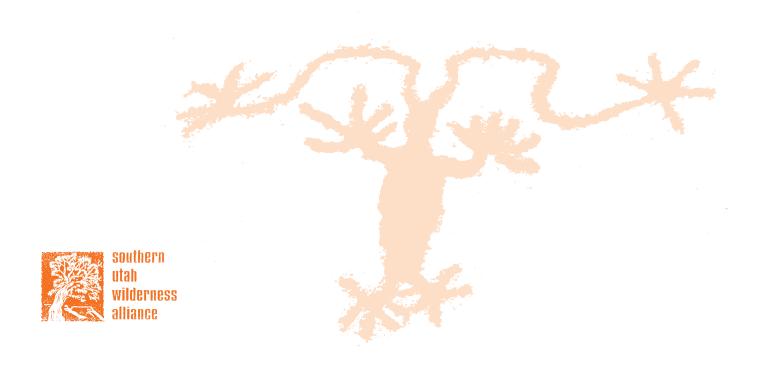
Preserving Prehistory



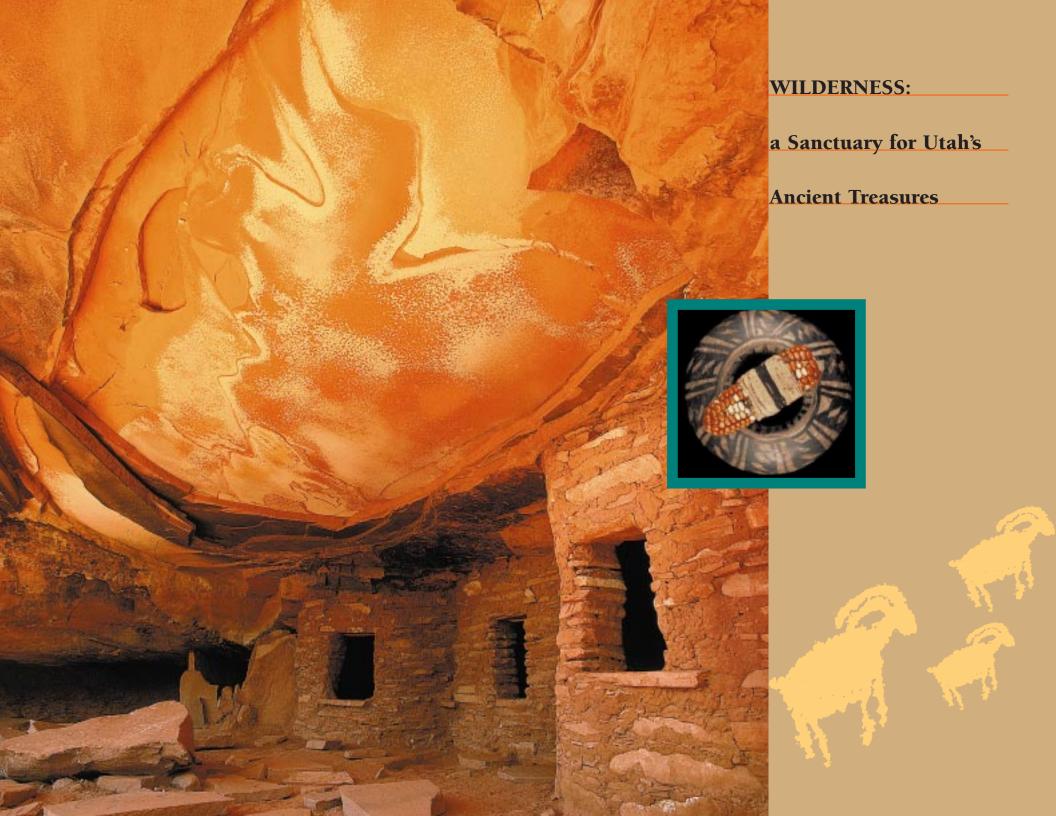
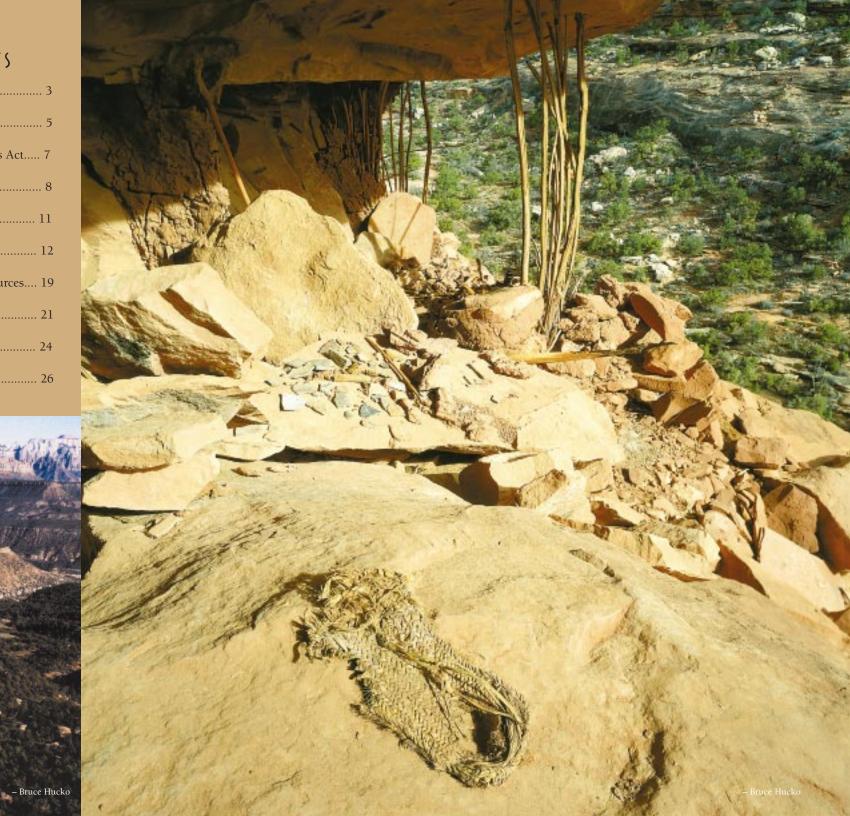


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Executive Summary

Utah's redrock wilderness country is famous for its sinuous slot canyons and soaring desert buttes, but deep within the folds of this remote landscape lie astonishing remnants of prehistoric cultures: cliff dwellings, stone towers, kivas, and rock art. Utah's wilderness lands also harbor a rich array of ancient fossils, some found nowhere else in the world.

These artifacts remain like faded fragments of long-forgotten stories, compelling us to look closer and imagine the past, thousands of years ago. Fossilized dinosaur bones weather from their tombs in the Cretaceous outcrops of the Kaiparowits Plateau; eerie petroglyphs haunt remote corners of the Uinta Basin; and abandoned cliff-dwellings keep silent vigil from the sandstone alcoves above the San Juan River. The prehistoric resources found in Utah's wild lands connect the past and present, and form a unique and irreplaceable record of what has come before.

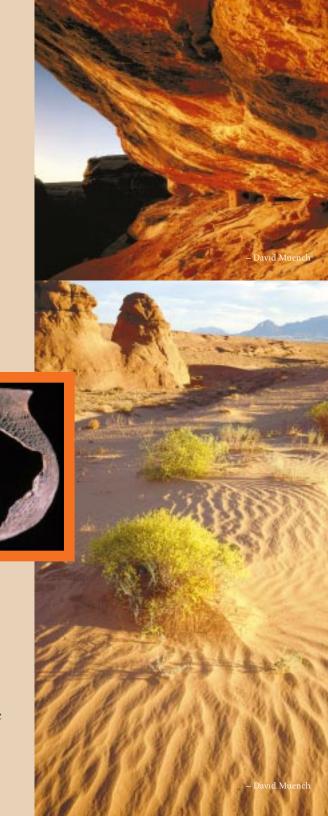
Unfortunately, this record – one that took thousands of years to create – is rapidly being erased. Drill rigs, bulldozers, off-road vehicles (ORVs), and even hikers are pushing ever further, and in ever greater numbers, into the wilderness. In the face of such pressures, prehistoric treasures are all too

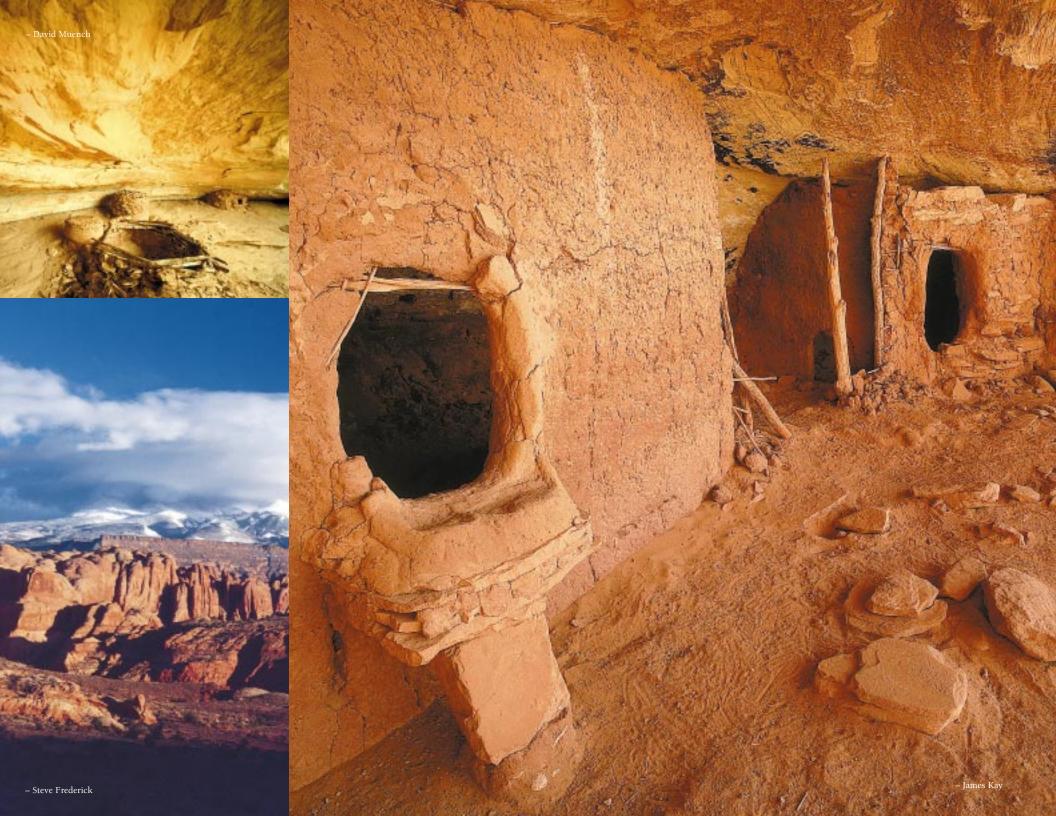
often damaged, destroyed, or stolen. Unlike other resources that may recover with time, cultural and paleontological resources are strictly non-renewable. When we make choices about the fate of prehistoric artifacts, our decisions will shape the legacy we leave for all the following generations.

The federal Bureau of Land Management (BLM) is charged with the protection of cultural sites and rare fossils in much of Utah's canyon country. Despite the good intentions of many who work for the BLM, the agency provides inadequate protection for Utah's irreplaceable and precious prehistoric resources. For example, the BLM has not come close to completing an inventory of cultural sites on lands under its jurisdiction, too often fails to consult with Native American tribes when it authorizes projects that impact their cultural sites, and lacks effective law enforcement to protect cultural treasures from looting or other damage. The agency has also authorized

activities such as grazing, off-road vehicle use, oil and gas drilling, and mining without first ensuring the protection of unique fossils or ancient human artifacts.

This report describes the prehistoric resources found in Utah's wilderness lands, their importance, and the threats that they face. It examines the laws and policies that govern the BLM's care of paleontological and archaeological resources,¹ and it presents specific examples which highlight management challenges and opportunities. Based on input from professional archaeologists, paleontologists, Native American tribal leaders, and other experts, the report recommends specific policies to address some of the obstacles to effective prehistoric resource management on Utah's wilderness lands.

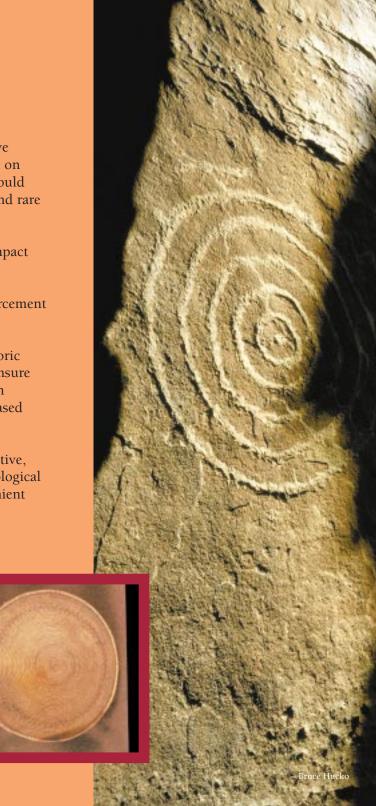




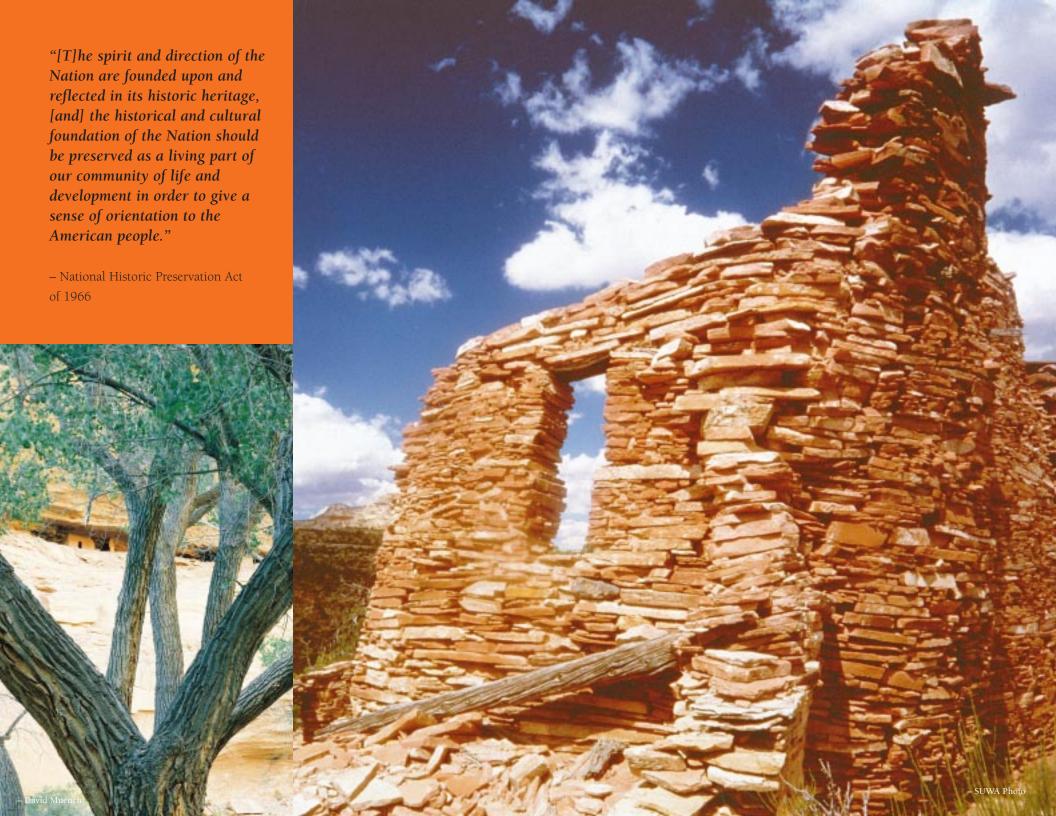
Recommendations

If Utah's cultural and paleontological resources are to survive past our own age, we cannot afford to complacently maintain the status quo. We recommend the following:

- Congress should pass America's Redrock Wilderness Act. Such designation would largely remove threats posed to many cultural and paleontological resources, as well as reduce the workload imposed on BLM archaeologists, by motorized vehicle use and development proposals. Wilderness designation would also allow land managers and archaeologists to focus on proactive measures to protect cultural sites and rare fossils.
- BLM should always consult with Native American tribes before authorizing **any** project that may impact cultural sites.
- BLM should request, and Congress should grant, adequate funding to conduct an effective law enforcement program to protect cultural sites.
- BLM should immediately complete the cultural resource inventories mandated by the National Historic Preservation Act and Executive Order 11593. The BLM should also address budget irregularities to ensure that the cultural resource program does not subsidize other programs, and the agency should strike an equitable balance between Section 106 compliance work and more proactive work such as research-based cultural inventories, site stabilization, and site interpretation.
- Congress should strengthen laws covering cultural and paleontological resources to provide substantive, rather than merely procedural, protection. The exceptional, irreplaceable archaeological and paleontological resources found on Utah's public lands should not be sacrificed to bulldozers blazing the most convenient path to a well-pad or mine site.
- BLM should use its planning and management tools to create more specially designated areas, such as Areas of Critical Environmental Concern, where archaeological and paleontological resources are given priority over development and recreation.
- BLM policy should protect surface sites from damage due to motorized vehicle use by prohibiting cross-country travel. All trails should be surveyed to ensure that they do not negatively impact cultural properties.







America's Redrock Wilderness Act: A Sanctuary for Utah's Prehistoric Resources

For over a dozen years, the Utah Wilderness Coalition (UWC) has worked to pass America's Redrock Wilderness Act in the United States Congress – legislation that in its current form would protect as wilderness more than 9 million acres of public lands managed by the Bureau of Land Management (BLM). According to the Wilderness Act:

"[a] Wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean. . . an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions..."

Wilderness designation protects our last remaining wild lands in their natural state: free from billboards, pavement, oil and gas wells, and off-road vehicles. If passed, America's Redrock Wilderness Act would permanently preserve some of the most stunning landscapes on earth, protect fragile plants and wildlife, and provide us with a reservoir of sublime stillness in an increasingly frenetic world. America's Redrock Wilderness Act would also provide the often-overlooked benefit of protecting the threatened archaeological and paleontological resources found on Utah's wild lands.

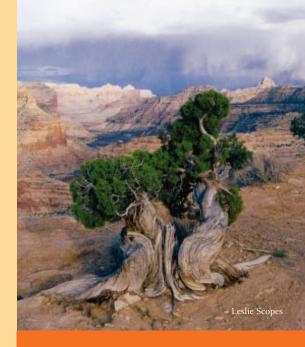
While America's Redrock Wilderness Act is not a solution for all the difficult problems surrounding the management of prehistoric resources on public lands, it offers a good start. Wilderness is consistent with the goals of some Native American tribes that wish to see "the natural perpetuation and 'resting' of [their] ancestral sites." Wilderness areas can also furnish future academic researchers with a "bank" of preserved archaeological and paleontological sites (although it must be noted that this sort of academic use may conflict with the wishes of some tribes). Either way, restrictions placed on land use by wilderness designation provide important de facto protections for these resources.

Designating wilderness areas removes the direct and indirect impacts posed to cultural and paleontological resources by motorized vehicle travel, and the construction of mines, drill-sites, well-pads, and other developments. Additionally, because wilderness designation would stop many development proposals, agency archaeologists would not be as overloaded with associated compliance work. As a result, resources would be freed within the cultural program for more proactive work such as research-based inventories, site interpretation, and site stabilization.

While wilderness designation would not come without challenges to managers of cultural and paleontological resources on public lands, it would clearly provide greater protection to these irreplaceable resources.⁶ Indeed, BLM archaeologists from Arizona and California (where large areas of BLM wilderness have already been designated) find that wilderness designation provides a net benefit to archaeological resources.⁷ In an article about managing cultural resources in the Grand Staircase-Escalante National Monument, archaeologist BetsyTipps notes that wilderness designation is one of the best, most cost-effective ways of reducing visitation to sensitive sites and thus protecting those sites.⁸

Areas proposed for wilderness designation by America's Redrock Wilderness Act





"[T]he Hopi Cultural Preservation Office generally supports the efforts of the Southern Utah Wilderness Alliance to establish a Redrock Wilderness, and we provide our endorsement of America's Redrock Wilderness Act." 9

- Hopi Cultural Preservation Office

"The Northwestern Shoshone are in support of any effort the Southern Utah Wilderness Alliance might present on behalf of Da-ma-so-go-be-a (mother earth)." ¹⁰

- Northwest Band of the Shoshone Nation

"The only viable option for conserving archaeological sites and controlling destruction is to designate large areas as wilderness." ¹¹

 Statement of archaeologist Claudia Berry before the House Subcommittee on National Parks, Forests, and Lands, 1995 "Hopi people consider prehistoric archaeological sites and isolated occurrences to be the 'footprints' of our ancestors."

Leigh Kuwanwisiwma, Director,
 Hopi Cultural Preservation Office



Changing Cultures

The 23 million acres of BLM lands in Utah are home to nearly half a million archaeological sites. ¹² They range from subtle petroglyphs etched into smooth sandstone walls to long-abandoned lookout towers perched like lonely sentinels atop canyon rims. Reaching even further back in time, Utah's public lands hold a wealth of important Jurassic and Cretaceous dinosaur and mammal fossils and other paleontological riches.

The ruins left by the ancestral pueblo culture – also commonly known as the Anasazi – are perhaps Utah's most famous prehistoric resource, but there is much more to the state's cultural history. Big-game hunters moved into what is now Utah over 11,000 years ago. Since then, human cultural patterns have constantly shifted, responding to changes in climate and fauna, technological developments, and population shifts. The result is a rich and complicated history, one that experts are still piecing together as archaeological sites in Utah slowly give up their secrets.

PALEO-INDIAN CULTURES (about 11,500 to 9,000 years ago)

The earliest evidence of human habitation in Utah comes from isolated discoveries of large, distinctively-shaped stone spear points. Archaeologists associate these chipped stone fragments with bands of big-game hunters who roamed North America more than 11,000 years ago. Known as Paleo-Indians, these earliest Americans probably focused their attention on hunting bison, and now-extinct animals like mammoths.¹³ Most likely, they also gathered vegetable foods and adapted their survival strategies to suit local resources and conditions.¹⁴ Evidence of Paleo-Indian cultures is sparse in Utah, but artifacts from the period have been found in the Uinta Basin and the San Rafael Swell, as well as the southwest and southeast corners of the state.¹⁵

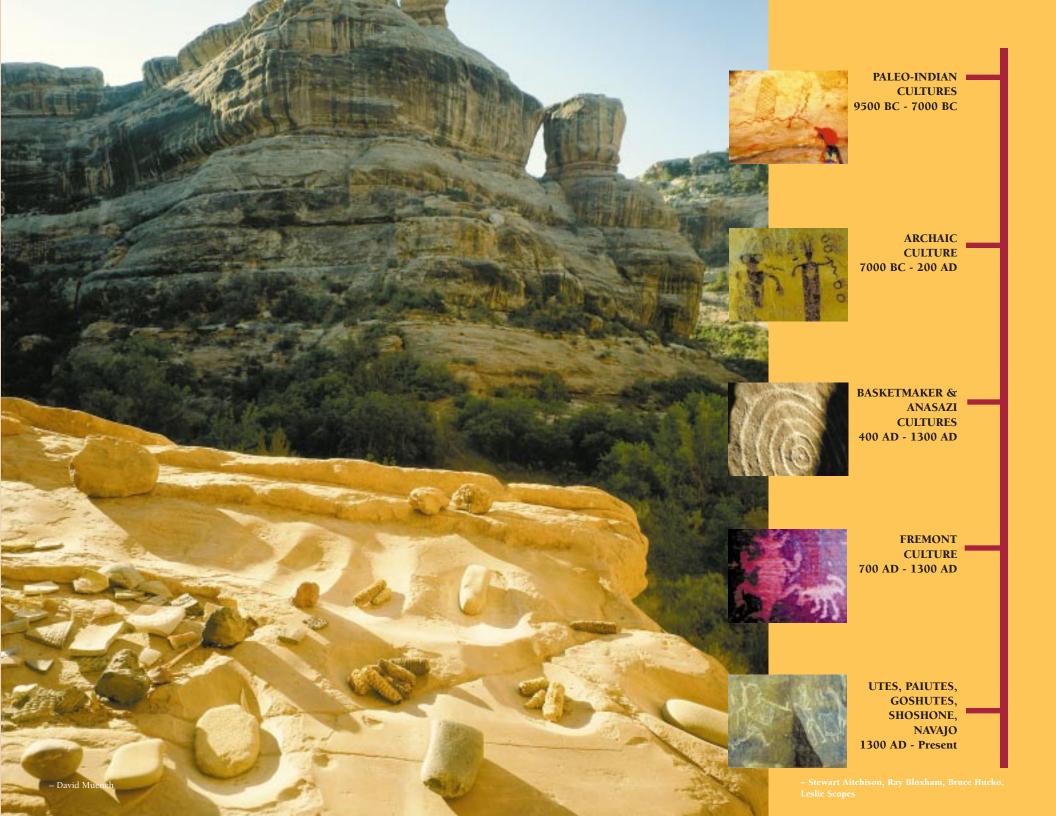
ARCHAIC CULTURE (about 9,000 to 1,800 years ago)

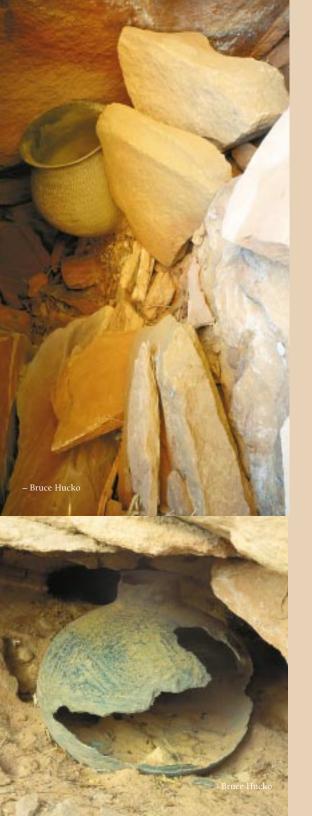
By roughly 8,000 years ago, big game herds in most of North America had dwindled drastically. In response, prehistoric hunting bands began to pursue a broader variety of wild game and shifted more attention to gathering vegetable foods. Evidence of this culture, known as the Archaic, is found throughout the state of Utah. Archaeologists have recovered artifacts like chipped-stone spear points, grinding stones, digging sticks, yucca sandals, basketry, nets, and cordage from a variety of Archaic sites. ¹⁶ The Archaic components of western Utah's Danger Cave and Hogup Cave sites are well-known for having provided archaeologists with some of the most continuous and complete cultural sequences in the world. ¹⁷ Archaic peoples are also thought to be responsible for "Barrier Canyon" style rock art: large, anthropomorphic pictographs named after the mysterious figures drawn on a rock art panel along Barrier Creek in central Utah. ¹⁸

ANCESTRAL PUEBLO CULTURES (about 1,600 to 700 years ago)

More than 2,000 years ago, some Archaic peoples in Utah began to plant maize and squash, thus setting in motion another cultural shift. The adoption of horticulture led to cultural changes – most notably a more sedentary lifestyle. By about 400 A.D., people in southeastern Utah began to create more substantial structures and intricate basketry. Members of this culture are sometimes known as Basketmakers. ¹⁹

The cultural pattern in southeastern Utah continued to change as the Basketmakers developed or adopted new technologies such as cotton weaving, pottery, and the bow and arrow.²⁰ Horticultural techniques evolved to include check dams, irrigation ditches, and terracing. These developments led to permanent, horticultural villages during the 8th century A.D., and marked the beginning of what is popularly called the Anasazi culture.²¹ As time progressed, ancestral pueblo villages and technologies grew ever-more complex. By 1100 A.D. their trademark masonry dwellings included multistory, multifamily residences, and they produced elaborately decorated pottery.²² Then, perhaps due to a prolonged drought near the beginning of the 14th century, inhabitants of these villages abruptly abandoned their canyon communities in Utah, most likely moving to more southerly farming communities in Arizona and New Mexico.





Most archaeologists believe that these early communities are linked to present-day Pueblo tribes such as the Hopi of northern Arizona, hence the preferred term, "ancestral pueblo".²³ In fact, the Hopi do not consider these ancestral sites to be "abandoned" at all; they believe that the ancient habitation sites, pictographs, and petroglyphs are simply "footprints" of their ancestors as they migrated to *Tuuwanasavi*, the Center of the Universe.²⁴

FREMONT CULTURE (about 1,300 to 700 years ago)

At roughly the same time that the ancestral pueblo culture blossomed in southeastern and south central Utah, the Fremont culture developed in much of the rest of the state. Like the ancestral pueblo cultures, the Fremont gradually adopted horticulture, irrigation, pottery, and a more sedentary lifestyle when compared to that of the nomadic Archaic culture. However, the Fremont always continued some hunting and gathering to supplement their food supply.

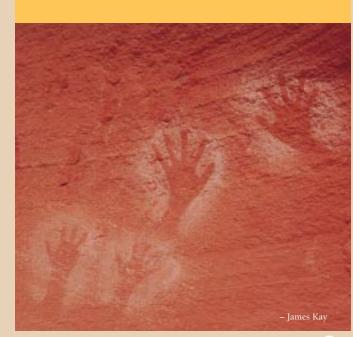
Near central Utah's Wasatch Plateau, the Fremont model led to the establishment of stable, horticultural villages – the "classic" pattern.²⁵ Outside central Utah, however, the Fremont pattern is much harder to pin down. Instead of following one single subsistence model, the Fremont employed a variety of strategies, ranging from more hunting-based nomadic bands to villages centered on rich marsh and river ecosystems. Despite the diversity found within their culture, the Fremont shared a distinctive coiled gray pottery, rod-and-bundle basketry, and a unique artistic style featuring trapezoidal anthropomorphic figures.²⁶ Although the Fremont culture was adaptable and flexible, it mysteriously faded from the archaeological record around 700 years ago and archaeologists have not definitively linked the Fremont culture to any modern tribe.²⁷ The Northwest Band of the Shoshone, however, claim a cultural affiliation with the Fremont people.²⁸

UTES, PAIUTES, GOSHUTES, SHOSHONE, NAVAJO

After about A.D. 1300, the ancestral pueblo and Fremont cultures were largely gone from Utah. Filling the void in most of the state (or perhaps pushing the old cultures out) were hunter-gatherer bands from the eastern Great Basin.

Archaeologists sometimes call these groups Neo-archaic peoples. They are also known by their more common names – Utes, Goshutes, Paiutes, and Shoshone. Like the Archaic groups before them, these people lived in small bands and practiced a mobile lifestyle, harvesting wild plants and hunting small game. Unlike their Archaic predecessors, some of these bands made limited use of horticulture in favorable conditions.²⁹ While these hunter-gatherers left behind some archaeological sites, they are better known from ethnographic accounts after contact with Euro-Americans than from the archaeological record.

In the southeastern part of Utah, Navajos replaced – or displaced – ancestral pueblo peoples. Perhaps originating from as far away as the Canadian plains, the Navajo hunters and gatherers adjusted their lifestyle to meet the challenges of the Colorado Plateau by borrowing elements from the Pueblo culture, and later, from the Spanish. However, they retained some distinctive characteristics, such as their use of round brush or log houses, called hogans. Like other contemporary tribes, the Navajo are better known from historical accounts and anthropological study than from the archaeological discoveries.



Ancient Fossils

Hidden in the colorful strata of Utah's wilderness are countless remarkable fossils. Most famous are those from the Jurassic and Cretaceous periods, over sixty-five million years ago – a time when dinosaurs roamed the planet. Of particular importance to researchers interested in dinosaurs are the badlands of the San Rafael Swell and the high plateaus of Grand Staircase-Escalante National Monument. Fossils from these wild lands may help paleontologists solve some of the mysteries of these long-vanished giants.

The San Rafael Swell is flanked by outcrops of the Jurassic-age Morrison Formation, "one of the most prolific sources of dinosaur fossils in the world." Significantly, the Morrison Formation has yielded the famous skeletons found in Dinosaur National Monument and the Cleveland-Lloyd Dinosaur Quarry. The Swell is also home to the Cedar Mountain Formation, a Cretaceous-age stratum that is especially important to paleontologists because its dinosaur fossils serve to fill-in the "missing links" that had previously existed between the upper Jurassic and the upper Cretaceous periods. As one paleontologist noted, "the links are not so 'missing' after all. They can be found, if researchers look hard enough, in the gullies and canyons of east-central Utah, weathering out of the Cedar Mountain Formation."

Further south, the Grand Staircase-Escalante National Monument contains promising outcrops of the Morrision and Chinle Formations—Jurassic and Triassic strata that have yielded important fossils in other regions.³³ However, the monument is most famous for its Cretaceous-age fossils. Discoveries made in the Kaiparowits Formation within the monument serve as global standards for comparison.³⁴ They have provided scientists with information on evolutionary history, and have extended the range of previously known Cretaceous fauna.³⁵ Indeed, researchers working in the

monument have found some of the earliest marsupial mammals in the world – perhaps precursors to the great expansion of mammals that would soon come in the Tertiary

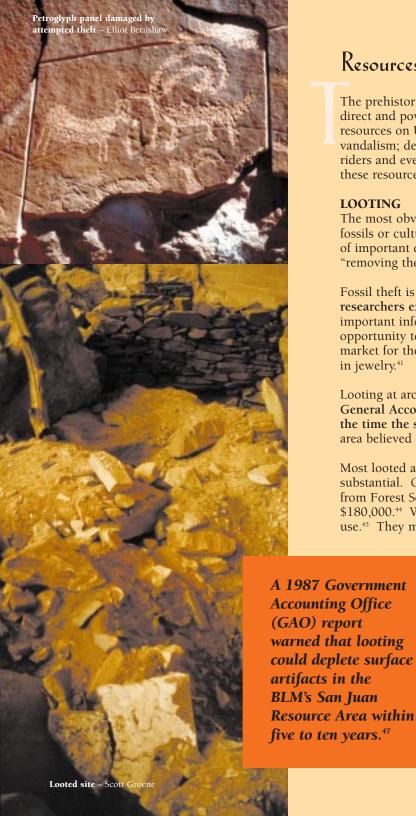




"A great deal of what we now know about the anatomy, biology, and phylogeny of dinosaurs has been derived from the study of fossils collected from eastern Utah." ³⁷

- Photos courtesy of BLM

 Frank Decourten, author of Dinosaurs of Utah



Resources at Risk

The prehistoric resources found on Utah's wild lands are priceless assets that fill us with wonder and connect us – in a direct and powerful way – to the past. Sadly, these connections are steadily disappearing. Cultural and paleontological resources on Utah's public lands are vulnerable to a number of threats: intentional destruction from looting and vandalism; demolition in the face of mining, oil and gas or other development; unintentional damage caused by ORV riders and even hikers; and at times, destruction due to mismanagement by the very agency charged with protecting these resources.

LOOTING

The most obvious form of damage to the prehistoric resources found in Utah's wilderness is looting. Looters remove fossils or cultural artifacts for personal profit. In doing so, they not only steal public property, they often rob scientists of important diagnostic information.³⁸ One Utah archaeologist likens removing artifacts from cultural sites to "removing the hands from a clock."39

Fossil theft is widespread in Utah. Every year, looters take five to ten times the volume of fossils that scientists and researchers excavate. 40 These illegal excavations deny scientists the opportunity to examine new finds that may yield important information about Utah's early climate, geography, plants, and animal life. And they deny everyone else the opportunity to view and learn from these finds. While some looters keep the fossils for themselves, there is a lucrative market for the ancient bones. A sizable dinosaur leg may fetch upwards of \$10,000, and many smaller fossils are used in jewelry.41

Looting at archaeological sites – sometimes called pothunting – is also common in Utah. A 1987 study by the General Accounting Office (GAO) found that over 18,000 sites on BLM land in Southeast Utah had been looted by the time the sites were recorded by professional archaeologists. 42 In 2001, a BLM archaeologist working in the same area believed that virtually all cultural sites had been impacted by looting to some extent.⁴³

Most looted artifacts sell for only a few dollars, but in exceptional cases the financial reward for pothunting can be substantial. One convicted looter from Utah received about \$30,000 for pottery, baskets, and other artifacts he stole from Forest Service lands in southeast Utah. One of the baskets and its contents was later sold to a dealer for \$180,000.44 While some pothunters are motivated by the profit, others collect ancient artifacts for their own personal use. 45 They may take arrowheads from public lands to add to their collections, or attempt to bring a section of a

Fremont pictograph panel from the canyon to their homes.

Many visitors who pocket arrowheads or pottery sherds on public lands don't know that they are breaking the law, much less damaging a fragile resource. Innocent as these tourists may be, the cumulative impact of their artifact collection on Utah's wilderness lands is significant: it deprives us of important information about past cultures just as surely as the more purposefully destructive activities of professional pothunters.

OFF-ROAD VEHICLES

Off-road vehicle (ORV) and four-wheel drive vehicle use in Utah is skyrocketing, 46 and is increasingly responsible for damage to Utah's prehistoric sites. The weight and torque of offroad machines can easily destroy fragile surface artifacts and fossils. What's more, by making access to remote backcountry sites relatively easy, ORV use can cause indirect impacts to prehistoric resources, such as increased visitation, looting, and vandalism.





Although regulations and Executive Orders⁴⁸ compel BLM land managers to designate ORV trails in such a way as to avoid impacts to sensitive cultural resources, the agency has failed to implement effective on-the-ground protection. As a result, ORVs commonly rumble through cultural sites, causing unnecessary and irreversible damage. When ORVs travel through archaeologically or paleontologically rich areas, their knobby tires wreck havoc, breaking and scattering ancient artifacts and obliterating contextual information.⁴⁹ They can also undermine the stability of fragile prehistoric structures by vibrating and eroding the soil at the base of their walls. Although many ORV riders may be unaware of the harm they can cause to archaeological sites, at least a few reckless riders use their vehicles to intentionally ravage cultural sites.

Unfortunately, the damage caused by off-road vehicle use extends far beyond the tire-tracks of the machines themselves. As more people use ORVs and other machines to penetrate deep into Utah's backcountry, visitation at formerly remote sites has increased sharply.⁵⁰ According to the BLM, "[t]his increased visitation inevitably results in intentional and inadvertent damage through collection, vandalism, surface disturbance, and other depreciative behavior."⁵¹ Indeed, ORVs facilitate the work of pothunters and vandals: studies of archaeological vandalism have linked the ease of access afforded by the use of motorized vehicles to greater resource damage.⁵² Put another way, cultural sites that are not easily accessible to four-wheel drive trucks and ORVs are more likely to retain their integrity and their value to science.

MINING AND OIL AND GAS DEVELOPMENT

Corporations are increasingly targeting Utah's wild lands in their search for oil, natural gas, and coal, and the Bush Administration has catered to the industry's demands to open public lands to development. In fact, in a recent information bulletin, the Utah State BLM Director instructed BLM staff that oil and gas lease work is their "No. 1 priority." Unfortunately, this kind of development in pristine wilderness lands exacts a heavy toll, not only causing profound ecological impacts, but inevitably resulting in the destruction of cherished archaeological and paleontological resources.

Despite the eco-friendly claims made by oil companies, drilling lays waste to pristine landscapes. Bulldozers scrape away vegetation not only for well pads, pumpjacks, and towers, but for the vast network of roads, pipelines, waste pits, and storage tanks that serve them. Although federal laws require archaeological surveys in advance of any such surface-disturbing activity, they do not necessarily compel developers to protect prehistoric resources that are found.⁵⁴ Because of this, irreplaceable archaeological sites can be obliterated in favor of well pads and roads. The BLM itself admits that authorized uses of public lands, such as oil and gas drilling, result in "an ever-diminishing cultural resource base, even when data recovery and other forms of mitigation are employed." ⁵⁵

In addition to its direct impact on prehistoric resources, oil and gas drilling leads to indirect damage, affecting a much larger area than the simple footprint of a pumpjack or pipeline. For example, oil and gas projects cause a surge in traffic and visitation to the surrounding cultural sites: four-wheel drive and ORV riders make use of the newly-created roads as points of departure, enabling them to reach formerly inaccessible areas with relative ease. As visitation to these remote sites increases, they inevitably suffer from both inadvertent and intentional damage.⁵⁶

Sadly, oil and gas companies are greatly interested in areas of Utah that are rich in cultural resources, such as the Book Cliffs, the Dome Plateau, and the Lockhart Basin/Hatch Point region. If the BLM allows drilling to take place on these wilderness lands, important archaeological sites – ranging from Archaic campsites to Ute petroglyphs – will be damaged or lost forever.

RECREATION

Every year, thousands of hikers, bikers, backpackers, rafters, canyoneers, and other non-motorized adventurers visit Utah's wild places, lured in part by the state's rich archaeological heritage. Despite the fact that such users tend to espouse "no-impact" backcountry ethics, they do pose a threat to archaeological sites.







"It is common to find sites where structures are visible only as chunks of mortar scattered among the dung, with perhaps a tell-tale stain of clay along an alcove back wall to indicate a structure once stood there. Wherever livestock have access, surface artifacts are rare. The integrity of artifact concentrations is lost, and the artifacts themselves are not visible unless subsurface testing is done." 64

National Park Service
 Environmental Assessment

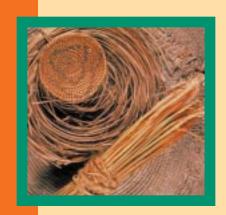
Sheer numbers are an enormous problem. In 1993, fewer than 3,000 visitors stopped by the Kane Creek Gulch Ranger Station in the Grand Gulch primitive area. By 2001, that number had nearly doubled to over 5,400.⁵⁷ With so many people, even accidental or minor transgressions of backcountry ethics can add up to major damage. For example, foot traffic near the base of cliff-dwellings can erode soils, causing instabilities in the ancient walls that may eventually lead to collapse. Inadvertently brushing against delicate pictographs can degrade or even erase the prehistoric images. Recreational users who aren't careful or who haven't taken the time to familiarize themselves with proper etiquette can do even more damage. For instance, misguided photographers have marred rock art panels by outlining their fading figures and symbols with chalk, and uninformed hikers have collected potsherds and arrowheads as souvenirs of their desert adventures. Incredibly, some individuals have even used roof timbers from ancient dwellings as fuel for their campfires.⁵⁸ These needless abuses inflict tremendous damage on an irreplaceable resource.

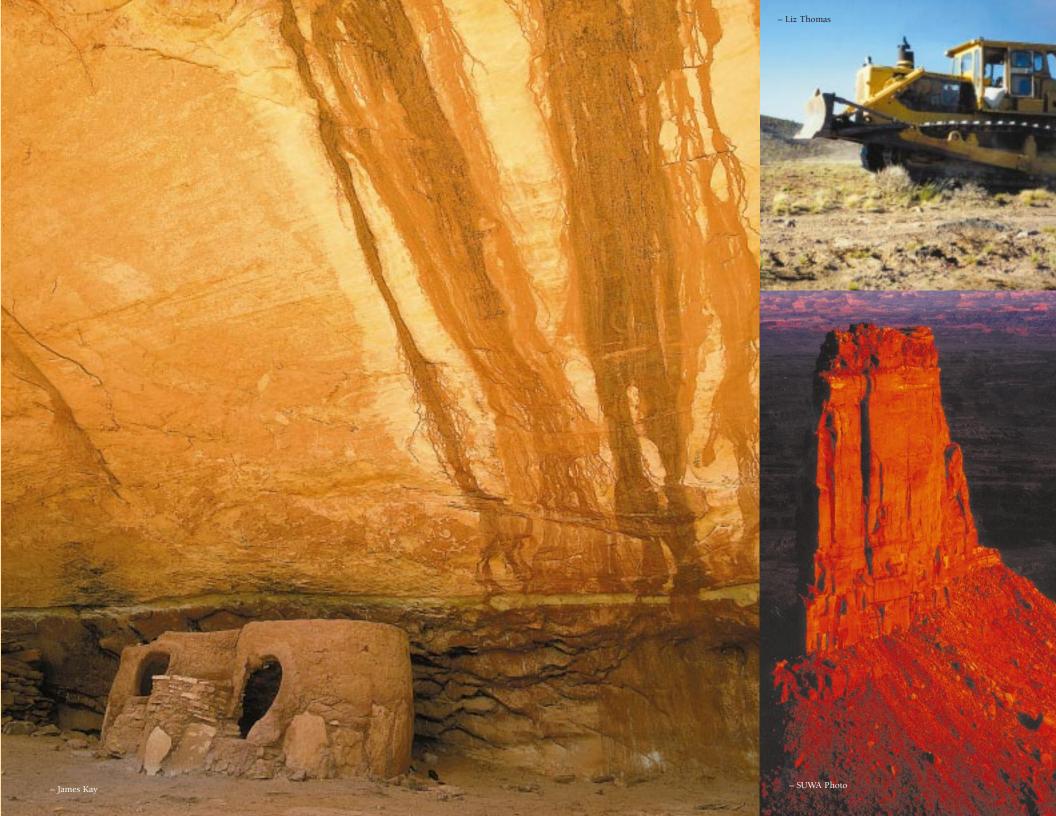
LIVESTOCK GRAZING

Grazing also takes its toll on the prehistoric resources found on Utah's wilderness lands. An assessment of the Glen Canyon National Recreation Area (managed by the National Park Service) noted the extensive damage cattle can cause to above-ground masonry structures:

[d]isplacement and loss of masonry elements, toppling of walls, loss of interior features and other construction details, churning of fill, and undermining of walls and foundations can all happen very quickly once a structure is exposed to livestock grazing.⁵⁹

The report also cited evidence of widespread damage to surface and subsurface artifact concentrations, middens, and even pictographs and petroglyphs – all caused by livestock grazing.⁶⁰ According to survey data from one plot in the National Recreation Area, grazing had impacted 86 percent of the recorded prehistoric sites.⁶¹ Despite the documented damage to cultural resources caused by cattle grazing, the BLM continues to renew the leases of grazing allotments in culturally rich areas with little or no monitoring or mitigation.⁶² To make matters worse, the BLM periodically attempts to improve grazing conditions by uprooting the native pinyon-juniper vegetation using an enormous chain suspended between two bulldozers. These so-called "vegetation treatments" not only scar the land, they displace and pulverize any cultural artifacts as well.⁶³







Examples of Damage to Utah's Prehistoric Resources

• FOSSIL THEFT

In 1991, a Richfield, Utah man found a rare, 85% complete allosaurus skeleton in the Mussintuchit Badlands west of the San Rafael Swell.⁶⁵ Instead of reporting the find to the proper authorities, the man dug up the dinosaur bones and sold them for a profit. He hastily took just nine days to do a job that would have taken a proper scientific excavation about six months, damaging the skeleton as a result.⁶⁶ Federal authorities didn't learn of the allosaurus skeleton – or its theft – until 1998. By that time, it was too late to file charges in the matter of the illegal excavation.⁶⁷

• OFF ROAD ABUSE

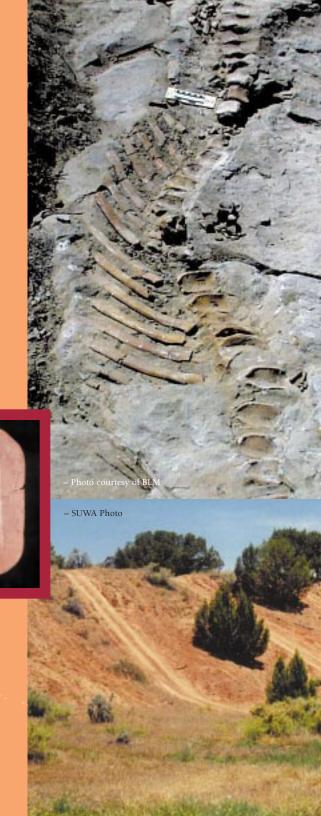
Author Steve Allen has hiked, guided and explored the canyons of southern Utah for over thirty years. Steve recalls witnessing ORV damage to archaeological sites:

"One after another, the group [of ORVs] roared past the 'Road Closed' signs and, with air under their tires at the top, thumped down next to the ruin. The ground shook. Next, a couple of the motorcycle riders propelled their machines into the ruin through a break in the wall and spent a minute spinning 'browdies' [circles] inside the dwelling."

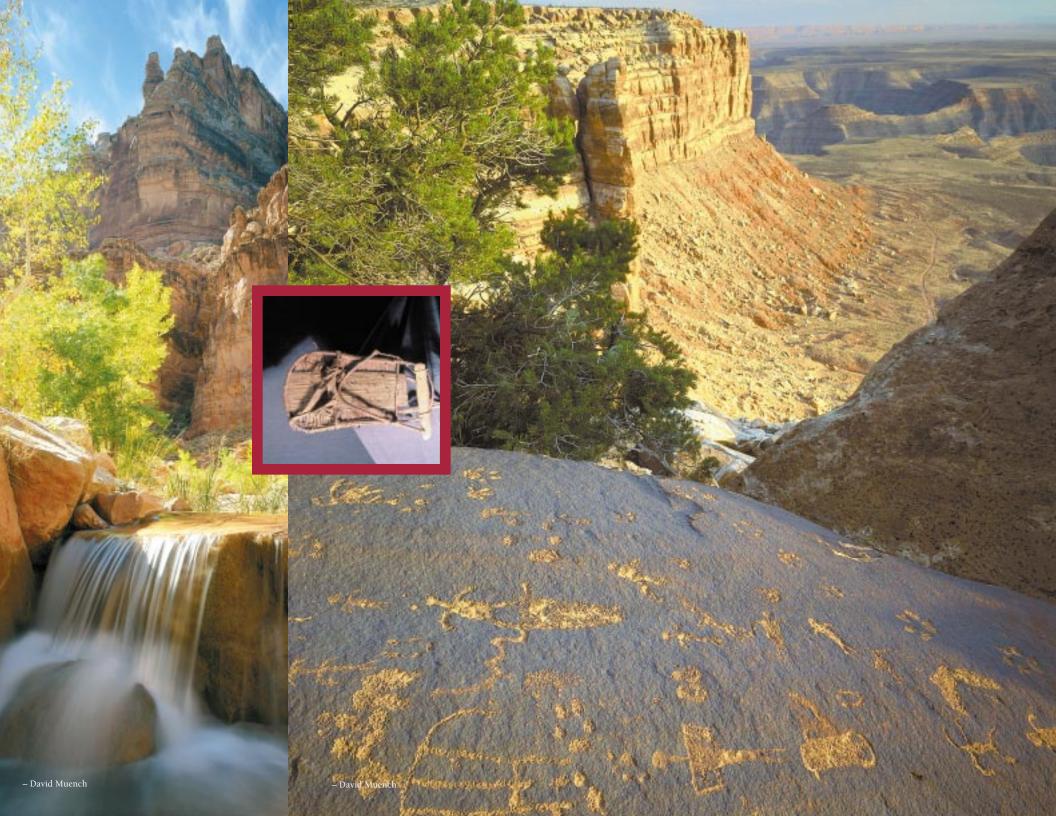
"More recently, on a trudge across the pinyon and juniper uplands between canyons in southern Utah, I followed an often-used ORV track for a mile or so. The area was simply packed with mesa top sites, many dating back to the Basketmaker II period, close to 1,500 years old. There in the track, a matate – a flat grinding stone used by the ancestral puebloans to prepare their grains – lay in two pieces, an ORV track going right over it." – Steve Allen

AGENCY MISMANAGEMENT

Certain areas of San Juan County in southeast Utah are filled with the delicate remains of ancient cultures. Unfortunately, the Bureau of Land Management sited an off-road vehicle "play area" in just such an area in the spring of 2001. The BLM employs these designations to attract and concentrate ORV use, thus creating de facto sacrifice zones. Although the agency attempted to use fencing to safeguard some of the cultural resources from the ORV impacts, multiple tire-tracks on the far side of the BLM's protective fence-line call into question the efficacy of such barriers. What's more, pottery sherds litter the ground even on the play area side of the fence, where the BLM now encourages ORV use.







BLM Mismanagement & Low Budgetary Priority Puts Treasured Sites at Risk

Although the BLM has the authority and duty to develop and implement strong cultural and paleontological resource protection programs, the agency's cultural resource program is mired in an administrative swamp. Cultural resource laws are often insufficiently implemented, and weaknesses in the statutes are magnified, not minimized.

LIMITED RESOURCES

Even more than other agencies, the Bureau of Land Management is hobbled by limited resources. With jurisdiction over 264 million acres, the BLM manages more land than any other federal agency, and its budget is stretched thin. The agency receives only about 49 dollars per one hundred acres for its cultural resource program, much less than other major federal land management agencies ⁶⁸ Similarly, the BLM employs fewer cultural resource management staff than similar agencies despite the fact that it manages far more land. ⁶⁹

MISMANAGEMENT OF FUNDS AND STAFF TIME

The BLM does not make the most of its limited budget. The agency spends its funds almost exclusively on compliance activities conducted under Section 106 of the National Historic Preservation Act and ignores more proactive work. The Moreover, the BLM misallocates its cultural resource budget. The agency should charge the cost of archaeological compliance work to the "benefiting subactivity." For example, archaeological work done for the benefit of a proposed oil and gas project should be charged to the agency's oil and gas budget. However, the BLM inappropriately charges such work to its cultural resource budget, in effect using scant cultural resource funds to subsidize the oil and gas activity. A recent BLM report lamented that "as long as the [BLM's] cultural program continues to subsidize the cost of compliance work for other programs, it will be unable to move forward with its own program."

NO PROACTIVE WORK

The BLM has not established an adequate account of the cultural resources it is charged with managing: in the roughly 30 years since the requirement to survey public lands was established,⁷³ the BLM has barely scratched the surface of its holdings. In Utah, the BLM has surveyed less than 6% of its lands for cultural resources.⁷⁴ The Bureau admits that this lack of knowledge has created a "paradoxical situation where BLM may be managing less important known resources at the expense of more important but unknown resources."⁷⁵ Not only is the BLM not fulfilling its responsibility to survey lands for cultural resources, it is not performing other "proactive" duties to safeguard cultural resources. In its own report, the BLM confesses that it is deficient in stabilizing and interpreting sites, preparing historic contexts, project plans, and National Register nominations.⁷⁶

LACK OF PLANNING

Although the BLM is required to consider cultural resources in its planning efforts,⁷⁷ nearly all of the Utah BLM's major land management plans fail to adequately address the issue. These plans are key to the protection of cultural sites and fossils because they set broad management goals and dictate how lands will be used for a decade or more. Most of the BLM's planning documents, however, give only passing mention to cultural resources and don't come close to describing a comprehensive strategy to preserve and protect cultural properties. Some plans identify Areas of Critical Environmental Concern (ACECs) specifically for cultural resources, but even these specially designated areas do not prohibit development activity as long as the agency finds that such activity is "compatible" with the preservation of cultural resources. As a result, few archaeological sites are specifically protected by the BLM planning process.

INADEQUATE LAW ENFORCEMENT AND OBSTACLES TO PROSECUTION

The BLM does not effectively enforce the rules that protect archaeological and paleontological sites on public lands. The

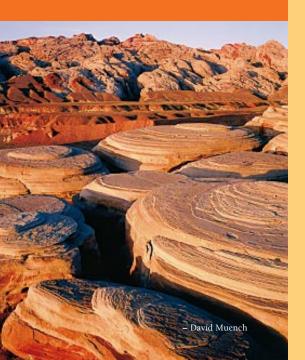


"We found that the [BLM] did not adequately survey the public lands to determine the location, nature, and extent of culturally significant sites... As a result, the Bureau does not know the locations or conditions of culturally significant sites on public lands; therefore, the Bureau does not have the information needed to protect these undisclosed cultural resources." ⁹²

 Office of Inspector General Audit on BLM's Cultural Resource Management, 1999

"Although we have done a good job of complying with Section 106 of the National Historic Preservation Act, we are failing to actively manage the resources entrusted to us." 93

– Bureau of Land Management Strategic Report, 2000



problem is foremost a lack of law enforcement officials. In the entire state of Utah, there are only thirteen BLM law enforcement rangers, less than one for every million and a half acres of land in the BLM's jurisdiction.⁷⁸ These rangers deal with all criminal and emergency activity on Utah's public lands; preventing damage to cultural and paleontological resources comprises only part of their work. With the increasingly sophisticated techniques used by pothunters, there is no way that BLM rangers can keep up with illegal excavators. Even if looters are caught, there is often little support for their prosecution. Although pothunters are clearly in violation of the Archaeological Resources Protection Act (ARPA), the public doesn't always view their activity as criminal.⁷⁹ As a result, relatively few ARPA cases are ever tried.⁸⁰

LACK OF CONSULTATION AND OVERSIGHT

According to the National Historic Preservation Act, the BLM must consult with Native American tribes when it authorizes undertakings that could potentially affect cultural properties. However, too often, the BLM fails to inform tribes of potentially harmful activities. For example, in a recent decision to allow highly destructive seismic exploration on BLM lands near Dead Horse Point State Park, the BLM did not specifically consult with any tribal officials before approving an activity that involved concentrated areas of disturbance. Si

The NHPA also requires federal agencies such as the BLM to consult with the State Historic Preservation Officer (SHPO), who advises and assists the agencies in carrying out their historic preservation responsibilities. However, in a relatively recent development, this relationship was altered when the Utah BLM signed a Protocol Agreement with the Utah SHPO. Previous to the Protocol Agreement, the BLM was required to consult with the SHPO before development projects began, thus giving the officer an opportunity to comment and, when necessary, suggest alternatives. With the new Protocol Agreement, the BLM has sought to disavow its responsibility to consult with the officer on "routine" projects. Instead, such review now takes place on a quarterly basis. This means that projects approved by the BLM could be completely finished before the SHPO or the public has a chance to voice concern. While it is too soon to judge how it will impact cultural resource management, the agreement is troublesome because it removes the SHPO's important oversight function. And it's doubly troublesome given the BLM's historic lack of consultation with Native American tribes.

CULTURAL RESOURCES NOT PROTECTED

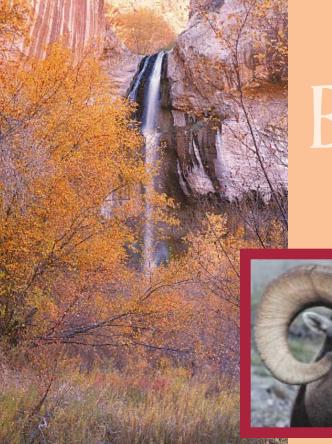
The BLM concentrates its cultural resource program on performing archaeological clearance work in advance of development proposals. If cultural properties are found once work is under way, development stipulations⁸⁶ are designed to offer further protections. Unfortunately, the BLM usually doesn't monitor sites for compliance with the stipulations: one agency archaeologist estimated that only 30% of development projects are monitored by the BLM for compliance, and about 10% of those were found to be out of compliance.⁸⁷

Furthermore, even if important archaeological sites are found before the bulldozers roll, they are not necessarily protected if the federal agency determines that other resources or management goals are more valuable. In one example, archaeologists working in the San Rafael Swell identified evidence of historic, Fremont, and Archaic usage at the "Deep Dune" prehistoric site. The property was deemed eligible for inclusion in the National Register of Historic Places and was found to have a "high potential for yielding significant scientific information." However, it was obliterated after a partial excavation in order to make room for the westbound lane of Interstate 70.89

If the Section 106 process does manage to protect a cultural site from the immediate impacts of development, it may not succeed in protecting the site over the long-term. As one researcher put it, "development near the cultural resource makes the resource more accessible via newly created roads, thereby increasing the chances of site visitation, vandalism, and pothunting."

Despite the obvious shortcomings of the Section 106 process, the BLM has thus far failed to engage in the proactive research and planning efforts necessary for better cultural resource management. Indeed, one BLM report admits that the agency's efforts to protect archaeological sites are backwards and, "[i]n many ways . . . the very opposite of management."





Appendix: Existing Laws Protecting Cultural Resources

Beginning in 1906 with the Antiquities Act, the United States Congress passed laws designed to protect prehistoric resources on federal lands. Sections 106 and 110 of the National Historic Preservation Act require the BLM to proactively manage, inventory, and mitigate damage to cultural properties, and consult with Native American tribes. Other statutes mandate that the agency take cultural and paleontological resources into account in management and planning decisions and enable BLM law-enforcement officials to take action against pothunters and thieves.

However, these laws have shortcomings and none of them adequately safeguards irreplaceable cultural resources. According to one study, the problems are twofold: either "the protections provide for a liberal balancing of interests, which allows cultural resource protection to be superseded or impacted by other interests; or . . . the protections are

procedural rather than substantive in nature, mandating compliance rather than preservation, and therefore ultimately do not protect the resource." In other words, when push comes to shove, current laws don't compel land managers to protect cultural resources when they stand in the way of a development project. As a result, cultural resource preservation is often compromised when on-the-ground decisions are made.

KEY LAWS AND PROTECTIONS FOR CULTURAL RESOURCES ON PUBLIC LANDS

Antiquities Act (1906)

The first federal law to provide for the protection of historic and prehistoric artifacts on public lands, this statute enabled historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest to be designated as national monuments. It gave the federal government responsibility for objects of antiquity on all government lands. The Act also imposed criminal penalties for unauthorized destruction of archaeological remains.⁹⁵

National Historic Preservation Act (1966)

A landmark law in the fight to protect cultural resources, NHPA established the National Register of Historic Places – a list of important historic and prehistoric properties – and gave listed properties special protections. Perhaps most importantly, section 106 of the statute required federal agencies to account for the effects of their undertakings on National Register properties (this was amended to include properties *eligible* for the National Register in 1976). This important law requires the federal government to consult with Native American tribes when activities they undertake or authorize impact cultural sites. The NHPA also established the Advisory Council on Historic Preservation to help federal agencies manage their cultural resources, and it provided grants to state preservation programs.

National Environmental Policy Act (1969)

This widely applicable law ushered in the practice of conducting Environmental Assessments and Environmental Impact Statements. NEPA required federal agencies to consider environmental, historical, and cultural values whenever they undertake or authorize projects that would affect the environment.

Executive Order 11593 (1971)

NHPA and NEPA both affected the way federal agencies dealt with cultural resources; President Nixon issued this Executive Order to unite and clarify existing policy. The order required federal agencies to apply NHPA provisions to cultural resources on public lands and made clear that agencies must inventory and evaluate all significant cultural resources under their jurisdiction. After this Executive Order was enacted, the BLM and other federal agencies began to hire archaeologists.⁹⁶

"Many of the statutes and regulations designed to address cultural resource protection are by nature procedural rather than substantive, and therefore have insufficient impact on the ground... As nonrenewable resources, cultural resources should be given greater protection than they are now afforded under federal law." ⁹⁷

- Stephen P. Kelly

SUWA Photo

Archaeological and Historic Preservation Act (1974)

Following up on the National Historic Preservation Act, this law authorized federal agencies to provide funds for the preservation and recovery of archaeological and historic resources when they were threatened by federal projects; the funds can be used for excavation, analysis, and publication of studies.

Federal Land Policy and Management Act (1976)

The "Organic Act" for Bureau of Land Management lands, this law required federal agencies to generate land management plans to guide management decisions for all uses of public lands. With respect to archaeological properties, FLPMA underscored Executive Order 11593 and specifically identified stewardship of cultural resources as one of the BLM's multiple use responsibilities. While FLPMA focused more on archaeological properties, other scientific resources such as paleontological sites were also within the Act's purview.

Archaeological Resource Protection Act (1979)

A 1974 ruling by the Ninth Circuit Court of Appeals (United States vs. Diaz, 499 F.2d 113) held that the 1906 Antiquities Act could not be used to prosecute looters because it was too vague. In response to both the 1974 ruling and a growing awareness of the problems caused by pothunting, Congress passed ARPA in 1979. The law subjects pothunters to criminal penalties and increases the severity of punishment for violators. It also banned the sale and possession of cultural artifacts from public lands.

Native American Grave Protection and Repatriation Act (1990)

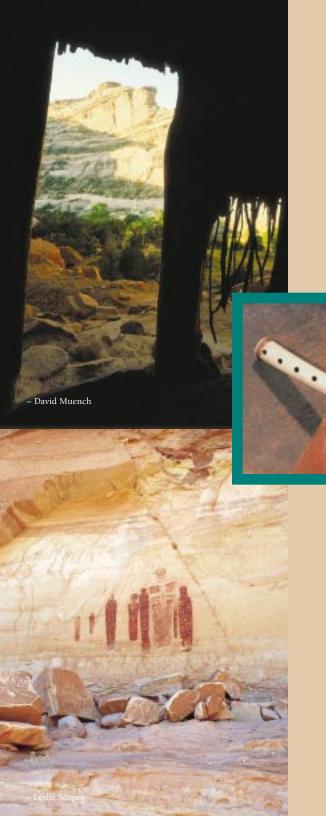
Enacted in response to "decades of abusive treatment of American Indian remains and burial grounds," NAGPRA requires federal agencies and museums to compile an inventory of collections of human remains and associated cultural items. It also mandates the repatriation of such items to the appropriate descendants or tribes.⁹⁹











FOOTNOTES

¹ This report focuses only on BLM lands; it does not address archaeological sites or fossils on lands managed by the U.S. Forest Service, although the federal laws and regulations cited here generally apply to those lands as well.

² Wilderness Act of 1964, (P.L. 88-577), § 2(c). To be clear, ancient archaeological ruins do not disqualify an area from being designated as wilderness. In fact, the presence of such resources may be used as a supplemental reason to designate wilderness. See, BLM Wilderness Inventory Handbook

(H-6310-1) January 10, 2001. § .22 A. 2. "Quality of the Area's Optional Wilderness Characteristics," (supplemental values such as cultural resources "may provide additional reasons for recommending an area as a WSA [Wilderness Study Area].")

³ Letter from Leigh Kuwanwisiwma, Director, Hopi Cultural Preservation Office to Southern Utah Wilderness Alliance. (February 5, 2002).

⁴ See, e.g., id., ("[t]he values of science and historic preservation are not entirely compatible with Hopi values.")

⁵ The BLM's Wilderness Inventory handbook compels the agency to consider whether or not granting Wilderness Study Area status to lands will provide additional protection to special features contained therein, such as cultural resources. See, BLM Handbook H-6310-1.

⁶ Wilderness designation would certainly result in de facto protections and benefits to archaeological and paleontological resources, but some argue that it would also cause

problems. Restrictions on motorized vehicles apply to law enforcement officials and archaeologists as well as the public. Rangers would have to patrol the backcountry on foot or horseback, which may limit the amount of ground they are able to cover. Wilderness designation does not prevent legitimate research, but site excavation and site stabilization conducted in designated wilderness may be made more difficult because of restrictions on surface disturbance and motorized vehicles. On balance. however, many archaeologists, paleontologists and conservationists believe that the protection that wilderness designation provides outweighs the costs of these reasonable restrictions. See, e.g. William D. Lipe, "The Wilderness System and Archaeological Conservation." The Wilderness and Cultural Values: A Symposium. Ed. Dr. Dee F. Green, Archaeological Report (Albuquerque: U.S.D.A. Forest Service, Southwestern Region, 1975),13. ("[T]he positive aspects of Wilderness preservation seem to outweigh the negative ones from the standpoint of archaeological conservation.")

⁷ Russ Kaldenberg, California BLM; Connie Stone, Arizona BLM, personal communication. August, 2001.

⁸ Betsy L. Tipps, "Archaeology in the Grand Staircase-Escalante National Monument: Research Prospects and Management Issues," Learning from the Land: Grand Staircase - Escalante National Monument Science Symposium Proceedings 1997. Ed. Linda M. Hill, (Cedar City, Utah: Bureau of Land Management National Applied Resource Sciences Center, 1997).145.

⁹ Letter from Leigh Kuwanwisiwma, February 5, 2002.

10 Letter from Patti Timbimboo Madsen, the Northwestern Band of the Shoshone, to the Southern Utah Wilderness Alliance, (March 2002).

11 Claudia Berry, Statement before the United States House of Representatives Subcommittee on National Parks, Forests, and Lands, 104th Congress, First Session on

H.R. 1500 and H.R. 1745. June 1995.

12 James Duffus, III et al., <u>Cultural</u> <u>Resources: Problems Protecting and</u> <u>Preserving Federal Archaeological Resources.</u> (Washington, D.C.: United States General Accounting Office, 1987), 39.

13 Brian M. Fagan, <u>People of the Earth: An Introduction to World Prehistory</u>, 6th Edition (Glenview, Illinois: Scott, Foresman, and Company, 1989), 221.

14_{Id}

15 William J. Parry and F.E. Smiley, "Hunter-Gatherer Archaeology in Northeastern Arizona and Southeastern Utah," <u>Perspectives on Southwestern Prehistory.</u> Ed. Paul E. Minnis and Charles L. Redman. (San Francisco: Westview Press, 1990), 49.

16 Parry and Smiley, 53. See also, Fagan, 221

17 Fagan, 221.

18 F.A. Barnes, <u>Prehistoric Canyon Country</u> <u>Rock Art</u> (Salt Lake City: Wasatch Publishers, 1982), 214.

Alice B. Kehoe, <u>North American Indians: A Comprehensive Account</u>, Second Edition.
 (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1992), 120.

20 David Muench and Donald G. Pike, Anasazi: Ancient People of the Rock (Palo Alto: American West Publishing Company, 1974), 18.

21 Kehoe, 120-122.

²² Muench and Pike, 18.

²³ Kehoe, 124.

²⁴ Letter from Leigh Kuwanwisiwma, February 5, 2002.

²⁵ David B. Madsen, <u>Exploring the Fremont</u>, University of Utah Occasional Publication #8 (Salt Lake City: Utah Museum of Natural History, 1989), 8.





²⁶ Madsen, 9-10.

27 F.A. Barnes, <u>Utah Canyon Country</u> (Salt Lake City: Utah Geographic Series, Inc., 1986), 45.

28 Letter from Patti Timbimboo Madsen.

29 Kehoe 371

30 Kehoe, 142-143.

31 Frank L. Decourten, <u>Dinosaurs of Utah</u> (Salt Lake City: University of Utah Press,1998), 98. Weber State University Professor Jeff Eaton calls Utah's Morrison Formation a "world-class, class-one resource." (Eaton, personal communication, March 21st, 2001).

32 Frank L. Decourten, "New Data on Cretaceous Dinosaurs from the Long Walk Quarry and Tracksite, Emery County, Utah," Geology of East Central Utah, Ed. Thomas C. Chidsey, Jr., (Salt Lake City: Utah Geological Association Publication No. 19, 1991), 206.

33 Formations like the Morrison and Chinle are beginning to attract the attention of paleontologists, and unpublished articles show that there is high potential for important discoveries in the Monument. See, David D. Gilette, "Recommendations for Paleontological Research in the Grand Staircase - Escalante National Monument," Learning from the Land: Grand Staircase - Escalante National Monument Science Symposium Proceedings 1997. Ed. Linda M. Hill, (Cedar City, Utah: Bureau of Land Management National Applied Resource Sciences Center, 1997), 388.

34 Gilette, 384.

35 Archibald, David J. "Emerging Importance of the Grand Staircase - Escalante Region in Cretaceous Vertebrate Biostratigraphy, Western U.S.," Learning from the Land: Grand Staircase - Escalante National Monument Science Symposium Proceedings 1997. Ed. Linda M. Hill, (Cedar City, Utah: Bureau of Land Management National Applied Resource Sciences Center, 1997). 355-356.

36 Gilette, 388.

³⁷ Decourten (1991), 311.

38 In order to draw the most complete and accurate conclusions about paleontological or archaeological sites, scientists often need to look at the both artifacts and the context in which they were found. If artifacts have been removed or the context has been disturbed by looters, scientists lose potentially valuable information. See, Colin Renfrew and Paul Bahn, Archaeology: Theories, Methods, and Practice (New York: Thames and Hudson Inc., 1991), 90 and 477-479.

39 Archaeologist Phil Geib, as quoted in Greer K. Chesher and Liz Hyman, <u>Heart of the Desert Wild: Grand Staircase - Escalante National Monument</u> (Bryce Canyon, Utah: Bryce Canyon Natural History Association, 2000), 69.

⁴⁰ Jim Kirkland, Utah State Paleontologist, personal communication. March 21st, 2001. As State Paleontologist, Kirkland excavates approximately 1,000 pounds of fossil material from public lands each year; thieves take roughly eight tons.

41 Kirkland, personal communication.

⁴² Duffus, et al., 22. This figure does not include sites that were looted after they had been recorded, or the many sites that have never been recorded by professional archaeologists.

⁴³ Nancy Shearin, archaeologist at the BLM's Monticello Field Office, personal communication. March 19th, 2001.

44 Duffus, 29.

45 Duffus, 21. The GAO study found that close to 30 percent of pothunters search public lands for ancient artifacts solely for their own personal use. According to the study, some agency officials believe that the Archaeological Resources Protection Act (passed in 1979) may have served to deter casual looting to some extent, but it did not prevent the surface collection of artifacts. Ironically, some officials

believe commercial looting may have actually increased since the passage of ARPA.

46 According to data from the Utah Division of Parks and Recreation, from 1988 to 1998, the number of registered ORVs grew from 22,000 to nearly 70,000. In 2001, the total number of ORVs likely reached 100,000. See, Overriding Utah's Wilderness: The Search for Balance and Quiet in Utah's Wilderness, (Salt Lake City: Southern Utah Wilderness Alliance, 1999).

47 Duffus, 104.

48 See, Executive Orders No. 11644 (signed by President Nixon in 1972) and No.11989 (signed by President Carter in 1977). See also, 43 C.FR. §§ 8341-43, BLM Manual at 8340-42.

49 Margaret M. Lyneis, David L. Weide, and Elizabeth vonTill Warren, <u>Impacts: Damage to Cultural Resources in the California</u> Desert, Cultural Resource Publications, Archaeology-History. (Riverside: Bureau of Land Management, 1980), 14-15.

50 "BLM Cultural Resources At Risk," Bureau of Land Management Strategic Paper. May 4th, 2000, 5.

51 Id., 5-6. See also, Lyneis, 15.

52 Paul R. Nickens, Signa L. Larralde, and Gordon C. Tucker, <u>A</u> <u>Survey of Vandalism to</u> <u>Archaeological</u> <u>Resources in</u>

Southwestern Colorado, Cultural Resource
Series No. 11 (Denver: Colorado State
Office, Bureau of Land Management,
1981), 129; see also, Richard V.N. Ahlstrom,
Pothunting in Central Arizona: the Perry Mesa
Archaeological Site Vandalism Study, Cultural
Resource Management Series No. 13.
(Phoenix: Arizona State Office, Bureau of Land
Management and USDA Forest Service,
Southwestern Region, 1992), 17; see
also, Tipps, 143.





⁵³ Information Bulletin No. UT 2002-008, Utah State Office, Bureau of Land Management (January 4, 2002), 12.

54 The National Historic Preservation Act (NHPA) and other laws protecting cultural resources on public lands are procedural in nature and do not constitute an inviolate standard. See, Stephen P. Kelly, "Potshards and Sun Calendars: BLM Management of Cultural Resources on the Colorado Plateau," 18 Pub. Land & Resources L. Rev. 87. 1997, 134-137 ("[U]nder the NHPA, persons seeking development on federal lands must simply prove that they have followed the statute's procedures. Even after such procedures are followed, cultural resources are still susceptible to harm because the protections

afforded are not absolute.").

55 BLM Strategic Paper,6.

56 BLM Strategic Paper, 5-6.

57 1993 visits to the Kane Gulch Ranger Station totaled 2,926. 2001 visits to the Kane Gulch Ranger Station totaled 5,441. Andy Boone. Recreation

Specialist at the BLM's Monticello Field Office, personal communication. May 7, 2002.

⁵⁸ Tipps, 142.

59 Glen Canyon National Recreation Area Grazing Component (Plan) and Environmental Assessment. Intermountain Region, National Park Service. U.S. Department of the Interior, (February 8, 1999), 27.

60 Id., 28.

61 Id., 29.

62 For example, see, Environmental Assessments prepared by the Monticello Field Office for the Cottonwood, Tank BenchBrushy Basin, and White Mesa grazing allotments (EA No. UT-090-01-48) and the White Canyon grazing allotment (EA No. UT-090-01-47).

63 Rick Moore, <u>Preserving Traces of the Past:</u>
<u>Protecting the Colorado Plateau's</u>
<u>Archaeological Heritage</u> (Flagstaff, Arizona:
The Grand Canyon Trust, 1994), 69.

64 Glen Canyon N.R.A. Grazing Plan and Environmental Assessment, 28.

65 Such a skeleton is extremely rare; only a dozen are known to science. See, "Businessman Charged in Theft of Rare Allosaurus Skeleton." Brent Israelsen, Salt Lake Tribune, A1, September 5, 2001.

66 "Couple charged in '91 dino theft." Donna Kemp-Spangler and Jerry Spangler, Deseret News, A1, September 5, 2001.

67 See, Israelsen, A1.

68 In contrast to the BLM's \$49 dollars per 100 acres, the Forest Service receives about \$72 dollars per hundred acres and the National Park Service receives a whopping \$771 dollars per hundred acres to spend on cultural programs. See, BLM Strategic Paper, 8.

69 The BLM employs the equivalent of 160 full-time employees for its cultural resource program; the U.S. Forest Service employs 204 full-time equivalents (FTE) and the National Park Service employs 817 FTE. See, BLM Strategic Paper, 8.

70 Earl E. Devaney, <u>Audit Report on Cultural Resource Management</u>, <u>Bureau of Land Management</u>. Report no. 99-i-808. U.S. Department of the Interior. (Washington: Office of Inspector General, September 1999), 6. This Office of the Inspector General report found that BLM archaeologists spent between 70 and 99 percent of their time focusing on administrative actions required prior to starting development projects, or on supervising permit holders, at the expense of more proactive work.

71 BLM Strategic Paper, 13. Although this

problem of "creative coding" was recognized in a 1994 report on cultural resources by the Grand Canyon Trust (Moore 1994, 73), BLM managers have still not effectively addressed the problem.

72 BLM Strategic Paper, 13.

⁷³ Section 110 of NHPA (1966) requires the BLM to establish preservation programs "for the identification, evaluation, and nomination... [to the National Register]... and for the protection of historic properties," (See, e.g., Kelly, 96) and President Nixon's 1971 Executive Order (E.O. No. 11593) made clear that NHPA provisions applied to cultural resources on public lands and that agencies must inventory and evaluate all significant cultural resources under their jurisdiction. (See, e.g., Spangler, 189).

⁷⁴ Devaney, 6. Even this meager number is misleadingly high. The vast majority of BLM cultural resource surveys were performed in advance of federal undertakings, not as a result of proactive agency planning (as of 1999, the BLM's Cedar City Field Office had not conducted a proactive cultural inventory in fifteen years). Surveys done in advance of Federal undertakings are of limited value to archaeologists and planners, because they aren't necessarily performed in areas with high resource density, or conducted in such a way as to maximize scientific findings. See, e.g., Moore, 82 ('[d]ata derived from many small compliance-driven programs are of limited use to both researchers and managers . . . ").

75 BLM Strategic Paper, 5.

⁷⁶ BLM Strategic Paper, 6.

77 1992 amendments to the NHPA require federal agencies to establish a preservation program for cultural resources so that eligible sites are managed in a way to preserve their values. NEPA requires consideration of cultural values when projects are undertaken on Federal lands. FLPMA specifically notes stewardship of cultural resources as an agency responsibility.

78 Rudy Mauldin, Utah BLM Special Agent, Criminal Investigator. Personal communication. September 5th, 2001. Also, Nancy Shearin, personal communication, March 19, 2001 (even in the archaeologicallyrich San Juan Resource Area in the southeast portion of the state, there are only 2 BLM law enforcement officials to protect over a million acres).

⁷⁹ In fact, many locals may themselves be involved in the illegal collection of artifacts, which may be viewed as a "wholesome family pastime and a matter of right." (See, Duffus, 27). According to a sample from one study of individuals in southwestern Colorado, some 70% of those questioned dug for prehistoric artifacts, and 100% collected artifacts from the surface of the ground. (See, Nickens, 88). In San Juan County, shops have sold shirts featuring depictions of looters with a ceramic vessel in one hand and a human skull in the other. The shirts bore slogans such as "I Dig San Juan County," and "Get Your Pot In San Juan County," further evidence that pothunting is not seen as a criminal offense. (See, Duffus, 24-25).

80 Ahlstrom, 21. Because pothunters are not necessarily viewed as delinquents by juries in rural communities, prosecutors are not enthusiastic about bringing ARPA cases to court. In fact, federal prosecutors usually only take on pothunting cases when the evidence is overwhelming and is likely to strike a chord with jurors; a case where "the defendants clearly knew they were on federal lands and intentionally looted a site, they knew they were violating a federal law, and site damage was substantial or large personal profits were realized." Id.

81 NHPA, Section 110 (a)(E)(ii).

82 Bruce Louthan, BLM Archaeologist, Moab Field Office. Personal Communication. August, 2001. See also, Veritas EA # UT-062-01- 011 at attached checklist (August 2001).

83 NHPA, Section 101(b)(3).

84 A 1997 Programmatic Agreement (Programmatic Agreement Among the Bureau of Land Management, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers Regarding the Manner in Which BLM Will Meet Its Responsibilities Under the National Historic Preservation Act) set the stage for the Utah Protocol (State Protocol Agreement between the Utah State Director of the Bureau of Land Management and the Utah State Historic Preservation Officer (SHPO) Regarding the Manner in Which the Bureau of Land Management (BLM) Will Meet its Responsibilities Under the National Historic Preservation Act (NHPA) and the National Programmatic Agreement (PA) Among the BLM, the Advisory Council on Historic Preservation (Council), and the National Conference of State Historic Preservation Officers (NCSHPO)), which was put into effect in March of 2001. The agreements, designed to increase efficiency and reduce paperwork, effectively deferred case-by-case SHPO oversight of routine BLM projects. Under the agreements, SHPO review of BLM actions will take place a quarterly basis.

85 State Protocol Agreement, Section VII. (A).

86 Typical stipulations for an oil and gas lease, for example, state: "[i]f in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects." (Section 6, Lease Terms, Form 3100-11, United States Department of the Interior, Bureau of Land Management. "Offer to Lease and Lease for Oil and Gas." October, 1992.)

87 Kelly, 122.

88 Rand A. Greubel, "Archaeological Investigations of 11 Sites Along Interstate 70: Castle Valley to Rattlesnake Bench," Apline Archaeological Consultants, Inc., Contract No. 93-8185 (Salt Lake City: Utah Department of Transportation), 380.

89 Id.

90 Kelly, 99.

91 BLM Strategic Paper, 5.

92 Devaney, 1. 93 BLM Strategic Paper, 1.

94 Kelly, 93.

95 However, its efficacy in this regard was later called into question. See, Kelly, Fn 23 (criminal provisions of the Antiquities Act were "declared unconstitutional by the Ninth Circuit on

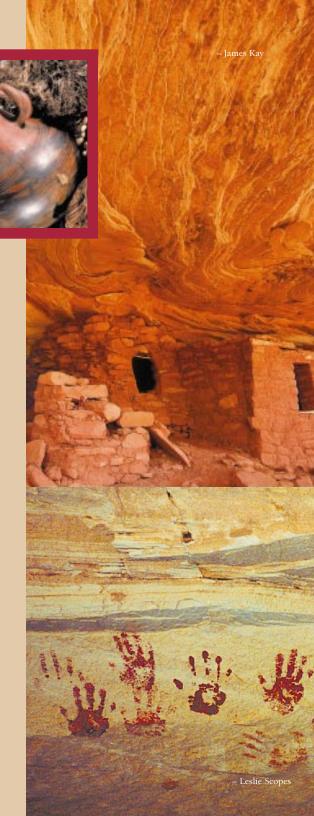
grounds of vagueness in United States v. Diaz, 499 F.2d 113 (9 Cir. 1974)," but "[t]he holding of Diaz is not universal in federal courts."

96 Jerry D. Spangler, <u>Paradigms and</u> Perspectives: A Class I Overview of Cultural <u>Resources in the Uinta Basin and Tavaputs</u> <u>Plateau.</u> UT BLM Contract No. 1422J910C4014. (Salt Lake City: Uinta Research, 1995), 189.

⁹⁷ Kelly, 94.

98 Sandra B. Zellmer, "The Protection of Cultural Resources on Public Lands: Federal Statutes and Regulations." 31-ELR-10693.

99 Id, 10693-10694.

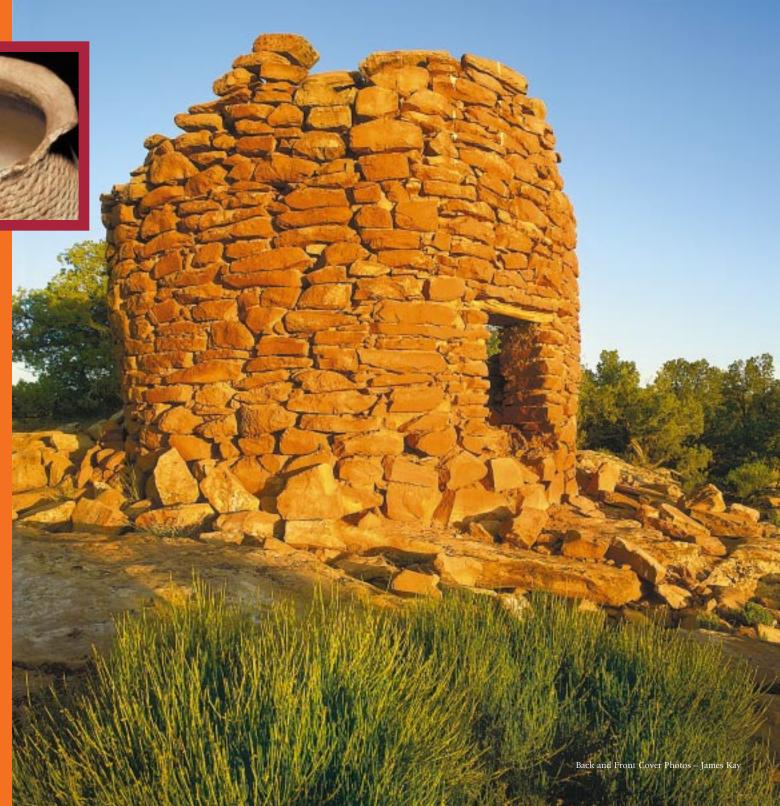




The mission of the Southern Utah Wilderness Alliance (SUWA) is the preservation of the outstanding wilderness at the heart of the Colorado Plateau, and the management of these lands in their natural state for the benefit of all Americans.

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