

Wyoming FY10 Annual Report Narrative Cultural Heritage Program

New Fork Crossing Land Acquisition - Major Accomplishment

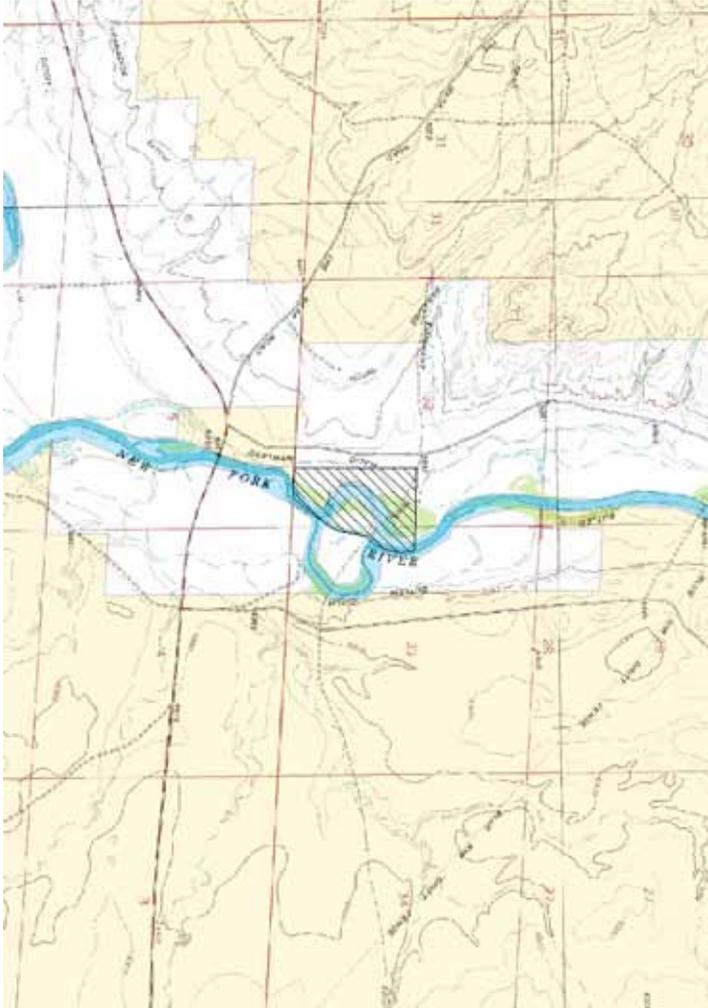
Archaeologists in the Pinedale Field Office discovered and evaluated the Wagner Variant of the Lander Road, a seven mile long segment of the California National Historic Trail. Historic documentation has proven this segment is the original route of the Lander Road as designed and built by Frederick Lander, an employee of the DOI - Pacific Wagon Roads Office, in 1858. This emigrant road was the first federally funded road constructed west of the Mississippi River and was used until the early 1900s. After the Wagner Variant of the Lander Road was abandoned in favor of a short-cut to the south, its location and function was forgotten until its re-discovery in August of 2009.

PFO and historic preservation partners, including the Wyoming State Historic Preservation Office, the Advisory Council on Historic Preservation, the National Park Service, the Sublette County Historical Society, the Alliance for Historic Wyoming, the Oregon California Trails Association and the Lander Trail Foundation, along with SWEPI L.P. and Ultra Resources Inc., completed an Amended Programmatic Agreement to mitigate adverse effects to the setting of the Lander Road and allow continued development of the Anticline natural gas field.

In addition, these same historic preservation partners, along with PacifiCorp, completed a memorandum of agreement to resolve the effects resulting from a large transmission line project also in the area. Together, both agreements resulted in the acquisition of an 82 acre parcel that contains the route of the National Historic Trail, intact emigrant camp sites, and the historic crossing of the New Fork River.

The property will be owned by the Sublette County Historical Society, but will be open to the public and managed in partnership with BLM and Wyoming SHPO for the purposes of historic preservation, public education, interpretation and research. This complex multi-party agreement has resulted in outstanding, valuable preservation of historic properties and is a great example of the partnerships that can be created to protect the National Historic Trails. It also provides a successful example of the types of creative mitigation that can be applied to the National Historic Trails for varied and complex projects. The result of these projects, the mitigation, and the historic research was previously presented at the NLCS Decade of Discovery Science Symposium in Albuquerque, NM.

In the photograph below, Mr. Clint Gilchrist, of the Sublette County Historical Society, stands approximately 200' downstream from the property. BLM's New Fork Campground lies behind the photographer. The map below that shows the area of acquisition in crosshatch.



Resource Protection Projects

Atlantic Rim Video

The video, “Wyoming’s Atlantic Rim Historic Trails,” won two bronze Telly Awards in the categories of “Use of HD” and “TV documentary.” “The Telly Awards honor the very best local, regional, and cable television commercials and programs, as well as the finest video and film productions.” This video was completed as mitigation for Anadarko Petroleum Corporation and Warren Resources, Inc.’s Atlantic Rim field development in Rawlins Field Office. It presents the history of the Overland Trail, Cherokee Trail and the Rawlins to Baggs Wagon Road, all of which run through the project area.

Middle Fork Site Recording I—BLM BFO 2010 Passport in Time Project

Eight volunteers from five states came to Outlaw Campground on July 11, 2010, to participate in the Buffalo Field Office’s first Passport in Time (PIT) project. 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.



Mapping a stone circle

Revisited sites included three rockshelters, one lithic scatter with rock art, and one lithic scatter with possible stone circles. Newly recorded sites included two rockshelters, two rock art sites, one lithic scatter, and one open camp that contained a total of 16 stone circles. Each rockshelter and lithic scatter were mapped and documented with a Trimble Geo XT unit and tools were point plotted, photographed, and measured. Volunteers learned to identify debitage and describe stone tools, produce plan view maps of rockshelters and stone circles, and were provided information about site ethics and the importance of the archaeological record.

Very little prehistoric rock art was found. One locality was heavily damaged by the Outlaw Fire of 2006 and very little rock art remained. Another locality, named Tool Groove Shelter, contained hundreds of tool grooves, some prehistoric and some likely historic, along with modern graffiti. Two artistic volunteers took the time to draw the rock art remaining in the BFO's only interpretive site, the Sweem-Taylor rockshelter. These drawings will be compared to previous photographs and drawings to track vandalism and deterioration of the site.



Mapping a Rockshelter



PIT Volunteers

Oregon Basin Petroglyph Site Protection

BLM, Cody Field Office and Marathon Oil Company worked together for the installation of a low profile post and cable fence to protect the Oregon Basin Petroglyph Site. The site (48PA28) has been subject to multiple vandalism incidents over the course of many years. In response, the BLM initiated the Wyoming Site Stewardship Program in 2008, a volunteer Clean-Up Day in 2009, and has now installed a low-profile protective fence in 2010. The fence posts are made of recycled drill pipe donated from Marathon Oil Company. Marathon not only supplied the actual drill pipe, but also contributed labor towards preparation of the pipe to be used as posts. The fence is designed to allow pedestrian access to the site, but to discourage hauling of palettes and other combustibles, which were being burnt proximate to the panels, and had the potential to destroy the sensitive cultural resource. Emergency access for fire suppression, medical assistance, or persons with disabilities is attained by lowering a section of chain link anchored via a padlock.

In the photograph below (LtoR), Marathon representatives Fulinda Hall and Randy Meabon congratulate BLM Cody Field Office archaeologist Kierson Crume and Field Manager Mike Stewart on the newly installed post and cable fence.



Paleontology Overviews Funded through ARRA

In 2009, BLM paleontologist Dale Hanson developed and found ARRA funding for seven paleontological overview projects in specific areas of Wyoming where a number of wind energy development projects were proposed. Other major projects, such as pipelines and transmission lines may also be considered in these areas in future years, as well as oil and gas development activities. These overviews will help the BLM assess the potential effects on the paleontological resources from wind energy, oil and gas activities, and other developments. In addition, these overviews of paleontological resources and their sensitivity to surface disturbance will assist in determining the appropriate mitigation needs when specific project proposals are received by the BLM. The contracts for the overview projects were awarded in FY10 and the work is ongoing.

Whoopup Canyon Photogrammetry project

Newcastle Field Office completed a week of fieldwork focused on taking photographs for photogrammetric documentation of Whoopup Canyon petroglyph. BLM National Operations Center photogrammetrists Neffra Matthews and Tom Noble, assisted by volunteers, took hundreds of photographs to make 3D models of the petroglyph panels. Panels on adjacent cliff faces were photographed together to make 3D models that covered sections of the cliff wall and give the feeling of walking along the canyon. The 3D models will be used to develop a virtual tour for educational purposes, as well as for monitoring and research. Photogrammetry provides the best available baseline data for monitoring future changes and deterioration of rock art panels. The petroglyph ACEC was severely impacted by wildfire in 2001 and fire impacted panels continue to spall. The photogrammetry will enable us to compare the post-fire condition of the petroglyphs with prefire photographs to see how much damage and deterioration has occurred.

Photogrammetry images were obtained for 30 small to large complex panels. Volunteers contributed 220 hours to the fieldwork and were essential to completing the high volume of work. The volunteers captured a record number of panels in photogrammetric images and also experimented with new developments in photogrammetry techniques.

New equipment used this year made photographing the panels a faster process. One improvement was triggering the photographs remotely on all the overhead shots via a wi-fi signal. This enabled the photographer to move to the next photograph in a matter of seconds. The photographer carried a notepad computer connected to the camera. Photographs were saved immediately to the notepad and due to the wi-fi connection, each photograph could also be inspected immediately and retaken if it was problematical due to focus or adequate overlap.

A second advance in equipment was use of a GigaPan to take panoramic views of the panel outcrops and settings. Once the GigaPan was set up, it could take 100 or more photographs in a matter of a few minutes. GigaPan panoramas were taken of the canyon settings to use as the background in the virtual tour. In addition, experiments were conducted on two panels in which sets of photographs were taken with the GigaPan to use for photogrammetry. The results will be compared with conventional photogrammetry photographs in which the camera stations move horizontally and vertically to capture the images. Testing will determine whether the software

can resolve the increased distortion of the more oblique angles of photographs taken from a central location. If GigaPan photographs work well for photogrammetry, a large panel can be photographed in a matter of a few minutes with the GigaPan compared with several hours or a full day for conventional photogrammetry. One of the experimental panels was very high overhead and could not be photographed well conventionally because it was not possible to stand close to it or raise a monopod high enough to reach it. If the new tool works for photogrammetry, it will also make it easier to photograph panels in difficult settings.

Museum Collections Highlight

Huntley Tribal Consultation

In June 2010, BLM staff from Casper Field Office, Wyoming State Office, and Washington Office consulted with representatives of the Northern Arapaho, Northern Cheyenne, Southern Arapaho-Cheyenne, Crow, Fort Peck Assiniboine, Rosebud Sioux, and Ute Indian tribes regarding an assessment of human remains from two adjoining sites (48GO07 and 48GO48). The human remains represent a minimum of nine individuals discovered inadvertently in 1963 as a result of construction activities in Goshen County, Wyoming. No funerary objects associated with the graves were known to be collected or have been found in the collections.

Based on archeological and radiocarbon evidence, BLM has determined that, pursuant to 43 CFR 10.2 (d) (1), the human remains represent individuals of Native American ancestry; however, a relationship of shared group identity cannot be reasonably traced to any specific federally recognized tribe. While the specific cultural affiliation of the remains continues to be unknown, an alliance formed by the consulting tribes have requested the repatriation of the material on behalf of all Native Americans pursuant to 43 CFR 10.2 (g)(5)(iii). The alliance nominated the Northern Arapaho tribe to be the lead contact for disposition of the cultural items. It is expected that the Federal Register notice will be published in late 2010 and repatriation will occur in 2011.

Native American coordination and consultation

Lander Tribal Consultation

In the fall of 2009, the BLM Lander Field Office hosted a week long tribal consultation meeting to elicit input into the Resource Management Plan revision and two oil and gas full-field development Environmental Impact Statements. Nine members of six tribes from Montana, North Dakota, South Dakota and Wyoming participated in field tours throughout the Lander Field Office, visiting numerous sites and providing invaluable comments on sites of sacred, spiritual, or traditional significance.

Of particular interest was Cedar Ridge, a 7 mile long ridgeline blanketed with possibly thousands of stone circles, cairns, rock alignments, medicine wheels, and effigy figures. The stone features continue down numerous finger ridges to the high rolling plains below. All of the traditional elders agreed that Cedar Ridge is a very special place, with many generations using the site for ceremonial purposes. The site also extends into the Casper Field Office and previous tribal consultation regarding activities on that side of the ridge has occurred as well. The elders feel

that the site still holds a great deal of power and is worthy of special protection.

Several rock art sites, prehistoric battlefields, and a giant stone circle measuring 70 meters in diameter were also visited. Throughout the tour, elders talked about the purpose and significance of the sites as well as recommended various protection measures for each site. Their comments are now being incorporated into each of the EIS documents and will drive how these sites are managed in the future. Below is a photograph showing the elders examining a 70 meter wide ceremonial stone circle.



National Programmatic Agreement implementation

The Deputy Preservation Officer and the Liaison to the State Historic Preservation Office provided five training opportunities for new archaeologists and new managers in FY10. The manager's class was updated to include the District level and a second class for "non-cultural specialists" was created. This office-wide training has been requested twice so far. Staff from the State Historic Preservation Office have assisted in these training opportunities as well. And in January the Advisory Council on Historic Preservation's liaison to the BLM participated in a briefing of the State Management Team.

In March, a review of the Wind River/Bighorn Basin District took place. The team consisted of the Wyoming Deputy Preservation Officer, the Montana Deputy Preservation Officer, the ACHP's liaison to the BLM, an assistant field manager and a staff member from the WYSHPO. Many staff in the Cody, Lander and Worland Field Offices were interviewed. Findings indicated that overall, the cultural program was working efficiently. The reviewers felt that the Section 106 process worked well, though was applied differently in each office due to the configuration of personnel, longevity in location and number of undertakings. Concerns lie in the sectors of

tribal consultation and public participation in the Section 106 process. A district-wide meeting with the field office archeologists will occur in FY11 in order to address these issues. Reviews of the High Plains District and the High Desert District will occur in 2011 and 2012.

Heritage Education and Outreach

Cody Take It Outside

The BLM, Cody Field Office partnered with the Greybull River Sustainable Landscape Ecology (GRSLE) non-profit for the second annual Take It Outside, 'Living Landscapes' project. Take It Outside is funded through the Youth Initiative with an aim of increasing environmental education. The Living Landscapes project objective is to teach children that they are an integrated part of their ecosystem. To realize this objective BLM and GRSLE spent two fun filled days with a group of children from the Yellowstone Behavioral Health Center and the Park County Chapter of the Boys and Girls Club surveying a Modified Whittaker sample plot for cultural resources, receiving taphonomy lessons, learning about the effect of Harvester Ants on surface artifacts, and even throwing plastic atlatl dart points! Below is a photograph showing participants from the Park County Chapter of the Boys & Girls Club fine-tuning their atlatl launching skills.



Conservation Outdoor Recreation Education (CORE)

In a beautiful spot near the Continental Divide in central Wyoming, a BLM-managed ghost town remains a silent witness to the heyday of Wyoming's gold mining era. After gold was discovered there in 1868, Miner's Delight became one of the state's earliest communities. And on a recent summer morning, Miner's Delight was the location of a BLM and CORE workday. The group worked for hours digging posts out of the ground that displayed old, illegible informational signs to make room for new interpretive exhibits. They also removed a rotting kiosk and repaired fences.

For the past ten years, CORE has taught young people how to have respect for all people and how to work together as a team. The 16 participants are all from Casper and many of them come from disadvantaged homes. CORE provides them with experiences they wouldn't normally have. "Most of these kids have never been in the mountains and have never camped," said longtime volunteer Ed Brennan. "Some of the kids who participate in three or four CORE group projects get really hooked on the Wyoming outdoors."

Sitting among the rustling aspen and gold mining era cabins, BLM Recreation Technician Brandon Thielke told stories about life at Miner's Delight when it was the region's biggest money-maker. "You thought you worked hard yesterday but imagine digging a pit all day and living here in the winter when it was 30 below," Thielke said. He encouraged the group to explore the area and they peered into the many doors and windows of the cabins and an old saloon.

Struggling under the weight of a heavy, rotting post he was hauling up the dirt road to the parking area, one of the young volunteers said, "We like volunteering, even though we do all this work and don't get paid for it. But it's helping the environment and it's helping people who visit to learn about this place."

Washakie Museum

This last year construction was finished on the new Washakie Museum and collections were moved to the new building. One of the central exhibits of the museum is the Soapy Dale Lodge, recovered from public land. The BLM and Washakie Museum entered into a cooperative agreement in 2005 for the purpose of promoting Heritage Education relating to public land resources by exhibiting the Soapy Dale Peak Lodge in an interpretive diorama. In the spirit of this agreement, the BLM and Washakie Museum worked together to develop the Soapy Dale exhibit for the new building. The outcome of this planning occurred last March when the Soapy Dale Lodge was moved from the former location of the Washakie Museum and reassembled in the new building. The Worland Field Office, along with the Office of the State Archeologist, assisted in moving and installing the lodge. That same week the Worland Field office assisted in moving another central exhibit, mammoth bone from the Clovis aged Colby Mammoth Kill Site. The grand opening of the Washakie Museum has occurred and both exhibits, along with many others highlighting the prehistory, history, paleontology, and geology of the Big Horn Basin, can be seen by the public.



Above: Mike Bies (BLM) and Danny Walker (Office of the State Archeologist) assembling the lodge.

Below: Placing the Colby Mammoth bone in its new exhibit.



Rock Art Exhibit

Newcastle Field Office completed development of a traveling exhibit featuring BLM rock art across Wyoming. The exhibit is designed for public education and enjoyment of the rich cultural heritage that is recorded on cliffs, boulders, and rock shelters throughout Wyoming. The exhibit is organized by commonly asked questions, such as: What is rock art? How old is it? What is the oldest rock art in Wyoming? How do people damage it? What does it mean? How do you visit rock art?

Rock art in Wyoming dates from the end of the Ice Age to the early historic era and includes a rich variety of images made on rock surfaces. The exhibit is designed to give the public an appreciation for the significance of prehistoric rock art sites as sacred places. It will educate them about the fragility of rock art and show how damaging rock art destroys everyone's enjoyment of this unique resource.

The exhibit has been to the Riverton public library and will be in the Lander Museum this fall. In November and December, it can be seen at the Rockpile Museum in Gillette.





Bureau of Land Management Rock Springs Field Office recreation planner Jo Foster follows Koby Cox and Michael Ross through deep swales along the Oregon/California Trail as they approach the continental divide.

Kansas State School for the Blind Students Take on the Rocky Mountains at South Pass

In the 19th Century the trip across the South Pass of the Rockies was called “seeing the elephant” or even “crossing the elephant’s spine.” The implication was that a trip along the Oregon/California Trail involved seeing something large and exotic. Accordingly the actual conquest of the continental divide at the South Pass of the Rockies often was a disappointing experience. Many of the hundreds of thousands of emigrants who made the long, perilous journey did not know they had crested the mountains until they were miles past the actual divide. Literally following in the footprints left by the pioneers of two centuries past, seventeen students from the Kansas State School for the Blind, took on the task of crossing the continental divide. In this task they were aided by talking global positioning satellite units, the prototypes of new technologies which will aid the visually impaired with experiencing the great outdoors without the need for human guides. The prototype units were constructed by Humanware of Canada and provide the user with detailed directions as well as interpretive materials. Initially the students got off to a rough start. However, after a short while when they used the system according to directions, they were able to adeptly navigate the trail and find their way to the summit of the Rocky Mountains on lands managed by the Bureau of Land Management’s Rock Springs Field Office.

This experiment was one facet of a three-week experience called the Discovery Trail. The students, accompanied by instructors, artists, and supporters followed the California Trail to the coast and then returned to Kansas by the Lewis and Clark Trail.

Students at the start of their trek over the continental divide. (L-R Koby Cox, Dylan Harris, Nicholas Meisenhelter, and Michael Ross). (All images by Terry Del Bene)

