

Middle Fork Site Recording I, BLM Buffalo Field Office's 2010 Passport in Time (PIT) Project

By Ardeth Hahn

Abstract

Eight volunteers from five states came to Outlaw Campground to participate in the Buffalo Field Office's first Passport in Time (PIT) project, July 11 through July 16, 2010. Volunteers contributed a total of 320 hours to updating previously recorded sites, recording new sites, and surveying for rock art in the Middle Fork Recreation Area. Four days were spent at the Middle Fork Recreation Area on the south side of Middle Fork Canyon, and one day was spent recording on Buffalo Creek, in the southern portion of the field office. By the end of the week, this incredibly hard working group of volunteers had updated or revisited seven sites, identified and recorded two new sites, and surveyed approximately two miles of sandstone exposures for rock art. This important work will allow the BLM to determine eligibility for the National Register of Historic Places (NRHP) and establish a management plan for the important resources of this area.

Special thanks go to Kate Buckman, Lawrence Clark, Patricia Clark, Tom Darnell, Vanessa Giorgio, Lynn Lary, Carol Poppenga, and Barb Ruby for volunteering their time; Buck Damone and Jennifer Walker for their help on July 15th; Courtney Frost, BLM Wildlife Biologist, for taking time the evening of July 13th to do a presentation on bats; and BLM Wyoming for funding the project. For more information about the Passport in Time program go to <http://www.passportintime.com/>.



2010 Middle Fork Site Recording I, Project Volunteers. Back Row: Vanessa Giorgio, Lawrence Clark, Kate Buckman, Barb Ruby, Tom Darnell, and Carol Poppenga. Front Row: Patricia Clark, Niko, and Lynn Lary.

Environmental Setting

The project is located in the Middle Fork of the Powder River Recreation Area, centered around Outlaw Campground and located approximately 25 miles east of Kaycee, Wyoming, in the Southern Bighorn Mountains (Wyoming Geographic Landforms Map, <http://wyoshpo.state.wy.us/res/assets/geomap.jpg>). Elevations in the project area range from 5,600 to 6,800 feet above sea level. The majority of fieldwork took place south of Middle Fork Canyon and north of Wild Horse Draw on a long northeast slope called South River Slope. One day was spent on the east side of Buffalo Creek Canyon, located nine miles south of the Middle Fork of the Powder River and just two miles north of the Natrona County line. Intermittent drainages in the project area flow east and north to the Middle Fork of the Powder River, which flows east to the Powder River. The underlying bedrock of the area project area is Tensleep Formation and Amsden Formation, with Chugwater and Goose Egg Formations visible as the “Red Wall” to the east (Love and Christiansen 1985). The ridges in the project area consist of sandstone bedrock and regolith, with weathered and eroded residuum on the side slopes. Colluvial and alluvial deposition occurs throughout the area, and some Aeolian deposits, particularly windblown sand, are present. Sediments consist of clay loam and sandy clay loam (NRCS Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>).



**Project area overview, view to east. Note the trees that were burned in the 2006 Outlaw Fire.
Taken by Ardeth Hahn, 10/5/2010.**

Field Methods

Fieldwork took place between July 12, and July 16, 2010, with Ardeth Hahn, BLM Archaeologist supervising the volunteer crew. On October 5, 2010, Ardeth Hahn returned to the Middle Fork project area to take additional photographs. The PIT crew met Monday morning, July 12, 2010, and was briefed by the BLM Archaeologist about the area, prehistoric and historic land use, cultural resource laws and practices, and site recording procedures. The majority of the week was spent rerecording previously recorded sites, and the PIT crew spent

the morning of Tuesday, July 13, 2010, surveying the sandstone exposures above and east of Outlaw Campground and along "Chokecherry Canyon", on each side of the gravel road that reaches Outlaw Campground, for rock art and historic inscriptions. Thursday, July 15, 2010, was spent at Buffalo Creek, recording site 48JO4255.

A list of sites had been selected to be revisited and either updated or completely rerecorded. Site recording included producing a plan view map with the assistance of a Trimble Geo XT unit. For rockshelters, a hand drawn plan view map was drawn and a location point taken with a Trimble Geo XT unit. All points taken with the Trimble Geo XT unit were downloaded and post-processed using GPS Pathfinder Office 4.20. Photographs were taken with digital cameras. Hand drawn plan view maps were produced of stone circles at 48JO4255 with the assistance of a "Tipi Quik". Debitage characteristic including material type, material color, stage (primary, secondary, tertiary, or shatter), presence or absence of cortex, and presence or absence of burning or heat treating was collected for every piece of debitage. The assemblage was also classified as to size class, after Ahler 1989, using hardware cloth. Size class 1 flakes will pass through $\frac{1}{16}$ " hardware cloth ; size class 2 flakes will pass through $\frac{1}{8}$ " hardware cloth, but not through $\frac{1}{16}$ " hardware cloth; size class 3 flakes will pass through $\frac{1}{4}$ " hardware cloth, but not through $\frac{1}{8}$ " hardware cloth; size class 4 flakes will pass through $\frac{1}{2}$ " hardware cloth but not through $\frac{1}{4}$ " hardware cloth; size class 5 flakes will pass through 1" hardware cloth but not through $\frac{1}{2}$ " hardware cloth; and size class 5+ will not pass through 1" hardware cloth. To aid in accuracy, a small 6" square wooden box with each of the appropriate hardware cloth sizes in it was made and used by volunteers as they recorded debitage. For each tool a field specimen number (FS#) was assigned. Tools were point plotted and photographed, and material type, material color, completeness, presence or absence of cortex, presence or absence of burning or heat treating, and length, width, and thickness in millimeters, was recorded. When rock art or historic inscriptions were found, photographs were taken and descriptions were written.



Late Archaic Besant projectile point base. Taken by Patricia Clark, 7/16/2010.



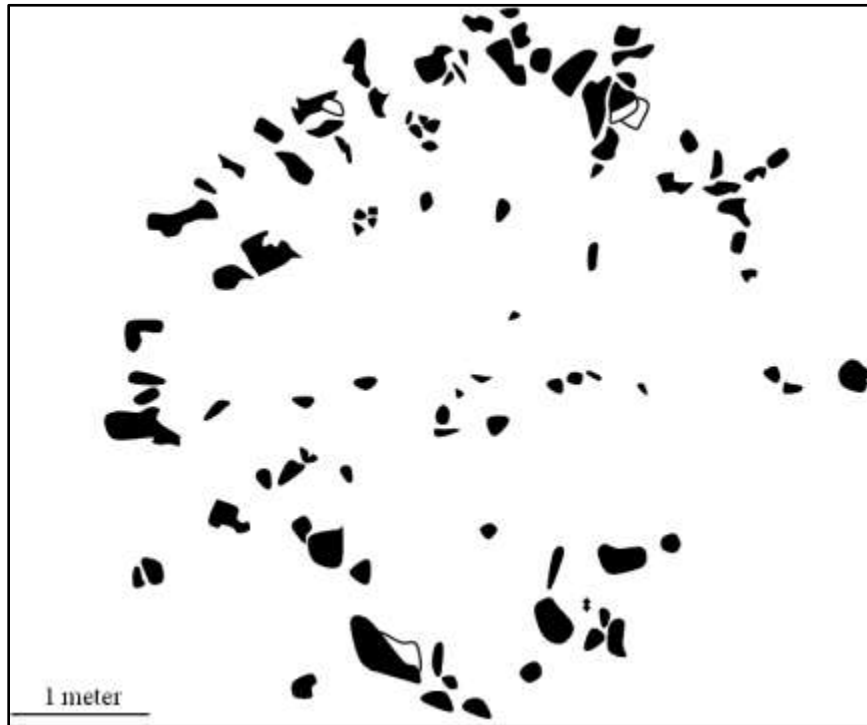
48J01254, close-up of prehistoric rock art figure. Taken by Ardeth Hahn, 7/12/2010.



48J01257, site overview, facing west. Location of previously mapped stone circle in center of photo and modern fire ring (constructed from the stone circle?) between the two trees. Taken by Ardeth Hahn, 10/5/2010.



48J01241, Feature 1, fire damaged rock art panel. Close up of panel showing inscriptions and fire damage. Taken by Ardeth Hahn, 7/14/2010.



48J04255, Stone Circle 8
Drafted by Lynn Lary, Vanessa Giogio, & Patricia Clark, 7/15/2010.
Photo view north-northwest, taken by Buck Damone 7/15/2010.

Conclusions/Summary

While the PIT crew was working and camping in the Middle Fork area, we observed recreationalists camping, fishing, riding ATVs, and mountain biking, and one group (which included an archaeologist from the Netherlands) drove up specifically to visit the Sweem-Taylor rockshelter. Past recreational use has caused impacts including graffiti, camping on archaeological sites, and constructing fire pits from stone circles. Impacts from the 2006 Outlaw Fire impacts can be seen in the large number of burned and dead trees, burned and dead sagebrush, the heavy spalling of sandstone rock surfaces, and the increased erosion. Lithics that exhibited potlid fractures and/or appeared burned were found at two sites in the area and the old road that runs through the area, along the ridge top above 48JO301, appear to have been bladed recently, possibly during the fire. All of these things have impacted the cultural resources in the area. It is clear that one important step BLM can take to halt the loss of archaeological resources is to educate the public about the importance of cultural resources in the area.

In 2010, two newly recorded sites were documented and six previously recorded sites were updated or rerecorded. The newly recorded sites included a rockshelter at Middle Fork Recreation Area and an open camp with 16 stone circles at Buffalo Creek. During the entire week, only one diagnostic artifact (a Late Archaic Besant-type projectile point base) was recorded in the Middle Fork Area, perhaps a function of the heavy recreational use the area receives that leads to artifact collection. Approximately two miles of sandstone exposures were surveyed for rock art, but very little was found with only two new localities recorded. The site boundary of 48JO1241 was expanded to include a newly recorded rock art panel that had been heavily damaged by the Outlaw Fire of 2006. No intact figures were recorded and the panel has been so heavily damaged that it no longer has research potential. The site boundary of 48JO373 was expanded to include a new locality, named Tool Groove Shelter, which contained at least 110 tool grooves, many of which are modern or historic, along with historic inscriptions and modern graffiti. Kate Buckman and Carol Poppenga, both artists, took the time to draw the rock art remaining in the Sweem-Taylor rockshelter (48JO301). These drawings can be compared to previous photographs and drawings to track vandalism and deterioration of the site.

Several efforts during recent years have indicated that a more active role is needed in managing BFO's cultural resources. During the RMP process the BFO documented over 500 cultural properties that need to be reevaluated, rerecorded, and/or tested in order to determine eligibility for the NRHP and establish a management plan. During FY2009 and 2010, BFO employed two seasonal archaeologists to do follow up work on a small number of coal bed methane PODs in the field office. They documented several instances of cultural properties being impacted or destroyed through oil and gas operations (Clingerman et al. 2011). *The Secretary of the Interior's Report to Congress on the Federal Archeology Program, 2004-2007*, released in 2010, makes six recommendations, two of which are reiterated below:

- **Recommendation 1:** *To prevent the loss of information and heritage values that archeological resources contain, more funding and personnel must be directed to ongoing efforts to identify, evaluate, and document the resources so as to avoid or mitigate adverse effects on significant and vulnerable sites. Because climate change and development are actively destroying archeological resources, these efforts must be accelerated.*

- **Recommendation 4:** *In order to strengthen archeological stewardship, coordinate and train volunteers, encourage and promote civic engagement by community and descendent groups, and support public education and outreach related to agency archeological activities and projects.*

The BFO's own work has shown an increase in damage to cultural resources due to development activities and a lack of public awareness, which is mirrored in the Secretary's Report to Congress. The FY2010 Buffalo PIT Project accomplished three things. First, the information collected by PIT volunteers allowed BLM personnel to identify, evaluate, and document historic properties. Second, the PIT volunteers received valuable educational experience about cultural resource management on public lands, area history and prehistory, the importance of site stewardship, and the opportunity to learn field methods in archaeology. Third, using PIT volunteers provided the BLM with in kind labor worth \$5,000, which helped BFO archaeologists accomplish more work with a smaller budget. In the future, the BLM will also use this information to develop interpretive signs for the area which will provide the public with information on prehistoric land use as well as on cultural resource management, the value of cultural resources, how to protect archaeological sites, and how to report vandalism.

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NRCS Web Soil Survey

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Wyoming Geographic Landforms Map

Electronic document, <http://wyoshpo.state.wy.us/res/assets/geomap.jpg>.