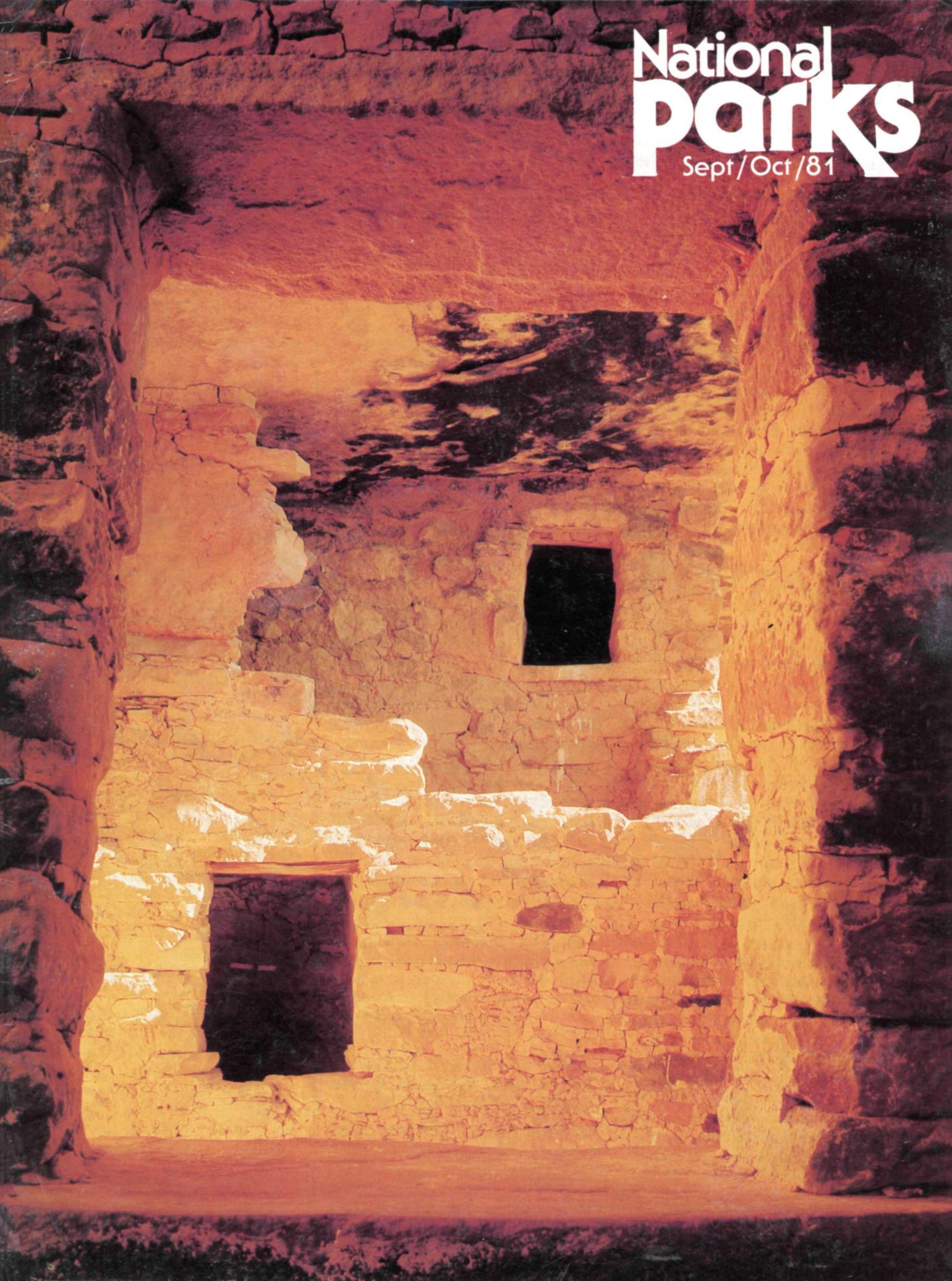


# National parks

Sept/Oct/81



# Commentary

## The Wilderness of Polls

**“Do you favor or oppose the following proposals that are now being considered by the Federal government? Spending money to improve the condition of the national parks rather than expanding the national park system.”**

(73% favor; 20% oppose)

This is one of ten questions in a *Newsweek* Poll that was published along with a cover story on Secretary of the Interior James Watt on June 29, 1981. I and many others were disturbed not only by the conclusions of this poll but more so by the fact that the questionnaire failed to provide important data that any intelligent respondent would need to know.

One fact is that more than 1 million acres of *private* lands exist *within* the boundaries of national parks, and the National Park Service needs to acquire some of these lands to protect the parks. Another is that Watt is proposing to halt land acquisition of areas Congress has *already* added to the National Park System. Another fact is that the money for acquisition of parklands comes, not from taxpayers, but from offshore oil drilling and is legally earmarked for acquisition of parks, not for maintenance of parks.

Once Congress has authorized the addition of an area to the National Park System, the Secretary of the Interior should act expeditiously to carry out the intent of Congress. Instead, Watt is distorting the facts and violating congressional intent, and the *Newsweek* poll and story are contributing to the misinformation. Such shallow questionnaires are doubly disturbing when their conclusions are cited in the text of the article without—again—fully divulging complete background information. Syndicated columnist Ed Flattau, writing to *Newsweek* about its article, said it best:

The magazine accepts without challenge Watt's contention that he is trying to restore a balanced approach to an Interior Department which had become the exclusive playground of “no-growth” conservationists.

The *Newsweek* article also meekly accepts Watt's distorted characterization of his environmental critics as implacable foes of development.

For the record, environmentalists' quarrels with Secretary Watt are not over increased development. Rather, it's where, to what degree, and how fast the development will proceed that are at issue.

Secretary Watt doesn't bother to make this distinction and neither does *Newsweek*. Consequently, the cover story creates an impression that supports Watt's portrayal of himself as a champion of modern day progress and of his environmental opponents as advocates for a return to the dark ages.

This misconstruing of environmentalists' positions and unwarranted glorification of Watt are reflected in the Gallup poll that *Newsweek* editors included in their cover story to justify their conclusion that the “pendulum of public opinion has swung somewhat in Watt's direction.”

At first glance, any intelligent reader must conclude either that the polling firm is biased by its employer or that the pollster is incompetent. Of greater concern, though, we all have to wonder how many readers will accept as fact the result of a poll in the rush of reading their papers, will make decisions based upon the biases of others, and will vote quickly without question.

Surveys have become a way of life, a way of comparing our views with others. Polls *should* cause questions, raise doubts, force us to be the individuals in the crowd—not cause us to homogenize our opinions with the masses, nor to be devices for predicting and, at least recently, for determining elections.

—Paul C. Pritchard  
Executive Director

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## OFFICIAL NOTICE

In the meeting of the Executive Committee of the Board of Trustees, February 27, 1981, it was resolved that Life Member dues be increased from \$750 to \$1,000 effective January 1, 1982.

# Editor's Note

Contemplating an Indian ruin somewhere in the Southwest, I feel presences all around me. Yet they remain elusive, mysterious, intriguing. Who were these people who built this community? Whose hand etched this drawing? Who patiently wove this intricate basket? How did they survive in this beautiful but stark land? What did they think and feel?

These people, remember, were not less evolved than we, but fully as intelligent as you and I. Although they still lived in the Stone Age, their intelligence shows in the well-engineered structures they built and the clever tools and utensils they made. Could you and I do as well under the same circumstances? Would we know what foods to gather and how to preserve and store them so they wouldn't spoil? Could we find and kill game without guns or even bows and arrows? Could we fashion the necessary clothing and utensils? Could we figure out how to cook in baskets without burning them? Could we survive one winter? Could we survive at all without our accustomed conveniences?

Those Ancient Ones did survive. They knew how to feed and clothe themselves. They helped one another, worshipped their gods, cherished their children, and grieved for lost loved ones—as we do. They appreciated beauty as well, for they took care to decorate the objects they made, to make their buildings beautiful, and to adorn themselves with jewelry.

When I stand where they lived and suffered and laughed and cried, I feel I am on hallowed ground, and I am awestruck, thinking of them.

A special section of this issue is dedicated to those Ancient Ones, whose spirits still people the land.

—EHC



# National Parks

Vol. 55, No. 9-10, September/October 1981

The magazine of the National Parks &amp; Conservation Association

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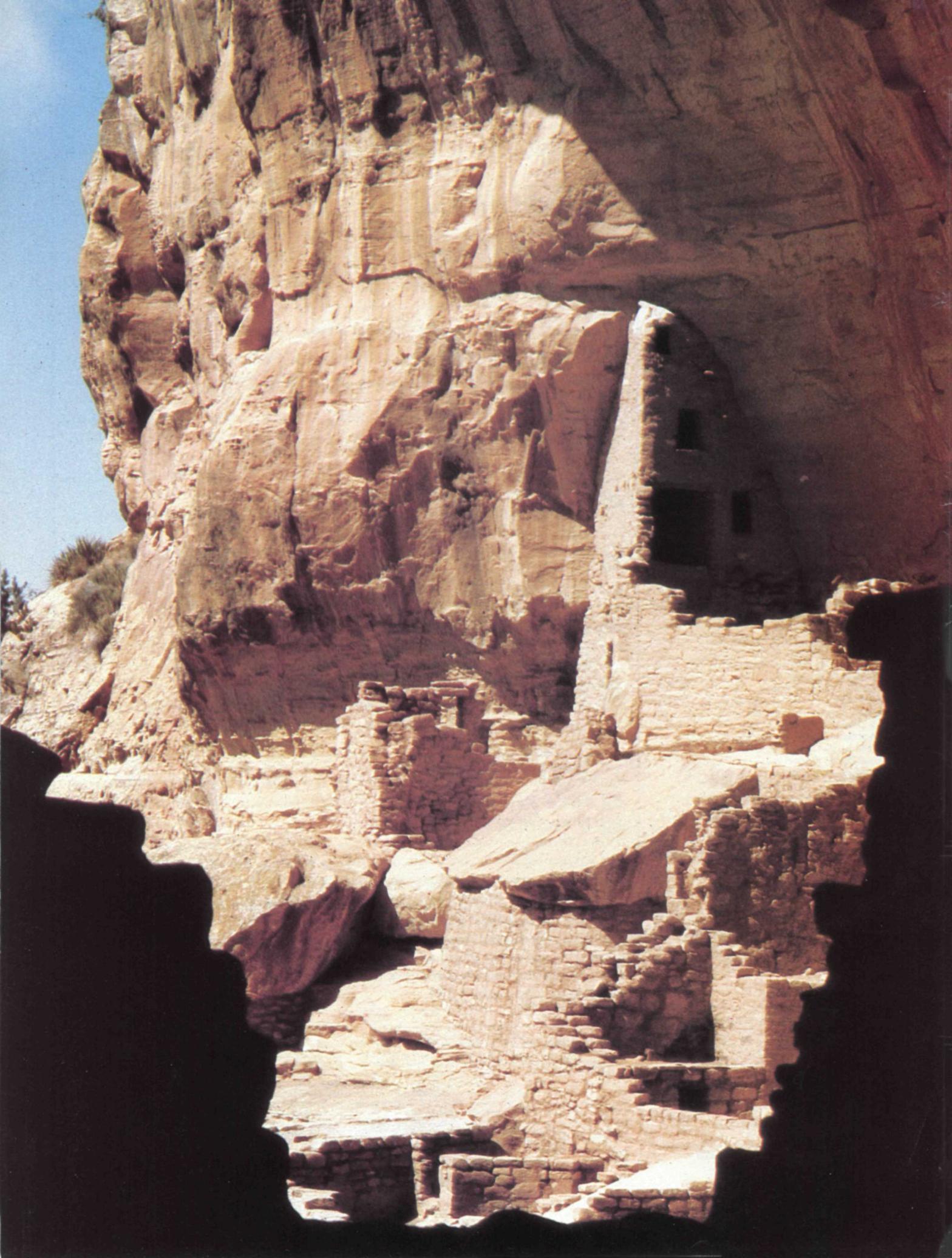
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**FRONT COVER** Mug House, Mesa Verde National Park, by David Muench  
**BACK COVER** "The All American Man," Canyonlands, by David Muench  
Whether peering through a window of an ancient ruin or unexpectedly encountering ancient graffiti in a remote canyon, the visitor is filled with wonder at the array of cultural treasures preserved in national parks. Yet, many archeological treasures are in danger of destruction, and they deserve protection. (See pages 4-19.)

National Parks & Conservation Association—established in 1919 by Robert Sterling Yard with the support of Stephen Mather, the first Director of the National Park Service—is an independent, private, nonprofit, public service organization, educational and scientific in character. Its responsibilities relate primarily to protecting, promoting, and enlarging the National Park System, in which it endeavors to cooperate with the National Park Service while functioning as a constructive critic. Life memberships are \$750. Annual membership dues, which include a \$7 subscription to *National Parks*, are \$150 Sustaining, \$75 Supporting, \$30 Contributing, \$22 Cooperating, and \$15 Associate. Student memberships are \$10. Single copies are \$3. Contributions and bequests are needed to carry on our work. Dues in excess of \$7 and contributions are deductible from federal taxable income, and gifts and bequests are deductible for federal gift and estate tax purposes. Mail membership dues, correspondence concerning subscriptions or

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Canyons lined with intricate cliffside dwellings reveal the secrets of a mysterious prehistoric people—

# The Anasazi of MESA VERDE

Ruth Armstrong

**A**top the pine-scented mesa, the children of the village were playing in the dust with sticks and rocks. A woman knelt nearby grinding corn for the evening meal and keeping a watchful eye on the children. Occasionally she called out to them, or spoke to one of the other women working nearby. Around her waist she wore a string apron made of plant fibers, her sole garment in the hot summer sun. Turkeys skittered around the crude houses, pecking at bits of grain spilled from the woman's grinding stone. The woman did not mind their intrusion, for the turkeys were greatly prized in the village; her people would weave their feathers with rabbit fur to make warm robes and blankets for the winter.

As the woman worked the corn, her man approached, returning



from hunting the mule deer and mountain sheep that thrived on the verdant mesa. He laid his share of the meat in a basket beside the woman, set down his throwing spear just inside the door, and stepped into the cool, dug-out earth house to rest.

The woman paused to look around the village. She felt content with her lot. The murmur of other women grinding corn or brushing debris away from the work area, the chatter of children, the calls of men working in the small fields—all these sounds melded into a hum of purposeful activity. She touched the

pendant that hung around her neck, a few rough pieces of turquoise stuck onto a thin stone with pitch from a pine tree. Like the rest of the villagers, her family lived in a cool pit house, a saucerlike depression in the ground covered by a pole-supported roof of brush and earth. She picked up her basket of corn, so tightly woven it held water and could be used to cook in.

As she rose from her task, she noticed the religious leader standing off to one side of the village, chanting as he scattered pollen in the wind, and she felt secure. She had heard many stories from the elders about how the people had wandered to this land, how they had learned to plant crops of beans, squash, and corn and to build homes so they could stay in one settlement to tend the crops. But the woman was not concerned with past or future. The present was real; life was good.



Human life had been struggling toward that sunlit afternoon about 700 A.D. at Mesa Verde in what is now southwestern Colorado for thousands of years, and it would continue to struggle toward spectacular new developments the woman could not have imagined. Yet only six hundred years later, at the zenith of their development in art, religion, and architecture, her people would mysteriously vanish from their villages, leaving us to theorize about their origin and their fate.

Some scientists believe that early man followed game herds across the Bering Land Bridge from Asia as long as 20,000 to 30,000 years ago, and that groups of these nomadic hunters scattered to settle in areas all across North America. This theory remains the most logical explanation of how the ancestors of the young woman of that summer afternoon in the eighth century had reached Mesa Verde. She was living during what is now called the Modified Basketmaker Period. Her ancestors had settled the mesa and developed basketmaking to a fine art, but her civilization had yet to reach the crest of an amazing burst of development known as the Classic Pueblo Period.

Mesa Verde National Park today traces the development of this *Anasazi* (a Navajo name meaning "the ancient ones") culture from about 550 A.D. to the abandonment of Mesa Verde before the end of the thirteenth century. Sometime

around 500 or 600 A.D. Indians first moved onto the top of the mesa. Only three centuries earlier the people had been nomadic hunters and seed gatherers; but they developed ways of raising primitive crops of beans, squash, and corn, and gradually they gathered to live in communities of pit houses on the mesa. They continued to hunt for meat and eventually learned to use the bow and arrow, which was more practical for small game. The *atlatl*, or throwing spear, remained in use for larger game for some time. They had long since domesticated the dog and kept tame turkeys, primarily for their feathers.

Over the centuries, as life became more stable and secure, these people became skilled artisans of fine turquoise jewelry. When cotton was introduced, probably from farther south, they began to weave cloth to supplement the fur and feather robes and leather garments. Although they continued to weave intricate baskets, the people developed improved fireproof pottery and decorated it with striking black-on-white designs.

The first real pueblo houses were built toward the end of the Developmental Pueblo Period, around 1050, but pit rooms remained in use, mostly as ceremonial chambers. Some of the sturdy, compact communal dwellings contained more than fifty rooms. Some were arranged around courtyards or plazas that contained several *kivas*—circu-

lar underground rooms used for religious rituals. The society became more complex, customs became religions; and as more of the people lived in closer communities, social order and government must have developed.

During the Great, or Classic, Pueblo Period, 1050 to 1300, all knowledge, trial and error, and natural development culminated in a flowering unequalled in any other North American prehistoric time. Personal ornamentation became a high art, in the form of shell and turquoise jewelry. Pottery exhibited the distinctive black-on-white Mesa Verde style in many variations. Pole and mud houses and crude stone walls gave way to masonry construction where stones were fitted together so beautifully they still stand after five hundred years of neglect. And ceremonies became showy and intricate rites, imbued with deep spiritual significance.

In the middle of this period, toward the end of the twelfth century, the people of Mesa Verde began to move from their pueblos on top of the mesa down into caves in the sheer canyon walls below, where they built the cliff dwellings so well known today. No one knows positively why they made such a drastic move in the midst of plenty. The new cave dwellings were difficult to reach and must have been dangerous, especially for children and older people. The caves were probably colder in the



Though the Anasazi departed en masse from Mesa Verde centuries ago, they left behind a wealth of clues to their culture in everyday items like tools, pots, and baskets.

The early Basketmakers wove sturdy sandals and tightly coiled baskets of many useful shapes from yucca fibers. During the peak of cultural development, classic shapes and designs became common in pottery. In the most advanced forms, black geometric and animal motifs were painstakingly painted on the white clay for a striking effect.



winter than their pueblo homes on top of the mesa and were undoubtedly hotter in summer. Why move? The ready answer is for protection. By this time, dozens of other communities had moved into the region, and competition for resources may have developed. The cliffside homes were certainly easier to protect.

After moving from the mesa top, the Anasazi occupied their cliff dwellings for only about one hundred years before they disappeared forever from Mesa Verde. That evacuation is an even greater mystery than their sudden move to the caves. The reasons for this new move may have been deforestation, a desire for new and less populated frontiers, superstition, a combination of these factors, or none of them. The only sure reason was drought; the study of tree ring growth of that period shows that a severe drought took place during the final quarter of the thirteenth century. The people traveled south and southeast, down to the Rio Grande where irrigable lands were broader and water sources more reliable. Some may have migrated southwest. By the time the Spaniards arrived in the sixteenth century, most of the descendants of the Anasazi were pretty well assimilated into other pueblo cultures along the Rio Grande in what is now New Mexico.

The ruins at Mesa Verde slept silently in summer sun and winter

snow until around 1880, when members of the Wetherill family, who ran cattle in the canyons below Mesa Verde, began to discover ruins that piqued their curiosity. In 1884 the family built a cabin near the mouth of one of the canyons for the five brothers who took turns tending the cattle. Ute Indians told them of the homes of the "ancient ones" in the canyons, and during the next twelve years, the Wetherills discovered most of the pueblos and guided several excavating parties to the sites. In 1906 the area was proclaimed a national park, and scientific excavation began to unravel the history of these resourceful people.

Today, the park's visitor center provides interpretive displays; paved roads lead to overlooks of all major ruins; foot trails lead to many pit house and pueblo sites.

No recent excavations have been made at Mesa Verde, the latest being an extensive report on Long House, one of the largest cliff dwellings in the park, in 1958. Gilbert Wenger, park archeologist, says that because of budgetary limitations the park can only "maintain the status quo." The status quo at Mesa Verde, however, is spectacular. This park offers a glimpse into the lives of a fantastic prehistoric people that lived in one of the most unusual spots ever settled. □

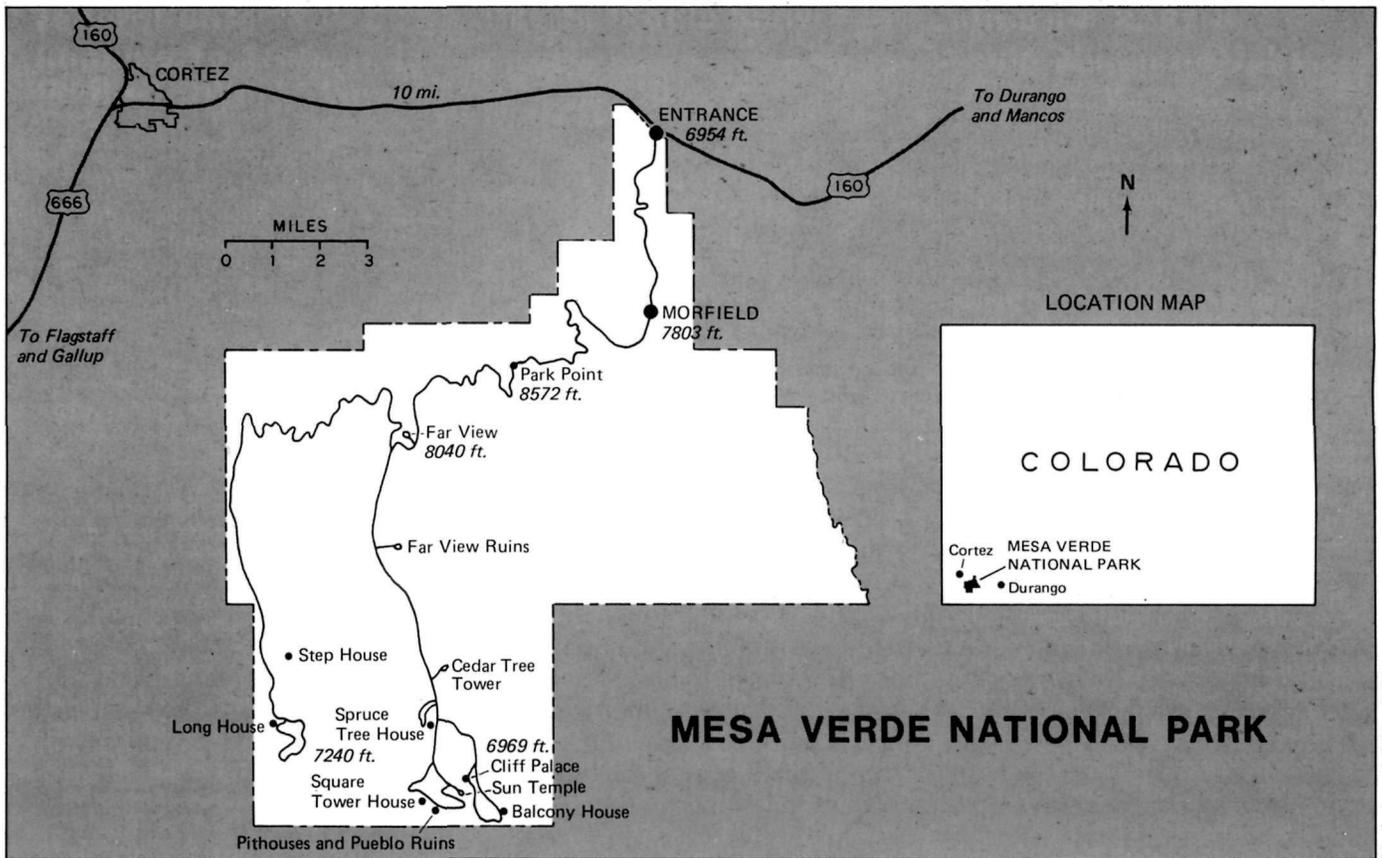
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Ruth Armstrong, a member of the Society of American Travel Writers and a native of New Mexico, previously published articles on Carlsbad Caverns and Chaco Canyon in National Parks.

An Anasazi Symposium will be held at Mesa Verde National Park on October 1, 2, and 3 for presentation of nationwide research papers on the culture. The papers presented at the conference will be published as a series showing the history of archeological study at the park. Other reading on the subject includes an award-winning book, *The Story of Mesa Verde*, published in 1980 by the Mesa Verde Museum Association, written by Park Archeologist Gilbert Wenger; and *Anasazi, Ancient People of the Rock*, by David Muench and Donald G. Pike, available from American West Publishing Company in Palo Alto, California, newly available in paperback. See *Bookshelf*, p. 42, for more reading.

Animal motifs courtesy of Mesa Verde Museum Association





Map by James F. O'Brien ©NIPCA

**WHEN YOU GO . . .**

The entrance to Mesa Verde National Park is midway between Cortez and Mancos, Colorado, on U.S. 160. The park is accessible to visitors from nearby Cortez, Colorado, via park buses from May to October. You can fly to Cortez or Durango, Colorado, or take the train to Grand Junction, Colorado, or Gallup, New Mexico, then rent a car.

Visitor facilities include bicycle rentals, campgrounds, gas stations, stores, showers, picnic areas, post office, laundry, hiking trails, restaurants, telephones, and lodging. Morfield Campground is open from May 15 to October 15 for tents and trailers, for a fee of \$2.00 per night, no reservations taken. There are no utility hookups for trailers, but picnic facilities, trailer-holding-tank disposal facilities, groceries, gas, showers, and laundry facilities are available at the campgrounds during those months. Lodging is available at Far View from May to October;

during summer months it is advisable to make reservations with the Mesa Verde Co., P.O. Box 227, Mancos, CO 81328, phone 303-529-4421.

From mid-November to mid-April concessioner facilities are closed, but the museum and Ruins Road are open year-round, unless storms close the roads. Tours of Spruce Tree House are conducted all winter, when weather permits.

Elevations on the mesa often exceed 7,000 feet. In summer, daytime temperatures go up to 90°F, but

evening temperatures dip as low as 55°F, so bring plenty of warm clothing to ward off the chill. Winter temperatures can be quite cold at this elevation, and snow frequently covers the ground. Hikes to the cliff dwellings are quite strenuous. Adequate footwear, such as hiking boots or sturdy shoes, is recommended for these trips. The level of exertion required for such hikes could adversely affect persons with heart or respiratory ailments. But, with the exception of Balcony House, all major cliff dwellings can be viewed from overlooks on the canyon rims, without hiking down the canyon trails. Parents should be especially alert for their children's safety near the cliff edge.

For more information, write the Park Superintendent at Mesa Verde National Park, CO 81330.



Photo by Bill Winkler



Rising over surrounding canyons, Mesa Verde was a lush green haven for early Anasazi settlers. The top of the mesa was breezier and moister than surrounding areas, leading to the success of early crop-tending ventures. From simple pithouse design evolved a remarkably engineered pueblo architecture, shown on top of the mesa (top) and viewed from the inside (right).

Photo by Christel Converse

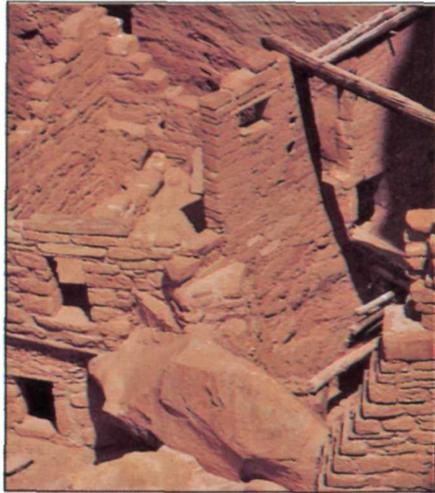
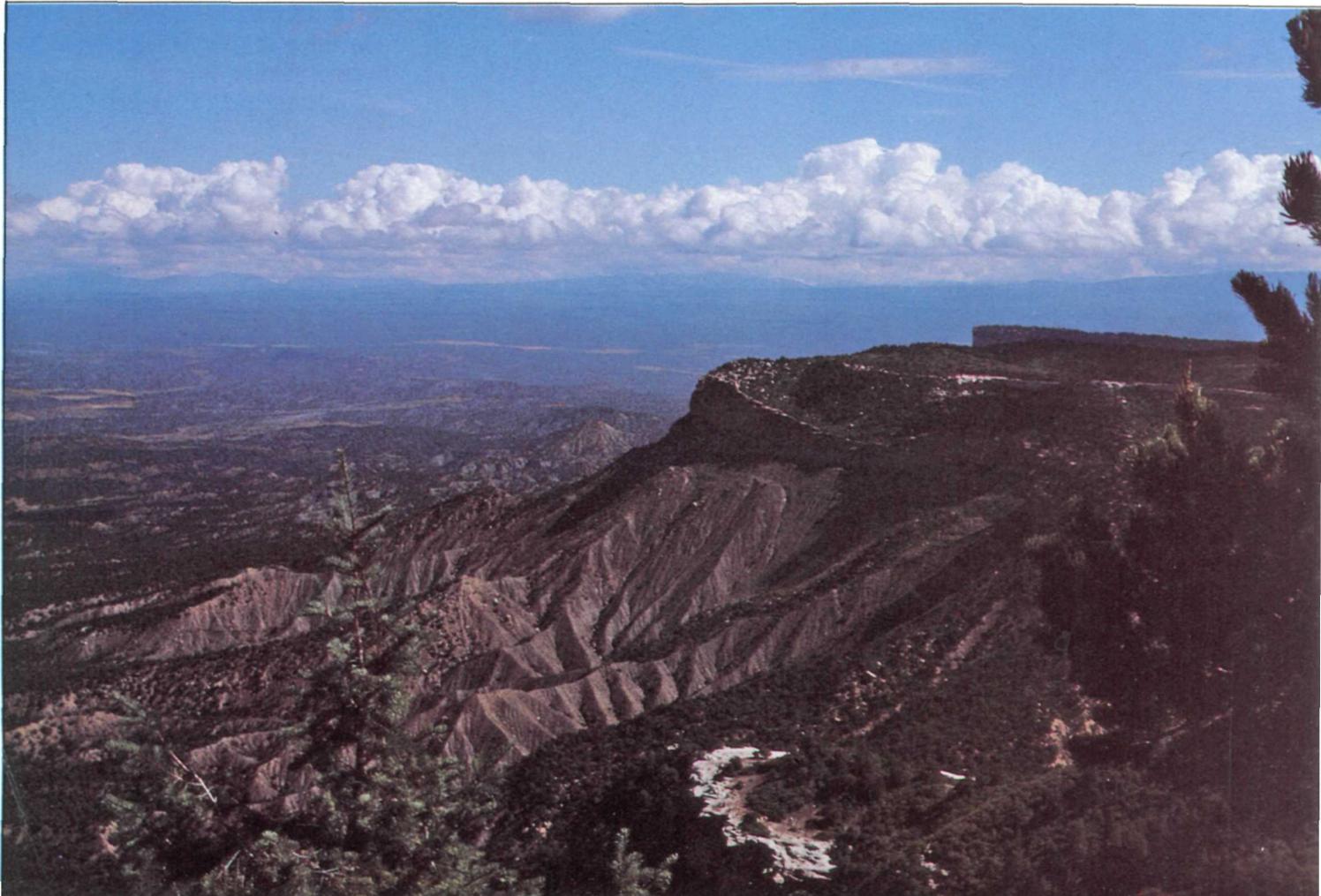
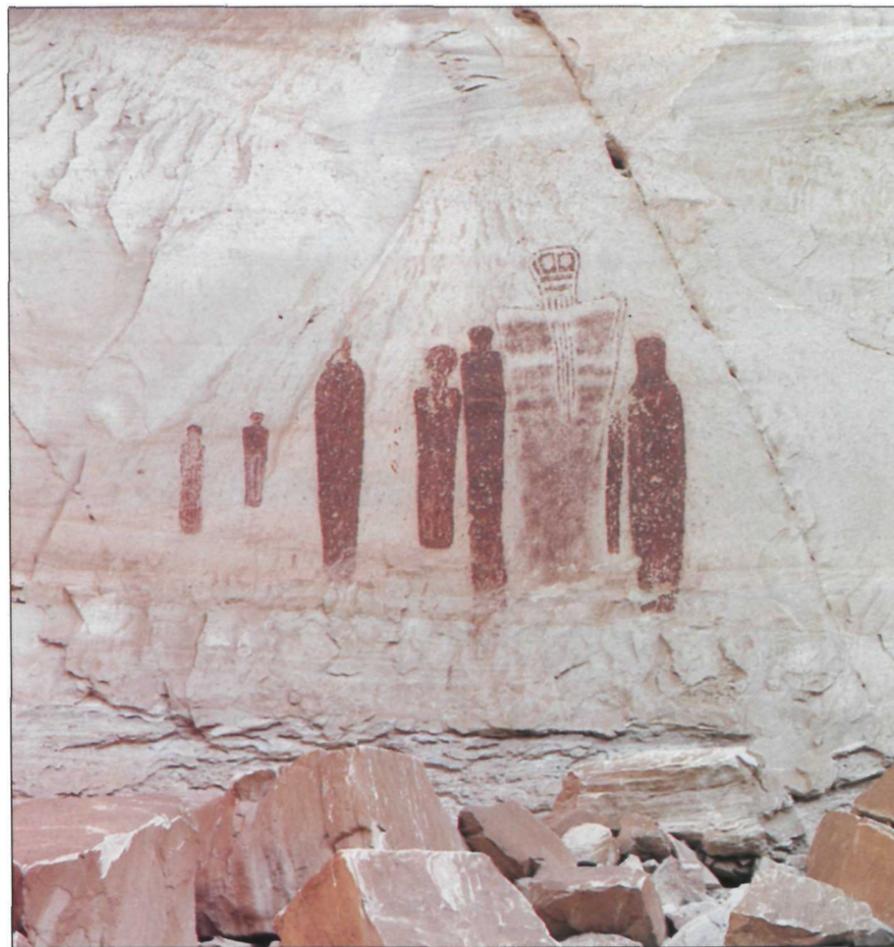


Photo by Christel Converse



# ROCK ART in the Southwest

A portfolio

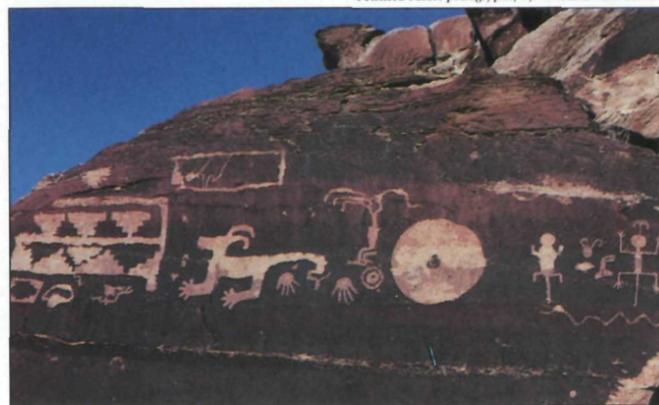


Barrier Canyon pictographs, Canyonlands, © 1978 Karl Kernberger

All over the Southwest one is likely to encounter, hidden away in secluded nooks or displayed dramatically on mighty cliffs, handiwork of the pre-Columbian peoples who inhabited this region. Designs picked out of the rock are called petroglyphs; those painted onto the rock are called pictographs.

Geometric shapes, hand prints, animals, people, mystic signs—no one knows the meaning of this enigmatic artwork. It ranges from rock faces crowded with small symbols to cliffs decorated with life-size humanoid figures. Do these cryptic inscriptions record events? Are some crude maps? Whimsical graffiti of bored wanderers? Invocations of magic spirits? Perhaps all these suggestions are true. Whatever the purpose of this intriguing artwork, across the centuries these bold statements still say to us clearly: *I was here!*

Petrified Forest petroglyphs, by National Park Service



Newspaper Rock in Petrified Forest National Park, Arizona, is literally covered with petroglyphs, some drawn atop older drawings. In the detail at right the “sun-arrow” may have pointed the way for early travelers to the nearest water. At far right a petroglyph in Capitol Reef National Park, Utah, depicts big-horn sheep, which no doubt were abundant in the area at that time and a favored source of food.

Land managers have a hard time trying to prevent vandals from defacing rock art and poachers from carting it away to sell to collectors.



Newspaper Rock detail, by Gerry Blair



Capitol Reef petroglyphs, by Russell D. Butcher

The eerie pictographs above in Canyonlands National Park, Utah, date from before 700 A.D.—and could go back thousands of years B.C. These and many similar pictographs in the Great Gallery in Barrier Canyon in the park are believed to have religious origins. According to Polly Shaafsma—anthropologist and art historian—these painters, later Fremonters of the same area, and Basketmakers of the lower and central San Juan Valley shared a tradition of portraying large human figures with supernatural attributes, which practice may indicate related shamanic practices throughout the region.

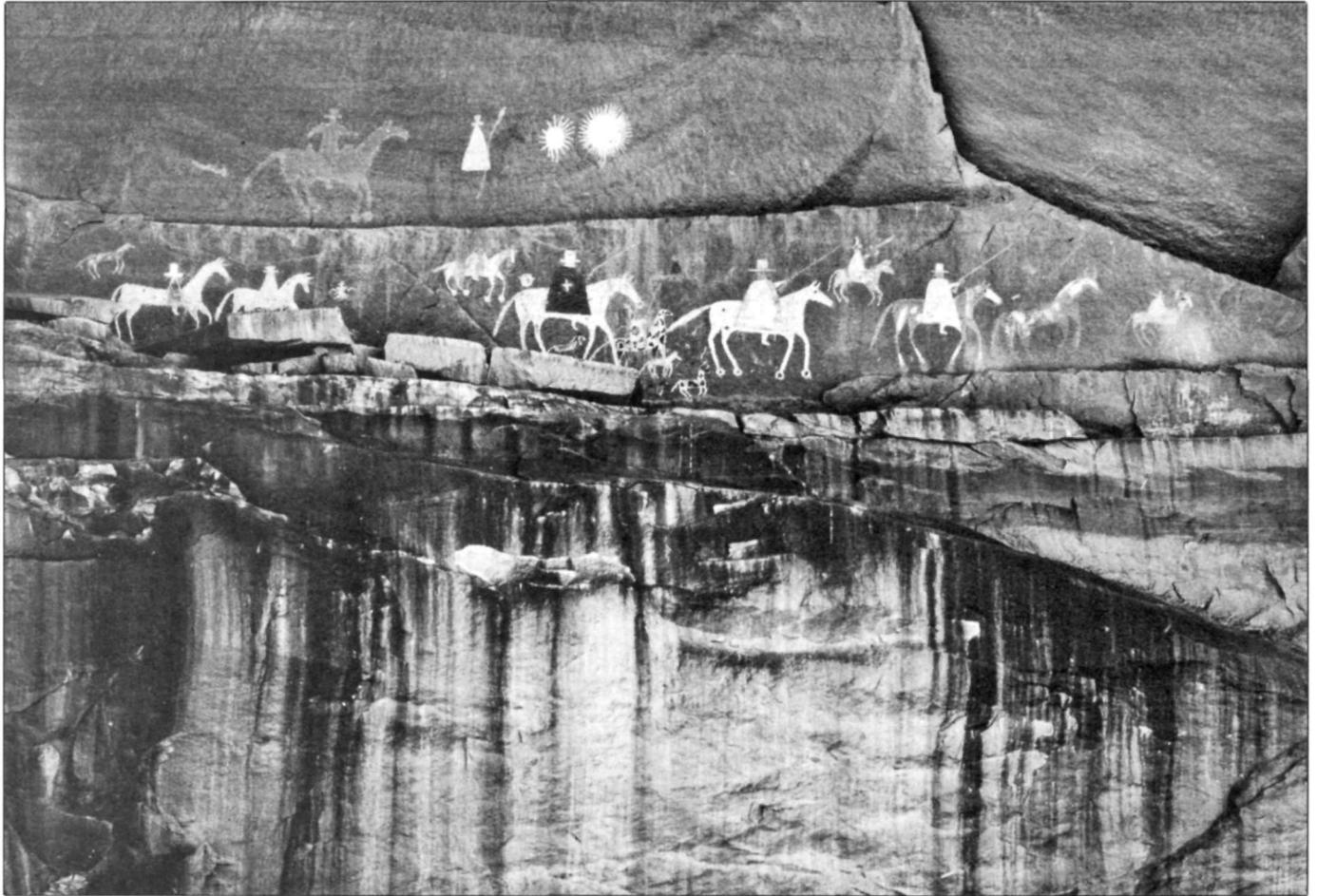




Late Anasazi pictographs, © 1978 Karl Kernberger

Petrified Forest petroglyph, by Petrified Forest Museum Association





Perhaps one of the rarest petroglyphs in the Southwest is the large mountain lion found in Petrified Forest National Park, Arizona, and now on display at the Rainbow Forest Museum in the park. The artist successfully conveyed his feelings about the animal's ferocity in this superb work of rock art.

The late Anasazi pictographs opposite (post 1300 Pueblo), found near Abo, New Mexico, depict masks of supernatural beings and probably were painted by shamans or had shamanistic purposes.

Of more recent vintage, the pictograph above in Canyon de Chelly National Monument, Arizona, is believed to portray the punitive Spanish military expedition led by Narbona that massacred many Navajos in Canyon del Muerto in 1804. The Navajos probably had never seen rifles before this expedition arrived; the artist carefully included these weapons—and the Franciscan monk that accompanied the expedition.

In 1980 the School of American Research in Santa Fe published the results of a huge project it sponsored to document Southwestern rock art. Readers interested in learning more about this fascinating subject and how to obtain a copy of the authoritative and beautiful book, *Indian Rock Art of the Southwest*, by Polly Schaafsma and illustrated by archeologist Curtis Schaafsma and photographer Karl Kernberger, may refer to Bookshelf, p. 42.

—Eugenia Horstman Connally

# MESA VERDE: A World Heritage

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Russell E. Dickenson  
Director, National Park Service

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An enthusiastic group of more than two hundred guests, park visitors, and National Park Service staff gathered at the pinyon-and-juniper-framed amphitheater on the brink of Spruce Canyon in Mesa Verde National Park on June 29, 1981, to attend ceremonies commemorating this park's seventy-fifth anniversary and formally dedicating Mesa Verde as a World Heritage Site. NPCA's Southwest regional representatives, Russ and Pam Butcher, were there and described the day's events and the principal address by National Park Service Russell E. Dickenson as tremendously inspiring. The following remarks are excerpted from Director Dickenson's address.

The world heritage program of the United Nations Educational, Scientific, and Cultural Organization began only nine years ago as an expression of cooperation among the family of nations. Its purpose is to safeguard the cultural and natural heritage of mankind, as represented by specific natural and man-made treasures around the world. Only eighty-five sites have thus far been designated in twenty-eight nations. Of these, the United States has the distinction of having six designated sites. They include Independence Hall in Philadelphia, where the Declaration of Independence was signed, and Yellowstone, Grand Canyon, Everglades, and Redwoods national parks. All the world heritage sites thus far designated in the United States are in the National Park System.

As a park professional and as a citizen, I find it immensely gratifying that this generation of mankind has recognized the most urgent need of all, and that is that we must

know far more about our world if we are to preserve it.

The Seven Wonders of the World, those man-made expressions that were considered the preeminent sights of the ancient world, have long been known. The Colossus of Rhodes, a 100-foot-tall bronze statue of the sun god, was destroyed and sold for scrap. The Pharos of Alexandria, a 440-foot-tall lighthouse at the mouth of the Nile, was destroyed by uncertain means, as were also the hanging gardens of Babylon and the statue of Zeus at Olympia. Only fragments on display at the British Museum remain of the Temple of Artemis at Ephesus, which was destroyed by an invading army of Goths. An earthquake destroyed the Mausoleum of Halicarnassus in what is now Turkey.

We can read about these impressive sites, view artists' conceptions of them, even visit the places where they stood or are believed to have stood. But the fact remains that they are gone—all of them—and

with them we have lost an impressive legacy in the story of mankind. Of the Seven Wonders, only the pyramids of Egypt remain, still telling their story of the ancient pharaohs and those early cultures along the Nile.

I'm sure it's apparent to most everyone that we cannot risk failing in our determination to preserve our natural and cultural heritage and the splendid places, scenes, and artifacts that represent that heritage.

We expend a great deal of money and effort in preserving and, in some cases, restoring many of our cultural and historic sites—the sites of ancient civilizations, settings that marked a significant development in the evolution of mankind and his culture.

Nor does this growing effort embrace only the works of man. Belatedly, we have come to recognize that there is a value beyond calculation in preserving the natural species with whom we share our planet. Even more importantly, we know now that the future of Earth itself is central to this issue and that we must exercise wise stewardship if oceans and forests and prairies and the living creatures they support are to endure.

It is important to understand the legislation that established the National Park Service sixty-five years ago, which directs the Service to conserve the scenery, the natural and historic objects, and the wildlife of the parks, and to provide for their enjoyment "in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

Conventional thinking portrays the parks as caught between the demands for preservation on the one hand and use on the other. On one side is the image of the museum, with the Park Service as a curator preferring that visitors handle the exhibits as little as possible. On the other is the conception of the na-



Russell D. Butcher

Russell E. Dickenson

promised. To develop them as conventional recreational facilities would be a misuse of their unique natural and historical values. And to see them as escapist enclaves, unrelated to the problems of our time, would be wholly to misread the opportunities they offer.

What, then, is the meaning of the national parks today?

There are four principles that I believe best describe the values of the National Park System.

One, the national parks are places where recreation reflects the aspirations of a free and independent people. They are places where no one prepares entertainment for the visitor, predetermines his responses, or tells him what to do. The parks provide a contrast to that familiar situation in which we are bored unless someone tells us how to fill our time.

Two, the parks are an object lesson for a world of limited resources. In the national parks, the visitor learns that satisfaction is not correlated to the rate at which he expends resources. Rather, just the opposite is true. The parks promote intensive *experience*, rather than intensive *use*. The more one knows, searches, and understands, the greater the interest and satisfaction of the park experience. The parks perform their function without being used up at all. Visitors do not increase their enjoyment of an alpine meadow by picking its flowers, for example. They increase their enjoyment and that of others by observing and appreciating the flowers in their natural setting.

Three, the parks are great laboratories of successful natural communities. Ideas are perhaps the scarcest of all resources, and nature is a cornucopia of ideas in a vast laboratory setting. With a discerning eye, one can see in any park a multitude of examples of efficiency and adaptation—in architecture, in food production and gathering, in resistance to disease, in procreation and energy

use—all of which have their counterparts in human society. Nature provides an unequalled storehouse of material for human contemplation.

Finally, the parks are living memorials of human history on the American continent. The National Park System is a richly endowed showcase of our history as a people: settlements of Native American people at places like Mesa Verde, sites associated with the American Revolution and the Civil War, communities of early settlers, homes of presidents. These places are essential to the aspirations of a free people, for without our history and our culture, we are at large and vulnerable in the present.

In this Mesa Verde complex a thousand and more years ago, there lived a people who except for that mysterious final migration spent their entire lives probably within a few miles of their birthplace, with little knowledge of the world around them. Yet, today, we commemorate the recognition of the world community of these people and their work and their contributions to the heritage of man. It is appropriate that we bestow this international honor through the auspices of the United Nations, because Mesa Verde and all other areas that have been similarly honored are truly international resources.

The earth is our home, and we share responsibility for the management of our environment and the preservation of our values. The air we breathe is common air; the seas at our borders are common seas; and these World Heritage properties are truly the properties of all mankind.

We are honored by this formal recognition of Mesa Verde National Park as a World Heritage Site, and on behalf of the National Park Service and of all Americans, we pledge ourselves to its enduring care and protection for the enlightenment, use, and enjoyment of future generations. □

tional parks as a playground to be administered for the recreation services they can provide.

These divergent views have great practical implications. If the parks are essentially just museums, we should hold these few places as the crown jewels of America's natural heritage, resisting the addition of areas possessing, perhaps, lesser significance; discouraging those uses and facilities that bring visitors to the parks in great numbers; and isolating the national parks as much as possible from contemporary problems such as energy, transportation, and urbanization.

If, on the other hand, the parks are simply a reservoir of raw material to be put in the service of our growing appetite for recreation, one measure of "success" would be the number of visitors we serve—but at what price?

Neither of these extremes accurately describes the role that the national parks must and do perform. If the parks are inaccessible to the vast majority of the American people, their purpose and mission is com-

Looting, farming, and development may  
obliterate all traces of America's

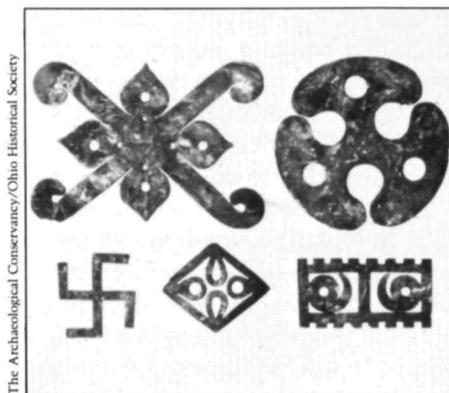
# PREHISTORIC LEGACY

Mark Michel

When the Smithsonian Institution team surveyed the great moundbuilder sites of the Ohio and Mississippi valleys in the 1840s, they found 20,000 mounds. Today, no more than 200 remain. Unless current trends of rampant looting, carelessness, and mismanagement of these and other American prehistoric sites are reversed, they will be lost forever, along with all opportunity to unravel the mysteries of these remarkable civilizations.

The Park Service has been dedicated to prehistoric site protection and interpretation since its inception. As early as 1889, Congress preserved the ancient ruins of Casa Grande in Arizona, which later became the first NPS archeological unit. Today more than thirty national park units are dedicated primarily to preserving America's prehistoric heritage, and many other units contain archeological sites within their borders.

The National Park System preserves only a handful of the prehistoric ruins still in existence. More are legally protected by virtue of their being on public lands, mainly in the West. In spite of this protection, a great deal of damage has already been done to sites on those western public lands. In the State of Arizona hardly a prehistoric site exists that has not been ravaged by looters. In addition, many valuable sites remain without any protection from private use or over-enthusiastic exploration by archeologists.



The Archeological Conservancy/Ohio Historical Society

In recent years the National Park Service has made a major attempt to modernize policies for better preserving the sites it manages. The biggest advance in the Park Service prehistoric management program has been at the great pre-Columbian complex at Chaco Canyon in northwestern New Mexico. One of the first parks proclaimed under the Antiquities Act of 1906, Chaco Canyon displays the nation's most spectacular prehistoric ruins. The largest of the pueblos at Chaco Canyon, Pueblo Bonito, contained between 600 and 800 rooms in a five-story, apartment-like complex curved and stair-stepped like a Roman amphitheater. The canyon and its magnificent major pueblos tell only a small part of the story of a once great civilization, however. Great roads linked this central settlement to a vast complex of supporting villages that were involved in an elaborate trade network.

In 1969 the National Park Service

founded the Chaco Center to study the entire Chacoan system. From those studies came an innovative plan to include a sampling of the outlying villages in the monument. As a result, in 1980 Congress created the Chaco Culture National Historical Park, incorporating thirty-three of these outlying towns into a single unit with the central Chaco settlement. The town sites are vastly important in studying the culture. Many of these outliers may never be opened to the public but will remain scientific preserves, providing information essential to our greater understanding of the Chaco culture.

Valuable artifacts and research material lost to looting and destructive archeological methods cannot be replaced. Unchecked looting on Western lands has made the business of looting even more profitable. As the extraordinary artifacts of the Chaco and other Southwest cultures become more and more rare, they become more valuable on the black market, and thus more in demand. Professional looters have responded to this demand by coming up with more efficient techniques to sack our nation's prehistoric treasures. Many now use backhoes and front-end loaders to recover hauls of jewelry or pottery, a process that also renders worthless a site's archeological value.

The situation is not as hopeless as

**Pre-Columbian artisans used copper from Isle Royale to craft these delicate ornaments (opposite). Near Newark, Ohio, sandwiched between modern-day roads and fields, the perfectly engineered circle and octagon earthworks of a Hopewell tribe are still clearly visible from the air. This prehistoric site remains relatively undisturbed, unlike most in North America.**

it seems. A tough new federal law, the Archeological Resources Protection Act of 1979, is slowing down looters on public lands in the West. The law allows courts to administer criminal penalties and large fines for looters.

**I**ronically, another major source of destruction to prehistoric sites has come from well-intentioned archeologists. In past years, Park Service archeologists sacrificed the preservation of irreplaceable information to digging to improve interpretive services for visitors. Techniques like carbon dating and tree ring analysis are relatively recent developments, so valuable clues to a culture's history were often ignored or destroyed in the past. In response to this problem the National Park Service has now adopted the modern techniques of "conservation archeology." The Park Service now manages a site so that some portions are preserved in situ (in place), thus allowing future generations of archeologists, with even more advanced techniques, to glean new information from original, untouched material.

The new management philosophy extends to park interpretation programs. These days interpretation focuses on the people and their culture more than on the artifacts or sites. In fact, many of the unexplored sites are closed to the public, to preserve them for future study.

The Archeological Conservancy/Smithsonian



Most of the prehistoric sites that remain intact lie on privately owned land, and their care or destruction depends solely on the discretion of the owners. Some landowners take special care to preserve the portions of their property claimed long ago by a prehistoric people. But, far more frequently, an owner's ignorance of the value, significance, or even the existence of an important site that may seem like nothing more than a slight rise in a cornfield, results in the plowing under of prehistory. The efficient new machinery of modern agriculture threatens these privately owned sites daily.

Until recently, NPS policy exacerbated the problem, restricting protective designation to only the most scenic and architecturally interesting sites, often disregarding threatened sites of great cultural or scientific significance. The Chaco project

marked a major breakthrough in Park Service management policy, and the effects of that breakthrough are spreading throughout the nation. Near Chillicothe, Ohio, the Park Service manages a small prehistoric Hopewellian ceremonial center known as Mound City Group National Monument. Like many NPS cultural resources, the site came under protective designation because it was located on surplus government property—in this case, a World War I training base. By the time the site was protected, many of its treasures had long ago been bulldozed to make room for barracks. The area encompassed by the monument remains historically important, but at the same time many significant Hopewellian sites containing vast stores of archeological treasures exist outside the monument, completely unprotected.

In truth, the existing monument



The Archaeological Conservancy/Ohio Historical Society

Viewed up close, Hopewell artifacts show fine craftsmanship possible only in a highly specialized society. To the left, obsidian points fashioned from raw materials imported from Yellowstone made exceptionally durable, sharp hunting tools. Right, a wealth of Hopewell artifacts, buried for centuries, includes freshwater pearls, a seashell necklace, grizzly bear teeth, mica and copper in intricate designs, pottery, and quartz and obsidian points. As these and other North American prehistoric artifacts are studied they reveal a remarkable cultural legacy that will be lost if the sites are not protected.

hardly does justice to this magnificent pre-Columbian culture, whose traces still mark the entire region. The Hopewell culture constituted the greatest prehistoric civilization in the eastern United States, flourishing from about 300 B.C. to 500 A.D. The Hopewellians developed a trade network even more elaborate than that of Chaco, collecting exotic materials from across the continent to fashion into ornate works of art. Hopewell villages reached as far west as Kansas City, east to New York State, and south to the Gulf of Mexico.

Recently, when the Park Service proposed expansion of the monument, it chose additional sites mainly on the old criteria of geographical proximity instead of cultural significance. Fortunately, Congressman John Seiberling (D.-Ohio) inserted a provision in the legislation requiring a study of all the remaining Hopewellian sites in the region to evaluate their cultural significance. Through these studies, preservationists hoped to ensure protection of the most archeologically valuable sites, rather than allow sites to be chosen for inclusion in the park based on arbitrary concerns. The study is due by December 28, 1983; but to date, no study has begun, there are no plans for its

completion, and new Interior Department policies seem to prohibit Park Service studies of prospective new parklands.

The list of possible Hopewellian sites includes the ceremonial center of the Hopewell civilization—the Hopewell Mounds Group—which dwarfs the nearby monument in size and in cultural significance. This group of mounds is believed to have contained the greatest quantities of fine art pieces of that culture ever discovered. A three-mile-long earthen embankment enclosed about forty mounds containing prestige burials. In those mounds, archeologists have found art works fashioned from mica from the Carolinas, shells from the Gulf of Mexico, copper from Isle Royale, grizzly bear teeth from the Great Plains, and obsidian from Yellowstone.

Rather than let the fate of the Hopewell Mounds Group remain uncertain, the Archaeological Conservancy, an NPCA Associated Organization, stepped in, bought the land, and established a preserve. The Conservancy acquires and permanently protects the best of those privately owned sites that remain in existence.

This kind of action by private groups may catch on, helping protect lands that the Park Service is neither authorized to acquire nor funded to purchase, during this time of severe budget cuts. Perhaps,

if it is ever completed, the NPS study of remaining unprotected Hopewell sites could recommend a system of protecting outliers similar to that developed at Chaco Canyon. In any case, timely protection of remaining sites is crucial if we are ever to unravel the many mysteries of the Hopewell and other prehistoric civilizations.

Until recently, visitors to park units like Mesa Verde and Chaco Canyon could learn little of the people who lived there. Today, improved site interpretation and more careful archeological study help tell the stories of past cultures, through displays of artifacts and art works, and through displays of the people's daily lives, based on scientific research. But some park interpretive programs of prehistoric cultures still need improvement. At Bandelier National Monument, for example, interpretation focuses on the present culture of Pueblo Indians, virtually ignoring the park's vast legacies from pre-Columbian tribes. The National Park Service has made great strides in protecting and managing our prehistoric heritage in the past decade, however. As funds permit, many missing pieces to cultural puzzles will be fitted into place, through site acquisition, protection, and study.





POINT CLEARVIEW  
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# The Greying of the National Parks

Even in the most isolated parks,  
air pollution reduces visibility,  
sterilizes lakes, and kills plants

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Terri Martin

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Imagine it is the year 2010. During the past thirty years, a new crop of smokestacks, synfuel plants, and stripmines has sprouted in the West. Environmental regulations and pollution controls have been rolled back to foster “unimpeded development.”

A small band of visitors stands on the southern lip of that giant geologic abyss—the Grand Canyon. They squint and stare silently into the expansive panorama that falls away before them—but a sweeping sea of smog hides the view.

“Spectacular,” says one of them. “But where is it?”

“I don’t know. Maybe we better go buy a postcard.”

An exaggerated scenario? Everyone certainly hopes so. But the National Park Service has called the degradation of air quality the number one

threat to the national parks. Air quality is endangered in almost half of the 333 units; for example, air pollution already impairs visibility about one hundred days of the year in the Grand Canyon. Acid rain has “killed” thousands of streams and lakes around the world. Pine trees and other vegetation are diseased and dying from exposure to airborne pollutants. The effects of air pollution are damaging park resources and diminishing visitor enjoyment from Shenandoah to Sequoia national parks.

## The Greying of the Parks

In the mountainous Southwest, where more than a dozen national parks, national monuments, and national recreation areas provide sweeping panoramic vistas, visibility is considered to be the best in the United States, if not the world. As Wallace Stegner once wrote, “In that country you cannot raise your eyes—unless you are in a canyon—without looking a hundred miles.” The impairment of visibility in this land of limitless vistas seems particularly severe. Power plant plumes or bands of yellow-brown haze can be seen from exceptionally great distances. Regional haze can fade brilliant blue skies and razor sharp red-rock horizons to a uniform dull grey.

Even the degradation of visibility—the air pollution problem most obvious to the park visitor—can be so quietly incremental as to escape public protest until it is essentially irreversible. The eastern United States, for example, where the average annual visual range is now less than fifteen miles, once rivaled the Southwest for breathtaking vistas. Not much more than fifty years ago Congress established Shenandoah National Park and spoke of the “grand views” from the Shenandoah Mountains east to Washington, D.C.—more than seventy



Photos by the National Park Service.

miles distant. Today severe air pollution episodes in Shenandoah National Park limit visibility to the interpretive signs along the roadside at times.

The grand views of the southwestern national parks are suffering the same incremental erosion as those of Shenandoah. In Arches National Park, for example, pollution from a local industrial source, the Atlas uranium mill, creeps into the park until it envelops the hills and cliffs, smothering the red-rock landscape in a sea of smog. This condition occurs as often as 50 percent of the time in December and January and about one-quarter of the time in the summer season.

Pollution from the Four Corners power plant oftentimes swallows the entire Chuska Mountain Range, located only sixty miles south of Mesa Verde National Park. Pollution from copper smelters in Arizona blows north to veil the view of the La Sal Mountains from Canyonlands National Park's "Island in the Sky" overlook. When the Huntington and Hunter coal-burning power plants add their celestial sewage to the Canyonlands air basin, visitors may miss this view entirely. Air pollution now impairs visibility in almost every national park in the mountainous Southwest at certain times. And a host of proposed strip mines, power plants, and synfuel projects threaten to paint the

pristine skies a dishwater grey over Grand Canyon, Mesa Verde, Zion, Bryce Canyon, Capitol Reef, Canyonlands, and other national parks.

Air pollution diminishes the enjoyment of the park visitor. In a recent survey of visitors to Bryce Canyon National Park, more than 99 percent of those interviewed said that scenic views are important aspects of their park visit; more than 95 percent said that degradation of air quality would impair their enjoyment of overlooks or scenery in the park. The park log at Arches National Park reflects visitors' dismay and frustration over air pollution. Visitors express their feelings in such written comments as, "Why does it smell so bad here?" "Is this air safe to breathe?" "Los Angeles isn't this bad!"

### **Monitoring the Damage**

Alarmed by the steady incursion of air pollution into many pristine national park areas, Congress amended the Clean Air Act in 1977 to include the protection of visibility and other resources dependent on clean air in many national parks as a national goal. Accordingly, the National Park Service began a visibility monitoring network to determine just what visibility conditions are in the national parks, and to scientifically investigate the causes of visibility impairment.

Looking across the Grand Canyon toward the North Rim from the Desert View overlook, the park visitor can easily see the effects of visual air pollution. On the left, ridges stand out in sharp relief on a clear day. To the right, haze obscures the same view.



The monitoring system measures actual visual range—how far can one see during different days of the year—and tells us where, and how frequently, visibility impairment occurs. The telephotometer, for example, operates like a sensitive light meter, recording precise measurements of contrast to determine visual range. Fine particles invisible to the human eye are collected and studied to determine their composition and origin.

### Regional Haze

Although layered haze and plume blight can be clearly attributed to a single source such as a power plant, the causes of regional haze, one of the most significant forms of visual air pollution, have been under dispute. Many industry spokespersons insist that natural causes—dust, humidity, forest fires, and the angle of sun—are *primarily* responsible for making near and distant objects look hazy. But research data from the NPS visibility monitoring network and complementary studies performed by the Environmental Protection Agency, the Tennessee Valley Authority, and independent consulting firms show that *man-made* sources play a *major* role in the degradation of visibility—even when those sources are hundreds of miles away.

In air quality studies associated with the Grand Canyon, the Park Service has determined that distant urban and industrial sources, as far away as three or four hundred miles, are largely responsible for air quality degradation in some of the parks. By tracing air masses associated with specific pollution episodes back to their source and by performing trace-element analysis of the air contaminants present, the NPS and EPA have been able to determine that industrial pollution from copper smelters in central Arizona and urban pollution transported hundreds of miles from the Los Angeles area cause visibility degradation inside the Grand Canyon.

The actual agents of visibility impairment are fine particulates formed from sulfur dioxide and ni-

trogen dioxide gases. These gases are emitted from sources such as fossil-fuel-burning power plants, metal smelters, and other industrial plants, as well as automobile exhaust. Sulfur and nitrogen dioxide gases, oxidized, or changed, in the atmosphere, become miniscule submicron sulfate and nitrate particles. These fine particles impair visibility by scattering light. Because they are almost weightless, they can stay aloft in the atmosphere for days. Transported long distances by prevailing winds, these particles result in a regional greying of the skies hundreds of miles from their source.

### The Toll on Plants and Animals

The reduction of visibility should not be dismissed as only an esthetic issue. It also warns of more serious threats to human health as well as to biotic resources in the parks. In fact, the same fine sulfate and nitrate particles that impair visibility can cause acid rain—another major air pollution problem in our national parks, and indeed, around the world. In their airborne journey, sulfates and nitrates can encounter moisture in the air and may form sulfuric and nitric acid, the chemical components of acid rain. (See "Acid Rain Fallout," *National Parks and Conservation Magazine*, October 1978.)

Some research indicates that acid rain may cause direct damage to plants, including crops, leaching nutrients from the soils and lowering resistance to diseases, infestation, and decay. Increased acid levels in rainfall can release toxic metals such as aluminum, manganese, and lead from the soil and sediments. In the lab, lead has caused severe deformities in fish; and it is known to be toxic to man. In our cities acid rain accelerates the corrosion of historic buildings and monuments, such as Independence Hall, the Merchant's Exchange building, and the Lincoln Memorial.

Increasing evidence of widespread acid rain led the NPS to investigate the effects of acid rain in

Shenandoah and the Great Smoky Mountains national parks beginning in 1975. Preliminary data from those parks indicate measurable changes in overall stream quality, with possible stress on native brook trout, aquatic salamanders, and crayfish.

Although acid rain has been considered primarily an eastern problem, the national monitoring system indicates that acid precipitation is far more widespread. Acid rain occurs not only in the eastern states, but also in the Rocky Mountain parks and in Sequoia National Park in California. Almost all research tells us that the problem is spreading. Even a lake or stream lying hundreds of miles from the nearest human settlement, surrounded by a protective forest, or within a national park, is no longer protected from the perils of acid rain.

Research increasingly documents the severe effects of air pollution on plant life inside and outside park boundaries. Gaseous air pollutants, particularly ozone and sulfur dioxide, cause injuries such as loss of pigmentation, bleaching, localized death of living tissue, and a reduction in biomass and yield. Air pollution can weaken the resistance of trees to insect infestations.

In Shenandoah and Great Smoky Mountains national parks, and along the Blue Ridge Parkway, the NPS works with Dr. John Skelly, a renowned plant pathologist from Virginia Polytechnic Institute and State University. Dr. Skelly's studies show extensive injury to and death of white pine and other vegetation by gaseous air pollutants. Again, air pollutants from distant sources cause most of the damage. Following an air pollution episode, white pine, which normally supports lush dark green foliage with long needles, shows a chlorotic mottling on the needles. After severe pollution episodes, tip burn occurs. Injury can lead to death. Dr. Skelly reports that 19 out of 315 trees surveyed since 1977 have died.

At Big Meadows Research Center in Shenandoah National Park, one of Dr. Skelly's experiments shows how biomass, or the overall height, color, and density of vegetation, is affected by varying air pollution levels. Dr. Skelly grows plants in open fields; in protected chambers that receive only ambient, or nonfiltered air; and in protected chambers receiving only charcoal-filtered, or clean, air. The biomass of the plants grown in open air is up to 50 percent less than that of the plants grown in filtered air. Plant growth is lowered by 30 percent between the nonfiltered and filtered chambers.

Across the country, extensive studies of ponderosa and jeffrey pines in the coastal ranges near Los Angeles also show widespread pollution damage. Every Park Service study plot, established to measure the extent of ozone damage to the ponderosa pines in Sequoia and Kings Canyon national parks, now contains trees that show at least moderate damage.

The health of our national parks cannot be separated from the condition of the rest of our environment. Air pollution does not respect boundaries, not even those of our national parks. The effects of air pollution on our parks—visibility reduction, sterile lakes, and diseased and dying vegetation—are not only serious threats to the welfare of our park resources, but also signs of a much larger problem. If air pollutants are causing the death of fish and plants, how can we expect human health to remain unaffected? If we can't keep skies blue over the Grand Canyon, how can we expect to ever clean up our own backyards?

Although the existing Clean Air Act has accomplished a great deal in a short time, today's air quality programs are inadequate to protect visibility, stop acid rain, and safeguard plants from pollution damage. Currently, there are no limits on allowable levels of fine particulates, the submicron-sized particles in the air. Nothing in the present act addresses the problem of the long-range transport of these particles. And, although the Clean Air Act requires stringent air pollution control technologies on new power plants and industrial sources that emit sulfur dioxides, the older, already existing plants cause serious pollution problems. Many of these plants will not be retired or replaced for another twenty years or more. New Clean Air Act proposals by industry and the Administration would relax these new source standards. Sulfur dioxide emissions still exceed 25 million metric tons annually in the United States (two-thirds from electric utilities), about a quarter of the worldwide total.

Without widespread public support for congressional action to renew our national commitment to clean air, air pollution will continue to erode the health and beauty of not only our national parks, but also our entire environment. □

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*Terri Martin calls southern Utah's land of limitless vistas her home. In 1978 she worked as an intern for NPCA and returned this year to help write and produce NPCA's TV show "Clean Air and the Parks."*

# Only Teamwork Can Save the Yellowstone Grizzly

After six years, research shows a disturbing picture of a species in trouble throughout the West

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Jim Jubak

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Weighing up to 800 pounds and capable of dragging a thousand-pound bison along the ground, the grizzly bear still has been no match for logging, recreational development, poaching, grazing, and vacation homes. The steady encroachment of civilization has reduced the range and numbers of the mightiest carnivore in the lower forty-eight states until the bear is in danger of extinction in this part of its range. For the past six years a team of scientists has looked for the knowledge that can assure the grizzly's continued survival in the area surrounding Yellowstone National Park.

Although the Yellowstone grizzly has been studied extensively since the pioneering studies of Frank and John Craighead began in the 1950s, scientists today still do not know the exact size of the bear population, its sexual composition, the ages of the bears, nor the exact resources the bears need for survival. Established in 1974, the Interagency Grizzly Bear Study Team, made up of representatives from the National Park Service, the Forest Service,

the Fish and Wildlife Service, and the states of Idaho, Montana, and Wyoming, has worked to fill in the gaps in existing information on the bears, often inventing new methods to get the data necessary to preserve the bears. Roland Wauer, head of the Park Service's Natural Resources Management Division, feels that the Study Team's efforts over the next few years are crucial to the survival of the grizzly in the lower forty-eight states. "Right now we're turning the corner on this whole issue. We're either going to continue the research and zero in on where we need to be, or it's all going to fall apart. I think the only salvation for the Yellowstone grizzly bear is having sufficient information not to make mistakes. I don't think we have enough data at this point to manage that population in the long term and keep it."

Simply getting an accurate count of the grizzlies living in this 8,000-square-mile area poses immense difficulties for Dr. Richard Knight and his team. The relatively few bears in the area make good use of timber cover during the day, hindering airborne surveys. Grizzlies roam over extensive home ranges: the largest home range of a radio-tagged grizzly covered more than 280 square miles.

Radio trackers on foot often have had trouble spotting bears in dense forest growth. Although most of the collared grizzlies fled from human contact, several circled back to investigate the tracking scientist, out of curiosity, team members believe. One summer, for example, team members had tracked bear number fifteen for several hours. "By 2200 this bear had slowly approached to an es-



Dr. Richard Knight, NPS

estimated fifty yards (later confirmed by tracks) from the monitor and had completed a full circle. No sound had been heard up until this point, then a few branches were heard cracking. A whistle from the observer brought a deep rolling growl from bear fifteen. The monitoring station was then relocated on the branch of a large tree."

Under these circumstances population estimates on the current number of bears vary so widely as to be of limited use in managing the grizzlies. In 1880 more than 100,000 grizzly bears roamed the United States between the Mississippi and the Pacific. Now experts guess only 1,000 bears live in six scattered populations in the West. Estimates on the Yellowstone population vary from the 177 bears actually counted by the Craigheads during the 1959–1967 period to a high guess of 350 bears. Any population estimates are even cloudier as a result of the extensive control measures, including the killing of more than 10 percent of the bear population by the Park Service during the 1968–1973 period after the dumps in the park were closed in a controversial decision. As a result of their more recently obtained information on the grizzlies, Knight and his team have lowered their population estimates for the greater Yellowstone area to 250 bears.

Current data are simply insufficient to determine any trend in the population level. The team has a general feeling that a loss of five or six bears a year can be sustained without a decline in the overall population, but "there's no question in the world that we're losing more than that," Wauer says. Reported mortalities exceed this

level during most years—nine bears were reported killed in 1978 and ten more in 1979—and additional deaths are certainly not reported. Poaching and other illegal kills represent the greatest threat to the population.

Although all data are preliminary at this point, even the initial studies reveal some disquieting facts about the Yellowstone grizzly population. The collected information shows a relatively young bear population, much younger than expected, and a high percentage of males in the population. Researchers speculate that the relative youth of the population reflects the large number of older bears that have been killed by sheepherders, poachers, and Park Service management activities. The health of the population, when so many bears are below breeding age, and when an unusually high percentage of the bears are male, concerns Knight. Such signs raise questions about the viability of the grizzly population in and near Yellowstone.

Viability is a special problem with the grizzly, a long-lived species that produces relatively few young. "There's an ecological principle that when a population gets low enough, no matter how healthy the individuals may be, eventually we'll lose the population," Wauer notes. Only Glacier and Yellowstone national parks sustain possibly viable populations in the lower forty-eight states.

The tentative nature of some of the data could change if the Study Team can mount the most intensive monitoring effort yet proposed during the next few years. "We haven't been able to mark a big population at one time.

The most we've marked at any one time has been twenty-two animals, and to extrapolate an understanding of the whole Yellowstone ecosystem from that is almost impossible," Wauer says. To solve this problem, the Study Team has proposed a two-year saturation trapping program for 1983 and 1984. A larger number of radio-collared bears is needed to accurately reflect the life of the average grizzly. Without this large data base, any predictions about grizzly bears would be like describing the average American citizen after interviewing only residents of New York City. The saturation trapping program would cost approximately \$300,000 more than the current annual expenditures.

From the perspective of Earl Thomas, director of the Wyoming Department of Game and Fish, the saturation program seems an absolute necessity. His department has responsibility for bear-caused depredations in Wyoming and, until 1973, managed a very limited hunting program. With second-home development and grazing occurring in portions of the bear's Wyoming range, Thomas vitally needs information on the bear and its population size. A recovery plan that would lay out permissible control measures would help his work immensely. "It's mutual interest. No one has a corner on wanting to perpetuate the grizzly bear."

Breakthroughs in the techniques of radio monitoring by the Study Team will enable the saturation effort to monitor immature bears for the first time. The team developed an expandable radio collar for tagging immature bears by a process of trial and error beginning in 1978. Until that time, it was almost impossible to track young bears, because inflexible collars, if used, would have gradually choked a young bear as it grew up.

The grizzly habitat at both Yellowstone and Glacier faces pressure from development around the parks. "The protective zone around Glacier has been badly eroded," Wauer comments. Smelting, mining, and timbering all occur around the borders of that park. Yellowstone faces a much slower encroachment from second-home development. As areas outside the parks are developed and the level of visitation goes up in the parks themselves, grizzlies and park visitors come into more and more frequent contact. The Study Team hopes to use its information to develop a rating system that would allow a land manager to protect important habitat.

In recent years several bear-caused human deaths have occurred in Glacier but none in Yellowstone. The nature of the grizzly habitat in Glacier probably explains this difference—a difference that shows the importance of habitat study for effective bear management and visitor protection. Each park has about the same number of grizzlies, but Glacier is only about half the size of Yellowstone. In addition, the steep terrain of Glacier reduces visi-

bility to rather short distances: a visitor is both more likely to encounter a bear in the smaller park and more likely to come upon the bear without warning to either the human or the grizzly. In closer terrain the bear may not have an escape route; and, feeling threatened, it may attack.

Habitat studies can show the feasibility of several management alternatives under consideration for protecting the park visitor and assuring the survival of the grizzly. Special use zones could be established to restrict activities by park and forest visitors that severely affect the grizzly—at least during key periods of the year. Highly productive elk herds could provide food for the bears in years when their food supply runs low. Grazing allotments on the national forests could be eliminated. Shepherders, who see the grizzly as a menace to their flocks, are believed to cause a major portion of grizzly bear deaths. Roughly 10,000 sheep graze on the forests within the study area.

Although the evidence persuades Knight of the need to eliminate grazing allotments, this example illustrates the vital importance of thorough habitat research. The team must give managers enough evidence to defend decisions to deny grazing permits or to set up special use zones to protect critical parts of the grizzly habitat. Team scientists know that any plan based on an inadequate definition could face defeat in a court challenge, an all too likely possibility in an area with intensely competing livestock, energy, timbering, and recreational uses. The Fish and Wildlife Service has completed work on a draft recovery plan, making the grizzly the only threatened species to have one. The team has made good progress toward defining the essential habitat for the grizzly, but the available information still does not meet the formal requirements set by the Endangered Species Act for the legal definition of critical habitat in a full-scale recovery program.

**T**he study itself and the grizzly bear have both reached a critical stage. The National Park Service has just decided to revise the draft grizzly bear management program for Yellowstone first prepared in 1974. The current six years of research provide a superlative springboard for getting the vital information necessary to protect the bears. Research objectives have been further refined, and the Study Steering Committee has been expanded to include land managers for the first time. The intensive trapping program, set to begin in 1983 if sufficient funds are available, will give us the first complete picture of the Yellowstone bear population. The future of the grizzly bear in the lower forty-eight states depends on this effort.

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*Jim Jubak is Assistant Editor of National Parks.*

# POLITICS & THE PARKS

Our national leaders  
have played politics  
with our National Park System

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Michael Frome

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When Jimmy Carter was running for office in 1976, the national parks provided an attractive plank in his program. He promised that more attention would be paid to them. He would allocate \$700 million to be spent over a five-year period on maintenance and rehabilitation, reversing the course of deterioration in park facilities.

Once the election was over, however, the idea was shelved. As far as national parks are concerned, the Carter Administration wrote a poor record of performance. The country's natural and historic treasures were relegated to low priority—except when it came to serving as a sump for the Administration's energy program.

To be bipartisan about it, Republicans of recent years haven't been any better. Nixon appointed one of his advance men in the White House as Director of the National Park Service, a decent chap named Ron Walker, whose knowledge of parks amounted to zilch. Ford had actually once worked as a ranger in Yellowstone, but during his time in the White House he kept the Park Service on a starvation budget and opposed proposals for new parks. Near the end he made an electioneering speech in Yellowstone promising big things, like Carter did, but it was too late and he clearly didn't have his heart in it.

Ronald Reagan has shown less interest in national parks than any President I can remember, but the politics of parks may still overtake him and force his concern. Politicians respond to public issues as measured by the attention the issues receive on front pages and prime-time TV news reports—and the columnists, commentators, and cartoonists all have been dealing increasingly with national parks and wilderness.

We have James G. Watt, the Secretary of the Interior, to thank for this upswing in public attention. It's not that he is a particular advocate or champion of national parks, but people fear that he is out to dismember them. Plainly, the people care.

Watt speaks repeatedly of "stewardship" of the great old parks that have been somewhat neglected, as evidenced by deteriorating facilities. Though I try to be fair and hopeful, I can't see where his performance, policy, or proposals actually are intended to rescue threatened resources. I find instead a steady procession of intrusions in the name of public use, without any defense by this Administration of the wilderness that is the heart of national parks. The worst of these intrusions may be yet to come.

National parks and preservation catch the eye of the public and press, but they are low priority with this Administration (as with most before it). The main idea is to open the public lands and put them to commodity production and use. "America must have a sound economy if it is to be a good steward of its fish and wildlife, its parks, and all of its natural resources," according to Secretary Watt. But he doesn't say that we must protect fish and wildlife, parks, and natural resources in order to have a sound, meaningful economy and decent quality of life; that without earnest conservation nothing will be left.

Watt is scarcely a lone hand. He speaks for the anti-federal, anti-environmental quadrant of Reagan support associated with the so-called Sagebrush Rebellion. Consider this excerpt from the "Mandate for Leadership," a blueprint prepared by the ill-tempered and extreme Heritage Foundation for the benefit of the Department of the Interior:

"The National Park Service administers its program with a narrow, if not nonexistent, view of multiple uses authorized for public lands under the Multiple Use and Sustained Yield Act even though many such uses would be compatible with maintaining national park resource values and purposes."

That gross inaccuracy pervades this scary statement is beside the point; it foretells a crisis in conservation. Ultimately the President may find himself pressed to address the future of national parks and his personal obligation to protect and preserve them. Considering that Secretary Watt's protestations fail to satisfy public apprehension, the President needs to be heard.

Congress isn't much better either. Over the years it voted to establish parks, with proper credit to itself, while not granting funds to make them work. When Walter J. Hickel was Secretary of the Interior, he observed the process and concluded that it was a design to enrich land speculators rather than to serve the public.

"A citizen, hearing the announcement that such-and-such a national park has been authorized, believes it has thereby been acquired," according to Hickel. "Often, only the concept of the park has been approved. No money has been appropriated to pay for it. Once the park is authorized, the land values increase sharply, over a period reaching a point where they are ten and sometimes fifty times as expensive as when the park was initially authorized."

Hickel cited two scandalous examples. In one, land values soared nearly a hundredfold following passage of legislation authorizing establishment of Cape Cod National Seashore in Massachusetts. In the other, when Point Reyes National Seashore in California was authorized for around \$14 million, the funding was not appropriated and the government ended up paying \$38 million for the property.

"If we had tied appropriations to authorizations or used long-term real estate contracts," declared Hickel, "the total payment, includ-

ing interest, would have been about \$17 million, thereby saving \$21 million. Besides, we would have been able to use the area ten years earlier."

Now the National Park System and the millions of Americans who use and enjoy it are paying the penalty. The pace of acquisition was slow enough, but now it has come to a grinding halt. As one example of the consequences, the Obed Wild and Scenic River, designed to preserve a beautiful area in East Tennessee, is in mortal danger from a general moratorium, or rescission, of already appropriated funds and a zero-request for new funds.

Hurdles in the Obed land acquisition process (the last dealing with oil and gas leases) had finally been cleared and the National Park Service was geared to initiate purchases. Several landowners were ready and willing to sell—when suddenly all funds were frozen.

"Since only about 80 acres had been acquired, NPS is thinking about possibly closing down its office," reports a bulletin from the Tennessee Citizens for Wilderness Planning, whose members campaigned for the legislation to establish the park. "If that happens, the project would be very difficult to revive. Furthermore, federal and state agencies would no longer give stringent handling to stripmine permits and water-quality permits affecting the watershed. To jeopardize protection of this high-quality yet truly fragile resource when we are so close to finally saving it would be a most unwise move on the part of the Administration."

Whatever the total national parks budget may be, it has never been very much. A little austerity is a good thing, contributing to efficient management, but it's difficult to trim when there isn't much fat on the bones. And I daresay that

scarcely any federal agency gives taxpayers better value for their investment than does the National Park Service.

"We don't need to build Taj Mahals in the parks," according to Representative Don Young, of Alaska, in advocating deep cuts. There are no Taj Mahals, of course, but such is the level of congressional discernment.

For fiscal 1981, President Carter decided to slash by about 55 percent the Land and Water Conservation Fund (LWCF)—the source of money for acquisition of federal parks, seashores, wild and scenic rivers, and of matching grants for comparable state programs, setting a pattern for his successor to follow. In terms of inflation and the nation's economy, the cuts are meaningless; the LWCF derives its revenue from offshore oil-drilling leases and can't legally be used for any other purpose than acquisition. In the long run, as Hickel pointed out, delaying acquisition of designated areas while prices escalate will only cost the public more and make the speculators rich.

One of the most critical effects of withholding LWCF money is the inability of the National Park Service to acquire private landholdings within park borders, even when property owners are willing to sell at fair market value. In order to provide services to inholders in the Wawona section of Yosemite National Park, the Wilsonia section of Kings Canyon National Park, and other places like them, manpower and funds must be drained from the parks themselves. Spreading real estate subdivisions block public access and create sewage and traffic problems. At battlefields like Gettysburg crucial tracts have been lost to development and park values diminished.

Despite his lamentations of neglect and his pledges of stewardship *cum* efficiency, I haven't heard Secretary Watt speak of the need to acquire private inholdings. But I want to stand and cheer when he does.

The gravest threat to the national parks, however, comes from the hunt for energy that apparently takes precedence over all other values, regardless of law and political party. In June 1977 a directive was sent to field personnel of the National Park Service opening national parks to exploration by the Department of Energy for uranium and other minerals, though these areas are expressly protected by law from mining. In December 1977 authority for exploration was extended to Death Valley National Monument and other park units. In 1977 and 1978 "collecting permits" were issued to major oil companies in Glacier Bay National Monument, an area specifically protected from exploration by congressional action taken in 1976.

Under Watt's predecessor, Cecil D. Andrus, Interior was poised to accelerate and expand leasing of western public lands for exploitation of oil shale and tar sands resources without concern for the impact on national parks. The country is now facing the severe consequences to Bryce Canyon National Park, in southern Utah, resulting from the issuance of coal leases in the mid-60s on public lands immediately adjacent to that park. Similar problems are likely to emerge at other superb park units in the Southwest—such as Dinosaur, Rocky Mountain, Arches, Canyonlands, Capitol Reef, Grand Canyon, Mesa Verde, and Glen Canyon—unless the full range of environmental consequences of oil shale and tar sands development is carefully evaluated *before* leases are committed.

Watt defines stewardship as "taking care of the parks we have before reaching for more." It's an appealing idea, in a way, or would be if the Secretary's stewardship also embraced concerns for air quality, the demands on already limited water supplies, and consequences of population explosions in sparsely populated areas. The drive for energy at all costs is like a loaded gun, with potential for irreparable damage to national parks and other wilderness and wildlife sanctuary areas of the West.

Possibly the national parks should be sacrificed, but the public ought first to have the facts of the case and to assess values gained versus values lost. But the public has been in the dark because politics prevails over principle in determination of national parks policy.

It wasn't always this way. In former years the National Parks Advisory Board, appointed by the Secretary of the Interior, was a forceful body composed of scientists, scholars, and public figures like Alfred Knopf, the book publisher, and Bernard DeVoto and Sigurd Olson, the authors. In recent years the Advisory Board has become like many other government commissions, composed largely of political patronage appointees and ex-congressmen.

The National Park Service has played its own little games of politics. The agency maintains a network of "VIP guest houses" in such desirable locations as the Virgin Islands, Cape Hatteras, Shenandoah National Park, and Grand Tetons. It uses these facilities to curry favor with members of Congress and their staffs, White House personnel, and others who are presumed to count. This system may once have served a useful purpose, which it has long outlived.

The best way to impress and influence a VIP in a democratic soci-

ety is with the quality of service the public receives. It elevates national park politics to the level of principle and ethics where it belongs.

There is still time. "Our parks are a national treasure—natural havens in an increasingly urbanized and crowded America," editorializes the *Daily News* of Port Angeles, Washington (a community at the foot of the mountains comprising Olympic National Park). "Our park system is the result of decades of careful work and much effort. Neither the Congress nor the American people are going to sit idly by and let some zealot dismantle the park system."

Even Republican conservatives must be dismayed and disturbed by the trend of things. The Reagan Administration was on the point of zero budgeting the Big South Fork National River and Recreation Area, when, in the nick of time, Senator Howard Baker of Tennessee managed to keep this marvelous project in his state alive. This shows what can be done.

Americans who care face challenge and opportunity to inform and involve such elected officials. "Stewardship" is a beautiful word and idea. Let the true stewards stand up and be supported for public office, and the false ones, the posers, be cast out to be replaced by better stock. □

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*Michael Frome recently received the Mort Weisinger Memorial Award from the American Society of Journalists and Authors for the best magazine article published by a member of the Society during 1980. Mike's article, "The Ungreening of our National Parks," ran as a five-part series in The Travel Agent. Portions were adapted and updated for January, February, June, and current issues of National Parks.*

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An exciting array of events  
will welcome visitors at the celebration of the

# YORKTOWN BICENTENNIAL

Marjorie Corbett

**F**ive years ago Americans celebrated the Bicentennial of the signing of the Declaration of Independence, the first step in the birth of the nation. This year, Congress has proclaimed October 19 as a "Day of National Observance" of the two hundredth anniversary of the victory at Yorktown, the battle that actually won independence for the colonies.

A four-day celebration from October 16 through 19 at Colonial National Historical Park will include historical art exhibits, battleground reenactments, fireworks, international ceremonies, and an address by President Reagan. Participation is expected from all over the country, as well as from France, Germany, and England.

For six years after the first shot was fired at Lexington, American colonial independence remained thwarted by the British. By the summer of 1781 the future looked bleak for the patriots: the South seemed firmly under British control, and New York remained a British stronghold. But by late August George Washington, ever unwilling to admit defeat, was on the brink of a decision that would break the British hold once and for all.

Cornwallis had just established winter quarters in the Town of York in order to let his British and Hessian troops recover from their taxing, year-long sweep of the South. A nearby British fleet would bring supplies. General Washington saw a chance, however, to surprise Cornwallis and led his troops from New York to join General Rochambeau's French troops from Rhode Is-



Courtesy of U.S. Capitol Historical Society  
Surrender of Cornwallis at Yorktown, by John Trumbull

land on a secret march to the Virginia port. Meanwhile, the Count de Grasse, admiral of the French support fleet, moved into the Chesapeake Bay. His fleet blocked the harbor, cutting off British supplies, while land troops encircled the town.

This masterful combination of French and Continental land and sea forces cornered Cornwallis' troops. Finally, his army battered by artillery and weakened by illness, Cornwallis surrendered. The defeated British troops laid down their arms in an elaborate ceremony on October 19, 1781, complete with banners, rows and rows of redcoats and tattered Continentals, and a British band playing "The World Turned Upside Down."

This colorful ceremony, along with other aspects of the siege, will be reenacted at Yorktown by some four thousand "troops," mostly amateur historians who research and construct uniforms according to strict specifications for authenticity. One thousand "troops" will reenact the march of Continental and

French armies from Rhode Island to Yorktown. Tom Deakin, an enthusiastic member of the re-created First Virginia Regiment and a planner for the Yorktown reenactments says, "We've been planning these events, drilling, and preparing costumes for two years. Re-creators are coming from as far away as Ohio, Pennsylvania, and even California."

Additional ceremonial troops will be supplied by France and Germany, and British officials plan to send an embassy delegation to participate in festivities.

Of special interest to art lovers and history buffs will be an unusual, two-hundred-item exhibit of art, artifacts, and documents at the Yorktown Victory Center. The collection includes paintings from Paris, London, and New York, as well as historical items like Lafayette's sword, Washington's diary, and the surrender documents. The Victory Center's museum curator, Daniel Hawks, remarks, "This is the most extensive, complete exhibit of Yorktown art and historical objects ever assembled. It's not likely that this kind of exhibit will be repeated in the next century."

Scheduled activities also include a visit from East Coast "Tall Ships," concerts, sailboat races, and an eighteenth-century crafts fair. Yorktown's Bicentennial promises to be an exciting celebration for visitors and participants. For further information write Superintendent, Colonial National Historical Park, P.O. Box 210, Yorktown, VA 23690. □

*Marjorie Corbett is Assistant Editor for National Parks.*

## NPCA Report

### Yellowstone Plan Gives New Powers to Concessioner

This fall's selection of a new concessioner for Yellowstone National Park will reveal how much control over the national parks Secretary of the Interior James Watt plans to surrender to private enterprise. The initial plans for picking a successor to interim contractor TWA Services to operate eight hotels and lodges, restaurants, and service stations in the world's oldest national park would give the new operator an increased possessory interest in visitor facilities—thus making it harder for the Park Service to remove a bad concessioner—and would lengthen the term of the concession contract. Secretary Watt's initial statements promise the concessioner an increased role in planning the future of the park.

The preliminary plan for granting a new concession in Yellowstone particularly concerns NPCA. The Park Service only recently fought a long and expensive battle to remove General Host Corporation from the park. That battle, which cost the Park Service \$19 million, led to the promise of a number of reforms in future concession contracts, including a proposal that Yellowstone facilities remain in federal ownership and be held by a nonprofit public corporation. General Host lost its contract in the park for the poor quality of its services and for allowing the deterioration of visitor facilities under its control.

In the past the Park Service has specified exactly what types of services concessioners were to provide and stipulated a precise length for each contract. The guidelines issued in the proposed Yellowstone concession contract invite the concessioner to pick a mix of services and facilities and to set a length of five to thirty years for the contract. NPCA has repeatedly urged the Park Service to shorten the length of concession agreements. "The only threat the Park Service has against a concessioner is to cancel the contract. The larger the company's investment in the park—and

the longer the contract runs—the more difficult it is to cancel a contract when the concessioner is performing poorly," Destry Jarvis, NPCA's Director of Federal Activities, says. "NPS lacks any means of punishing poor service other than contract cancellation, another shortcoming of the present system."

A provision that would commit the concessioner to investing in the facilities, in exchange for a waiver of the franchise fee normally paid to the federal government, deeply disturbs NPCA. In effect, federal fees would be invested by the company in Yellowstone facilities. NPCA would prefer that the Park Service receive the fees in the normal manner and then allocate these funds for park maintenance wherever the Park Service, not the concessioner, sees the greatest need.

### Outliers Subject of New Plan at Larger Chaco NHP

Archeological researchers, who have steadily expanded our understanding of the sophistication of the prehistoric Chaco Indian culture, are now developing a plan to protect thirty-three sites that provide major evidence of a complex trading network that may have covered 30,000 square miles and included seventy-five communities from the tenth to twelfth centuries. A joint planning team, including representatives from the Park Service, the state of New Mexico, the Bureau of Indian Affairs, and the Bureau of Land Management has begun a five-part process that will result in a series of new management plans by 1984.

Reacting to recent discoveries that revealed the previously unknown extent of Chacoan culture in the Four Corners region of Colorado, Utah, Arizona, and New Mexico, in 1980 Congress expanded Chaco Canyon National Monument by 13,000 acres and designated it a national historical park. The additions to the park, the "archeological protection sites" scattered across the San Juan Basin, were designed to protect about half of the outlying communities, called outliers. The outliers were connected to the main Chaco Canyon administrative and ceremonial center by

an extensive and elaborate road and signal tower system unique north of Mexico.

According to the study team, the purpose of the study is to "assess the known archeological resources associated with the prehistoric Chacoan culture in the San Juan Basin, to provide for the preservation and interpretation of these resources, and to facilitate research activities associated with these resources."

Phase I of the process, completed in March 1981, appointed the study team and determined the scope of the study. Field studies and recommendations for management developed in Phase II will be used to prepare an environmental assessment and draft management plan—Phase III of the process—by October 1982.

The last two phases, both to be completed by March 1983, require the preparation of the final management plan and cooperative agreements for the preservation of the thirty-three archeological protection sites.

The diversity of land ownership in the area and the vast coal and uranium resources located in the San Juan Basin make these cooperative agreements especially important. An estimated thirty energy companies are presently exploring parts of the basin. The study team released interim guidelines for oil and mineral companies in the area this summer. Energy companies have worked diligently to cooperate on the protection of these sites in the past, and the study team expects excellent cooperation throughout the ongoing planning process.

### California's Mono Lake Proposed as National Monument

Lying in a high desert basin at the foot of the Sierra Nevada just east of Yosemite National Park, Mono Lake supports one of the largest concentrations of water and shore birds in the West in a unique environment of cinder cones and brine-shrimp-laden water. Legislation introduced by Rep. Norman Shumway (R-Cal.) on June 26 would establish the Mono Lake National Monument, protecting the lake from

some of the pressures that threaten to destroy the populations of birds and turn the lake itself into a dry salt bed.

Beginning in 1941, the City of Los Angeles has diverted an increasingly large portion of the water flowing into the lake to supply the needs of a growing metropolitan region 350 miles away. The water diversions, accompanied by the city's steadfast refusal to adopt meaningful water conservation policies that could save more than the supply now drawn from the entire Mono Basin, have steadily lowered the lake's water level. Low water levels have exposed the bird colonies to increased predation by coyotes, bobcats, and other mammals, and has further increased the salt content of the lake to a level that has begun to threaten the populations of brine shrimp and insects that feed the lake's vast colonies of gulls, avocets, grebes, phalaropes, and sandpipers. "As one of the oldest continuously existing lakes in North America, Mono Lake is truly a national treasure, and it deserves appropriate protection," Shumway stated on introducing the bill. "Unfortunately, present policies are turning that national treasure into a national disgrace."

The monument would be limited to the lake and the Mono Craters south of

the lake. Most of the land within this area is already managed by federal agencies, primarily the Bureau of Land Management. The bill limits the monument to 160,000 acres and restricts land acquisition to instances in which proposed uses conflict with the purpose of the monument. The bill further grandfathered all existing uses and mandates the use of the least disruptive forms of land management, such as conservation easements instead of land purchases, wherever possible.

The bill marks the first step toward implementing the Interagency Task Force Report of 1979. It calls for a natural resources inventory and a study of possible water management alternatives to end the withdrawal of water from the Mono Basin. "Without an end to the water diversions, Mono Lake will become a shrunken dead sea of water too salty to support even the brine shrimp adapted to this environment," says Destry Jarvis, NPCA's Director of Federal Activities. "We must protect this unique resource, its scenery, and its wildlife."

No action has been taken on Shumway's legislation since its introduction. NPCA hopes that Rep. John Seiberling (D.-Ohio) will schedule hearings on the bill in September.

## Reader Interest Survey

We want to know how interesting readers found each item in this month's issue of the magazine. Please circle the number in the column to the right of each title that best describes your reaction. You may enclose comments or suggestions if you wish. Please mail the form to **Editor, National Parks, 1701 18th Street, NW, Washington, DC 20009.**

	Very Interesting	Somewhat Interesting	Not Interesting
COMMENTARY (inside front)	1	2	3
EDITOR'S NOTE (inside front)	1	2	3
The ANASAZIS (p. 4)	1	2	3
ROCK ART (p. 10)	1	2	3
MESA VERDE NP (p. 14)	1	2	3
PREHISTORIC LEGACY (p. 16)	1	2	3
AIR POLLUTION (p. 20)	1	2	3
YELLOWSTONE GRIZZLY (p. 25)	1	2	3
POLITICS & PARKS (p. 28)	1	2	3
YORKTOWN (p. 31)	1	2	3
NPCA REPORT (pp. 32-45)	1	2	3
Yellowstone Plan	1	2	3
Chaco Outliers	1	2	3
Mono Lake	1	2	3
Voyageurs NP	1	2	3
Bandelier Appeal	1	2	3
EPA Memo	1	2	3
Land Acquisitions	1	2	3
Wilderness Bill	1	2	3
New Trails	1	2	3
Advisory Board	1	2	3
Glacier Bay Whales	1	2	3
BOOKSHELF (p. 42)	1	2	3
THE LATEST WORD (p. 46)	1	2	3

	Excellent	Good	Fair	Poor
How would you rate the cover?	1	2	3	4

Additional comments \_\_\_\_\_

You may publish these comments   
Your name and address (optional):

\_\_\_\_\_  
\_\_\_\_\_

### Members and Friends are invited to The Annual NPCA Members' Reception & Dinner

Thursday, November 19, 1981  
Key Bridge Marriott Hotel  
Rosslyn, Virginia

RSVP: Public Affairs Office  
National Parks & Conservation Association  
1701 18th Street, N.W.  
Washington, D.C. 20009

The Trustees and Staff look forward to welcoming you!

## Bill to Change Border for Hunting at Voyageurs NP

At Voyageurs National Park hunters have generated more noise than all the park officials, visitors, and ducks put together. Listening to the commotion were four Minnesota congressmen who now propose changes in the park's boundaries to open the area to waterfowl hunting.

Introduced as the solution to long-term hunting and boundary disputes, S. 625, sponsored by Senators Durenberger and Boschwitz, and H.R. 846, sponsored by Representatives Oberstar and Vento, delete 1,782 acres of park land, including one thousand acres in Black Bay. In return the park will get 318 acres for access roads and a visitor center. Only 10 percent of the Black Bay area currently falls within park borders, but the division of the traditional duck-hunting area has created a heated dispute between hunters and the state on one side and the Park Service on the other.

The closing of the park's portion of

Black Bay to hunting has intensified local resentment toward the Park Service. A lawsuit brought by a local hunter to contest NPS authority to prohibit hunting in the park was rejected by both District and Appellate courts several years ago. Local hunters feel the area contains the best fowl hunting within a seventy-five mile radius. Other residents feel the Park Service has not lived up to promises made when the park was established. Local residents expected more development of visitor facilities and more tourist traffic as a result of the park, but the expected recreational boom has failed to materialize. The land exchange would take effect only after the state has developed a plan for a wildlife management area on state and the once-federal lands in Black Bay and has agreed to manage state lands along the shores of Black Bay to protect their natural character. The bill does not require that the state manage all of Black Bay as a wildlife area.

The bill does not provide a solution for the pressing disputes concerning inholdings and development funds that have plagued the park since its establishment in 1975. Hunting is currently

permitted on 7,000 acres of scattered inholdings throughout the park, making wildlife protection within park boundaries extremely difficult. Of the \$19 million authorized for the development of Voyageurs in the original legislation creating the park, only \$300,000 has been appropriated by Congress, prohibiting construction of resource education centers for park visitors. Currently Voyageurs lacks any facility for interpreting the park—the only example of mainland southern boreal forest in the National Park System.

The bill contains a proposal to raise the land acquisition ceiling for Voyageurs National Park by \$11 million in order to complete acquisitions within existing park boundaries, yet neither Senator Durenberger's office nor Voyageurs Superintendent Tom Ritter expects this provision to survive the final bill.

NPCA and the Voyageurs National Park Association both object to the bill in its current form. The land trade does not solve the most pressing problems of the park, nor does it guarantee continued state protection for the entire Black Bay area. The bill also sets a dangerous precedent for further boundary changes.



Russell D. Butcher

John Hunter, Superintendent of Bandelier National Monument, and NPCA Southwest Regional Representative Russell D. Butcher examine one of the rotten supporting beams, called vigas, on the roof of the main visitor building at the monument.

## NPCA Launches Bandelier Monument Fund Appeal

NPCA's "Threatened Park Facility Fund: Bandelier Project" has been launched with the naming of a project committee of distinguished New Mexicans, a kickoff reception on July 23 in Santa Fe for the committee members and invited guests. Business leaders in New Mexico are also being asked to contribute toward the \$95,000 fund that will make possible urgently needed repairs on the historic complex of pueblo-style visitor center buildings built by the Civilian Conservation Corps during the 1930s in Bandelier National Monument near Los Alamos, New Mexico. To make a tax-deductible contribution to this exciting project, please send your check to National Parks & Conservation Association, Attention: Bandelier Project, 1701 18th Street, N.W., Washington, D.C. 20009.

*Continued on page 41*



**National  
Parks**

**HOLIDAY GIFT GUIDE**

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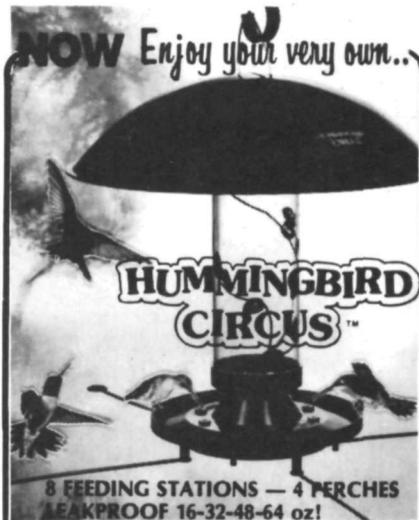


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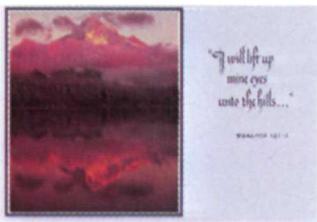
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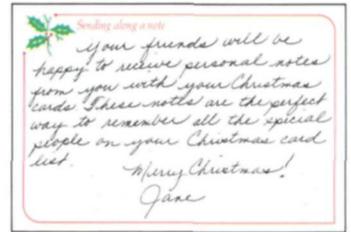
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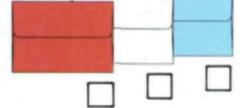


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SEPT/OCT

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## EPA Memo Shows Continued Attack on Clean Air Act

Advocates of a strong Clean Air Act and opponents who would like to emasculate the bill have waged a continuing war of words, leaked memos, and committee testimony as the September 30 deadline for reauthorization looms ever closer. Senate and House committees, admitting they have almost no hope of reauthorizing the bill any time in 1981, held hearings on the Act throughout July. Meanwhile, Senator Gary Hart (D.-Colo.) released a memo from EPA administrator Anne Gorsuch that confirms the authenticity of a draft Administration bill leaked in June to Rep. Henry Waxman (D.-Cal.). Waxman called the draft bill a "blueprint for the destruction of our clean air laws."

The Clean Air Act "does not need any fundamental changes, with the exception of the addition of a program to address the very real problem of acid rain," said NPCA Executive Director Paul Pritchard in July 9 testimony before the Senate Committee on the Environment and Public Works. Pritchard emphasized the importance of keeping the regulations that protect visibility in the national parks. "If we cannot protect air quality and visibility in our Class I parks and wilderness areas, can we hope to ensure good air quality anywhere in the United States?"

Gorsuch's memo, written to other members of the Reagan administration's Clean Air Act working group, adds further Administration proposals for weakening the Act to those in the draft bill. Although the draft would repeal fifty-one separate provisions of the Act and relax sixty-four others, the Gorsuch memo shows that the working group is considering even more far-reaching changes: eliminating air quality protection for national park areas, and ending the federal requirement for pollution controls on most new plants.

The memo considers gutting the Act by administratively redefining clean air,

*Continued on page 42*

## Contrasting Views Abound as Senate Examines Federal Land Purchases

On July 9 and 10 the lion sat down with the lamb at a Senate workshop on federal land acquisition run by Wyoming's Senator Malcolm Wallop. Testifying before the Senate panel, conservationists, Secretary of the Interior James Watt, lawyers, park inholders, Park Service officials, lawyers, and even writers all offered their own conflicting views on the faults of current national policy for buying land for parks and forests.

The workshop emphasized the serious problems posed for the parks by the failure to purchase land within congressionally authorized park boundaries and the Park Service's inability to control incompatible uses on lands adjacent to the parks. According to the Park Service's own "State of the Parks" report, issued just last year, "more than 50 percent of the threats were attributed to sources or activities located externally to the parks." These activities range from oil and gas drilling, logging, and road construction along the edges of Glacier National Park to trespass grazing in Badlands National Park.

At present, the National Park Service lacks any effective means for controlling incompatible uses of lands adjacent to the parks. In many instances the neighboring landowner is another federal agency whose land management policies differ from those employed in the parks. In other cases the park adjoins a town or county with few zoning laws and those too weak to protect the park. Park Service attempts to control incompatible use are often seen as unwarranted and unwanted extensions of federal power into local affairs.

Many of the suggestions proposed at the workshop for solving adjacent land problems stressed the need for cooperation between the Park Service and local communities and concerned citizens. "Public agencies do not have the tools to work with the public," commented Joseph Petrillo of the California Coastal Conservancy.

Providing local governments with financial incentives for creating strong land use plans compatible with park units might be one solution. Although this approach would place an additional

financial burden on the Park Service, it would probably cost less than correcting the damage after the fact.

The federal purchase of land for parks came under attack from several directions. Speakers such as Charles Cushman of the National Inholders Association referred to Park Service programs to purchase all the rights of ownership to a piece of property—full fee acquisition—as disruptive to local communities and unnecessarily expensive. In testimony before the Senate subcommittee NPCA's Destry Jarvis noted that in many cases full fee acquisition is actually cheaper than the alternatives when all the costs of management are included, and that purchase is absolutely required in some situations to assure public access and use as well as to protect important natural resources. NPCA has always supported alternatives to full fee acquisition, while noting that none of these techniques is universally effective.

For example, current law, supported by NPCA, prohibits the Park Service from exchanging park land for private land to round off or complete a park. Any NPS land exchanges would have to be accomplished by using land belonging to another federal agency such as the Bureau of Land Management.

Easements, another useful tool, can protect important resources by limiting a private owner's ability to develop his land in ways incompatible with the park. The cost of an easement, however, may be as high as 80 percent of the cost of buying undeveloped land especially when public use is to be provided by the easement. Enforcing the restrictions on use contained in an easement adds other costs and problems. Less expensive easements usually do not provide public access to the land.

"Although a variety of alternative means of land use control and protection exist, including zoning, easement acquisition, land exchanges, and donations, fee acquisition will continue to be a necessary tool for the National Park Service to accomplish its mission effectively," Jarvis said in his testimony.

—Kirsten Engel, NPCA intern

Hart said. "The memo points out that it might be politically unwise to seek a change in the statutory requirement that standards be set at levels adequate to protect the public health, since there is enough discretion under the current law for EPA to roll back the current standards just by officially redefining the health effects of pollution."

## Yosemite, Sequoia-Kings Canyon Areas in Wilderness Bill

NPCA and the National Park Service have both endorsed a proposal to add hundreds of thousands of acres in Yosemite and Sequoia-Kings Canyon national parks to the national wilderness system. A national parks wilderness bill (H.R. 856), introduced by Rep. Philip Burton (D-Cal.), has been combined with a national forest wilderness proposal to form H.R. 4043. The legislation would protect the natural resources of major portions of the parks from the stresses posed by roads, motorized vehicles, developed campgrounds, and permanent visitor facilities. Three small areas in the surrounding national forests comprising 23,000 acres would be added to the two parks by the bill. Committee markup of this legislation is expected this summer in the House. No action has been scheduled in the Senate.

The Wilderness Act of 1964 set aside specific congressionally designated areas for special management. Inside a park wilderness area all forms of recreational activity are allowed that were permitted before wilderness designation except those that require motorized vehicles such as jeeps, trail bikes, or snowmobiles. In addition, the areas are managed to minimize the evidence of man's presence. The construction of buildings and roads is prohibited. Maintenance to trails and other resource management structures is done with the least obtrusive methods possible. Wilderness management would closely resemble the natural zone management philosophy now applied by the Park Service to these areas. Wilderness designation would establish this management by

*Continued on page 43*

## Bookshelf

- \***Harpers Ferry—Time Remembered**, by Martin Conway. (Reston: Carabelle Books, 1981. 159 pages, \$14.95 hardcover, limited edition.) On October 17, 1859, John Brown and a small following of seventeen men stormed the Harpers Ferry arsenal in an ill-fated attempt to arm negro slaves and establish an independent republic in Virginia's mountains. The plan was short lived, ending in Brown's quick trial and hanging; but the fame it brought to Harpers Ferry lasts to this day. Martin Conway, former superintendent of Harpers Ferry National Historical Park, has assembled a fascinating collection of historical Harpers Ferry photographs, prints, and engravings, as well as recent photos to show the rich legacy and the many changes Harpers Ferry has undergone, from its early days as a center for water-powered industry to its establishment as a national historical park in 1963.
- \***These are the Endangered**, by Charles Cadieux. (Washington: Stone Wall Press, Inc., 1981. 221 pages, \$15.00 hardcover.) When the graceful condor soars high above the San Rafael Mountains in California, scanning the earth below for carrion, he seems invulnerable. Yet, the California condor is one of the rarest birds in the world, with an estimated population of only twenty-nine. Because of its slow reproductive rate, human encroachment on breeding grounds, and pesticide contamination of its food chain, the condor is rapidly being driven to extinction. Charles Cadieux studies the condor's plight, as well as the case histories of thirty-one other U.S. endangered species. The book also contains the complete list of U.S. endangered species; a discussion of the Endangered Species Act of 1973; and a study of the role of wildlife refuges, national parks, and zoos in protecting and breeding endangered species. *These are the Endangered* is a must for anyone concerned with identifying the myriad threats to our wildlife and with gaining a better understanding of the issues involved.

\***Richard Wetherill: Anasazi**, by Frank McNitt. (Albuquerque: University of New Mexico Press, 1966. 370 pages, \$6.95 paper.) A historical novel about Richard Wetherill, discoverer of the Mesa Verde and Kiet Siel cliff dwellings and the archeologist who initiated the excavation of Pueblo Bonito, the largest prehistoric ruin in the United States.

\***The Earthshapers**, by Karen Speerstra. (Happy Camp, Naturegraphs Publishers, Inc., 1980. 80 pages, \$7.95 hardcover.) An archeologically authentic novel about an ancient native North American culture called Mound Builders. The name derives from the thousands of earth mounds they raised, primarily as burial sites, throughout the eastern and midwestern United States. Mound excavations have revealed a wealth of information about Mound Builders: they were a peaceful, highly religious people who conducted a wide trade in items such as copper from Lake Superior and seashells from the Atlantic and Gulf coasts. Karen Speerstra's novel is written for high-school-level readers in an attempt to develop young adults' interest in and understanding of prehistoric cultures.

\***Indian Rock Art of the Southwest**, by Polly Schaafsma. (Albuquerque: University of New Mexico Press, 1980. 379 pages, \$40.00 hardcover.) A comprehensive collection, with 32 color plates and 250 photographs, of petroglyphs and rock paintings done by Native Americans. Schaafsma's descriptions and analyses of rock art provide insight into this artform and the artists' cultures.

\***Anasazi Pottery**, by Robert H. Lister and Florence C. Lister. (Albuquerque: University of New Mexico Press, 1978. 94 pages, \$5.95 paper.) A catalogue that illustrates ten centuries of U.S. prehistoric southwestern ceramic art from the collection of Earl H. Morris, pioneering southwestern archeologist.

**NPCA BOOK SERVICE:** Books indicated by an asterisk are available from NPCA. For each book, members receive a 15 percent discount off prices listed above. Add handling fee of \$1.25 per book. Send check or money order to NPCA Book Service, 1701 18th Street, N.W., Washington, D.C. 20009.

## NPCA Report

Continued from page 42

law, however, and protect these areas from possible changes in policy at the Interior Department.

Designating a portion of a national park as a wilderness area guarantees that these acres will be managed to preserve their natural qualities rather than for intensive visitor use. Wilderness areas have become more and more important in the parks as increasing levels of visitation and the development of facilities to handle that visitation threaten the very resources crucial to the purpose of the parks. Wilderness areas provide vital habitat for wildlife and plant communities.

As is true for the entire wilderness system, H.R. 4043 does not call for the purchase of any additional land, but merely for the use of specific management techniques on acres already in the parks. The areas in Yosemite and Sequoia-Kings Canyon that currently receive the heaviest use are outside the boundaries of the proposed wilderness areas. The bill does not close visitor facilities, acquire land, or exclude visitors—in cars or on foot—from the most popular sections of the parks. In Yosemite the wilderness proposal is a part of the master plan for easing congestion in the park and eliminating unnecessary visitor facilities from the Yosemite Valley. That plan was finally approved last year after extensive public hearings.

Although the bill recommends 736,900 acres of wilderness for Sequoia-Kings Canyon and 677,600 acres for Yosemite, both the Park Service and NPCA testified in favor of adding several important areas to the current legislation. NPCA urged Congress to add 90,000 acres in two units deleted from the bill. In addition, NPCA recommended designating that part of the Mineral King area of Sequoia-Kings Canyon above 8,000 feet as wilderness.

A virtually identical bill to H.R. 4043 passed the House last year before meeting its end in the Senate. Legislation to establish wilderness areas in Great Smoky Mountains National Park and on Cumberland Island National Seashore may also be taken up by the Ninety-seventh Congress.

## Three New Trails, Volunteer Funds Survive Hearing

A bill to encourage volunteer trail groups and to add new trails to the National Trails System (H.R. 861) is again before Congress, but delays in studies and opposition by the Park Service are doing more harm to the bill than a hiking boot to a wildflower.

Four of the seven trails proposed for addition to the system in the original bill were suggested as historic trails, a category that did not exist when the trails were first studied. After an often confused debate on the differences among recreational, scenic, and historic trails, the House Subcommittee on Public Lands has eliminated the bill's proposal to restudy the Chisholm, Shawnee, Western, and Santa Fe trails in the new category—a process that could be completed in ninety days. Sections of the Santa Fe Trail might tiptoe into the trail system as a recreation trail with plaques commemorating events and people, the Park Service noted.

Studies on the Potomac Heritage, Natchez Trace, and Florida trails by the Forest Service and NPS found them qualified for inclusion as scenic trails. The subcommittee favorably reported these trails to full committee.

Park Service witnesses, including Ira Hutchinson, deputy director of NPS, advised the subcommittee not to allocate funds for land acquisition. The majority of the routes of the trail lie on federal, state, or other public lands, he noted. Subcommittee chair Rep. John Seiberling (D-Ohio) questioned the usefulness of breaking a trail into unconnected segments, particularly in the case of the Natchez Trace. The subcommittee amended the bill to provide only \$0.5 million for land acquisition and \$2 million for development on the Natchez Trace Trail.

The Park Service unsuccessfully recommended a subcommittee veto of funding for a Volunteer Action Program to help citizen groups plan, develop, and manage national trails. The volunteer program was strongly advocated in testimony by NPCA Director Paul Pritchard as a significant way to save money on trail construction and maintenance.



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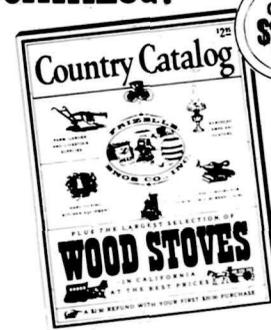
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## Advisory Board to Study Major Issues in Parks

The National Park System Advisory Board has set up six committees to study major issues confronting the Park System. The board, composed of distinguished private citizens such as Lady Bird Johnson and former astronaut Walter Shirra, voted to establish the com-

mittees after meeting with Secretary of the Interior James Watt on April 16. NPCA staff members are working with several of the committees to supply background information and research materials.

One committee will look at deauthorizing some areas now included in the National Park System. Although Secretary Watt has repeatedly denied the existence of a plan to delete areas currently designated as national park units, he did urge the formation of a

committee to study the matter. In a related area, another committee will consider the proposal to amend the Land and Water Conservation Fund to permit the diversion of some money from land acquisition to park restoration and maintenance.

Two committees will examine major resource management issues in the parks. One will look at the problems posed by the introduction of nonnative species into the parks, and another group will make recommendations on

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the management of cultural resources within the system.

Developing guidelines for adding new historic parks to the National Park System will fall to a fifth committee. A sixth committee will discuss a new idea—recommended at different times by both NPCA and Secretary Watt—for operating some visitor facilities at the parks through a public benefit corporation. The corporation would own selected visitor facilities in the parks; income from these facilities would be used for the maintenance of those facilities rather than for the profit of a private concessioner.

## Interior Drags Feet in Glacier Bay Whale Case

The freeze on final Park Service regulations designed to control vessel traffic and commercial fishing in Glacier Bay National Park during the feeding season of the endangered humpback whale has been extended until September 1—the end of the whale season.

The delayed regulations are intended to supplement existing regulations that restrict the number of cruise ships entering the bay.

Originally scheduled to go into effect in January 1981, these regulations have been postponed four times this year while the Administration examines their economic impact under President Reagan's new criteria for federal regulations.

Information gained from a Freedom of Information Act request made by NPCA showed that the required economic analysis of the regulations had been prepared by the Park Service as early as May. Bureaucratic foot-dragging and a petition filed by the cruise ship industry, however, have caused the regulations to be delayed until the summer feeding season is over.

Seeking to take advantage of the Administration's apparent disinterest in implementing the whale regulations, the cruise ship industry petitioned the Department of the Interior to permit thirty additional cruises into the bay this summer more than the eighty-nine permitted by the existing regulations. After consultation with the National

Marine Fisheries Service, which has legal authority over regulations affecting marine mammals, the Department decided against permitting the additional cruises.

The Park Service determined that vessel regulations were necessary following a rapid drop in the number of whales visiting the bay in 1978 possibly caused by a sharp increase in vessel traffic. Aside from harassment due to encounters with vessels in the bay, researchers believe that vessel noise in the narrow bay may also disturb the whale.

Scientific theories that food scarcity could also be causing the whales to avoid the bay prompted the Park Service to include in the vessel regulations a ban on the commercial harvest of whale food species.

The humpback is one of the most endangered of the great whales. At one time numbering around 15,000, the North Pacific population has been depleted to a mere 1,000. Approximately one hundred of these North Pacific humpbacks feed along the coast of Southeast Alaska each summer. Until

1978, Glacier Bay was a major feeding ground.

In response to the concern over the decline of the humpback in Glacier Bay, three studies are being conducted that will examine the acoustics of the bay and its effect on whales, food availability, and whale behavior in general.



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# The Latest Word

## SENATOR JOHNSTON LEADS FIGHT ON LAND AND WATER CONSERVATION FUND By a razor-thin

margin on July 23 the Senate Appropriations Committee approved an amendment by Senator J. Bennett Johnston (D.-La.) that increases spending from the Land and Water Conservation Fund (LWCF) by \$156 million. Money from the Fund goes to acquire land for national parks, among other purposes. The 15-14 vote raised the spending level from \$45 to \$201 million. The margin of victory was provided by Senator Arlen Specter (R.-Penn.). All the Democrats on the Committee supported Senator Johnston's amendment. The Senate bill also provides \$105 million from general revenues for health and safety improvements in the national parks. Most of these funds would be used for maintenance and construction projects. The House bill includes \$118 million for this purpose. The bill is expected to reach the Senate floor in mid-September. Differences between the House and Senate versions will be reconciled in a conference committee later that month.

You can help: Write your Senators today and ask them to oppose any attempt to delete LWCF funding when the Interior appropriations bill reaches the Senate floor. This funding is vitally needed to continue the acquisition of parkland and wildlife habitat by federal, state, and local governments. If you live in Louisiana or Pennsylvania, please write Senator Johnston or Senator Specter and thank him for his outstanding efforts on behalf of the Land and Water Conservation Fund.

## MAMMOTH SUPERINTENDENT CAVES IN ON RELOCATING VISITOR FACILITIES The Superintendent

of Mammoth Cave National Park, Robert Deskins, has announced his intention to radically alter the approved master plan for the park in response to continuing local opposition led by the park concessioner. The existing plan, strongly supported by NPCA and other conservation

and caving organizations, calls for moving the major visitor facilities from their present location on top of the historic entrance to the cave to a new site on the edge of the park. Visitors would be bussed to the various cave entrances for tours in much the same way that visitors are now bussed from the historic entrance to other cave entrances. This "staging area," the central theme of the plan adopted in 1976, would reduce crowds and automobile congestion now common at the historic entrance and protect the caves from geological and biological changes caused by the facilities above the caves. Deskins has proposed replacing the staging area with a major new development in the de facto wilderness north of the Green River in order to open up this part of the park and to aid the local economy. The principal opposition to the existing master plan has been created by the park's concessioner, National Park Concessions, Inc., which fears competition from other restaurants, motels, and gift shops located at the edge of the park near the site of the proposed staging area. According to Superintendent Deskins, the plan can be changed without public comment or a new Environmental Impact Statement—unless the proposal generates controversy. NPCA opposes altering the plan and believes that, at the least, ample time for public comment must be provided before any change is initiated.

You can help: Write to Director Russ Dickenson, National Park Service, Department of the Interior, Washington, D.C. 20240. Ask that the approved master plan with the staging area be implemented in the park.

## HOUSING DEVELOPMENTS THREAT TO PETERSBURG BATTLEFIELD Continuing urban encroachment

at the Petersburg National Battlefield seriously threatens the future existence of one of the most significant Civil War battle scenes protected by the National Park Service. Increasingly frequent acts of vandalism on interpretive displays have forced Park Service personnel to forego replacing many of them. The Battlefield often doubles as a backyard for four high-density housing projects already

located on the boundary of the park. Now yet another housing development on the boundary of the Battlefield seems likely. The U.S. Department of Housing and Urban Development recently purchased a tract of land for the construction of a 101-unit project. NPCA and many other concerned organizations have attempted in vain to seek a compromise on the use of the site. You can help: If we don't act to preserve the historic resources of the Battlefield --the earthworks and "The Crater"--they won't be around for the next generation to ponder. All who care about our historic heritage should write to Secretary of the Interior James G. Watt (U.S. Department of the Interior, Washington, D.C. 20240) and Secretary of HUD Samuel R. Pierce, Jr. (Department of Housing and Urban Development, Washington, D.C. 20410).

FIRE ISLAND MOSQUITO SPRAYING VIOLATES NPS PESTICIDE POLICY

In a direct repudiation of recently established policy, Assistant Secretary of the Interior G. Ray Arnett has reversed a National Park Service ban on chemical pesticides in units of the System unless there is a clear and present danger to human health. Arnett's new directive came in response to a request from Suffolk County on New York's Long Island for aerial application of the pesticides Abate and Dibrome for mosquito control throughout Fire Island National Seashore. Conservationists, led by the Fire Island Wilderness Committee, an NPCA Associated Organization, along with local commercial fishermen, have protested the use of the pesticides, which are known to be harmful to both birds and some marine life. In publicly announcing the new controls on chemical pesticides only a few months ago, Park Service Director Russell Dickenson said, "The National Park System has a responsibility to perpetuate natural conditions and ecosystems in national parks." At press time NPCA and the Environmental Defense Fund had just filed suit to block this directive.

PARK SERVICE IMPROVES CUMBERLAND ISLAND PLAN

Although the newly revised general management plan for Cumberland Island National

Seashore is not expected to be made public until November, it seems likely that the Park Service will make a number of improvements over the controversial earlier version of the plan: reductions in the visitor use levels, decreased use of motor vehicles, and removal of proposed developed facilities. More immediately, Representative Bo Ginn (D.-Ga.) has agreed to introduce a bill to designate 8,775 acres on Cumberland Island as wilderness and to delineate 11,450 acres as potential wilderness.

AUGUST RECESS LEAVES CLEAN AIR, WILDERNESS BILLS IN COMMITTEES

The traditional August recess found a number of important pieces of environmental legislation still awaiting action by congressional committees.

- All things come to those who wait--even the Reagan administration's long-delayed proposals for amending the Clean Air Act. Once promised for a June 30 deadline, the guidelines released on August 6 by EPA administrator Anne Gorsuch mark a big retreat from earlier Administration efforts to prepare a complete draft bill. The nine-point framework purports to continue the Prevention of Significant Deterioration Program (PSD) that protects many national parks while ending such protection for the rest of the country.
- Rep. Phillip Burton's (D.-Cal.) H.R. 4083 to protect 2.1 million acres of national forest and almost 1.5 million acres of Yosemite and Kings' Canyon national parks as designated wilderness awaits hearings by Senator James McClure's (R.-Idaho) Energy and Natural Resources Committee after being introduced by Senator Senator Cranston (D.-Cal.). The bill passed the the House in mid-July.
- It never fails to rain on volunteer trail groups. The shower took place in the House Interior Committee when members voted to drop grants to volunteer trail groups from a bill amending the National Trails System Act. The bill was changed to allow the use of NPS and Forest Service funds to help the groups.

REMINDER: To join National Park and Conservation Association, write NPCA, 1701 18th St., N.W., Washington, D.C. 20009.

