Secrets of the Past in a Rugged Land

The archaeological case for protecting Greater Canyonlands

Text by Jerry D. Spangler
It is hard to imagine a more likely candidate for national monument protection than Greater Canyonlands — the magnificent 1.8 million acres of public land surrounding Canyonlands National Park in southern Utah. It remains one of the last great untouched frontiers of the American West and one of the largest roadless areas in the lower 48 states. It also forms the heart of one of the West’s most critical watersheds, upon which 40 million Americans and 15% of our nation’s agriculture rely. And its unparalleled recreational opportunities — hiking, rafting, rock climbing, biking — are world-renowned.

But there is another reason why Greater Canyonlands is so deserving of protection under the Antiquities Act: the area holds some of the most scientifically important cultural resources to be found anywhere in North America. Enshrined in ancient alcoves or perched astonishingly on the ledges of sheer canyon walls, human history here is as layered as the sandstone topography that enfolds it.
As unlikely as it may seem when first gazing upon this arid and rugged landscape, human culture not only survived but thrived among the high plateaus, serpentine canyons, and impassable river gorges of Greater Canyonlands. This wild landscape stands today as a largely untapped and remarkably well-preserved library of almost 12,000 years of human history: from Ice Age mammoth hunters, to ancient farmers who cultivated corn in the arid desert, to infamous outlaws like Butch Cassidy who found refuge here. It is a vast outdoor museum that could one day unlock the mystery of how humans adapted to a changing climate in the American West.

The area’s aridity and isolation have helped preserve remnants of this fascinating history largely intact and undisturbed: spears from Paleoindian hunters; basketry, tools, ceremonial objects and clay figurines from Archaic hunter-gatherers; and the elaborately designed pottery, standing stone structures, cliff dwellings, and brilliantly complex rock art of the Basketmaker, Ancestral Puebloan and Fremont peoples. To venture into this landscape – as anyone willing to tread lightly and respectfully can do – is to walk through time with wonder and awe, marveling at the secrets of our collective past.

Unfortunately, without action, this treasure trove of scientific and historical knowledge will be lost over time. Poorly regulated off-road vehicle use, proposed oil and gas drilling, tar sands mining, and uranium and potash development all threaten to transform the region and open the door to looters and vandals.

With each site that is lost through neglect or malice, another page is ripped from our history.

If we don’t act now to protect this extraordinary landscape, we may never fully understand the mystery and lessons of the ancient ones or have the chance to follow in their footsteps with our grandchildren.
Evidence of America’s first hunters – called Paleoindians – is generally quite rare. The passage of time has erased most of what they left behind, and even more has been destroyed by later generations. But in Greater Canyonlands, the dry climate has helped to preserve the archaeological deposits. It is, in fact, an extraordinary outdoor museum that tantalizes scientists with its wealth of Paleoindian evidence that could well unlock the secrets of the earliest Americans and how they came to arrive, and thrive, in what is now an unoccupied desert wilderness.

Based on the presence of certain distinctive stone tools at these sites and others, it is believed that Paleoindians first occupied the area between 11,500 and 11,000 years ago and remained for nearly three thousand years. The first arrivals were probably following the herds of Ice Age herbivores, mostly mammoths, as the now-extinct pachyderms moved up and down the Colorado and Green rivers. The preferred hunting implement was what is today called a Clovis point: a spear with a unique channel flaked on one end (called fluting) where it was hafted to a wooden shaft.

As the climate grew warmer with the passage of time, the high grasses that characterized the Ice Age were replaced by shorter grasses more suitable to small grazers, including an ancient form of bison. Humans responded by developing a smaller spear point – today called a Folsom point – that featured longer fluting along almost the entire surface.

At the Dawson Site, located around a now-desiccated playa near the Green River, archaeologists recovered more than 200 Paleoindian artifacts, including six Clovis points – the largest cache of Paleoindian artifacts yet recovered in the region.

Dozens of Paleoindian tools, including several Folsom points, have also been found at the Montgomery Site on a terrace above the Green River in the same area.
By about 10,000 years ago, the landscape of Greater Canyonlands had begun to assume the desert characteristics that we see today. The deserts were more suitable to bighorn sheep and deer, whereas the mountains favored deer, elk, and modern bison. Humans adapted to the changing climate by exploiting a broader range of animals and relying more on plants found in multiple locations. A general pattern of seasonal mobility remained unchanged for almost 8,000 years.

Cowboy Cave and Jim Walters Cave – two twin alcoves near Horseshoe Canyon – contain archaeological deposits representing nearly 10,000 years of human history, all layered like a book waiting to be opened. The excavations here rank among the most important ever conducted in the American West, and the alcoves themselves are in the pantheon of nationally significant archaeological sites listed on the National Register of Historic Places.

The most stunning reminders of the Archaic hunters and gatherers are found on the sandstone walls of Greater Canyonlands. Hundreds of life-sized human figures without arms or legs have been painted in a palette of red, white, green, and black pigments, each staring down upon modern visitors with a ghost-like quality that evokes wonder and mystery. Archaeologists call this Barrier Canyon style rock art, and Greater Canyonlands is the heartland of this artistic expression. It is recognized as one of the most elaborately complex and well preserved Archaic rock art styles anywhere in North America.

The alcoves of Greater Canyonlands have revealed a wealth of artifacts that represent not only the daily necessity of gathering, processing, and consuming food, but also a broad array of social, leisure, and ceremonial activities: basketry, sandals, cordage, nets, snares, atlatl shafts, awls, gaming pieces, wooden hoops and pegs, wooden and clay figurines, and ornamental artifacts.

There are literally scores of alcoves like Cowboy Cave throughout the San Rafael Desert area, most of which have never been examined by archaeologists for what they can teach us about America’s past.
Human interaction with the landscape of Greater Canyonlands experienced a fundamental shift by about B.C. 500. Instead of moving seasonally to exploit different patches of resources, families began building houses and settling down in one place for much of the year to cultivate corn and squash. Archaeologists are working to understand why this happened. Did resident hunter-gatherers turn to farming or did farmer immigrants arrive from the south? In any case, they were so successful at crop cultivation that by A.D. 1 their diet was comprised almost entirely of maize (corn).

Referred to as the Basketmakers, these early farmers constructed pit houses (houses dug into the ground that were lined with stones and covered by a roof of wooden beams) and built storage cists in the alcoves, which later served as elaborate burial chambers. They were masters at weaving baskets with elaborate designs, and they produced a style of rock art unlike anything before or since. These cultural expressions are especially common in the canyons draining into the Colorado River from the east and south — places that now carry names like Indian Creek, White Canyon, and Arch Canyon.

Pottery was introduced to the region by about A.D. 500, an innovation that allowed ancient cooks to boil foods for extended periods of time, such as protein-rich beans. The ancient residents of Greater Canyonlands became master potters, producing not only plain grayware for boiling foods, but also elaborately designed bowls, ollas, and mugs, and even animal effigies. The landscape here is littered with millions of shards from these ancient vessels.

The remarkable ruins, rock art, and artifacts left behind in Greater Canyonlands tell a story of profound change occurring throughout the American Southwest.
Greater Canyonlands marked the northern edge of developments happening throughout the American Southwest. In Arch Canyon, there is evidence the ancient ones had massive ceremonial centers, called Great Kivas, and prehistoric road networks connecting these hamlets to ceremonial centers at Chaco Canyon and elsewhere.

Ancestral Puebloan ruin, Beef Basin. © Ray Bloxham/SUWA

Ancestral Puebloan structure, Beef Basin. © Scott Braden/SUWA

Ancestral Puebloan pottery. © Bruce Hucko
As farming became more and more successful, populations expanded into every conceivable niche of the myriad canyons of southern Greater Canyonlands. Remnants of their sojourn here are found in the hundreds upon hundreds of cliff ruins visible today in places like White Canyon, Arch Canyon, and Indian Creek. Virtually every canyon on the south and east sides of the Colorado River has stunning reminders of this increasingly complex society.

Popularly, these people are known as “cliff dwellers,” although that name is misleading. The Ancestral Puebloans often lived and farmed on the mesa tops where remnants of their houses – circular alignments of stone foundations – can still be seen amidst the piñons and junipers. They also lived on the canyon bottoms and in the alcoves that had been occupied by the hunters and gatherers millennia before. And yes, some of them lived on cliff ledges high above. Typical of this period of time, the ancient ones built their homes above ground in the pattern still practiced by modern Puebloans.

Around A.D. 1000, local climates improved dramatically, allowing farming to expand onto higher elevation mesas where it had never before been possible – as high as almost 8,000 feet in some cases. Corresponding to this expansion, populations appear to have reached an all-time high, perhaps due to immigration of farmers from the south. For the first time, the Ancestral Puebloans began to expand north and west of the Colorado River in large numbers.

By about A.D. 1150, a series of prolonged droughts occurred when populations were at their highest. Though the ancient farmers had weathered serious droughts before, there were now too many people to feed and not enough food. People began to migrate south. For those who remained, violence and warfare became commonplace. Families retreated into defensive positions on cliff ledges and fortified outcrops that appear today as the cliff ruins throughout Greater Canyonlands.

By about A.D. 1300, the last of the farmers had abandoned their homes, the ruins of which stand as silent reminders of a cultural tradition that had survived here for 1,800 years, only to collapse in the face of droughts and social strife.
Maize farming appeared on a small scale north of the Colorado River about A.D. 250, apparently coexisting alongside hunting and gathering. These early farmers – known today as the Fremont – might have been Basketmaker immigrants from the south who had been farming for centuries, but no one knows for certain. They might also have been hunter-gatherers who learned farming from their Ancestral Puebloan neighbors. Living on the environmental fringe, they were highly adaptive to environmental changes, farming when possible and foraging for wild foods when crops failed. But their lifeway collapsed around A.D. 1300, at the same time as the Ancestral Puebloan communities to the south.

The Fremont people of the Greater Canyonlands area lived in pit houses and fashioned grayware pottery for cooking. They are known for their elaborate clay figurines, a unique style of moccasin fashioned from the leg of a deer, stone and shell pendants and jewelry, and a distinctive rock art tradition that continues to amaze modern visitors.

DNA evidence suggests the Fremont might have been distant cousins to the Ancestral Puebloan peoples to the south. What happened to them after A.D. 1300 is not known. There is growing evidence from the region that a few of them remained here, farming their maize well into the 1500s.

The Fremont expressions found along the Green River in Labyrinth Canyon, and along the San Rafael and Dirty Devil rivers, have not yet been studied in any depth by archaeologists. Each of these places remains an unexplored storehouse of scientific information that could help explain how ancient farmers could grow corn, beans, and squash in arid desert environments.
Evidence of the Fremont people is found along the Dirty Devil River, the Green River, the San Rafael River, and Horseshoe Canyon – all areas with permanent water that could have been used to irrigate fields.
The abandonment of Greater Canyonlands by Fremont and Ancestral Puebloan groups coincided generally with massive migrations elsewhere in the West. The Numa of California were migrating north and east into Nevada and Utah, eventually becoming the Ute and Paiute peoples of today. The Athapaskans were migrating south and east out of British Columbia along the eastern flanks of the Rocky Mountains, eventually becoming the Apache and Navajo. Meanwhile, the Ancestral Puebloans moved south into Arizona and New Mexico where their pueblos are still occupied today, and where they are neighbors of the Navajo.

The Hopi, Zuni, and other modern Pueblo people consider the archaeological sites of Greater Canyonlands to be sacred reminders of their ancestors’ migrations, and it is common for them to make spiritual pilgrimages here to honor their ancestors. Archaeological evidence supports their claims that they are direct descendants of the ancient ones who lived and prospered in Greater Canyon centuries before.

The Navajo consider the mesas and canyons of southern Greater Canyonlands – places like Bears Ears and Comb Wash – to be sacred ancestral homelands. Navajo healers still use these lands to collect plants and herbs for their ceremonies.

Greater Canyonlands is also significant to the White Mesa Utes, a name that refers to people from both the Southern Paiute of the San Juan Band and the Weeminuche Band of the Southern Ute. There was significant intermarriage between these two groups and the artifacts they left behind are often indistinguishable. Elk Ridge was so important to the Utes that they persistently defied all relocation efforts. The Bear Dance, a spring ceremony symbolizing nature’s awakening, was historically performed at the Bears Ears.

Although Greater Canyonlands was largely abandoned by about 700 years ago, the region continues to hold deep spiritual significance to modern-day Native Americans.
Early Spanish expeditions charged with establishing a direct trade route to settlements in California were compelled to skirt the deep chasm of the Colorado River and its labyrinth of side canyons. The 2,700-mile route they established is now known as the Old Spanish National Historic Trail.

The Green and Colorado rivers with their cacophonous rapids were too perilous for most early Euro-American explorers, but some did venture into Greater Canyonlands. Early fur trapper Denis Julien might have floated the rivers in the 1830s as his name is found etched on the walls of Cataract Canyon. And the harrowing experiences of Major John Wesley Powell and his crew, who explored the Colorado River in 1869 and 1871, are recounted in journals held in reverence by river runners today.

As the American West became more settled at the end of the 19th century, the vast maze of canyons north of the Colorado River, known as the San Rafael Desert, became a haven for the last vestiges of lawlessness in the West. Known as Robbers Roost, the area once sheltered as many as 200 to 300 heavily armed outlaws who defied lawmen with impunity in the 1880s and 1890s. Among the notorious characters who called it home were Butch Cassidy and his right-hand man, Elza Lay, and other members of their Wild Bunch, as well as a cadre of lesser-known bandits. Today, Robbers Roost remains a Mecca for Old West enthusiasts from around the world.

A few ranchers tried to make a go of it here, but they had minimal luck. Even the hardy Mormon pioneers largely avoided the inhospitable region.

More recently, the uranium boom of the 1950s inspired prospectors to venture into the wild canyon country of Greater Canyonlands. Many fortunes were made and lost in what may be considered the last mining rush of the American West.
Until recently, the vast majority of Greater Canyonlands remained a wild no man’s land: its remoteness, aridity, and rugged terrain largely served to protect the area’s historical and archaeological treasures from harm. Today, however, a multitude of threats imperil this remarkable outdoor museum, as well as the area’s scenic wonders and ecological health.

Dirty energy development and resource extraction

Existing federal land use plans throw open Greater Canyonlands to extractive industries, including oil and gas drilling, uranium exploration, potash mining, and even tar sands development.

Already, an oil boom is encroaching on the northern edge of Greater Canyonlands, industrializing this wild and archaeologically-rich landscape with scraped earth drilling sites, pipelines, pumpjacks, towering storage tanks, and a sprawling network of roads designed to accommodate heavy truck traffic. Exploration for potash, a component of fertilizer, is also underway. And approval of the first U.S. commercial tar sands mining operation on nearby lands threatens to open the door to similar development in Greater Canyonlands.

Resource extraction is capable not only of destroying ancient artifacts and obliterating historic settings, it also causes indirect damage. The improved or newly-created roads that service mineral extraction create expanded access to once remote points of departure, enabling vandals and looters to more easily plunder nearby cultural sites.

Skyrocketing and poorly regulated off-road vehicle use

Greater Canyonlands has long attracted visitors who enjoy driving jeeps on backcountry dirt roads to explore the area’s scenic wonders. But today, Greater Canyonlands is threatened by battalions of off-road vehicles with the technical capability to go where no one has ventured before.
In its existing land use plans, the Bureau of Land Management (BLM) opened an excessive tangle of routes to vehicle travel, some of them illegally created by maverick riders. Many of the agency’s designated routes are merely faint trails across the desert that go nowhere in particular and serve no purpose. Tragically, some routes pass directly over and through sensitive archaeological sites. In 2013, the U.S. District Court in Utah ruled that the BLM violated federal environmental and historic preservation laws by designating routes without completing the required archaeological surveys and other assessments, including in Greater Canyonlands. Information from such studies is essential for the agency to make route designations that avoid or minimize damage from ORVs.

This network of trails is now being used by vandals and looters to access ancient sites once protected by their isolation. Some alcoves formerly laden with artifacts are now moonscapes of looters’ pits. Each year, more cultural treasures are forever lost.

**What is needed: A Greater Canyonlands National Monument**

The most significant underlying threat to Greater Canyonlands is the area’s multiple use management regime, which fails to give priority to protecting the values that make this amazing landscape an essential part of our nation’s cultural and natural legacy.

Unless action is taken to change this, the area’s extraordinary cultural treasures, as well as its stunning scenery, exceptional recreational opportunities, and critical watershed values, will continue to be degraded and destroyed.

Now is the time for a presidential proclamation protecting Greater Canyonlands as a national monument!
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Author’s note: The Colorado Plateau is still home to the descendants of ancient peoples who lived in Greater Canyonlands, and its importance to these people continues today. Traditional knowledge taught by Native American tribes is sometimes very different from what western scientists have theorized about human history in this region. This publication is written from the perspective of a professional archaeologist, not from a tribal viewpoint.

For more information, visit: greatercanyonlands.org

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