

## Project Summary

### Rocky Mountains Cooperative Ecosystem Studies Unit

<b>Project Title:</b> Archeological Data Recovery at 48YE114 for Mitigation of Federal Highways Project, Yellowstone National Park (YELL), Wyoming
<b>Type of Project:</b> Technical Assistance
<b>Funding Agency:</b> National Park Service
<b>Other Partners/Cooperators:</b> Federal Highways Administration
<b>Effective Dates:</b> May 3, 2004 - September 30, 2006
<b>Funding Amount:</b> \$ 99,999.00
<b>Investigators and Agency Representative:</b> NPS KEY OFFICIAL: Ann Johnson, Yellowstone National Park, PO Box 168, Yellowstone NP, WY 82190, Phone: 307-344-2156, <a href="mailto:ann_johnson@nps.gov">ann_johnson@nps.gov</a>  PRINCIPAL INVESTIGATOR: David Eckles, Director of Archaeological Survey, Office of the Wyoming State Archaeologist, Department of Anthropology Dept. 3431, 1000 E. University Avenue; Laramie, Wyoming 82071; Phone: 307-766-5301, Fax: (307) 766-4052, e-mail: <a href="mailto:DECKLE@state.wy.us">DECKLE@state.wy.us</a>
<b>Project Abstract:</b> This archeological survey is part of the Data Recovery Plan (DRP) for eligible site 48YE114, an area of Yellowstone NP that will be disturbed as part of a highway construction project. The work will be concentrated within areas of the site that are part of the "area of potential effect" (APE) of widening the road alignment where it abuts the southwest boundary of the site and the area through the northeastern portion of the site where an alternate alignment of the road is proposed to avoid impact to thermal areas. The APE is defined as 10 meters from the edge of the existing alignment and approximately a 20 meter wide corridor in the area of the proposed re-alignment. The archeological tasks defined in this scope of work satisfy only a portion of the subsurface testing described in the DRP. The remainder of the data recovery will be conducted later, when sufficient funds are available to complete the work.  Geophysical investigation of the site will involve using magnetometer and resistivity sensory equipment to identify anomalies which may represent buried cultural features. The geophysical investigations will be conducted by Dr. Danny Walker, Assistant Wyoming State Archaeologist. This work will be done in the initial phase of investigations, providing guidance for productive placement of excavation units.  A series of approximately 60 shovel tests will be placed at 5 meter intervals within the two areas of potential effect for the entire length of the site, except in areas where steep hill slopes or shallow rocky soil or marshy areas would preclude the presence of buried cultural material. Wetlands will be avoided to prevent conflict with wetland mitigation issues.  Following shovel testing, approximately 10-20 1 meter by 1 meter units, will be excavated to explore shovel test areas with high artifact densities, possible cultural features or distinctive cultural layers. Information gained from the excavation units will be used to guide the data recovery excavation.  Laboratory analysis of the excavated material will include: obsidian and dacite sourcing, AMS Carbon 14 dating of suitable organic material, macrofloral analysis of botanical remains, possibly pollen analysis should hearth material be recovered, blood residue analysis of recovered tools, use-wear analysis, faunal analysis of bone material, and analysis of the geomorphology of the site. All collected artifacts will be cataloged, labeled, and bagged according to NPS requirements for curation of artifacts.

**Outcomes with completion dates:**

1) Small Project Report (due 6 weeks after conclusion of field work)

2) 2004 Descriptive Annual Report (due June 30, 2006)

End Date of Project: September 30, 2006

**Keywords:** Archeological data recovery, Federal Highways Administration, Yellowstone National Park, University of Wyoming, cultural artifacts, Grand Loop Road

***For Administrative use only:***

*Date Annual Report Received:*

*Date Final Report Received:*

*Publications, etc. on file:*