

Project Completion Report Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU)

Prepared by Elaine Skinner Hale, RPA, June 2012

Project Title: MOOSE EXHIBIT SITE 48YE201: DATA RECOVERY, YELLOWSTONE NATIONAL PARK, WYOMING, PHASE 1 EXCAVATIONS

Project Code: P11AT10356 , UWY-149

Type of Project: RESEARCH

Funding Agency: National Park Service

Partner University: The UNIVERSITY OF WYOMING

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Start Date of Project: May 1, 2011

End Date of Project: (originally Sept. 30, 2015) actually May 15, 2012

Funding Amount: \$140,000

Number of Students Involved, and Type of Student (Undergraduate, Graduate, Post Doctorate): One (1) undergraduate, one (1) Masters Candidate, and one (1) Doctorial Candidate in Archeology, all from the University of Wyoming

Project Summary, including descriptions of project deliverables, any changes made during the life of the project, work accomplished and/or major results. If the information is restricted (e.g. location of endangered species or cultural resources), indicate the title and location of the final report. There is no report for the first phase of data recovery, which is excavation only.

This is the first phase of the data recovery excavations at prehistoric, National Register eligible, site 48YE201 and involves excavations in portions of the area of potential effect of the road reconstruction and other areas of the site containing high concentrations of cultural material, intact stratigraphic levels, or datable buried cultural levels. The archeological data recovery excavations were confined within the boundaries of prehistoric site 48YE201. This site is located at the Moose Exhibit turnout, along the east side of Obsidian Creek, across from its confluence with Winter Creek. The site measures approximately 215 m north-south and 60 m east-west. It is approximately 5km north of 48YE116 and is about 2.2 km north of the boundaries of the Obsidian Cliff National Historic Landmark. The site is located in the north-central portion of the western edge of the Obsidian Cliff 7.5 minute quadrangle.

The subsurface excavations were performed in accordance with the "Data Recovery Plan for Mitigation of Sites 48YE114, 48YE116, 48YE201, and 48YE406, Yellowstone National Park, Wyoming" prepared by Paul H. Sanders, March 2004, and submitted to the WYSHPO for approval. After reviewing the plan, the WYSHPO agreed that implementation of the treatment plan will adequately mitigate the adverse affects to site 48YE201 caused by the widening and reconstruction of the road, as stipulated in the parks' road reconstruction Programmatic Agreement. This site, along with several others is associated with the prehistoric procurement of tool stone from the Obsidian Cliff National Historic Landmark, a short distance south of the site.

The data recovery plan is designed to retrieve enough archeological data and information to get an understanding of the nature of the site without destroying the majority of the site. Sensitive wetland areas, such as the spring mound within the site boundary will be avoided and the areas previously disturbed by the construction of the road and parking pull-through lack integrity and will not be tested. Previous archeological survey of the site identified large quantities of cultural material recovered from four 1m x 1m excavation units, which also exhibit some evidence of cultural stratification as noted by the variable flake frequencies from the excavation levels. Unfortunately, tree tip-ups, rodent burrows, freeze-thaw action, and other activity have disturbed the buried stratigraphy of the site.

During the 2011 field season, the Office of the Wyoming State Archaeologist (OWSA) spent four 10-day sessions excavating 21 1m X 1m units within the site boundary. Previously, shovel tests and magnetic survey have been conducted at the site to gather information on the best places to locate test units. The major portion of the excavation was located within the area planned for roadway expansion, although some units were located closer to Obsidian Creek. Prior to excavation of the data recovery units, soils were augered and the geomorphology of the soils and sediments was examined by a geoarcheologist to determine the location of possible in-tact culture-bearing buried surfaces. The same geoarcheological experts returned to examine the opened excavation units after they had reached what appeared to be the bottom of the cultural levels at 130 cm below surface. The stratigraphy of the soils indicated that the area had been previously disturbed by a number of agents such as down-cutting of washout areas, old roads, and bioturbation.

The 2011 field season recovered a few tools diagnostic to the Late Archaic period and over 21,000 pieces of chipped stone debitage, mostly obsidian giving a preliminary indication that the area functioned as a tool production workshop rather than a domestic camp area. The most productive excavation unit is located in the area between the Grand Loop Road corridor and the paved pull-through parking area for the Moose Exhibit indicating that the more significant buried cultural layer has been impacted by the previous construction of the pull-through parking area and the main line of the Grand Loop Road. All artifacts were examined in the field, bagged and labeled for laboratory examination in the OWSA lab, source, use-wear, residue, and other tests, and museum cataloging prior to being returned to the park repository. A full data recovery report will be generated as the conclusion of Phase 2 of data recovery at 48YE201.

The OWSA crew spent 1,600 hours conducting in-field excavations at the site and 200 hours in project planning and management. Three students participated in the excavations – one doctoral candidate, one master's candidate, and one undergraduate student. A member of the Wyoming State Archeological Society/Historical Society also participated in the field excavations. Yellowstone Park archeologist, Elaine Skinner Hale, participated in the project

from the planning stages through field excavations providing 120 hours of time towards the management and execution of the data recovery.

The total funding for Phase 1, Excavations is \$140,000 with OWSA direct costs totaling \$119,149 and indirect costs for CESU overhead at \$20,851. Project funds are provided by the FHWA FLHP funding through YNP for the Golden Gate to Norris road reconstruction program. No non-NPS funding sources were used. All the funds received in FY2011 were obligated. All excavation work identified in the Scope of Work was completed in 2011.

ASMIS records for this site have not been updated as the data recovery analysis is not completed. Several local discussions concerning the project have been made and plans for presentation of the project results at Montana and Wyoming Archeological Society programs as well as the Plains Anthropological conference are planned for the future.