2015 Colorado Project Highlights

Major Highlights

Stabilization/Restoration of the Golconda Boarding House and Compressor Shop (BPS #67726): The Gunnison Field Office (GFO) successfully completed this multi-year project in partnership with Hinsdale County Historical Society, HistoriCorps, Colorado Youth Corps Association, and Colorado State Historical Fund (SHF). Work was completed on the Golconda Boarding House and Compressor Shop, located near the summit of Engineer Pass along the Alpine Loop Scenic Byway. The SHF award for the project totaled $134,800 with a cash match of $57,000 from BLM.

The boarding house, built in 1920, is a large two-story log building that dominates the site. The building measures 98.5' long and is 18 feet wide. Currently, this is the largest remaining standing log structure on the east side of the Alpine Loop that is accessible to the public. The compressor building is located southeast of the boarding house and still contains a forge, a free standing anvil, a drill steel bit press, and an air compressor and motor. The passage of time, exposure to the harsh environment, abandonment, and neglect has all taken a toll on the stability of these impressive structures and their contents. In 1999, the Golconda Mine (5HN454) was listed on the National Register of Historic Places (NRHP).

Golconda Boarding House, before restoration, July 2011.

Golconda Boarding House during restoration by Colorado Youth Corps members.

Golconda Compressor Shop after restoration with newly installed interpretive panel.

Golconda Boarding House after restoration with newly installed interpretive panel.

The Kremmling Field Office (KFO) continued work on the **North Park Cultural Landscape Study** in partnership with Dr. Robert Brunswig and the University of Northern Colorado (UNC). This on-going interdisciplinary study of Native American use in North Park, Colorado uses archaeological research, oral history and ethnographic research of the Ute Tribes, Northern Arapaho Tribe, and Eastern Shoshone Tribe. Since 2012, BLM has contributed $42,000, and UNC has contributed thousands of volunteer hours from field school students.

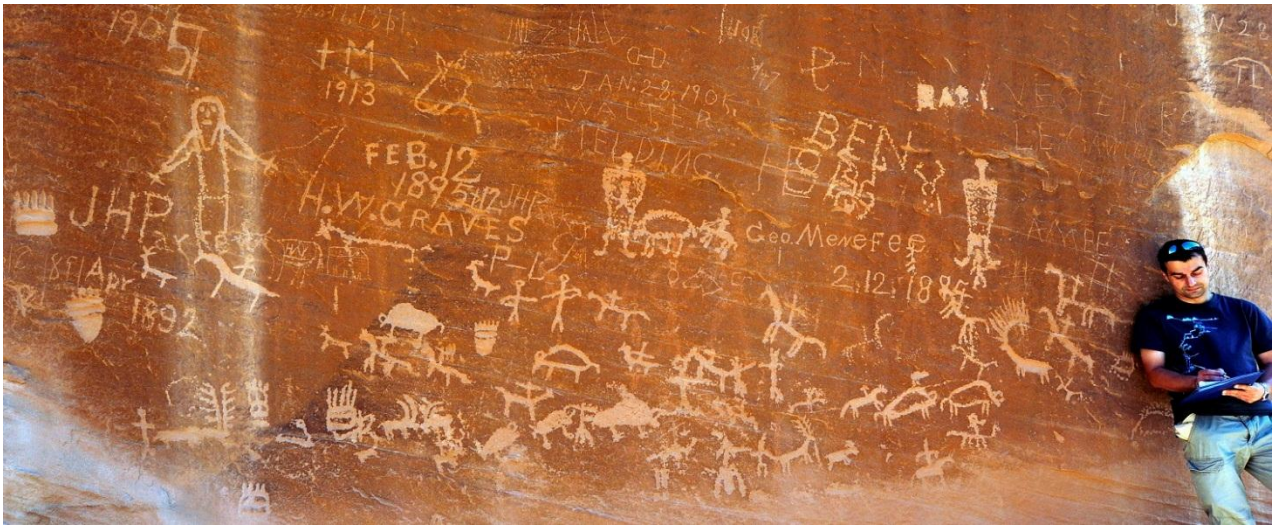
Dr. Robert Brunswig continued investigations on sites 5JA318 and 5JA319 along Buffalo Ridge. This ridge consists of an extensive game drive system, associated camps, and activity locales. The research team intensively mapped site 5JA318, a stone ring site at the southwest corner of the Buffalo Ridge gap canyon. Numerous rock features, including a very large and complex game drive system with multiple segments of drive walls, game blinds, and cairns, has been documented. A bison drive was documented that ends in a “jump” into a spring (mire) that is surrounded by a processing and short-term living camp (5JA320) that dates from Early Paleoindian times.

The field school used GPS and GIS mapping to intensively record artifacts and features at site 5JA319, a game processing camp at Antelope Spring East. Two 1 m excavation units were excavated at site 5JA319. In shallow deposits, bison and pronghorn bone, tool-sharpening (small flake) debris, and broken butchering tools (including most of a large biface knife) were found.

Looking East at excavation on Buffalo Ridge on site 5JA321 by UNC Field School, with Dr. Robert Brunswig.

Jagiellonian University's Sand Canyon-Castle Rock Community Archaeological Project and Field School: For the fifth year, project director Dr. Radoslaw Palonka travelled with a mixed group of twelve graduate and undergraduate archaeological students from Krakow, Poland to Canyons of the Ancients National Monument (CANM) in southwest Colorado to continue their research. The project is the first independent Polish archaeological project in the United States, and seeks to further our understanding of prehistoric community organization within a 13th Century Puebloan society. While the project's primary focus is on the Sand Canyon – East Rock Canyon area of the Monument, this year's expedition also ventured a few miles north into the poorly documented Sandstone Canyon.

Working with Monument archaeologist Vince MacMillan, the group conducted extensive Light Detection and Ranging (LiDAR) documentation of 120 meter long "Strawman" petroglyph panel (5MT13288). Researchers were able to accurately discern specific chronological origin of each of the hundreds of petroglyph elements of the rock art panel. Additionally, the project's students were trained in the documentation of historic inscriptions by noted Southwestern historian Fred Blackburn.



Dr. Radoslaw Palonka from Jagiellonian University documenting the "Strawman" rock art panel (5MT13288), CANM, Colorado.

Archaeological students from Jagiellonian University digitally mapping and LiDAR scanning at the "Mad Dog Tower" (5MT135), CANM, Colorado.

Marsh Quarry Education Program (BPS #61801): The Royal Gorge Field Office (RGFO) developed the Gold Belt Byway Junior Explorer Activity booklet in partnership with the Geological Society of America, Florissant Fossil Beds National Monument, the Gold Belt Byway Association, the Royal Gorge Bridge and Park, and Cripple Creek and Victor Mines. The activity booklet highlights the stewardship of public lands and the geology and paleontology along the Gold Belt National Scenic Byway. The booklet targets a younger audience with kid-friendly explanations for common geologic and paleontological phenomena and activities

targeted toward ages 9-12. Additionally, a General Services Administration (GSA) intern assisted with developing the Activity booklet. The paleontology program funded Michael Johnson, the paleontologist that created the booklet. Recreation (1220) and Minerals (1990) and the Florissant Fossil Beds National Monument partially paid for illustrator Paige Latendresse, also a GSA student. The Royal Gorge Bridge and Park also contributed funds for printing.

Marsh Quarry, early 20th century.

Johnson Stage Stop/Carr Ranch Historic Structure Assessment and National Register Nomination: GFO successfully partnered with Hinsdale County Historical Society (HCHS) and the Colorado State Historical Fund to complete a historic structure assessment of four historic cabins located at the site. The Johnson Stage Station, erected in 1878, was an important node in the system of wagon roads north of Lake City, Colorado. The station, strategically located at the junction of routes linking Lake City with Sapinero and Gunnison, was a base for Charley Johnson's freight service and a layover for travelers and other freight haulers.

Nathan C. Carr and sons purchased the station in 1890 and converted it into a productive ranch. Now known as the Carr Ranch, the station became headquarters and residence to the Carr family's sawmill and ranching operation, generating lumber, hay, cattle, and horses for the local market through the 1950's. The station's three core buildings, the residential cabin, the saloon, and another smaller cabin, are good examples of stage station architecture on Colorado's mining frontier. Although the buildings were inhabited for decades after 1889, few substantial changes were made, preserving original appearance, construction, and workmanship. The ranch complex also included a cemetery for members of the Carr family.

The stage station's original cabins stand intact, but without roofs, and have changed little since construction. The site was acquired from the Carr family by BLM in 1962. Currently, the site is regularly visited by heritage tourism enthusiasts. Its central location off of Highway 149 between Gunnison and Lake City, makes it an easy side trip for visitors heading to and from the Alpine Loop Scenic Byway. The site features an interpretive panel that was created in 1998 with the assistance of members of the Carr Family. Structure assessments will pave the way for long term preservation, management, and interpretive needs for the Johnson Stage Station. The final goals of this project are to stabilize and interpret structures that are not only safe for visitors to enter and tour but that will be able to withstand many harsh winters in the future.

Concurrently, the site is being nominated to the NRHP. Eric Twitty of Mountain State Historical and the HCHS are working together to complete the nomination documentation, and it is hoped to have the site listed by the summer of 2016.

Carr Ranch, circa 1900

Sound Democrat Mill and Mine, and Silver Queen Mine National Register Listing: The Tres Rios Field Office (TRFO) partnered with Mountain Studies Institute to complete a NRHP nomination, and the site was listed in April, 2015. This historic hard rock mine and milling complex is located in the heart of the San Juan Mountains of southwestern Colorado, along the Alpine Loop Backcountry Byway. The two inter-related mines, patented in the early 1880s, were active from 1894-1910. The complex consisted of the two mines, an aerial tramway that transported the ore to the mill, and a surface railway connecting the Silver Queen to the Sound Democrat's Aerial Tramway.

Carr Ranch, today

The Sound Democrat Mill is a rare survivor of its kind. Ore concentration mills used to be a common feature in the San Juan Mountains mining landscape. The Sound Democrat Mill is the most complete example of an early ore concentration and amalgamation mill in the region. The BLM stabilized the mill in the 1990s. The National Register listing was accomplished to recognize the significance of the property, and facilitate a SHF grant application for additional preservation treatments at the mill.

Sound Democrat Mill and Mine, at left, and Silver Queen Mine, at right, in the background.

State Protocol Revision

The revised Protocol was signed on October 29, 2014. Notable changes to the original agreement include: (1) undertakings with no adverse effect determinations are considered routine undertakings; (2) undertakings with adverse effects to historic properties are considered non- routine undertakings; (3) clarifies when BLM seeks concurrence from the State Historic Preservation Office (SHPO); (4) requires a project log annually; (5) adds a revised list of undertakings exempt from identification and evaluation of cultural resources; (6) considers geophysical operations involving surface disturbance as non-routine undertakings; and (7) added a section to resolve disagreements with SHPO about National Register eligibility, effects on historic properties and proposed effect determinations.

National Historic Preservation Act Section 106 Compliance

- BLM and SHPO completed a Protocol certification review of the Little Snake Field Office (LSFO).

- CANM continued work on a Programmatic Agreement (PA) outlining alternative procedures for the Kinder Morgan, Inc.'s CO2 lease area covering a 12,000 acre cultural landscape that includes about 1,500 recorded sites.

- LSFO and WRFO completed requirements under the Memorandum of Agreement (MOA) to resolve adverse effects from the Piceance Basin Lateral Pipeline (formerly called the Entrega Interstate Pipeline). BLM and SHPO received and accepted the eight-volume set of reports on the excavation of several middle Archaic pithouses and two historic homesteads.

- LSFO completed consultation with the Ute Tribes regarding a Numic rock art site located within an oil and gas lease parcel that was deferred in 2014.

- LSFO continued work on renewing the Questar MOA requiring monitoring for prehistoric buried sites in wind-blown sand deposits for oil and gas development.

- LSFO is working toward completing a PA to address the Hiawatha Regional Energy Development Plan covering parts of Colorado and Wyoming.

- LSFO is consulting with the SHPO on the removal of historic structures from the Powder Wash Camp, a good example of a 20th century, oil and gas company town.

- LSFO is working on an MOA for the Colowyo's Collom Gulch Coal Mine Expansion. The expansion involves avoiding eligible and "need data" sites, archeological monitoring of top soil removal and periodic monitoring of sites with dry-laid rock features to check for adverse effects from blasting to remove overburden. A possible eagle trap located one to two miles from the proposed mine is part of the blasting monitoring plan.

- LSFO is working on Section 106 requirements for the Trapper Coal mine expansion. Grand River Institute is testing five of seven sites to determine eligibility. Two of the sites are wickiups of concern to the Ute Tribes.

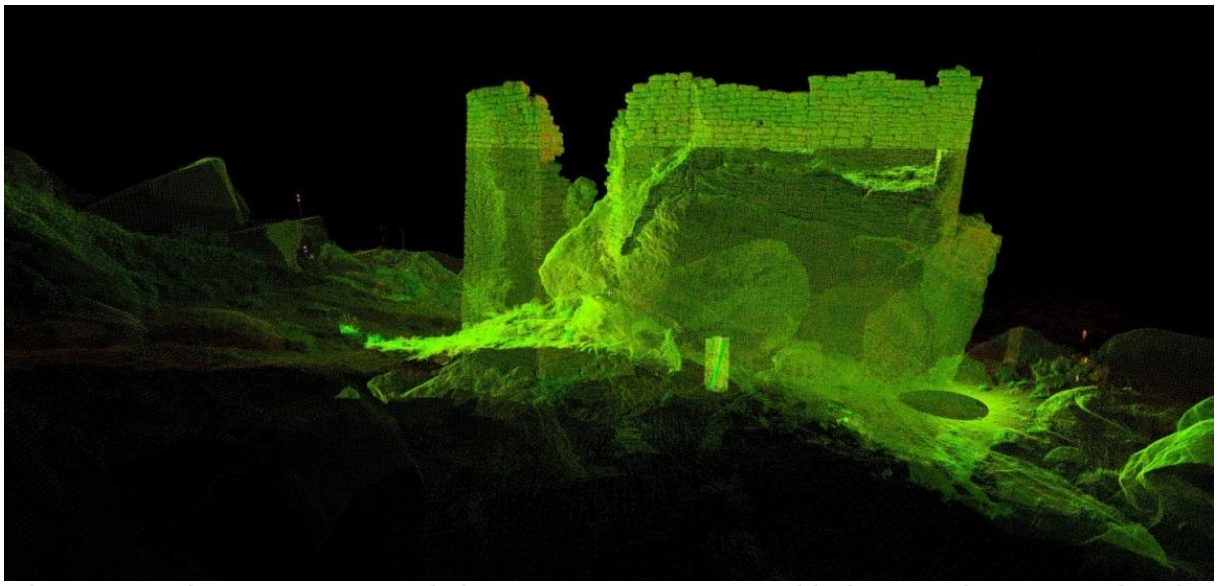
- LSFO is consulting with SHPO on revising the PA for the Sand Wash Basin Special Recreation Management Area (SRMA) that directs BLM to survey a certain portions of the SRMA, annually monitor specific sites, experiment with methods designed to direct Off Highway Vehicle (OHV) use away from important sites, and to excavate two sites.

- San Luis Valley Field Office (SLVFO) is working on an MOA for the mitigation of eligible sites for a Public Service Company of Colorado's transmission line. Also, work continues on the Solar Regional Mitigation Strategy and pilot Regional Cultural Landscape Assessment, and range permit renewals.

Identification, recordation, and evaluation of heritage resources

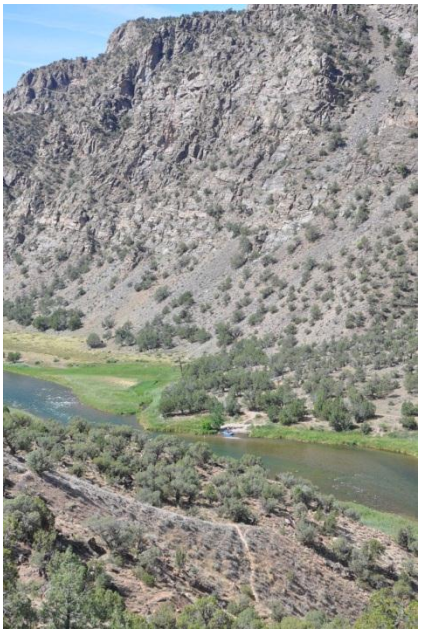
Digital Architectural Documentation Project: Agency Protocol and Online Training Course Development: Using research funding from the National Landscape Conservation System (NLCS), CANM, in partnership with the BLM's National Operations Center and the University of Colorado at Denver School of Architecture and Planning's Center of Preservation Research (CoPR) continued work on their digital documentation project at a late Pueblo III (ca. AD 1250) site. The project is using advanced Light Detection and Ranging (LiDaR), High Definition Surveying (HDS), close-range photogrammetry, and High Dynamic Range photography (HDR) to create three-dimensional models and scaled Historic American Buildings Survey drawings of the site's 750 year-old architecture. Work progressed on a written manual and an online training course to be offered through the National Training Center providing guidance for other BLM offices and other agency's on digital documentation of similar prehistoric architectural resources throughout the Southwest.

Moose Tower Pueblo (5MT8162), CANM, Colorado.



Close-range photogrammetry and LiDaR on Moose Tower Pueblo (5MT8162), CANM, Colorado.

Red Canyon Survey: Now in its third year, this project is a cooperative effort between the Colorado Archaeological Society (CAS), Chipeta Chapter and Gunnison Gorge National Conservation Area (GGNCA). The area chosen for the survey is in a remote and rugged wilderness on the east bank of Gunnison Gorge. The area is nearly inaccessible except on foot and receives few visitors. To date, twelve sites have been recorded, including two PaleoIndian kill sites located along major game trails.

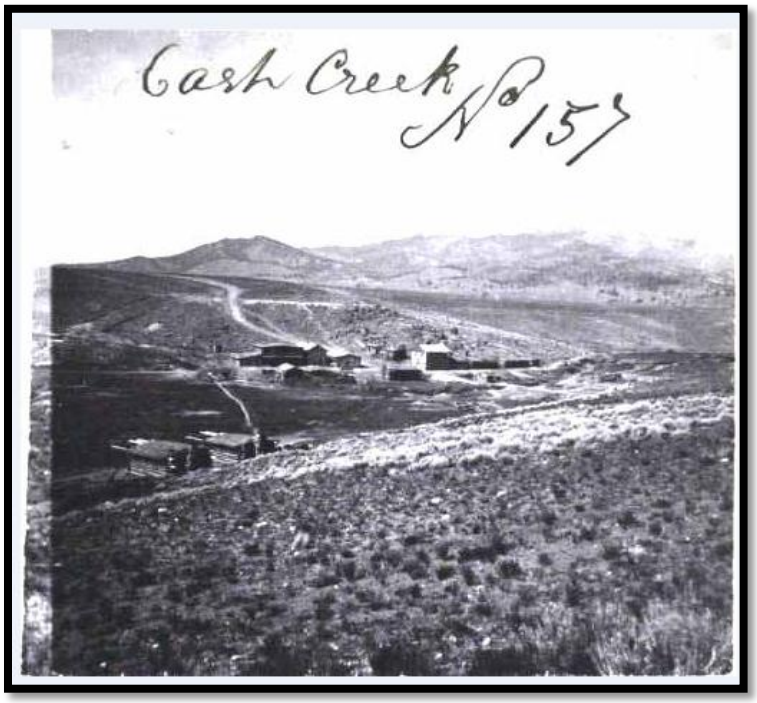


Red Canyon, GGNCA, Colorado.

UFO Paradox Valley Field School: The Paradox Valley project is entering its sixth year of research in western Colorado in partnership with Western Wyoming Community College, Lee

University and more recently with Yale University, University of Pretoria (South Africa), the New Zealand Conservancy and the Mongolian National Museum. Beginning in 2009, the project set out to inventory a remote area in the eastern Paradox Valley known to be home to numerous examples of Ancestral Puebloan rock art. The area has been proposed as an Area of Critical Environmental Concern (ACEC) in the UFO Resource Management Plan (RMP), and is being intensively investigated with the goal of creating a NRHP district. To date, about 1,500 acres of the proposed 2,100 acre ACEC has been inventoried and over 30 rock art panels and 12 prehistoric habitations documented.

RGFO Cache Creek Inventory: Work continued at the recently-discovered Cache Creek townsite, in partnership with Eric Twitty of Mountain States Historical and Holly Norton, the Colorado State Archaeologist. Originally believed to be washed out by the extensive placer mining at Cache Creek, the site was found by chance during a hike to another inventory area, and its location was confirmed using a historic photograph. "Cash Creek", as it was known during 1859 and 1860, was home to Horace and Augusta Tabor and their son Maxie just before they moved to Leadville, Colorado. The site has great archaeological potential, but more importantly, may provide information about life during the very earliest mining era in the Front Range and Central Mountains



Other notable projects are:

- CANM completed an intensive pedestrian inventory on recently acquired land (56 acres) within the significant archaeological landscape of Yellow Jacket Canyon.

- Colorado River Valley Field Office (CRVFO) completed inventory in the Bull Gulch and Castle Peak Wilderness Study Areas (WSA). The project focused on research that views human-environmental interactions on a landscape-scale.

- Grand Junction Field Office (GJFO) completed survey of an area near De Beque, Colorado to test a predictive model for protohistoric wickiup locations.

- GFO partnered with the Interpretive Association of Western Colorado to inventory and document segments of the Old Spanish National Historic Trail. BLM contributed $11,000 and received 160 volunteer hours.

- GFO continued its partnership with the University of Oklahoma on the Gunnison Basin Archaeological Project. Students contributed 500 volunteer hours of survey work.

- White River Field Office (WRFO) completed 111 acres of inventory within the remote Bull Canyon WSA.

Stabilization, Rehabilitation, and Other Preservation Activities

In preparation for the designation of the Grand Valley Off-Highway Vehicle SRMA under the GJFO RMP, Level II documentation of two segments of the Little Book Cliff Railway was completed. GJFO utilized the engineering staff to record the segments with a total station and create drawings with AutoCAD Civil 3D software. Photos were taken with medium-format cameras, and all documentation was stored at the Museum of Western Colorado.

Little Book Cliff Railway grade.

Other notable projects are:

- CANM initiated in-house, close-range photogrammetric analysis on Lowry Pueblo National Historic Landmark (NHL).

- CANM completed a condition assessment of Lowry Pueblo NHL, in partnership with archaeologists from Mesa Verde National Park.

- GFO partnered with the Lake City Youth Corps to maintain the Capitol City Cemetery generating 50 volunteer hours.

- GFO restored the historic Ferraro Ditch in order to keep water flowing through the ditch. The original flume was severely rotted and would have been destroyed by any water flowing through it.

- GJFO recorded the Climax Camp, an historic uranium mining camp dating from the 1930s to the 1960s. This detailed recording greatly contributes to the knowledge of uranium mining in western Colorado, as numerous mining sites in remote areas have not been inventoried to date. GJFO hopes to use this information to contribute to a regional context regarding uranium exploration and mining on the northern Colorado Plateau.

- The Ute Ulay historic mine, which is located on county, private and BLM land (30 ac) was listed on Colorado's Most Endangered Places list. TRFO will fully document and nominate the site to the NRHP in 2016.

- WRFO finished architectural documentation and a condition assessment of a Fremont granary.

Monitoring and Site Stewardship

CANM Cultural Site Stewardship Program (MSSP): The MSSP is administered by BLM with Diane McBride, a contracted administrative assistant. Volunteers monitored 71 prehistoric cultural sites (Ancestral Puebloan), 2 historic sites (one homestead and one unknown Anglo or Navajo structure), and two dual-component sites (historic and Ancestral Pueblo). There are 46 site stewards that contributed approximately 650 hours of time and drove 7,600 miles. At an estimated BLM volunteer value of $22.14/hour, this equates to a total of $14,391 for donated labor and $4,294 for mileage, or $249.13 per site as a savings to government. Ms. McBride also arranged and facilitated a number of educational opportunities for the MSSP volunteers. In total, site stewards participated in over 3,000 hours of training, lectures, and volunteer work.

Dominguez Escalante National Conservation Area (DENCA), GJFO and McGinnis Canyons National Conservation Area (MCNCA) hosted Cassandra Brigham and Adam Bouché whom are GeoCorps interns provided through a partnership with the Geological Society of America. The interns assisted with numerous projects including Section 110 inventory and monitoring, rock art recordation, and river site monitoring. Last year's intern, Lucy Harrington, presented her findings from a predictive model she created for MCNCA at the 80th Annual Meeting for the Society of American Archaeology.

GeoCorps interns monitoring a sheepherder's camp along the Gunnison River, DENCA.

Other notable projects are:

- GGNCA and UFO have a robust site stewardship program managed jointly by BLM and CAS, Chipeta Chapter. Currently, 41 site stewards are in the program of which fifteen are active in monitoring five sites.

- GJFO's site stewardship program continued with monitoring of several vandalism incidents and an additional eight sites.

GeoCorps intern Cassandra Brigham records a rock shelter site.

- GJFO hosted the first meeting of CAS, Grand Junction Chapter. This partnership will extend into more site steward training and likely more volunteer participation in cultural resource projects.

- MCNCA archaeologists and interns worked on a river monitoring project along the Colorado River in the Ruby-Horsethief area. This is a popular section of river to raft and camp, and the project was undertaken to see if recreationists are impacting sites near river camps. The results of the survey showed that most sites were unaffected by campers, a positive finding which shows that the relatively new BLM river permitting system is working to protect sites by limiting visitation to a reasonable number.

- MCNCA archaeologists monitored ten sites within McDonald Creek, a canyon with distinctive rock art sites. These sites are rarely accessible, but are popular because of their uniqueness in the area. Results of the monitoring found few impacts from recreationists.

- TRFO used volunteers to monitor prehistoric rock shelters, as part of the Slickrock Landscape Livestock Grazing PA totaling 320 volunteer hours.

- UFO's site stewardship program continued in partnership with CAS, Chipeta Chapter. Fifteen stewards are active with 27 individual properties currently being monitored.

- WRFO site stewards and volunteers devoted 120 hours to help monitor and protect cultural resources.

A cold morning accessing cultural resource sites to monitor along the Colorado River.

Research, Field Schools, and Data Recovery Projects

Eagle Rock Shelter: Excavations were completed at the shelter located in GGNCA. After 8 years of excavation with teams from Western Wyoming College, Lee University and Yale University, the floor of the shelter was reached. The site may be the oldest occupation site in Colorado, with multiple dates near 13,000 years old. A significant Clovis occupation is followed closely by continuous occupational layers between 9,000 and 13,000 years old. The significance of this site can't be understated; there are perhaps four stratified Paleoindian occupations of this age in all of North America, and the evidence recovered from the site will make a substantial addition to what is known of this cultural time period.

The degree of preservation within the shelter is unprecedented, with organic artifacts common at the 8,000 year old level including fine string and cordage, string small game snares, a yucca fiber sandal and bone, wood, sinew, and leather artifacts. Information from this shelter is breaking new ground in research, and will likely lead to a re-interpretation of many commonly accepted archaeological theories for this area. The next phase of work at the shelter involves public visitation and interpretation. A visitor trail loop, interpretive signs and kiosk are planned.

GJFO renewed its partnership with Colorado Mesa University (CMU). The GJFO has initiated plans to work with CMU on a field school in the summer of 2016, and is currently in the planning phases to produce an educational video regarding cultural resources in the area, cultural resource laws, and cultural sensitivity training.

Fremont basket from Eagle Rock Shelter.

KibRidge-Yampa Site (BPS # 68532): LSFO sponsored archaeological research at the KibRidge-Yampa site in partnership with Dr. Fred Sellet from the University of Kansas. The site is important to understanding the early prehistory of northwest Colorado because it contains a rare, complete sequence of stratified Early Paleoindian occupation levels. Initial excavations in

the 1990s revealed dark stained levels that were radiocarbon-dated to the Clovis and Folsom periods. Current research techniques are being used to further detail these occupation levels.

Paleoindian points from the KibRidge-Yampa site.

Tribal Consultation and Coordination

- Dominguez Archaeological Research Group facilitated biannual tribal consultation with the Ute Tribes and CRVFO and other field offices in the Northwest District (BPS # 68441).

- Native American coordination and consultation for the DENCA RMP continued with Field Office and NCA managers making presentations to the Ute Indian Tribe Cultural Department, the Southern Ute Indian Tribe Cultural Department, and the Ute Mountain Ute Cultural Department.

- GJFO continued work with the Colorado State University Extension office and the Ute Tribes on the Ute Learning Garden, a Secretarial award-winning education and outreach program (BPS # 61942).

- UFO conducted four individual Tribal consultations centering on the Eagle Rock Shelter excavation.

- LSFO initiated more regular consultation with the Ute Tribes and the Eastern Shoshone Tribe.

- WRFO is funding a large-scale ethnographic study of the Piceance Basin, a strategic oil and gas basin, to better manage and protect historic properties from ongoing development.

Native American Graves Protection and Repatriation Act Activities

- GGNCA completed consultation with the Ute tribes concerning the repatriation and reburial of a single individual recovered during the excavation of Eagle Rock Shelter. BLM will complete notification and transfer of custody to the Ute Mountain Ute tribe prior to reburial planned for September 2015.

- LSFO has been working on repatriating the inadvertent discovery of a burial in a rock alcove on Duffy Mountain that consists of human remains from the lower half of a human body. BLM determined that the burial is most likely of Native American affiliation because it was located in a setting analogous to Ute crevice burials.

- SLVFO completed the repatriation and reburial of one individual and 9 associated funerary objectives partially funded in 2014 (BPS #67748: $5,000).

Paleontological Resources Management

GGNCA and UFO continued its partnership with Dr. Martin Lockley from the Denver Museum of Nature and Science in the search for dinosaur tracks. The research identified and recorded at least 10 new dinosaur track localities on public lands. The Ute Trail Trackway is particularly noteworthy. It appears to exhibit evidence of dinosaur behavior, reflected in the tracks of what looks to be a group or hunting pack of Theropods running down their prey. To date four professional journal articles were published concerning finds in the area. Another article is currently being reviewed by the journal Science for publication. Work will continue identifying dinosaur tracks and other ichnofossils in GGNCA throughout the Dakota Sandstone exposures. The research team has located and recorded several hundred Cretaceous age tracks and trackways in the area.

LSFO had two paleontology projects in the Sand Wash Basin searching for fossils of Eocene mammals deposited in and around an ancient lake. Two professors from universities in California are involved in a multi-year study of giant stromatolites in the northwest portion of the geologic basin. Stromatolites are often spherical or oblong structures formed by accretion of calcium carbonate as a by-product of mats of cyanobacteria growing in shallow aquatic environments. The goal of the investigation is to identify the paleoenvironmental conditions that lead to the formation of these unusually large specimens.

The second study involves a professor from a university in Iowa embarking on a multi-year study of the fossil localities in the Sand Wash Basin to identify the stratigraphic position of the boundary between fossils of two “land mammal ages.” The transition between these differing suites of mammals is thought to mark a period of relatively rapid evolutionary change. The land mammal ages are marked by differences in the kinds of small mammals present. Whereas previous paleontological studies in the area were attracted to fossils of large mammals, such as the so-called titanotheres, the current study will focus on better understanding the small mammals of the Eocene. The professor has a background in early primate evolution and future work in the basin may shift to that topic if adequate kinds and amounts of small primates are found in coming years.

The federal paleontology collection that was held at the local Dinosaur Depot Museum was moved to the Royal Gorge Regional Museum and History Center. A total of 776 specimens have officially been catalogued with this collection. The museum received Department of Interior (DOI) funds to assist with cataloguing the collection. They also received DOI funds to assist with increasing public access to the collection using the exhibits that they also inherited from the Dinosaur Depot.

The Colorado State Office completed an assistance agreement with the University of Colorado Museum of Natural History for "Collections and Research Projects" for the purposes of collaboration in: 1) maintaining DOI/BLM Museum Property collections; 2) providing continued opportunities for research; 3) developing, managing and assisting with cultural and natural resource databases and collections from BLM for research, education, and/or management purposes, 4) creating partnerships as appropriate, and 5) benefitting the public through collections, research, exhibits, and other educational programs and outreach. The agreement was funded with $25,000 from WO-240.

Museum Collections Management

With funding from a DOI museum grant, GJFO started numerous projects with the Museum of Western Colorado (MWC). The first project involved an archaeology and paleontology kids' camp, which engaged third- through fifth-graders by using BLM collections at the museum. A curriculum was produced for the camp that will be used each fall and spring for the foreseeable future. The camp was so popular this year that it sold out to 30 students within a few hours, and had a long waiting list. Through this grant, MWC was also able to hire an intern to work with photographing and rehousing BLM collections. GJFO is also working with the museum to create traveling kits for school children and educational websites using BLM collections.

Kids explore BLM collections at the Museum of Western Colorado during the first spring break archaeology and paleontology camp.

Alissa Leavitt-Reynolds teaches kids about rock art during an interactive event at the kids camp.

GJFO received a second DOI grant for nearly $18,000 to assist in the care and interpretation of BLM collections held at MWC. Work has begun to develop more kid camps and to create traveling exhibits/kits using BLM collections. GJFO also received funding for a National Council for Preservation Education intern to be stationed at MWC in the summer of 2016.

Heritage Education, Interpretation, Outreach, and Tourism

DENCA reached approximately 68 individuals with interpretive events including two professional conference presentations, a student showcase, Arthur Carhart Wilderness Training, and a Preservation Board field trip. During these events, students and adults learned about the past culture groups who lived in DENCA and also about how those people used and benefited from natural resources such as plants and animals that can still be found today in the NCA.

Additionally, another BLM intern presented her work analyzing prehistoric quarries in the DENCA at both the annual meeting for the Colorado Council of Professional Archaeologists and at a student showcase at Colorado Mesa University.

LSFO archaeologist Gary Collins produced an archaeology discovery box for Moffat County schools following a similar example from the Vernal Field Office. The box will be available for school teachers to assist with educating students about stewardship of prehistoric sites on public land. The box contains a three-ring notebook with information on archaeology and local prehistory, stone artifacts made by a modern-day flintknapper, and examples of perishable artifacts. Both BLM and the local CAS chapter contributed funds toward the project. Finally, Gary gave a presentation on the various kinds of prehistoric animal traps known from Colorado and adjoining states to CAS, Vermillion Creek Chapter.

GJFO GeoCorps Intern Adam Bouché helps Alexandra Price collect a quarry sample from a site in the DENCA.

Fossils for Youngsters: Melissa Smeins, geologist at RGFO, partnered with members of Fremont County Stones & Bones to offer multiple fossil presentations at Pueblo International Magnet School's annual Science Day. Fifteen presentations were given to over 200 students from kindergarten through the third grade. A flipchart developed by Dr. Millie Wintz was used to illustrate the fossilization process, and students spent time with an exhibit of ammonites and sea shells. Students and teachers enjoyed the opportunity to hold and examine "real fossils", and it was an exciting opportunity to share the love of fossils with such a great group of students.

An additional program with Fremont County Stones and Bones included presenting fossils to 4th and 7th grade classes at the Fossil Boot Camp. Students are able to touch, magnify, and locate anatomical parts on 18 different fossils in individual fossil kits. The Colorado School of Mines donated 40 boxes of fossils to produce the fossil kits. The paleontology program provided $1,500 for plastic boxes, labelling materials and hand lenses for the kits. (See http://www.gardenparkdinos.com/?page_id=2812)

RGFO provided $2,000 to the Royal Gorge Regional History Museum to assist with a Canon City Heritage Brochure that was originally created by BLM GSA interns highlighting paleontology of Marsh Quarry and its connection to Canon City Heritage. The brochure was in high demand but required some updating. Once updated it will be distributed widely; it is in high demand! Also, the field office participated in the Canon City Exploratory School Greenhorn Limestone Project that was funded by the National Environmental Education Foundation—HOL mini-grants program. (See http://www.gardenparkdinos.com/?page_id=2679).

Fossil presentation at Pueblo International Magnet School's annual Science Day.

The reported site enhancement projects are:

- GFO installed interpretive exhibits at the Golconda Boarding House and Compressor Shop.
- TRFO installed two interpretive exhibits at the Animas Forks townsite.
- WRFO replaced old sun-bleached interpretive panels at sites 5RB373, 5RB347, 5RB79, 5RB698, 5RB92, 5RB372, and 5RB748 in the Canyon Pintado National Historic District.

Other notable projects are:

- GJFO reached nearly 300 individuals through community programs and presentations such as the Ute Learning Garden docent training, three presentations at Colorado Mesa University, a presentation at the meeting of CAS, Grand Junction Chapter, and a teacher training.
- Interpretive events for the MCNCA included participation in the Colorado Canyons Association McInnis Canyons Scavenger Hunt for fourth graders. This year, 188 kids and 38 adults participated in the scavenger hunt, where they learned about past culture groups who lived in the MCNCA.

Trail to rock art site in Canyon Pintado National Historic District.

- RGFO prepared a “Kids Lithic Industry Teaching Kit” to teach children about the importance of archaeological context and the need to leave artifacts in place.

- RGFO helped produce information for the “Crossroads through Time” interpretive project by compiling relevant information and illustrations regarding the prehistoric occupation of Colorado broadly, and Fremont County specifically.

- SLVFO worked closely with active members of Conejos County, Colorado to provide educational archaeological tours for at-risk youth within the community.

- UFO and GGNCA provided educational opportunities for schools, public presentations and seminars, support for and partnerships with local tourism officials, schools and county governments including four public presentations reaching 150 people, and a newspaper article about the dinosaur trackway study.