

April 21, 2014

PR Number:

Project Code: UWY-163

Park/NPS Unit: Fort Laramie National Historic Site

Administrated through the: Rocky Mountains Cooperative Ecosystem Studies Unit
Cooperative Agreement Number H1200-09-0004

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

Larry Schmidt – PI

This is the final report for the “Digital Imaging of Plant Specimens for Fort Laramie National Historic Site”. Before the imaging trip to Fort Laramie we purchased a color card and located an external hard drive to use for back up of the images. Then Larry Schmidt and an undergraduate student traveled to Fort Laramie National Historic Site to image the specimens in the collection on August 21, 2012. Once we arrived at Fort Laramie the imaging equipment was set up, the camera and monitor were calibrated and the imaging of specimens began. The imaging of the collection took one day including the travel to Fort Laramie and back to the University of Wyoming. In all, 487 images of mounted plant specimens were taken. We saved the image files to an external hard drive and kept copies on the computer hard drive that we used to run the camera software for imaging the specimens. After all of the imaging was finished we returned to Laramie with the image files and the photography equipment.

The images were transferred to servers located at UW IT and also on the processing computer located in the UW Libraries Digital Resources Department. Images were then processed using Adobe Lightroom to create jpeg’s, DNG and Tiff files for processing and preservation. Using workflows developed for other projects we began processing the specimen information found on the labels. To begin the process an undergraduate student matched images with the appropriate record in the Excel Spreadsheet exported from the NPS database. This was accomplished using the jpeg file name that matched information found on the label of the specimen images that mirrored the Excel record for the correct specimen. The specimen labels included catalog numbers, collector and other information that could be used to make a match. In some cases new records were created where a match could not be found. Students used the label information on the images to clean up the data, used [USDA Plants](#) to add current species and common names, and added phenology information to Excel spreadsheet. They consulted with Ron Hartman and Ernie Nelson (Rocky Mountain Herbarium) when they had questions about species, common names or phenology. In cooperation with Rocky Mountain Herbarium staff the specimen records were georeferenced so location information is now in the database. The Fort Laramie National Park herbarium images and records are now available on the [Rocky Mountain Region Virtual Herbarium](#) website.

See attached financial report.

For more information on the development of the Rocky Mountain Region Virtual Herbarium please refer to the Final Report for the NPS Northern Great Plains Network Herbarium Imaging Project, Phase 1.

PI – Larry Schmidt _____

Financial Report - Final

NPS Grant

Grant Number 4201-11093-1001504
Amount of Award \$1,821
Grant Period June 1, 2012 - March 31, 2014
Report Period June 1, 2012 - March 31, 2014

Principal Investigator Larry Schmidt
Title DIGITAL IMAGING OF PLANT SPECIMENS FOR FORT LARAMIE NATIONAL HISTORIC SITE

<u>Expense Categories</u>	<u>Budget</u>	<u>Previous</u>	<u>Current</u>	<u>Cumulative</u>
Imaging/Processing/Database	\$1,306.00	\$1,324.60	\$5.73	\$1,330.33
Equipment/Supplies	\$0.00	\$99.99	\$0.00	\$99.99
Travel/ Meeting Costs	\$244.00	\$117.96	\$0.00	\$117.96
Indirect Costs (17.5%)	\$271.00	\$270.96	\$0.25	\$271.21
TOTAL	\$1,821.00	\$1,813.51	\$5.73	\$1,819.49
Total Payments Received	\$1,821.00			
Total Grant Expenditures	\$1,819.49			
Balance	\$1.51			

Signature: _____

Date: _____