

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Preventative Search and Rescue for Rocky Mountains NP

Discipline: Interdisciplinary
Type of Project: Research
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Effective Dates: 8/1/2011 - 6/30/2014
Funding Amount: \$20,000

Investigators and Agency Representative:

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Investigator: Stephen Reynolds, Director, High Plains Intermountain Center for Agricultural Health and Safety, 154B EHB Department of Environmental and Radiological Health Sciences, Colorado State University, Fort Collins, CO 80523; 970-491-3141, Stephen.Reynolds@ColoState.edu

Project Abstract: Rocky Mountain National Park (RMNP) and the National Park Service (NPS) are committed to reducing the number of unintentional injuries among our visitors. The purpose of this project is to develop a thorough understanding of patterns of visitor injury based on recent injury data and to ensure that RMNP has appropriate strategies and materials to address critical emergent patterns of injury.

The team from Colorado State Department of Public Health (CSU) will work closely with NPS at the local and national level to complete this project. The CSU principal investigator is Dr. Stephen Reynolds. However, a student co-investigator will accomplish most of the work as part of an internship and/or master's degree in Public Health.

With support and guidance from park staff, CSU will:

1. Identify and review park visitor fatality and injury data sources,
2. Extract a minimum of five years of retrospective data , and
3. Enter data into the data collection tool provided by PRMP. The data collection tool captures the most critical injury data points for each incident and allows for accurate analyses that follow current industry standards. It also allows for comparison of data with other parks.
4. Explore the park,
5. Review existing forms of risk communication at RMNP and select parks with similar types of risk
6. Research the method to release risk communication to visitors and outdoor recreationists
7. Review park safety plans and/or other visitor safety policies and guidelines, and
8. Observe visitor behavior and interactions between staff and visitors.

Upon completion of data extraction, the student investigator will work with CSU and PRMP staff to analyze collected data using standard statistical software analysis programs. A report summarizing findings including critical incident types and/or visitor groups will be a key product and fulfill one component of the student's degree requirements.

During the second phase of the project, the student will conduct a systematic and thorough review of existing RMNP safety communication materials and strategies as well as select materials from other parks with similar injury patterns. This review will result in a gap analysis of how safety materials match up with injury, visitor, and media types. Recommendations for addressing critical injury patterns through the use of new or modified communication strategies will be summarized in a graphical report and/ or presentation. This second report/presentation will fulfill a second component of the student's degree requirements.

Finally, the student investigator will work with park staff to implement one or more new communication products.

Outcomes with Completion Dates: All products will be due no later than March 30, 2014

1. Report or presentation summarizing gap analysis and making recommendations for Preventative Search and Rescue approaches including target audiences, media, content
2. Development of select Preventative Search and Rescue messages/media

Keywords: Rocky Mountain National Park, Colorado State University, Search and Rescue, communication strategies