

Wyoming Highlights 2008

Our major highlight comes from the Lander Field Office, where the Wyoming Department of Environmental Quality, Abandoned Mine Lands Department (AML), in partnership with BLM, successfully removed a public health hazard at a mine, while at the same time innovatively protecting significant historic features. The Carrie Shields Mine, near South Pass City in west-central Wyoming, has a deep and dangerous shaft connected to a crumbling horizontal adit, both of which could be hazardous to curious visitors. However, it is also a significant 1870's-era gold mine, with several historic structures and features in and around it. One of the structures is directly over the shaft. Normally in order to reduce or demolish the hazard, the structure would have been damaged or destroyed. To prevent this, AML came to BLM (the landowner) and proposed an innovative solution: hire a historical architect to record and disassemble the structure over the shaft, make the mine safe, and then reassemble the structure in better condition than it was before.

After working out a plan with BLM and consulting with SHPO, AML hired Eppler Pump and Pipe Inc. (construction expertise) and Larson-Tibesar Associates, Inc. (cultural resources expertise) to do the work. After documenting the structure, taking it apart, and laying it aside, the contractor installed a cap and grate that would allow bats living inside the shaft to continue to use it. Once that was done, the team carefully replaced rotted logs and reassembled the historic structure over the shaft. Using HABS photos from the 1960's, they also added some logs on the walls to match the photograph. Reconstruction of the original horse whim used to haul ore out of the shaft was accomplished using excess materials from the nearby historic Carissa Mine. A lock for the whim tongue was installed and walls were reinforced with hidden rebar rods. Again, the extra materials were taken from excess material at the nearby historic Carissa Mine/Mill site.

The resulting product retains a great deal of the historic integrity of the original structure, and it should now be able to withstand the effects of wind and weather for a very long time. The Abandoned Mine Lands Department, Eppler, and LTA should all be congratulated for an excellent and very innovative job.



Lander Field Office – Carrie Shields Mine project; this is the shaft area that was capped and grated to allow bats in and out. The cable would have come up from the shaft and been attached to the top of the whim shown in the next picture.



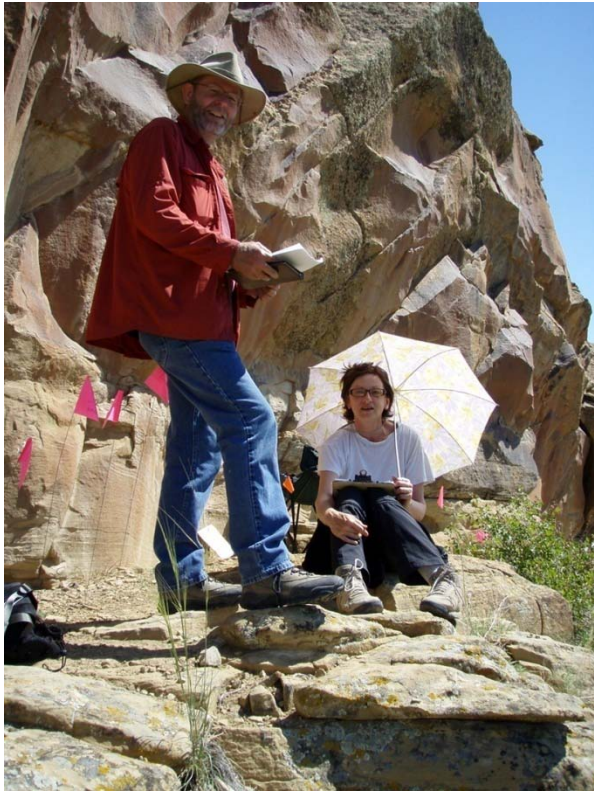
Lander Field Office – Carrie Shields Mine project, showing Karina Bryan, LFO archaeologist, just to the right of the horse whim that was reconstructed. The post sticking out from the whim is what the horse would have been attached to.

Passport in Time projects

Wyoming was fortunate to have two Passport in Time projects. One occurred at the Legend Rock Petroglyph Site (48HO4), sponsored by our Worland Field Office. BLM entered into a long term cooperative agreement with the Wyoming Archaeological Society to facilitate the logistics of the project. Other partners included the Legend Rock Ranch, Wyoming State Parks and Cultural Resources, and the Office of the Wyoming State Archaeologist. Over 1,168 volunteer hours were contributed with a combined value of \$38,087.10. The goal of the project was to identify and record the petroglyphs and pictographs located on BLM and private lands to the level recorded on State lands in 2007. An additional 223 panels were documented as a result of this year's project, including a fish pictograph of a sucker. This likeness is the only known Wyoming prehistoric fish image than can be identified to species. Dr. Danny Walker, Assistant Wyoming Archaeologist, assisted with the organization and operation of the project. The documentation included the capture of photogrammetric data for the creation of digital elevation models of select panels. Tom Noble and Neffra Matthews, specialists from BLM's NOC, conducted the photogrammetry. Those volunteers with an interest in future petroglyph recording were given an opportunity to learn these methods. Several of the panels were processed and models were created in the field. These models allow precision measurement of the attributes of the images including but not limited to the angle the of impact, dimensions of the impact marks at the sub-millimeter level of accuracy, and the precise (within centimeters) physical location of the panels in the UTM zone 12 grid.

In addition, Hubert B. Two Leggins and Dr. Timothy McCleary spoke with the participants about the Crow Tribal perspective of petroglyphs and pictographs with an emphasis on Legend Rock. Thomas Cavanaugh spoke about the Comanche perspective on the images as well. Field trips were provided to nearby sites for the volunteers who came from as far away as Buenos Aires, Argentina, and Ontario, Canada. Most were having their first real contact with the BLM. We believe the project was extremely successful from both a resource protection perspective, as well as for our public education and partnership programs.

Worland Field Office – Legend Rock PIT project – volunteers recording rock art panels.



The second PIT project focused on surveying unexplored areas of the Little Missouri Antelope Trap landscape in the Newcastle Field Office. Experienced PIT volunteers intensively surveyed 300 acres of the trap landscape that had not been previously investigated. They discovered that most of the area surveyed consisted of prehistoric and proto-historic habitation remains. New discoveries included the first clear suggestion of Shoshone visitation or use of the trap in the form of a tri-notched projectile point of a type identical to points from the Eden-Farson site, a Shoshone antelope processing village in southwestern Wyoming. Other rare discoveries included a number of pottery fragments, several from the same pot. As in previous surveys, most habitation remains dated from the Late Archaic and Late Prehistoric or Proto-historic. The volunteers also pin-flagged a series of juniper wings or drive fences that led antelope over a low pass into a pit trap on the opposite slope of the ridge. The volunteers contributed 400 hours of work time for the fieldwork.

After the volunteers went home, the work continued through a partnership with the University of Wyoming. Over 10 days this field season, it was discovered that a low pass appears to have three courses of wings at different elevations on the slope. These multiple drive fences offer good evidence for repeated use of the pass for trapping. The crew mapped each log with a total station. Students measured the length, width, and orientation of each log in order to record the trap structures as they lay today, after more than a century of decay. Mapping of the wings was exceptionally difficult because of young junipers that had expanded over the slope during the Twentieth Century. The tall rod used was difficult to wield between trees and had to be threaded through the branches of bushy junipers for many mapping shots. At the mouth of the pass near the terminus of the juniper wings, a cairn was discovered, positioned where it commands a view of a large basin which served as the gathering place for the antelope before they were brought into the trap. This may have been the place where the antelope shaman stood to conduct the ceremonial hunt.



Newcastle Field Office – Antelope Trap PIT project – recordation of trap wings

Public Education

Pinedale Field Office sponsored the Boulder Lake Public Dig this FY, allowing hands-on experience to 16 local volunteers. The project involved all aspects of fieldwork, from survey and recording of surface cultural material, shovel testing of the site area and formal excavation on three hearth-like features within an exploratory trench. Boulder Lake receives high visitation numbers and, though impacts to cultural resources have occurred in the past, it is believed that intact buried archaeological remains will continue to be found. Results from radiocarbon dates on the fire hearths, analysis of the hearth fill and pollen wash from ground stone should provide important data for future work.

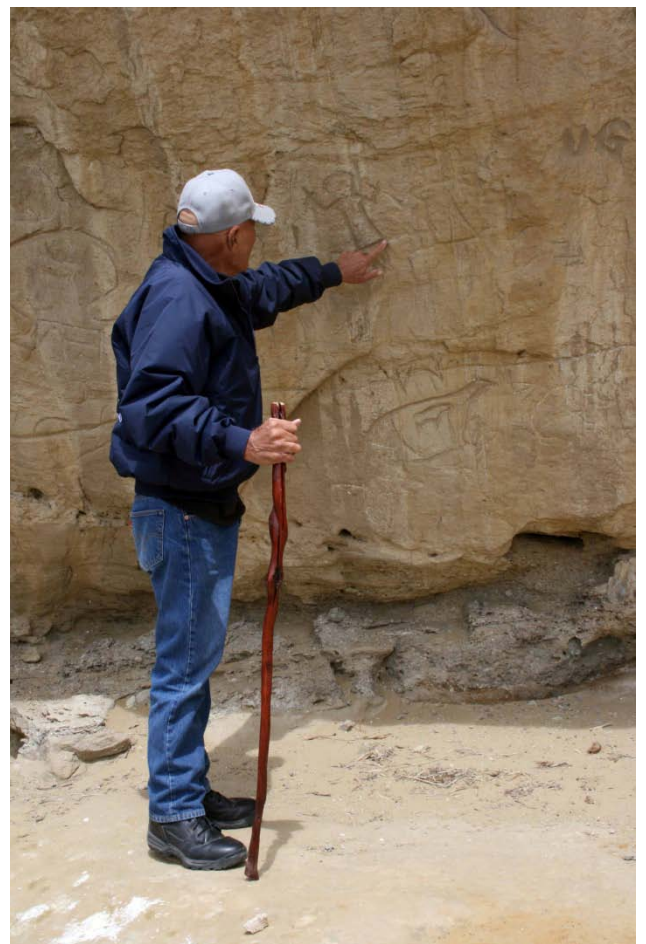


Pinedale Field Office – Fremont Lake Public Dig; volunteer Rose Sterling shows a stone tool discovered in the excavation.



Partnerships

The Rock Springs Field Office in partnership with the Wyoming Humanities Council, Wyoming Travel and Tourism, the Rock Springs Chamber of Commerce, the Eastern Shoshone Nation, the Northern Arapaho Nation, and the Northern Ute Nation did principle filming at the White Mountain Petroglyphs. In concert with our three partner Indian Nations the office filmed three interpretations of rock art. The interpretation is intended to meet the Bureau's responsibilities under the Americans with Disabilities Act. A final video will be produced for use at BLM web sites, tribal web sites, the Wyoming Travel and Tourism website, a kiosk at site, and the Rock Springs Chamber of Commerce web site. This will allow those with disabilities to receive a guided tour of this important site by tribal elders. The day of filming yielded over three hours of excellent high-definition video.



Photos from the Rock Springs Field Office Partnership activity with the Northern Arapaho and Northern Ute tribes. Clifford Duncan, Northern Ute, (horizontal pictures) is shown being filmed and speaking about the rock art. Richard Ferris, Northern Arapaho, (vertical picture) is also shown discussing rock art from White Mountain Petroglyph Site.

Additional highlights

Our Buffalo Field Office successfully completed a Memorandum of Agreement involving consultation with seven tribes and the Wyoming State Historic Preservation Office over effects to the setting of the Pumpkin Buttes Traditional Cultural Property (TCP). The agreement covered the effects from an expansive area of coalbed methane wells and associated infrastructure to the TCP. The project was modified so wells and infrastructure were either hidden or blended in with the background in relation to an observer on top of the buttes. BFO also began work on a programmatic level agreement with the Wyoming SHPO relating to the setting of Pumpkin Buttes.



Buffalo Field Office – Pumpkin Buttes Traditional Cultural Property

Site Steward Training

Our 2008 site steward training took place through our Cody Field Office, in association with the Wyoming State Office, the Wyoming State Historic Preservation Office, the Shoshone National Forest and the Buffalo Bill Historical Center. In May, 10 people were trained in monitoring procedures, preservation ethics and safety, focusing on the at-risk cultural resources of the Oregon Basin Petroglyph Site.



Casper Field Office volunteers provided over 130 hours to BLM, helping to locate and record prehistoric sites in the Beaver Rim and Red Wall areas of central Wyoming. In addition, nearly 15 years after its discovery, the cultural resource inventory of the Cedar Ridge Traditional Cultural Property has been completed. Analysis and reporting are underway. In addition, the sensitivity model has progressed to the ground-truthing stage and will be available for application to upcoming EIS work.



Casper Field Office – Volunteer Jacob Henry, 10, proudly shows a projectile point located during the Beaver Rim inventory.