

# Save America's Treasures

## Heritage Inscriptions

### Fourth Interim Report, December 1, 2007

Award Number: ST-00-05-0007-05

Awarded Institution Name: Montana State University - Billings

First Interim Report: June 1, 2006

Second Interim Report: December 1, 2006

Third Interim Report: June 1, 2007

Fourth Interim Report: December 1, 2007

Period Covered by the Report: June 1, 2007 to December 1, 2007

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## **Performance Description**

### **a. What is the purpose of the project?**

The purpose of this project is to create a digital collection of historic signatures, dates and artwork spanning the time period from the 1800's to the present. The data is being organized into a data compilation, searchable database, and web page interface. The collection is also supplemented with physical reproductions obtained from non-contact three-dimensional scanning technology.

The project also includes the identification and appropriate documentation of previously unrecorded sites through the Montana, Wyoming, North Dakota and South Dakota State Historic Preservation Offices.

### **b. What activities or services have been carried out with project funds to support the purpose of the project? *If the project schedule has not been met, explain why and describe the steps being taken to return the project to its proposed schedule of completion.***

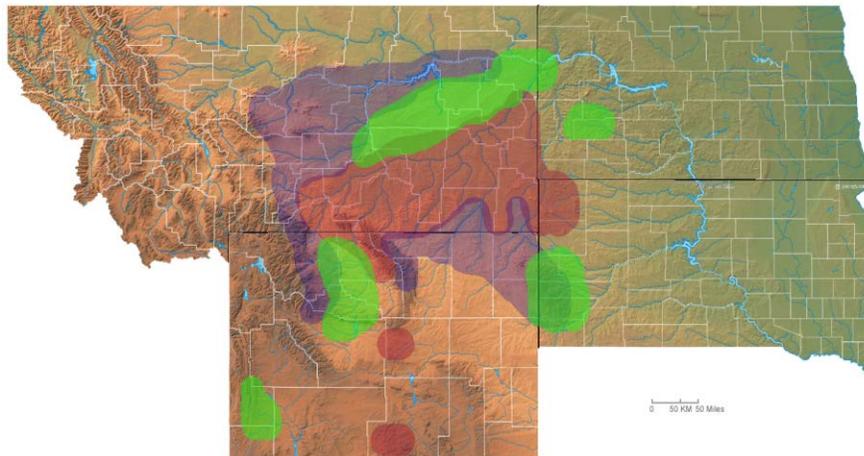
#### **Field Surveying Activities**

Survey activities have continued throughout the fourth period of the grant. As the project has received more publicity, more volunteers have come forward not only to assist in survey activities, but to identify sites relevant to the project. This has led to a listing of sites that will be incorporated beyond the duration of the grant.

Additional survey information continues to be incorporated from supplementary sources, such as cultural resource management firms and historic consortiums.

During the months covered by this stage of the grant, outings to sites in Montana, the Dakotas and Wyoming continue to provide a great deal of data to be processed. The data includes field notes, digital images, GPS data and three-dimensional scan files.

Basic use of the GPS, field communication devices, and survey techniques is a standard for students and volunteers and every survey session is preceded by a safety orientation.



**Red shade shows area of early survey concentration, Purple represents area of third phase, green of fourth grant quarter focus.**

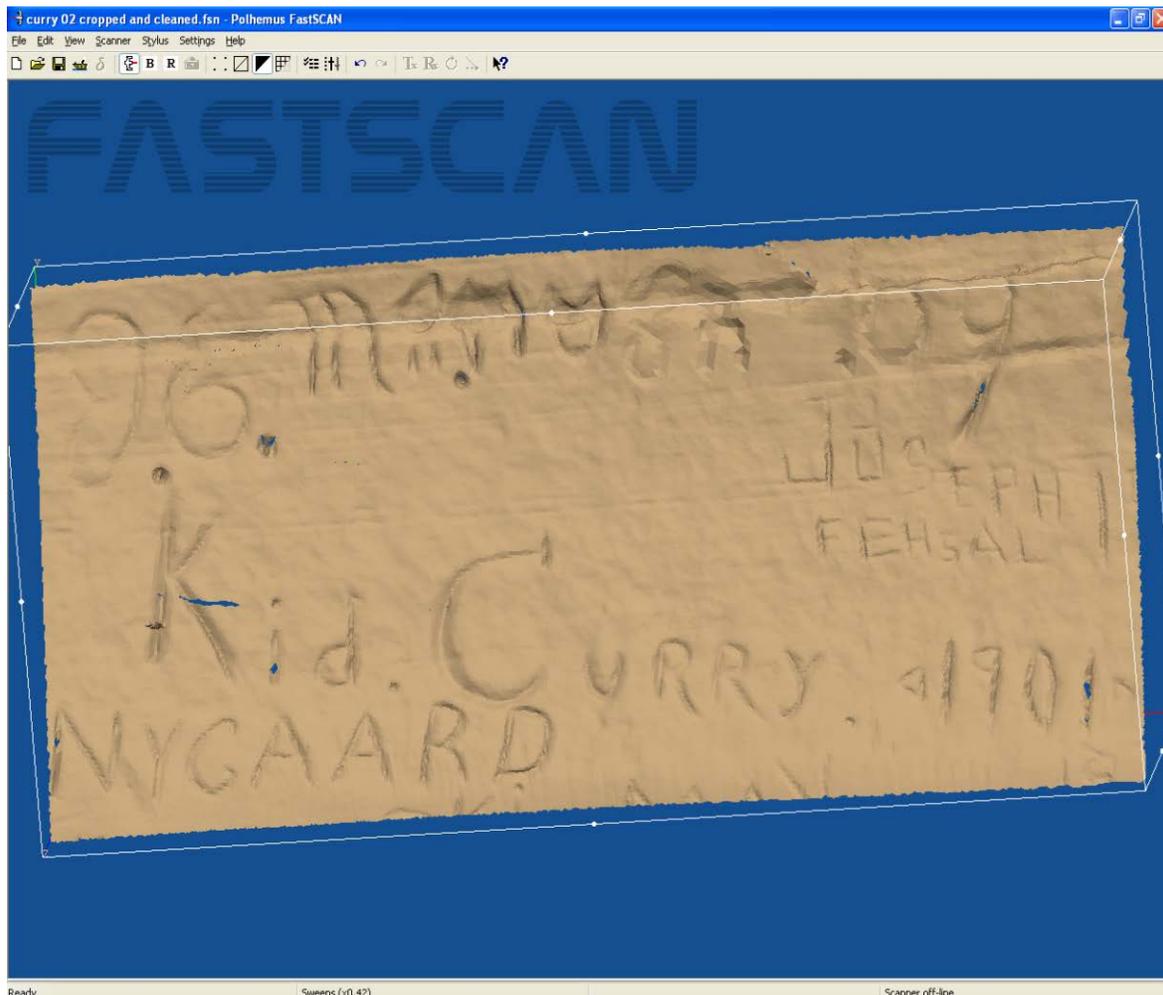
Field surveying and data organization accounts for a considerable amount of time and representative match for the project. To date over 2,800 hours of documented time has been dedicated to the venture by grant overseers, students and volunteers.

### Technological Activities

All technologies including Field radios, Global Positioning System (GPS), Surveying and Digital Imaging Technologies continue to function normally in the field. GPS Points are now being compiled into a single database to represent entire scope.

The primary organizational structure of the web page has taken form and importing the data is currently the primary focus of the grant principles. This public posting of the web page is slightly behind schedule due to the massive amount of data (in both number of files and data mass), but is expected to be caught up in early December.

All 3D technologies continue to function normally. Three dimensional data scans obtained during this quarter of the grant include George A. Custer 1874 and Kid Curry 1901.



**Image capture from 3D scanning software showing the Kid Curry 1901 inscription**

### Collaboration and Consultation

While ongoing activities with government agencies, cultural resource management firms and private landowners continue to generate a constant dialog about the project, specific activities occurred that are relevant to the successful completion of the grant.

During the month of June, Tim Urbaniak was invited to the Jeffers Petroglyph Site in Minnesota to demonstrate the viability of 3D scanning on the quartzite formation. Under the guidance of Dr. Alan Woolworth and Chuck Bailey several scans were obtained at the site and Tim Urbaniak is currently processing material for a report.

In October Tim Urbaniak and volunteer Rob Mutchler traveled to Ekalaka, Montana at the request of the County Museum located there. The museum is in passion of fragments of a historic cavalry inscription that was recovered from Forest Service land. The fragments were scanned and an exhibit output from the 3D printer is planned to unveil in the spring.

Of particular note are comments from the public showing great support for the project concept. Emails have been received from people looking for specific inscriptions from their family and support material for research articles have been supplied.

Conversations continue to occur with private landowners concerning significant inscriptions on the northern plains. These sites reinforce the belief that distributions of historic and cultural resources are ubiquitous on the northern plains.



**Volunteer Rob Mutchler and a private landowner confer about a location where the initials of Teddy Roosevelt could once be seen on the sandstone outside of Ekalaka, Montana.**

Tim Urbaniak has been commissioned by the National Park Service to author the Historic Landmark nomination for the site containing the inscriptions of *M Lisa 1807* and *Colter 1810*. A Drafting and Design student group from the Montana State University – Billings, College of Technology has designed a protective shelter for the site and work is being funded by Yellowstone County to fabricate the shelter.

**c. What are the outputs of the project activities or services to support the purpose of the project? Explain what documentation is used to report the outputs.**

Grant principles continue to provide public presentations sharing information about the inscriptions and technologies used. Presentations are scheduled for the Carbon County Historical Society in Red Lodge during January and the Carter County Museum in Ekalaka during March. (Copies of all presentations are available on file)

An 3D printed exhibit is being created for the Carter County Museum in Ekalaka. (Data files are available)

An exhibit showing images from the project and 3D printouts of some inscriptions will be on display in the MSU-Billings Library during the month of December. (Physical pictures and output 3D models are available for viewing)

An exhibit showing images from the project will be on display at the MSU-Billings, College of Technology beginning in January.

Over 200 gigabytes of images, documentation and 3d data have been organized into an accessible folder structure. (Files are backed up on two portable USB storage drives)

**d. What are the outcomes of the project activities or services to support the purpose of the project? Explain what documentation is used to report the outcomes.**

Project archives were provided to Ryan Swanson for a presentation at the American Rock Art Research Association. The files were from a survey conducted on private land where native rock art coexists with historic inscriptions. This is an example of the archive supporting research interests.

Arguably, the most significant outcome of the project is now emerging, the public interface in the form of the web page access.

The web page can be viewed at <http://www.msubillings.edu/library/Speccoll/historicinscriptions.htm>

The entire website will be 'unveiled' to the public during a reception in January at MSU-Billings.

The screenshot shows the MSUB (Montana State University Billings) website. The header includes the MSUB logo, the text 'Save America's Treasures A Resource for Historic Inscription Research', and the 'INSTITUTE of Museum and Library SERVICES' logo. Below the header is a navigation menu with links: Home, Project Information, Contact Us, Inscriptions by Period, Projects & Articles, and Specific Site Database. The main content area contains the following text:

The purpose of this project is to digitally document, organize and archive historic signatures, dates and artwork spanning the time period from the 1800's to the present.

The northern high plains are rich in sandstone geologic formations. Carved by nature into spectacular shapes and cliff lines, these formations have served as convenient natural palettes for historic inscriptions and artwork. Accumulated on the sandstone surfaces of this region are thousands of signatures and historic artwork that chronicle the settlement of the west since the early 1800's post Lewis and Clark era. These cultural resources are threatened by natural erosion, development, and modern vandalism.

Due to natural and cultural forces, these resources are disappearing at an accelerating rate. This project provides a foundation for present and future archiving and researching of these unique historic resources through applications of digital imaging and three-dimensional scanning technology. This database created by this project also serves as a new resource for genealogy and historic research of these **nationally significant** incisions. The populace that left these marks participated in **significant national events** that shaped the west, such as troop movements during the Plains Indian Wars and cavalry battles, including the Battle at Little Big Horn. They document the arrival and presence of the people that first brought cattle into the region, traveled the Bozeman Trail, worked on the railroads and founded the towns. Inscriptions exist from people that participated in the first United States Geological Survey and served in the Civilian Conservation Corps. Individually, some inscriptions were created by figures that stand out in history, together, this significant collection documents the general settlement and development of the region through a period of general national expansion, continuing into a period of early community development.

This new, unique regional resource is a result of collaboration among many public and private entities.

Many of the files here are uncompressed and may take long periods of time to load over a dial-up connection. A high-speed connection is recommended or files may be accessed directly in the **Special Collections** area of the **Montana State University - Billings Library**.

**e. Report other results of the project activities.**

During this quarter of the grant, surveying equipment was used to support a research project to document a native battle on the Crow reservation.

Survey equipment was also used to digitize the surface of the boulder with the inscriptions of *M Lisa 1807* and *Colter 1810* for a shelter project.

Publicity generated for the Special Collections component of the MSU-Billings Library has led to further inquiries about the possibility of it serving as a home for additional regional historic material.

**f. Additional comments/anecdotal information.**

Near Yellowstone Park at 10,000 ft. in the Custer National Forest the team verified historic inscriptions from the 1870's. These are currently believed to be the highest elevation historic inscriptions in Montana.

While certainly not all cliffs containing historic inscriptions have been surveyed, a broad representation of sites is represented in the primary offering of data. Many site leads and property invitations also continue. In general, people continue to be very willing to share stories about the stone inscriptions and supportive of the project.

While the public interface for the project is slightly behind, the magnitude of data in both quantity and known significance as a cultural resource is exciting.

### 3. Certification

In submitting this report, I certify that all of the information is true and correct to the best of my knowledge.

Name and title of the person submitting the report and date of submission:

Tim Urbaniak      Archaeology Field Team Director      11-30-07