



**NATIONAL  
CONSERVATION  
LANDS**

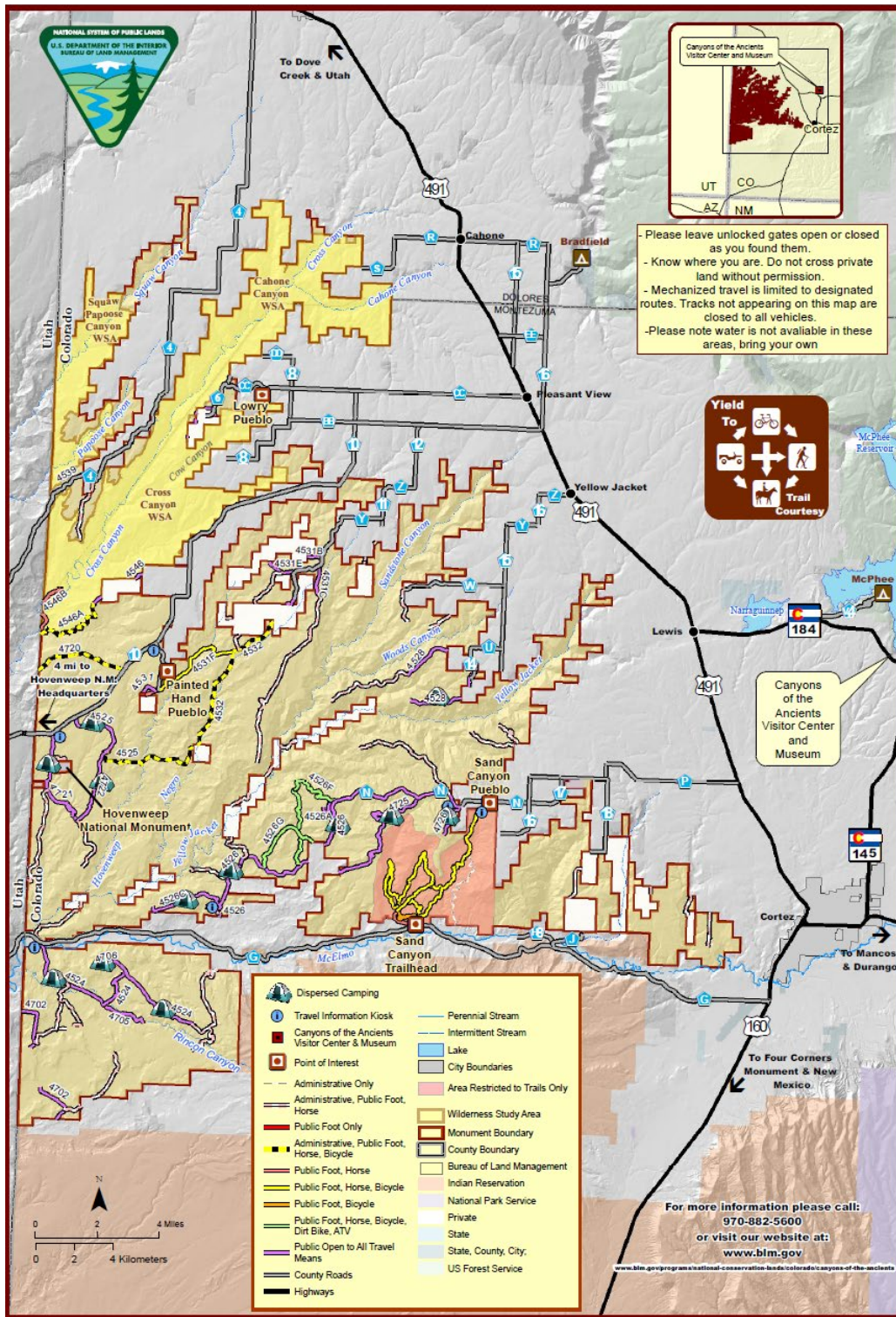
**Colorado**  
2021: Annual Manager's Report

# Canyons of the Ancients

National Monument



# Map



# Accomplishments

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**Painted Hand Stabilization.** As one of 13 sites within Canyons of the Ancients National Monument (CANM) allocated specifically for development and public interpretation, Painted Hand Pueblo plays a critical role in the Monument's and the BLM's mission to preserve cultural resources and to educate the public about their significance and sensitivity. After extensive digital documentation effort were conducted, CANM partnered with preservation experts from Mesa Verde National Park to stabilize standing 13<sup>th</sup> Century Ancestral Puebloan architecture at the site. Specifically, the crew of four archaeologist/masons repointed the mortar and re-laid existing stone at both the iconic Tower A and the more subtle Tower B, to both preserve the structures and to improve visitor safety. The previous stabilization efforts at the site were conducted by the BLM in 2002, and the new efforts should also help maintain this important educational and cultural resource for the coming decades. Finally, the intra-site visitor trail was re-rerouted and improved to help in this effort, and additional interpretive products are being developed by the BLM with the assistance of the Maryland Institute College of Art.



*Tower A at Painted Hand Pueblo, one focus of this year's stabilization work under the interagency assistance agreement between CANM and preservationists at Mesa Verde National Park.*

**Chappell Collection donation.** In May 2021, CANM Accessioned the “Chappell Collection” through the BLM 1105 Donation policy. The Chappell Collection includes 4,921 artifacts and 1,056 archives purchased by the Anasazi Historical Society from Cliff and Ruth Chappell in 1982 and placed on “permanent” loan to the Bureau of Land Management (BLM) Canyons of the Ancients Visitor Center and Museum. The “Chappell Collection” is comprised of archeological objects collected from private lands in southwest Colorado and adjacent states from 1929 to 1982, as well as the Chappell’s field notes. Artifacts represent a wide variety of Ancestral Puebloan material culture from the Northern San Juan region, including ceramics, chipped stone, bone, textiles, ornaments, ground stone, shell, and organic material. CANM staff fully cataloged the collection and have stored the materials in a manner ensuring secure and stable conditions, which they provide for public access and use, in accordance with DOI collections standards (411 DM Museum Property Handbook).



*An additional accomplishment: The bookstore space at Canyons of the Ancients NM was vacated in 2019. In 2021, a new partner was identified. In the spring of 2022, the Glen Canyon Conservancy opened a new outlet at the monument visitor center and museum.*

# Challenges

**COVID-19 and Visitor Center Operations.** The monument Visitor Center and Museum was closed to the public from March 2020 through April 2021 due to safety concerns related to the COVID-19 pandemic. The center opened in the spring of 2021 with reduced hours to ensure staff were available to manage shifting safety protocols. For the following year, the center was the only federal lands/public lands contact facility open to the public in Montezuma and the surrounding counties. The visiting public appreciated the opportunity to interact with our staff and we saw record visitation throughout the spring and summer seasons.

**Yellow Jacket and Flodine Park Grazing Allotments.** The Yellow Jacket and Flodine Park grazing allotments have been vacant since 2005. A 2015 decision to re-issue the grazing permits was appealed. Over the last year or more, monument and field office staff have worked with the State Historic Preservation office and the National Advisory Council on Historic Preservation to develop a programmatic agreement which will allow the grazing permits to be re-issued while at the same time reducing risk of damage to cultural sites. The process is being closely watched by affiliated tribes, environmental groups, and the ranching community. BLM staff have developed a method to identify those areas where sensitive cultural sites are likely to occur, those areas where livestock are likely to concentrate, and the areas where the two parameters overlap. The process provides the opportunity to significantly reduce both risk to cultural resources as well as the need for additional archeological surveys. Meetings will be held with interested parties in the spring of 2022 and staff will continue to work through the additional steps required to complete the programmatic agreement as well as NEPA requirements.

# Visitors

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Recreational use of the monument saw an all-time high in 2021. As Covid-19 drastically changed our lives, many visitors sought the outdoors and solitude of our natural places such as Canyons of the Ancients National Monument, which remained open to the public throughout the pandemic. Places like Sand Canyon Pueblo and the Sand Canyon Trail system (20 miles open to hiking, biking, and horseback riding) saw more visitation than ever before. In the last year we installed new Traqx counters (total of 19) across the Monument and Visitor Center to get better data on how many people were accessing the landscape. This data shows 23,735 visitors came to the Visitor Center and Museum and 171,713 traveled to front country and back-country sites on the Monument in 2021. If you compare this to 2020 data, we saw 29,576 visitors to the Visitor Center and Museum and only 116,247 on the monument (front and back-country). Visual

Assessments and working with trail youth corps indicate that trails within the Sand Canyon/Rock Creek area remain stable and in good shape even though the visitation shows a large increase in this area.



*Biking on the Sand Canyon Trail*

# Partnerships

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**K-12 Curriculum-based Education Program** – A new agreement with San Juan Mountains Association (SJMA) in 2021 started a new partnership for delivering education programs on the Monument and at the museum. SJMA and CANM staff delivered 14 programs reaching 214 youth in new family-based hikes and guided tours at the museum and on the monument. We continue to work with SJMA creating new stewardship and program opportunities for youth and their families. We are also updating old education materials and re-vamping next year’s curriculum-based education programs that we offer to K-12 schools.

**Southwest Colorado Canyons Alliance (SCCA)** – SCCA is the official friends’ group of CANM and continues to partner with us for adult education and stewardship. The programs include engaging volunteers to assist with long term Wilderness Study Area (WSA) monitoring. Volunteers look for evidence of human use in WSAs including appropriate use as well as inappropriate use such as tire tracks and vandalism. In 2021, SCCA partnered with the BLM and developed a new Trail Information Specialist Program. Volunteers are trained by BLM staff on appropriate messaging, area information, and interpreting popular front country cultural sites. Volunteers are stationed at the Visitor Center (VC), Lowry and Sand Canyon and aid in information and interpretation of special cultural sites. We look forward to seeing both programs grow.



*School children participating in an Outdoor Museum on the Ground event with BLM staff.*

**Volunteer Program:** Total Hours of Volunteers Efforts: 3,590 (97 volunteers, \$91,290 value). Canyons of the Ancients National Monument has volunteer positions in Visitor Services that cover front desk hosts and docents, Archaeology, Curation, Gardening, Trail Information Specialists, Wilderness Study Area Monitors, and more. Without the volunteers, we could not achieve the goals we have set in monitoring and public education.

**Volunteer Spotlight. Botanical Inventory Program.** In 2021, two dedicated volunteers, Marian and Peter Rohman dedicated over 1,000 hours identifying, recording, and inventorying plants found at Canyons of the Ancients National Monument. They made 43 field trips to the monument during the year, visiting sites including the McElmo Natural Area, the Cahone and Cross Canyon Wilderness Study Areas, the Sand Canyon hiking area, the Lowry Pueblo area, and the area south of McElmo Creek. During their field trips, the couple documented all plants seen in flower and fruit. Peter took over 4000 photos, and Marian collected over 400 plant specimens. They identified several species which are new to the monument, some new to Montezuma County, including one state-listed species, and at least one species new to Colorado! They also collected data for the Colorado Natural Heritage Program for eight state-listed species. All of the pictures and locations of plants found in the field are added to a Plant Identification Book which can be found at the Canyons of the Ancients Visitor Center and Museum for visitors to enjoy.



*Marian holding the CANM plant ID book that she created for the Canyons of the Ancients Visitor Center and Museum. She continues to update this book as her and Peter find more specimens in the field. Next steps are making these digital and highlighting plants in bloom by the month in the Visitor Center.*



# Science

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CANM has partnered with the Department of American Archaeology at Jagiellonian University in Kraków, Poland for the past 11 years on the **Sand Canyon Archaeological Project**. The project has trained over 100 graduate and undergraduate students in the theory, techniques, and methods of Southwestern Archaeology, and the agency has in-turn benefited extensively from the student's use of cutting-edge digital documentation to help preserve its world-class cultural resources. Due to Covid-related travel restrictions, the annual archaeological field school did not take place in 2020 or 2021. Instead, the students and faculty used the time to complete several grant requirements, give professional presentations at conferences in both Europe and North America, and publish several international journal articles. To date, the project has produced 54 professional publications and 66 professional conference presentations. Notably, the principal investigator on the project, Dr. Radosław Palonka, published the first Polish-language textbook on Southwestern Archaeology in 2021, featuring rock art from CANM on its cover.



*Cover of the first Polish-language textbook on Southwestern archaeology, written by federal partner Dr. Radosław Palonka, and featuring rock art from Canyons of the Ancient NM on its cover.*

# Climate Impacts and Resiliency

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**Native Fish.** Yellow Jacket and McElmo Creek are both irrigation return streams that bring water from the Dolores River. The two streams are important for native fish including Colorado Pikeminnow, Roundtail Chub, Bluehead Sucker, and Flannelmouth Sucker. In many parts of the West, irrigation diversions have impacts on native species by creating barriers to movement and dewatering streams. In most years, Irrigation return causes the streams to flow most of the year and provide important habitat for the native species. In recent years, both monument streams have seen many more months of little to no water flow between the melting of snowpack and the summer monsoonal rains. Due to the drought in 2021, very little water was diverted to the streams and there were several dry sections from early May through July's summer rains. The native species have the ability to survive in warm water conditions. We surveyed several isolated pools along Yellow Jacket Creek in the spring and one 12-foot-wide pool had over 100 adult Bluehead Suckers, Flannelmouth Suckers, and Roundtail Chubs residing in it. Several of the fish had been PIT tagged (small microchip implanted in the fish) years before showing just how amazing these fish are at living in a desert environment.



*Flannel Mouth Sucker*

**Vegetation Communities.** The challenge posed by climate change to the monument's vegetation is uncertainty. While the landscape itself, defined by rugged terrain and harsh conditions, resulted in vegetation communities that are well adapted to extremes, the uncertainty of future climate conditions makes predicting the stability, or instability of those communities nearly impossible. The past several years, punctuated by drought conditions and unpredictable precipitation patterns, demonstrate this challenge. This uncertainty makes planning for revegetation, hazardous fuels reductions, and riparian restoration projects more difficult and diminishes the opportunities for success.

# Social and Environmental Justice

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**Collections and NAGPRA** – The monument’s curation staff provided a revised Collections Summary to CAMN’s twenty-six consulting tribes in 2021 following procedures described in Section 10 of the Native American Graves Protection and Repatriation Act. Summaries include information about the archaeological site from which items were recovered, and descriptive categories of object types. This summary provides consulting tribes with additional opportunity to review BLM collections curated at CANM. Collections of interest include objects that may be sacred and ceremonial, or items of cultural patrimony.



*Artifacts from the CANM museum collection*

# Events

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## **Sand, Stone, and Songs: Ancient Lessons from a Living Landscape (2022 Special Exhibit)**

Recent technological developments, such as LiDAR, photogrammetry, and reflectance transformation imaging finally offer the precision and detail necessary for preserving and understanding these reservoirs of indigenous knowledge. For the past 15 years, the BLM and the Center of Preservation Research at the University of Colorado Denver have worked in partnership to apply these modern techniques to our preservation and understanding of these ancient resources.

Our documentation strives to preserve structures and cultural landscapes through observation and data gathering at a specific point in time. Accurate digital and analog records of these vital cultural places are critical to their future interpretation and preservation. The documentation process helps us to explore these resources' prehistoric, historic, spatial, and environmental contexts.

To this end, our team developed a public exhibition of our work for display at the Visitor Center and Museum between January and December of 2022. The title of the exhibition, "Sand, Stone, and Songs: Ancient Lessons from a Living Landscape" will showcase our architectural drawings and their cultural significance to living tribal members, with the goal of educating the public and creating advocates and partners in preservation.



*CANM's 2021 special exhibit celebrated the 50<sup>th</sup> anniversary of the Wild Horse and Burro Act. Special events, including an event highlighting the partnership between the Montezuma County Sherriff's Department with the Wild Horse and Burro program, also helped celebrate the anniversary.*

# CANM Ethnographic Research Project

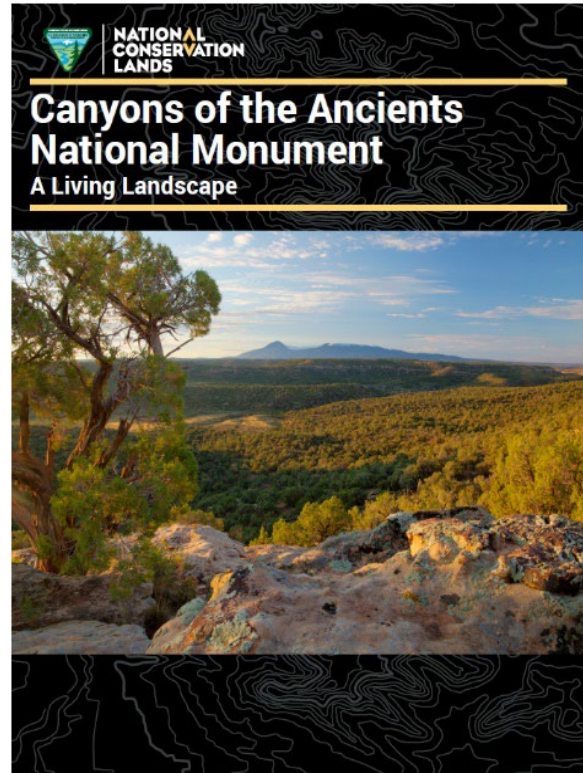
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The BLM, in cooperation with Mountain Studies Institute and Anthropological Research, LLC, conducted an ethnographic overview of Canyons of the Ancients National Monument (CANM). This ethnographic overview reviews published and archival literature 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.

The review covers 26 of the tribes that Canyons of the Ancients National Monument 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 ongoing project is to develop 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 into the future.

In 2021, CANM published and made publicly available a 36-page color handbook detailing tribal connections with the prehistoric cultural resources and natural landscape managed within the monument. The publication is the culmination of several years of both field investigations and oral interviews with 26 descendent communities and anthropological researchers. The publication is available for no cost to our museum visitors and has been sent to numerous partners and other agencies in the four corners area.



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## **Canyons of the Ancients National Monument**

Tres Rios Field Office  
Bureau of Land Management  
27501 Highway 184  
Dolores, CO 81323  
Phone: 970-882-5616

**Report compiled by:** Ray O’Neil, Monument Manager; Amala Posey Monk, Supervisory Park Ranger; Vince MacMillan, Archeologist; Tracy Murphy, Supervisory Museum Curator (acting); Garth Nelson, Range Specialist, and Russ Japuntich, Fisheries Biologist

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