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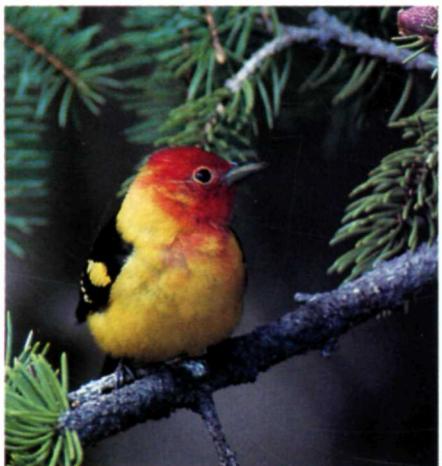
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JEFF FOOTT

Western tanager, page 22

EDITOR'S NOTE

It's been 30 years since Rachel Carson, in her book *Silent Spring*, warned us that North American birds were in trouble. Since then, DDT and other pesticides that were having a disastrous effect on bird populations have been eliminated, and many species—most notably the bald eagle—have made a comeback. But today many birds again are disappearing from areas where they were once plentiful.

What's causing the decline? For songbirds that breed in the north and winter in Central or South America, the main culprit is fragmentation or destruction of habitats at both ends of their migratory routes. And critical stopover areas along the way are also being destroyed at an alarming rate.

For this reason, national parks and other protected areas—both in this country and beyond our borders—have a critical role to play in providing a safe haven for beleaguered songbirds.

NATIONAL PARKS

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NATIONAL Parks

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November/December 1990
Paul C. Pritchard, Publisher

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Cover: Ellis Island, by Ted Hardin.

For many years the first stop for millions of immigrants, Ellis Island is now a museum where Americans can learn how their ancestors shaped this country.

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

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An Appeal for Action

IT'S 1990, the first year of the Decade of the Environment, and our national parks are facing a bleak future.

Of course, there are those who will scoff that this lament is nothing new from NPCA and that we have "unrealistic" expectations for the National Park System.

Unrealistic? Should Park Service rangers and other employees be living on the line of poverty, some reportedly qualifying for food stamps? Is this the reality that we must accept?

And why has funding for national, state, and local park acquisition declined by two-thirds in the last decade, falling dreadfully behind the growth of the population (and other indicators of need) in this country?

And who's to take credit for endangered species programs that show increasing numbers of plants and animals becoming endangered, while few ever go off the list, having been saved?

And why is it that the Statue of Liberty was restored only because of the commitment of private citizens and corporations and not because of the clear and conscious plan of the federal government to maintain this and other world-significant landmarks?

These are concerns supported by hard statistics and shared by conservation leaders in Congress and the Administration. Fortunately, NPS Director Jim Ridenour, Senator Dale Bumpers, and Congressmen Bruce Vento and Sidney Yates are excellent leaders dedicated to



the parks. So what is the problem?

The problem may well be that we, as citizens, have not yet put sufficient pressure on all members of Congress and the Administration to more aggressively pursue park and open space issues.

Without our personal commitment, the so-called Decade of the Environment

may be just a hollow promise.

Fortunately for NPCA, we have opportunities for member involvement. Our citizen network, begun in 1983, now numbers more than 200 organizations and individuals around the country who have volunteered to watch after their local national park unit. Our Congressional Contact Program is growing by leaps and bounds. The annual March for Parks is a new part of our effort to increase citizen involvement in the cause of the parks and open space.

The genius of the environmental movement has always been that leadership has been initiated by private citizens at the local level, not in Washington. Therefore, for the first time in NPCA's 71-year history, we will begin our long-range planning by using the results of our membership survey. Those results are summarized in this issue of the magazine. They will be reviewed by the Board at its meeting on Nov. 16.

We hope you will join in some way, be it the Contact Program, the March for Parks, or the National Park Action Program. The promise of the Decade of the Environment begins with each of us.

Paul C. Pritchard

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LETTERS

Assassination Addendum

I read with interest Kristin Eddy's "Death of a President" [July/August 1990]. However, there was no mention of President William McKinley who was assassinated in Buffalo, New York, in 1901.

The gun which Leon Czolgosz used to kill President McKinley, as well as the handkerchief that Czolgosz used to disguise the gun, are on display at the Theodore Roosevelt National Historic Site in Buffalo.

*Mary Valley
Mt. Holyoke, Massachusetts*

Rent Control

The fact that "plowing and overgrazing long ago destroyed Big Bend's grasslands and stripped the topsoil" ["Tex-Mex Park," July/August 1990] should be the

best signal to stop renting public lands to ranchers in the West at 1810 prices while destroying the ecology of those areas in the 1990s.

*Ruth O'Shea
Bakersfield, California*

Fan Mail

I want to thank you for such a great publication.

Yours is the most complete listing of the current issues in Washington, D.C., and how they will affect our many national parks.

*Chris Baker
Union City, Pennsylvania*

I just received my first issue of your magazine and I want to commend you on such a diversified, informative magazine.

I found each and every article a plea-

sure to read and even reread. The photos are gorgeous; they almost make me feel like I'm there.

I've ordered several useful catalogs that were advertised and responded to two articles asking for letters to be written in support.

Thank you for a wonderful magazine.

*Susan M. Wutsch
Little Ferry, New Jersey*

Make No Bones About It

I am in complete disagreement with the views expressed by Bruce Craig in "Bones of Contention" ["Forum," July/August 1990].

Scientific analysis of human remains from the distant past gives us a much clearer understanding of the cultures being studied.

I have no problem with the excavation of my own European ancestors that has been ongoing for over a century.

As to Mr. Craig's quoted remark from Bill Tall Bull that retaining human remains as "artifacts" is inhuman and un-Christian: both Mr. Craig and Mr. Tall Bull should enlighten themselves with a quick trip to Europe where the bones of a legion of saints are proudly and prominently displayed in nearly every major church and cathedral on the continent, along with relics from the death of Jesus Christ.

The discrimination and exclusion of Native Americans from this process of enlightenment and discovery would be another subtle and insidious form of cultural racism.

*William Stout
Pasadena, California*

CUT Clean Up

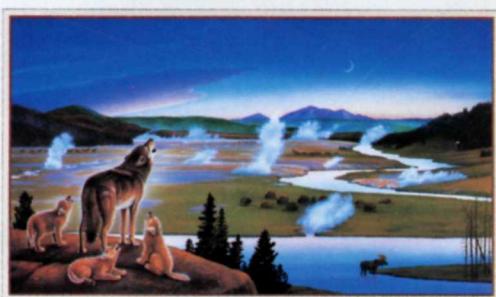
I hope it was the Church Universal and Triumphant (CUT) that paid for the fuel spill clean up and not the taxpayers ["News," July/August 1990].

Could you enlighten us?

*Lynn Dahl
Chicago, Illinois*

CUT paid for the clean up while Montana's Department of Health and Environmental Sciences monitored the church's effort to remove spilled oil from the area.

—the Editors



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Portents from the Pond

I read with a heavy heart "Unlikely Harbingers" [July/August 1990].

When I was growing up beside a deep glacier lake in New Hampshire, salamanders abounded. Our gentle, sandy beach had lots of green salamanders.

Along the lake road, after evening rains, the baby peepers would all be out in the hundreds, hopping along. The magical orange newts with wise eyes slowly moved in the woods. Last summer I realized the green salamanders were gone.

The peepers had long been gone. A rare, holy sight is still the orange newt. I felt a terror in my bones for our planet.

Our lake is still pure—although a nuclear power station is 12 miles away, and acid rain claims much of the forest. I pray we do not forever lose these amphibian friends.

Louisa Putnam Finnegan
Santa Fe, New Mexico

I have been maintaining and protecting a private wildlife refuge for 20 years. The annual toad mating festival attended by 20,000 toads blackened the water's edge with tadpoles. Six years ago, the chants of tree frogs started to diminish.

Today, except for an occasional toad, and a few bullfrogs, all is silent.

I miss their mesmerizing music.
Corry E. Mason
Columbia, South Carolina

This worldwide amphibian decrease may herald an environmental crisis that should now be looked at with more urgency. Unfortunately, it may be too late.

Like the proverbial canary used to detect mine gases, by the time the canary began to be overcome, it was too late for the miner.

Let us hope this is not the case for the amphibians and the rest of the world.

Donald Chad Johnson
Spokane, Washington

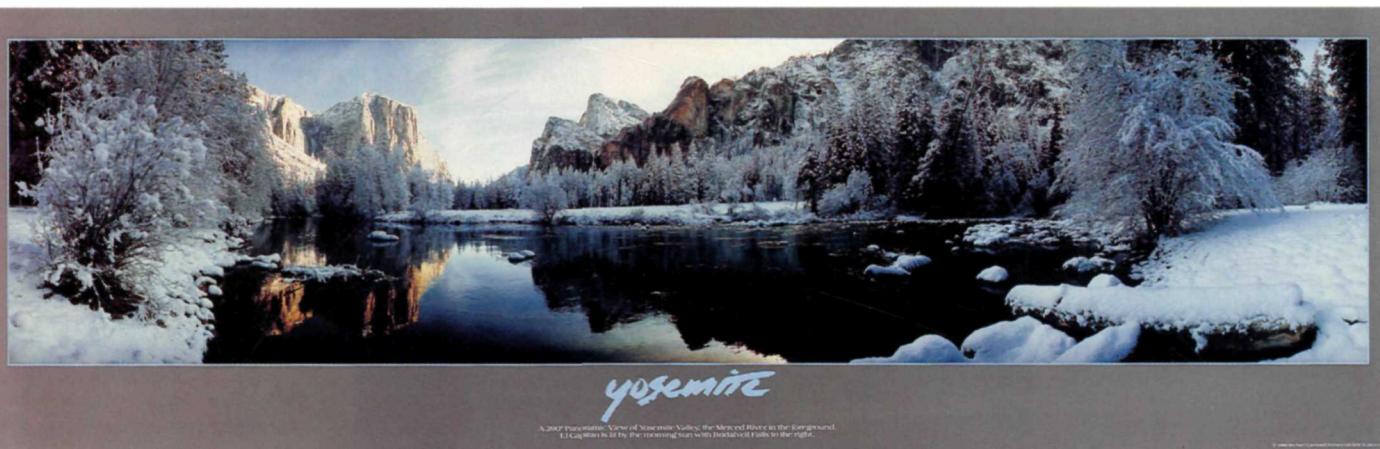
The Population Challenge

NPCA President Paul Pritchard offers some important challenges for us to concern ourselves with over the next 20 years in his "Outlook" [July/August 1990].

I must point out that each of these issues, no matter what technological, economic, or legal strategies we use to tackle them, can only become worse if we do not work together to stop the root of the problem: a national and world population growth that will soon rule out the coexistence of natural environments. We cannot accept these growth rate projections when we contemplate doubled visitation to national parks in the next 20 years.

William Lent
Clifton, New Jersey

Write "Letters," National Parks, 1015 Thirty-first St., NW, Washington, D.C. 20007. Letters may be edited for space.



YOSEMITE NATIONAL PARK, California. A 290 degree panoramic ground view of the Yosemite Valley, the Merced River in the foreground. El Capitan is lit by the morning sun with Bridalveil Falls to the right. Each year over a million visitors come to see these wonders, which are some of the most rugged and beautiful in the nation.

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NEWS

N P C A

LUJAN UNVEILS BATTLEFIELD PLAN

Secretary of the Interior Manuel Lujan unveiled a federal plan this summer to preserve the nation's threatened battlefields. Lujan said the American Battlefield Preservation Initiative will bring together efforts by federal, state, and local governments, private organizations, and individuals to protect once-rural battlefields now endangered by development.

"Battlefields—especially Civil War battlefields—are a particularly important part of our national heritage, and they are worthy of our best efforts to protect them," Lujan said in announcing the plan at Manassas National Battlefield Park.

"We commend Secretary Lujan for taking this important step toward preserving endangered battlefields," said NPCA President Paul Pritchard, who along with NPCA Board of Trustees Chair Norman Cohen attended the announcement ceremony. Pritchard noted that many endangered national park battlefields could be preserved through boundary changes recommended in NPCA's National Park System Plan.

Under the initiative, Lujan said, the Interior Department will assist in joint efforts to protect battlefield land through acquisition or other measures such as donations, zoning restrictions, and easements. Lujan is also expected to ask Congress for limited funds—about

\$15 million—for the program. It is expected these funds will be used for federal land protection and aid to state-level preservation programs.

The program also calls for development of long-term strategies to protect sites not immediately threatened.

The impetus for Lujan's program comes in part from a 1988 preservation battle at Manassas. To prevent shopping mall construction on an unprotected

Lujan said the plan will focus first on 25 high-priority Civil War sites in 14 states, then may expand to include threatened battlefields from all wars fought in the U.S. Of the 25 sites, eight are already within the National Park System but face serious threats from development on adjacent lands. The other 17 have no federal protection.

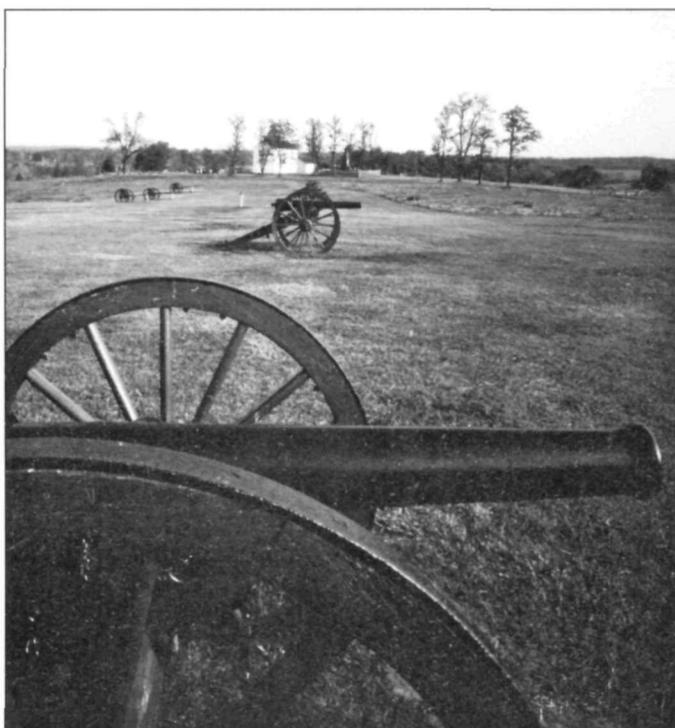
The sites are part of a comprehensive list, drawn up by Interior in consultation with NPCA and other preservation groups, of more than 100 threatened battlefields nationwide. Of these, 20 are within the park system.

"We're encouraged by the Secretary's announcement," Bruce Craig, NPCA cultural resources program manager, said. "It's an important start. However, \$15 million is not likely to be enough to provide adequate protection for the designated 'priority' battlefields."

Craig urged Interior to take a more active role in acquiring land for national park battlefields. "Secretary Lujan wants a partnership. But partnership does not exist if the private sector is asked to buy all the land and then simply donate it to the Park Service," he said. "Federal acquisition of key parcels is a necessity for any

partnership to work."

Lujan stated a first priority would be the Wilderness battlefield in Virginia. Fredericksburg and Spotsylvania National Military Park protects part of the site, but lands fought over during the fi-



DAVID MUNCH

Manassas was the site of a 1988 preservation battle.

portion of the battle site, Congress made an expensive emergency purchase of the land. Since then, legislators, officials, and preservationists have been seeking a better way to protect battlefields than relying on such costly last-minute measures.

nal Confederate assault are slated for housing development.

At NPCA's urging, Lujan toured the Wilderness battlefield in August. He met with officials, preservationists, and the landowner, who has expressed willingness to sell the site for eventual addition to the park. NPCA has been negotiating for such a settlement since early 1990. Representative D. French Slaughter, Jr. (R-Va.) introduced a bill this summer to authorize the addition.

Development seems inevitable at another priority battlefield, however. The Board of Supervisors of Culpeper County, Virginia, has approved plans for an industrial park at Brandy Station, site of the Civil War's largest cavalry battle.

Meanwhile, Civil War legislation is pending in Congress. One bill calls for a comprehensive study of Civil War sites to identify potential additions to the park system. (See separate story, page 11.) Congress voted this fall to expand Vicksburg National Military Park in Mississippi and is considering a bill to designate a New Mexico Civil War site as Glorieta National Battlefield.

This summer, Congress added 1,900 acres of previously unprotected battlefield to Gettysburg National Military Park. NPS, however, will purchase only 250 acres. The Richard King Mellon Foundation has agreed to donate another 266-acre parcel, and the Gettysburg Battlefield Preservation Association has donated seven acres. NPS hopes the purchase of scenic easements or development rights will protect the rest.

The legislation also sets a larger area around Gettysburg in which NPS will try to preserve the "battlefield setting" in cooperation with landowners and local zoning officials. At Antietam National Battlefield in Maryland, the Park Service and local officials have reached similar zoning agreements.

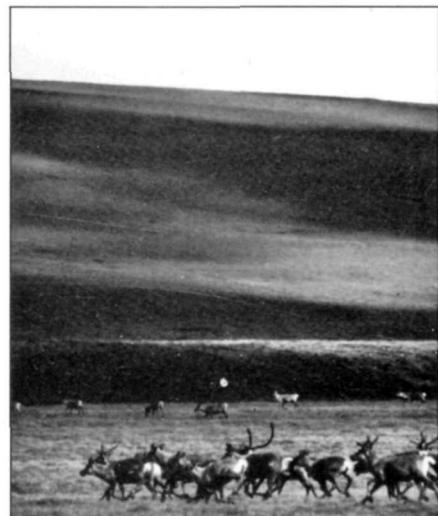
Threats to battlefields have grown in recent years as suburban sprawl reaches the once-rural areas where most battlefields are located. Popular interest in the Civil War has grown too, however. More than 13.9 million people watched the first night of the PBS series "The Civil War" in September and battlefield parks report a marked increase in visitors.

PROTECTED AREAS COULD BE OPENED TO DRILLING

Fallout from the Middle East crisis threatened hard-won conservation gains at home this fall, as Congress considered weakening protections environmentally sensitive areas currently have from oil and gas drilling.

The Senate in August approved an amendment to the Defense Authorization Act that could make otherwise protected areas available for drilling. The National Energy Security Act of 1990, sponsored by Senator Frank Murkowski (R-Alaska) and co-sponsored by senators James McClure (R-Idaho) and Conrad Burns (R-Mont.), would take effect whenever the amount of foreign oil the United States consumes exceeds 50 percent of its total oil consumption in any six months out of a 12-month period.

In these circumstances Congress would require the president to submit a schedule for leasing federally owned lands "in order of their potential for oil and gas discovery." Potential sites would include sensitive coastal areas in Florida and California—which last summer received a ten-year drilling moratorium from President Bush—and national



KAREN JETTMAR

Legislation could open the Arctic National Wildlife Refuge to oil drilling.

wildlife refuges. The Arctic National Wildlife Refuge, which conservationists have long fought to protect from oil extraction, would be especially vulnerable.

The amendment excludes only national parks from drilling, but conservationists say that parks would nonetheless be damaged by drilling in newly available adjacent areas. The amendment would also allow the president to override the Endangered Species Act and the

NEWSUPDATE

▲ **Trails.** In conjunction with NPS, NPCA is sponsoring a series of trails meetings this fall. Meetings will be held November 10 in Washington, D. C.; November 11 in Delaware Water Gap, Pa.; and November 17 in New River Gorge, W. Va. All interested in helping plan a trails system for the mid-Atlantic area should contact Jennifer Seher at (202) 944-8573.

▲ **Bandelier.** A committee set up by the U. S. Forest Service to investigate logging practices near Bandelier National Monument has issued its final report. The report found an array of environmental violations and recommended closer scrutiny of timber sales and evaluation of the area for expanded federal protection.

▲ **Route 66.** In September President Bush signed into law a bill authorizing a study of ways to preserve and commemorate Route 66, which for much of the 20th century linked Chicago to Santa Monica, California. The role of "the mother road" in westward migration began with refugees from the Dust Bowl and continued after World War II as economic opportunity and the lure of the open road encouraged further movement west.

▲ **Conference.** The Everglades Coalition will hold its sixth annual conference January 10-13 in Miami. For more information or to register, call (305) 448-3636 or write the Coalition at 4203 Ponce De Leon Boulevard, Coral Gables, FL 33146.

National Environmental Policy Act, which requires that the environmental consequences of potentially harmful activities be weighed.

Environmentalists say the Middle East crisis and the Murkowski amendment emphasize the need for energy conservation and decreased dependence upon non-renewable fuel sources.

"For a decade now the government has not had any kind of coherent national energy policy," said William Lienesch, NPCA conservation programs director. "A sound policy would fill our national energy demands without permanent sacrifice of the country's most precious lands."

NPCA CHARGES COUNTY IS PAVING BURR TRAIL

Despite existing legal prohibitions against paving the Burr Trail before further environmental review, Garfield County recently laid asphalt on more than 12 miles of the trail in Utah. NPCA and other environmental groups expressed outrage at the county's action and took immediate steps to challenge the roadwork in court.

The scenic dirt road extends for 66 miles from Boulder, Utah, to Glen Canyon National Recreation Area. The trail passes through Capitol Reef National Park and is bordered by proposed wilderness areas.

The entire length of the Burr Trail is within Garfield County, Utah, where county officials are hopeful that widening the trail will boost area tourism. But environmentalists contend that paving the Burr Trail would degrade the scenic values and wilderness character of much of the trail and adjacent park and public lands.

Terri Martin, NPCA Rocky Mountain regional director, said that in its actions Garfield County deliberately violated existing court rulings.

"The county had a right to gravel the stretch of road west from Capitol Reef National Park, but paving was specifically prohibited until further environmental review was completed," Martin stated.



SOUTHERN UTAH WILDERNESS ALLIANCE

Conservationists claim the "gravel" laid on the Burr Trail is actually asphalt.

The double layer of asphalt tar and rock chip laid down by Garfield County cannot be defined as gravel and by most definitions constitutes pavement, Martin said. "The asphalt and chip has dried to an inch-thick, hard, and durable surface. You can actually hold a chunk of it in your hand. You can't call that gravel," she said.

Garfield County maintains, however, that the roadwork is simply routine maintenance for gravel roads.

"I feel strongly we could put down 12 inches of asphalt if we could afford it," said Garfield County Commissioner Tom Hatch.

The Bureau of Land Management (BLM) has jurisdiction over most of the Burr Trail. BLM has been ordered in court to comply with the National Environmental Policy Act (NEPA), whose provisions require an environmental review of the alternatives to, and the impacts of, road construction and paving on the Burr Trail.

Conservationists say that no road construction or paving can occur until BLM conducts a complete, detailed environmental review of the entire project.

The dispute will ultimately be resolved in court where NPCA and other environmental groups will seek a new

injunction against further "paving," Martin said. These groups also are considering court action to force Garfield County to scrape up the material that already has been laid.

In addition, further court action can be expected as a result of Garfield County's effort to overturn a decision by the Interior Department's Board of Land Appeals (IBLA), Martin said. IBLA ruled that future work on the Burr Trail must be preceded by compliance with NEPA, which requires an environmental analysis of the full scope of a project before any work can begin.

NPCA expects to intervene in that new case to challenge the county's right-of-way claim, to back up the IBLA decision, and to insist upon full NEPA compliance, Martin said.

CLEAN AIR ACT REMAINS STALLED IN CONFERENCE

Clean air legislation remained in conference this fall, as members of Congress attempted to resolve differences between the two bills passed by the Senate and House earlier in the year. At this writing, the fate of strong measures to protect national parks from air pollution

and to halt acid rain was still uncertain.

Although the Senate and House passed their respective clean air bills in April and May, conference did not begin until mid-July, due in part to the long process of selecting conference members. Negotiations, once begun, bogged down quickly, although progress was made on some issues.

The two chambers agreed to an even more aggressive phase-out of ozone-depleting chemicals than international agreement now calls for and to a nationwide recycling program for such chemicals in the meantime.

Congress reached agreement on pollution control requirements for areas whose levels of ozone and carbon monoxide violate health standards. In October it also reached agreement on motor vehicle, tailpipe, and fuel standards.

As the original October deadline approached, however, significant and controversial issues remained to be reconciled. Conferees had yet to resolve the issues of acid rain, airborne toxics, and alternative fuels.

Of these, acid rain legislation stands to benefit national parks most. Both the House and Senate bills seek to reduce acid rain-causing sulfur dioxide emissions 50 percent by the year 2000. Environmentalists hope the final agreement will slow the severe damage acid rain has caused to forests and lakes across the U.S. and in Canada.

The conference has also yet to tackle differences over how to protect national parks from air pollution. The House bill contains an amendment sponsored by Representative Ron Wyden (D-Ore.) that would give the highest level of air quality protection to all parks of more than 6,000 acres that have not yet received it. It would also require the EPA to develop new regulations within two years on regional haze. These regulations would protect and improve air quality for western parks. The Senate bill contains much weaker provisions.

While the debate goes on in Washington, a serious threat to air quality in Shenandoah National Park has arisen. Between 30 and 40 new power plants are being planned in Virginia. Of these, 15 have applied for, and four have re-

ceived, air pollution permits from the state. The National Park Service has found that one of these, a Multi-trade Limited, Inc., plant, would significantly damage air quality and visibility at Shenandoah. NPS has proposed submitting similar findings on the rest of the 15 plants unless the state develops a long-term strategy for protecting Shenandoah from air pollution.

The plants would worsen existing problems at Shenandoah. A 1985 hearing held by Representative Bruce Vento's (D-Minn.) national parks subcommittee found serious air and water pollution there. This summer the park issued health advisories to hikers.

PACKAGE OF KEY PARK BILLS MAKES PROGRESS

Congress combined several important national park bills into one package this fall. At press time, backers of the legislation hoped it would pass both chambers of Congress before the session's scheduled end in October.

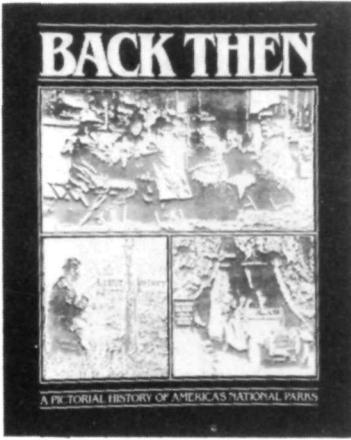
The bills, if passed, would fund studies of Civil War and other historic sites nationwide for possible addition to the park system; provide for studies of current park boundaries to see how well parks are protected; and reauthorize the National Parks Advisory Board, which advises the Secretary of Interior.

MARKUP

KEY PARK LEGISLATION*

Bill	Purpose	Status
Vicksburg S. 2437	Expand the park to include a historic canal, dug in a Union attempt to reverse the Mississippi and bypass Confederate batteries. NPCA supports.	Passed the Senate in July and the House in October; now awaits the president's signature.
Saguaro National Monument H. R. 5675	Expand Saguaro by 3,000 acres to protect a dense, healthy stand of the disappearing cacti. NPCA supports.	Passed the House in October.
Glen Canyon Dam H. R. 4498, S. 2807	Require Interior to stabilize flow from dam within 90 days, to minimize damage to Grand Canyon. NPCA supports.	H. R. 4498 passed the House in July; S. 2807 awaits full Senate action as part of a larger package.
Yellowstone wolf re-introduction H. R. 2786, S. 2674	H. R. 2786 requires EIS on reintroduction by December 1991, followed by release of grey wolves in park. S. 2674 allows reintroduction under certain conditions NPCA supports H. R. 2786.	H. R. 2786 has been in subcommittee since 1989; the Senate Energy Committee held a hearing on S. 2674 in September.
Weir Farm S. 2059	Designate Connecticut's Weir Farm, center of American Impressionism, as national historic site. NPCA supports.	Passed the Senate in June and the House in October. The House-passed version awaits action by the full Senate.
Underground RR H. R. 3863	Examines remaining Underground Railroad stations for designation as historic trail. NPCA supports.	Passed the House in June; awaits vote on the Senate floor.
Glorieta battlefield H. R. 4090, S. 2165	Establish New Mexico Civil War battle site as Glorieta National Battlefield. NPCA supports.	H. R. 4090 passed the House in October and is pending on the Senate floor.
Bryce Canyon H. R. 3058	Trade strip-mining leases near Bryce for credit toward leases elsewhere in Utah. NPCA supports.	Passed the House in June; now before the Senate Energy Committee.
Mary McLeod Bethune house H. R. 5084	Add the educator and leader's Washington, D.C. house, and its archives on African-American women's history, to the park system. NPCA supports.	H. R. 5084 passed the House, and was approved by the Senate Energy Committee, in July. It awaits full Senate action.

* NPCA is currently working on more than 80 bills.



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The national parks are the cornerstone of America's natural heritage. See how the parks looked "back then" before the invasion of concession stands, highways and armies of tourists. Parks like Yellowstone, Yosemite and Grand Canyon are revealed as pristine gems of natural beauty. Focusing primarily on the large western parks, the photographs were found in the archives of the Library of Congress. They are reproduced beautifully on high quality enamel paper.

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In August, S. 1770, sponsored by Senator James Jeffords (R-Vt.), came to the Senate floor. The bill calls for a one-year study of Shenandoah Valley Civil War sites. While the valley played a pivotal role in the war, none of its battlefields are part of the national park system. The pace of development between Richmond and Washington, D.C., makes the need for preservation urgent.

Senator Dale Bumpers (D-Ark.) amended the bill on the Senate floor to fund a comprehensive study of Civil War sites nationwide. The Senate passed the amended bill and sent it to Representative Bruce Vento's (D-Minn.) national parks subcommittee.

The subcommittee added provisions for a three-year NPS study to determine areas of American history inadequately represented in the park system and to recommend possible new park sites.

The subcommittee then added the contents to another important park bill. H.R. 2582 would re-authorize the National Parks Advisory Board, which counsels the Secretary of the Interior on national parks matters. It would also authorize the National Parks Advisory Council, on which board members may serve after their four-year terms.

Finally, Vento's subcommittee added the text of a bill passed earlier by the House Interior Committee. The bill calls on NPS to study park boundaries, beginning with the 25 parks it considers highest priority, to recommend any boundary changes necessary to protect the parks, and to develop criteria for future boundary studies.

After approval by the House Interior Committee, H.R. 2582 passed the House in October. The Senate has yet to act on the House version of the bill.

BEAR HANDLING SEEN TO SHIFT AT YELLOWSTONE

The National Park Service has adopted a more aggressive strategy of trapping and relocating grizzly bears that appear near populated areas and roadsides in Yellowstone National Park.

While supporting Yellowstone National Park in its effort to keep visitors



ERWIN AND PEGGY BAUER

Attracted by food, grizzly bears soon become habituated to human-use areas.

safe from problem bears, NPCA is encouraging park officials to examine the reasons why grizzlies are entering populated areas of the park.

In the past, park managers would relocate a bear only if the animal demonstrated dangerous behavior such as taking human food or charging a car.

NPS has stated that the new strategy is necessary to prevent bears who show little fear of humans from getting into trouble, said Terri Martin, NPCA Rocky Mountain regional director. NPCA and other conservationists, however, say that moving bears is merely a short-term response to a long-term problem.

"The real issue is increased protection of the grizzly's shrinking habitat," said Martin. "As grizzly bear numbers increase toward a more healthy population, bears are more likely to be forced into areas near human development in the park. These developments encroach on bear habitat. NPS needs to look at ways to manage people as well as bears."

Conservationists have suggested, for example, that NPS consider postponing the opening date of Lake Lodge and Bridge Bay campgrounds until trout finish spawning in nearby streams and bears leave the area each spring.

NPS has not indicated whether or not it will seriously consider this idea, however, which is bound to be controversial, Martin said.

Last year more than 2.5 million people visited Yellowstone, one of the na-

tion's most popular national parks. Park managers removed one bear from the park and relocated to other areas of the ecosystem two bears who were feeding near human-use areas, Martin said.

Joan Anzelmo, a spokeswoman for Yellowstone, said the park does not have an established policy to relocate and remove problem bears. "We deal with each bear on a case-by-case basis," Anzelmo said.

Yellowstone officials advise visitors to use extreme caution when they observe or encounter wildlife in Yellowstone. "Our concerns are for the safety of park visitors and protection of Yellowstone's wildlife and the habitat which supports it," said Yellowstone Superintendent Bob Barbee in a press release. "Occasionally, that means that we must take management action which requires moving an animal from a highly visible, heavily visited area into a more remote portion of the park."

NPS TO MOVE BUILDINGS FROM YOSEMITE VALLEY

National Park Service Director James Ridenour announced plans this summer to remove some NPS buildings from Yosemite National Park's central valley. The move partially fulfills a recommendation of the park's landmark 1980 general management plan, which remains largely unrealized.

Ridenour said that in 1992 the Park Service plans to begin removing its maintenance and warehouse operations from Yosemite Valley. NPS will construct new facilities in the nearby park town of El Portal, California.

"We anticipate," Ridenour said, "that the El Portal construction, and restoration of approximately five acres in Yosemite Valley, will be completed in 1996, based on the availability of funds." He estimated a cost of \$40 million.

Ridenour said as many as 20 buildings, including maintenance facilities for the park's 350 vehicles, and some employee housing would be moved. Much of the area in which the buildings are located will return to its natural black-oak woodland state, he said.

Russ Butcher, NPCA Pacific Southwest regional director, called Ridenour's move "one of the most dramatic steps in the last ten years to fulfill the mandates of the general management plan."

Howard Chapman, former NPS western regional director, said, "They've decided to throw a lot of money at this, but it still leaves the biggest problem, automobiles in the park, with nothing done." The 1980 plan identified private automobile traffic as Yosemite's major problem, creating pollution and traffic jams.

Chapman said if the Park Service is to solve these problems by expanding public transportation, as the plan recommends, it needs to allow space for servicing shuttle buses as it builds new maintenance facilities.

"With the limited amount of money the federal government has, they ought to get the biggest bang for the buck. The thing that can make the biggest change is moving the automobile out," Chapman commented.

Ridenour's announcement nonetheless signals some relief ahead for Yosemite and its badly clogged central valley. The park has seen visitor numbers rise sharply in recent decades, with a 37 percent increase in the last ten years alone.

Inappropriate development has also plagued Yosemite Valley for most of this century. Heavy automobile traffic, motels, gift shops, liquor stores, and a video outlet have made the once-pristine valley resemble a tourist town.

The 1980 general management plan sought to control such encroachments upon the park. The plan set goals including expanded shuttle service, a 17-percent cut in overnight accommodations in the valley, and removal of nonessential NPS and concessioner buildings.

While some improvements have been made in the last ten years, a 1989 NPS progress report revealed that the plan's goals remain largely unmet.

Butcher said that NPCA expects more progress when a review of NPS and concessioner housing within the park is completed in 1991. The 1980 plan called for a study to determine what housing needed to remain within the park and alternatives for placing housing outside park boundaries.

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NPS BUDGET MAY SEE INCREASES FOR 1991

In October, the Department of Interior budget bill for fiscal 1991 began moving through Congress again, after months of deadlocked federal budget talks. While the bill in its current form boosts National Park Service funding, at this writing its final provisions were undecided.

The bill originated in the House Subcommittee on Interior Appropriations. The subcommittee recommended a total NPS budget of approximately \$1.3 billion, a \$226 million increase over 1990. The Bush administration had sought a \$48 million funding cut.

In some cases, the subcommittee and the administration acted similarly. For NPS operations overall, the administration proposed a \$63 million increase, which the subcommittee boosted by another \$43 million. It added \$7 million to a \$29 million increase for maintenance.

The subcommittee preserved the administration's \$13 million increase for resource management. Resource management, NPS's basic conservation, research, and historic preservation work, is a high priority for Director James Ridenour.

Elsewhere, the subcommittee set increases where the administration sought reductions. Construction projects, traditionally favored by Congress, got \$28 million more, not \$98 million less.

Conservationists are especially encouraged by the subcommittee's \$35 million increase for land acquisition, over the administration's \$9 million increase. At present, there is a \$2 billion backlog of designated parkland that has yet to be purchased.

While the subcommittee passed the bill in July, the House Appropriations Committee did not take it up until early October, roughly ten weeks behind the usual schedule. The full committee, as is standard procedure, changed the bill little, and sent it to the House floor.

From there, the bill still must go to Senate subcommittee, full committee, and the floor, then to a conference committee to reconcile any differences with the House version. The budget that emerges must be approved by both chambers and signed by the president.

BATTLEFIELD TO HONOR NATIVE AMERICANS

The House of Representatives voted in September to erect a memorial at Custer Battlefield National Monument to the Native Americans who fought in the Battle of the Little Bighorn. A companion bill has been introduced in the Senate.

"Custer's last stand," called by Native Americans the Battle of Greasy Grass Creek, took place on June 25, 1876. Lt. Col. George A. Custer led a U.S. Army attack on a Sioux and Cheyenne village. In the defense, led by Sitting Bull and Crazy Horse, the soldiers were outnumbered and none survived.

While the battle was an Indian victory, the outrage it caused among white Americans accelerated the war for the Great Plains and hastened its outcome.

Five years later, the government installed a monument to those killed on the U.S. Army side. In modern times, with impartial interpretation of the Indian wars more prevalent, support has grown for a memorial to the Native Americans who fought in the battle.

During a 1988 rally to mark the battle's 112th anniversary, Sioux and Chey-

enne participants placed next to the existing monument a plaque commemorating "our Indian patriots who fought and defeated the U.S. cavalry." That summer, a survey found visitors overwhelmingly supported the idea of a permanent memorial.

"It's overdue," said Superintendent Barbara Booher, noting that Native Americans have advocated such a memorial for more than 60 years. "It gives the Indian participation equal recognition, which it never had before."

The legislation directs the Department of Interior and the park's Native American advisory committee to select a site for the memorial and to hold a design competition similar to that held for the Vietnam Veterans Memorial.

In testimony before Congress, NPCA and Native American groups recommended changing the name of the park to Little Bighorn National Battlefield. Bruce Craig, NPCA cultural resources program manager, noted Custer is the only park battlefield named after a commander rather than the location of the battle itself. "Rename this area so that it reflects an impartial recognition of the area's importance," Craig said.

The artist Red Horse was a witness to the Battle of Greasy Grass Creek, in which Custer's U.S. Army troops attacked and were defeated by the Sioux and Cheyenne.



RED HORSE. COURTESY OF THE SMITHSONIAN

NPCA SEEKS TO BLOCK PARK SNOWMOBILE TRAIL

NPCA is pursuing a lawsuit against the Department of Interior and the National Park Service, alleging that a snowmobile trail planned for Voyageurs National Park in Minnesota would violate the 1964 Wilderness Act and NPS policy.

The Park Service wants to cut a 30-mile snowmobile trail through the park's undeveloped Kabetogama Peninsula. The peninsula, roughly half the park's land mass, is under consideration for status as federally protected wilderness.

In the suit filed in a Minnesota district court, NPCA and the Voyageurs Region National Park Association argue Interior did not make legally required recommendations on wilderness status for the park. The suit also argues both current snowmobile use in the park and plans for the trail violate NPS snowmobile policy and wilderness protections.

National park land designated as wilderness receives the highest degree of protection available. The Wilderness Act and department regulations require the Secretary of Interior to review "every roadless area of five thousand contiguous acres or more in the national parks for wilderness designation," then submit recommendations to the president.

Interior ignored a 1979 deadline for completing a wilderness review of the Kabetogama Peninsula, a 100,000-acre roadless area. In early 1983, Congress demanded the recommendation and President Reagan's decision by that June.

The Park Service recommended that more than 80,000 acres of the park, including most of the Kabetogama Peninsula, be designated as wilderness. It submitted the proposal to then-Interior Secretary James Watt. Watt instead told NPS to recommend no wilderness for Voyageurs. It complied but did not come up with any supporting evidence for this new recommendation, which was never submitted to Reagan.

According to Dick Frost, assistant superintendent at Voyageurs, a wilderness recommendation for the park will be forthcoming. "The decision has been that, because we are still not in compliance with the law that has required it,

although through no fault of our own, we need to take the proposal we did prepare in 1983, bring it up to date, and submit a wilderness proposal," he said.

"We will modify our trail plan to reflect whatever the wilderness decisions are," Frost stated. He expects a completed proposal in about 18 months. In the meantime, the suit alleges Interior has ignored its legal responsibility to make wilderness recommendations.

The suit also challenges NPS approval of current snowmobile use at Voyageurs and of the proposed trail. NPS policy permitting snowmobiling only on lakes and roads used by motor vehicles in other seasons is not enforced on the peninsula at present.

This failure to enforce policy also contradicts wilderness protections, which specify that in protected areas "there shall be no temporary road, no use of motor vehicles . . . no other form of mechanical transport, and no structure or installation within any such area." Under Park Service policy, these protections are also applied to areas under consideration for wilderness designation, such as the Kabetogama Peninsula.

NPS Director James Ridenour had to waive both these protections and NPS snowmobile policy to grant permission for a trail to be built solely for snowmobile use in a potential wilderness area.

NPS would remove more than 50 acres of vegetation from the peninsula to construct the trail and would place two small buildings along it. A temporary trail has been in use on the peninsula since last winter. No date has been set for construction of a permanent trail, which requires approval from Congress.

The suit argues the trail and related development would reduce the suitability of the peninsula for wilderness status. Conservationists also say the trail is unnecessary, a hindrance to other winter activities, and detrimental to the ecology of the peninsula, which is habitat for the threatened grey wolf.

Voyageurs preserves a 220,000-acre area of more than 30 interconnected lakes surrounded by forest. The park is named for the French-Canadian fur traders who paddled the waters between Montreal and the Canadian Northwest.

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- Bloomsbury Review



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EXPANSION PROPOSED FOR SAGUARO

The discovery of a hidden stand of healthy saguaro cactus by NPCA's Pacific Southwest regional director may result in a 3,500-acre expansion for Saguaro National Monument.

While touring the Rocking K Ranch in the spring of 1988, Russ Butcher came upon a small hidden valley up against the

southern boundary of the monument that was slated for housing development. Known as Deer Camp Creek valley, it contains a dense stand of healthy, multi-aged saguaros. Because the monument's saguaros are inexplicably declining, Butcher immediately recognized the need to preserve this stand. The monument's Rincon saguaro stand has been reduced by more than 50 percent since the late 1930s, and scientists predict that

the remaining mature saguaros will all be gone by the year 2000.

In addition, the monument does not have a complete age representation of the cactus. According to Saguaro Superintendent Bill Paleck, the Deer Camp stand equals or exceeds any stand in the monument today.

Butcher subsequently met with the president of Rocking K Development, and discussions began on acquisition.

In a series of negotiating sessions including landowners, county and state officials, local environmentalists, NPCA, and other conservation groups, proposed acquisition boundaries were drawn. The approximately 3,500 acres of Sonoran Desert proposed for addition is comprised of about 1,800 acres of Rocking K land plus the adjoining X9 Ranch and some state and other private land. All parties have expressed willingness to sell, Butcher said.

The Pima County Board of Supervisors endorsed the proposal this summer, and representatives Morris K. Udall (D-Ariz.) and Jim Kolbe (R-Ariz.) and Senator John McCain (R-Ariz.) introduced legislation in late September.

The Department of the Interior has said the proposal "affords an opportunity to explore this option" but has asked for a study first.

"There's already been a highly credible study done by an environmental consulting firm," Butcher said. "It is fiscally irresponsible to spend taxpayers' money on a redundant study."



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NPCA CONTESTS AIRPORT NEAR GLEN CANYON

NPCA and other conservation groups filed two lawsuits in October challenging federal decisions to approve a new airport immediately adjacent to Glen Canyon National Recreation Area.

One suit contests the Federal Aviation Administration's (FAA) decision to approve and fund construction of the airport, while the other contests the Bureau of Land Management's (BLM) decision to transfer 380 acres of land to San Juan County, Utah, for the project.

Legal action came after FAA ignored

objections filed by NPCA and after BLM rejected a similar protest. The protest had challenged BLM's decision to transfer the land.

"An airport, especially at the scale proposed, is simply not needed here," said Terri Martin, NPCA Rocky Mountain regional director. "Furthermore, silence, solitude, and the ability to get away from the grinding and growling of modern machinery is a major part of what draws people to the area. The airport will significantly degrade visitor enjoyment of Glen Canyon by increasing noise intrusions from aircraft overflight."

In its environmental impact statement for the project, FAA itself expected general aviation operations in the area to increase an estimated 100 percent by the year 2007 if the new airport is built.

The proposed airport is designed to accommodate aircraft with as many as ten seats, like those used in commercial air service. Plans include a 5,700-foot runway, terminal, rotating beacon, hangars, facilities for fuel storage and sales, and supporting septic, water, and power systems.

FAA asserts that the airport is needed to replace an existing 3,800-foot gravel airstrip in the park's Halls Crossing area, used primarily for NPS administrative purposes. NPCA, however, questions the greatly expanded size of the replacement airport and maintains that an existing airstrip near the park's Bullfrog marina can adequately serve the area. The Bullfrog airstrip is located only five miles across Lake Powell from Halls Crossing. A ferry service connects the two.

"Only three percent of the visitors to the Bullfrog/Halls Crossing area arrive by aircraft and FAA's own environmental impact statement says a new airport won't change that," said Martin. "We believe that NPS administrative and visitor access needs can be adequately served by the existing network of modern paved highways, the ferry, and the airstrip at Bullfrog."

San Juan County, the project sponsor, had originally proposed the new airport as part of a larger plan to privatize part of Glen Canyon NRA for commercial resort development. Public outcry defeated the plans, but the county has con-



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NPCA-1

tinued to push for an airport on nearby BLM lands. The prospect of sharing construction and maintenance costs, however, could erode the county's long-term support for the project.

By law, FAA can approve an airport in or adjacent to a park only if it demonstrates that there are "no feasible or prudent alternatives" and if it has undertaken "all possible planning to minimize harm." FAA maintains that the proposed airport will not cause undue environmental damage to Glen Canyon.

Both NPS and the Environmental Protection Agency, however, have said that the proposed airport will significantly increase noise impacts at the park. Both agencies have specifically demanded that, at a minimum, FAA require mandatory noise or overflight restrictions, as well as noise monitoring, to "minimize harm" to the park as required by law. FAA, however, has refused these requests.

BILL ADDS HISTORIC SITES TO TUMACACORI

Legislation passed by Congress this summer adds Spanish mission ruins from the 17th and 18th centuries to Tumacacori National Monument in southern Arizona and redesignates the site Tumacacori National Historical Park.

The bill passed the House in March and the Senate in July. President Bush signed it into law this fall.

As part of the Spanish colonization effort, Jesuit missionaries came to what is now Arizona and northern Mexico. Father Eusebio Kino founded a series of missions there between 1667 and 1711.

When Kino established Los Santos Angeles de Guevavi, one of the two new sites, it was the first Spanish mission in modern-day Arizona. Guevavi remains the only Jesuit *cabecera*, or regional head church, built in the U.S. Kino built the other two park sites, San Jose de

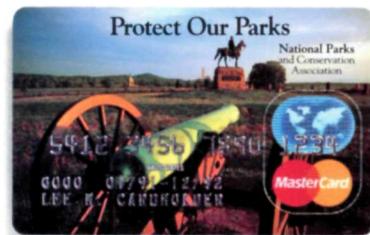
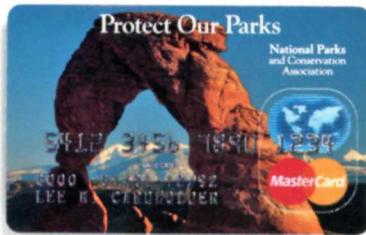
Tumacacori and Calabazas, as wayside chapels without resident missionaries.

In 1751, local Pima Indians revolted against Spanish domination but were quickly suppressed. After the revolt, Tumacacori became the *cabecera*, and the Spanish king replaced Jesuit missionaries with Franciscans. The Franciscans constructed their own churches over the structures at Tumacacori and Calabazas, and Guevavi was abandoned altogether in 1773 after frequent Apache raids.

Bruce Craig, NPCA cultural resources program manager, testified before Congress that the new sites will enable the Park Service to more fully present the story of Spanish colonization. "Tumacacori focuses on the Spanish missionization effort under the Franciscans," he said. "Mission Guevavi presents the opportunity to focus on the Jesuit missionization efforts and the important and too often neglected aspect of this colonial era, the Indian revolts."

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The Rebirth of Ellis Island

**THE GATEWAY OF GENERATIONS
REOPENS ITS DOORS**

BY F. ROSS HOLLAND, JR.

IT IS THE NATURE of historic preservation to destroy a unique quality of old structures—the emotional appeal of moldering ruins. Certainly, that has happened at the old Ellis Island immigration station now that the administrative building, the most historically significant structure on the island and in the top five nationally, has been restored. This structure represents immigration, an overwhelmingly important theme of American history.

Ellis Island was the first stop for millions of immigrants between 1892 and 1924. On one day—April 17, 1907—11,747 immigrants were processed there. The first immigration station was built there in 1892. Five years later a fire destroyed the original wooden buildings, and in 1900, the present Beaux-Arts building, with its four graceful copper domes, was built.

My first encounter with Ellis Island, part of the Statue of Liberty National Monument, was in 1976 when several of us from the National Park Service gathered in the main administrative building to determine how to spend a recent appropriation of \$1 million. The Park Service was directed by Congress to use this money to open the island and building to the public.

The elaborate building reflected nearly 25 years of neglect, vandalism,

and theft. Fallen plaster from walls and ceilings and litter were everywhere we walked, dangling pieces of plaster were waiting for the next rainfall to further weaken their hold, and virtually every window in the building had broken panes. Furniture in various stages of disrepair was scattered about the rooms, and toilets and washbasins were filthy and rusting. White ceramic tiles littered the floors near walls, and bricks had fallen away from columns, exposing broken iron drain pipes. Two barn owls flying about the Registry Room illustrated to us the openness of the building.

Despite the derelict character of the

It was this feeling that I came to think of as the ghost of Ellis Island.

structure, there was a power to it that left one with a sense of awe. One could not walk through the building without feeling, intuitively, that here had occurred a great human drama. It was this feeling that I came to think of as the ghost of Ellis Island.

The necessary decisions were made, and soon clean-up and stabilization work began on the 230,000-square-foot

administrative building. Safe routes for visitors were defined, and, where necessary, wooden walkways with plywood ceilings were erected. This plywood protection was deemed a better solution than supplying each visitor with a hardhat. In 1976, the island was opened to the public. Thereafter, the route was inspected regularly.

For some reason, relatively few people visited Ellis Island between its opening and 1984, when it was closed for the major rehabilitation from which it recently emerged. For those who did come, it was a rare and emotional experience. Many of them had parents or grandparents who had come through the old immigration station.

The rangers reported that tears in the eyes of visitors were a common sight. I am sure these visitors felt the “ghost”—that collective force of energy left by the millions upon millions of people who had passed through Ellis Island.

Now the plaster piles have been cleaned up, brick stanchions have been repaired and restored, tiles replaced, and the floors refurbished. All the walls and cracks and crevices are covered up with paint and varnish. It is all clean, freshly painted, and orderly. And the sense of awe—the ghost—is gone.

The restoration is not wrong; rather, it is technically correct.

The million or so visitors to the historic building each year can, among many things, see a fine film on immigration through Ellis Island and view exhib-

its in the east wing. They can go to the old railroad ticket office and waiting room and see the “Peopling of America” exhibit that traces immigration both before and after Ellis Island. The “Treasures from Home” exhibit showcases almost 900 artifacts that immigrants brought from home, including clothes, toys, and mementos of family and friends left behind.

Visitors, much like the immigrants, can climb the stairs to the Registry Room, where immigrants waited and were examined by doctors and immigration inspectors. Doctors determined in less than ten seconds whether an immigrant passed or needed further examination. Immigrants with possible health problems were marked with chalk on their clothing. The discovery of trachoma, a contagious eye disease, meant automatic rejection. Inspectors judged the immigrants by asking them questions, such as: Do you have any skills? Do you have a job waiting for you here? Are you an anarchist? Are you a polygamist?

The Registry Room is a magnificent space with a high vaulted ceiling covered with tile laid by the Guastavinos, a Spanish immigrant family. The work was done so well that less than 20 of the 28,800 tiles had to be replaced during the restoration.

Visitors can tour the restored Hearing Room, where a young Fiorello LaGuardia served as a translator, and the refurbished medical examination room. They can see the money exchange office, which became such a scandalous operation that it brought the wrath of Theodore Roosevelt upon it, and the Social Services office where volunteer organizations from the Daughters of the American Revolution to the Hebrew Immigrant Aid Society gave advice—and sometimes even money out of their own pockets—to the immigrants.

To delve deeper into Ellis Island's story, visitors can listen to tapes of interviews with people who paused at Ellis Island on their way to a new life.

The south side of the island has not been restored, though it has been cleared of the unwanted jungle that had grown around it, harboring wharf rats.

The hospital and the contagious disease ward are on this side, as well as the commissioner's house and the recreation

building, all of which still stand. Only part of the hospital has been minimally refurbished for use as administrative offices. Fortunately, few immigrants of the estimated 12 million to 15 million who passed through Ellis Island saw this side.

There was an early effort to develop the south side of the island and preserve these buildings. Just before the fund-raising project started, the National Park Service began a search for a developer.

Though a nonprofit company was ultimately found to restore some of the

tion Chairman Lee Iacocca, was enormously successful. It is extremely doubtful that the old administrative building would be in the condition it is in today without that fund-raising effort, nor would there be a museum or a film telling the immigration story.

Though the fund-raising work was exceedingly important, one should not forget the enormous volunteer effort that went into the restoration. A group of New York businessmen, as members of the Restoration Coordinating Committee, voluntarily acted as an advisory body in Ellis Island's restoration.

The History Committee, composed of many of the nation's most prominent immigration and ethnic historians, played a key role in the development and shaping of the film and the museum. All of these historians volunteered their time to the point, at times, of impinging upon their academic activities and responsibilities.

In September the restored administrative building and museum were dedicated as the Ellis Island Museum of Immigration, one of the largest strictly historical museums in the country. For the first

time the American public has a site to visit that will tell them something of their origins and how their ancestors helped shape, and in the process were shaped by, this young country. Visitors will not find the "ghost" there anymore, but they will have a safe place to visit and the opportunity to learn about that all-important, and on-going, theme of American history—immigration.

F. Ross Holland, Jr., is an NPCA trustee and former associate director of cultural resources management for the National Park Service. After retiring from the Park Service, he was director of restoration and preservation and served as assistant to the president for the Statue of Liberty—Ellis Island Foundation.



buildings and use them as a conference center, conflict and a change in the tax laws thwarted that plan. Most of the structures that would have benefited from this effort will most likely remain in their moldering state for now and in the end will perhaps be taken down.

Historic preservation is expensive, especially when dealing with large, institutional structures. At Ellis Island, renovation of the main building with its museum and interpretive programs cost more than \$140 million. And it was all paid for by donations from individuals, civic and ethnic groups, and corporations, not by taxes.

The fund-raising effort, conducted by the Statue of Liberty—Ellis Island Foundation and headed by Chrysler Corpora-



The Songbird Connection

As bird populations decline,
national parks are islands of
protection along migratory routes.

by Stephen Nash

SPRING CREEK emerges quietly from some generous subterranean source, in a pond on the margins of Minnesota's St. Croix River Valley. Then the water picks up speed as it tumbles over an old dam, and you begin to hear it. A pleasant sound, perhaps, but disturbing for research zoologist Richard Weisbrod. So is the lilting clarity of the occasional birdsong.

"I was raised in this part of the world," he says. "Twenty years ago, you couldn't distinguish a Baltimore oriole from an ovenbird. It was a cacophony of avian vocalizations. Now, at mid-morning in the middle of May, you can even hear the stream. And there are no thrushes. There ought to be all sorts of thrushes here."

The dozens of bird species that migrate to or through the St. Croix National Scenic Riverway from Latin America

The wood thrush, though far from endangered, is becoming scarce in places where it was once abundant.

each spring should be thriving. Part of the national park system, the corridor offers 252 miles of protected habitat.

But Weisbrod's lament is not just misplaced nostalgia. Reports of the decline or disappearance of migratory bird populations have been accumulating from widely scattered areas across the country. The phenomenon is not restricted to shore and wetland species and majestic birds of prey, many of them recognized as rare or threatened for decades. Now the species reported as scarce or missing from areas where they were formerly abundant are songbirds, familiar even to the casual backyard observer: orioles, tanagers, warblers, flycatchers, redstarts.

Several factors have made scientists cautious about sounding an alarm, however, and some still call the evidence inconclusive. For one thing, bird populations can change dramatically from year to year, even under normal conditions. Without reliable, continuous data col-

MICHAEL HORAK



BATES LITTLEHALES

The North American Breeding Bird Survey (BBS) confirmed that the decline of migrating songbirds is real, abnormal, and widespread. Two cases in point: populations of the chestnut-sided warbler (above) are down nearly 30 percent since 1978, while the indigo bunting (right) has experienced a decline of six percent in the same period.



BATES LITTLEHALES

lected over many years—20 years is an accepted minimum—who could say whether the reported declines were within the realm of natural variation?

But new research has led to a growing scientific consensus: population declines among many migratory species are real, abnormal, severe, and widespread.

At a recent symposium, Clemson University ornithologist Sidney Gauthreaux reported on his preliminary comparison of radar images of the massive bird migrations across the Gulf of Mexico. The numbers staggered some of his colleagues: the density of the flocks had dropped by half over the past 20 years.

A recent analysis of data collected in the North American Breeding Bird Survey (BBS) shows declines of 6 to 78 percent among a score of migrant land bird species, just from 1978 to 1987. But to talk about extinctions in these species is premature, according to U.S. Fish and Wildlife Service ornithologist Sam

Droege, one of the study's authors. "The gist of our paper is to say, 'Watch out—where will the bottom line be? We don't know where the situation will end.'"

Droege and his co-authors say their data strongly implicate the rapid deforestation of Mexico and Central and South America—crucial habitat for many migrants.

Other scientists argue that forest fragmentation in our own country is a more significant factor in the declines, partly because some birds will breed only in deep forests. Fragmented woods also afford far less protection from predators and from parasitic birds that prefer forest edges.

Before proposing action, scientists would prefer to sort out the relative importance of these environmental changes and track population shifts among a long list of migrant species, especially those most threatened.

That process is still in its infancy, how-

ever, and time may be short. The BBS, so far the best source of data, is "wide, but shallow," says Purdue ecologist Kerry Rabenold. It consists of bird counts made by volunteers who have driven more than 2,000 different prescribed routes around the U. S. and Canada each summer since 1966.

"I distrust its ability to detect declines in species we're most concerned about," he says. "It's a roadside survey, so it wouldn't get at deep-forest species, which are in the greatest peril. And the survey can't cope, statistically, with the low numbers of rarer species to see how bad the declines really are."

AT GREAT SMOKY MOUNTAINS National Park, Rabenold and a team of students rolled out of bed at 4:30 a.m. each day during the 1990 breeding season to cross-check the accuracy of the BBS with other techniques and to look for ways that it might be



JEFF FOOTT



ROBERT C. SIMPSON/TOM STACK & ASSOCIATES

As habitats are fragmented or destroyed, parks become key to the survival of migrating songbirds such as the Canada warbler (above). A yellow warbler feeds its "adoptive" offspring, a cowbird chick (left), as the smaller warbler chicks struggle to survive. The speckled eggs of a cowbird (below left) infiltrate a yellow-shouldered blackbird nest.

modified for use in the park system.

They are part of a grassroots effort called the Migratory Bird Watch, slowly growing within the Park Service, whose organizers hope to build an international monitoring and conservation network. Administrators in each park have been invited to set up the essential long-term bird counts and to establish symbolic "linkages" with other parks to focus attention on the migrants.

The "linkages" are an interpretive device to remind park visitors of the interdependence of the hemisphere's natural preserves. Blackpoll warblers and eastern wood-pewees, for example, breed in Acadia National Park, Maine, and pass through the Everglades during their migratory cycles. The olive-sided flycatcher and Townsend's warbler link Mount Rainier in Washington and Arizona's Chiricahua National Monument, which they pass through on their way south for the winter. For the long-distance mi-



ANNE HEIMANN

grants, of course, these connections extend on southward, to the rest of the hemisphere.

"I think the key is raising awareness among the American public that protecting and preserving those birds, which we take for granted, is dependent on international cooperation," says Richard Cunningham, chief interpreter for the Park Service's western region.

So far, administrators at about a dozen national parks have incorporated the Migratory Bird Watch into their research and interpretive programs. But a proposal to extend it to all suitable national park areas, and an initiative to foster cooperative efforts in Latin American countries, has attracted scant support among decision-makers in the upper echelons of the park system.

Though their land mass is too tiny to afford real protection, the national parks have a crucial role to play in future bird research, scientists say. The parks pro-

Silent Spring

ROB CURTIS



Olive-sided flycatcher

Many songbird species, once abundant, are now becoming scarce. Data collected in the North American Breeding Bird Survey (BBS) measured the decline of a number of songbird species between 1978 and 1987. Here's a sampling.

Bay-breasted warbler	-78%
Tennessee warbler	-67%
Black-billed cuckoo	-42%
Olive-sided flycatcher	-41%
Yellow-billed cuckoo	-36%
Rose-breasted grosbeak	-31%
Wood thrush	-30%
Chestnut-sided warbler	-29%
Northern oriole	-23%
Canada warbler	-21%
Veery	-19%
Northern parula	-17%
Common yellowthroat	-15%
Acadian flycatcher	-11%
Scarlet tanager	-10%
White-eyed vireo	-10%
Ovenbird	- 8%
Indigo bunting	- 6%

SOURCE: CHANDLER ROBBINS, JOHN SAUER, RUSSELL GREENBERG, AND SAM DROEGE, OFFICE OF MIGRATORY BIRD MANAGEMENT, U.S. FISH AND WILDLIFE SERVICE.



The colorful western tanager breeds throughout the western U. S. and winters in Mexico and Central America.

vide a baseline for comparison with other, less protected areas—essential in attempts to explain what is happening to the migrants. Yet today very little is known about the size and health of bird populations in our national parks.

"The Fish and Wildlife Service is getting religion about doing that kind of basic monitoring," Rabenold says, "and the Park Service is, too, to a lesser degree."

ABOUT HALF THE BIRDS in the national parks are long-distance migrants. Of some 650 bird species that breed in North America, Cunningham points out, 332 migrate beyond the boundaries of the U. S. Though we may think of them as "our birds," they spend two-thirds of their lives on the migratory journey and on their southern wintering grounds. Migration routes can stretch thousands of miles, from Amazonia to the Arctic, but the largest numbers of birds winter in Central America and the Caribbean islands.

The wood thrush, for example, inhabits lowland rainforests from southern Mexico to Panama during the winter

season. Its breeding range extends roughly across the eastern half of the U. S. Robin-sized, feathered mostly in shades of brown, the wood thrush is not one of the more eye-catching migrants, but its song is among the sweetest. "Whenever a man hears it, he is young, and Nature is in her spring," Thoreau wrote. "Wherever he hears it, it is a new world and a free country, and the gates of heaven are not shut against him."

Wood thrush populations are falling fast—about 30 percent in just ten years, according to the BBS study.

Smithsonian biologist John Rappole sees thrushes during spring and summer research in Virginia's Shenandoah National Park, and, during the winter, in Mexico's Tuxtla Mountains Biosphere Preserve. That nobly named area, however, is a preserve only on paper. "We started work there in 1973," he says. "Since that time the amount of forest has declined from 30 percent to 15 percent, replaced by pasture. There are no wood thrushes in pasture areas."

Population pressure in Mexico and throughout Latin America drives subsis-

tence farmers farther and farther into the rainforest, where they log areas unsuited for farming. "You're talking about slopes of 45 degrees, rainfall of 160 inches a year. They get two years of use out of a field. There isn't much forest left; at some point they're going to run out, and they're still going to be facing the same problems. It's a situation that can't go on." Furthermore, once cleared, rainforests do not regenerate. Current estimates of the rate of destruction of tropical forests throughout Latin America range from one to 3.5 percent per year and possibly higher.

Neither is the wood thrush's summer habitat, north of the border, secure against threats. Cowbird populations have reportedly swollen in many areas, including the Rocky Mountains, where larger forests have been split up into smaller patches. An edge-dwelling parasite, the cowbird lays eggs in the nests of other species, sometimes destroying the eggs of the host bird. Any survivors face tough competition, as the big cowbird chicks usually hatch earlier, grow faster, and eat more of the food provided by their "adoptive" parents.

In the fragmented woods around Lake Shelbyville, Illinois, an important regional breeding area for songbirds, one recent study found that cowbirds had parasitized 80 percent of the nests of all other species. In wood thrush nests, cowbird eggs outnumbered thrush eggs four to one. The thrushes were doing little but raising cowbirds, researcher Scott Robinson found.

National parks afford more protection, but Rappole's research shows how park management practices can alter the balance of survival for any species. Songbirds like the wood thrush, for example, breed in just the kind of greenery that is eaten by deer. In Shenandoah and many other national parks, Rappole says, deer populations are now about ten times their natural density. The timber wolves and mountain lions that kept deer populations in check before human settlement have not been reintroduced. "The deer just clean out the understory," he says. "It looks, from the ground level to four feet, like somebody's gone through with clippers."

ROB CURTIS



TO AVOID PREDATORS or starvation, long-distance migrants depend on healthy ecosystems in two places, usually thousands of miles apart. But to call their situation "double jeopardy" leaves out the real drama of their survival.

"The experience that has moved me more than anything else," says Ted Simons, research biologist at Gulf Islands National Seashore, "has been watching these birds appear after they have flown 15 to 24 hours or more, non-stop, across the Gulf. They weigh only eight to 12 grams, and they have flown five or six hundred miles."

Some stumble aimlessly, so tired they are willing even to be picked up in human hands, he says. They are vivid against the white sand of the barrier islands, like hopping Christmas lights. "It's really spectacular to see these brightly colored birds—indigo buntings and blackburnian warblers, scarlet tanagers, yellow warblers—foraging, trying to build up their energy supply so they can continue migrating."

The birds stay from a couple of hours to a couple of weeks. Moving to the island's north side, they flutter uncertainly, as if making up their minds to leave. Then, airborne, they head north at 30 miles an hour or so, up along the Missis-

The Tennessee warbler's decline is one of the most severe, according to the BBS: 67 percent in just ten years.

sippi toward St. Croix River country, perhaps, or northeast to the Smokies, the Appalachians, or Canada.

"The period of migration, just from a survival standpoint, is very critical and very stressful, especially for the trans-Gulf migrants," Simons explains. "They have very little latitude, at that point, to continue or keep looking for suitable habitat. If they don't find it, they're in big trouble. They don't have the luxury to go on another couple of hundred miles."

There are only guesses as to how quickly stopover habitat may be disappearing within or south of our national borders, but few doubt that it is. The river forests of Texas are an important flyway, for instance, and they are falling fast, Rappole says.

"And just like musical chairs," the 1990 Gulf Island migration report notes, "there aren't enough places to go around . . . Remove this habitat and we pull an irreplaceable chair out from under millions of migrating birds whose stake in the game is survival."

Stephen Nash last wrote for National Parks on Triassic fossils.

Test Your Bird Brain

by John Pepin

BIRD MIGRATION has intrigued naturalists for centuries. In recent years, much has been learned about the annual flight between winter habitat and summer breeding grounds. Yet, how a bird finds its destination—perhaps halfway around the world—is one of nature's unanswered mysteries. To test your knowledge of bird migration, try the following quiz.

1. In addition to geese, what group of birds generally flies in V-formation, especially during migration?

- A. Swans
- B. Cranes
- C. Ducks
- D. All of the above

2. Benefits of migrating in flocks would include which of the following?

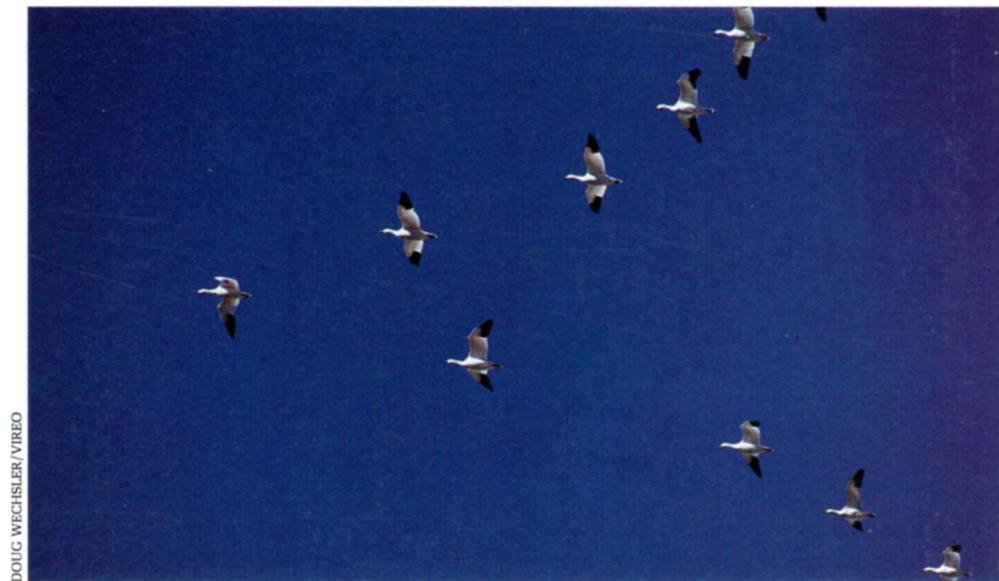
- A. Leadership of smartest bird
- B. Improved sense of direction
- C. Protection
- D. All of the above

3. Which bird species migrates the longest distance?

- A. Common loon
- B. Arctic tern
- C. Sandhill crane
- D. Baird's sandpiper

4. The endangered Kirtland's warbler spends its winters in:

- A. South America
- B. Michigan within its breeding grounds
- C. The Bahamas
- D. Central America and southern portion of Mexico



Lesser snow geese flying in V-formation. The configuration apparently affords additional lift, energy conservation, and reduced drag.

5. During periods of food shortage or extreme cold, some birds may exhibit strange behavior including:

- A. Hibernation
- B. Suicide
- C. Digestion of wood and plastic materials
- D. None of the above

6. The peregrine falcon is one of the avian world's fastest fliers. How far is the peregrine capable of flying in one 24-hour period?

- A. No more than 925 miles
- B. At least 1,350 miles
- C. At least 1,675 miles
- D. At least 2,000 miles

7. Migrating bird flocks generally consist of:

- A. A single species only
- B. A single species and age only
- C. A single species, age, and sex only
- D. Any or all of the above

8. The rarest, if not already extinct, migratory songbird of the U. S. is:

- A. Kirtland's warbler
- B. Bachman's warbler
- C. Golden-winged warbler
- D. Prothonotary warbler

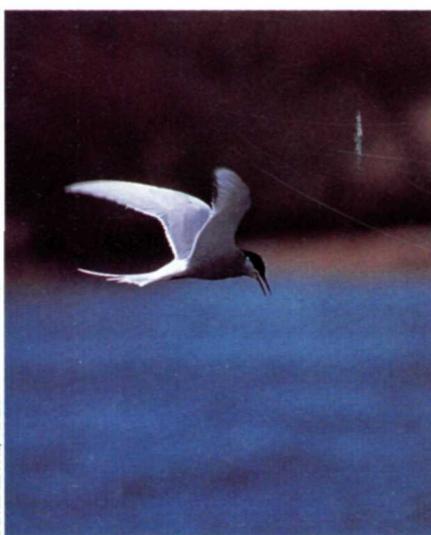
9. During migration, most birds generally fly at altitudes of:

- A. Above 40,000 feet
- B. 25-40,000 feet
- C. 10-25,000 feet
- D. Below 10,000 feet

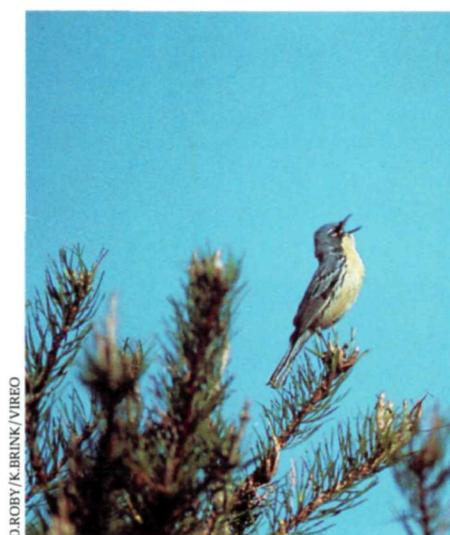
10. The physical condition of many migratory species in the days just prior to their departures may be characterized by:

- A. Periods of nocturnal unrest
- B. Hyperactivity
- C. Seizures
- D. None of the above

See answers on next page.



G.DRENEAUX/VIREO



D.ROBY/K.BRINK/VIREO

Answers

1. D. All of the above. Other examples of bird groups often exhibiting this flight behavior are pelicans, cormorants, godwits, ibises, gulls, and various shorebirds. It is generally believed that birds flying in this configuration behind the leader benefit from additional lift, energy conservation, and reduced drag.

2. Both B and C. Both the advantages of increased directional bearing and protection are offered to birds through flock migration behavior. The idea that the leader bird is wisest is easily dismissed by simple flock observation: the leader of the group is frequently changed.

3. B. The migration route of the Arctic tern takes the bird from Arctic summers, where it breeds, to Antarctic winters—covering distances as great as 11,000 miles one way. This fact allows the Arctic tern to spend more hours of its life in daylight than most any other animal.

4. C. The Kirtland's warbler winters in the Bahamas exclusively. This fact is often cited as a contributing factor to the species' endangered status: among other things, the geographic area may be too small for young migrants to locate accurately. Other factors involved in the bird's demise include nest parasitism by cowbirds and jays and the extreme need for specific habitat type for breeding.

5. A. Hibernation. Members of the bird families that include swifts, hummingbirds, and nightjars generally exhibit short periods of torpidity in which bodily functions slow down to conserve energy. And while this torpid state does not last long enough in most species to classify as true hibernation, the common poorwill's torpid state does. This member of the nightjar family lives on reserves of accumulated fat while it reduces its body temperature by as much as 40 degrees F. and hibernates for up to three months.

6. B. At least 1,350 miles. In comparison, warblers and other small bird

Clockwise from top: A flock of sandhill cranes along Nebraska's Platte River; the endangered Kirtland's warbler; Arctic tern, the marathon migrant.

groups may average only 30 miles per day with stops, increasing to more than 200 miles per day near the end of their journeys (frequency of stops decreases as the birds near their destination).

7. D. Any or all of the above. Flocks may not only consist of these particular assortments of characteristics but may also feature almost any mixture including birds of different species, ages, and sexes. Species migrating together would have a tendency to have similar migration characteristics, including nocturnal/diurnal migration preference, distance traveled each day, and speed of flight.

8. B. Bachman's warbler. Habitat destruction and an extremely narrow migration flight pathway are among the factors that have led to the demise of this songbird. Last sightings of the bird, which formerly ranged throughout the southern United States, occurred in the early 1960s.

9. D. Although some species' migration altitudes may range at higher levels, the majority of migrating birds fly below the 10,000-foot level—regularly between 3–5,000 feet. The bar-headed goose of the Himalaya Mountains holds the world's migratory altitude record at nearly 29,000 feet, while some birds have been known to fly mere inches above the ocean waves along migration paths.

10. Both A and B. According to *The Birdwatcher's Companion* (C. Leahy, 1984) pre-migratory restlessness is a symptom of the metabolic changes that occur within birds as they prepare to migrate. The condition is characterized by hyperactivity and nocturnal unrest. This hyperactive state leads to overeating, which in turn builds up fat for use as an energy source during migration.

John Pepin is a freelance writer whose quizzes appear regularly in Wildbird Magazine.



Winter Paradox

Yellowstone struggles to retain its tranquility amid growing demands for winter tourism.

By Todd Wilkinson

THINK OF an isolated frontier in the dead of winter. You are in the Rockies—northwest Wyoming, to be precise, the least populated state in the nation.

Before your eyes, herds of bison trudge across a sweeping snowscape, leaving behind only temporary furrows that disappear into funnels of wind and dunes. Nearby, geysers puff their vaporous steam until crystalline pebbles of hoarfrost collect on bows of lodgepole pine.

Then, abruptly, the spell of silence is broken. First you hear the hum. Finally, you see a fleet of snowmobiles accelerating past a futuresque, tank-like vehicle called a snowcoach. Even in this remote area of Yellowstone National Park,



LEWIS KEMPER; INSET: ERWIN & PEGGY BAUER

From a millennium of solitude to a generation of noise and activity: Yellowstone's serenity is threatened by the park's growing popularity as a winter recreation spot.



these machines are a part of the daily ritual during winter months. For photographer Steven Fuller, there is a paradox in cherishing the winter environment of this 3,500-square-mile sanctuary and sharing it with the outside world.

"It isn't a matter of whether people should be permitted to see the park and the natural wonders of winter, but how," said Fuller, who lives in Yellowstone year-round. Eighteen years ago, Fuller was hired to look after several hundred tourist cabins at the Canyon Village development. After raising two daughters in the park, he still resides at Canyon with the romantic employment title of "Winterkeeper."

"Even in the remoteness of a Yellowstone winter," Fuller said, "space and emptiness, void of machinery and the smell of gasoline, are rapidly diminishing quantities. Tranquility is what brought people to this relatively hostile environment in the first place, and that's why, I assume, people will continue to come."

"But one of the great luxuries of 20th century America is to be out of sight or

mind of other humans," he added, while skiing through a forest of lodgepole pines burned by the 1988 fires. "I'm afraid that once we humans finally figure out how to preserve the beauty of Yellowstone in winter, there will be no way to turn the crowds of people back. The essence will be irretrievable; it will be gone."

But 25 years ago, the decision was made to develop Yellowstone as a winter destination. "If we'd known then what we know now," said Yellowstone Park Superintendent Bob Barbee, "we might have done things differently."

At the time, fewer than 1,000 tourists journeyed into Yellowstone each winter, most of them on curious recreational machines called snowmobiles. In what many park observers consider to be a major miscalculation, no one in the Park Service expected the snowmobile industry to grow so large so fast. Nor did park planners know that winter visitation via snowmobiles would balloon sixty-fold. "In their wildest dreams, I doubt that anyone could have predicted it would

Already stressed by the harsh weather, animals are frightened off roads by snowmobilers and skiers.

grow like it has," Superintendent Barbee theorized. "But we can't turn back the clock. Winter recreation in Yellowstone is here to stay whether we like it or not."

This year, a record 105,000 visitors are expected to tour the park in the winter. Three-fourths of them will glide over groomed trails on snowmobiles and snowcoaches, while 25,000 other visitors, many of them cross-country skiers, will drive to trailheads along the park's only plowed highway between Mammoth, Wyoming, and Cooke City, Montana. Within just two decades, the number of people staying in the park's two hotels during the winter has risen from fewer than 700 to 34,000.

Park officials predict that visitation will continue to grow 50 percent throughout the 1990s and then level off. Conservationists, however, are skeptical, saying Yellowstone is underestimating its potential for growth, and the time for

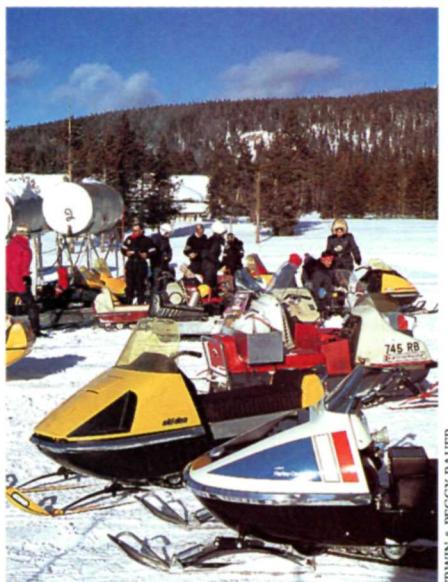
confronting the impacts of winter tourism has already arrived. According to David Simon, natural resources coordinator at NPCA, parks all across the country, Yellowstone included, are already "venting onto thin ice" with winter use.

"No longer can the park ignore the environmental consequences of winter tourism, which is running out of control and has been since it started," said Don Bachman, program assistant with the regionally based Greater Yellowstone Coalition, which is comprised of organizations and individuals who work on conservation issues in the Yellowstone area. "It is clear that the change from a millennium of solitude to a generation of noise and activity has resulted in negative intrusion upon wildlife and the very essence that makes winter in Yellowstone unique."

Conservationists say the increasing scope of winter development combined with strong political pressure to build additional facilities stand not only to harm the park's aesthetics but could prove deadly to wildlife already stressed by the harsh weather. Some 2,200 bison and several thousand elk live in conditions where the mercury routinely drops to 40 degrees below zero and mountainous meadows are buried by six to seven feet of snow. In the 1980s, Yellowstone began seeing a phenomenon in the winter that normally only occurred during the summer—bison jams, in which tourists inadvertently surround buffalo to get a closer look. Wildlife biologists also say that the extra energy expended by animals when they are frightened off roads by snowmobiles and skiers is dangerous because many elk and bison barely survive the winter on stored fat supplies.

TO RELIEVE SOME OF the stresses on the park, NPS released a draft Winter Use Plan for Yellowstone and adjoining Grand Teton National Park and John D. Rockefeller Parkway this spring, with plans to finalize it in early 1991. Implementation will follow contingent upon congressional funding.

Unprecedented in its focus, the plan is significant, according to many conservationists, because it will shape the way



ERWIN & PEGGY BAUER

The number of tourists riding through Yellowstone on snowmobiles has increased sixty-fold in the past 25 years.

winter tourism is approached in the Yellowstone area as well as in other national parks such as Mount Rainier, Glacier, and Rocky Mountain. Park Service officials feel the pressure will be on soon to develop these parks as winter recreation spots, too.

Largely at the urging of NPCA and other conservation groups, the Park Service has agreed to define the level of visitation, or carrying capacity, the park can handle without being harmed or degrading visitors' experience. In its Winter Use Plan, the Park Service pledges not to expand winter development unless it can demonstrate that increased visitation will not adversely affect the park.

NPS defers implementation of the carrying capacity study, however, for as long as ten years, arguing that winter visitation will level off over those years and will not cause unacceptable impacts, said Yellowstone's Park Planner Kevin Brandt.

"I like the idea that people can come here in the winter and see the features of Yellowstone but with a whole new twist," said Brandt, who worked at the Old Faithful development for three winters. "By the same token, I've seen bison and elk being run down the road by snowmobiles. At some point, that proba-

bly gets to be too much. From what I've seen and read in reports, we're not at that point yet. Still, you never have as much data as you'd like."

Terri Martin, NPCA's Rocky Mountain regional director, said that the park's decision to implement a carrying capacity study is a major step in the right direction, but that it should be implemented as soon as possible. "Why speculate about whether or not existing or future visitor use levels are harming park values? It makes more sense to implement a carrying capacity study now so that problems can be addressed when they arise."

Under the National Park and Recreation Act of 1978, Yellowstone is mandated to define acceptable thresholds on tourism. The Park Service, however, has failed to establish carrying capacities. As a result, NPCA has spent several years developing a state-of-the-art carrying capacity methodology designed specifically for use by park managers. The guide will be published this year.

"The objective of carrying capacity is not to lock people out of parks," said Laura Loomis, deputy director of conservation programs at NPCA, "but to assure that visitor use patterns and levels do not harm the quality of visitors' experience or degrade park resources. Carrying capacity begins with clearly defining the kind of experience and environment the park is there to protect, and then taking steps to assure visitor activities don't harm those values. At Yellowstone, we need a carrying capacity program to protect the park's pristine environment, vulnerable winter wildlife, and a visitor's opportunity to experience the park's stunning natural quiet and its solitude."

Superintendent Barbee and his staff, however, are caught between political forces who want to expand the regional tourism industry and conservationists who want to ensure that winter development is guided by protecting the park and its wildlife.

While total winter visitation pales in comparison to the 2.7 million people who drove through the park in the 1990 summer season, the economic stakes are high. Studies show winter visitors spend

twice as much as their summer counterparts, and park gateway communities are spending millions to lure more people into the region.

The town of West Yellowstone, Montana, which sits on the western edge of the park, bills itself as "the snowmobile capital of the world." Snowmobiling in the national park forms the center of the town's commercial marketing strategy. Similarly, business interests in Jackson Hole to the south, where 225,000 visitors converge to downhill ski in the Tetons, acknowledge Yellowstone as a primary drawing card. Meanwhile, tourism officials in Cody, Wyoming, on the park's eastern boundary, have pressed for expanded winter development and say they would like a piece of the economic pie, which is conservatively estimated at \$6 to \$10 million annually.

Wyoming Governor Mike Sullivan and U.S. senators Alan Simpson and

Many bison barely survive the harsh Yellowstone winter. Photo by Lewis Kemper.

Malcolm Wallop have drafted a half dozen letters to Park Service regional chief Lorraine Mintzmyer during the past year seeking financial support for expanded winter development. Tourism officials in Cody, backed by those politicians, have asked the Park Service to winterize unused summer facilities at Canyon Village and transform the development into a destination center for snowmobiling and cross-country skiing.

Ironically, the proposal was greeted with hesitancy from Yellowstone's largest concessionaire, TW Services, which oversees hotels at park headquarters in Mammoth and at Old Faithful. Because of high operating costs, the winter concession operation struggles to break even financially, even with Old Faithful's 100-room Snow Lodge boasting 98 percent occupancy. "That could change with several ski areas in Montana trying to turn themselves into destination resorts and promoting Yellowstone," said Steve Tedder, chief of operations for TW Services. In comments submitted to the National Park Service, however, Tedder

opposed expanded development stating, "With winter visitation of only 100,000, additional facilities or areas should not be opened," he wrote. "At this point, there is hardly enough use of existing facilities at all park locations to financially support the operation. Unless the National Park Service plans to increase winter visitation, expansion of overnight facilities and other services would only dilute the existing business."

DESPITE POLITICAL PRESSURE, Yellowstone released a draft plan last spring, which calls for no new winter development inside the park, instead focusing on rehabilitating existing structures. Any new development, the Park Service suggests, should be channeled into the nearby communities. But rehabilitating Yellowstone's winter facilities is no small proposition. In proposals submitted to the National Park Service, planners asked for \$20 million to repair buildings, upgrade emergency oversnow vehicles, and import equipment that can hold the enormous

amounts of trash accumulated at Old Faithful that can't be trucked out until spring. The biggest cost is a \$9.6 million reconstruction of Snow Lodge.

Conservationists were pleased with the Park Service's decision to hold the line on new facilities. They agree, however, that NPS clearly caved in to political pressure in recommending construction of a segment of the Continental Divide Snowmobile Trail through Grand Teton National Park.

Backed by Wyoming's governor, its congressmen, and the national snowmobile industry, the Divide Trail would extend 370 miles from central Wyoming to northern Yellowstone. It would become part of the longest groomed network of snowmobile trails in North America. To establish a link through Grand Teton, NPS recommends constructing a 30-mile trail along the side of Grand Teton's major highway because this road is plowed in winter.

"The construction of a snowmobile trail through Grand Teton, even if it is alongside the road, presents unaccept-

able environmental, safety, and budget impacts," said NPCA's Martin. Martin believes that inexperienced snowmobilers are likely to slide off the trail and collide with vehicles on the plowed highway. She points out that the trail will require the cutting of roadside trees and construction of new maintenance buildings and housing in the park. It also may lead to future widening of the highway, Martin said.

Conservationists also object to the cost of the trail—\$2 million to construct and \$250,000 annually to maintain—an exorbitant and unjustifiable expense in the face of the continuing federal budget squeeze. Finally, the proposed trail violates Park Service regulations, which confine snowmobiles to unplowed roads and waterways that are used by vehicles in other seasons.

Yellowstone's Brandt, who is helping draft the joint park development plan, says he never expected the issue to become so divisive. "It's been an interesting experience trying to provide information to such divergent interests,"

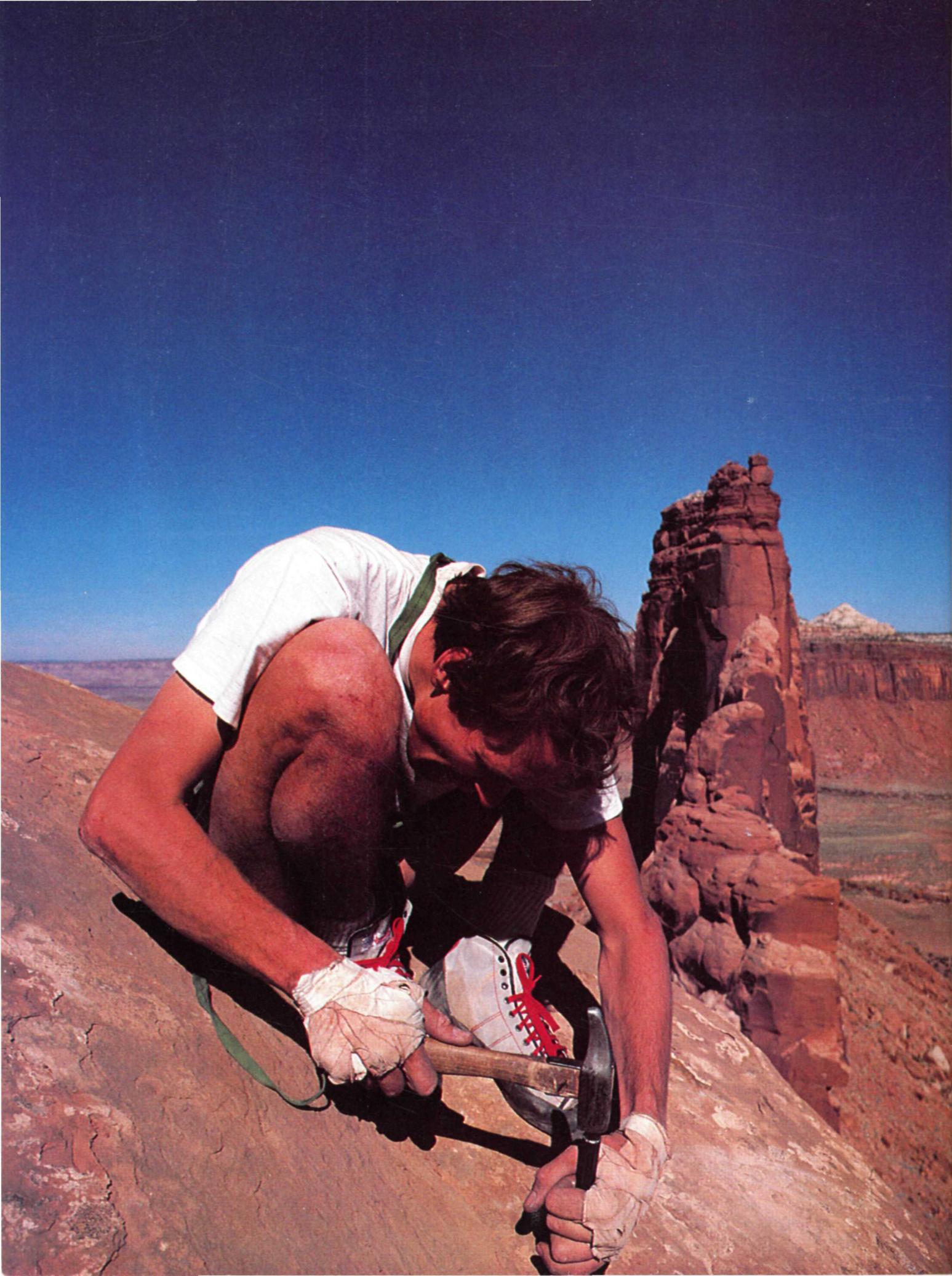
Brandt said. "The key, of course, is to strike a balance between resource enjoyment and resource protection. With the controversy surrounding this winter development plan, we're learning how to achieve some middle ground."

"Nobody's expecting us to put up a Taj Majal winter resort in the middle of the Old Faithful geyser area," he added, "and we're not proposing to lock the gates and keep people out either. We have to find the balance. Everyone has their own definition of solitude."

Finding that balance, Martin said, is not as simple as use versus preservation; it is a more philosophical question of providing use that is consistent with preserving natural values. Otherwise, she said, society will be incrementally destroying the values of the parks that the nation set aside to protect.

Todd Wilkinson is a freelance journalist based in Bozeman, Montana. He specializes in natural resource issues in the West and covers the northern Rockies for the Denver Post.





Set in stone

Permanent bolts are turning cliffs in many national parks into artificial climbing walls.

By Claire Martin

LAST AUGUST, Ranger Maura Longden stopped to watch a couple of rock climbers putting up a new route on Lumpy Ridge, a popular climbing area in Rocky Mountain National Park in Colorado.

The climbers were clearly traditionalists: they mostly used removable devices to clip their ropes into and drilled few holes into the rock for permanently fixed bolts. The few bolts they did install were unobtrusive and used only where there was no other option.

"A sport climber probably couldn't do this route—he wouldn't know how," one of them said to Longden.

He was referring to the new breed of aggressive climbers who drill all-bolt routes on formerly pristine rock, thereby dismissing the "clean climbing" ethic of leaving no traces.

A climber drills another hole for a permanent bolt at Canyonlands National Park's Point Beyond.

Because all-bolt routes usually are difficult—and consequently desired by climbers perhaps more ambitious than reflective—the use of bolts, facilitated by portable electric drills, recently has become an issue in virtually any national or state park with challenging rock walls.

The result is that cliffs in many national parks are becoming the equivalent of artificial climbing walls. Often routes literally are within an arm's length of one another. In a popular climbing area about 40 miles from Rocky Mountain National Park, so many new routes have been put up that some climbers keep track of them on computers.

In the 1980s, as climbing increased in popularity and climbing routes proliferated, so did trails leading to the bases of popular cliffs. The access paths, which veered off official hiking trails, and the new climbing routes sometimes had devastating effects on wildlife and plants. The trails encouraged erosion and endangered vulnerable plants, and some

bolted routes were so close to nests that the birds abandoned their territory.

Other park users complained about the whine of motorized drills as well as the music blaring from the large, portable cassette players favored by many rock climbers.

Park managers have responded to the situation in many ways, from ignoring the problem to forbidding all rock climbing. But nobody yet has solved the problem. The Park Service currently has no system-wide policy concerning climbing but allows each park to adopt its own standard dependent upon the pressure it is receiving. "We don't want to take the decision-making away from the local officials," said Butch Farabee of the Park Service. "But ultimately we will need some umbrella guidelines for the parks."

Motorized drills have been banned at many national parks and monuments, including Rocky Mountain National Park, Joshua Tree and Pinnacles national monuments in California, and Big Bend

National Park in Texas. Officials at some parks, including Canyonlands in Utah, allow drills in certain areas but forbid climbers to use chalk, which often leaves rock permanently splotched.

Others, concerned about the effect climbing can have on nearby raptors, archaeological features, and surrounding ecosystems, have simply banned all climbing, with varying success.

At one point, Big Bend managers forbade the sport, in part because climbers were bolting on rocks with pictographs. Many climbers ignored the ban and even surreptitiously installed new routes with camouflaged bolts.

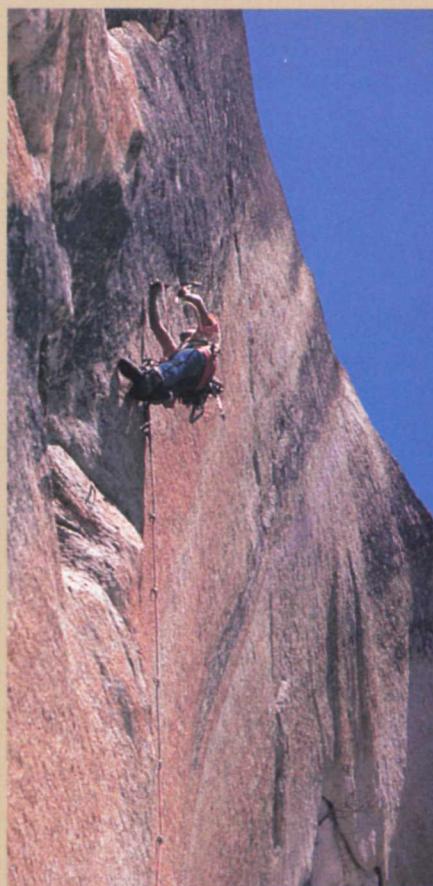
Eventually, Big Bend rangers reached a detente with the climbers, who agreed to avoid sensitive areas and to install new routes only after consulting park managers. Pinnacles, too, was temporarily closed to climbing until new restrictions, similar to those set by Big Bend, were imposed.

Because bolting is as much an issue among many climbers as it is among park managers, some climbers have taken matters into their own hands. In Yosemite, bolted routes have been chopped—the bolts' heads cut flush with the rock—by exasperated traditionalists John Bachar and Kurt Smith, who took responsibility for their actions.

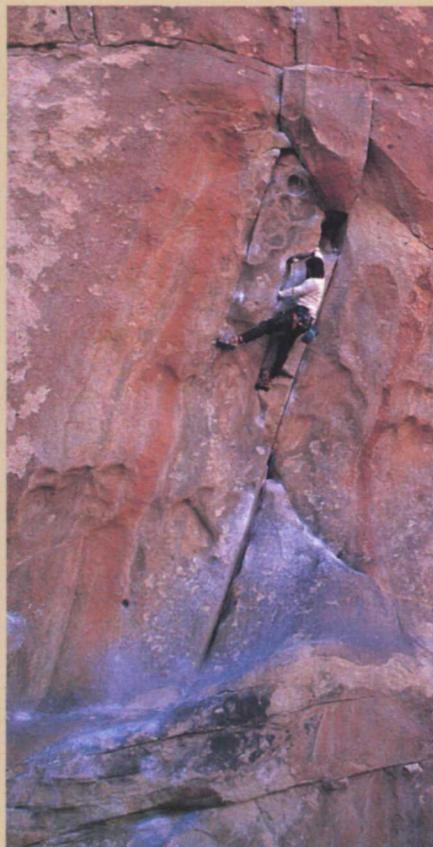
But chopping routes can be dangerous. If a climber is high on a route and expects to clip a rope into a bolt, and no bolt is there, he or she could easily fall.

What is the solution? At Rocky Mountain National Park, which lures climbers to its high peaks as well as to Lumpy Ridge, rangers formed an internal task force, including plant and wildlife specialists and employees who climb, and studied impacts of the sport for nearly a year. The task force looked at how other national parks addressed their climbing problems and consulted with rangers in nearby Boulder Mountain Parks and Eldorado State Park, both climbing meccas.

With officials from these parks and local climbers, the Rocky Mountain rangers wrote a suggested code of ethics for climbers. Basically, the code asks climbers to treat others with respect, to leave no trace, and to pack out what they



GLEN ROWELL



GLEN ROWELL

Many climbers dismiss the traditional climbers' ethic of leaving no traces. At Yosemite National Park, a climber drills a hole into an already bolt-studded rock (top). A popular climbing spot in Joshua Tree National Monument shows the chalk stains left behind by climbers (bottom).

pack in. The code has been posted at trailheads used by climbers and distributed in local mountaineering shops. Rangers at all these parks are working with the Colorado Climbers Coalition, an organization concerned about access and ethics, to finalize the code and reach an agreement that balances the climbers' interests with the welfare of the park and other users.

"The climbers have made it clear that they want to take a good part of the responsibility, and they've been cooperative in helping to educate other climbers about ethical behavior," said Longden, who is a capable climber herself.

"You have to remember that climbing is part of the history of many of our national parks. Anything we decide upon has to be with the cooperation of climbers. We're not trying to inhibit climbing or close our eyes to the advances made in climbing. We're struggling with the issue of what's appropriate in a national park." In many cases, however, bolting is not appropriate.

This winter, officials from Rocky Mountain National Park will hold several public meetings to discuss options with local climbers. According to Longden, who chaired the task force, it will be the first time that climbers have been allowed to help shape policy from the beginning.

"We are not talking about a wholesale ban, but about being reasonable and respectful," she said.

"Those two guys I watched last August were putting up a pretty difficult route, as difficult as a lot of bolt routes. It was kind of interesting to see that, because it showed that you can still put up high-grade climbs without resorting totally to bolts."

Claire Martin, a staff writer at the Denver Post, is a climber and a bicyclist.

Birds of Prey

**FIVE OF THE BEST PARKS FOR
RAPTOR WATCHING**

BY JAMES TOOLE

BY ALMOST ANY MEASURE, raptors, or birds of prey, are amazing creatures. They are fast, powerful, and beautifully proportioned. Above all, they are built to hunt. Their wings, talons, and large keen eyes have evolved for that single purpose.

Hunting raptors dart among trees, plunge into oceans, glide over fields in the night. Owls can hunt entirely by sound, and virtually all raptors have extraordinary powers of sight. Peregrine falcons, said to swoop at speeds of up to 250 miles per hour, may be the fastest creatures on Earth.

The following five national parks are among the most exciting places in the nation to view these magnificent birds.

Golden Gate National Recreation Area

Migrating hawks are not always easy to see. Thermals of air, found most abundantly along the ridges that many hawks follow during migration, carry soaring hawks high into the sky in great spiraling kettles that may contain hundreds of hawks at a time. So it is rare to find an area where large numbers of migrating hawks will fly low enough to show the flight patterns and rich markings that bring us out to see them in the first place.

Golden Gate National Recreation Area is such a place. In the fall, viewed

from the high bluffs of the Marin headlands, hawks may fly at eye level or even below you as they migrate southward. They have followed, like most hawks, either the coast or the inland ridges. At Golden Gate, where the Pacific Coast meets the Coast Range, two streams of hawks converge.

The fast-flying peregrine falcon preys almost entirely on other birds.



WENDY SHATTIL/BOB ROZINSKI/TOM STACK AND ASSOCIATES

Most common are red-tailed hawks, sharp-shinned hawks, Cooper's hawks, and turkey vultures, which together comprise about 90 percent of the roughly 10,000 hawks counted at Golden Gate each fall. Broad-winged hawks, rarely seen in the western United States, are found each fall in surprising numbers at Golden Gate.

Though the flight season lasts throughout the fall, the best time to see large numbers of migrating hawks is late September and early October. The headlands near the visitor center at Fort Barry Chapel offer some of the best views.

Public hawk-banding demonstrations are conducted every weekend during peak season by the Golden Gate Raptor Observatory as part of its ongoing raptor research program.

For information, contact Golden Gate National Recreation Area, Fort Mason, Building 201, San Francisco, CA 94123, (415) 556-0560.

Everglades National Park

Unlike fast-hunting falcons and accipiters, kites seem content to hover and glide, buffeted by the wind. They are

Raptor Recovery

A field mouse or warbler, struck by the shadow of a hungry raptor, might feel little sympathy. But raptors, some of the world's most graceful and powerful predators, are under constant threat.

Until well into this century the threat was hunting, and from the mid-1940s until the mid-1970s it was the pesticide called DDT that weakened raptor egg-shells and threw many populations into severe decline.

In recent years the National Park Service has established raptor recovery programs in parks with important raptor habitat. Although some NPS plans involve species reintroduction, most aim to help native populations recover through monitoring and inventory-taking projects.

Programs to recover the peregrine falcon, one of the raptors most harmed by DDT, have become models for national park raptor recovery efforts. By 1973, when DDT was finally banned, nesting peregrines had disappeared completely from the eastern United States and were rare in the West.

Today, sites such as Glen Canyon National Recreation Area in the Southwest and Yukon-Charley Rivers National Preserve in Alaska report almost 50 nesting pairs each year, and Grand Canyon an estimated 100 pairs.

The Park Service is also involved in cooperative programs with other federal agencies and private research groups. One program has established a uniform peregrine banding protocol throughout the western states. Another program studies the continuing effect of contaminants that travel through the food chain, by examining eggshells and the remains of raptor prey.

Human development, which destroys open space in the U.S. at an alarming rate of one million acres per year, squeezes raptors into ever-shrinking corners of the country. Under these conditions, the fight to protect national parks, and the pristine habitats they preserve, will become vital.

—James Toole

temperate, slender hawks with a liking for warm climates and a name inspired by the wind toys that fly, like they seem to, at the whim of the wind.

Everglades National Park is one of the Park System's best hawk habitats and one of only a handful of places in the United States where four species of kite can be seen. Three kite species nest in the park: the black-shouldered, the snail, and the unmistakable swallow-tailed. A fourth species of kite, the Mississippi, is an occasional migrant through the park.

Relatively large numbers of bald eagles and ospreys also nest here. In recent years approximately 50 pairs of eagles and 200 pairs of ospreys have been found.

Winter may be the best time to see hawks at Everglades. Look for large numbers of American kestrels, a few merlins, and scattered peregrines chasing shorebirds along the coast. Swainson's hawks and short-tailed hawks, rarely found elsewhere in the East, are good winter finds.

A prime place to start looking for hawks at Everglades is the road to the Royal Palm Visitors Center, where there are wide views of the open sky. Look here for short-tailed hawks, most common in winter.

For more information, contact Everglades National Park, P.O. Box 279, Homestead, FL 33030.

Apostle Islands National Lakeshore

Thanks to a weird confluence of factors, Apostle Islands National Lakeshore is another good place to see unusually low-flying hawks.

Located off Wisconsin's Bayfield Peninsula, the Apostle Islands stumble out like stepping stones into the cold waters of Lake Superior. Hawks traveling northward in spring cross the peninsula and follow the islands into the lake. Twenty miles later, at Outer Island, the thermals of warm air collapse over the cold lake water, and the birds, facing a seemingly endless expanse of water, falter and turn around. Of the small number that continue across the lake, many will die of exhaustion before they ever see the north shore.

The numerous hawks that turn back to shore offer a great show to anyone intrepid enough to brave the islands of Lake Superior in early spring. Stand at the southwest end of Outer Island to see them return, very low to the ground, flapping against the wind, the thermals gone.

Many will be sharp-shinned and broad-winged hawks, along with smaller numbers of Cooper's hawks and American kestrels. Apostle Islands also reports very strong merlin flights, with a healthy smattering of peregrine falcons.

In addition, the park funnels thousands of passersines (perching birds), waterfowl, and shorebirds northward every spring. Park officials have counted as many as 1,500 passersines per hour on peak days.

Head for Long Island, at the extreme southern end of the park, to see large numbers of waterfowl and shorebirds and good flights of falcons and sharp-shinned hawks. The heaviest concentration of hawks is in spring, between April 15 and May 5.

Normal daily temperatures during spring flight, however, range from 30 to 50 degrees, and the lake can be partially frozen into May. Accessibility can also be a challenge. Before early June, when the water taxi service opens, you will need to hire a private boat from the mainland.

Apostle Islands may not be the easiest park to reach for hawk-watching, but it offers a trip you will remember. For more information, contact Apostle Islands National Lakeshore, Route 1, Box 4, Bayfield, WI 54814.

Big Bend National Park

For Mexican border specialties and a wide selection of other raptors, head south to the deserts, mountains, and river canyons of Big Bend National Park.

Four rare border species—the Harris' hawk, the gray hawk, the common black hawk, and the zone-tailed hawk—may be found under the right conditions at Big Bend. Just this year gray hawks produced two young in a nest along the Rio Grande.

Grays and Harris' have been seen in the Rio Grande Village area, and black



WENDY SHATTIL/BOB ROZINSKI/TOM STACK AND ASSOCIATES

When migrating, ferruginous hawks follow ridges and shorelines.

hawks are occasionally seen in the Davis Mountains to the north. Zone-tails are most often seen in the Chisos Mountains, soaring like turkey vultures with their wings held in a shallow V-shaped dihedral.

Other common species can be seen more often. A native population of fifteen pairs of peregrine falcons inhabits the areas, where they soar to heights of four to five thousand feet. Sharp-shinned and Cooper's hawks prefer the more wet or wooded regions of the park.

Also found are kestrels; harriers; prairie falcons; red-tailed, ferruginous, and Swainson's hawks; and elf, great-horned, and flammulated owls. Mississippi kites are occasional spring migrants.

Hawks are good at Big Bend in any season, and bird walks are held weekly throughout the year. For information, contact Big Bend National Park, TX 79834.

Gateway National Recreation Area

Every spring, blown to the coast by a western wind, thousands of hawks follow the New Jersey shoreline to a spit of land called Sandy Hook. They are a few of the many thousands of hawks that migrate, by ridge or by coast, through Greater New York every year en route to warmer climates.

For the last 14 years the Cape May Bird Observatory (CMBO) has conducted hawk studies at Sandy Hook, the southernmost unit of Gateway National Recreation Area. Every spring CMBO reports counts of five to ten thousand raptors, the most common of which are sharp-shinned hawks and American kestrels. Merlins, Cooper's hawks, and northern harriers pass through in smaller numbers, with peregrines, red-shouldered hawks, and broad-winged hawks lagging behind. The most fortunate observers may see the lone swallow-tailed kites that show up about once every

spring, nearly a thousand miles north of their traditional range.

Hawk season is April and May at Sandy Hook, with counts peaking around the last week in April. Most hawk-watchers gather at the embankment near Sandy Hook Lighthouse. The lighthouse offers good views of the beach route preferred by many low-flying birds.

Gateway is one of several Atlantic coast parks used by large numbers of migrant raptors. Assateague Island, Cape Hatteras, and Cape Lookout National Seashores are other good areas to visit. Assateague is known for fall peregrines, which have been counted and banded there for more than 20 years.

For information on Gateway, contact Gateway National Recreation Area, Floyd Bennett Field, Building 69, Brooklyn, New York 11234.

James Toole is public relations coordinator at NPCA.



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NOTICES

Survey Results

The results are in!

More than 400,000 new NPCA members and concerned citizens responded to our 1990 national survey on park issues. The 12-question referendum asked participants to express their opinions on a variety of issues, ranging from park threats, such as development and poaching, to clean air legislation.

"Your overwhelming responses to the survey will help NPCA develop and establish our priorities in the years to come," said NPCA President Paul Pritchard.

From a random sampling of survey responses, we found

- ▲ Nearly 100 percent of the participants feel the Bush administration should endorse NPCA's National Park System Plan to preserve parks and acquire land for more protected areas.

- ▲ A key legislative battle for park conservationists now is strengthening the Clean Air Act. Almost all of the participants—99 percent—support federal controls to ensure cleaner air and clearer views of our nation's scenic wonders.

- ▲ More than 90 percent of those surveyed agree the national parks should be closed to hunting and trapping.

- ▲ Almost all of the participants favor legislation to control destructive acid

rain in Great Smoky Mountain and Shenandoah national parks.

- ▲ The U.S. Forest Service has subsidized timber cutting in the national forest around Yellowstone National Park and is considering opening land around the park to oil and gas leasing. Nearly 80 percent of those polled oppose leasing the area for energy development, while 20 percent need more information.

- ▲ Almost all of the participants support NPCA's efforts to educate young people about future park problems.

- ▲ Currently, about 1 million acres of wilderness land and open space are lost each year. More than 98 percent of those polled support a congressional bill to create the American Heritage Trust. The trust would secure funds for local communities, as well as state and federal agencies, to preserve land and historic sites endangered by development.

Results from other questions concluded that participants enjoy activities such as hiking, camping, photography, and sightseeing when visiting national parks. Most people know of a national park in their home state, and almost 50 percent of the sampling have visited Yellowstone, one of the nation's most endangered park areas.

Most importantly, 97 percent of those polled are willing to make a financial

NPCA supporters want wildlife protected from hunting in the parks.



LEONARD RUE

contribution to NPCA if it could help prevent a full-scale crisis in our National Park System—like poaching of wildlife or the destruction of priceless artifacts.

If you would like to respond to the survey, or make a tax-deductible contribution, please contact NPCA at 1015 Thirty-first St., N.W., Washington, D.C. 20007.

March for Parks 1991

Plans are already in motion for the second annual March for Parks—The National Celebration of the Outdoors. The event, a kick-off for Parks Appreciation Week, will take place in communities nationwide on May 4-6, 1991.

The march will raise public awareness about park concerns nationally, while generating financial support for environmental programs in local communities. Proceeds from the march will help pay for community projects such as tree plantings, educational activities, research, and land acquisition.

The National Celebration of the Outdoors, the largest coalition ever assembled to save open space, will join NPCA this year, adding more than 1,000 potential conservationists to the event.

"This merger will enhance NPCA's efforts to not only assist federal agencies and national projects, but to help fund state and local projects," said NPCA President Paul Pritchard.

Also new for 1991 is School March for Parks Day on May 4. NPCA encourages schools to hold a march as part of an environmental curriculum. Separate promotional and training materials have been developed based on the many successful school marches in 1990.

Last year's March raised nearly \$400,000 through the assistance of 15,000 marchers who participated in 200 walks. NPCA hopes to double participation this year through individual and corporate sponsorship and involvement.

As March Partners, individuals and groups raise funds for their own local projects. One-half of the proceeds are returned to the March Partners to help pay for community projects.

NPCA will use the remaining proceeds to fund national projects that benefit all communities, such as NPCA's

Poaching Hotline. Funds also will be used to bring park issues to the attention of Congress and the media.

March for Parks 1991 would like your support. NPCA encourages you to organize or participate in a march in your community this spring.

For more information, call 1-800-NAT-PARK.

Let's Party!

Don't forget about NPCA's 11th annual dinner on Thursday, November 15, at the Westin Hotel in Washington, D.C. For more information, contact Tom Zakim, NPCA, 1015 Thirty-first St., NW, Washington, D.C., 20007.

New Regional Rep

Dale Crane is NPCA's new Pacific Northwest regional director, covering Oregon, Washington, Northern California, Idaho, and parts of Montana. The regional headquarters are located at 618 South 223 St., Des Moines, WA 98198, (206) 824-8808.

Credit Card

This fall NPCA introduces the NPCA MasterCard, a new way to help protect national parks. Unlike similar credit cards, the NPCA MasterCard lets you decide where your money goes—to support either wildlife, cultural sites, or conservation education.

A portion of every purchase you make with the NPCA MasterCard is returned to NPCA.

In addition, the NPCA MasterCard, through the Bank of Baltimore, has no annual fee in the first year and a low annual rate of 16.9 percent.

We count on you, our members, to keep NPCA at the forefront of the fight to save America's national parks. Please take advantage of this important opportunity to make a real difference in the work of the National Parks and Conservation Association.

Look in your mailbox this month for further details or contact NPCA at 1-800-NAT-PARK.

New Custom Video Delights Children

"HOW DOES SANTA KNOW MY NAME???"

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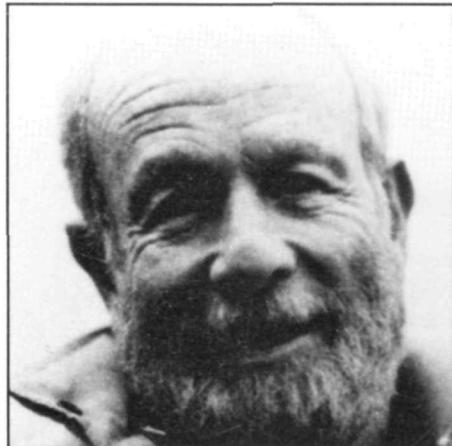
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Child's Full Name _____ (Only one child's name per tape. Use separate sheet for your personal message)

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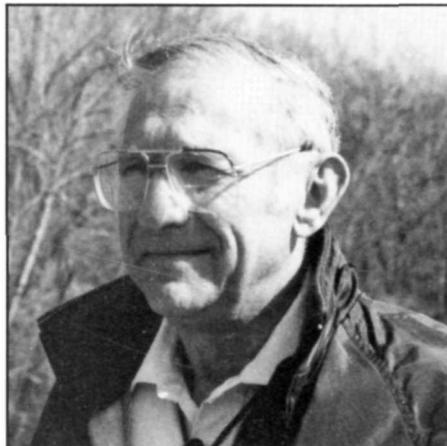
Marjory Stoneman Douglas Award

The Marjory Stoneman Douglas Award is presented by the National Parks and Conservation Association and the Bon Ami Co. to recognize an individual for an outstanding effort that results in protection of a unit or a proposed unit of the National Park System. The award is named in honor of Marjory Stoneman Douglas for her many years of dedication to preserving the fragile ecosystem of the Florida Everglades.



1987 RECIPIENT

DR. EDGAR WAYBURN. For forty years, Dr. Wayburn has been a leading environmentalist. He was the principal conservation architect for the establishment of Redwood National Park and Golden Gate National Recreation Area, and for the 1980 Alaska National Interest Lands Conservation Act.



1988 RECIPIENT

ROBERT CAHN. A Pulitzer Prize winner for his Christian Science Monitor series on the state of the national parks, Mr. Cahn has also served on seminal environmental councils and, through numerous books and articles, furthered the cause of conservation.



1989 RECIPIENT

POLLY DYER. For decades, Mrs. Dyer has led the fight to protect and preserve Olympic National Park. Her activism at Olympic began in the 1950s, when she headed the effort to block logging and a coast road slated for the park. Mrs. Dyer continues her work as president of the Olympic Park Associates.

The Faultless Starch/Bon Ami Co. wishes to congratulate the recipient of this award and thank them for the excellent contribution they have made to the protection of our environment.

The Bon Ami Co. has actively supported the efforts of organizations such as National Parks and Conservation Association for over 100 years and will continue to work toward the goal of preserving our natural resources for future generations.



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COUNTED CROSS-STITCH, ten favorite scenes from the National Parks. You will enjoy our photographic quality designs. Charts or ready-to-stitch kits. Color catalogue \$1.00 (refundable) to: FulmerCraft, Box 340-NP, Moose, WY 83012.

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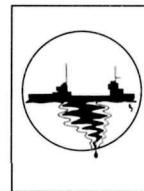


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REVIEWS

Embattled Wilderness

ENVIRONMENTAL HISTORIAN Alfred Runte's new book *Yosemite: The Embattled Wilderness* is not your typical history of people, buildings, and events. Readers may be disappointed if they are expecting to retrace the steps of John Muir or are looking for a neat recap of Yosemite's lost conservation battles, such as the fight to save Hetch Hetchy or the Tioga Road controversy. No, in this effort, Runte has tried "wherever possible, to avoid familiar ground." He succeeds admirably.

Runte is selective in his focus in this environmental history of Yosemite. He zeros in on visitor, bear, and fire management issues. He stresses that the most enduring question affecting most if not all of our national parks is, just where do we draw the line between preservation and use?

Early on in the book, Runte points out that neither public ownership nor the name "national park" guarantees perpetual protection. He convincingly demonstrates how Yosemite's custodians (beginning with the state of California's Yosemite Park Commission, followed by the U.S. Cavalry and finally the National Park Service) have managed the park as a "resort," creating an ecological nightmare if not a biological calamity.

Predictably, Runte hardly has a kind word for David Curry or other park concessionaires. He also takes pot-shots at conservationists.

But he places laurels on the crown of one important but relatively unrecognized hero—Joseph Grinnell. He credits Grinnell with cementing the relationship between national parks and education and with being one of the earliest proponents of the "science of sanctuary," the idea that parks should be managed as islands of biodiversity.

Runte concludes that even though the ideal of sanctuary recently has been winning its share of converts, Yosemite no longer is and never again will be a pristine ecological refuge. A central observation of the book is, if the parks are to remain or be restored as biological sanctuaries, "then the resource must always be considered first." Unfortunately, Runte says, the Park Service tradition "is built on visitation, not science."

After reading this book, readers will be able to recognize a universal truism regarding the history and evolution of a good many of our national parks, especially the older so-called "crown jewel areas" (Yosemite, Yellowstone, Grand Canyon, etc). That is, the history of virtually every one of these parks reflects a trend toward continuous compromise, and all too often the park ends up the loser.

Yosemite: The Embattled Wilderness by Alfred Runte, University of Nebraska Press, 271 pages, hardback; available for \$24.95+\$2.50 shipping from NPCA Park Education Center, 1015 31st St., NW, Washington, D.C. 20007.

—Bruce Craig, NPCA cultural resources program manager

Bears are an issue at Yosemite.



FRANZ LIPP

A Long Journey Home

Were You a Wild Duck, Where Would You Go? blends graceful illustrations with a lyrical tale that challenges children to become environmentally conscious and active.

Mallard, a wild duck, begins his journey to the home he remembers—a place of clear waters, lush woodland, and many friends. It was a place where all creatures, including humans, lived harmoniously in an abundant environment. Instead he finds unnatural places littered with garbage, miles of highways, and domes of smog-filled air, and wonders where to go next.

But Mallard does not despair in his search, and he ends the tale with a song of hope to children to make a better world.

On every page, Jane Osborn-Smith's delicate watercolors depict the many conditions of the environment in imaginative quilt-like patterns.

Were You a Wild Duck, Where Would You Go? by George Mendoza; Stewart, Tabori & Chang; 32 pages, hardback; \$14.95.

Operation Earth

Public television's environmental series "Race to Save the Planet" continues with weekly one-hour programs through December 6. Filmed in more than 30 countries on all seven continents, the series is the centerpiece of public television's Operation Earth campaign, a year-long effort designed to encourage individuals to search for solutions to local and global environmental problems.

Issues covered by the remaining episodes include the rapid extinction of uncounted species; alternatives to fossil fuels, which cause acid rain, smog, and global warming; innovative solutions to waste disposal; and the many ways that individuals, communities, and nations are striving to save the environment.

"Race to Save the Planet" is a production of the WGBH Science Unit, directed by Paula Apsell. Viewers interested in using the course to earn college credit can call 1-800-LEARNER for further information. Check local listings for times and dates.

Armchair Exploring

When Mardy Murie first entered Jackson Hole more than 60 years ago, she thought she was entering a fairyland, the pioneer conservationist recalls in the video "Grand Teton National Park: This Special Legacy."

The video seeks to evoke the same reaction in viewers through stunning photography, original music, and informative narration.

The video describes the geological forces that created the unforgettable peaks of the Teton Range and explains the biological implications of this vertical relief that soars skyward for 7,000 feet from the floor of Jackson Hole to the summit of the Grand Teton.

"Grand Teton National Park"; BP/North American Productions, VHS, 32 minutes; available to members for \$22.45+\$3 shipping and handling from NPCA Park Education Center, 1015 31st St., NW, Washington, D.C. 20007.

Final Notes: Antietam National Battlefield will be aglow with candles on December 1 to honor the soldiers that died there in 1862. For more information on the illumination ceremony, call the battlefield at (301) 701-3130.

▲ For an informative booklet on how to use a third less water without sacrificing comfort, send \$5, postpaid, to Rocky Mountain Institute, 1739 Snowmass Creek Road, Snowmass, CO 81654-9199.
▲ Highlights of a discussion by NPCA's Wilderness Anniversary Committee on the historic Wilderness Act of 1964 are available on a video entitled "Wilderness in the National Parks." The 50-minute tape is ideal for wilderness training and classroom use. For the tape and a copy of the printed report, send \$39 to Media Services, Western Washington University, Bellingham, WA 98225.

▲ Limited quantities of the proceedings from the second biennial conference on parkways are now available. For *Parkways: Past, Present, and Future*, send \$15.95 plus \$3.25 per book shipping and handling to Becky Curtis, Appalachian Consortium Press, University Hall, Boone, NC 28608, (704) 262-2064.

GETTING TOO MANY CONSERVATION MAILINGS?

Occasionally, on a limited and selective basis, NPCA makes its membership list available to other organizations whose goals and programs might interest you.

If you prefer not to be included with the names we make available, just let us know and we will remove your name from the list.

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NATIONAL

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VOLUME 64, 1990

<i>Abbreviations:</i>	
BLM:	Bureau of Land Management
LWCF:	Land and Water Conservation Fund
NB:	National Battlefield
NHP:	National Historical Park
NL:	National Lakeshore
NM:	National Monument
NP:	National Park
NPCA:	National Parks and Conservation Association
NPRes:	National Preserve
NPS:	National Park Service
NR:	National River
NRA:	National Recreation Area
NS:	National Seashore

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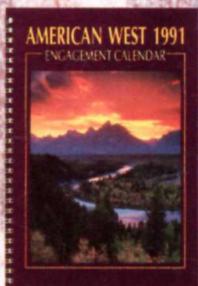
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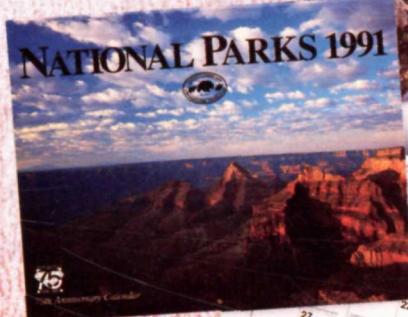
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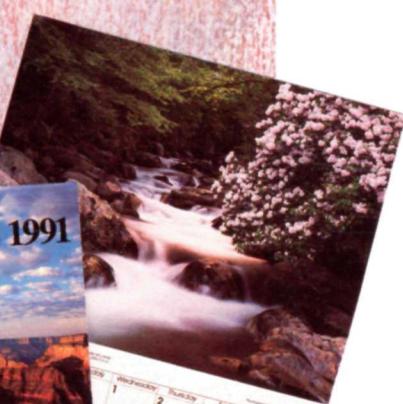
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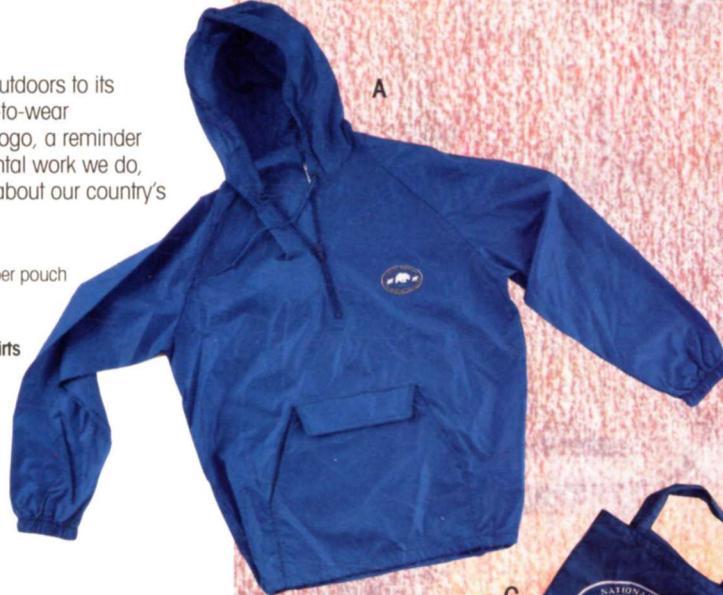
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A



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D



E



G



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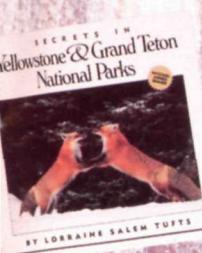


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M

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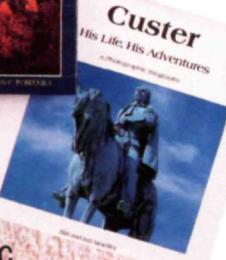
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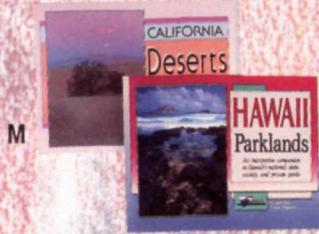
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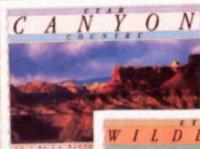
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SECRETS IN YELLOWSTONE AND GRAND TETON NATIONAL PARKS

BY LORRAINE SALEM TUFTS



L



J



K



M



I

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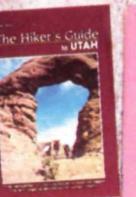
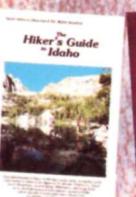
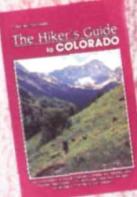
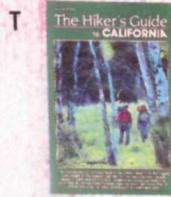
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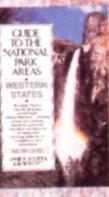
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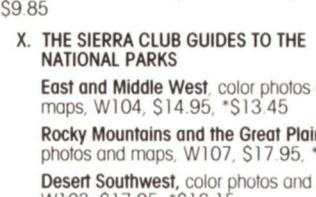
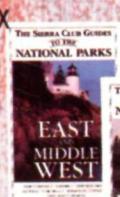
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The Stephen Tyng Mather Society was created to involve dedicated NPCA members and friends who, by their annual contributions of \$1,000 or more, continue to ensure the thoughtful stewardship of our National Park System. Today's Mather Society members are distinguished among the growing network of conservation-minded individuals who recognize the importance of preserving our natural and cultural heritage for future generations.

We gratefully acknowledge the following individuals whose generous support enables us to continue the fine tradition of Stephen Tyng Mather, the first director of the National Park Service, and founder of NPCA.

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JEREMY SCHMIDT

Lehman Caves

COMPARED TO GIANTS like Carlsbad Caverns in New Mexico, Lehman Caves [in Great Basin National Park, Nevada] is relatively small. Yet, as if to compensate for its size, Lehman Caves is remarkably well decorated with cave formations, or as geologists call them, speleothems: stalactites, helictites, flowstone, draperies, the mysterious shields, and more.

Lehman Caves can set your hair on end. All it takes is for someone to turn off the lights for a few minutes and leave you standing alone in the darkness—the absolute black of the underground night. Your eyes strain for something on which

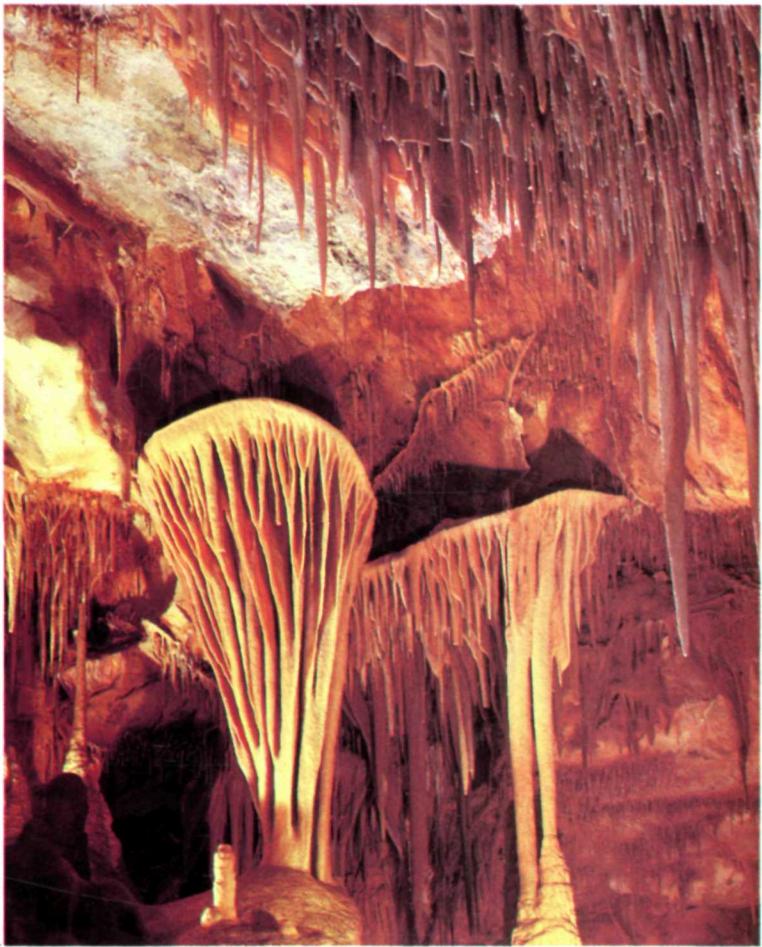
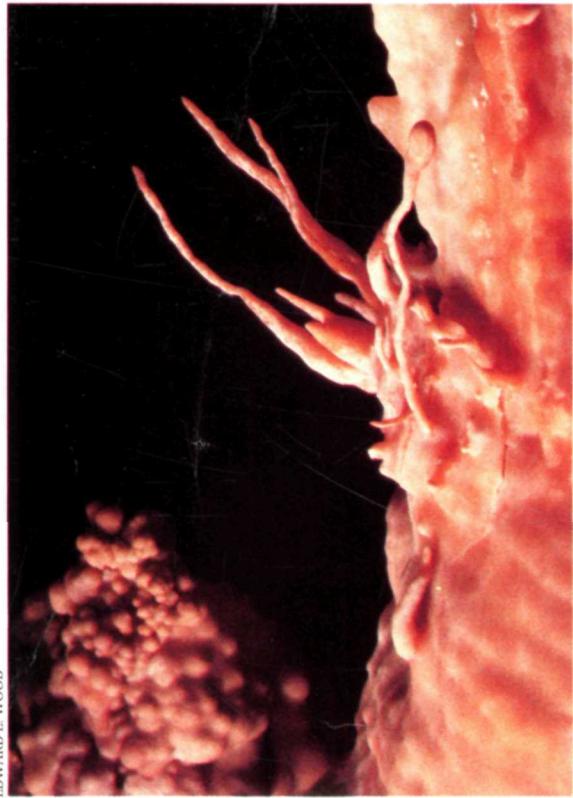
to focus, but they find nothing. Unless you have hold of a hand railing, only the cool, damp, unmoving air touches your skin. Your sense of balance is disrupted; it would be hard to walk any distance. And the silence! A vast, impenetrable silence, as deep as the darkness, fills the space around you. No voice, no motor, no animal sound can be heard. You start thinking about the rock, a whole mountain's worth, weighing heavily on all sides. The urge to turn on your flashlight becomes almost irresistible.

But then, as your ears grow accustomed to the silence, you begin to hear faint sounds. A delicate crystalline music

is playing, muffled and distant. It is water—falling in single droplets from the ends of stalactites, trickling down the cave walls, pooling on the floor. The sound adds dimension to the space, gives it shape and color, and it seems that you can hear it more clearly in the dark than you could with the lights on. When someone flips the light switch again, relief is mixed with regret.

Excerpted from Lehman Caves, by Jeremy Schmidt; Great Basin National History Assoc. Available from NPCA Park Education Center, 1015 31st St., NW, Washington, D.C. 20007; PB, \$2.95 + \$2.50 shipping.

EDWARD E. WOOD



Clockwise from top left: columns in Sunken Garden; helictites grow in crazy tangles like dried noo-dles; the Parachute; delicate and rare aragonite.

JEREMY SCHMIDT



EDWARD E. WOOD

In a small way, this chick with a French name has been helping to clean up planet earth for 103 years.



"We live in a time, I believe, when many 'old-fashioned', old reliable

products are about to become new products and products of the future, as we delicately restructure our priorities, redirect technology toward what's ecologically necessary and redefine 'progress' so that its definition includes mankind's finite economical survival on this beautiful finite earth."

We said this in 1974*, and it certainly bears repeating here, now!

*In our letter to Stewart Brand, about the ecological beauty of the original Bon Ami cake, published in *Whole Earth Epilog*, September, 1974, page 594.

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