Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Digital Herbariums for Multiple National Park Sites

Discipline: Natural

Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: University of Wyoming
Student Involvement: Yes, student technician

Effective Dates: 9/1/2014 - 12/31/2017

Funding Amount: \$33,015 [FY15: 13,507; FY14: \$19,508]

Investigators and Agency Representative:

NPS Contact: Kara Paintner-Green, Network Coordinator, NPS Northern Great Plains Inventory and Monitoring Network, 231 East St. Joseph Street, Rapid City, SD 57701, (605) 341-2807, Fax (605) 341-7192, kara_paintner@nps.gov

Investigator: Larry Schmidt, Associate Librarian, University of Wyoming Libraries,
Dept. 3334, 1000 E. University Ave., Laramie, WY 82071-2000, (307) 766-2844, Fax (307)
766-2510,
lschmidt@uwyo.edu

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 and Bighorn Mountain 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:

- 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. Consortium of Northern Great Plains Herbaria http://ngpherbaria.org/portal/index.php
- 4. Rocky Mountain Herbarium at http://www.rmh.uwyo.edu/data.php
- 5. From the University of Wyoming Libraries Rocky Mountain Region Digital Herbarium https://www-lib.uwyo.edu/digitalherbaria/
- 6. Natural History Collections database and imaging support through iDigBio https://www.idigbio.org/

With this in mind, a common goal of North Dakota NPS units, Bighorn Canyon NRA 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. This project will include high-resolution imaging of plant specimens in the herbaria of Bighorn Canyon NRA (BICA), Fort Union Trading Post NHS (FOUS), Knife River Indian Villages (KNRI), Theodore Roosevelt NP (THRO). The total number of plant specimens to be imaged is approximately 5,100. The images will be processed at the Digital Collections Lab, University of Wyoming Libraries and served through the Rocky Mountain Region Digital Herbarium website. A set of images will also be provided to the National Park Service.

Outcomes with Completion Dates: 12/31/2017

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