COOPERATIVE ECOSYSTEM STUDIES UNITS
NATIONAL NETWORK

**Award Number:** P14AC01670
**Project Number**: CMU-07
**CFDA #:** 15.945
**Park/NPS Unit: Heritage Partnerships Program, NPS Intermountain Region**
**Title of Project: Rosebud Battlefield NHL Archeological Fire Assessment**

**Administered through the:** Colorado Plateau Cooperative Ecosystem Studies Unit Cooperative Agreement Number P14AC00921

**CESU Partner: Colorado Mesa University**

**PROJECT CONTACTS:**
**Principal Investigator:** Dr. Douglas D. Scott, Visiting Research Scientist, Department of Social and Behavioral Science, Colorado Mesa University, Grand Junction, Colorado, Phone: (402) 429-3268; Email: ddscott@coloradomesa.edu
**Partner Administrative Contact*:*** Cindy Lueb, Director, Office of Sponsored Programs, Colorado Mesa University, 1100 North Ave., Grand Junction, CO 81501-3122, Phone: (970) 248-1424, Email: clueb@coloradomesa.edu
**NPS Certified ATR:** Charles Haecker, Archeologist, Heritage Partnerships Program, National Park Service, Intermountain Region, P.O. Box 728, Santa Fe, NM 87504-0728, Phone: 505-988-6757, FAX: 505-986-5202, Email: charles_haecker@nps.gov (FED EX Mailing Address: National Park Service, 1100 Santa Fe Trail, Santa Fe, NM 87505)

**FUNDING INFORMATION:**
**Amount Funded: $24,475.00**
**NPS Account Numbers (amounts in parentheses): PPIMIMRO6F/PX.XIMRO14NR.00.1//144**
**Fund Source: National Register Programs (IMR)**
☒NPS Funding
☐ Is this funded using a reimbursable account number? If yes, IMR contracting needs a copy of the Interagency Agreement.

**PROJECT DATES:**
**Start Date: September 15, 2014**

***NOTE*: *This Task Agreement will become effective on the date of final signature or the effective date of the Award document, whichever is later.***

**End Date: June 1, 2016**

**NPS Administrative Contacts**
**CESU Coordinator:** Todd Chaudhry, National Park Service/CPCESU, NAU P.O. Box 5765, Flagstaff, AZ 86011, 928-523-6638, Fax: 928-523-2014; todd_chaudhry@nps.gov

**Intermountain Region Administrative Contact:** Kelly Adams, Grants and Agreements Specialist, National Park Service, 12795 West Alameda Pkwy, Lakewood, CO 80228. Phone: 303-969-2303 Fax: 303-969-2992 Email: Kelly_adams@nps.gov

**FEDERAL FINANCIAL REPORTS:**

***Federal Financial Reports*** (Check as required for project based on spending plan, period of performance, risk, cooperator history, etc.)

{ } Quarterly {X } Semi-annually { } Annually

Final (required)

**PROJECT SCHEDULE AND TECHNICAL REPORT DEADLINES:**

List all technical reports and products in sequential order as required in the scope (more lines and milestones can be added as needed):

*Project Start Date* **– September 15, 2014**

**As weather permits: Initiation of fieldwork**
**June 30, 2015: Completion of fieldwork**
**November 30, 2015: Submit draft report**
**January 15, 2016: NPS review comments on draft report to CMU**
**June 1, 2016: Submit Final Report**

*Technical progress reports* – { } Quarterly { } Semi-annually {X} Annually
(Check as needed from PI to monitor progress of specific project. Content should be addressed in the scope.)

*Investigator's Annual Report (IAR)* – insert date

*Database, Collections/Specimens, Archives, and Maps provided to the NPS ATR or Technical Expert* – May 1, 2016

*Draft Final Report* – November 30, 2015

*Final Report* – May 1, 2016

*Project End Date* – June 1, 2016

*Final SF425 FFR* must be submitted within 90 days of project end date

**PAYMENTS**

**2 CFR PART 215.22*:*** Cash advance (drawdown) to recipient organization shall be limited to the minimum amounts needed and be timed to be in accordance with the actual immediate cash requirements of the recipient organization in carrying out the purpose of the approved program or project. The timing and amount of cash advances shall be as close as is administratively feasible to the actual disbursements by the recipient organization for direct program or project costs and the proportionate share of any allowable indirect costs.

**2 CFR PART 215.25 (8)(e)(1):** Incur pre-award costs 90 calendar days prior to award or more than 90 calendar days with the prior approval of the Federal awarding agency. All pre-award costs are incurred at the recipient's risk. (i.e. the Federal awarding agency is under no obligation to reimburse such costs if for any reason the recipient does not receive an award or if the award is less than anticipated and inadequate to cover such costs.)

## CESU REQUIRED PRODUCTS (may be different from those products required by the ATR – See Statement of Work for Products required by the NPS unit):

The Principal Investigator will prepare a brief report abstract suitable for public distribution and two hard copies and an electronic version (in PDF file format) of the final report and mail all to Todd Chaudhry, National Park

Service, CPCESU, NAU P.O. Box 5765, Flagstaff, AZ 86011. Please be sure to include the project number (e.g.; NAU-###, UMT-###, UAZDS-###) and the P number on the cover page of the final report.

PROJECT ABSTRACT:

This project is an archeological metal detecting survey on approximately 150 acres of Rosebud Battlefield National Historic Landmark, which is a National Historic Landmark in Montana. The park experienced a wildfire in 2013 that impacted about 150 acres, which is the subject of this inventory. This project is being completed in cooperation with the NPS, Intermountain Region, Heritage Partnerships Program, which provides assistance to National Historic Landmarks within an 8-state region, including Montana.

SCOPE OF WORK:

INTRODUCTION

This project is a cooperative research and education effort entered into, by and between the Department of the Interior, National Park Service (NPS) and Colorado Mesa University, Grand Junction, Colorado, for conducting an archeological metal detecting on approximately 150 acres of Rosebud Battlefield State Park, Montana. The park experienced a wildfire in 2013 that impacted about 150 acres which is the subject of this inventory. Unless otherwise specified herein, the terms and conditions as stated in the Cooperative Agreement will apply to this Scope of Work. The NPS-Heritage Partnerships Program (HPP) of the National Park Service, Intermountain Region, helps local citizens, organizations, communities, and government agencies in the identification, recognition, education, preservation and documentation of America's heritage. HPP, in partnership with Colorado Mesa University, will conduct an archeological metal detecting survey within, and in the general vicinity of, the burned area of Rosebud Battlefield State Park, Montana. The survey will attempt to identify and define various historic activities that have occurred within the project area and as described in written and oral accounts regarding the1876 Battle of the Rosebud.

BACKGROUND

The Great Sioux War was the last major struggle between European American settlers and Native Americans. Fought on June 17, 1876, the Battle of the Rosebud was one of the largest engagements fought between the United States Army and Native American forces. The battle was a victory for the Sioux and Cheyenne who were trying to preserve their way of life at the end of the nineteenth century. According to Milter's (2013:30-48) analysis of the battle, it is important because it set the scene for what would happen eight days later at the Battle of the Little Bighorn, where Sioux and Cheyenne warriors wiped out the Seventh Cavalry commanded by George Armstrong Custer. The battle fought along the Little Bighorn would represent the pinnacle of Native American power during Sioux wars. Soon after, with increasing pressure from the U.S. Army and the destruction of the buffalo on which these Native Americans depended, the Sioux and Cheyenne would be forced to return to the reservations.

Previous relic collecting by Thain White (1961) and Keith Werts and Stevan Booras (2011) as well as professional archaeological investigation by Aaberg (1981) and the recent specific battlefield archaeology project reported by Milter (2013) definitively demonstrate the patterned presence of physical evidence related to the 1876 fight. These data and sources will be employed during the proposed investigations both as background data and as guidance on artifact types and distributions that are likely to be encountered. They will inform and guide the metal detecting work in the fire-effected area.

STATEMENT OF WORK

Any in-field modifications to methodologies described below must first be approved by the NPS partner National Landmarks Program archeologist prior to implementation of such modifications. The area of interest is the approximately 150 acres of land that was burned by the 2013 wildfire.

Metal Detection

Survey of the area will involve metal detectors, which will be operated by professional archeologists and by students and/or experienced volunteers. The metal detecting technique will entail placement of a series of parallel and evenly spaced transects, each transect measuring no more than ten meters wide and aligned to conform with burn boundaries. Primary transects will be oriented to the cardinal directions when possible or follow appropriate contours to cover the survey area in a reconnaissance manner. Optional secondary transects, with a perpendicular orientation may be employed as well, as a crosscheck against possible bias introduced by consistent sampling in only one direction. Other, complementary metal detection sampling approaches may be employed as needed. One approach might be to select a modest-sized quadrat (e.g., measuring 20 x 20 meters) centered on an artifact cluster identified via the broader survey, and then to comprehensively investigate that unit via a contiguous series of metal detected transects. The resultant information may more precisely delineate the boundaries of apparent artifact concentrations, and perhaps indicate other discrete clusters.

Good quality very low frequency (VLF) metal detectors will be used. VLF metal detectors are more versatile than PI machines since the former can identify different types of metals as well as pinpoint the exact location of a buried target. VLF detectors can identify targets down to a depth of approximately one foot (30 cm) below surface. If a pulse induction (PI)-type detector is available it will be used as appropriate. PI detectors can identify targets down to a depth of at least three feet (approximately1.0 meter) below surface, and can screen out conductive salts and mineralization. A PI detector, however, cannot distinguish between different types of metals nor can it pinpoint the approximate depth below surface and location of a target. Both metal detector types will be used in tandem, to ensure adequate ground coverage. Collected target location data will include the type of metal detector (i.e, VLF or PI) that was employed when identifying a given target. The resultant data will permit differential comparisons between VLF- and PI-identified clusters of targets.

Upon receiving a positive signal, a metal detector operator will place a pin flag at that location and continue surveying. Visual inspection of the transect surface also may identify nonmetallic artifacts, e.g., historic ceramics, glass beads.

A metal detector and excavator team(s) will excavate selected targets. Excavation of a targeted artifact typically requires excavation of a hole that is approximately 10 cm in diameter. Excavation will involve using a conventional-sized trowel to ensure careful exposure of an in situ artifact and cleaning the walls of the hole. The intent is to limit ground disturbance sufficient to expose and recover the targeted artifact. Another team member will record each flagged location using a decimeter accurate GPS unit to provide the required (sub-meter) level of location fidelity.

Except under specified conditions, exposed artifacts will be analyzed in the field, and resultant exposed soil horizon(s) recorded to identify the presence of any intact subsurface cultural deposit. The artifact will be re-buried at the depth of discovery unless a determination is made that it warrants collection. The survey team will employ forms that track in-field analysis of re-buried targets, a field specimen log; and a photo log form. Excavation will cease immediately if inadvertent discovery of human remains should occur and all policy and regulatory requirements, including consultation with culturally affiliated tribes, will be followed. Non-metallic objects may be uncovered during the process of excavating the targeted metallic artifact. In such a situation, non-metallic objects either will be recorded and re-buried or collected based on criteria noted above.

An artifact will be collected only if it provides information that is diagnostic of a particular chronological period or ethnic group, or is sufficiently unusual to merit additional research or curatorial preservation. Non-collected artifacts will be photographed and measured in the field as appropriate.

RESPONSIBILITIES OF NPS AND COOPERATOR

A. The Cooperator

The Cooperator will

- be responsible for all phases of the work and will be accountable for the accuracy and professional quality of the fieldwork;
- produce the final report and all requirements for the databases and archival/curatorial needs;
- meet all personnel requirements necessary to carry out archeological investigations on federal lands, including personnel requirements listed under the Secretary of Interior Standards for Archeology and Historical Preservation;
- provide all equipment necessary for the completion of the fieldwork, analysis, and report preparation; and
- meet the Secretary of Interior Standards, Guidelines, and Qualifications for work on federal lands.

B. The NPS

The NPS-Heritage Partnerships Program (IMRO) archeologist, Charles Haecker, will be the Agreements Technical Representative (ATR) for this project. Mr. Haecker will

- act as primary contact for local, NPS, professional archeologists who are interested in volunteering their time and considerable expertise to this project;
- contribute his own expertise in the application of various remote sensing techniques slated for this project;
- assist in the training of university students;
- assist in the analysis of artifacts discovered as a result of this project; and
- review the draft final report; and
- be on-site and participate as project consultant during the fieldwork phase of the project.

Montana Fish, Wildlife & Park's facilities management and law enforcement staff will provide logistical support to the cooperator to insure a safe and accessible work environment. NHP staff will work and interact with the cooperator as their schedules allow, providing both staff and students the opportunity to increase their knowledge of the park resources, archeological processes, and resource significance.

## COOPERATIVE AGREEMENTS OR TASK AGREEMENTS INVOLVING COOPERATORS WORKING ON-SITE

### Background

In cooperative agreements or task agreements with universities where the university utilizes interns, student employees, research associates (RAs) or cooperators on-site (hereafter called "cooperator personnel"), these cooperator personnel sometimes work on government sites in close proximity to federal employees. It is illegal (without specific statutory authority) for federal employees to directly supervise the cooperator personnel or any

university employees or for the students or other university employees to supervise federal employees. When cooperator personnel are working on an NPS site, it is important that there is a clear distinction between students and federal employees.

**Office Environment and Vehicles**

- The office space of the cooperator personnel and NPS personnel should be clearly labeled (Name and NPS or University affiliation on office or cubicle space).
- Cooperator personnel should be listed separately from NPS personnel in telephone lists, other identification or organizational rosters, and publication credits.
- Cooperator personnel should not receive "all-employee" e-mail or other communications intended for NPS personnel (unless it relates directly to the work the cooperator is doing for the NPS). When the e-mail does relate to the work being done, a copy of the same e-mail message should be sent to the University or cooperator's supervisor.
- Cooperator personnel may use NPS e-mail systems when the communication relates directly to the work the cooperator is doing for the NPS. The e-mail addresses of the cooperator personnel must include a label associated with their NPS e-mail address that identifies the cooperator's status (i.e., "Linda Webb, Cooperator" would be the label associated with the e-mail address, linda_webb@contractor.nps.gov). Doing so clearly identifies this individual each time they send an e-mail message using the NPS system, and it identifies their status as a research associate, student intern or student employee in the e-mail directory.
- Unless stipulated in the agreement, cooperator personnel should not drive government vehicles.
- Unless stipulated in the agreement, cooperator personnel should not ride as a passenger in a government vehicle. When this is planned as part of the agreement, an appropriate amount of liability insurance should be negotiated.
- Prior written approval by the Park Superintendent or Center Manager must be obtained in order for a task to allow cooperator personnel to drive or ride in government vehicles.

**Supervision and Scheduling**

- Each task must specify the university's/cooperator's supervisor for the cooperator personnel.
- Unless stipulated in the agreement, NPS staff should not set hours for cooperator personnel, specify where the work should be done, or conduct performance appraisals. National Park Service staff may give performance feedback to the cooperator personnel supervisor.
- Cooperator personnel should report leave, scheduling, and other related issues to the university or cooperator's supervisor, not to NPS employees. The supervisor of the cooperator personnel should then communicate with the NPS. National Park Service employees cannot directly supervise cooperator personnel on a day-to-day basis. Work should be given to the cooperator personnel (via the cooperator's supervisor) on a "task basis." Cooperators should work without NPS supervision to accomplish each task, although technical consultations and cooperation is permissible.
- The Cooperator will be responsible for any disciplinary action needed to correct student employee conduct or performance problems. The NPS agreements technical representative will inform the university/cooperator's supervisor of any conduct or performance problems.
- The Cooperator will remove student employees from their positions if they fail to improve performance or address conduct issues.
- The NPS will review and provide feedback to students or interns regarding work assignments.

- The NPS will inform the cooperator of conduct or performance problems with cooperator personnel so that the university can counsel employees and correct the performance problems.
- The NPS will recommend to the cooperator dismissal of cooperator personnel based on conduct or performance issues.
- The Cooperator will hire students, interns or RAs to work on NPS tasks identified in the agreement. Hiring will be conducted in consultation with the NPS Agreements Technical Representative (ATR).
- The Cooperator will: pay students, interns or RAs for hours they have worked in support of the agreement.

**Representation and Communication**

- Cooperator personnel cannot in any way represent themselves to the public as NPS employees.
- Cooperator personnel are required to wear visible identification at all times.

**Other Issues**

- Cooperator personnel should not list an NPS affiliation on publications, but rather should list the cooperative agreement under which the work was performed.
- Cooperator personnel should not be invited to official NPS "social" events.
- Cooperator personnel will follow the local policy of the facility when federal facilities are closed due to early release for holidays, snow days, etc.

**PRODUCTS:**

DELIVERABLES

Report

Upon completion of the fieldwork, the cooperator shall analyze and interpret the data acquired during the testing and present the results in a report of publishable quality, meeting professional standards. The report format shall include: Title Page, Table of Contents, List of Figures and Tables, Abstract, Introduction, Culture History (emphasizing periods relevant to the project in question), Previous Research, Research Design, Field Methods, Excavation and Documentation Results, Artifact Analysis, Project Findings, Management Summary and Recommendations, References Cited, Appendices (e.g., FS Log, Artifact Analyses Tables, Maps, etc.)

Project Documentation

1) Two hard copies and one digital copy of a Draft Final Report;

2) One digital copy of the Draft Final Report for review by the ATR (Haecker)

3) Four bound copies, one archival unbound copy, and one archival electronic copy (CD) of Final Report (.pdf format).

4) All photo documentation generated by project. This includes a complete set of photos in digital format (.tiff) with supporting photo logs, and two sets of 4 x 6 hard copy printed photos:-One set, for archives, should be labeled with project accession number and photo number and sleeved in 4 x 6 Print File Archival Preservers, Style No. 46-6P, one photo per pocket.-One set, for NPS office files, labeled with project accession number, site number, photo number, and

brief description. The photos should be sleeved in 4 x 6 Print File Archival Preservers, Style No. 46-6P, inserting two photos, back to back, per pocket.

5) Hard copies of all original and, if applicable, finalized, field documentation (FS logs, test unit recording forms, plan views, profiles, etc.)

6) Three extra copies of any oversized project area base maps and graphics produced by the project, as appropriate.

7) Final list/database of all collected artifacts incorporating the data fields necessary for curation.

8) All materials generated for this task agreement including, but not limited to, all field documentation forms, maps, stratigraphic profiles and plan views, artifact recording forms, analysis forms, drawings, GPS logs, negatives, photograph logs, computer analysis forms, GIS data and associated metadata, and any other computer databases generated in digital format – will be submitted with final report.

Disposition of Collections and Project Documentation

All materials and data produced by the cooperator in performance of this task agreement, or in work in support thereof, are, and shall be, the sole property of the Rosebud Battlefield State Park and the state of Montana. All materials shall be turned over to the park or a designated repository at the same time the completed final report is submitted. These materials include, but are not limited to, the following items: field notes, outlines, abstracts, copies, microfilm, CDs, files, graphics (including maps, sketches, charts, tables, and related overlays), photography (digital images, and microfiche), collected artifacts, and data sheets.

Artifacts

All artifacts and specimens collected during this project, as well as their derivatives and by-products, remains the property of Rosebud Battlefield State Park and the state of Montana. Collected specimens that are to be permanently retained and bear labels containing accession and catalog numbers as required by the park. Artifacts will be processed and labeled in accordance with the guidelines outlined in Curatorial Requirements for Collectors of Archeological Collections. All artifacts will be submitted to the park curator along with the project documentation and final report.

**BUDGET:**

*See attached.*