

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: New geologic mapping at Scotts Bluff National Monument and Chimney Rock National Historic Landmark

Type of Project: Research
Discipline: Natural
Funding Agency: National Park Service
Other Partners/Cooperators: University of Northern Colorado
Effective Dates: 8/1/2012 - 12/31/2014
Funding Amount: \$6734

Investigators and Agency Representative:

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Project Abstract: Scotts Bluff National Monument (SCBL), located in Gering, Nebraska, requires new geologic mapping to address a number of resource management, infrastructure, and visitor safety related issues. Existing published mapping is at such a small scale that individual geologic units which are relevant to these issues are lumped into larger geologic formations and do not provide the level of detail necessary for park staff to make sound management decisions. In particular, the park is concerned with:

- Erosion and loss of valuable paleontological resources in the badlands section of the park
- Slope stability in the upper stratigraphic units of the park, particularly in the areas of a single pedestrian tunnel along a trail and three automobile tunnels along the road to the overlook on top of Scotts Bluff
- Slope stability on any new trails built by the park
- Viewsheds to the south and west of the park
- Erosion of nearby affiliated Chimney Rock National Historic Landmark (CHRO) in Bayard, Nebraska

Outcomes with Completion Dates:

Field work will commence during the summer of 2012 and continue in the summer of 2014. A final map product with accompanying unit descriptions and any cross sections will be delivered by September, 2014.

Keywords: geologic maps, Scotts Bluff National Monument (SCBL), Chimney Rock National Historic Landmark (CHRO), University of Northern Colorado