

## Colorado 2017 Highlights

### Paleontology

**Paleontology Resource Management & Education (#BPS-1268)**: Marsh Quarry funding supports Geological Society of America GeoCorps Student Andrew Smith that has allowed the Royal Gorge Field Office (RGFO) to accomplish all paleontology program support work over the past year, in addition to supporting our local volunteer partnerships. A portion of the funding also supports the BLM's partnership with the Royal Gorge Regional Museum and History Center that is operated by the City of Canon City.



**Andrew Teaching GSA k-12 Rocky Mountain Regional teacher field trip to Skyline Drive.**

In addition to these standard accomplishments, Andrew assisted with developing a new exhibit at the museum that highlights the fossils of the Western Interior Seaway in Fremont County and has supported National Fossil Day educational events at the Museum as well. Andrew revised the interpretive signs in the Garden Park Fossil area at both the Marsh Quarry interpretive trail and the Cleveland Quarry site. The look and feel of the interpretive signs have been modernized to current BLM standards and the educational aspect of the signs is significantly improved. This funding also allowed BLM to respond to a record number of requests for educational presentations including several Every Kid in a Park presentations in partnership with our local Fremont County and the Gold Belt Byway Association. The BLM also assisted with the addition of geology and paleontology pages into a local trail/adventure guide that is distributed in

the local high schools by a local non-profit (Fremont Adventure Recreation). The RGFO also hosted the Preserve America Youth Summit in Garden Park Fossil Area where 60 individuals participated in hands on activities reinforcing the significance of preserving our local paleontological heritage.



Andrew working with Students at Fountain International Magnet School identifying fossils.

## Museum

**Anasazi Heritage Center (AHC) Collections Backlog Cataloging (BPS #16-4563 & 4564) and Grand Junction Field Office (GJFO) Stewardship of the Past (DOI Museum Grant)**: These two projects address the BLM collection backlog and storage problems and provides better access for research. The efforts are a direct result of complying with the Inspector General's museum property audit (OIG Report C-IN-MOA-0010-2008) and DOI and BLM museum property staff response to the OIG report.

The BLM paleontology and geological collections curated at the Dinosaur Journey were made more accessible by creating a collections annex in the exhibit hall. The new room is approximately 300 sq. ft. with 10 ft. ceilings, recessed LED lighting, fire suppression, electrical and internet receptacles, and an oversized steel entry door. The room was also supplied with a new workstation, six new specimen cabinets and two relocated cabinets, one utility/supply shelf, and four steel shelves for oversized specimens. Additionally, this DOI grant provided funds for a new security camera system with digital recorder. Eight cameras were installed; these were aimed at collections doors, exit doors, and outside the building. Finally, new shelving and supplies were obtained for the BLM archeological collections to expand existing space at the Museum of Western Colorado.



Removing the exterior door and walkway behind the Allosuaras exhibit at Dinosaur Journey museum.

## Major Highlights

**North Park Cultural Landscape Study (BPS #16-3427):** Under the direction of Dr. Robert Brunswig and Dr. James Doerner with the University of Northern Colorado field school, a volunteer survey was conducted in the North Springs and Owl Ridge areas in the Kremmling Field Office (KFO). At North Springs, three stone circles and a continuous associated lithic scatter was documented with Late Paleo Indian and Early Ceramic diagnostic artifacts. An intensive prehistoric occupation was documented at Owl Ridge including a rock-walled pit, interpreted as an eagle-trap and two sets of long parallel rock walls, each with a crescent wall vision quest at one end. Both sites (actually all including the vision quests) are oriented to mountains on the horizon (one to the south and one to the east). Several stone tipi rings and a light scatter of lithics was recorded.



**Looking southeast at spur ridge off of Owl Ridge at the Dance Circle/plaza. Associated tipi rings are in the saddle.**

**Ute Ulay NRHP Nomination and Interpretation Project (BPS #1399):** The Gunnison Field Office (GFO) successfully partnered with Hinsdale County to nominate the Ute Ulay Mining Complex for the National Register of Historic Places. A large portion of the mine was recently donated to Hinsdale County and the remaining portions are either privately owned or on BLM lands. The Ute Ulay mine is located west of Lake City and is often called “the mine that made Lake City.” It was one of the earliest and biggest producers in the area and leaves behind a well preserved complex of structures including a mill with intact machinery, the remains of a hydropower plant and flume, a redwood water tank, and several residential structures and workshops. The nomination is complete and is currently under review by the Keeper of the National Register. It is hoped to have the site listed by the fall of 2017.

In addition to the nomination, a comprehensive interpretation package has been completed that includes a new walking tour brochure and trail, an informational kiosk, and a new interpretive panel. This package provides visitors a complete history of the site and also provides a site stewardship and preservation message. This project was completed with the assistance of several partners including Hinsdale County, Lake City DIRT, and the Colorado Department of Reclamation and Mining Safety.



**New kiosk with register, donation and walking tour brochure boxes and interpretive panel.**

**Ute Learning Garden (BPS# 16-4613)** continues to thrive through the partnership with Mesa County and the Colorado State University Extension Office.



**Ute Indian Tribe Pow Wow at the Ute Ethnobotany Garden.**

This year, the GJFO archaeologists conducted a docent training, teaching volunteers about the prehistory and history of the Grand Valley and about Ute heritage, and equipping them to lead tours for youth and adults through the Garden. The training included a field day on GJFO-managed lands to give docents a first-hand look at Ute archaeology and plants that would have been utilized by the Ute. The GJFO also helped erect a tipi (or nugan) at the Garden using lodgepole pine that Ute tribal members gathered, peeled, and cured with GJFO staff over the course of 2016 and 2017. Tribal representatives from the Ute Indian Tribe, as well as GJFO and CSU staff, gathered to put up the tipi up in May of 2017.



**Brock Chappoose and Betsy Chappoose, along with archaeology seasonal Matt Heinritz and archaeologist Alissa Leavitt-Reynolds, assemble the nugan.**

**Colorado Mesa University Cultural Resource Field School (BPS #16-4580):** The GJFO was proud to host a field school in partnership with Colorado Mesa University. Six students participated in the course, learning about archaeological inventory and data recovery. The field school systematically surveyed site 5ME1373, the Indian Creek site, identifying its boundaries. The students excavated two hearths, retrieving charcoal and float samples to analyze during their fall 2017 laboratory class.



**CMU field school students excavate two hearths at site 5ME1373.**

**Archaeological Inventory and Site Evaluation in the Rio Grande Natural Area and the Punche Valley, Conejos County, Colorado:** Paleocultural Research Group (PCRG), History Colorado, and the San Luis Valley Field Office (SLVFO) conducted archaeological inventory, evaluative testing, and rock art documentation.

The project's primary goal is to develop a baseline dataset of the archaeological resources of the area, including Native American camps and rock art sites, historic homesteads and irrigation features, historic trails, and other aspects of the cultural landscape. The field investigation included inventory of previously undocumented parcels and evaluation of previously recorded cultural resources. Field work occurred during two eight-day sessions from July 7 to 15 and July 20 to 27, 2017.

The project resulted in completing 264 acres of Section 110 survey. This resulted in recording 22 new sites and re-recording of one site on BLM lands. Two previously recorded sites were subjected to evaluative test units (two 1 meter by 1 meter test units at each site). Two previously recorded sites had rock art that was documented in detail.

The project was a major success with 43 volunteers contributing 1,488 hours of volunteer service. Volunteers learned essential archeological skills under the History Colorado Program for Avocational Archaeology Certification. These skills included performing archeological surveys, recording archeological sites, and conducting limited testing. Interagency personnel and regional archeological researchers converged on the

project to assist and collaborate to understand and record the unique cultural resources present in the SLVFO Rio Grande Natural Area.



**Dr. Mark Mitchell (PCRG) discusses the Rock Art and the plans for the day with volunteers and interagency visitors.**

**Skinner Cabin Interpretation and Rehabilitation (BPS # 1346):** In partnership with HistoriCorps, the Museum of the West, and Colorado Canyons Association, the McInnis Canyon National Conservation Area (MCNCA) completed stabilization of the Skinner Stone Cabin. The cabin was constructed from local stone sometime in the first decade of the 20th century, and the public frequently requests information about the cabin from the BLM. Over the last 40 years, the wood and sod roof collapsed, causing some of the walls to fall as well. The BLM contacted HistoriCorps with a proposal to rebuild the walls and roof, and in the fall of 2016, HistoriCorps spent three weeks stabilizing the site with master masons and volunteers. To complete the project, BLM also partnered with the Museum of the West to research the cabin and produce informational kiosks for visitors to the site. The project was also aided by Colorado Canyons Association, who organized a National Public Lands Day event to construct a fence around the site, further protecting it from deterioration. This project was such a success that MCNCA and partners were awarded a Heritage Preservation Award from the Museum of Western Colorado.





**HistoriCorps crew and BLM staff pose in front of the Skinner Stone Cabin during restoration efforts.**

**CANM Ethnographic Research Project:** Canyons of the Ancients National Monument (CANM), in cooperation with Mountain Studies Institute and Anthropological Research, LLC, conducted an ethnographic overview of the Monument. This ethnographic overview reviews published and archival literature to summarize tribal histories and traditional associations with CANM and the greater Four Corners region. Additionally, ethnographic field visits and oral interviews were conducted with the Hopi Tribe, Pueblo of Santa Clara, and Pueblo of Zuni.

This ethnographic overview includes 24 of the tribes that CANM currently engages in government-to-government consultation, including: the Hopi Tribe, Jicarilla Apache Nation, Navajo Nation, Ohkay Owingeh (Pueblo of San Juan), Pueblo of Acoma, Pueblo of Cochiti, Pueblo of Isleta, Pueblo of Jemez, Pueblo of Laguna, Pueblo of Nambe, Pueblo of Picuris, Pueblo of Pojoaque, Pueblo of San Felipe, Pueblo of San Ildefonso, Pueblo of Santa Ana, Pueblo of Santa Clara, Pueblo of Santo Domingo, Pueblo of Taos, Pueblo of Tesuque, Pueblo of Ysleta del Sur, Pueblo of Zia, Pueblo of Zuni, Southern Ute Tribe, and Ute Mountain Ute Tribe. The goal of the project is to establish working relationships with representatives from each of these tribes in the future and to use those relationships to gather tribal knowledge for managing the CANM cultural landscape.



Hopi Tribe cultural advisors at the “Jumping Man” rock art panel in CANM: (l-to r): Stewart B. Koyiyumptewa, Bill Preston, Gilbert Naseyowma, and Riley Balenquah. Photograph by Maren P. Hopkins, Anthropological Research, LLC.

**Maryland Institute College of Art Landscape Documentation Project:** Students from the Maryland Institute College of Art (MICA) began their initial work at Lowry Pueblo National Historic Landmark within CANM. Their collaboration with local archaeologists and Native American tribal consultants brings together elements of archaeology, architecture, ethnography, geography and the Historic American Landscapes Survey to document the cultural landscape surrounding this important prehistoric Native American site during the 50th year of its listing as a National Historic Landmark.

The working method, which employs hand drawings, watercolors, photographs, digitalized drawings, GIS maps and 3D computer terrain reconstructions was developed by Professor Katie O’Meara of the Department of Architectural Design and Professor Joe Basile of the Department of Art History, Theory and Criticism. The project seeks to achieve the BLM’s cultural landscape management goals by using the unique skills of MICA art and design students. Based on the premise that drawing and mapping are ways of thinking about objects, spaces and places—ways that are distinctive from

standard archaeological approaches—the goal of the project is to depict how landscapes in the region of Lowry Pueblo may have developed over time: making visible the modern developments that have altered the environment while tracking significant natural features. Native American cultural experts collaborated on the project, providing cultural orientation and deep context for the artists in their documentation efforts.



**Southern viewshed from Lowry Pueblo National Historic Landmark (5MT1566), as documented by Ty Skeiky, Maryland Institute College of Art, CANM, Colorado.**

**Volunteer of the Year:** GJFO awarded Janice Shepherd, with Outstanding Volunteer of the Year Award for her work with the cultural resource program. Janice spends hundreds of hours annually monitoring cultural resources and helps to organize site stewards for trainings and clean-ups of non-historic trash on some of our sites. She is always willing to lend a hand and provides an immeasurable benefit to our program. Congratulations, Janice!



## **National Programmatic Agreement Implementation and State Protocol Revisions**

- The Colorado State Office is developing supplemental guidance for the oil and gas program and the range program.

### **NHPA Section 106 Compliance**

- Colorado will initiate field office programmatic agreements for travel management beginning with the White River Field Office. A statewide template was developed by a working group of field office staff specialists to be used by field offices to begin consultation with consulting parties and Tribes on local issues and interests.
- Dominguez Escalante NCA (DENCA) staff focused travel management surveys on the heavily-used roads in the office area. This year's work targeted Cactus Park in the northern portion of the NCA. BLM staff surveyed over 8 miles of roads and trails during this season and recorded over 110 cultural resources (isolated finds and sites).
- The Little Snake Field Office (LSFO) travel management related issues were a priority, including completion of three reports to meet requirements of the South Sand Wash Open Area Programmatic Agreement. A temporary archaeologist was hired to complete a synthetic report of survey and monitoring work in the area. The reports will serve as a basis for revising the PA to protect important sites in the open area. LSFO will begin work on developing travel management plans for two large areas in field office. Finally, the field office acquired project-specific funding to develop a predictive model to guide future Class III surveys for travel management efforts.

### **Stabilization, rehabilitation, and other preservation activities**

- The Colorado River Valley Field Office (CRVFO) completed a rock art study in their field office (BPS #862). This study entailed revisiting nine previously recorded rock art sites. Many of the sites had not been revisited for 30 or more years, so an appraisal of their condition and an upgrading of their documentation was needed. Panel depictions varied from bear figures and bear paws, to shaman figures and bison. These panels were documented through high resolution photography and color and exposure was manipulated to reveal greater detail about the rock art.
- In collaboration with the Western Anthropological and Archaeological Research Institute (WAARI), the White River Field Office (WRFO) continued efforts to stabilize the Eagle Point rockshelter.

- The Gunnison Gorge NCA (GGNCA), in partnership with WARRI, began development of the Paradox Rock Art National Register District nomination (BPS #16-3726).
- CANM, in partnership with McElmo Canyon Research Institute, initiated the historic structure assessment of the Lamb House historic homestead (BPS # 16-4260).
- GFO, in partnership with Mountain Studies Institute, continued stabilization of the Sound Democrat Mill.
- GFO, in partnership with Hinsdale County, submitted nominations for the Johnson Stage Stop and Ute Ulay Mining Complex (BPS #1399).

### **Identification, recordation, and evaluation of heritage resources**

- CRVFO, in partnership with Colorado State University, completed inventory of 350 acres within the Deep Creek ACEC to support tribal concerns for additional information of the area (BPS #16-4180).
- The Tres Rios Field Office completed inventory of 855 acres located in areas of high site density.

### **Monitoring and site stewardship**

- GJFO hosted a site steward training. Because of the high interest in the program, BLM partnered with the local US Forest Service and National Park Service offices to create and distribute an application, by which eight site stewards were selected for the pilot training. Over the course of two days, trainees attended an in-class and in-field course to learn about monitoring sites. As a result, eight new site stewards are monitoring several sites in the GJFO, including National Register-listed Calamity Camp.
- The CANM Cultural Site Stewardship Program includes 47 site stewards that monitor 75 sites. The sites monitored includes 71 prehistoric Ancestral Puebloan sites, 2 historic sites (one homestead and one unknown Anglo or Navajo structure), and 2 dual-component sites (historic and Ancestral Pueblo). These volunteers contributed approximately 784 hours of time and drove 8,012 miles totaling \$18,471.04 of donated labor and \$4,326.48 for mileage. Ms. Diane McBride, who leads the program, has facilitated over 2,500 hours of training,

lectures, and volunteer work since March of 2015. In 2017, the program was expanded into TRFO.

- DENCA trained a new group of site stewards. The Grand Valley Site Stewards spent a day learning how to monitor sites in Big Dominguez Canyon.

### **Research, field schools, and data recovery projects**

- DENCA funded Section 110 survey in the Gibbler Gulch area. During this survey multiple wooden features, such as hunting blinds and possible wickiup structures, were documented.
- A final report on investigations at the KibRidge-Yampa site was completed to finalize the joint venture between LSFO and the University of Kansas to further evaluate the Early Paleoindian components at this important site. The research clarified the relationship between the Paleoindian components and the natural stratification of the site.
- In partnership with the Rocky Mountain Youth Corps (RMYC), two RMYC interns helped WRFO archaeologist's survey in the Moose Mountain Wilderness Study Area.
- WRFO continued inventory in the Skull Creek WSA (BPS #543). Colorado State University will hold the 2018 archaeological field school for this project. Students will inventory, conduct limited testing, learn photogrammetric (3-d) mapping at several of the better preserved corn storage granaries in the Miller Creek archaeological district.
- For the seventh year, project director Dr. Radoslaw Palonka from Jagiellonian University travelled with twelve graduate and undergraduate archaeological students from Krakow, Poland to CANM to continue research at the Sand Canyon-Castle Rock Community. The project is the first independent Polish archaeological project in the United States, and seeks to further understand prehistoric community organization within the 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.
- Using research funding from the National Landscape Conservation System, 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 implementing their digital

documentation project at late Pueblo III (ca. AD 1250) sites within the Monument. This research uses 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. In 2017, onsite scanning and documentation was completed at both Lowry Pueblo National Historic Landmark and Painted Hand Pueblo.

### **Notable planning accomplishments for heritage resources**

- The Eastern Colorado Resource Management Plan for the RGFO is in its second year, and staff are currently developing alternatives. A tribal consultation meeting was held with the Southern Ute Indian Tribe, Ute Mountain Ute Tribe and Ute Indian Tribe to identify topics and concerns to be addressed by the plan.

### **Tribal Consultation and Coordination**

- Tribal representatives from the Northern Arapaho Tribe, Tribal Historic Preservation Office, Jerel Coler and Myron Old Man came to the KFO to visit sites of traditional cultural and spiritual significance that included a bison kill site and a likely Arapaho affiliated prayer dance plaza/circle.

### **Native American Graves Protection and Repatriation Act (NAGPRA) activities**

- LSFO completed the repatriation and reburial of one individual and Colorado is currently working on 3 cases of repatriation and reburial in CANM and WRFO.

### **Paleontological resources management**

- GGNCA initiated work on the Dinosaur Trackways Public Interpretation project (BPS #16-3723).
- WRFO, in partnership with the Western Interior Paleontological Society, provided a public day to show the exceptional finds of the paleontological excavations on Douglas Pass.
- WRFO, in partnership with Colorado Northwest Community College (CNCC), held a paleontological field school for students from CNCC's Craig campus. CNCC instructors spent two weeks excavating a Hadrosaur (duckbilled) dinosaur in the Douglas Creek area for the third and final year. Due to the excellent preservation researchers working with molecular paleontology will be examining

some specimens to try and do more detailed analysis of the environment during the time the dinosaur lived and perhaps find other valuable chemical data about the dinosaur.

- CANM and TRFO initiated work on the Landscape Approach-Regional Paleontological Overview and Data Analysis (BPS-16-3964).

### **Museum collections management**

- WRFO, in partnership with Colorado State University, initiated work on inventorying and documenting collections from a regionally significant site (BPS # 556).

### **Enforcement of heritage protection authorities (e.g. Section 6 of ARPA and Section 3606 or the PRPA) and related activities.**

- Using restitution funds received for a rock art vandalism conviction in GJFO, BLM with assistance from the Ute Indian Tribe and Colorado Canyons Association (CCA) hosted a cleanup and education event in Rough Canyon, where the vandalism occurred. The Mt. Garfield Middle School eighth grade students contacted BLM for a cleanup day. BLM, CCA, the Ute Tribe, and Mt. Garfield teacher Ginger DeCavitch coordinated a day filled with cleaning charcoal graffiti from canyon walls, removing charcoal and trash from recent activity, and removing a social trail to the rock art site. Betsy Chapoose and Brock Chapoose taught the students about native cultural landscapes and the importance of rock art sites within these landscapes, while the BLM archaeologists and geologist taught students about the importance of leave no trace and historic resources.



**Middle school students remove a social trail to a rock art site in Rough Canyon.**



## Heritage Education, Interpretation, Outreach, and Tourism

- DENCA led a Gunnison river rafting trip with cultural staff talking to volunteers about the resources of the NCA. Another project was Escalante Nature Days, a scavenger hunt event with our Colorado Canyons Association partners, where DENCA cultural staff spoke to Delta County elementary school students about rock art and how to visit those sites with respect. This year about 160 people attended the event.
- DENCA outreach efforts included a tour of the Rambo Homestead for Palisade Parks and Recreation staff led by BLM seasonal, Natasha Krasnow. This event promoted public education about this important heritage site and passed on lessons about site etiquette.
- Over 200 people participated in DENCA outreach efforts this year.
- GJFO continued to partner with the Museum of Western Colorado and School District 51 to utilize the Ancient Ones kit. The kit was used in 32 classrooms and reached 650 children in Mesa County this year. This kit utilizes BLM collections to teach children about the people that populated the Grand Valley long before the area was settled by Euroamericans. This kit continues to serve the community by allowing students to access collections that they would otherwise not be able to see.
- WRFO is developing a pedestrian trail to access the Lookout Point Fremont site in the Canyon Pintado National Historic District in collaboration with RMYC trail crews. Trail upgrades to the White Birds and Waving Hands sites will occur in August 2017.
- TRFO installed two new antiquity signs at the Bradfield and Mt Sheep Point entry points at the Dolores River Canyon.