Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Digital Imaging of Plant Specimens for Fort Laramie National Historic Site

Discipline: Natural

Type of Project: Technical Assistance & Education

Funding Agency: National Park Service
Other Partners/Cooperators: University of Wyoming

Effective Dates: 6/1/2012 - 3/31/2014

Funding Amount: \$1821

Investigators and Agency Representative:

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Project Abstract: Fort Laramie National Historic Site (FOLA) has almost 500 botanical specimens in their museum collection. The University of Wyoming will create high-resolution images of 487 plant specimens at FOLA. This work will increase park and public access to herbarium specimens that are managed by the National Park Service (NPS) and add to a virtual herbarium of the northern Great Plains area and Wyoming NPS specimens. 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 (RM) Herbarium. A set of images will be provided to the NPS.

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:

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

The UW Libraries virtual herbaria collection will support education by allowing the public to search for plants using both common names and scientific names. The web interface will allow users to search for ecological data such as altitude, habitat, geographic location, collection year and other scientific or historical information. This will be an invaluable resource to amateur botanists, students, NPS staff, and researchers interested in the flora of Wyoming.

Outcomes with Completion Dates:

Fall 2012: PI and student intern travel to FOLA with imaging equipment and obtain images of all FOLA herbarium specimens.

December 31, 2012: Progress report - including available quality control reports (UW Libraries)
April 30, 2013: Draft final report and draft report abstract (UW Libraries)

July 31, 2013: Images loaded, stored, and maintained on UW Libraries Digital Initiatives website, available to the public (UW Libraries)

December 31, 2013: Final report and final report abstract (UW Libraries)

Keywords: Digital Imaging, botanical specimens, Fort Laramie National Historic Site, University of Wyoming Libraries