

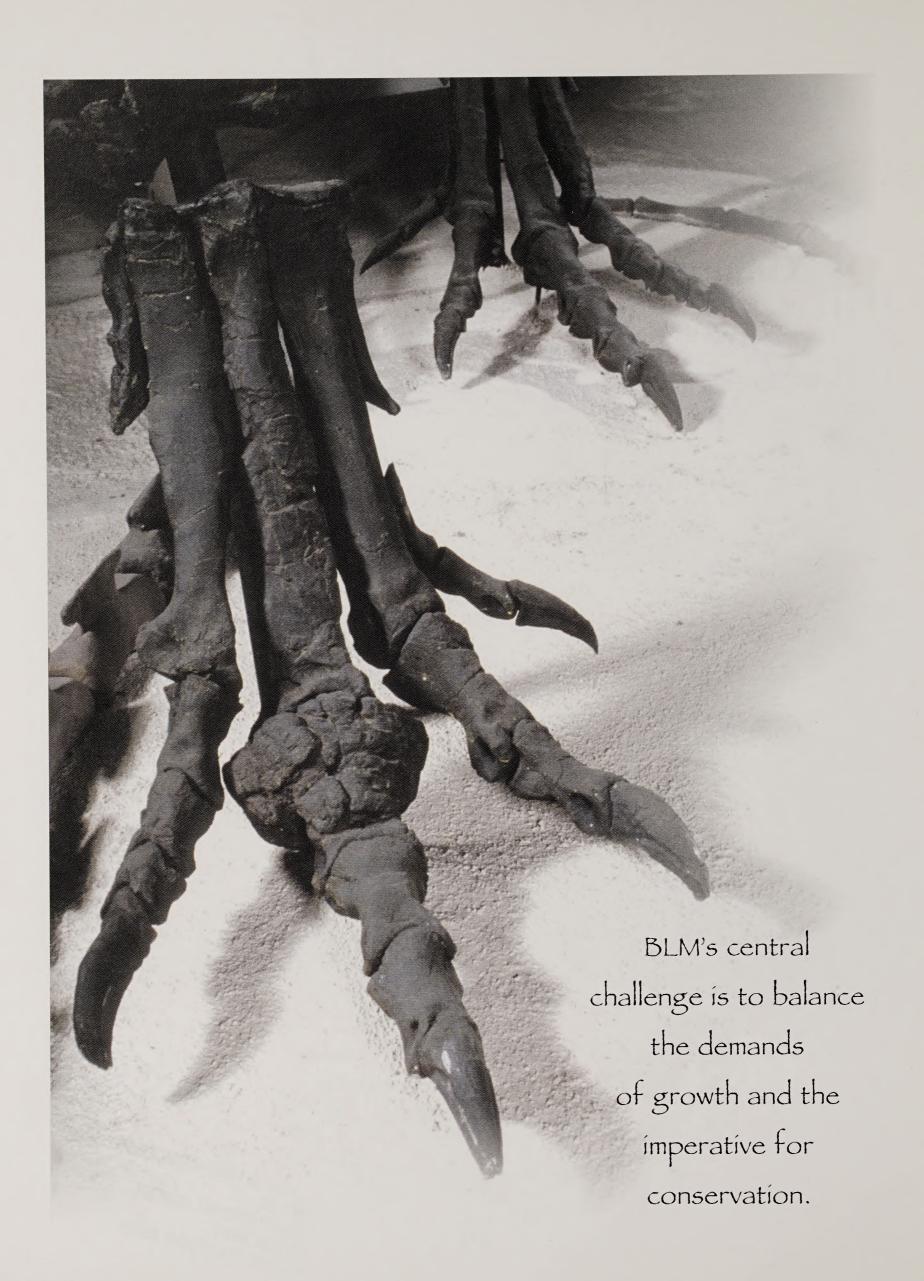
# America's Priceless Heritage:

Cultural and Fossil Resources on Public Lands



U.S. Department of the Interior Bureau of Land Management November 2003

DG. 50, DENVER FEDERAL CENTER P.O. BOX 25047 DENVER, COLORADO 80225 DENVER, COLORADO



# Preface:

#### An Invitation to the Reader

The Bureau of Land Management (BLM) is responsible for managing 261 million acres of public land—about one-eighth of the United States. Most of these lands are in the Western United States, including Alaska, and they include extensive grasslands, forests, high mountains, arctic tundra, and deserts. BLM also manages about 700 million acres of subsurface mineral resources, as well as numerous other resources, such as timber, forage, wild horse and burro populations, fish and wildlife habitat, wilderness areas, and archaeological, historical, and paleontological sites.

BLM administers the public lands within the framework of numerous laws, the most comprehensive of which is the Federal Land Policy and Management Act of 1976 (FLPMA). FLPMA directs BLM to follow the principle of "multiple use," which means managing the public lands and their various resource values "so that they are utilized in the combination that will best meet the present and future needs of the American people." This multiple use mission requires BLM to address quality of life issues, including providing clean air and water; providing recreational opportunities; protecting wildlife; and safeguarding cultural and fossil resources; as well as providing for a sound economy through the production of energy, food, and fiber and by sustaining local communities and their heritage.

Given the scope of its multiple use mission, BLM affects more Americans on a daily basis than any other land management agency. The Bureau constantly faces the challenge of ensuring a balance of land uses among perspectives that are occasionally, if not often, competing. BLM recognizes that people who live near the public lands have the most direct connection and knowledge of them, as well as a commitment to their stewardship. At the same time, the Bureau maintains a national focus because these lands belong to all Americans, whose appreciation of them continues to increase.

BLM's central challenge is to *balance the demands of growth and* the imperative for conservation. America is entering into a new era of conservation to achieve a healthier environment and a more secure economy—what Secretary of the Interior Gale Norton





calls the "new environmentalism." Secretary Norton sums this new environmentalism up in a visionary approach she calls the "four Cs"—using communication, cooperation, and consultation, all in the service of conservation. At the heart of the four Cs is the Secretary's belief that for conservation to be successful, BLM must involve the people who live on, work on, and love the land.

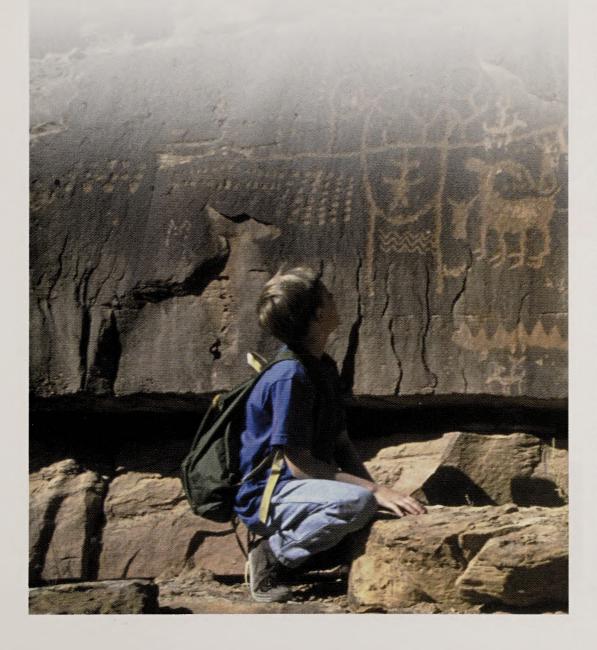
The Bureau's ability to partner with public land users; local residents; nonprofit groups; universities; "friends of" organizations; and State, local, and tribal governments fosters a wide and diverse support network. This network is essential not only because the agency has limited staff and budget resources, but because there is a wide variety of stakeholders who are concerned about public land management. The Bureau has been working cooperatively with partners and volunteers for decades and that work has yielded outstanding results towards attaining common goals and values.

Secretary Norton's approach to conservation is especially relevant to the management of cultural and fossil resources on public lands. These resources are a constant source of fascination for visitors. People look to these resources for recreational opportunities...for fulfilling their curiosity about the recent and remote past...for contemplating their origins...for preserving and continuing their cultures...for finding peace and quiet. The Secretary's approach to managing these resources was furthered on March 3, 2003, when President Bush signed a new Executive Order, which directs Federal agencies to advance the protection, enhancement, and contemporary use of historic properties, particularly by seeking public-private partnerships to promote the use of such properties as a stimulus to local economic development. The Executive Order is an important component in a new White House initiative called Preserve America, which was announced on March 3, 2003 by First Lady Laura Bush. The *Preserve America* program will serve as a focal point for the support of the preservation, use, and enjoyment of America's historic places.

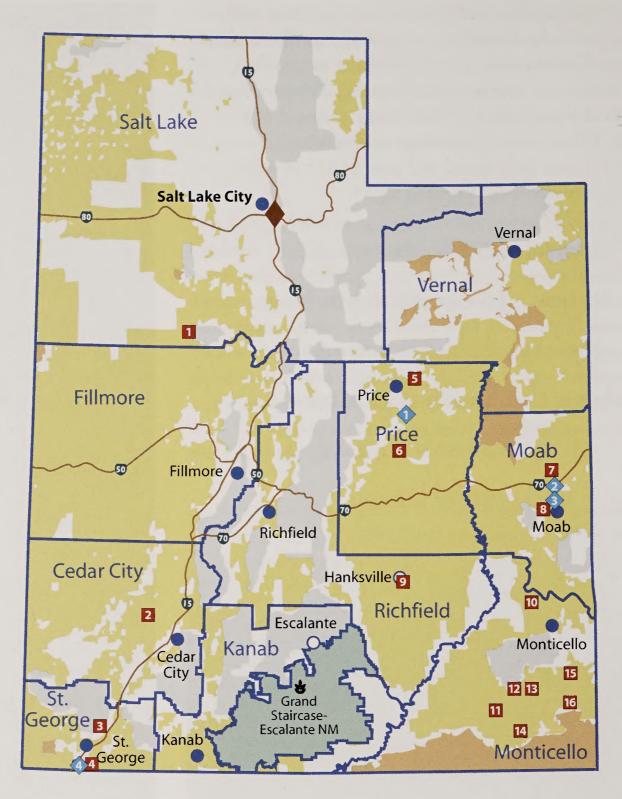
The Bureau is proud of its mission and understands why it is crucial to the Nation's future. The Bureau's vision is to live up to this ambitious mission and thereby meet the needs of the lands and our people. In order to achieve this goal, the Bureau must seek new ways of managing that include innovative partnerships and, especially, a community-based focus that

involves citizen stakeholders and governmental partners who care about the public lands and the cultural and fossil resources found on them. This document is an invitation to you—the public BLM serves—to continue your ongoing dialogue with us about the health and future of the Nation's cultural and natural legacy. Tell us what is important to you, what you care most about, what you want saved, and how BLM can work collaboratively to preserve our priceless legacy.

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#### Interpreted Cultural Sites

- Simpson Springs Pony Express Station
- Parowan Gap Rock Art
- **Red Cliffs Archeological Sites**
- Fort Pearce
- Nine Mile Canyon Arch. District
- Buckhorn Wash Rock Art
- 7 Sego Canyon Rock Ar8 Potash Road Rock Art Sego Canyon Rock Art
- Wolverton Historic Mill
- Newspaper Rock (Rock Art)
- Kane Gulch Ranger Station (Grand Gulch)
- Mule Canyon Arch. Ruins
- **Butler Wash Ruins**
- Sand Island Petroglyphs
- Three Kiva Ruin
- Alkali Ridge National Historic Landmark

#### Interpreted Paleo Sites

- 🕠 Cleveland-Lloyd Dinosaur Quarry
- Copper Ridge Sauropod Dinosaur Tracks
- Mill Canyon Dinosaur Trail
- Warner Valley Dinosaur Tracksite



## UTAH

## Statistical Overview

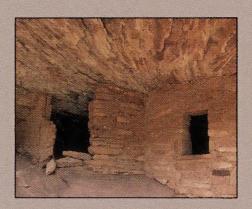
Acres of public land	22.9 million acres
Acres inventoried for cultural properties (FY 2002)	77,550 acres
Acres inventoried for cultural resources (to date)	1,613,887 acres
Cultural properties recorded (FY 2002)	1,133 properties
Cultural properties recorded (to date)	35,451 properties
Cultural Resource Use Permits in effect (FY 2002)	44 permits
National Register of Historic Places listings (to date)	33 listings
National Register of Historic Places contributing properties 618 properties	
Section 106 class III undertakings (FY 2002)	581 undertakings
Section 106 data recovery, projects (FY 2002)	9 projects
Section 106 data recovery, properties (FY 2002)	164 properties
Interpreted places	20 places

## Cultural Resources

#### 1. Program Summary

The Bureau of Land Management in Utah manages nearly 23 million acres of public lands, approximately 42 percent of the State's surface. Existing records indicate that of these lands, only 1,613,887 acres (7 percent of the total) have been inventoried for cultural resources. Despite the low inventory levels, 35,451 sites have been recorded on public lands in Utah to date, including at least 1,133 sites recorded in fiscal year 2002.

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Cedar Mesa, southeastern Utah.

...pueblo
architecture and
kivas associated
with the Anasazi
or ancestral
Puebloan
Puebloan
peoples appear
in the
archaeological
record.



Stabilization of a masonry storage room, dated around A.D. 900, Grand-Staircase Escalante National Monument, Utah.

Figures available at the Utah State Historic Preservation Office (Division of State History) indicate that 55 percent of all sites recorded within the State are on BLM-managed lands.

BLM lands in Utah include two National Historic Landmarks: Desolation Canyon and Alkali Ridge. Thirty-three properties, a combination of individual sites and districts totaling 618 sites, have been listed on the National Register of Historic Places. Each year, a few hundred additional sites are determined eligible for inclusion on the National Register.

#### 2. State Cultural History

There is no firm date for the earliest entry of humans to the Utah environment. However, there is firm evidence that Paleo-Indians occupied the shorelines of the ancient Lake Bonneville in late Pleistocene (Ice Age) times, with relict marshland sites comfortably dated at 8000 B.C. or older in northwest Utah. Clovis complex sites also document these Paleo-Indian inhabitants at several locations across the State.

The subsequent Archaic tradition was based on hunting and gathering a wide range of resources. This way of life lasted thousands of years in Utah and is represented by sites such as Danger Cave and Juke Box Cave. In some parts of Utah, Native peoples followed the Archaic traditions until contact with Euro-American explorers and settlers in the 19th century.

In southern and southeastern Utah, the Archaic tradition was gradually incorporated into other ways of life. By about 1000 B.C., preceramic Basketmaker complex sites were well-established with clear evidence of agriculture. During the Formative Period, beginning about A.D. 700–750, pueblo architecture and kivas associated with the Anasazi or ancestral Puebloan peoples appear in the archaeological record. Prehistoric roads connecting evenly placed settlements and activity centers, attributed to the Chacoan culture, also appear.

During this time period, the Fremont culture also emerges. The people associated with this culture adopted maize agriculture, pit houses and stone architecture, and a strong ceramic tradition. Their sites are found north of the Puebloan areas, throughout much of central and eastern Utah and in western Colorado and parts of Nevada.

Between A.D. 1300 and 1350, Fremont and Anasazi people seemed to abandon their villages and pueblos. After a brief hiatus, Late Archaic hunting-gathering traditions replaced these agricultural societies. Although some tribes do not agree, archaeological evidence suggests that today's Puebloan tribes are descended from the Anasazi, while Numic-speaking tribes (Paiute, Shoshone, Goshute) and the Navajo arrived in this area after the abandonment of Anasazi and Fremont villages.

The Spanish entered Utah in 1776–77, led by Fathers Dominguez and Escalante. They were followed by explorers, mountain men, and trappers, such as Jim Bridger and Peter Skene Ogden, and by western emigrants passing through to California and Oregon.

By 1847, a small party of Mormon settlers led by Brigham Young had come to stay. By 1860, 30,000 Mormons, members of the Church of Jesus Christ of Latter-Day Saints, had migrated to the Utah Territory from elsewhere in the United States and from countries across Europe. Salt Lake City became a major hub for travel east and west, north and south. Railroads, gold, iron, and coal mines all served to attract new waves of immigrants to Utah throughout the 19th and 20th centuries. World War II efforts brought renewed industrial vigor and burgeoning military bases to Utah, and spurred an additional influx of people.

#### 3. Cultural Resources At Risk

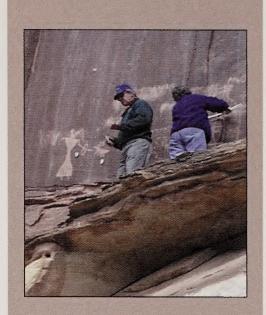
Vandalism and theft continue to be issues in the preservation and protection of archaeological and historic sites in Utah. In northwest Utah, a series of caves along the ancient shorelines of Lake Bonneville continues to be a target for looters. Caves in Millard, Juab, Tooele, and Box Elder Counties have been impacted despite efforts by BLM and the State of Utah to close the highest profile sites with steel gratings. Vandals have smashed a monolith at an important rock art complex with implications for archaeo-astronomy. Rock art sites have been defaced and partly destroyed by modern graffiti and bullets; BLM has engaged in several restoration projects to repair some of this damage.

Portions of the extant Transcontinental Railroad grade across BLM lands in northwestern Utah are deteriorating. Parts of the grade are well-maintained for recreational bicycling, but wooden culverts and trestles are in need of documentation, protection, and stabilization.

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Damaged pictograph, San Rafael Swell, Utah.



Rock art conservation efforts at a Fremont period petroglyph site along the Escalante River, Utah.

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Development threatens resources in southwest Utah as Washington County and Iron County experience unparalleled growth. Growing visitor demand for recreational opportunities, and the demand for access to lands for development and infrastructure, threaten Virgin Anasazi villages, which occupy locations highly sought for land exchange and development.

In southeast Utah, an extraordinary and continuous influx of visitors is contributing to the degradation of some of the world's most interesting archaeological remains. These remains comprise a rich tapestry of sites stretching from the San Juan River to the north. Vandalism and theft also continue to be problems in this area.

In central and northeast Utah, visitor use is also increasing, with off-highway vehicle activity burgeoning in some areas. In other areas, resource development conflicts with the preservation and protection of cultural resources.

#### 4. Major Accomplishments

- Published 25 volumes in the cultural resource series and planned 2 new volumes for publication.
- Inventoried BLM collections held in several repositories in Utah and completed agreements with three repositories; plans are in place to update these inventories and secure additional agreements in fiscal year 2003.
- Worked in partnership with several colleges and universities to identify, evaluate, and protect archaeological resources around the State.
- Developed a quick and efficient response to post-fire reseeding efforts, which has resulted in the inventory of tens of thousands of acres since 1996.
- Documented nearly 500 archaeological sites in Nine Mile Canyon over the years in partnership with volunteers and academic institutions.

## 5. Ethnic, Tribal, and Other Groups to Whom BLM Cultural Resources Are Important

Utah has a diverse set of ethnic and tribal communities that have contributed to the cultural fabric of the State and that

may be recognized in archaeological sites, historic sites, and other places valued for their representation of Utah culture. The contribution of numerous tribes must be recognized first and foremost. Today, seven tribes recognized by the United States as sovereign tribes reside either entirely or in part within the State of Utah. These include the Ute Tribe (northern Ute), White Mesa Band of the Ute Mountain Ute, Navajo, five bands of the Paiute Tribe of Utah, Skull Valley Goshute, Confederated Goshute Tribes of Utah and Nevada, and Northwest Shoshoni.

In addition, tribes currently residing in other States either occupied lands in Utah at one time or have some level of cultural affiliation to lands and places within Utah. These include all of the Puebloan tribes (21 tribes) currently living in Arizona, New Mexico, and Texas. Most notable among the Pueblos in terms of ongoing involvement in Utah lands are the Hopi, Zuni, Jemez, Zia, Nambe, and Laguna.

The Southern Ute Tribe, Eastern Shoshone (Fort Washakie), Shoshone-Bannock (Fort Hall), Shoshone-Paiute (Duck Valley), Ely Shoshone Tribe, Te-Moak Tribe of Western Shoshone (with four bands), Duckwater Shoshone Tribe, Moapa Band of Paiute Indians, Kaibab Paiute Tribe, and the San Juan Southern Paiute Tribe have either occupied or traditionally used lands in Utah, or have otherwise indicated cultural affiliation to lands and resources within the State or an affiliation to prior occupants of the State at some time in the past.

Members of these 38 tribes have varying degrees of affinity for the lands, natural resources, and places of Utah, ranging from traditional use areas to places of deeply held religious and sacred values, places in use today and for all time for ceremonial and spiritual purposes.

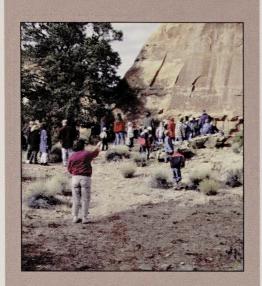
No discussion of culture, ethnicity, and tribal issues within the State would be complete without mention of more recent history. The Mormon emigration to Utah, which lasted for nearly 30 years, is reflected throught the State. Utah is rich with place names and historical sites imbued with the traditional, community, and spiritual values of the Mormon people.

More recently, immigrants from Mexico, other Latin American countries, and Europe have left their marks on Utah's lands. Of particular interest for Utah public lands are the labor gangs recruited from Greece, the Slavic countries of eastern Europe,

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"Ute Panel" at the Sego Canyon rock art site, Utah.



A BLM presentation on rock art for the Escalante Elementary School outdoor education program near Escalante, Utah.

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Italy, Mexico, and other countries to work in various mines and related industries across the State. Descendants of tribes and early pioneers remain in the State today, contributing to the cultural diversity of Utah.

#### 6. Existing Partnerships

- Earthwatch International to document over 200 rock art sites in San Juan County and record and evaluate numerous sites in Mill Creek Canyon.
- The Interagency Task Force on Cultural Resources, which includes participants from BLM and the State of Utah, National Park Service, U.S. Forest Service, and other agencies at the State and Federal level. The task force has operated since 1986 for the protection and enhancement of cultural heritage resources across the State and has supported Utah's Intrigue of the Past, now the national Heritage Education program known as Project Archaeology; developed the ZiNj Educational Project including ZiNj Magazine and ZiNj TV; developed the popular Utah Preservation Magazine; and supported the State History Fair, heritage tourism, heritage education, and efforts to promote stewardship and protection of cultural resources.
- The Four Corners Heritage Council, of which BLM is a charter member. Formed as a result of a task force symposium in 1990, the council works to develop and promote heritage tourism initiatives that serve to protect and enhance the spectacular archaeology in the Four Corners States. The council works actively with Federal agencies, local governments, and Indian tribes to promote Native American perspectives in the interpretation of resources to the public.
- The Data Management Committee of the Interagency Task Force on Cultural Resources to manage and operate an automated database of cultural resource information.
- Nine Mile Coalition, a multiyear partnership involving BLM, Brigham Young University, Utah Statewide Archaeological Society, and other members to inventory and document hundreds of sites in the Nine Mile District.

 Various museums and academic institutions, with which BLM maintains multiple, ongoing partnerships, for exhibits and displays, research, student training, and other activities that promote and protect BLM's cultural resources.

#### 7. Economic Benefits

There is little primary data available about the impacts of cultural resources on the local economy. However, scientific polls indicate that more than 90 percent of visitors to the region intend to visit one or more historic or archaeological properties during their stay, and heritage tourists are known to be more likely to stay in motels or hotels than other visitors, with average family visits lasting 3–4 days at a cost of \$215 per day.

Visitor use days at the Cedar Mesa/Grand Gulch complex alone have increased to over 100,000. If one-fourth of these visitors spends a single night in a motel, the contribution to the economy would be more than \$5,000,000. Factor these conservative numbers by the dozens of BLM venues available, and the numbers climb rapidly. Add in gasoline purchases, convenience store purchases, groceries, gift shop sales, and other sales developed just for this tourist industry, and it is obvious that heritage tourism on BLM lands in Utah helps to bring in millions of dollars of revenue. It would be extremely reasonable to suggest that heritage tourism on public lands in Utah is directly responsible for an estimated \$10,000,000 of economic benefits in Utah.

## Paleontological Resources

#### 1. Program Summary

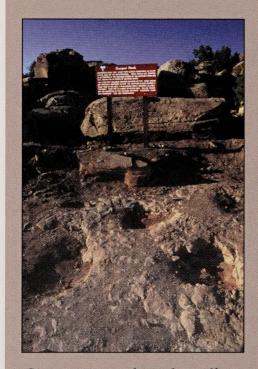
Fossils have been collected and documented from thousands of localities on Utah public lands since the 1800s. Researchers and students from all parts of the country come to observe or collect from areas that are known to have rich deposits of fossils. BLM Utah issues an average of 50 Paleontological Resource Use Permits every year. Many of these are for consulting on projects that have potential impacts to areas where fossils may be found.

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A stabilization project at Simpson Springs, Utah, along the Pony Express National Trail.

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Giant sauropods and smaller meat-eating dinosaurs left these tracks near Moab, Utah, about 150 million years ago.

#### 2. State Paleontological History

Utah has a rich paleontologic history that begins over 500 million years ago with fossils of invertebrates such as trilobites and sponges that were common in the Cambrian Period. During the Paleozoic, the record of vertebrates begins with fish and amphibians. Early Mesozoic tree trunks and cycad stumps are evidence of warm, wet climatic conditions. Later deposits of sediments during Jurassic times contain an extremely rich and diverse dinosaur fauna that includes such icons as Allosaurus, Stegosaurus, Apatosaurus, and even some fossils of very early mammals. Cretaceous-age rocks, including perhaps the most complete terrestrial sequence in the world, contain not only dinosaur fossils, but fossils of turtles, crocodiles, fish, mammals, invertebrates, and plants. In the early Tertiary, primitive mammals, birds, turtles, and crocodiles lived around vast lakes. Trees, flowers, and insects completed the picture. Utah has a diverse record of Ice Age faunas that include mammoths and mastodons, horses and camels, saber-toothed cats, wolves, musk oxen, and ground sloths.

#### 3. Paleontological Resources at Risk

Some of Utah's oldest fossils are also some of its most sought after. At some localities, casual collecting has been pursued overenthusiastically and resulted in major surface disturbance with significant impact to the resource. Unauthorized collecting by commercial collectors has also been a major factor in the loss of potentially important paleontological specimens. Urban growth in Utah is concentrated along the Wasatch Front, and people seeking recreational opportunities such as mountain biking and off-highway vehicle use, even hiking and camping, also intentionally or inadvertently threaten fossil resources.

#### 4. Major Accomplishments

- Conducted excavations and research at the Cleveland-Lloyd Dinosaur Quarry, where dozens of dinosaurs died in a drought; the visitor center, which opened in 1968, is scheduled for renovation over the next 2 years.
- Discovered the world's only articulated skull, jaws, and neck of an apatosaur ("brontosaurus"-like dinosaur).
- Discovered seven new dinosaurs at Grand Staircase-Escalante National Monument.

#### 5. Existing Partnerships

- The Cincinnati Museum Center for curation of significant specimens.
- The Utah Field House of Natural History for curation of specimens.
- The Museum of Western Colorado for interpretation.
- The Utah Geological Survey for a paleontology database.
- The Utah Museum of Natural History for exhibit development.
- Utah Geological Survey, Utah Museum of Natural History, and Museum of Northern Arizona for inventory of Grand Staircase-Escalante National Monument.

#### 6. Economic Benefits

Over 300,000 people visit paleontological sites and exhibits in Utah annually, most of them along the Dinosaur Diamond National Scenic Byway or in Grand Staircase-Escalante National Monument. The Cleveland-Lloyd Dinosaur Quarry attracts around 6,000 visitors a year. Uncounted others visit the public lands to collect plant and invertebrate fossils for their own use. While collectors may camp on public lands, visitors to developed sites are more likely to stay in towns. Therefore, the economic contributions from paleontological resources would be similar to those generated by heritage tourism.

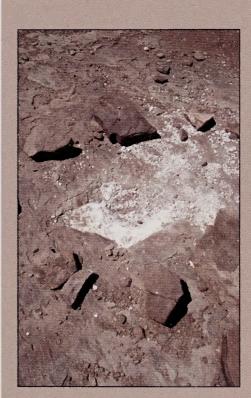
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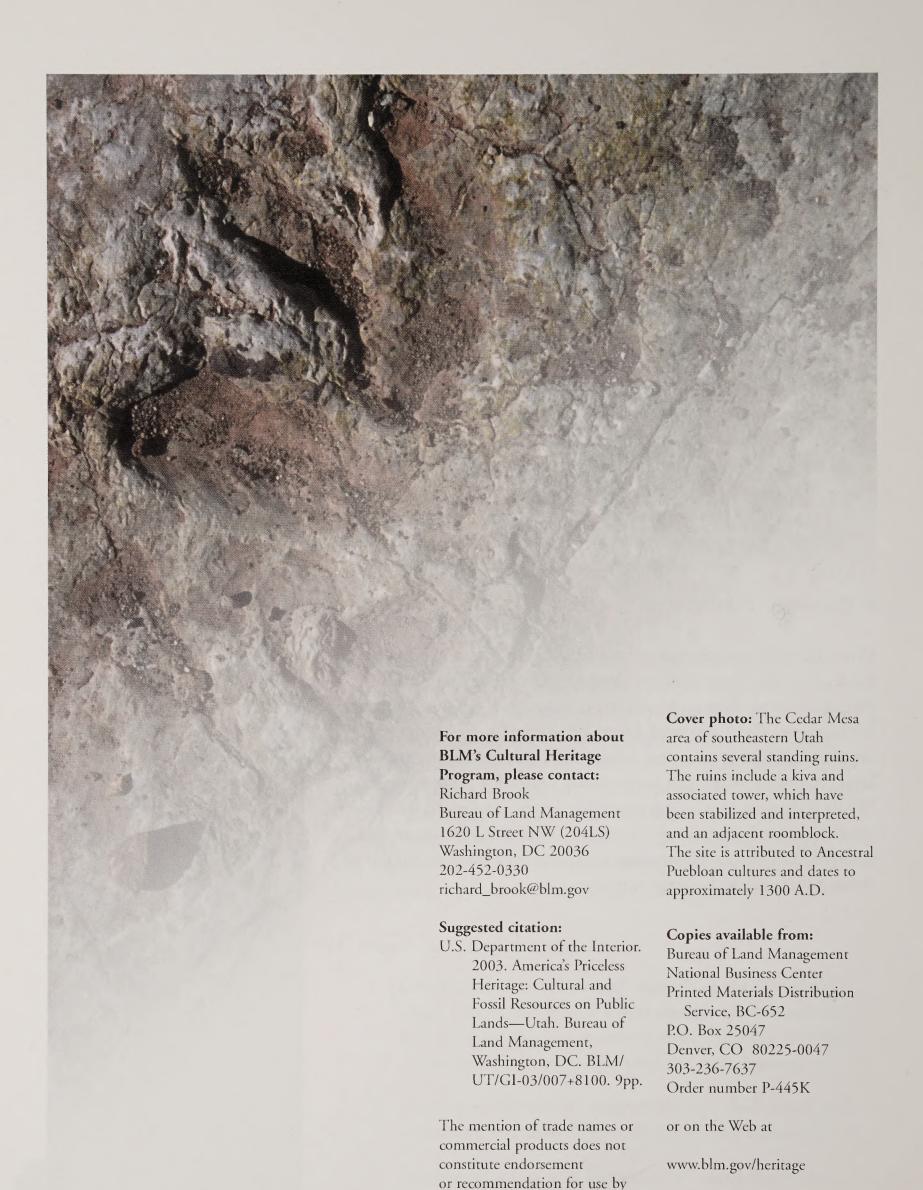
paleontological

sites and exhibits

in Utah annually...



A visitor's efforts to take home a plaster replica of a track have left it damaged forever.



the Federal Government.

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