

Rocky Mountains Cooperative Ecosystem Studies Unit  
Project Summary

**Project Title:** Survey and analyze ice volume and depth of Teton Glaciers using Ground Penetrating Radar (GPR)

**Discipline:** Natural

**Type of Project:** Technical Assistance and Education

**Funding Agency:** National Park Service

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

**Student Participation:** No

**Effective Dates:** April 20th – December 31st, 2022

**Funding Amount:** \$10,992

**Investigators and Agency Representative:**

NPS ATR: Dr. Jennifer Newton, Social Scientist, National Park Service, Grand Teton National Park, PO Box 170, Moose, WY 83012, (307) 739-3425, Jennifer\_newton@nps.gov

Investigator: Daniel McGrath, Colorado State University, Daniel.mcgrath@colostate.edu

**Project Abstract:**

**Project Goals** – The overall goal of this project is to characterize and understand the overall snow and ice depth of the Teton glaciers at the end of the accumulation season, ultimately informing our understanding of the role glaciers play in the hydrologic budgets.

**Project Objectives** – Establish a monitoring protocol by adopting or adapting an existing protocol. Conduct GPR survey of a Teton glacier. Analyze and determine ice and snow depth, volume, and Snow Water Equivalent of a Teton glacier at the end of accumulation season 2020 (May). Discuss and propose mechanisms for ongoing programmatic monitoring for future years.