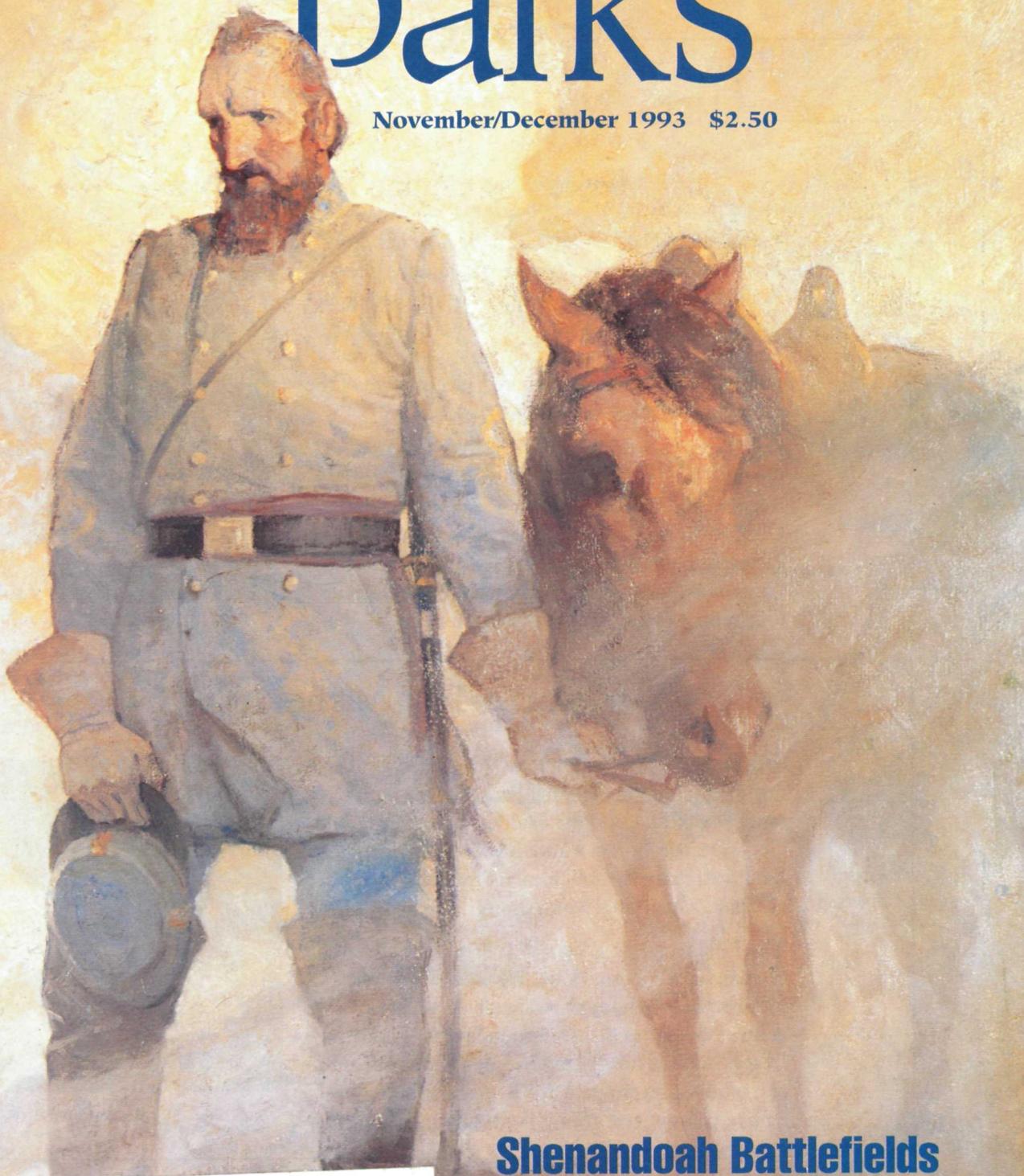


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**DR. LIANE RUSSELL**, the 1992 recipient, led efforts to establish the Big South Fork National River and Recreational Area in 1974 and to designate the Obed River as a Wild and Scenic River in 1976. For 25 years, she and the group she formed, Tennessee Citizens for Wilderness Planning, have successfully fought off a variety of threats to both rivers.



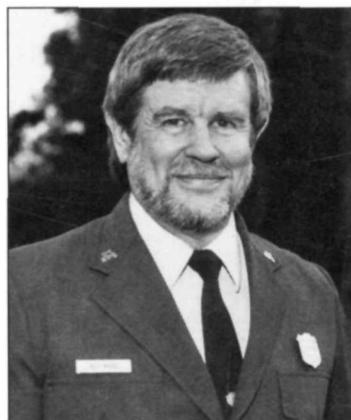
*Liane Russell*

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## Stephen Tyng Mather Award

The Stephen Tyng Mather Award, named for the first director of the National Park Service, is presented by NPCA and the Faultless Starch/Bon Ami Co. in recognition of a Park Service employee who has risked his or her job or career for the principles and practices of good stewardship.

The 1992 recipient is **BILL WADE**, superintendent of Shenandoah National Park. He used every means at his disposal to gain more stringent air pollution controls on power plants surrounding the park. Despite limited funds, he has built a strong research and monitoring program and has established cooperative planning efforts with surrounding counties.



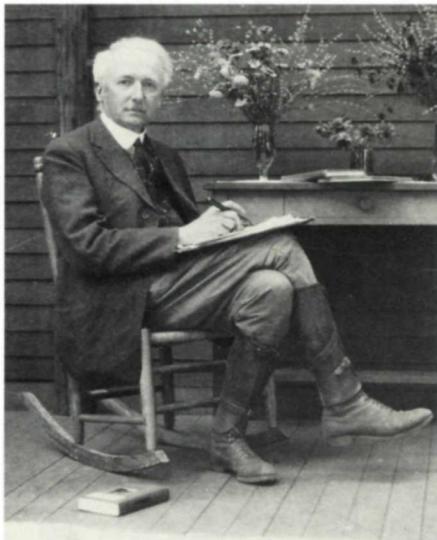
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*Bill Wade*



The Faultless Starch/Bon Ami Company wishes to congratulate the recipients of these awards and thank them for the excellent contribution they have made to the protection of our environment.

The Faultless Starch/Bon Ami Company has actively supported the efforts of organizations such as NPCA for more than 100 years and will continue to work toward the goal of preserving our natural resources for future generations.



Robert Sterling Yard, page 38

### EDITOR'S NOTE

The National Parks and Conservation Association (NPCA) marks its 75th anniversary in 1994, and *National Parks* magazine is joining in the celebration. We asked John Miles, author of an upcoming book about the history of NPCA, to write a series of articles about the association's evolution since its establishment on May 19, 1919. The first article in the four-part series (see page 38) describes the people who saw the need for a group to protect the national parks and who worked to put that vision into action. Subsequent articles will discuss the fight for national park standards and other major struggles with which NPCA has been involved throughout its history.

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# National Parks

THE MAGAZINE OF THE NATIONAL PARKS AND CONSERVATION ASSOCIATION

Vol. 67, No. 11-12  
November/December 1993  
Paul C. Pritchard, Publisher

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COVER: In a 1910 painting by N. C. Wyeth, Stonewall Jackson surveys the Shenandoah Valley before his famous campaign. Many of the battle sites may become a park unit.

Established in 1919, the National Parks and Conservation Association is the only national nonprofit membership organization that focuses solely on defending, promoting, and improving our country's National Park System while educating the public about the parks.

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## OUTLOOK

# Grassroots

THE CRISIS of leadership that currently exists in Washington may be larger than the issues of a particular administration or Congress. The crisis is not just a question of the way federal budget dollars are spent or who pays what taxes. It may in fact be the trauma that any society experiences as it reaches the end of one era and focuses on another.

During the past 50 years, America has largely decided that many of its problems—whether national or local—could best be solved by action at the federal level. The environmental agenda is a classic example of this; many environmental groups have devoted most of their resources to legislative efforts, be it pushing for laws and regulations or for adequate federal funding for environmental concerns. But today we may have exceeded the capacity of this nation to achieve its environmental goals solely by federal action.

In terms of budget, the sad fact is that the environment has taken the hit before other federal programs. The environmental budget was reduced by two-thirds beginning in 1980 by President Reagan and Interior Secretary Watt, then further cut in the late 1980s by the Gramm-Rudman Act, which forced the federal government to limit spending.

The good news is that the environmental movement, guided by a fast-growing grassroots constituency, has reckoned with the fact that not every



DOMINIC R. TIDMARSH

problem can—or should—be solved by Washington.

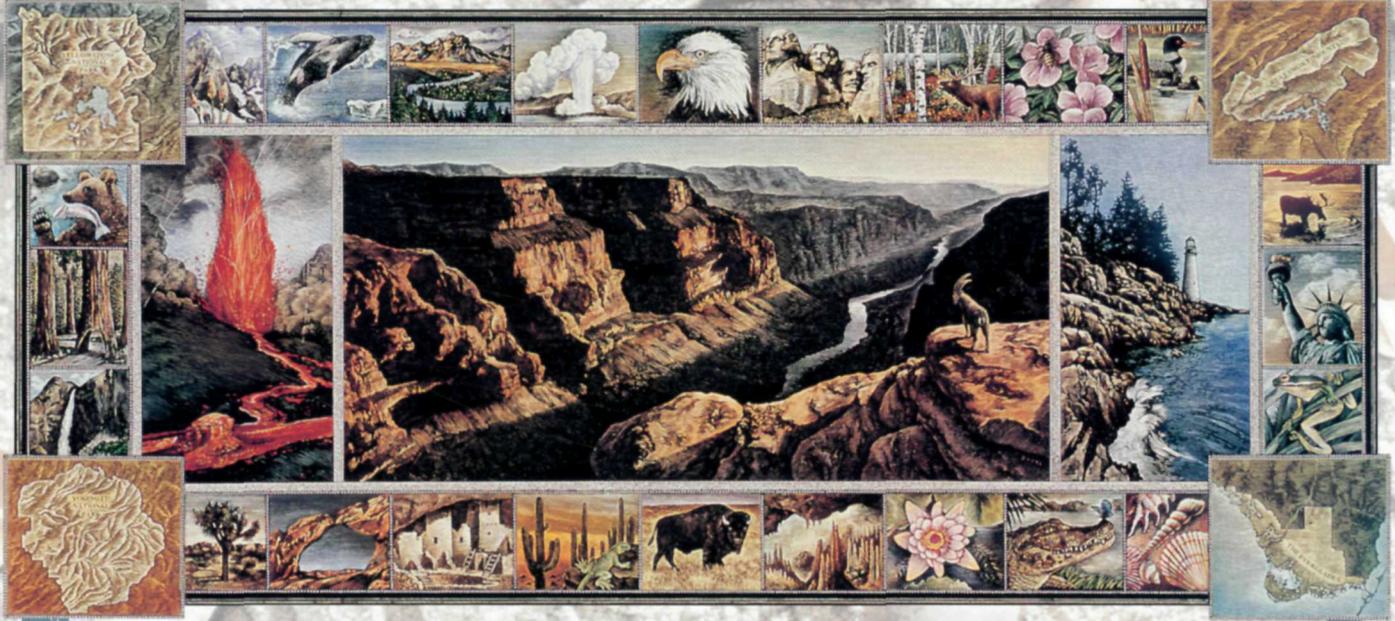
NPCA has successfully fought many park protection battles but now is looking more to local citizens to lead the way. Our park activist network unites NPCA members, parkwatchers, and park advocacy groups to build a large and diverse

corps of grassroots activists.

As part of its 75th anniversary celebration, NPCA is publishing the *National Park Activist Guide*, a manual providing the tools citizens need to bring about positive change for national parks at the grassroots level. In addition, we will host a conference in San Francisco in May 1994, under the leadership of our members and trustees, to focus on this new era of citizen activism on behalf of the parks. The conference will bring together local activists from around the country who have a real understanding of the issues facing our parks and open spaces. Together we will explore ways in which private citizens can help with park research, interpretation, resource management, land acquisition, or any of the other vital National Park Service tasks that have been continually underfunded.

The environmental movement will be healthier in the 21st century if we can find solutions at the community and state levels to complement the Washington solution of the past 50 years. This represents a new era for the parks—and, as in the past, it represents a new era for our nation as well.

President, NATIONAL PARKS AND CONSERVATION ASSOCIATION



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## LETTERS

### Saving the Wolves

I wrote a boycott letter to the Alaska Board of Game and felt fairly powerless as a voice of one ["Bringing Back the Pack," May/June 1993]. Then I realized that if my fiance and I decided to cancel a wedding in Alaska, the boycott of one would increase to 34.

NPCA members who belong to other groups should encourage them to boycott Alaska for its policy on wolves. Giving an informal update on an issue could generate a greater awareness and a greater potential for boycotting power.

*Cynthia Barrington  
Thornton, CO*

### Oil and Politics Don't Mix

In the July/August 1993 issue of *National Parks*, a letter by D. L. Guttormson of the Exxon Company states that

the areas affected by the huge oil spill "...are almost fully recovered and there is no credible scientific evidence of long-term effects."

This is an insult to the intelligence of anyone who knows the facts about the irrevocable damage this event caused.

The damage will be with us for many decades, and this irresponsible act cannot be covered up by such statements from the source of the problem.

*Clarence Petty  
Canton, NY*

### Taking Exception

NPCA is making a mistake by opposing the hunting amendment to the California Desert Protection Act [News, March/April 1993]. Hunting is a successful wildlife management tool in the millions of acres of land that would be-

come the Mojave National Monument under the proposed bill. Changing the name of the area from desert to national monument or national park isn't going to change the ecosystem in which hunters are an integral part.

*Bruce E. Baker  
San Antonio, TX*

### Historical Discrepancies

I wish to take exception to a statement in the article by J. Charles Swift, "The Road to Independence," in the July/August 1993 issue of *National Parks*. Speaking of sites in the National Park System that are related to the Revolutionary War, he writes, "The first military action of the Revolutionary War occurred in April 1775 when Massachusetts militia exchanged fire with the British at North Bridge [in Concord]." Those of us who live in Lexington, Massachusetts, feel that the "first military action of the Revolutionary War" occurred here, on the Lexington Green, when soldiers of General Gage's army attacked and killed eight of the Lexing-

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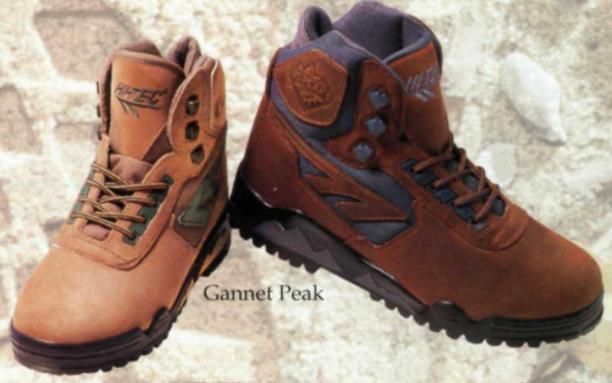
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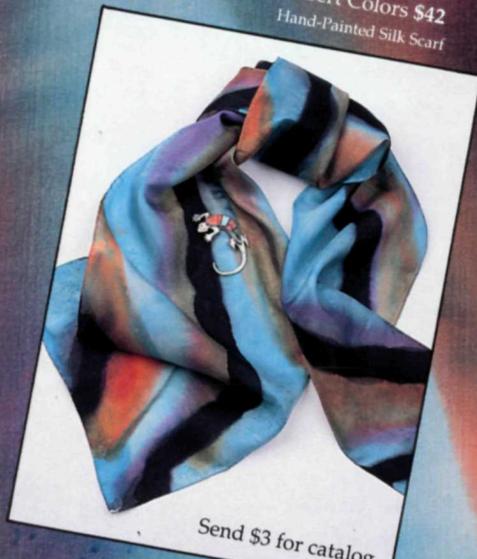
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ton Minutemen, before going on to Concord and the battle at North Bridge.

As I tell my students, the first colonists were killed in Lexington, and the first British soldiers were killed in Concord. Both towns, in a friendly rivalry, lay claim to being the "birthplace of the American Revolution." As Captain John Parker, the leader of the Lexington Minutemen, said, "If they mean to have a war, let it begin here!"

Rosemary W. Putnam  
Lexington, MA

### Roads to Ruin

While I am as alarmed about recent interpretations of R.S. 2477 as writer Michael Milstein is in his article "Roads to Ruin" [Sept./Oct. 1993], I must say that the important "What you can do" suggestion at the end of the article is barking up the wrong tree.

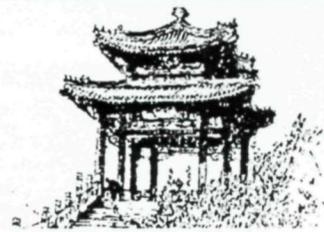
Yes, Interior Secretary Bruce Babbitt can temporarily revise the interpretation of R.S. 2477 until another presidential administration comes along and re-revises that ruling. What is needed is a revision of the Federal Land Policy Management Act of 1976 to delete, or at least carefully define, "existing" rights-of-way in public lands, as Milstein notes. So, my fellow readers, sharpen your congressional pencils and let's fight this "plate of spaghetti"!

Lee Hegstrand  
Fond du Lac, WI

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### Correction

In the article "The Evolution Time Bomb" [Forum, July/August 1993], the area of the United States should have read 3.6 million square miles, which would bring the protected park and wildlife refuge lands to 7.5 percent of the land mass in the country.



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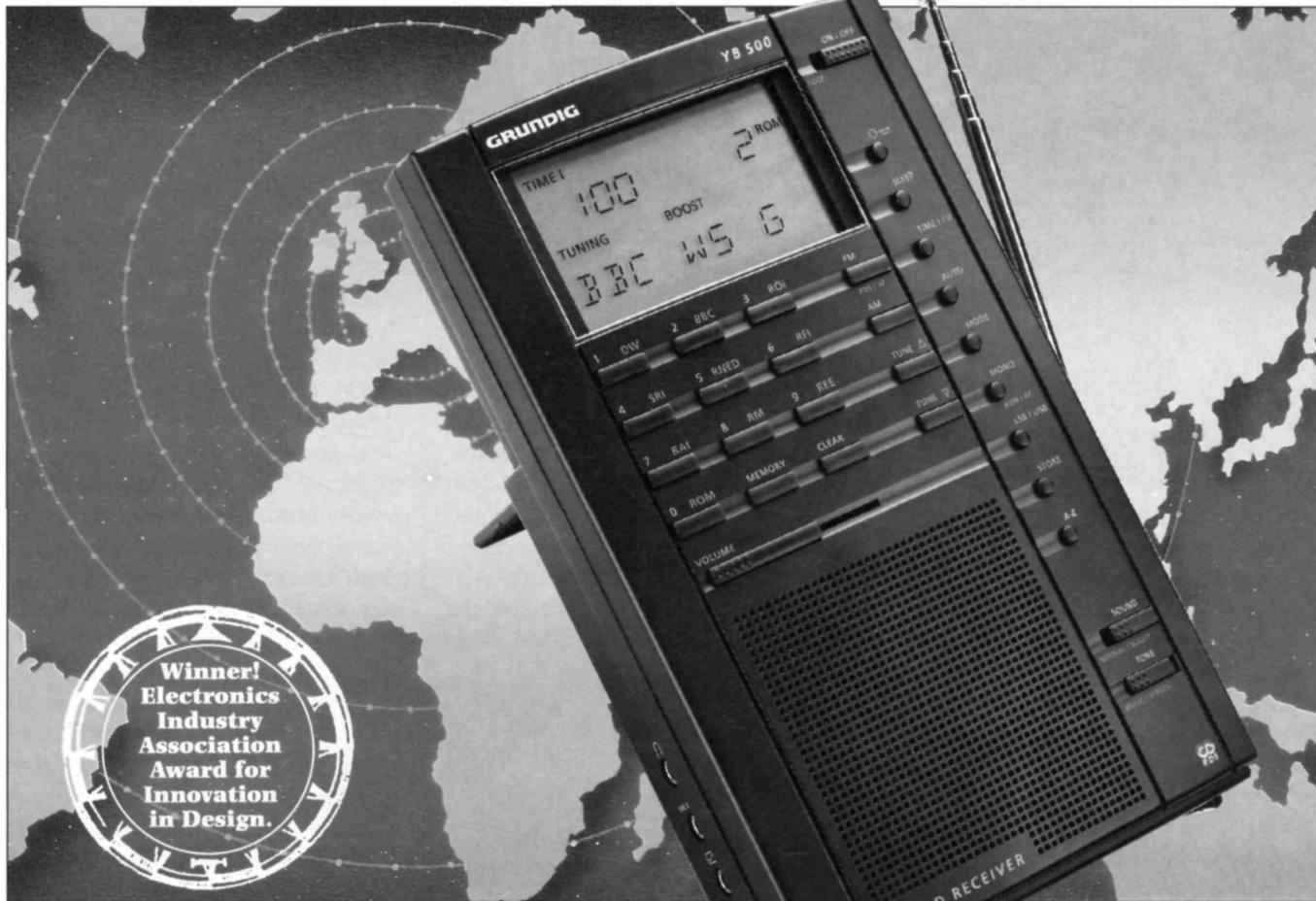
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# NEWS

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## CIVIL WAR SITES FACE GRAVE THREATS

On September 1, 1862, 1,500 soldiers were wounded or killed at the Civil War battle of Chantilly, Virginia. Today, of the ground they fought on, a piece spanning less than three acres remains, wedged against a shopping mall and housing complex. The rest has been swallowed up as the suburbs of Washington, D.C., sprawl out across formerly rural lands.

Chantilly is not alone. "The nation's Civil War heritage is in grave danger," a study released this summer concluded. "It is being demolished and bulldozed at an alarming pace. It is disappearing under buildings, parking lots, and highways." Congress charged the Civil War Sites Advisory Commission, which authored the report, with the first comprehensive study of Civil War battlefields in more than half a century.

"To NPCA and others who work to protect them, it had become clear that battlefields inside and outside the park system are at serious risk," said Bruce Craig, NPCA Northeast regional director. "But until this report no one has so thoroughly documented the magnitude of the problem."

Of the sites where the war's principal battles took place, "many...are lost; others are in imminent danger of fragmentation and loss as coherent historic

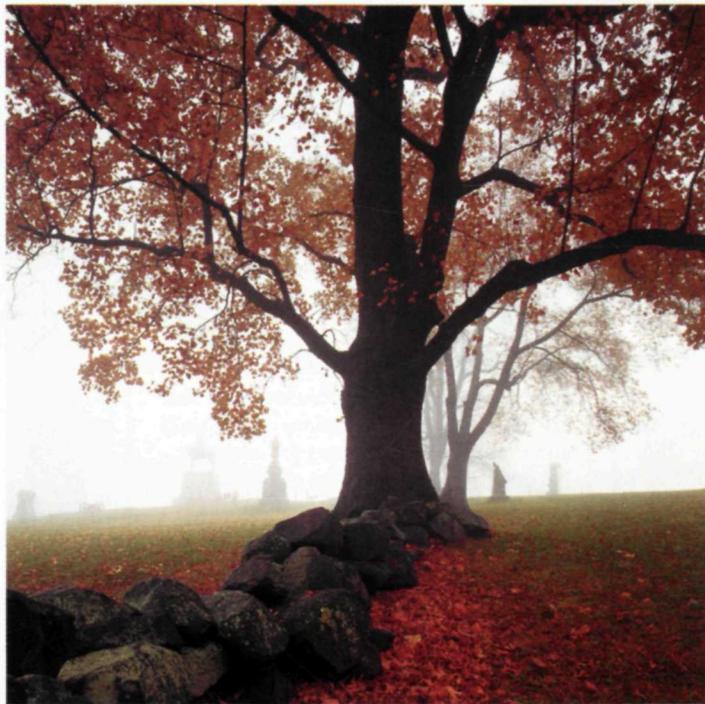
sites. Over the next ten years, the nation could lose fully two-thirds of the major Civil War battlefields unless preventive actions are taken," the report declared.

Almost one in five of the most important battlefields has already disappeared. Another 42 percent of the major sites are seriously threatened, the commission said. It drew up a "prior-

ities" list of 50 of the most important but endangered battlefields, including many sites within the National Park System. The Union waged three years of battles for control of Richmond, the Confederate capital. But Richmond National Battlefield Park contains only 2 percent of the land that was fought across. The rest, Superintendent Cynthia MacLeod said, is "all vulnerable to total destruction and alteration of appearance." Henrico County has issued a permit for gravel mining of an unprotected part of the Malvern Hill battlefield, where the 1862 siege of Richmond was turned back after bloody fighting.

The location of Fredericksburg, Virginia, halfway between Washington and Richmond, made it a focal point of the Civil War. Now the stretch of Interstate 95 that connects the two cities passes between the battlefields of Fredericksburg and Spotsylvania National Military Park. According to census figures, Spotsylvania County grew 110 percent in the 1970s and 73 percent in the 1980s, making it Virginia's fastest-growing county during both decades. "It's a community that had numerous dairy farms in the 1960s that are now houses," George Church, assistant superintendent, said, "and those are right up around the park boundary." The park has also faced plans for incinerators, cellular telephone towers, and discount stores at its borders.

The area surrounding Gettysburg National Military Park "may be a rural, agricultural setting at the moment, but it is rapidly becoming a bedroom community for the Washington, Baltimore, and Harrisburg metropolitan areas," said the park's Jim Roach. While the park contains "the core battlefield," he



DAVID MUENGH

A report to Congress details serious threats to Gettysburg (above) and other Civil War battlefields inside and outside the park system.

ity" list of 50 of the most important but endangered battlefields, including many sites within the National Park System.

The Union waged three years of battles for control of Richmond, the Confederate capital. But Richmond National Battlefield Park contains only 2 percent of the land that was fought

said, "if present trends continue, in many areas of the battlefield the view will change significantly."

"The Civil War was fought when the infrastructure of the country was basically in place," said Ed Bearss, Park Service chief historian. "The major transportation corridors were in place, and in the eastern half of the United States, the industrial centers had generally already been decided on." These were the areas the armies fought to control, he said. These are also the areas from which development has radiated since, leaving the battlefields, Bearss said, "in the eye of the hurricane."

The commission called for a study of some particularly significant sites to see whether they should become part of the park system. (See page 24 for a study of the Shenandoah Valley.) To help protect the 50 priority battlefields, it proposed a seven-year program of land purchases. Each year \$10 million in federal funds would be matched by \$10 million to be raised by states or non-profit battlefield preservation groups.

But most battlefield land will remain in private ownership. The commission made several recommendations to encourage conservation of these lands, including adjustments in state and federal tax policies.

Sen. Dale Bumpers (D-Ark.), who requested the study, said he will introduce a bill to enact at least some of the recommendations. "The commission's report will go a long way to assist Congress on how these historic sites can best be protected," Bumpers said. "I intend to do all I can to help."

But because of the present fiscal climate, the land-purchase program may find opposition in Congress. "What we need to remember," said Craig, "is that Congress requested this study because of the expense of its emergency land purchase at Manassas." In 1988, it bought battlefield land just outside the border of Manassas National Battlefield Park in Virginia to prevent imminent construction of a shopping mall on the site, at a cost so far of \$120 million. "We can save money as well as battlefields by protecting crucial lands before crises like Manassas arise," Craig said.

## BABBITT LAUNCHES NEW RESEARCH AGENCY

The federal government launched an ambitious new approach to environmental science this fall. The National Biological Survey (NBS), which came into existence in October, will "take the field biology of the Department of the Interior—the best in the world—and redeploy it in a new way," said Secretary of the Interior Bruce Babbitt.

Babbitt has charged the survey with cataloging and mapping every plant and animal species in the nation. The goal is to assemble a detailed picture of the country's ecological makeup and update it regularly so that serious environmental problems can be detected early on.

The survey idea has met with enthusiasm from environmental groups including NPCA. But there is also concern that tapping the research staff of the National Park Service and other Interior Department agencies for the survey means the agencies' own short-term scientific needs may not be met.

Babbitt last spring called creation of the survey his highest priority, saying it will "provide a map to help us avoid environmental and economic conflicts." With better management, he said, there do not have to be "train wrecks," like the clashes over ancient forests of the Northwest and other places where ex-



© JACK JEFFREY/PHOTO RESOURCE HAWAII

**A new agency may help prevent the decline of species like Hawaii's imperiled iiwi.**

tensive loss of habitat has put wildlife on the endangered species list. The survey would help by providing "an early warning system," said Rep. Gerry Studds (D-Mass.), an NBS proponent.

The new agency will pull together not only existing Interior Department efforts but also research being done by state agencies, private institutions, universities, and industry. "There is a tremendous amount of data, but the challenge is to integrate it all so people can see the bigger picture," said Dr. Eugene Hester, deputy director of NBS. The National Academy of Sciences advised

## NEWSUPDATE

▲ **Endangered parks.** *National Parks in Crisis*, an NPCA report released in August, updates previous surveys of the threats facing national parks. At many parks, the report found, problems such as maintenance backlogs, lack of funds for research and preservation programs, and staff shortages have grown worse, even as the number of visitors has grown.

To receive a copy of *National Parks in Crisis*, contact Member Services, NPCA, 1776 Massachusetts Ave., N.W., Washington, DC 20036.

▲ **Plans on hold.** In September, a developer withdrew plans to build a 20,000-capacity open-air amphitheater at a site half a mile from the boundary of Petroglyph National Monument in New Mexico. Traffic and noise from the amphitheater would seriously disrupt the park, which contains sites sacred to Pueblo Indians of the Albuquerque area, NPCA and Friends of the Albuquerque Petroglyphs say. They are urging the developer, who is looking for another site, not to select one near the monument.

the survey in an October report on how to bring data together from all these sources and make the compiled information easily available.

Scientific staff for the survey come from the U.S. Fish and Wildlife Service, Park Service, Bureau of Land Management, and other Interior Department bureaus. The idea is that research scientists from each agency will join the survey, while applied scientists and managers remain. Steps are being taken, Hester said, to ensure NBS serves the other agencies' research needs.

Report after report from NPCA, the National Academy of Sciences, and the Park Service has called for an overhaul of the parks' poorly funded and staffed science program. The Park Service recently took a step NPCA and others have recommended, creating a science advisory committee to promote improvement efforts. Many argue the loss of research staff will be a setback.

"Our question is not whether there should be an NBS (there should!), but whether it is right to remove science from the national parks in the process," Dr. Jerry Freilich, ecologist at Joshua Tree National Monument, and Bob Moon, now chief of resources management for the Park Service's Rocky Mountain region, wrote to Babbitt's office this summer. "There is simply no way to create one agency that will serve another agency without fail."

But the potential benefits for the parks are also clear. "Many threats to parks come from the declining health of the larger ecosystems of which parks are a part," said Michael Weland, NPCA Washington representative. "The Park Service would never have the authority or the resources to monitor these larger systems, but NBS can."

## UTAH LANDS BILL SIGNED INTO LAW

Utah is not a state short on environmental controversies, but in the future they may arise a little less often, thanks to legislation signed into law by the president October 1.

The bill, which trades 200,000 acres



**A bill to end conflict over Utah state lands within Arches and other national parks is now law.**

of state-owned land within Utah national parks, national forests, and Indian reservations for federal mineral holdings, passed the Senate in September. The House of Representatives had approved it in June. The state and federal government must still come to an agreement on the value of the lands before the exchange can be made final.

The proposal's success is the result of an unusual coalition among environmentalists, Utah members of Congress, and the state. "Removing state inholdings from the national parks and forests and Native American lands makes sense on all sides," said Terri Martin, NPCA Rocky Mountain regional director, whose efforts over the last decade helped lead to the passage of the bill. Utah Gov. Mike Leavitt (R) agreed, saying the swap "makes good business sense for the state."

Since it became a state, Utah has owned scattered square-mile blocks of land meant to generate revenue for its schools. Of these, 82,000 acres are now inside Arches and Capitol Reef national parks, Glen Canyon National Recreation Area, and Dinosaur National Monument. There are another 76,000 acres in national forests and nearly 40,000 within Indian reservations.

The situation has often led to conflict. Claiming that it must manage the

lands to "maximize revenue," Utah has repeatedly announced plans to develop them or sell them. Last year, it proposed sending work crews into its holdings within Arches National Park to drill for water and dig pits. The goal was to determine the potential for building tourist attractions there.

NPCA successfully beat back this plan, as it had in a similar proposal in 1989. That year, Utah declared that it would put its park inholdings up for sale unless Congress agreed to exchange them for large parcels along the shoreline of Lake Powell in Glen Canyon National Recreation Area. Utah planned to build marina and hotel complexes along the lakefront.

In contrast, the new law sets up a trade in which the state will receive, in return for its land, a share of mineral royalties generated on public lands, unleased coal tracts, and some parcels of federal lands. NPCA and other conservation groups helped craft the proposal to make sure that these are not in environmentally sensitive areas.

"When I heard that it passed, I took a big sigh of relief," said Noel Poe, Arches superintendent. Development of the state sections "was always a potential that was hanging over our heads and that would have had a major impact on the park's resources," he said.

## SENATE COMMITTEE VOTES FOR DESERT PROTECTION

After nearly two decades of effort, NPCA and other conservation groups achieved a major victory October 5 in their efforts to protect the California desert. The Senate Energy and Natural Resources Committee approved in a 13-7 vote the California Desert Protection Act, which would preserve 1.4 million acres of the desert as Mojave National Park; expand the boundaries of Death Valley and Joshua Tree national monuments and redesignate them as national parks; and set aside 4 million acres of federal land in the desert as wilderness.

"This is a great day for conservation," said NPCA President Paul Pritchard. "If passed, this will be the most extensive act of land protection ever approved for the lower 48 states."

California Sens. Dianne Feinstein (D) and Barbara Boxer (D) led efforts to advance the bill after years of stalemate. They also rallied opposition to amendments that would have dramatically weakened the bill. One, promoted by the National Rifle Association, would have lessened protection for the Mojave area and allowed sport hunting there.

At press time tough fights still lay ahead for the bill on the floor of the Senate and in the House of Representatives. NPCA and other groups expected to fight damaging amendments likely to be offered during those votes.

*✍ Write to your senators (U.S. Senate, Washington, DC 20510), asking them to work for passage of the California desert bill without such amendments.*

## AIRCRAFT NOISE LINGERS AT GRAND CANYON

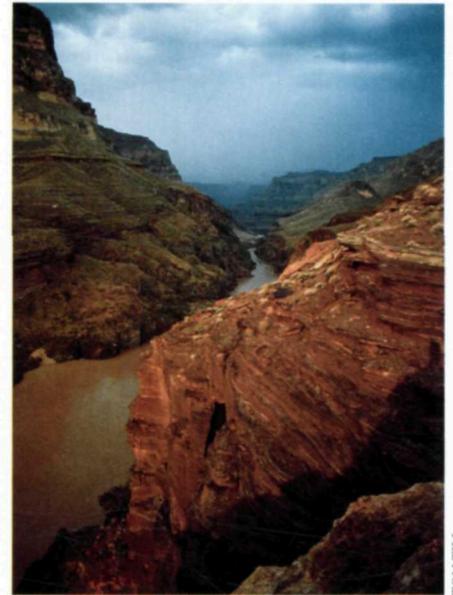
Noise from airplanes and helicopters flying over the Grand Canyon exceeds limits set by federal law, a National Park Service study concluded this fall.

Legislation passed in 1987 calls for the "substantial restoration of natural quiet" in Grand Canyon National Park. But even in regions of the park where aircraft are not allowed, they are still clearly audible, the study found.

"New measures are obviously needed if we're going to attain the goals of the 1987 law," said David Simon, NPCA Southwest regional director.

Sponsored by Sen. John McCain (R-Ariz.), the law was enacted in response to the growing popularity of airplane and helicopter tours of the Grand Canyon and other parks. "Noise associated with aircraft overflights at Grand Canyon National Park is causing a significant adverse effect on the natural quiet and experience of the park," the legislation declared. There were also safety concerns after a 1986 airplane-helicopter crash in the canyon killed 25 people.

Under the law, regulations set up specific flight corridors for aircraft and "flight-free" zones covering 44 percent of the park. "The purpose of the flight-free areas is to provide a location where visitors can experience the park essen-



At Grand Canyon National Park, the number of airplane and helicopter tours has increased dramatically in the past five years.

TOM TILL

## MARKUP

### KEY PARK LEGISLATION

Bill	Purpose	Status
<b>Utah land exchange</b> Public Law 103-93	Sets up a state-federal exchange for lands Utah owns within national parks, forests, and Indian reservations. In exchange, Utah receives federal mineral interests. NPCA supports.	The bill was signed into law by the president on October 1.
<b>California Desert Protection Act</b> S. 21	Create Mojave National Park, expand Death Valley and Joshua Tree national monuments, redesignate them as national parks, and designate 4 million acres of Bureau of Land Management wilderness. NPCA supports.	The Senate Energy and Natural Resources Committee approved S. 21 on October 5. It still awaits votes in the full Senate and the House of Representatives.
<b>Shenandoah battlefields</b> H.R. 746 S. 1033	Establish a national battlefield park in Virginia's Shenandoah Valley to preserve Civil War sites and set up a heritage commission of local landowners, business people, officials, historians, and preservationists. NPCA supports.	H.R. 746 is before the House subcommittee on national parks. NPCA testified at a September 21 hearing on S. 1033 before the Senate subcommittee on national parks.
<b>Concessions</b> H.R. 1493 S. 208	Increase concessions fees and return them to the park system; establish competitive bidding for concessions contracts; reform possessory interest. NPCA supports.	H.R. 1493 is before the House subcommittee on national parks. S. 208 is before the Senate Energy and Natural Resources Committee.
<b>Lechuguilla Cave</b> H.R. 698	Permanently withdraw an area near Carlsbad Caverns National Park from oil and gas drilling, to protect spectacular Lechuguilla Cave. NPCA supports.	H.R. 698 passed the House of Representatives on May 11. It is now before the Senate Energy and Natural Resources Committee.

*NPCA is currently working on more than 40 bills.*

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tially free from aircraft sound intrusion," McCain said as he introduced the bill. But what the Park Service study found, said Linda Mazzu, natural resources specialist at the park, "is that the noise from flight corridors bleeds into flight-free zones more than we expected." The park's final report is due in November.

One problem, Mazzu said, is that the regulations "were based on a certain amount of aircraft" that has long since been exceeded. Over the past five years, the flightseeing industry at the Grand Canyon has grown dramatically. In 1992, 800,000 people toured the park by air, nearly double the 1988 figure.

The 1987 act called for new measures if the zone system did not restore natural quiet. At a late November workshop, the Park Service, tour operators, environmental groups, the Federal Aviation Administration (FAA), and others will discuss possible steps to take next. These may include limits on the number of aircraft; changes in the layout of flight-free zones and flight corridors; and incentives or requirements for the use of quiet aircraft technology.

At the same time these steps are being considered, Grand Canyon Airport outside the park is proceeding with plans for new airtour facilities. The FAA has agreed to pay 91 percent, or \$952,000, of the cost of a new 25-acre heliport there.

The private companies that provide airtours over the park currently operate from a site near Arizona Route 64 and a site at the airport. It is generally agreed that, for safety reasons, all helicopter tours should operate out of the airport.

But "construction of new helicopter facilities has the potential to increase the capacity for overflights and thus will further negate the statutory goal" of restoring natural quiet, Secretary of the Interior Bruce Babbitt wrote to Secretary of Transportation Federico Pena in August. Babbitt and environmental groups have asked the FAA to ensure the new facilities do not mean more helicopter tours. They also asked it not to fund other expansion projects at the airport until the Park Service presents its final report on overflights and the FAA completes related studies.

## BOARD PUSHES TO EXPAND JACKSON HOLE AIRPORT

High in the spectacular mountains of Grand Teton National Park in Wyoming, or along the park's Snake River, the only sounds are those of wind, water, wildlife—and jets coming and going overhead.

Jackson Hole Airport is located inside the national park, the only commercial airport in the nation so situated. Over the years it has grown from a gravel airstrip and single log building that accommodated local air traffic into an airport—complete with terminal, restaurant, car rental services, and parking lots—that handles major airline jets and hundreds of thousands of tourists each year.

Two years ago, the airport board proposed a 1,700-foot expansion of the Jackson Hole runway. The board claims the extension is needed to increase the margin of safety for jets using the airport, although the Federal Aviation Administration has declared current operations at the airport safe. Teton County commissioners, park officials, local conservation groups, and NPCA wanted the airport to consider ways to reduce the effect on the park while ensuring safety. The board agreed to complete a plan examining these issues.

The board released a draft version of the plan in August. Of the alternatives it proposed, one would preserve the status quo. All the rest would extend the airport's runway by at least 2,000 feet and expand the terminal; two would double the runway in size. They all would add a control tower, radar, and approach lighting as well.

While the board said these steps would "enhance safety" at the airport, a representative of its consulting firm conceded in September that the proposed runway extensions would increase safety only if current passenger and baggage weight restrictions remained in place. But the alternatives that propose extending the runway would also "reduce or eliminate the payload restrictions," the plan says. Several of the alternatives specifically state that they are designed to accommodate projected future growth in passenger numbers.

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"Enough is enough," said Terri Martin, NPCA Rocky Mountain regional director. "It is time that we recognize Jackson Hole Airport is located within Grand Teton National Park and start operating it in a way that reduces, not increases, its impact on the park and the Jackson Hole valley." Both Martin and park officials have pressed for a new set of alternatives.

Teton County commissioners have also stated that the alternatives do not address the range of concerns they wanted. "All these choices seem to fall in one category," said Commissioner Dail Barbour. "We would like heavy consideration to be given to the park's concerns." She said this view was shared by a majority of commissioners and expressed by residents at public meetings. Barbour also called for examination of "the possible impacts on the community and quality of life" from further expansion of the airport.

Some of the alternatives suggested by Martin and Jack Neckels, Grand Teton superintendent, include requir-

ing aircraft to take off and land from the south, unless weather conditions make it unsafe, in order to avoid flying over the main body of the park; limiting aircraft to quieter models designed to handle shorter runways; reducing the allowable levels of airplane noise; ending nighttime flights to limit artificial lighting; increasing weight restrictions to enhance safety; and limiting the number of planes using the airport.

Martin and Neckels both noted that the airport's lease comes up for reconsideration by the Department of the Interior in 2013.

The airport is currently operating under a lease extension granted by former Secretary of the Interior James Watt, who reversed a 1979 decision of the previous secretary, Cecil Andrus, to phase out the airport.

"If the airport is not willing to take steps toward reducing the impact on the park over the next 20 years, the Interior Department will have little choice but to begin planning for its removal," Martin said.

## DENALI'S FUTURE HINGES ON CURRENT DEBATES

Denali National Park in Alaska may be the country's greatest readily accessible wilderness. Less than a day's drive from Anchorage and larger than the state of Massachusetts, the park contains Mount McKinley, the highest mountain on the continent; grizzly bears, wolves, moose, and caribou in an abundance unknown in the lower 48 states; and millions of acres of rolling, many-colored tundra broken only by a single 90-mile road.

Denali may seem too huge to be vulnerable, but it is in many ways up for grabs. The state of Alaska, the National Park Service, other federal agencies, members of Congress, environmentalists, and others are debating a variety of issues that together may shape the future of the park.

One of the great controversies at Denali is what some call a lack of access to the national park. Visitors travel down the single winding road into the heart of the park on buses limited in

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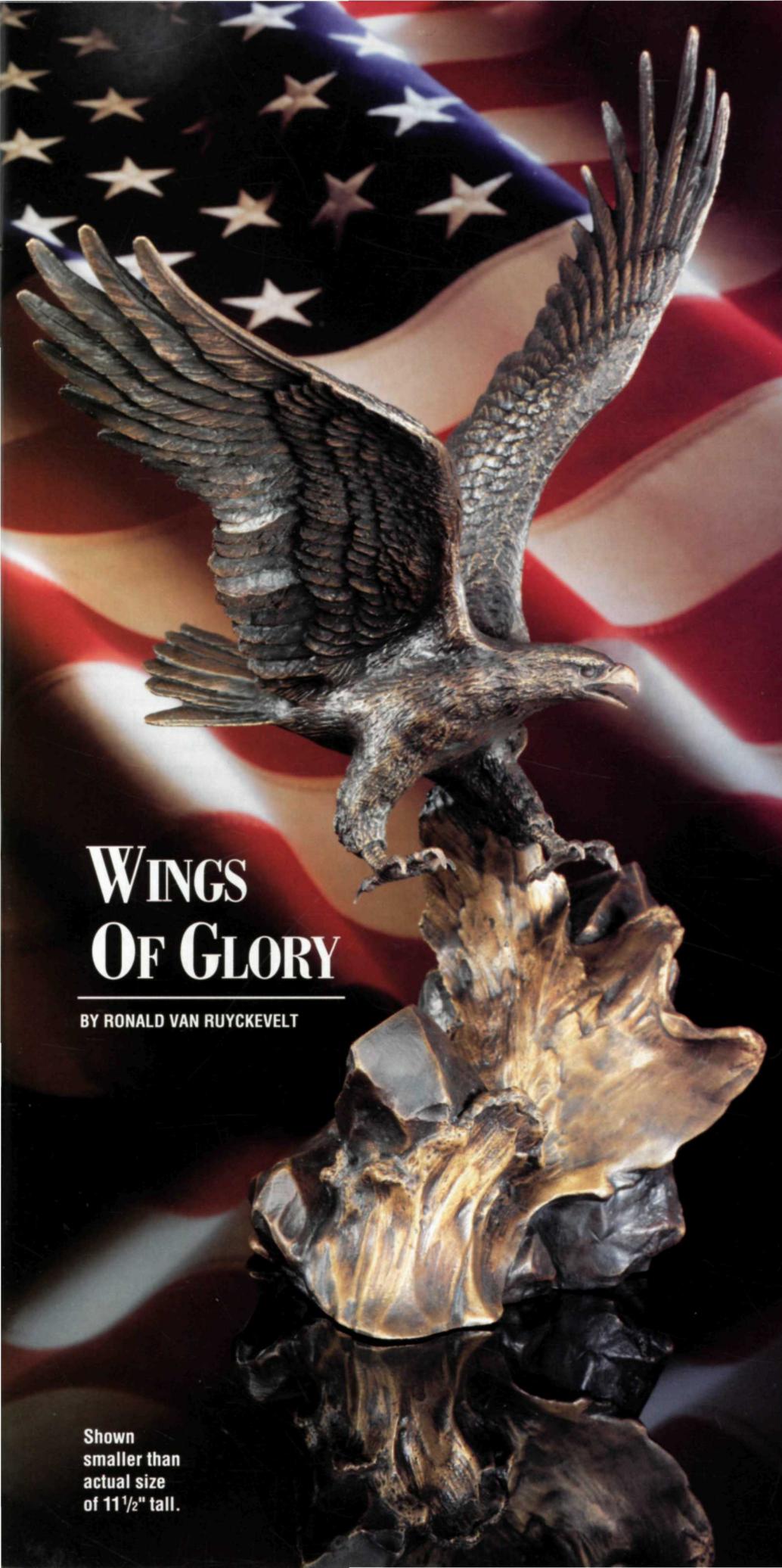
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DAVID MUEENCH

The question for Denali National Park is how to provide access and protect wilderness.

number and capacity for safety reasons. Those who want to explore the northern half of the park on foot can get off at any point and hike across its trailless tundra. This system allows people to see the park with little disruption to its landscape or wildlife. Because it also puts a cap on visitation, state officials and Alaska members of Congress have called for more vehicles on the road, more roads into the national park, or even a monorail system.

Another answer to providing additional visitor opportunities is development of the southern region of the park, below Mount McKinley (which is also known by its Native name Denali, "the High One.") This area provides the best views of the mountain, which from the north is often obscured by clouds. But the area, while spectacular, remains as a surveying party found it in 1913, "most difficult of access." Obstacles include nearly impassable rivers, thick birch, spruce, and alder forests, and some of the longest glaciers in the world.

A National Park Service plan for the area released this fall has so far found many critics, from the state of Alaska to environmental groups.

NPCA and other groups argue the plan neither gives a wide range of people the opportunity to view Denali nor protects the wilderness character of the

southern half of the national park.

"In Denali, we are continuing to build a jigsaw puzzle without ever looking at the front of the box," said Chip Dennerlein, NPCA Alaska regional director. "Without an overall vision, a real sense of how to preserve what is special and magnificent about Denali, those qualities could easily be diminished or even in the long run lost. If we have a clear understanding of the park as a whole and how south Denali fits into the whole, we can protect the park's resources and provide wonderful opportunities for additional visitors."

To do this, Dennerlein said, "a true partnership" between Denali National Park and Denali State Park on its border is necessary.

These and other issues led Secretary of the Interior Bruce Babbitt, after a trip to Alaska this summer, to propose the creation of a Denali task force. Dennerlein met with Babbitt during that trip and has been working with Interior Department officials on formation of the group. As well as looking for a new alternative for south Denali, NPCA is suggesting that the task force address the question of making visitor access consistent with preservation. "The way we answer this question in Denali," Dennerlein said, "will set a precedent for all the national parks of Alaska."

## STATE MAKES PLANS FOR AIRPORTS IN ALASKA PARKS

The Federal Aviation Administration (FAA) announced \$600,000 in grants to the state of Alaska this fall for planning airports inside Denali and Wrangell-St. Elias national parks and preserves.

The National Park Service and NPCA insist the FAA has no authority to issue such grants. They also strongly oppose building state-owned commercial airports at the heart of two of the country's premier wilderness parks.

"This is an issue of enormous significance," said Chip Dennerlein, NPCA Alaska regional director. "The FAA has taken from the Park Service and given to the state the authority to control access to these parks, which is the most important tool in shaping their future."

Currently the Park Service operates a small airstrip in the Kantishna area of Denali and another in the Chisana area of Wrangell-St. Elias. The airstrips are used for park operations and serve a few private lodges and local residents. "We don't believe that significant development would be appropriate or in concert with the purpose for which the park was established," said Russell Lesko of Wrangell-St. Elias.

In August, Dennerlein and John Morehead, Alaska regional director of the Park Service, wrote the FAA asking it not to issue the planning grants. They cited evidence that the airstrips are on Park Service land and that federal laws do not permit the FAA to issue grants for such projects on parkland.

The FAA wrote back, "The fact that a responsible public agency...does not yet have title to a specific tract of property is...not a valid reason for denying a planning grant application." The statement refers to Alaska's claim that it holds rights-of-way across the two parks that include the Kantishna and Chisana airstrips. As a result, the state argues, it has the right to develop these areas.

✉ Write to FAA Administrator David Hinson, 800 Independence Ave., S.W., Washington, DC 20591, and Park Service Director Roger Kennedy, 18th and C Streets, N.W., Washington, DC 20240, to express opposition to the FAA grants.

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# REGIONAL REPORT

## News Briefs from NPCA's Regional Offices

### ALASKA

*Chip Dennerlein, Regional Director*  
Ahtna, Inc., the Native Alaskan corporation that owns land surrounding the entrance to Wrangell-St. Elias National Park and Preserve, announced in September that it had issued its first logging contract for those lands. Approximately 40,000 acres are to be cut. While the Park Service cannot prevent the logging, Superintendent Karen Wade and Dennerlein have expressed hope that they can work with Ahtna to limit the effect on Wrangell-St. Elias.

### HEARTLAND

*Lori Nelson, Regional Director*  
This fall NPCA opened a Heartland regional office in the Minneapolis-St. Paul area. Its director, Lori Nelson, will work to protect national park sites in the Midwest and Great Plains, from the Dakotas south to Oklahoma and east to Ohio. Nelson, an attorney, was recently a candidate for the Minnesota State Senate, served on the staff of Rep. Collin Peterson (D-Minn.), and lobbied on environmental issues at the state level.

### NORTHEAST

*Bruce Craig, Regional Director*  
The town of Gettysburg, Pennsylvania, is changing from a rural farming community to a far-flung suburb for several mid-Atlantic cities. (See page 10.) To keep the historic setting of Gettysburg National Military Park intact as development spreads, the National Park Service has prepared a land-protection plan. The plan identifies important pieces of the battlefield deserving protection as parkland. It also outlines a broad conservation strategy for the surrounding historic district, to be undertaken cooperatively by the park, local officials, and landowners. "Gettysburg

is among the most important battlefields in the public mind—look at the popularity of Ted Turner's recent movie *Gettysburg*," said Craig. "If the feel and character of the battlefield are to survive, this kind of cooperation is absolutely essential." Craig has contacted the Park Service with his recommendations on the plan.

In the three days of fighting at Gettysburg, the greatest battle of the Civil War, more soldiers fell than in any battle before or since in North America.

Private landholders within Acadia National Park want the park's boundary shrunk so that they can build houses on undeveloped Round Pond. Recently they gained support for their position from the Acadia National Park Advisory Commission, which consists largely of local residents. The commission voted 6-5 August 31 in favor of the boundary change. Craig wrote to the advisory commission opposing the effort. He pointed out that legislation Congress passed in 1986 to fix the park boundary was based on years of negotiations among environmental groups, neighboring towns, landowners, and the Park Service.

The boundary cannot be altered without special congressional legislation. To express opposition to the boundary change, write to Maine Sens. George Mitchell (D) and William Cohen (R), Washington, DC 20510.

### PACIFIC NORTHWEST

*Dale Crane, Regional Director*  
Washington Gov. Mike Lowry (D) wrote Crane this summer, expressing his support for the creation of an international park in the North Cascades of Washington and British Columbia. "Our two nations have much to gain from such a park," Lowry said, calling

for the remaining wilderness there to be protected "in its entirety." British Columbia Minister of the Environment John Cashore has described the proposed park as "a great idea."

In September, forestry and parks officials from the United States and Canada met to discuss ways to better protect the ecosystem. Crane had urged such a meeting between the two countries. Although much of the North Cascades is already preserved as parkland, intensive clearcutting on the Canadian side has left biologists unsure whether endangered species in the area such as wolves, grizzlies, and lynx can survive.

More than 600 acres of Washington's rugged, scenic San Juan Islands, including some of the finest shoreline, remain untouched government property. The land consists mostly of old Coast Guard holdings now protected by the Bureau of Land Management. Crane is concerned about pressure on the bureau to sell the lands for development and is calling for them to remain under BLM protection. "Their loss," he said, "would affect the character of the islands as a whole," as well as nearby San Juan Island National Historic Park. The park contains the site of the British-American "Pig War" of 1859 as well as pristine forestlands and beaches.

### ROCKY MOUNTAIN

*Terri Martin, Regional Director*  
Rainbow Bridge in Utah, the world's largest natural bridge, is to the Navajo a sacred place. But for years it has not been treated as one, suffering instead from overcrowding, litter, high levels of noise, graffiti, and vandalism of ancient rock art. The National Park Service, which manages the site as Rainbow Bridge National Monument, released a draft plan in 1990 that seemed unlikely to solve these problems. It would have

allowed annual visitation to increase threefold. The figure was based on the number of people who could fit onto the site's floating walkway and trail at once. The plan also called for paving areas leading to the natural bridge.

Martin protested what she called the "how many people can fit into a phone booth" approach, stating that the plan "treats Rainbow Bridge as a sideshow, not a place of wonder and power."

The final version of the plan, issued this summer, reverses the original approach. Large groups of visitors will be allowed for only several hours each day. The rest of the day will be set aside for smaller groups. The plan also takes steps to prevent motorboating, water sports, and other incompatible activities from spilling over into the site from adjacent Glen Canyon National Recreation Area. Park guides will accompany all commercial boat tours to teach visitors about the geological significance of Rainbow Bridge and its cultural and religious significance to the Navajo.

## SOUTHEAST

*Don Barger, Regional Director*

The state of Tennessee refused this summer to issue a permit for a water supply dam on one of the major tributaries to Big South Fork National River and Recreation Area.

NPCA and the National Park Service had written letters urging that Fentress County not be allowed to dam the North Prong of Clear Fork, part of a web of rivers flowing through the rugged, scenic gorges of the Cumberland Plateau on the Tennessee-Kentucky border.

Clear Fork, the state Department of Environment and Conservation pointed out, has been spared the acid and metal pollution from defunct mines that plagues many bodies of water in the area. As a result, reducing the influx of clear, fresh water it provides "would further disrupt and degrade the river system," the department wrote.

Clear Fork is also home to at least one threatened species and is part of the most popular white-water rafting run within Big South Fork.

The Blue Ridge Parkway winds for 470 miles through the mountains of Virginia and North Carolina, linking Shenandoah National Park at its north end with Great Smoky Mountains National Park to the south. The 27-mile stretch through Virginia's Roanoke Valley, however, is marked by some less pristine scenery: a rock quarry, petroleum tank farm, dam and power station, congested highways, and miles of subdivisions.

NPCA, Friends of the Blue Ridge Parkway, and local citizens are urging Roanoke County to protect some still-undeveloped areas along the parkway. Although numerous county officials have expressed support for the plan, a developer is at the same time pushing for zoning changes to allow dense residential construction immediately adjacent to the parkway. At press time, the Roanoke Board of Supervisors had scheduled an October meeting to decide whether to agree to the zoning change. NPCA is working with Friends of the Blue Ridge Parkway, the Park Service, state and local officials, and area residents to promote a comprehensive look at planning strategies along the entire length of the parkway.

## SOUTHWEST

*David Simon, Regional Director*

A series of explosions 10,000 years ago left behind a landscape of lava formations and extinct volcanoes in northeastern New Mexico. The cone-shaped mountain at its center was added to the National Park System in 1916. But the boundaries of square-mile Capulin Volcano National Monument have never included the volcano's lower slopes. Two private cinder-mining operations have dug so deeply into those lower slopes that the park boundary fence now hangs in mid-air, and there is continuing erosion on the side of the volcano.

The Park Service is preparing recommendations for expanding the park's boundaries, which would allow it to purchase the mining sites. The expansion would require congressional approval, however. NPCA is urging quick action to prevent further damage to Capulin Volcano.

NATIONAL PARKS

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# New Direction for NPS

*Director Roger Kennedy shares his views on public service and the national parks.*

**S**OON AFTER ROGER KENNEDY became Park Service director this summer, *National Parks* sought his thoughts on the park system and the service. What follows is an excerpt from that interview.

**Q: What do you see as your priority for the Park Service?**

**A:** The restoration of the morale of the public servants. We need to restore or enhance their sense that they are appreciated as the hard-working, underpaid, frequently badly housed public servants that they are. And that goes for full-time, seasonal, contract...rangers and bureaucrats and maintenance people alike.

**Q: You were quoted in a San Francisco newspaper as saying that salaries for Park Service employees are a national disgrace.**

**A:** They are. Job for job, Park Service people are underpaid. Not in all instances, but in those instances it is a disgrace. It's an old complaint that needs to be dealt with.... What happens in any government...is that over time the pay scales and working conditions of people reflect a fairly accurate value system of the people in charge. And since we think parks are important and people who work in parks are important—and they are important—it will

take us some time to reflect that more adequately.

**Q: You were also quoted as saying you had 500 ideas for the Park Service...**

**A:** I never said that. The Park Service doesn't need to be visited by genius, it has been visited by committee.... I think the Park Service has been studied to death. It needs the articulation of what everybody has already tried to get done.... In the process of reorganizing and re-energizing the personnel system, there are few mysteries to be solved. The Vail Agenda is our agenda. [*National Parks for the 21st Century: The Vail Agenda* is a self-examination detailing the Park Service's persistent problems and addressing them with a series of recommendations. The findings came out of the 75th anniversary symposium held in Vail, Colorado.] ...There are a lot of good ideas [in the Vail Agenda]. In each of these instances, what I've tried to do is to say, let's find people who care about these things and ask them to do it.

**Q: In your visit to Yosemite, you suggested that \$5 a carload for a week was too low as an entry fee to the park. What would be a fair price?**

**A:** I don't know, but it isn't \$5 a carload for a week. Every park is different, every audience is different, the mix of

people is different. I've gotten some good, intelligent, caring letters about whether or not the American people care enough about the parks to pop for them. I don't think we need to test that principle because the American public is doing pretty well. What we are not doing well is to have specific users respond to that use by paying differentially for those uses. I happen to think it's absurd for people my age to get in free. Some people who are my age are, if asked, perfectly willing to pop—and are probably in a reasonable position to do so.... We ought to provide sensible incentives for people to collect fees. If all the dough flows back into the general [treasury and not the parks], that seems to me to set a very low incentive for [the parks] to collect.

[Kennedy also agreed with charging fees for commercial air and bus tours. A final budget measure was signed by Congress August 10 that included fees for tour buses throughout the National Park System as well as air tours in Grand Canyon, Arizona, and Haleakala, Hawaii.]

**Q: Would you support a reservation system on peak days?**

**A:** I think everybody would. It seems to me that it certainly is better for the visitor to know well in advance on certain days that you have to have reservations than to drive for two and a half hours and get turned around at the gate. But the key is to give people enough notice in advance that reservations are needed.

**Q: What is the role of parks: is it for recreation or to preserve habitat?**

**A:** All of the above, but not all in the same parks. All of the above, but each in its own place. It is a different thing to be in Gateway [National Recreation Area outside of New York City]...than it is to be in the backcountry of Yosemite. So there is no generic answer. ...I think we have to make it easier for people to find solitude. We can encourage people in finding the park experience as it was traditionally defined,

and encourage people to seek it, and that often means nothing more complicated than a mimeographed sheet telling them how to get away from the crowd. We need to let them know that it is okay to park the car, close the door, and go for a walk—if you know where to walk.

**Q: What about parks as places to provide habitat?**

**A:** They are laboratories, and they are preserves, and they always have been. We are not the only species.

**Q: You don't see the increase in visitation as a conflict?**

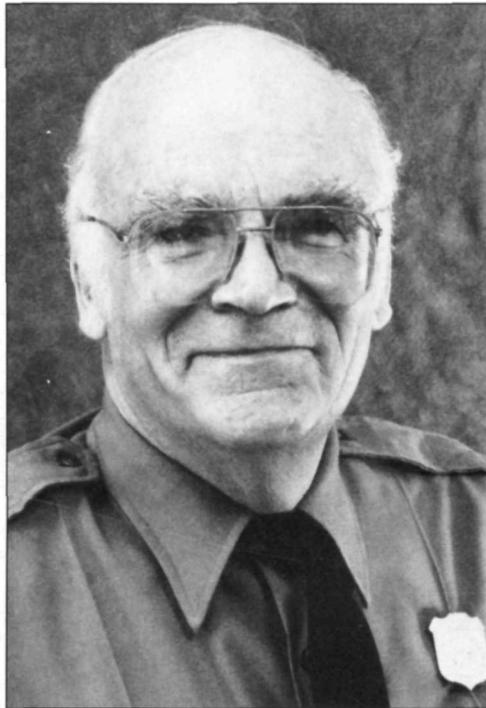
**A:** The increase in visitation is in almost every instance to already impacted human habitat....I'll [bet]... there are fewer people in Glacier backcountry today than there were in 1950. I'll bet that's true in the Smokies. My experience in the Smokies is that once you get out of your car and stop looking at the leaves, there is an awful lot of Smokies and there's nobody there. Which is not to say there isn't a problem, but let's get the problem where it is, which is on the road.

**Q: If you want to charge folks more than \$5 per carload to get into the parks, would you consider charging for rescues?**

**A:** Sure—there's willing acceptance of risk. Some people do accept and court higher risk than others....Chasing around with helicopters, spread all over, it's very expensive. [Last year, the Park Service spent \$3 million on search and rescues.]...Certainly when someone has accepted and courted risk, and it has cost everyone else a lot to rescue them, if they are insured, it would seem a little unjust for that insurance not to help with the costs. I don't know the law, but I have a strong sense of justice. I myself have been rescued by a helicopter from great unpleasantness and I am grateful for that, but I guess I feel that I should have had to do something to express my thanks in a fiscal way.

**Q: Where were you plucked by a helicopter?**

**A:** Nearly 50 years ago from the top of a mountain in Hawaii where I should not have been. So, yes, I have had that experience. I do not know what the formula is here, but there has to be a formula that has to do with your fair share of the cost in rescuing you from something that you decided to do.



NPS Director Roger Kennedy.

**Q: In 1988, the National Park Service issued a report on air quality in the parks which stated that scenic vistas were affected by man-made air pollution more than 90 percent of the time in the lower 48 states. What initiatives do you plan to undertake to enhance air quality?**

**A:** Everything I can think of!

**Q: Would you consider seeking regional haze regulations from the Environmental Protection Agency?**

**A:** I don't know whether I would or not, but it sounds like a good idea. What would make a difference? I don't

know that yet.

**Q: What is your perception of public service, and how does your wearing a ranger's uniform fit that perception?**

**A:** It says I'm one of you and we're proud.

**Q: Does the park system currently offer a balanced representation of American history? Or is it lacking in sites to represent episodes in history?**

**A:** It's not lacking in sites; every site has a cultural connection. Let's try Yellowstone. Yellowstone National Park—one of the most revered sites of the Hopewell Indians in Central Ohio. ...[Just as cultural sites have a natural connection.] And there is at least a half an acre, probably three acres, of old growth behind Arlington House [formerly the mansion of Gen. Robert E. Lee and his wife, Martha Custis, and now part of Arlington National Cemetery]. Never been cut, never been farmed.

**Q: Are there elements of the American story that are not represented?**

**A:** Of course there are. There are people in the American story that are underrepresented too, and in the Park Service, too. There's so much more talk than there is action—ask me again in three years.

**Q: You brought new thinking to the Smithsonian, presenting not just the pretty aspects of American history. What kind of new thinking will you bring to the parks?**

**A:** I didn't do the internment exhibition [exploring the period when more than 120,000 Japanese-Americans were imprisoned for the duration of World War II] because I wanted to rejoice in grief. It was because we have learned, and we don't want it to happen again. The point is, we don't have to invent unpleasantness, all we have to do is to reflect on the experience in such a way that we can learn from it.



# *The Last Valley Campaign*

As development marches across Virginia's Shenandoah Valley, residents, historians, and preservationists are mounting a defense of Civil War battlefields.

By Charles Feigenoff

Modern-day "soldiers" re-enact the battle of New Market, one of many Civil War battles fought in Virginia's Shenandoah Valley.

PHOTO BY SAM ABELL



**S**TANDING ON THE BRIDGE over Interstate 81 at the New Market battlefield, it's hard to imagine that North and South ever fought bitterly in the Shenandoah Valley. The steady drone of tractor trailers has long since replaced the sputter of muskets and the flash and roar of cannon, and the uninterrupted stream of commerce and the passage of time have muted the partisan feelings that set these regions against each other.

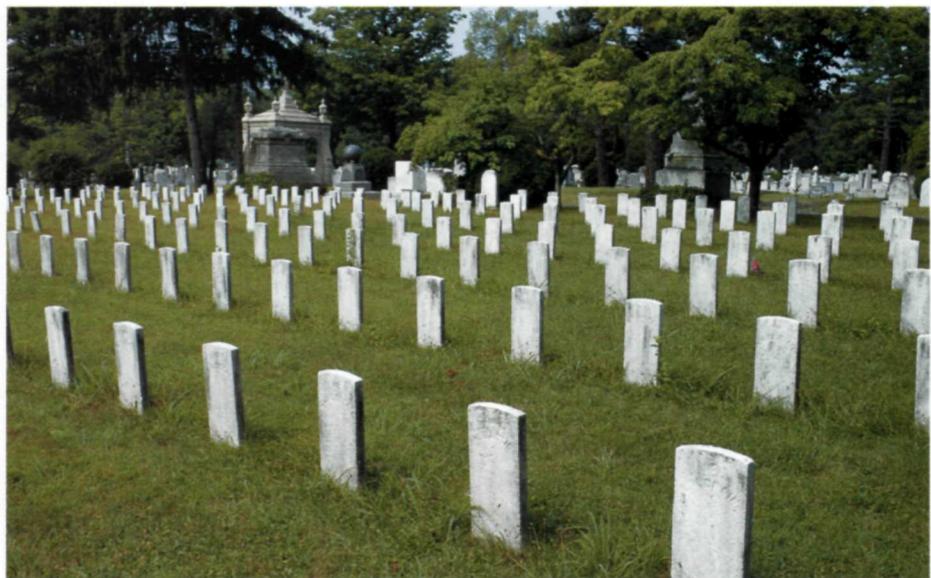
Now, residential, industrial, and commercial development in the valley—nurtured by major thoroughfares such as I-81—threatens to obscure the tangible evidence of the conflict entirely. There is a real danger that if we don't act soon, the forests and fields where frightened, desperate men fought for a cause they believed in will be overrun one last and final time.

One hundred and thirty years ago, the Shenandoah Valley was one of the most fiercely contested regions in the country. In 1862 Maj. Gen. Thomas J. "Stonewall" Jackson entered the valley with 17,000 men and outmaneuvered three Union armies twice his size, forcing the North to divert troops from Richmond and setting the stage for Gen. Robert E. Lee's invasion of Maryland.

Two years later, Maj. Gen. Philip H. Sheridan struck hard from the north, crushed Confederate armies sent to stop him, and burned the farms that blanketed the valley. He brought the Southern capital to its knees by depriving it of the livestock and grain that its citizens and their defenders needed to survive.

Both campaigns were "as crucial in shaping the course and ultimate outcome of the war as were Antietam, Vicksburg, Chickamauga and Chattanooga—yes, even as important as Gettysburg itself," says James M. McPherson, the Princeton historian who won a Pulitzer Prize for his Civil War study, *Battle Cry of Freedom*. Yet, except for a few private efforts, the Shenandoah Valley battlefields are completely unprotected.

**New Market, site of a decisive 1864 battle, is one of the few Shenandoah Valley battlefields that is privately protected.**



CONNIE TOOPS

In February 1993, Rep. Frank R. Wolf, whose congressional district was recently rewritten to include the northern half of the valley, introduced a bill to establish the Shenandoah Valley National Battlefields as a unit of the National Park System. Similar legislation followed in May, sponsored by senators John Warner and Charles Robb of Virginia and Sen. James Jeffords of Vermont.

These bills are noteworthy not simply because they aim to protect a crucial part of our national heritage. They reflect a grassroots philosophy that, from the very start, involves local governments, citizen groups, and preservationists in creating national parks. And they are based on the understanding that national parks need not be large blocks of contiguous land, but can embrace scattered sites. NPCA and like-minded groups played a decisive role in drafting this legislation.

**T**HERE IS LITTLE QUESTION about the importance of the Shenandoah Valley in Civil War history. The average American may have a hard time placing Front Royal and First Winchester, Cross Keys and Port Republic, but mention Jackson's valley campaign, and eyes light up. Jackson understood the strategic importance of the valley. It angles east as the Shenandoah River flows north, making it an ideal corridor for advancing Confeder-

**Graves of Confederate soldiers fill Stonewall Cemetery near Opequon Creek, site of the battle known as Third Winchester.**

ate troops to launch an attack on Washington. It even served Jackson's purposes in retreat, forcing pursuing Union troops farther and farther away from Washington as they marched south.

In 1862, the professor-turned-general defeated three Northern armies in a single month, not merely because he appreciated the valley's strategic potential but because he mastered its topography. He used the Blue Ridge Mountains that form the valley's eastern wall to screen his troop movements from the Union command, and he made a practice of keeping Massanutten Mountain, a high ridge that divides its northern portion into two smaller valleys, between his troops and his opponents. Jackson also knew every back road, river crossing, and bridge between Staunton and Winchester and turned them to his advantage as his "foot cavalry" covered more than 650 miles in five weeks.

One of the keys to Jackson's success was the map he ordered from Jedediah Hotchkiss. In the spring of 1862, Jackson asked Hotchkiss to "make me a map of the Valley." The resulting map, measuring three by eight feet, served as the blueprint for Jackson's campaign. It traces more than 4,500 roads, pro-

vides 230 historic place names, locates 260 mills, forges, schools, churches, and tollhouses, and identifies more than 1,000 farms by the name of the resident, in addition to providing topographical and watershed information.

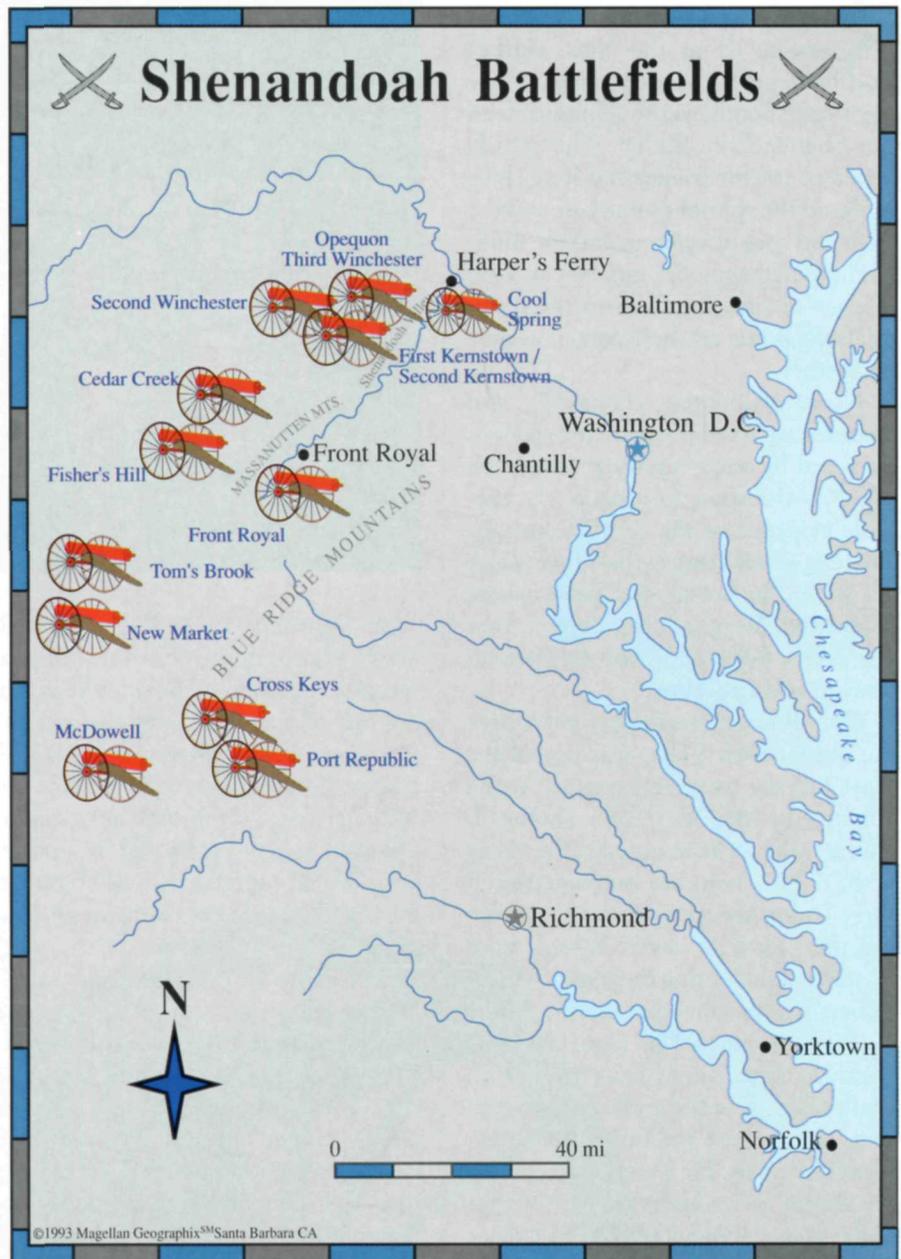
Between May 8 and June 9, Jackson defeated Union forces at McDowell, in the rugged mountains just west of the valley, overran a detached Union force at Front Royal, routed Union defenders at Winchester, and stopped two Union columns before they could unite below Massanutten Mountain by attacking them individually at Cross Keys and Port Republic.

His campaign demonstrates how an inferior force can, through fast movement, surprise attack, and intelligent use of the terrain, mount a successful campaign against much larger armies. In five weeks, he inflicted more than 7,000 casualties at a cost of only 2,500. Gen. Norman Schwarzkopf recently credited Jackson's campaign as a model for his strategy in Iraq.

The valley campaigns of 1864, though not as well known as Jackson's valley campaign, also provided a foretaste of what future wars would be like. In March 1864, Lt. Gen. Ulysses S. Grant made a priority of breaking the Confederate hold on the valley. During the summer, the valley changed hands several times, with battles fought at New Market, Piedmont, Cool Spring, and Second Kernstown.

In October, after a series of pitched battles with the Confederate army of Lt. Gen. Jubal A. Early at Opequon and Fisher's Hill, Sheridan introduced the concept of total war. Sheridan reported, "I have destroyed over 2,000 barns, filled with wheat, hay, and farming implements; over 70 mills, filled with flour and wheat.... When this is completed, the Valley from Winchester up to Staunton, 92 miles, will have but little in it for man or beast." Sheridan finally took control of the valley by routing Early's cavalry at Tom's Brook and turning the tide of battle at Cedar Creek.

Sheridan's string of victories in 1864 had political as well as strategic importance. After taking 100,000 casualties, Union assaults on Richmond and At-



lanta had bogged down, and growing antiwar sentiment jeopardized Lincoln's re-election. The success of Sheridan's campaign proved a tremendous morale booster for the North and restored confidence in the administration.

**A** CIVIL WAR VETERAN returning to the battlefield at Cross Keys or Port Republic would have little trouble recognizing it even today, for the valley has retained much of its rural character. Peter Svenson, author of *Battlefield: Farming a Civil War Battlefield*, an account of building a home on 40 acres at the site of the Battle of Cross

Keys, writes that after the war, scores of German and Swiss carpenters fanned out across the valley and made a living replacing the barns that Sheridan had razed. Their handiwork still stands and, in fact, farming is almost as important to the valley economy now as it was during the Civil War. William Veno, director of planning for Rockingham County, points out that Augusta, Rockingham, and Shenandoah counties, the site of seven major battles, are among the top five agricultural counties in Virginia.

But development has not sidestepped the Shenandoah Valley. In many areas,

particularly around Winchester, the conditions that drew armies to clash at a specific spot—the intersection of major highways, a rail head, or a hill with a panoramic view—are just the conditions that encourage development. The population density of Frederick County, which surrounds Winchester, grew from 69 people per square mile in 1970 to 110 in 1990. This growth has been accompanied by a decline in acreage under cultivation. Between 1964 and 1987, farm acreage in Frederick County dropped 27 percent, and the battlefields of First Winchester and Opequon (or Third Winchester) were almost entirely overwhelmed. Although most of the other battlefields retain at least a fair amount of integrity, nearly all are subject to some form of threat, either from residential, commercial, or industrial development, or from highway construction.

The interstate highway system, built in the 1960s, stimulated much of the change that the valley has witnessed in the last 25 years and in itself has been particularly unsparing of the battlefields. The Park Service calls this highway program “the single most destructive event in the history of these battlefields.” Interstate 81, which runs the length of the Valley parallel to the old Valley Turnpike, cuts across eight battlefields, and I-66 intersects two.

**W**HILE THE EFFORT to save the Civil War battlefields in the Shenandoah Valley has been a top agenda item for several preservation groups, the legislative drive to preserve the battlefields owes much to a senator from Vermont. In 1989, the 125th anniversary of the Battle of Cedar Creek, Sen. James Jeffords visited the Shenandoah Valley spot where the Vermont Brigade had made a heroic stand during that battle. “The Vermont legislature had passed a resolution asking its congressional delegation to do what it could to maintain the monument that veterans of the brigade had placed there after the war,” says Jeffords. He found the monument overgrown and much of the battlefield unprotected.

Returning to Washington, Jeffords—working with Virginia senators John Warner and Charles Robb—proposed legislation that resulted in the National Park Service (NPS) undertaking a study of Civil War sites in the Shenandoah Valley in 1990. “It became apparent to me,” Jeffords remarks, “that if we didn’t act soon, we would lose part of our heritage forever.”

NPS issued a first draft of the report in October 1991. As a historic treatment of the major events of the Civil War in the valley, it is an impressive piece of work. Official Civil War records document 326 armed clashes in the Shenandoah Valley; of these, the Park Service identified 15 battles of major significance. Wherever possible, researchers walked the battlefields, locating such remains as earthworks and burial sites and assessing their condition. They determined the boundary of the study area and defined each battlefield’s core area—the amount of land considered crucial to understanding and interpreting the conflict. NPS also provided a detailed assessment of the threats to each battlefield and ranked them by condition and current risk to preservation.

But for all the effort that went into producing it, the report did not contain strong enough recommendations for battlefield preservation, a circumstance that led landowners, preservation groups, officials from local government, representatives of the tourism industry, and economic development councils to form their own working group. The purpose of the group was to develop a bill for a battlefield national park that would be acceptable to landowners and preservationists—a bill that the Virginia delegation could introduce in Congress.

“This was really a grassroots effort,” comments NPCA Northeast Regional Director Bruce Craig. “Our role was to first help the grassroots organizations determine objectives and then gather all their ideas, offer our experience in creating new parks, and finally help them craft a doable bill.”

The groups began meeting in January 1992, and each brought a different perspective to the discussions. NPCA’s

## New Market: A Model



DAVID LOWENIS

Development surrounds the New Market Battlefield Historical Park.

**T**HE EXPERIENCE OF the New Market Battlefield Historical Park provides a model of how Shenandoah battlefields might be preserved. The Virginia Military Institute created the park in 1967 to commemorate the role of VMI cadets at New Market. Ed Merrell, director of the 280-acre facility, notes that 45,000 visitors stop each year to visit the Hall of Valor and walk the battlefield.

“We’ve learned how to encourage visitors to visit each of our three separate parcels of land, and we’ve learned the importance of working closely with the surrounding communities, issues the Park Service will have to master if the battlefield preservation bill is passed,” he says.

But the park has felt pressures of development. “Just in the last year, the town of New Market has annexed properties on its north and south borders,” Merrell notes. “They’ve created major new subdivisions, and Main Street has lost several historic structures. The passage of a bill might encourage localities to do better planning. As an organization, we don’t consider it restrictive. It opens up possibilities for us to share our expertise and form partnerships with the Park Service.”

The bill is endorsed by the New Market Battlefield Historical Park, the New Market Area Chamber of Commerce, and the Shenandoah County Board of Supervisors.



SAM ABELL

partner in the effort to preserve the Shenandoah battlefields is the Association for the Preservation of Civil War Sites. For A. Wilson Greene, APCWS executive director, the battlefields are irreplaceable for those who hope to take a full measure of our history. "Only by walking the actual ground where men fought and died," he insists, "do you gain an emotional appreciation of their ordeal, something that can't be gained from sitting in your armchair reading a book."

James McPherson seconds Greene's view. He recalls the experience of a student of his who spent her senior year studying the Union defense of Little Round Top at Gettysburg. "As we walked across the field toward the hill," he recalls, "she began to weep."

Greene and McPherson also stress the substantial economic benefits that a park would bring to the region. Ac-

cording to June Wilmot, executive director of the Winchester/Frederick County Economic Development Commission, most of the economic benefit from the proposed park will come from support services such as restaurants and motels rather than from federal spending on the park itself. And these are benefits, she points out, that can be gained without local governments' investment in infrastructure like schools, water lines, and sewage treatment plants.

In McDowell, a quiet town some 30 mountainous miles west of the valley, these benefits seem particularly attractive. Richard Hevener, a member of the Highland County Board of Supervisors, admits that "most of the McDowell battlefield land is already in the hands of preservationists and it's too rugged to farm, so we have nothing to lose. We're too far out of the mainstream to

attract much industry, so we think we can benefit from tourism."

Bill Veno, the planner from Rockingham County, takes a more cautious approach. "Because we're an agricultural area, our battlefields are much better preserved than those in the northern end of the valley," he notes. "As a result, there is less support for intervention. So far, we've been successful in using local regulations to limit development around Port Republic, but there is no guarantee that the battlefields will be protected in the future. We are looking for a way to preserve farmland and battlefields at the same time."

One thing all parties agree on, however, is that the proposed national battlefield will help preserve the valley's distinctive character and heritage not only for the people who live there but for citizens of other states as well. "Our

Port Republic (left) has changed little since Civil War days. While most of the battlefields retain a fair amount of integrity, the site of the first battle of Kernstown (right) is among those now surrounded by strip development.

Civil War history is part of the way we think about ourselves," declares Wilmot. "It would be a tragedy if we forgot it."

In May 1992, a first draft of the proposed legislation was readied and circulated for comments. In September, NPCA played a key role in crafting a second draft incorporating these comments. When the second draft was issued and sent out for endorsements, "every local jurisdiction signed off on it," says Craig. "No landowners objected, as they helped fashion the bill." With the help of NPCA and APCWS, the citizen group was able to present the Virginia delegation with the text of a bill that already had gained solid support among its constituents.

"In creating a Shenandoah battlefields park," says Congressman Wolf, the bill's sponsor in the House, "we are moving in the spirit of reconciliation and trying to avoid the acrimony that has developed from land takings in the past." Under the proposed legislation, the Park Service would purchase lands within a "historic core" area and acquire property in the surrounding study area through donation or land swap. No property would be seized through eminent domain; land would be purchased only from willing sellers. In preserving lands, the Park Service would pursue such nonadversarial tactics as purchasing development easements from farmers, which would preserve the land without restricting their ability to farm, and acquiring the right of first refusal, so that core lands could be tagged for acquisition at some future date. The bill also authorized federal grants to local governments and regional entities to cover the cost of developing plans for conserving the battlefields' historic character.

The cooperative spirit that infuses land preservation and planning would



also infuse the governing structure of the park itself. The House bill calls for a commission—composed of local landowners and officials as well as historians and preservationists—to prepare a framework for establishing the park within three years. The Senate bill calls for the immediate creation of the park from 1,140 acres already in the hands of preservation groups and the establishment of a similar commission to guide additional purchases. Despite these differences, both the House and Senate bills agree that community involvement is instrumental in creating the park unit free of the controversy that has surrounded preservation at such Civil War battlefields as Manassas and Brandy Station.

One reason that it has taken so long to include the Shenandoah battlefields in the park system is that the scattered events of a military campaign do not conform to the traditional concept of a national park as a contiguous block of land. The bills, in providing for the preservation of the Shenandoah battlefields, offer a model "partnership park" for other groups attempting to preserve sites of historic significance. For example, "the idea of creating a historic corridor [has] application to the Lake Champlain area," comments Sen. Jeffords, "which witnessed the major campaigns of the French and Indian War."

The bills do more, however, than preserve battlefields. Both bills call for a major interpretive focus on the experience

of the people living in the valley, not just the soldiers who fought there. The lives of civilians were disrupted—Winchester, for instance, changed hands 72 times—and their livelihood was deliberately destroyed, yet little is understood about the experience of everyday people who suddenly found themselves in the midst of a battlefield, their crops ruined and their homes converted to field hospitals. "When people come to visit us," observes Ed Merrell, director of the New Market Historical Battlefield Park, "they are often as interested in the families who lived here as they are in the soldiers who fought here." Under similar provisions in both bills, educational and interpretive programs would be conducted at two NPS visitor centers—one in the upper valley and one in the lower.

PERHAPS THE BEST—and simplest—argument for the bills comes from author Peter Svenson, owner of a 40-acre portion of Cross Keys. "Civil War battlefields are our roots," he says. "If we let them be destroyed, we lose our connection with the past. I look out my window and see 40 acres that are still relatively untouched, but it is in an area that is being increasingly encroached upon. The next 130 years won't treat this landscape as kindly as the last 130. We must think about the future."

*Charles Feigenoff is a free-lance writer based in Greenwood, Virginia.*



# THE INFORMATION GAP

The National Park Service is hampered by a lack of knowledge about the ecological makeup of the parks.

By Bill Sharp and Elaine Appleton

RESEARCH BIOLOGIST David Graber cannot find his frog. He knows it was here—somewhere—in Sequoia National Park, but nobody has seen the foothill yellow-legged frog in the park since the late 1970s. No one warned of the amphibian's impending demise; the creature passed unnoticed from the California park. No one realized the frog was gone until the mid-1980s; repeated checks failed to turn up any specimens.

Not only is Graber's frog apparently gone from Sequoia, but any theories that could explain why are simply conjecture. Still, it is a measure of inventory efforts at the park that the disappearance of the frog was noticed at all. Some species "lost" in one national park may be "found" in another. For instance, even though the foothill yellow-legged frog is no longer in Sequoia National Park, it survives elsewhere. The discovery that a species is lost to a particular park "is almost always serendipity," says Graber, research biologist at Sequoia, unless a species has been declared en-



dangered and is, therefore, being carefully monitored.

Most people think that national parks have been thoroughly studied for years, and that they are immutable preserves with species well understood. This notion is not only wrong but dangerously misleading. Quite simply, the National Park Service (NPS) suffers from an embarrassing lack of knowledge about the species in its parks. And as the 1992 *Science in the National Parks* study states, "Informed resource management is impossible without science in its broadest sense—that is, the acquisition, analysis, and dissemination of knowledge about natural processes and about the human influences on them."

More than a dozen other studies issued over the past few decades by NPCA, the National Academy of Sciences, and the Park Service itself all

suggest that there is a woeful lack of information about the species that live in and depend on the parks.

Although land-use decisions should be based on a thorough understanding of which creatures and plants are living where and what sorts of changes will affect their survival, NPS efforts to catalog species and gather scientific information about them are scattered at best. In fact, no national park has ever been the subject of a complete biological inventory.

Because information is sparse or nonexistent, "lots of species could be disappearing and we wouldn't even know about it," says Thomas J. Stohlgren, ecologist and global change research coordinator for the Park Service's Colorado Rockies biogeographical area. "They never appeared on our species lists."

The Clinton Administration has ambitious plans to change this through a program of shared science called the National Biological Survey. Interior Secretary Bruce Babbitt plans a more aggressive approach to preserving ecosystems and wildlife, involving a campaign to reverse years of underfunding and neglect in research programs. But it remains to be seen how this program, which got under way in October, will affect the Park Service. The effort will be nothing if not an uphill climb.

In 1992, working with James F.

**The Park Service's efforts to catalog species are scattered at best, unless the creature has been declared endangered, such as the Florida panther, and is being carefully monitored. Fires, a necessary ingredient in the sequoia's ability to reproduce, were suppressed for a time because of a lack of information.**



CRIS CROWLEY/TOM STACK & ASSOC.

Quinn of the Division of Environmental Studies at the University of California at Davis, Stohlgren drew attention to the poor state of biotic inventories in 40 Western national parks and monuments. They found that species lists for most of the parks are less than 80 percent complete. "Only a small number of parks are doing systematic inventories," says Stohlgren. But when they are able to do them, researchers can sometimes increase significantly the number of listed species. Over the past decade, a handful of these parks added 1,439 vascular plants, 111 birds, and 15 mammals not previously recorded.

Even these new lists may be insufficient. The two researchers found that classification and sampling schemes are inconsistent from one park to another. This discrepancy hampers understanding of particular species, which in turn affects the Park Service's ability to make sound management decisions. In the past, exotic fish were introduced to improve recreational opportunities without thought to the implications for native species. And because of a lack of scientific information, fires were suppressed in the parks, leading to unan-

anticipated changes in the character of forests.

In addition, plants other than trees and creatures such as insects receive little if any attention. "I think we've done a good job of surveying...the charismatic megafauna, the bears, elk, wolves, and other large animals. But we've done a pretty miserable job on the rest," says Stohlgren. About half of the parks surveyed in the 1992 study reported essentially no research on invertebrates or nonvascular plants—major components in maintaining the health of an ecosystem.

In fact, "Lots of parks have no formal biological studies at all," says Quinn. But compiling even a partial inventory for any one park would be a full-time job for a number of years, he says. "There is no right way to do this, and that is one of the problems," he adds. "The way to think about biological surveys is that we know almost nothing. We have little bright spots of knowledge in a sea of ignorance."

A yet-to-be-published nationwide study found that less than 25 percent of parks maintain maps of vegetation, soils, or geology. It reviewed natural resource

information from 252 national parks and monuments and was conducted by Stohlgren, Quinn, Gary Waggoner of the NPS Geographic Information Division, and Michael Ruggiero, chief of the NPS Wildlife and Vegetation Division, who is now on loan to the National Biological Survey.

Lack of detailed information is so pervasive that when a 1986 article appeared in *Ecology* magazine charging that nearly 40 species had vanished from many parks, NPS had to scramble to refute the charges. The author had relied on outdated, confusing park records as a basis for his article. In some instances, a number of the species in question had never been in the parks. In other cases, individual park employees knew the species were alive and well, but NPS had no written records to offer as proof. The Park Service was unable to gather enough data to disprove the charges until 1992, six years after the article first appeared.

"We really know much less about the national parks and other Interior Department lands than the public expects," says Quinn. "You would think that you can call up and find out where



CONNIE TOOPS

The Park Service has gathered information on large mammals, such as bears, elk, and wolves, but has few data on birds such as the Louisiana heron, shown in the Everglades, or invertebrates, such as the moth (*Clodius parnassian*) at Crater Lake National Park.

in the parks we have red foxes, but I can assure you...we often just don't know."

Smaller parks share these problems, and frequently have even fewer resources to either inventory or monitor their plant and wildlife populations. Even so, these areas provide habitat crucial to a variety of creatures and plants, a point underscored by Stohlgren and Quinn in a 1991 study comparing six small northern California national park units with Sequoia-Kings Canyon National Parks.

For a park of any size, however, the rule for many years has been species management by crisis, says Bob Cunningham, general superintendent of the NPS Southern Arizona Group in Phoenix. "As management problems come up, we prevail on our scientists or on university scientists to do a study," says Cunningham. "Where the problem is reasonably obvious, we devote our resources to it, but we are not blessed with anything left over to spend on issues that are not crises." For instance, he says, "We're not surveying reptiles."

Because they are comparatively undisturbed, parklands are ideal places to

monitor phenomena such as global climate change, ozone layer depletion, and pollution. But funding for science has always been a problem. "Only 2.3 percent of our NPS budget goes to support scientific research...," Stohlgren says. "Good industrial companies often spend at least 10 percent on research and development. We've been spending about one-fifth of that for years." In 1992, the Park Service's inventory and monitoring program received about \$2 million to \$3 million in funding, expanding to \$4 million to \$5 million with the 1993 program. To position itself to receive the funding it needs, the Park Service began an inventory pilot program, which will cost more than \$20 million. The total needed to reverse years of neglect and underfunding would be more than \$200 million.

While the problems seem overwhelming, the Park Service's science program has had some bright spots. At Channel Islands National Park, off the coast of southern California, research marine biologist Gary E. Davis and his colleagues are actively studying 500 of the 2,000 or so species in the park, including 100 marine varieties.

Davis is assembling what he calls an early warning system for endangered species and ecosystems at Channel Islands. Rather than waiting for crises to develop for wild populations, Davis gathers information on selected species on a routine basis to construct baseline information.

"There aren't many long-term ecological monitoring efforts in the parks," says Davis. "We tend to work mostly with theory—testing these theories with observation is rare. Part of why we need long-term observation in the national parks is to be able to make better predictions of what will happen when we change these systems."

That changes will take place in park ecosystems is a given, but what Davis hopes to provide is a better understanding of where these changes lead over time. He points to the fishing industry, which reduced several species of abalone in succession nearly to extinction. Populations of pink, red, green, white, and, finally, black abalone all have been exhausted along the southern California coastline, says Davis. Although some areas were closed to abalone harvesting 15 years ago, the stocks have not recovered. Whether this is due primarily to continued poaching or to some fundamental change in the ecosystem remains unclear. These are the kinds of questions Davis hopes to answer, and these are the kinds of disappearances he hopes to prevent with an early warning system.

In creating more comprehensive inventories and early warning systems, the Park Service does not have to go it alone. Some of the most promising efforts to date are cooperations between the Park Service and The Nature Conservancy. For 18 years, the Conservancy has been building an international network of biodiversity data centers, called National Heritage Programs. In 1987,



PAT AND BOB MOMICH/TOOIPS STOCK PHOTOS

CONNIE TOOIPS

The Park Service's science program already has shown some signs of change. Until recently, fires were suppressed throughout the park system, a practice that was changing the character of some forests. NPS now engages in "prescribed" burning in some areas, a process which in fact can help plants with reproduction. Some creatures, such as the tree frog, above, and nonvascular plants, such as lichen, left, have suffered over the years from lack of attention, but the Clinton Administration has plans to change that through the National Biological Survey. The survey, a federal program of shared science, is an ambitious approach to preserving eco-systems and wildlife.

Great Smoky Mountains National Park became the first national park to adopt The Conservancy's program. "Before we had a heritage program, a lot of our information was in the brains of employees who had worked here a few years," says Keith Langdon, Great Smoky's supervisory natural resource specialist. "There was no institutional memory; there was no logical way to prioritize species for monitoring and protection."

By cataloging species' rarity in 82 centers across the Western Hemisphere, the heritage program provides a rational way to establish priorities for species protection. For instance, says Langdon, "we knew gnome finger lichen was

found around the Southern Appalachians, but apparently most of the species is found within park boundaries. Recent [heritage] information says it has declined outside the park; we don't know why." Because of this information, says Langdon, they decided to raise the priority for monitoring the lichen.

Combining in-park inventories with those outside has such value that other parks are now cooperating with The Nature Conservancy. This year, NPS is providing logistical support to the effort to found the Greater Yellowstone Conservation Data Center, headquartered in Mammoth Hot Springs. The center will inventory species throughout the Greater Yellowstone Ecosystem,

including two national parks, the John D. Rockefeller Parkway, seven national forests, Bureau of Land Management lands, U.S. Fish and Wildlife Service refuges, and private holdings.

In addition to the programs already under way, the Park Service will benefit from the National Biological Survey (NBS), which took over much of inventory and monitoring design work with improved funding aimed specifically at science on U.S. public lands, including completion of a species inventory.

Since 1885, the United States has struggled to complete a biological survey—against apparently overwhelming odds. A Division of Economic Ornithology and Mammalogy formed in the

Department of Agriculture in 1885, evolving into the Bureau of Biological Survey, only to disappear into the Interior Department's Fish and Wildlife Service in 1940. A poorly funded and nearly unknown Office of Biological Services survived within Fish and Wildlife until 1986.

This year, the Clinton Administration decided to try again. Interior Secretary Babbitt suggested the idea for the National Biological Survey, which would include research scientists from Fish and Wildlife and NPS, as well as from other Interior agencies.

Earlier this year, the Park Service's Gary Davis presented a paper titled: "The National Biological Survey: An

Agenda Driven by Biotic Resource Trends," which gives some indications of the direction this agency may take in meeting its objectives. Davis identifies four threats to natural ecosystems: unsustainable consumption rates of resources, such as ancient forests and fishery stocks; land-use practices that fragment habitats; human alteration of air, water, and soil that destabilizes ecosystems; and the spread of alien species.

To help deal with these threats, NBS will develop techniques for restoring ecosystems; devise better measures of a system's dynamics, including the roles played in those systems by various species; create models for predicting eco-

system behavior; and develop the best approaches to manage these systems.

The boundaries of parks are only lines on maps. Because species are affected by land-use changes outside the parks as well as within them, the Park Service will surely benefit from these cooperative species inventory efforts. "We have a lot to learn about the plants and animals in our national parks—what they are, where they are, how healthy they are, and what roles they play," says the Park Service's Stohlgren. "That information affects every important decision we make."

*Bill Sharp and Elaine Appleton last wrote about the Everglades for National Parks.*



Both Stephen Mather, the first Park Service director, and Robert Sterling Yard, the agency's first public relations man, believed there was a need for a private organization, not beholden to government, to watch over the national parks and protect these public lands against those who might compromise the parks' integrity. Both men were instrumental in forming NPCA. Mather, third from left in the photo above, and Yard, fourth from left, above, were among those celebrating the dedication of Rocky Mountains National Park in 1915. Yard, right, also took time from his busy schedule to vacation at Yosemite in California.



75th Anniversary:  
A Retrospective

# Charting the Course

Seventy-five years ago, NPCA's founders established a mission that continues to guide the association today.

By John Miles

**N**EARLY 75 YEARS AGO, a small group of scientists and educators gathered at the Cosmos Club across from the White House in Washington, D.C., to establish a group dedicated to protecting the national parks.

In the previous decades, conservationists had rallied to defend the Sierra Nevada Mountains as well as birds being slaughtered for their meat and feathers; why not a group to champion the national parks?

The National Park Service (NPS) had been formed three years before, but the group believed the infant service needed a private organization, not beholden to government, to engage in battles against dam builders, sheep herders, and others who might violate the integrity of the national parks. The time was right to organize, and the National Parks and Conservation Association—originally called the National Parks Association (NPA)—was born at that Cosmos Club meeting May 19, 1919.

Robert Sterling Yard, a journalist, editor, and businessman, led the effort to create the association. The small, intense, hard-working Yard served as a one-man public relations staff for the recently created NPS. He had worked with Stephen Mather, founding director of the Park Service, on the staff of the

*New York Sun* in the early 1890s. Mather brought Yard to Washington to promote both the parks and the agency charged with managing them. Considered a valuable addition to the team, Yard, then 58, received his salary directly from Mather.

Yard was a pivotal figure in the National Parks Association. Though not a young man, the organized and resourceful Yard had remarkable energy and stamina. Under his leadership, the association became the principal citizen guardian of the national parks. He would remain a key figure in its history for nearly a quarter century.

Yard believed inspiration and education were the principal values of national parks, and when the National Park Service was established in 1916, he began promoting education within the new agency. But this did not ignite the small NPS staff still struggling to define its mission, to set up its organization, and to build its presence in Washington.

After a year of frustration, Yard decided to create an education committee outside government. He found scientists and educators receptive to the idea, so in June 1918 they organized the National Parks Educational Committee. Charles D. Walcott, a distinguished geologist and president of the National

Academy of Sciences, was elected chairman. William Kent, a national park enthusiast, former congressman from California, and donor of Muir Woods National Monument, became vice chairman. Prominent Washington civic leader Henry B. F. Macfarland was named chairman of the executive committee, and Yard became executive secretary. The mission would be “to educate the public in respect to the nature and quality of the national parks [and]...to further the view of the national parks as classrooms and museums of Nature.”

The National Parks Educational Committee had 25 founding members, and Yard worked for the next 11 months to recruit more. By April 1919, membership had grown to 72 people, most of whom were leaders in science and education. Although the group considered the committee temporary, they agreed to form a more permanent organization—the National Parks Association—if sufficient interest in their agenda existed.

Support for a permanent organization was strong, and even Mather favored the idea. Yard had, Mather noted, suggested the idea in 1916, but World War I intervened. Mather proposed Yard as the association's executive secretary and pledged \$5,000 for the

secretary's salary and organization expenses. Mather offered to do this because he loved the national parks and was sure "that the association, once it is...launched, will play an important part in their success."

Yard and his associates wanted to protect parks from loggers, dam builders, and other developers as well as preserve national park ideals. This might mean shielding the parks from those who wanted the areas to serve a purpose other than one of inspiration or education. The association founders saw in the emerging National Park System the best expressions of the designs of nature. While the association supported the aim of expanding the National Park System, it believed any additions should satisfy the highest standard. Yard was careful not to tread on the toes of his friend and benefactor Mather, but he was concerned about the government's intent. The time might come, Yard believed, when a group like NPA would be forced to challenge the Park Service. The service might be on the right path now, he said, but NPA must be created and "a basis for common working... established as precedent for later periods when...politics may plunge the service so deeply into the tape basket that policies become prostituted and vision lost," a prediction that would be borne out during the 1980s.

NPA would have three central missions, fundamental principles for the association to this day: to advocate and protect high standards in enlarging and managing the National Park System; to encourage use of the parks for their highest purposes of education and inspiration; and to defend national parks from those who might damage them.

When the National Parks Association was founded, the park system was evolving, its future uncertain. Would the system, as the association's founders believed it should, be "complete and rational" and include "the full range of American scenery, flora, and fauna..." in areas identified by their extraordinary significance? Or would the system include units of lesser quality? The founders feared that Congress might add units of less than national signifi-



**NPCA continues to defend Yellowstone's impressive geysers against those who would exploit their geothermal energy.**

cance, as they believed it had with Platt National Park in Oklahoma, redesignated in 1976 as Chickasaw National Recreation Area. Today the association continues to struggle with this issue. And as the number of park visitors climbs unabated, one question remains central: what purpose do the parks serve? The association's founders struggled with this same question 75 years ago: would the national parks be preserves, museums, and natural classrooms, or resorts, playgrounds, and recreation areas?

During the park system's early years, Mather aggressively promoted new parks and enlisted the support of automobile clubs, railroads, and chambers of commerce in his initiative. Though the association carefully avoided even implied criticism of Mather, it was concerned about the suggestion of boosterism for the future of the system.

And what of national monuments? What should they be, and how should they be selected? Presidents beginning with Theodore Roosevelt had created monuments under the Antiquities Act,

legislation that allowed them to do so without gaining approval from Congress. As a result, NPA maintained that national monuments "have been created hit or miss, chosen without plan or purpose, upon chance suggestions." The association committed itself to defining standards for selecting monuments and proposed that "a permanent committee of historical and scientific experts" be formed to apply the criteria. (Such a committee appeared as the Secretary of the Interior's Advisory Board on National Parks, Historic Sites, Buildings and Monuments in the early 1930s.) The association, stocked as it was with scientists, was certain a system that made sense could be achieved.

The founders' ambition was for their organization to become the heart of a national effort on behalf of parks. They understood the need to build coalitions. Yard was charged with building a membership and a presence for NPA in national park and conservation affairs. To launch his membership campaign, Yard searched for an opportunity to prove NPA's spirit. His first skirmish was what he called the "elk opportunity" in Yellowstone National Park. Too many elk, a damaged range, and summer drought followed by deep winter snow drove the hungry elk beyond Yellowstone's boundaries, where they were slaughtered by hunters. The killing outraged park and wildlife advocates, who called for measures to stop it.

The Park Service began feeding the elk. Yard sent out bulletins carrying information about the animals and seeking donations. Any money received was passed along to the Park Service. NPA maintained that the Yellowstone elk herds must be protected. The herds "must be kept within limits of size which a reasonable range will support," but killing by hunters was not an acceptable way to achieve this goal. In April 1920 Yard could report to the association's 700 members that the animals had survived the winter.

The elk crisis helped NPA make a name for itself. Funds were raised, members were educated, and a long campaign involving hunting and wildlife was launched. This episode, only the



**NPA helped Mather and Yellowstone Superintendent Horace Albright, right, deflect a reservoir proposal from the park.**

first in a long line, would give the fledgling organization an opportunity to demonstrate its aims and methods.

That spring brought another opportunity for Yard to establish the association in the national effort for park protection. Yellowstone was again the subject of controversy, but this time the issue concerned water for irrigation and protecting national parks from intrusion. Rep. Addison T. Smith of Idaho introduced a bill into the 66th Congress proposing an irrigation reservoir in the Falls River-Bechler River basins within the southwest corner of the park. The water would flow to farmers in Idaho. Director Mather and Yellowstone Superintendent Horace Albright did their best to slow necessary surveys of the basins, while NPA and other organizations opposed the legislation at congressional hearings. The reservoir threat was, at least temporarily, averted.

Soon the association was in another battle, this time over legislation to create a Federal Power Commission (FPC) to permit water development on public land, including national parks. A dam

had been authorized nearly a decade earlier in Yosemite's Hetch Hetchy Valley, and national park defenders were determined not to allow another such intrusion in the National Park System. The struggle raged through the halls of Congress, and NPA became a full-fledged foot soldier to combat what Yard called "The War on the National Parks."

Influential Western interests sought access to the parks through the Federal Power Commission, and in the first congressional round, they pushed through a bill giving the FPC jurisdiction over park waters. To counter these Western forces, Yard worked to develop a network.

Working with groups such as the Appalachian Mountain Club, Sierra Club, and Mountaineers, Yard set up regional organizations in various cities throughout the country. But his most important allies were the National Association of Business and Professional Women and the General Federation of Women's Clubs. Established in every congressional district, these clubs pursued a legislative agenda as part of their regular activity. Yard recruited and received their support, creating a lasting alliance that would be a significant in-

gradient in building NPA's influence.

With help from these clubs, Yard won partial victory in the struggle over the Federal Power Act. An amendment to the act stipulated that the FPC could not authorize water projects in existing parks and monuments but could do so in any new units unless specifically prohibited. Yard warned the trustees that the defense of national parks against water projects would be a long struggle. His words would prove prophetic. In 1993 NPCA issued *Park Waters in Peril*, a report detailing the magnitude of the threats to water throughout the park system.

By the second annual meeting in 1921, the association could claim 1,300 members. It watched Congress closely from its Washington base, while alerting people across the nation when threats to the national parks occurred. The association could also apprise members and others of opportunities to improve and strengthen the National Park System. This was not the form of education initially envisioned by the founders, but they saw its importance and would pursue other projects as time and resources allowed.

NPA's founders clearly believed the National Park Service could not (and perhaps would not) undertake certain projects. Politics to some degree would dictate the policies of the service, which would be subject to the will of Congress and the executive branch of government. The founders were idealists who believed they could work for the "big fruits of the national parks movement... unhampered by politics and routine." While so far the association had worked alongside the service, the founders awaited the time when they would stand firm for their ideals against powerful political forces within the government.

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*John Miles teaches environmental studies at Western Washington University and is writing a book about NPCA to celebrate the association's 75th anniversary. This is the first in a series of four articles about the association. The next article will focus on the fight to establish standards for selecting park sites.*

# Frozen in Time

*Some of the world's most significant deposits of fossils are preserved in U.S. national parks.*

By Clayton E. Jackson

**M**ILLIONS OF YEARS ago, animals such as gazelle-camels and rhinoceroses roamed a land covered with plants much different from those of North America today.

Sometimes natural catastrophes, such as severe drought, felled large numbers of these ancient creatures and plants at one time, freezing an unusual collection of species in one place. Over the millennia, time and the elements transformed many of these creatures into fossils. Some of their images remain in such extraordinary detail that separate species of insects are identifiable.

Fossils, it seems, have always fascinated humans. For instance, at John Day Fossil Beds National Monument, the excavation of an American Indian site turned up a fossil leaf collection belonging to the former occupants. Fossils continue to captivate thousands of visitors, and the National Park System offers a world-class selection of sites. At least 50 areas within the park system protect significant fossil remains, and of those more than a dozen were established for their unique deposits.

## Hagerman Fossil Beds NM

Among the newest national monuments in the park system, Hagerman Fossil Beds National Monument in south-central Idaho offers one of the largest and best preserved collections of fossils in the world.

Dedicated in 1988, Hagerman has

been described as having the best variety, quantity, and quality of fossils for the Pliocene epoch, providing a glimpse of a nearly intact 3.5-million-year-old ecosystem. More than 100 species of vertebrates have been identified. Discoveries made at Hagerman changed the way paleontologists viewed the history of the Earth, according to a National Park Service (NPS) study.

Large aquatic creatures are well represented in the fossil remains, as are other fauna, including swans, ducks, cormorants, ground sloths, saber-toothed tigers, ground squirrels, mastodons, camels, deer, and a variety of

turtles, frogs, snakes, and snails.

Hagerman is most famous for its "horse quarry," where more than 150 individual fossils of horses have been found. The site was first excavated in 1929 by a crew working for the Smithsonian Institution, and the museum has a full-scale Hagerman fossil exhibit of its own. Fossils from this site are found in natural history museums throughout the world.

Because it is a relatively recent addition to the park system, the monument is still in the early development stages, and visitors are urged to call or write before traveling to the park. A visitor center is scheduled to open by late 1993, and limited services will be available by early 1994. Future plans include providing access to the Snake River, which winds through the national monument, as well as a research center that would accommodate visitors.

Besides its world-class collection of fossils, Hagerman is one of the few park system units that contains ruts made by wagons using the Oregon Trail.

For additional information, contact Hagerman Fossil Beds National Monument, P.O. Box 570, Hagerman, ID 83332.

## Florissant Fossil Beds NM

High in the Rocky Mountains may seem an unlikely spot for a fossil deposit, but

Snake River at Hagerman Fossil Beds National Monument, Hagerman, Idaho.



LARA HARTLEY



STEWART M. GREEN/TOM STACK & ASSOCIATES

Visitors to Florissant Fossil Beds National Monument can see petrified tree stumps along the Petrified Forest Loop Trail. In addition, fossils of some of the insects found at the monument, such as this wasp, can be viewed at the visitor center.



KENT AND DONNA DANNEN

a few miles south of Florissant, Colorado, is an area that boasts one of the best collections of insect fossils in the world. Fossils of dragon flies, beetles, ants, butterflies, and other insects are nearly perfectly preserved here.

Florissant Fossil Beds protects an area that some 35 million years ago was a sickle-shaped lake formed by lava flows. Giant redwoods, some more than 250 feet tall, bordered the shore of the lake. Stumps of these ancient redwoods are among the items preserved at the site. Intermittent volcanic ash settled in and around the ancient lake, trapping a large variety of insects, animals, and plants. As the ash compacted, it eventually transformed into shale.

Florissant's fossil deposits, first discovered by Dr. A. C. Peale of the U.S. Geological Survey in 1874, have few rivals. Some 1,100 species of insects have been identified at Florissant, including all of the known New World butterflies of the era. Fossils of some of the insects and plants found at the monument are on display inside the visitor center.

The giant petrified forest is the star attraction for those visiting the monument. The Petrified Forest Loop Trail winds around several exposed stumps. The trail eventually leads to the "Big Stump," which is 12 feet high and 38

feet in circumference. If the tree represented by that stump were alive today, it would be nearly 300 feet tall. In 1893, attempts were made to cut the Big Stump into sections to haul it away to Chicago for the Columbian Exposition. Broken saw blades—evidence of these failed attempts—are still visible in the top of the stump.

About a dozen stumps are exposed at the monument, and park paleontologist Bill Dexter believes another 100 stumps may still be buried.

For more information, write to Florissant Fossil Beds National Monument, P.O. Box 185, Florissant, CO 80816.

### John Day Fossil Beds NM

Preserved in the desert hills of eastern Oregon is one of the world's most complete fossil records. The three units of John Day Fossil Beds National Monument preserve a 40-million-year record of plant and animal life; fossil beds that extend over five million years are considered rare.

Fossils came to be at John Day in a variety of ways. Leaves fell into old lakebeds and were covered by sediments. Mammals became fossils when they fell into sinkholes, or their remains were buried by either river sediments

or volcanic debris.

The monument encompasses 14,000 acres in three separate units, Sheep Rock, Painted Hills, and Clarno. Each offers a distinct record of history. At Sheep Rock the mammals are the most important fossils, among them the oreodont, a pig-size creature that grazed in herds. Painted Hills includes many plant fossils, and Clarno offers several significant fossil sites, among them the Clarno Nut Beds. The Nut Beds preserve more than 300 plant species, including some standing fossil trunks. Fossilized leaf imprints and fossilized seeds indicate a variety of species including palm, fig, cinnamon, cycad, and tree ferns. Two trails allow visitors to see embedded plant remains.

Also at Clarno is the Hancock Mammal Quarry. Visitors can tour the Hancock Field Station, operated by the Oregon Museum of Science and Industry. Several programs are offered for those interested in the geology, paleontology, and ecology of central Oregon.

The current visitor center is in an old ranch house at Sheep Rock and features fossils recovered from the John Day Basin. The visitor center is open daily from March to October but closed weekends and holidays during the winter months. Visitors also can tour a laboratory that demonstrates how fossils are prepared and preserved.

For more information, write to John Day Fossil Beds National Monument, 420 West Main Street, John Day, OR 97845.

### Agate Fossil Beds NM

The Agate Springs Ranch located in western Nebraska along the Niobrara River has changed little since it was acquired by Captain James Cook in 1887. The area was established as Agate Fossil Beds National Monument in 1965.

At the beginning of this century, Agate Springs Ranch became a haven for noted paleontologists. In 1904 O. A. Peterson from the Carnegie Museum began the first scientific excavations on a conical hill overlooking the ranch. A year later, Professor E. H. Barbour from the University of Nebraska began similar operations on an adjacent hill. The



KENT AND DONNA DANNEN

**John Day Fossil Beds National Monument in Oregon is made up of three separate units, Sheep Rock, Painted Hills, and Clarno. The appropriately named Painted Hills is shown at left. Above is a fish fossil found at Fossil Butte National Monument in Wyoming.**

TOM ALGHIRE/TOM STACK & ASSOCIATES

hills became known as Carnegie and University hills.

The paleontologists found dozens of complete skeletons in their repeated excavations. The prevailing theory is that the “bonebed” at Agate is a 19-million-year-old waterhole where thousands of drought-stricken rhinoceroses and horse-like chalicotheres perished. The chalicotheres or *Moropus* was an odd-looking creature with clawed feet and a neck and body like those of a modern giraffe.

Visitors to Agate Fossil Beds will discover plenty to see and do. A paved interpretive trail leads to quarry sites on both Carnegie and University hills. The fossil layer is partially exposed at both sites, and visitors can see rhinoceros and chalicotheres bones in their natural state. Another trail leads to two examples of the so-called devil’s corkscrews, which perplexed paleontologists initially. The mystery was solved when the remains of beaver-like animals were found inside some of the corkscrews, actually fossilized burrows. The ancient beaver, or *Palaeocastor*, lived a life similar to a modern-day prairie dog, and was land-oriented rather than water-oriented.

A new visitor center was dedicated

in November 1992, and exhibits are expected to be in place by June 1995, the monument’s 30th anniversary. Plans include placing 100 Lakota artifacts from the extensive Cook collection on display and making fossil casts of some of the best Agate specimens currently on display at the Denver Museum of Natural History and the University of Nebraska Museum.

For more information, contact Agate Fossil Beds National Monument, P.O. Box 27, Gering, NE 69341.

### Fossil Butte NM

Some 50 million years ago, southwest Wyoming had a wet, semitropical environment. Near the present-day town of Kemmerer, an enormous lake teemed with life. Six-foot gars, bowfins, stingrays, turtles, and more than 20 other freshwater species swam in the waters of what is now called Fossil Lake, which was 50 miles long and up to 15 miles wide. Crocodiles lay in wait along its shores, and insects, birds, and bats drifted overhead.

As these creatures died, they sank to the bottom of the lake, settling into the ooze. The water in Fossil Lake eventually disappeared, leaving behind a large basin and the most noteworthy record

of freshwater fossil fish ever found in the United States.

Fossil Butte National Monument protects a portion of this ancient lakebed. Thousands of fossils are still preserved in the 20- to 30-foot-thick fossil-bearing layer at the monument. “These species are so perfectly preserved that it is like a snapshot,” said park ranger Marcia Sagnant. Skin, scales, teeth, delicate tail rays, and fins can all be seen in detail.

One of the more interesting phenomena has been the unearthing of what are called “mass mortality” layers. In three such layers, all of the fish appeared to have died at the same time. The commonly held theory is that these massive die-offs resulted from sudden temperature changes. A seven-foot by four-foot “mass mortality” slab is on display in the visitor center, where people can also see fossils being prepared for relocation to museums. The slab contains 356 fish, representing three distinct species.

Several short hiking trails are also available. The historic quarry trail allows visitors to get a good look at fossils in their natural condition, and trailside exhibits recount some of the history of fossil collecting.

For more information, write to Fossil Butte National Monument, P.O. Box 592, Kemmerer, WY 83101.

*Clayton E. Jackson is a free-lance writer and photographer who lives in Los Angeles, California.*

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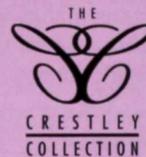
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## NOTICES

### Scholastic Joins NPCA

NPCA has joined with Scholastic Inc., the nation's leader in educational marketing, to develop a special program to mobilize students throughout the country to join in March for Parks, America's largest walk for parks.

March for Parks coincides with Earth Day and will take place April 22-24 in each of the 50 states. Participants can raise money for a particular project at their local park, and all of the money generated will go toward that project. The Scholastic Youth Service Program seeks to educate today's youth about the value of the National Park System, encourage youth service activities in parks, and create "park advocates" among the students. Proposed activities include tree plantings and park clean-ups. More than 250,000 classrooms will

be a part of the Scholastic Youth Program. For more information on the Scholastic Youth Service Program, contact Richard K. Delano at Scholastic Inc., 730 Broadway, New York, NY 10003. To get involved with March for Parks, contact Grassroots, NPCA, 1776 Massachusetts Ave., N.W., Washington, DC 20036.

### Parks in Crisis

For the third consecutive year, NPCA has issued a critical report examining the problems of the National Park Service. Released to mark the service's 77th anniversary, *National Parks in Crisis* is based on the results of a survey of 14 national park superintendents. The report presents a snapshot of visitation, staffing, resource management, unfunded maintenance programs, and

other problems. The first report, *A Race Against Time*, was released to coincide with the Park Service's 75th anniversary. Copies of *National Parks in Crisis* are available by writing NPCA, Member Services, 1776 Massachusetts Ave., N.W., Washington, DC 20036.

### Annual Report

Throughout the year, NPCA testified before Congress; worked on more than 120 bills; and held meetings, conferences, and workshops to protect and augment the National Park System. NPCA made progress on a number of issues this year, attaining some long-term goals.

NPCA scored a major victory by shifting the focus for generating more revenue from the public to commercial users of the parks. NPCA suggested that commercial users of the parks should pay for their access before visitors pay more. NPCA pointed out that each year hundreds of air, sea, and land tour operators charge tourists for trips into the parks but pay the Park Service little or

## ❄️ THINK OF NPCA THIS HOLIDAY SEASON ❄️

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### FOSTERING CITIZEN ACTION

Citizens must be kept informed about the issues and threats affecting our national parks so they can act to protect them.

◆ Establish an NPCA Legislative Action Fund to notify citizens at the local level about park issues as well as generate their support in resolving them. **\$20,000**

◆ Provide a scholarship for a participant in NPCA's citizens' conference in May 1994. The conference, to be held in San Francisco, will bring together 275 representatives from citizens' organizations and the Park Service to define the role of citizen involvement in park protection for the 21st century. **\$850** per scholarship

◆ Update, print, and distribute approximately 125,000 copies of NPCA's *How To Have A Quality Visit* brochure. This pamphlet provides readers with helpful tips on how to maximize their park visit while minimizing their impact on fragile park ecosystems. **\$20,000**

### EQUIPPING NPCA'S REGIONAL OFFICES

During the past two years, NPCA opened three new regional offices: Heartland (Minneapolis), Northeast (Washington, D.C.), and Southeast (Tennessee). Each office needs:

- ◆ Laptop computer and modem **\$2,000**
- ◆ Laser printer **\$1,000**
- ◆ Fax machine **\$1,000**

### PROMOTING LEADERSHIP

As citizens, we have a responsibility to help protect and preserve the "common

treasury" that we have set aside for ourselves and for generations to come. One way of ensuring that we pass on the legacy of our national parks is by exposing today's students to the issues that confront our parks and providing them with the expertise and skills they need to help protect them.

◆ Fund a 12-week intern position at NPCA. Our Conservation Programs, Grassroots, and Editorial departments need highly motivated and committed student interns throughout the year. **\$2,500** per intern position

Send your contribution to NPCA's Holiday Wish List, 1776 Massachusetts Ave., N.W., Washington, DC 20036. For more information on supporting these programs or others, contact Ms. Jessie A. Brinkley, Dir. of Development, 1-800-NAT-PARK, ext. 130.

nothing for the privilege. A final measure included fees for tour buses throughout the park system as well as air tours in the Grand Canyon in Arizona and Haleakala in Hawaii.

NPCA's intensive work to reform the national park concessions system also paid off this year. Rep. Jan Meyers (R-Kans.) introduced legislation in the House identical to Sen. Dale Bumpers' (D-Ark.) concessions reform bill, which NPCA supports. This is the latest step in NPCA's ongoing battle to increase funding to the parks.

Park protection is one of NPCA's most important missions, and in 1993 the association won a series of battles on this front. NPCA helped to secure protection for Yellowstone National Park, which contains more geothermal activity than anywhere in the world. NPCA supported a recent compact between the state of Montana and the National Park Service that protects the park from the effects of groundwater exploitation. NPCA also testified before Congress in favor of the Old Faith-

ful Protection Act, which would provide authority and funds to implement the compact and extend safeguards to other states bordering the park.

This year, legislation to establish a national park in the Mojave Desert made significant progress and faces its best chance ever of passage. NPCA testified in support of the bill, which would expand two national parks and designate a third. Together with other conservationists, NPCA worked hard this year to oppose efforts to allow hunting in the proposed Mojave National Park.

As a principal player in the Everglades Coalition, NPCA has helped to make the Everglades a priority for the Interior Department. Interior Secretary Bruce Babbitt, Environmental Protection Agency Administrator Carol Browner, Florida Governor Lawton Chiles, and more than 200 others attended the 8th Annual Everglades Coalition Conference coordinated by NPCA. As a result of a suggestion made by NPCA President Paul C. Pritchard, Secretary Babbitt announced the cre-

ation of an interagency task force to coordinate a response to the problems of the Everglades. The task force will provide overall federal direction for rescuing the Everglades. To ensure that action is taken, the Everglades Coalition has released its own restoration plan for this unique natural resource.

NPCA released *Park Waters in Peril*, a report summarizing the most pressing problems confronting park waters, such as dams and pollution. The report—made possible by the generous support of the David and Lucille Packard and the Tides foundations—recommends solutions and outlines case studies of 12 units in the National Park System, including Everglades National Park. The case studies discuss the importance of water to park values, highlight significant threats, and examine the obstacles to protection efforts.

Besides devoting attention to protecting park waters, NPCA continues to be a recognized leader in the field of visitor impact management. In June NPCA conducted a two-day workshop

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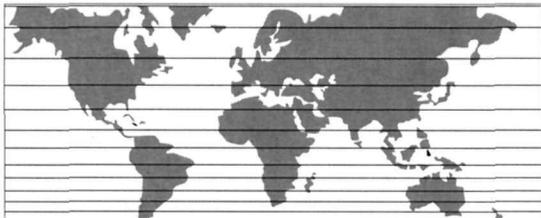
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for Costa Rican park service and tourism officials seeking advice from NPCA on how to accommodate the growing number of visitors to their parks.

NPCA's grassroots department made strides this year, expanding its network of full-time regional offices to the Northeast and Southeast. The Park Activist Network, a coalition of NPCA members, volunteers, and advocacy groups, now numbers more than 6,000.

According to the audited financial statements for the fiscal year, NPCA's total operating income for 1993 was \$12.3 million. Percentages of total expenses were as follows: program services 75.1 percent, fund raising 8.7 percent, membership recruitment 13 percent, and management and general 3.2 percent.

Find out more about NPCA's achievements, missions, and programs by writing for the free 1993 annual report at NPCA, 1776 Massachusetts Ave., N.W., Washington, DC 20036.

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## REVIEWS

# Ninemile Wolves

By 1930, the American West had been scoured clean of wolves. They gave way under a campaign of extermination that lasted more than half a century and employed meat laced with strychnine or ground glass along with bullets and traps. The animals wolves fed on—the bison, the deer, and the elk—had disappeared first. Ranging in their place across the West were sheep and cattle. Without question, wolves did turn to eating livestock sometimes. But the holy hatred with which they were regarded and the fervor with which they were killed meant that people and wolves were not going to be able to reach any sort of accommodation on the matter. "Until recently," Rick Bass writes in *The Ninemile Wolves*, "the score stood at Cows, 99,200,000; Wolves, 0."

But with hunting better regulated, elk and deer numbers have long since rebounded and begun rising with no end, or counterbalance, in sight. And over the last 15 years, lured by this abundance of prey, wolves have started to trickle down from Canada into Montana. Most stick to Glacier National Park on the border, but some are making forays into the rest of the state. Bass picks up the story with the first known pack in 60 years to establish a den and produce a litter of pups in Montana outside the park.

What these wolves discover is a West not quite sure it has changed its mind about them. Two successive families fall prey to disaster, caught in turf battles between state and federal agencies, shot by ranchers, or run over. "I keep wondering if Montana's big enough for wolves," says a saddened federal biologist, who then answers the question.



ERWIN AND PEGGY BAUER

A gray wolf hunting in winter.

"The state is big enough. Can the people in the state be big enough?"

The problem again is livestock depredation, or the fear of it, and the possibility of slightly fewer deer for hunters. Times have changed—wolves that do kill livestock can be tracked and caught with radio collars, helicopters, and dart guns, and funds are available to compensate ranchers for lost cows—but for many, one misstep on the part of a single wolf still cancels the right of the whole species to exist. "May we all never be judged by anything so harshly or held to as strict a life or unremitting of borders as the ones we try to place on and around wolves," Bass writes.

At the heart of the book is a scene in which Bass and two researchers follow the wolves' tracks through the snow as they weave in and out of one another, sometimes curling off in explorations here or there but always returning to that "braided stream" of footprints. Bass mimics those tracks in the crafting of

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his essay, taking up threads of history, science, politics, anecdote, and reflection, frequently digressing but always returning to weave the elements together in a long strand that follows along behind the wolves "like the tail end of a comet."

Bass is a prominent short-story and nonfiction writer, and if his prose occasionally veers toward the breathless, it also often attains real beauty as he invokes wolves' pure love of movement, their elusiveness, endurance, tight-knit families, and formidable hunting prowess, their "great hearts." What draws him most to wolves, and comes through most memorably in his book, is the mysterious "force...I have to call it spirit" he sees in them, which "we can extinguish...but we can never entirely control."

*The Ninemile Wolves*; paperback, \$10.00, Ballantine Books, New York; hardcover, \$22.95, Clark City Press, Livingston, Montana.

—Elizabeth Hedstrom

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*National Parks*

Volume 67, 1993

NB: National Battlefield  
NHP: National Historical Park & Preserve  
NL: National Lakeshore  
NM: National Monument  
NP: National Park  
NPCA: National Parks and Conservation Association  
NPS: National Park Service  
NR: National River  
NRA: National Recreation Area  
NS: National Seashore

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# Falling Water

**P**ARK PURSUIT tests your knowledge of the history and the natural resources represented within the National Park System. Clues can be found in past issues of the magazine, in books, or in literature about the parks.

The November/December quiz focuses on waterfalls within the National Park System, and information has been provided to aid you in identifying the sites depicted.

Water is among our most cherished resources, whether it slakes the thirst of wildlife in the arid West or nourishes marshes in the East. Water is inseparably linked to watersheds and natural systems that transcend the boundaries

of national parks. It feeds streams, brooks, geysers, and desert springs. No living creature can do without it.

In its many manifestations, water has served to transport us and our goods and provide power for our mills as well as satisfy our thirst. Despite this, water is a resource most of us take for granted. Trash lines the shores of many beaches, and few public water supplies are safe to drink without treatment.

Even so, one aspect we do not take for granted is the beauty it provides. Artists have captured that power on canvas and paper through landscapes and verse. Tumbling from high ledges, rushing headlong in an endless race to

the sea, the power of cascading water has inspired both art and industry.

Painters and poets have captured that power on canvas and paper through landscapes and verse. Inventors and engineers have harnessed waterfalls to produce the electricity that provides power to homes and businesses.

If you are unable to wait until the next issue for the answers, call our 900 number from a touch-tone phone (see page 6). Answers to the September/October quiz are: 1. Canyon de Chelly National Monument in Arizona; 2. Little River Canyon Preserve in Alabama; and 3. Black Canyon of the Gunnison National Monument in Colorado.

- 1.** This park's 318 glaciers and countless snowfields fuel its numerous waterfalls. Winters are long, and as much as 20 feet of snow accumulates during the season. The park's 505,000 acres encompass more than half of all glaciers in the lower 48 states. What national park site is this?



PAT O'HARA



ERIC LONG

**2.** Near the nation's capital, the Potomac River builds up speed and force as it falls over a steep, jagged rockwall and flows through a narrow gorge. This dramatic scene makes this park a popular site. The river here was a trading place for Indians and early colonists. What national park site is this?



DAVID MUEENCH

**3.** In spring this is a roaring, solid fall, driving great clouds of mist out from its base. During low water season it becomes light and misty. Indians called this fall Pohono, or a puffing wind. Considered one of the most beautiful of all of this park's falls, it drops from the lip of a hanging valley. What is the name of this waterfall, and what national park site is this?



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