Rocky Mountains Cooperative Ecosystem Studies Unit Project Summary

Project Title: Bison Vegetation Ecology in Grand Canyon National Park

Discipline: Natural **Type of Project:** Research

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Student Participation: Yes

Effective Dates: 8/3/20 - 12/31/2025

Funding Amount: \$47,436

Investigators and Agency Representative:

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Project Abstract:

Project Goals – This project will use both large fixed and small moveable vegetation exclosures to better understand how bison are currently utilizing plant resources on the Kaibab Plateau, on the North Rim of Grand Canyon. The project aims to better understand which vegetative features bison select for, to determine how that varies seasonally, and to look at how reduction of the bison population may impact vegetation recovery.

Project Objectives – This project will support a graduate student (Masters) position to implement the work described in the "Project Goals" section above, within Grand Canyon National Park (GRCA). In the short term, the project will identify the types of vegetation that the bison utilize so that field staff can evaluate current effects of bison on park vegetation resources. The student will also collect baseline data and develop long term vegetation monitoring protocols, so that as the park reduces the bison population, park staff can continue to monitor effects of that action on vegetation resources.