

**Project Summary**  
**Rocky Mountains Cooperative Ecosystem Studies Unit**

**Task Agreement #:** G20AC00388

**Project Title:** The Control of Whitetop Mustard and Russian Knapweed by Insect Herbivores: Large-Scale Studies of Herbivory and Distribution

**Discipline:** Natural

**Type of Project:** Research

**Funding Agency:** United States Geological Survey

**Other Partners/Cooperators:** Colorado State University

**Student Participation:** No

**Effective Dates:** 08/15/2020 to 01/15/2021

**Funding Amount:** \$29,546.00

**Investigators and Agency Representative:**

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**Project Abstract:**

Project goals: The goal of this research is to examine how *L. draba* and *R. repens* interact with other plants and insects (both herbivores and parasitoids) in the communities where they have invaded and how these interactions are influenced by differences in water availability.

Project objectives: Specific objectives include:

Objective 1: conduct common garden and reciprocal transplant studies to establish how geographic variation in these plants leads to their large distributions and array of plant-insect interactions

Objective 2: conduct greenhouse studies that explore the key features of invasiveness of these plants (i.e., tolerance/resistance to herbivory, response to water availability, clonal growth).

Objective 3: conduct surveys that explore how plants respond to herbivores and different environments throughout parts of the invasion range.