

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Bat use, ecology, and management recommendations in the White Grass Ranch Area, Grand Teton National Park

Discipline: Natural

Type of Project: Technical Assistance

Funding Agency: National Park Service

Other Partners/Cooperators: University of Wyoming

Effective Dates: 6/1/2005 - 10/1/2006

Funding Amount: \$6,950.00

Investigators and Agency Representative:

NPS Contact: Sue Wolff, GRTE, Drawer 170, Moose, WY 83012, 307-739-3464,

susan_wolff@nps.gov

Investigator: Doug Keinath, Wyoming Natural Diversity Database, University of Wyoming, P.O. Box 3381, Laramie, Wyoming 82071; 307-766-3013, dkeinath@uwyo.edu

Project Abstract:

Buildings at the White Grass Ranch, Grand Teton National Park (GRTE), are planned for renovation beginning in the summer of 2006. In 2004, it was discovered that several sensitive bat species including the Townsend's big-eared bat, were using the buildings at the ranch for day, night, and maternity roosts and that the bat diversity in the area was substantial. To mitigate for bats that will be impacted by the rehabilitation of the buildings, the park in cooperation with the Wyoming Natural Diversity Database, University of Wyoming, will investigate bat use at the ranch and provide recommendations on how to manage bats in the area. This project will have immediate management implications for bats in GRTE, as it will directly provide needed information about bats at White Grass prior to the renovation of the buildings. Information gathered from this project would be used to develop a strategy for managing bats at the ranch in the future as well as analyze appropriate mitigation measures applicable for bat conservation.

Tasks The following tasks are designed to obtain information about bat use at the White Grass Ranch. Tasks resulting from this project include:

1. Determine bat use at and in the vicinity of the White Grass Ranch. Number, species, time and type of use will be evaluated and determined. Natural and manmade bat habitat features of importance will also be determined.
2. Provide expert advice on how to manage bats at and in the vicinity of White Grass Ranch. Guidelines on how to manage bats at the ranch both before and after building renovation will be provided.
3. Evaluate ways to mitigate for bats that roost in the buildings at White Grass Ranch.
4. Compile information pertinent to bat conservation, health issues, and management options at the ranch.
5. Assist the park in developing a plan for future bat monitoring at White Grass.

This work will be conducted by park biologists, pest management specialists, field technicians and bat experts from the Wyoming Natural Diversity Database (WYNDD).

Outcomes with Completion Dates:

1. A final report will be provided that summarizes bat use at and in the vicinity of the ranch. Critical habitat features will be identified and mapped. Maps and pictures will be provided electronically to the park. The final report will be submitted to Science and Resource Management at GRTE, the NPS Research Coordinator and the RM-CESU host university.
2. Recommendations on how to manage and exclude bats at White Grass Ranch will be provided in a final report. In addition, ways to mitigate for bats that are excluded at the ranch will be summarized and methods to conserve bats in the area of the ranch will also be provided in the report.

Keywords: bat ecology, White Grass Ranch, Grand Teton National Park, University of Wyoming, Townsend's big-eared bat, building rehabilitation

For Administrative Use Only:

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: