

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: NPS Northern Great Plains Network Herbarium Imaging Project, *Phase 1*

Discipline: Natural
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: University of Wyoming
Effective Dates: 7/1/2011 - 12/31/2011
Funding Amount: \$13,086

Investigators and Agency Representative:

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Project Abstract: The purpose of the agreement is to increase park and public access to herbarium specimens that are managed by the National Park Service by creating a virtual herbarium of northern Great Plains area NPS specimens. The professional standard for herbaria is to provide web-based access to specimen data and images. Most herbaria are just now developing this capability and few NPS units provide such access. Herbaria are collaborating to provide unified access to data about their collections on regional online interfaces such as:

1. SEINet (Southwestern Environmental Information Network) for the desert southwest at <http://swbiodiversity.org/seinet/index.php>
2. Pacific Northwest Portal at <http://www.pnwherbaria.org/portal/search.php>
3. Rocky Mountain Herbarium at <http://www.rmh.uwyo.edu/data.php>
4. From the University of Wyoming Libraries - Digital Herbaria: Grand Teton National Park at <http://www.rmh.uwyo.edu/digitalherbaria/search.php>

With this in mind, a common goal of Black Hills area NPS units and the University of Wyoming (Rocky Mountain Herbarium and University of Wyoming Libraries) is to make scientifically collected and documented NPS plant specimens available to public users from botanical researchers to amateur native plant enthusiasts in an accessible, non-destructive manner. Phase I of this project will include high-resolution imaging of plant specimens in the co-located herbaria of Mount Rushmore National Memorial and Devils Tower National Monument/Jewel Cave National Monument and the herbarium at Wind Cave National Park. The specimens are stored in two locations (Mt. Rushmore National Memorial and Wind Cave National Park) and the total number of plant specimens to be imaged is approximately 3,500. The images will be processed at the Digital Collections Lab, University of Wyoming Libraries and served through their Digital Research Collections website and that of the Rocky Mountain Herbarium. A set of images will also be provided to the National Park Service.

Phase II of this project will include high-resolution imaging of plant specimens at herbaria at 9 remaining NPS units in the Northern Great Plains Network (Agate Fossil Beds NM, Badlands NP, Fort Laramie NHS, Fort Union Trading Post NHS, Knife River Indian Villages, Missouri National Recreation River, Niobrara National Scenic River, Scotts Bluff NM, Theodore Roosevelt NP).

Outcomes with Completion Dates:

- **July 2011:** PI and student intern travel to Custer South Dakota with imaging equipment and obtain images of all MORU/JECA/DETO and WICA herbarium specimens.
- **December 31, 2011:** Progress report - including available quality control reports
- **December 31, 2012:** Progress report - including available quality control reports
- **April 30, 2013:** Draft final report and draft report abstract
- **July 31, 2013:** Images loaded, stored, and maintained on UW Libraries Digital Initiatives website, available to the public

Keywords: Herbarium, digital images, public access, National Park Service, Northern Great Plains Network, University of Wyoming