

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Evaluating key uncertainties regarding road grooming and bison movements

Discipline: Natural
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Montana State University
Effective Dates: 9/1/2008-8/1/2013
Funding Amount: \$15,000

Investigators and Agency Representative:

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Project Abstract:

The issue of bison demography, winter movements, and distribution patterns with respect to the groomed road system at Yellowstone National Park was a focal point in the Washington, D.C., District Court's opinion on December 16, 2003, regarding motorized winter use regulations. The purpose of this project is to gain expertise and services that improve our understanding of key uncertainties regarding this issue. Two prototype camera systems were deployed during winter 2007-08 in collaboration with Montana State University for monitoring the frequency of bison and over-snow vehicle movements. These systems include a bullet-type camera, light source for night operations, digital recorder, storage medium, trigger system, solar and fuel cell power system, enclosure, and data retrieval and image processing system. The purpose of this agreement is to collaboratively monitor, refine, service, and repair these systems during coming winters to ensure adequate data is collected to satisfy the overall project objectives, as outlined in the Record of Decision (ROD) for the Winter Use Plans Final Environmental Impact Statement (FEIS) approved November 20, 2007 (72 Federal Register 70781-70804).

The MSU Department of Ecology will:

- Provide experts and/or researchers to monitor, refine, service, and repair two prototype camera systems designed for monitoring the frequency of bison and over-snow vehicle movements that includes a bullet-type camera, light source for night operations, digital recorder, storage medium, trigger system, solar and fuel cell power system, enclosure, and data retrieval and image processing system; and
- Hire and pay (or contract) experts and/or researchers to work on tasks identified in the agreement. Hiring will be conducted in consultation with the key NPS official, as will oversight.

The NPS shall:

- Provide park staff to collaboratively monitor and oversee operations and effectiveness of the camera systems;
- Work collaboratively with the principal investigator on the hiring of experts and/or researchers and refinement, service, or repair of the camera systems; and
- Inform the principal investigator of conduct or performance problems with the experts and/or researchers, or operation of the camera system, so that remedial action may be taken.

Outcomes with Completion Dates:

Due Date for Final Report and/or Other Products: August 1, 2013

Keywords: ungulate, habitat monitoring, population monitoring, Yellowstone National Park, Montana State University, bison, winter use