

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

**Project Title:** Yellowstone Archeology Program Technical Assistance

**Project Code (such as UMT-72 and/or the “J” number):** J1580090464, UMT-215

**Type of Project (Research, Technical Assistance or Education):** Technical Assistance

**Funding Agency:** National Park Service

**Partner University:** University of Montana

**NPS Agreement Technical Representative (with complete contact information):**

Tobin Roop  
National Park Service  
PO Box 168  
Mammoth Hot Springs, WY  
82190  
(307) 344-2224  
[tobin\\_roop@nps.gov](mailto:tobin_roop@nps.gov)

**Principal Investigators (with complete contact information):**

Douglas MacDonald  
Department of Anthropology  
University of Montana  
Social Science 216  
Missoula, MT  
59812  
(406) 243-5814  
[douglas.macdonald@mso.umt.edu](mailto:douglas.macdonald@mso.umt.edu)

**RESEARCHER:**

Robin Park  
PO Box 222  
Emigrant, MT  
59027  
(406) 223-2335  
[rjpark@gmail.com](mailto:rjpark@gmail.com)

**Start Date of Project:** January 1, 2011

**End Date of Project:** December 31, 2012

**Funding Amount:** \$76,000.00 (total cost)

**Project Summary, including descriptions of project deliverables, 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. Also add web sites where project-related information may be found.**

This project consisted of several key tasks. All of the tasks outlined in the project proposal were accomplished to the highest degree possible.

### Cataloging

One key task was to catalog backlog artifacts currently in the Heritage and Research Center (HRC) archaeology lab and enter artifact data into the Department of the Interior Collections Management System (ICMS). This involved the analysis, processing (cleaning, labeling, preparing for storage), and cataloging (in the database) of prehistoric and historic period artifacts from various projects for inclusion into the museum collections. This task was accomplished through coordination with Curatorial staff. Over 100 artifacts were processed in this manner and added to the Museum collection (or are in the process of being added). The project deliverables were in the form of catalog records, which are restricted and available to appropriate personnel through the ICMS database.

### Inventories

Another task was to conduct large and small archaeological inventories as needed. Two larger inventories were performed during this agreement, and are outlined below. Both projects were Section 106 compliance inventories of powerline corridors. These were undertaken in response to a proposal by Northwestern Energy Corporation to clear vegetation from the corridors to ease access to the lines for routine maintenance.

#### *The Bridge Bay Powerline Inventory:*

This Section 106 inventory involved one day of fieldwork, performing surface survey and documenting isolated cultural resources along a 4 mile corridor created by the powerline installation (running generally southwest from Bridge Bay Campground). No new sites were recorded. Several isolated concentrations of historic artifacts (mostly cans and other metal) were observed and documented. This inventory builds on previous inventories along the powerline corridor, and completes the inventory of the segment of corridor slated for vegetation removal. It was determined that no cultural properties would be impacted by the proposed work. A final report is being prepared and will be completed by the December 31, 2012 deadline. It will be on file with the Yellowstone Center for Resources and restricted.

#### *The Mesa Road Powerline Inventory:*

This work was scheduled for summer 2012, but was prioritized for emergency inventory in 2011 due to threats from the Gibbon fire, which burned to the southeast of the powerline corridor. Due to the threat from the fire, the corridor was slated to be cleared of vegetation as soon as

possible, which was determined to be a ground disturbing project with potential to disturb any cultural resources within the area. Thus, prior to this emergency clearing, approximately 3.5 miles of the corridor (located generally between Madison Junction and Canyon Creek) was inventoried for cultural resources. A single artifact (historic bottle dating to ca. 1910) was documented and collected. No additional cultural resources or sites were recorded. The corridor was mapped and documentation included photos and field notes. A brief report summarizing these results was provided to resource managers including fire personnel, and is considered restricted. Further inventory is planned in 2012 for the remainder of the powerline corridor within the area of potential effect for routine vegetation clearing by Northwest Energy Corporation. The final report will be prepared upon completion of the remaining inventory, and will be restricted and on file with the Yellowstone Center for Resources.

### *Backcountry Reconnaissance*

In addition to the above inventories, backcountry reconnaissance was performed in the remote northwest corner of the park. This project was initiated to try and re-locate several sites which had been recorded in the 1970's but had never been evaluated by a professional archaeologist. In addition, reports of a new site (stone circle structure) in a high altitude setting in the area were to be investigated. The hope was to inventory additional high altitude pass environs in the park to add to our knowledge of pre-contact use of these areas. Approximately 5 miles were covered during this reconnaissance. Three new sites and three previously recorded sites were located and documented to professional standards. Multiple tools were collected from a lithic workshop site, including points diagnostic of the Middle Archaic and possibly Paleoindian periods. This site was recorded on a high altitude mountain pass, and provides further insight into prehistoric use of these environments. An extensive campsite was also recorded at a high altitude lake, and yielded various tools including engraving/perforating tools, points and knives. The stone circle feature was found and documented, and potentially was a former vision quest site. However, obvious signs of human impact (such as removal/addition of rocks to the structure and proximity to a large tower installed less than 50 feet away) were evident and these activities have destroyed the context of the original site.

### *Trail Re-Routes*

In accordance with Section 106 compliance efforts, several backcountry hiking trails with sections slated for re-routing (due to damage, flooding, ground instability etc.) were subject to archaeological inventory. The projects proposed included re-routing sections of the Specimen Creek, Seven Mile Hole, Wapiti, Fawn Pass and South Boundary trails. Since this work involves changing the route of established trails and ground disturbing activity, these projects must be cleared through the compliance process prior to project initiation. The Fawn Pass trail re-route was planned for an area which had been previously inventoried, and it was determined that no further archaeological work was necessary and no cultural properties would be impacted. The other proposed re-routes required archaeological inventory because they were in areas which had not previously been inventoried, and/or were in areas that had a particularly high probability for cultural resources to be present/threatened by the work. Due to a very high water year, the South Boundary trail work was postponed until next season, as fording the Snake River to get to the area in question posed safety risks. The remaining trail re-routes were inventoried and in all cases, no cultural resources were found within the proposed project area and/or the project would not adversely affect the cultural resources present.

### Compliance for Ground Disturbing Projects

Another task was to assist with cultural compliance of ground disturbing projects and perform site monitoring if necessary. In-house file searches were performed for several smaller ground-disturbing projects throughout the park. The project to expand the footprint of the concessionaire's garage facilities at Fishing Bridge was within a large and significant site (48YE1), and minor testing and monitoring of the work was undertaken. Three shovel test pits were placed within the expansion footprint. Two of these required removal of the existing concrete which covered the existing footprint. The pits were then dug in the ground exposed by cutting out holes in the concrete slab covering the area, to ensure that any cultural resources currently under the concrete footprint were accounted for. The third pit was dug along the expansion plan for the footprint, beyond the extent of the concrete slab. However, in all three cases, it appeared that the ground had been disturbed during previous phases of construction. Only a few obsidian flakes were recovered from these test pits. It was decided that the project could continue without further testing/monitoring. A brief report (which will be restricted material) is currently being prepared and will be completed by the December 31, 2012 deadline. This report will be on file with the Yellowstone Center for Resources and restricted.

### ASMIS Database Management and Updating

The Archaeological Sites Management Information System (ASMIS) is a database used by the Department of the Interior to record and monitor all archaeological sites. One of the tasks of this agreement was to add to and update the information in this database. Over 140 records were added/updated in ASMIS during this agreement. These records are restricted and available only through the secure database.

### Condition Assessments

A total of 64 sites were evaluated through condition assessments, meeting the federal goal of 35 condition assessments for Yellowstone. These records are kept in the restricted site files located in the Archaeology Lab in the HRC. They have also been entered into the ASMIS database.

### Report Review

The review of professional reports was one of the tasks to be performed "as needed". Four reports were reviewed by the researcher during this agreement, in addition to the review of website content and resource briefs provided through the Greater Yellowstone Science and Learning Center website. The deliverables include the updated content provided at: <http://www.greateryellowstonescience.org/topics/archeology>. The reports reviewed will be on file with the Yellowstone Center for Resources and restricted.

### GIS Digitization Project

A final task was to coordinate with the spatial analysis department on digitization of park archaeology sites and information for the park-wide GIS database. Approximately 150 records containing site location and descriptive information were provided to the GIS department for addition to the park-wide archaeology GIS database. These records were selected following inventory of the existing GIS database, which showed that ~300 sites currently documented

were not yet in the database. This work was performed during the course of this agreement, and the product associated will be the generating of a complete GIS database for the management of cultural resources in the park. Access to this database is restricted to cultural resource employees and select management personnel in Yellowstone.

**Number of students participating in this project: undergraduates, graduate students, degrees conferred.**

Additional assistance with some of the field projects performed as part of this agreement was provided by two student interns. One graduate student (Emily Eide of the University of Montana) and one undergraduate student (Jason Plain Feather of the University of Montana) participated in internships under the supervision of the researcher (Robin Park). The internships were through the University of Montana Anthropology department, and the Native American Internship program (a RM CESU agreement), respectively.