However, how the translocation of C from above-ground to below-ground components is affected by grazing is poorly understood, hampering the full appreciation of the effect of grassland management on C cycling. The focus of the proposed research is to determine how grazing intensity affects the movement (from shoot to root, and to the soil) of newly assimilated C in grasslands in different eco-sites in Mattheis Ranch. By using the isotope tracer technique, we will directly quantify the flow of C in grassland ecosystems under different grazing intensities and eco-site conditions. The research will improve the biogeochemical understanding of the herbivory effects on C cycling in the plant-soil system and contribute to terrestrial models used to predict the feedback between grazed grasslands and climate change.

FACULTY-DEPARTMENT

Forest soil lab - Renewable resource, University of Alberta

OPEN TO STUDENTS FROM THE FOLLOWING INSTITUTIONS

Chinese universities participating in the [*Double First-Class Initiative*](#).

DESIRED FIELD OF STUDENT STUDY

Ecology related background, have field and lab work experience.

INTERNSHIP LOCATION

Edmonton Campus

NUMBER OF INTERNSHIP POSITIONS

1-2

INTERNSHIP DATES

Start: July 1, 2019

End: September 1, 2019

ARE THE DATES FLEXIBLE?

Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.