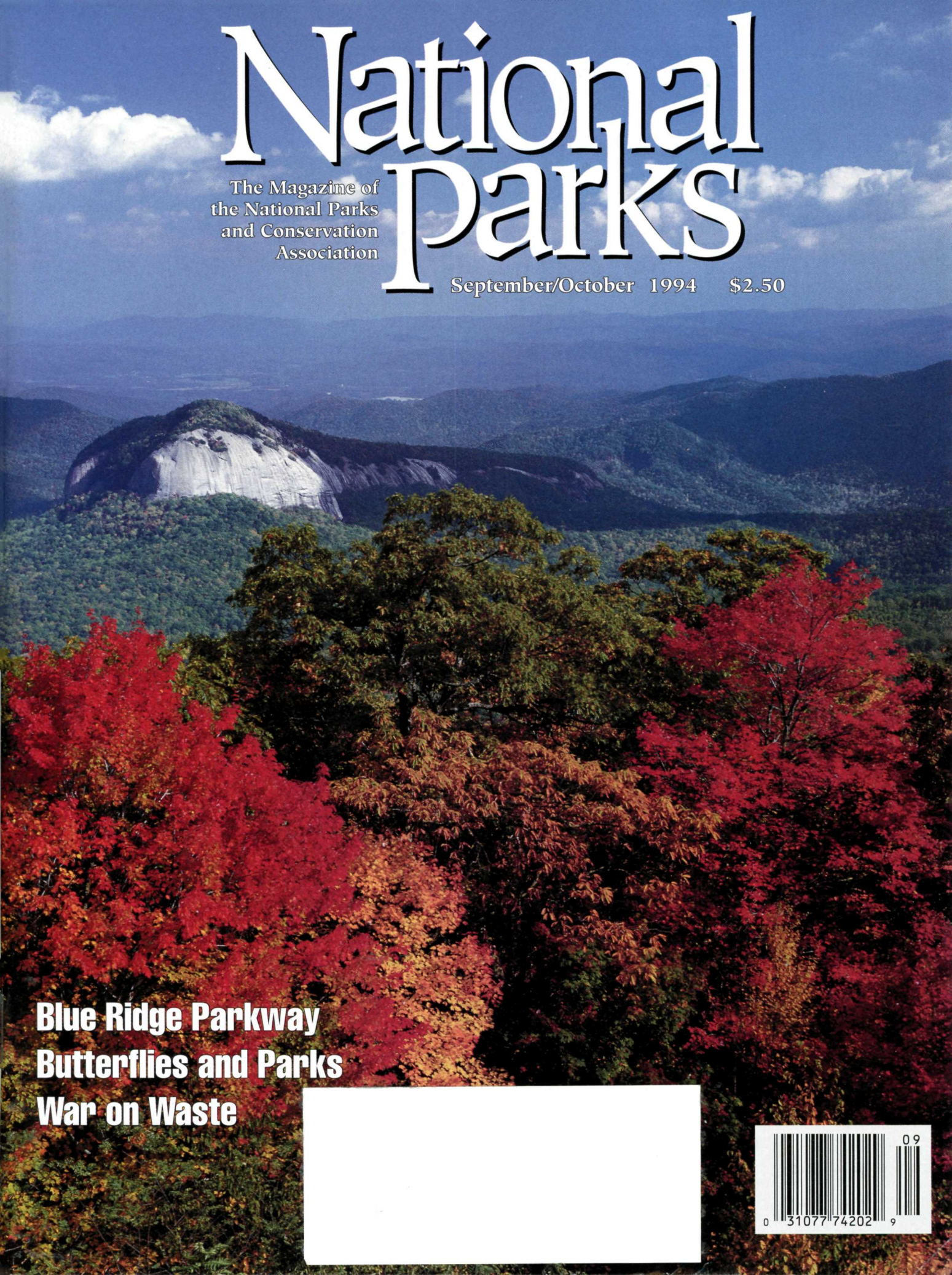


National Parks

The Magazine of the National Parks and Conservation Association

September/October 1994 $2.50

Blue Ridge Parkway
Butterflies and Parks
War on Waste

09
0 31077 74202 9

COLLETTE TOURS

Experience the Best of Both Worlds with Collette Tours

Costa Rica and the Galapagos Islands

Only Collette Tours brings together two extraordinary locations in one incredible adventure. From the tropical rain forests of Costa Rica, to the winding shores of the Galapagos Islands, experience the ultimate in Eco-tourism.

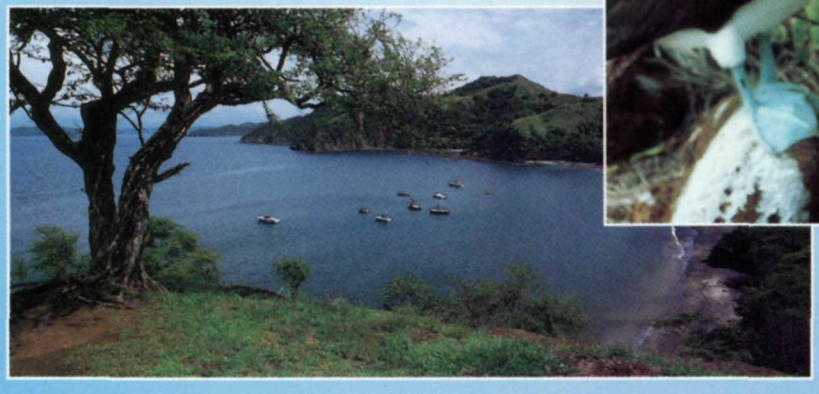
View exotic quetzals, golden toads and hundreds of species of birds and butterflies in the cloud forest of Costa Rica. Catch a glimpse of the famous Galapagos blue-footed boobie, giant tortoises and lovable sea lions.

In one vacation, visit two places that are out of this world!

Collette Tours has been servicing the needs of the escorted tour traveler since 1918 by providing care-free vacations which include quality accommodations, informative pre-vacation literature, exciting sightseeing and friendly and knowledgeable tour guides.

EPIDENDRUM ORCHID, ONE OF MANY EXOTIC VARIETIES

BLUE FOOTED BOOBIES



COSTA RICA, SANDY BEACHES

For free brochures, call

1-800-717-9191

For reservations, contact your local travel agent.

Circle No. 64 On Reader Service Card.

DAVID H. AHRENHOLZ

Karner blue butterfly, page 32

EDITOR'S NOTE

When we think of threatened or endangered species, the "charismatic megafauna"—panthers, grizzlies, and the like—usually come to mind. But a huge portion of the animal kingdom is made up of invertebrates, a classification that includes insects, crustaceans, mollusks, and other uncharismatic creatures—and many of them are suffering population declines. In this issue, Associate Editor Linda M. Rancourt looks at the plight of butterflies, which are among the most colorful and conspicuous species in the insect world. Many are dwindling in number because of habitat loss and other factors, and protected areas such as national parks offer the last sanctuary for some of these beautiful insects.

NATIONAL PARKS

Editor: Sue E. Dodge
Associate Editor: Linda Rancourt
News Editor: Kim O'Connell
Editorial Assistant: Katherine Heinrich
Design Consultant: Icehouse Graphics

National Advertising Office
Carol Cummins, Director, Marketing & Advertising
Nan Sincero, Advertising Sales Coordinator
1776 Mass. Ave., N.W., Washington, DC 20036
(202) 223-6722

National Parks (ISSN 0276-8186) is published bimonthly by NPCA, 1776 Mass. Ave., N.W., Washington, DC 20036. Single copies are $2.50. Title registered U.S. Pat. and TM Office, © 1994 by NPCA. Printed in the United States. Second-class postage paid at Washington, D.C. Contributed manuscripts and photographs should be addressed to the Editor and should be accompanied by a stamped, self-addressed envelope. No responsibility can be assumed for unsolicited material. Articles are published for educational purposes and do not necessarily reflect the views of this association. POSTMASTER: Send address changes and circulation inquiries to: **National Parks, 1776 Mass. Ave., N.W., Washington, DC 20036.**

USA Newsstand Distribution by Eastern News Distributors, Inc., 2020 Superior St., Sandusky, OH 44870.

PRINTED ON RECYCLED PAPER

The Audit Bureau

PRINTED WITH SOY INK

National Parks

THE MAGAZINE OF THE NATIONAL PARKS AND CONSERVATION ASSOCIATION

Vol. 68, No. 9-10
September/October 1994
Paul C. Pritchard, Publisher

OUTLOOK

FEATURES

DEPARTMENTS

COVER: *Looking Glass Mountain from Blue Ridge Parkway, by Gene Ahrens. Scenic vistas such as this one are threatened by a push to develop along the parkway.*

Established in 1919, the National Parks and Conservation Association (NPCA) is America's only private, nonprofit citizen organization dedicated solely to protecting, preserving, and enhancing the U.S. National Park System.

Life memberships are $1,000. Annual memberships: $250 Guarantor, $100 Supporter, $50 Defender, $35 Contributor, $25 Active, $22 Library, and $18 Student. Of membership dues, $3 covers a one-year subscription to *National Parks.* Dues and donations are deductible from federal taxable incomes; gifts and bequests are deductible for federal gift and estate tax purposes. Mail membership dues, contributions, and correspondence to NPCA, 1776 Mass. Ave., N.W., Washington, DC 20036. When changing address, please allow six weeks' advance notice and send address label from your latest issue plus your new address.

A Prairie Park

DUPONT PHOTOGRAPHERS

THE VISTA from the ranch is incredible. To the west, miles of rolling prairie stretch to the horizon; to the east lie the magnificent stone barn and the manor house with its red mansard roof. Just to the north of the house sits a one-room schoolhouse, alone on its own knoll.

The 17-square-mile Z Bar (Spring Hill) Ranch in Chase County, Kansas, was just purchased by the National Park Trust (NPT), a land trust established by the National Parks and Conservation Association (NPCA) over a decade ago. The purchase is a very special event in the history of both organizations. NPCA and NPT worked together with funding provided by NPCA to secure this piece of our national heritage.

Documentation of the property's significance goes back decades. The Park Service placed the house and school on the National Register of Historic Places in the early 1970s. In 1991, the Park Service acknowledged the "national significance" of the entire property. The vision of NPCA and NPT, therefore, was not just to protect a special property; it was to protect a site worthy of national park status.

When the ranch was about to be sold to investors, a special commission created Sen. Nancy Kassebaum of Kansas tried to buy it but failed. Consequently, the bank that owned the property said it would sell it to the highest bidder, and it became clear that the only way to protect the ranch was through action by NPT and NPCA.

The acquisition of new parks is a low priority for the federal government, even when that acquisition has broad public support. The Z Bar Ranch may therefore serve as a private holding for an indefinite time, but it will be available to the National Park Service for permanent management, as is the case in several other park units.

In many respects, the ranch represents many innovative efforts. One of which I am particularly proud was that NPCA's board of trustees used limited endowment funds, formerly invested in stocks and bonds for the development of corporate and municipal activities, to invest instead in the future of the National Park System. That alone is a bold vision generally not followed by charitable organizations such as NPCA.

A sea of prairie flowers and tall grasses harboring untold wildlife is now preserved for all of us. It is special to be part of this experience, and every NPCA member should be proud. Thanks to the boards of NPT and NPCA, to the staff and consultants and decades of dreamers who made possible the Tallgrass Prairie National Preserve.

Paul C. Pritchard

President, NATIONAL PARKS AND CONSERVATION ASSOCIATION

Accept this free Automatic Drip Coffeemaker, and enjoy Gevalia® Kaffe as 19th century Sweden never could.

Step back in time to the proud, century-old Swedish tradition of fine coffeemaking. We invite you to share it with the help of this free, European-style Automatic Drip Coffeemaker. Made exclusively for Gevalia® Kaffe, it is the best way we know to ensure that your first encounter with our fine coffee will be at its most flavorful.

A TASTE OF HISTORY.


Victor Th. Engwall

Savor a cup of Gevalia Kaffe and you will be taken back to an era when clipper ships, filled with exotic treasures from around the world, sailed the high seas. In the Swedish seaport of Gävle, they traded their riches on sun-bleached wooden docks.

Here in 1853, Victor Theodor Engwall began an importing company that led to a demanding quest.

YESTERDAY'S OBSESSION IS TODAY'S REWARD.

Over the years, Engwall's descendants became obsessed with creating a coffee as close to perfection as possible. They roasted, tasted, tested and blended the world's most prized Arabica beans, imported from lush African mountains and South American tropical jungles. Their efforts were rewarded when their coffee earned the Swedish Royal Seal—an honor still held today. Roasted with a special process and sealed in half-pound, golden foil pouches to guarantee freshness, every cup of Gevalia Kaffe is as robust and full-bodied as the Engwalls originally intended.

Gevalia Kaffe is not sold in stores; instead we will deliver it to your home. Choose whole bean or ground, Regular or Naturally Decaffeinated. A special note: we remove caffeine using the very same natural elements that put effervescence in sparkling water. The result is a full-flavored decaffeinated unlike any other you've tasted.

A WELCOME GIFT.

With your Trial Shipment of Gevalia Kaffe you'll receive your Coffeemaker in either jet black or soft white. To ensure rich flavor whether you make one cup or four, an exceptional brewing process features an exclusive aroma-lock system and high extraction filter cone.

The retail value of this Coffeemaker is $39.95. It is yours to keep for simply ordering a Trial Shipment of Gevalia Kaffe with the understanding that if after trying it you want more, you will get further shipments through the Gevalia Kaffe Import Service. To order, complete and send the attached order form. Credit card customers may call us toll free at **1-800-678-2687.**

Complete and mail this coupon to: Gevalia Kaffe Import Service, P.O. Box 11424, Des Moines, Iowa 50336

☐ Yes, I would like to try one pound of Gevalia® Kaffe for $10, including shipping and handling, and receive with it the Automatic Drip Coffeemaker (retail value $39.95) as a free gift.

Please send Gevalia Kaffe—two 1/2 lb. packages of the type(s) indicated below—with the understanding that I will continue to receive shipments of Gevalia approximately every six weeks. I understand that I may cancel this arrangement at any time after receiving my introductory shipment without obligation to accept further shipments. The Automatic Drip Coffeemaker is mine to keep regardless of my decision.

Check Coffeemaker color: ☐ White (WH) ☐ Black (BL)

Check one: ☐ Whole bean (1) ☐ Ground (2)

Check one: ☐ A.Traditional Roast Regular ☐ B.Traditional Roast Decaf. ☐ C.1/2 lb. Traditional Regular + 1/2 lb. Decaffeinated

Charge my: ☐ MasterCard ☐ VISA ☐ American Express ☐ Discover Card

Card Number: _____

Exp. Date: _____

☐ Enclosed is my check payable to Gevalia Kaffe for $10.

Please Print

Please sign here: _____

CODE: 006-934844

Name _____

Address _____

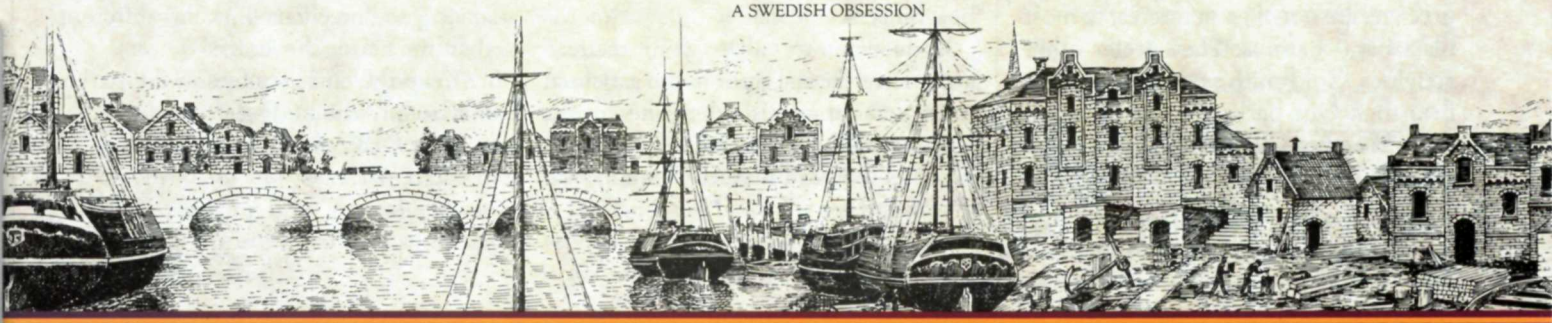
City _____ State _____ Zip _____

Phone ( ) _____
Area Code

HOW THIS SERVICE WORKS: 1. You must find Gevalia Kaffe pleasing to your taste or you may send a postcard within 10 days after you receive your introductory supply telling us to cancel, and we will send you nothing further. The Automatic Drip Coffeemaker, in either black or white, is yours to keep in any case. **2.** Otherwise, about one month after you receive your introductory package, you will receive your first standard shipment containing four packages (1/2 lb. each) of the type(s) you have indicated. Your standard shipment of 4 packages will be sent to you thereafter once every 6 weeks. **3.** You will be billed $4.45 for each package of Gevalia Kaffe Regular and $5.25 for each package of Decaffeinated. (Prices slightly higher for Canadian residents.) A shipping and handling charge will be added. **4.** You agree to pay as soon as you receive each shipment. For those using credit cards, subsequent shipments will also be conveniently billed to your card. **5.** The above prices are guaranteed not to rise through January 31, 1995. **6.** You may change the quantities and type of Gevalia you want at any time, or cancel the arrangement and receive no further shipments simply by notifying us. **7.** Limit one membership per household. **8.** Offer is open to residents of the U.S., the U.S. Virgin Islands and Puerto Rico, **and now Canada.**

G·E·V·A·L·I·A® K·A·F·F·E

A SWEDISH OBSESSION



LETTERS

Debate on Diversity

Your recent article by Jack Goldsmith, "Designing for Diversity" [Forum, May/June 1994], is way off target. To modify the National Park System to lure ethnic minorities would be a disaster and one more facet of our country that would be changed to please a few, ignoring the desires of the majority.

Bringing more minorities into the parks would probably raise the crime rate when the rangers are being forced to spend more of their time in law enforcement than ever before.

If minorities do not like going to the parks, it is their loss. But, please don't let us be duped into thinking it is our loss. Many of us look to the parks as an escape from the problems ethnic minorities create. Please don't modify our parks to destroy our oasis.

Guy Lucier
DeLeon Springs, FL

The National Park System has many problems, but the lack of attendance by members of certain groups, who out of their own free will decide to spend their time and money somewhere else, is not one of them.

Goldsmith has it all backwards. A much better idea would be an absolutely, positively nondiscriminatory policy with no exceptions. Now that would be progress.

Frank Boland
Falls Church, VA

All ethnic groups are free to visit any national park without discrimination of any kind. It is obvious that the activities and environment in the National Park System, which many of us deeply appreciate, are not of great interest to most blacks and Latinos. They prefer other activities. Goldsmith's own studies confirm that. Our parks are overcrowded now. Whether Goldsmith wishes to be realistic or not, bringing in blacks and Latinos from the ghettos will only contribute disproportionately to vandalism and other criminal activities, including robbery, murder, drug trafficking, and gang activity.

Ideas such as this, although "politically correct," are intellectually bankrupt. By publishing the article "Designing for Diversity," *National Parks* does current visitors a disservice.

Joseph K. Lange
Grand Junction, CO

Forbid the day when the National Park Service begins to establish visitation quotas based on population percentages. Any overworked park employee can tell you that park use is nearing maximum, and additional visitors, no matter the racial or ethnic group, are the last thing needed. The visitors who do frequent the parks are there by personal choice, not by some undefined social bias that has been built into the park system.

The Park Service's obligation is one of historical accuracy and honesty in presentation. Racial, ethnic, or religious groups linked to a site should be presented in a balanced fashion that represents America.

Gary Wilsher
Woodland Park, CO

Points on Plovers

I want to thank *National Parks* for publishing "Plight of the Plovers" by Bill Sharp and Elaine Appleton [March/April 1994]. The article does a wonderful job of explaining the very difficult task faced by beach management agencies trying to protect this threatened species while minimizing impacts on beach users.

I do want to call to your readers' attention a factual error in the article. A draft version furnished to me by the authors read, "The cooperative effort involves federal Fish and Wildlife, National Park Service, and state programs in efforts to bring the plovers back from the 1986 eastern seaboard population of 790 to a more viable and stable population of 1,200." The *published* version states that these agencies "have worked together to increase the...population...to the *current* more viable population of 1,200" (emphasis added). Twelve hundred *pairs*—not 1,200 individuals—is the recovery *goal*, not the current population.

In 1993, the U.S. portion of the plovers' Atlantic Coast range supported 875 pairs; added to the most recent comprehensive Atlantic Canada survey of 234 pairs in 1991, this yields a rangewide population estimate of approximately 1,100 pairs. While the 100-pair discrepancy may appear small, it constitutes almost 25 percent of the difference between the 1986 population estimate of 790 pairs and the 1,200-pair goal.

On another matter, the article states that the U.S. Fish and Wildlife Service "blocks access completely to some of its wildlife refuges." In fact, piping plover protection has not resulted in complete closure of any refuges. Rather, the piping plover's beach habitat on national wildlife refuges has been closed to the public during the breeding season, while other portions of these refuges remain open to public access.

Anne Hecht
Endangered Species Biologist,
U.S. Fish and Wildlife Service

Paying Their Way

I agree that concessioners should be paying much higher fees, but I am also a firm believer in entrance fees [Outlook, "Paying for the Parks," July/August 1994]. If you use the parks, you should be willing and expected to help pay for them directly. The fee should be per person, including senior citizens. I am one, and there is no excuse for cut rates on anything by age—poverty rates among senior citizens are no different than the national average.

Keep the entrance fees in the parks, not back to the budget.

Silas B. Weeks
Eliot, ME

Lords of the Wild

- 23K gold rim
- Edition limited to a total of 28 firing days

Shown smaller than actual size of 8 1/4"

Broken Silence by *Al Agnew*

A branch snaps and the lord of the forest stands alert. His gaze, steady and proud, penetrates the cold winter morning as easily as his cry pierces the silence of the night.

Presenting "Broken Silence," a fine porcelain tribute to the great Northern grey wolf, and the very first collector plate by one of America's most honored wildlife artists, Al Agnew. With uncanny realism, he has captured the animals' regal winter coats, their distinctive ears and facial markings, the male's striking eyes...even the natural setting, a pristine stand of snow-blanketed birch trees.

"Broken Silence" inaugurates Al Agnew's *Year of the Wolf* Plate Collection, a series of portraits of the majestic wolf, through every season of the year— available exclusively from The Hamilton Collection. Each striking issue will be hand-numbered and accompanied by a matching Certificate of Authenticity. As an owner, you will have the right—*with no obligation*—to preview subsequent issues. Our 30 Day, *100% Satisfaction Guarantee* assures you order at no risk.

Demand may be strong for this masterwork of wildlife artistry. Submit your order today.

Respond by: October 31, 1994

Please enter my order for "Broken Silence" by Al Agnew. *Limit: One plate per collector.*

I need send no money now. On acceptance, I will be billed $29.50* when my plate is shipped. **T7Z1 QLRA**

Ms./Mrs./Mr. _____

Address _____

City _____

State _____ Zip _____

Telephone (____) _____

Signature _____

***Plus $2.96 shipping and handling. Shipments to Florida will be billed 6% state sales tax.** *All orders must be signed and are subject to acceptance.*

The Hamilton Collection

4810 Executive Park Ct., P.O.Box 44051, Jacksonville, FL 32231-4051

Thanks from the Rangers

I felt compelled to write on behalf of more than 5,000 members of the National Park Rangers Resource Protection Fund to express our appreciation for Yvette La Pierre's exceptional piece of journalism, "Illicit Harvest" [May/June 1994]. She has done a superior job of documenting a very complex issue which we—as public servants and public land users—feel very strongly about.

Our phones have been ringing steadily with concerned citizens wanting to help protect the parks and their resources. I hope that your magazine will continue its excellent record of exposing the many critical issues facing our national parks today. Only through a well-informed public and Congress can solutions be found to the rampant poaching now occurring in our nation's parks.

Robert R. "Bob" Martin
President, National Park Rangers Resource Protection Fund

Olympic Goats

I wish to comment on your article on mountain goats by Carmi Weingrod ["On the Horns of a Dilemma," May/June 1994]. I have visited Olympic National Park several times, once ascending Mt. Olympus. The ascent was a unique experience, having traveled from the seashore, through the rain forest, into alpine meadows, across a major glacier, and up the rocks of the summit pyramid!

For me, the mountain was *the* experience, but I also saw a stunning display of wildflowers and a shiny-coated mountain goat blocking my progress on the trail. For most people, the sighting of wildlife is the highlight of their trip. I believe most park visitors would be very happy to have vast ecosystems go to hell if more wildlife might be seen.

Roy Bishop
North Hollywood, CA

I wish to express my unfavorable reaction to the article "On the Horns of a Dilemma." One of the important aspects of visiting any natural area is the wildlife as well as the flowers and trees. The decision to butcher animals in the national parks and other preserves has become a national trend. It seems to be an outgrowth of instruction received in recent years at universities where the professors espouse that philosophy. The decision to kill the goats is a bad one. The methods of eliminating animals, if you read every word of the reports, are very cruel. Many of the public were not aware that this has been going on, and I don't think that Secretary Babbitt has become enough aware of it to take a different action.

Rita Martin
Downers Grove, IL

Write: Letters, NPCA, 1776 Massachusetts Ave., N.W., Washington, DC 20036. Or call 1-900-835-6344. Callers will be charged 89 cents a minute. All calls and letters may be edited for length and clarity.

THE CLASSIC JEAN JACKET...
NOW IN GENUINE LEATHER!

The all-American favorite, re-created in butter-soft nubuck leather!

Nubuck leather is rugged, yet incredibly soft. Suede is soft but it's not very durable. Shows wear and weather. Nubuck is the leather tanners' answer. It has the soft, buttery feel of suede. But it's tough as buckskin. And authentically western: strong, handsome, at home on the range.

Only rugged men could drive great herds of cattle across endless miles of Western prairie. And only a tough jacket could take the wear and tear of the trail. That's why generations of cowhands have sworn by their denim jean jackets. Today the jean jacket is a good-looking, great-fitting worldwide favorite ... ask anyone who has ever owned one!

Now, Willabee & Ward re-creates the classic American cowboy jacket in luxurious, suede-like "nubuck" leather!

Same great details as the original!

This meticulously tailored jacket boasts all the great looks, comfort and details of the original jean jacket. The metal button-front closures, the tapered fit, adjustable side plackets, button-close and side-entry pockets, and, of course, the authentic western topstitching.

What have we added? Just some of the toughest, butter-soft leather you've ever seen. And a smooth, satin blend lining. The result — a magnificent jacket that's perfect year-round for hard-working wear or a night on the town.

Just $195! Convenient monthly installments.

Available exclusively from Willabee & Ward, the genuine leather classic jean jacket comes in saddle tan and is priced at just $195 (plus $9.50 shipping and handling). Payable in six convenient monthly credit card installments of only $34.08. Complete with a *30-day money-back guarantee.* Available in four popular sizes for men and women: S, M, L, and XL. Have questions about sizing? Call us — we'll fit you right over the phone. Phone orders are normally shipped the next business day.

CALL TOLL-FREE:
1-800-367-4534 EXT. 689-154

Willabee & Ward
47 Richards Avenue
Norwalk, CT 06857

WILLABEE & WARD W&W

Satisfaction Guaranteed

CALL TOLL-FREE:
1-800-367-4534 Ext. 689-154

Please send me ____ Genuine Leather Jean Jacket(s).
Size(s) (Circle):

	Small	Medium	Large	Extra Large
Men's	(36 - 38)	(40 - 42)	(44 - 46)	(48 - 50)
Women's	(8 - 10)	(12 - 14)	(16 - 18)	(20 - 22)

☐ For each jacket, charge 6 installments of $34.08* to my credit card.

☐ VISA ☐ Mastercard ☐ Discover ☐ Am. Ex.

Credit Card # _____ Exp. Date

Name _____

Address _____

City/State/Zip _____

Signature _____
(All orders subject to acceptance.)

☐ I prefer not to use my credit card and will pay by check. Enclosed is my check for $195 plus $9.50 shipping and handling, a total of $204.50* for each jacket.

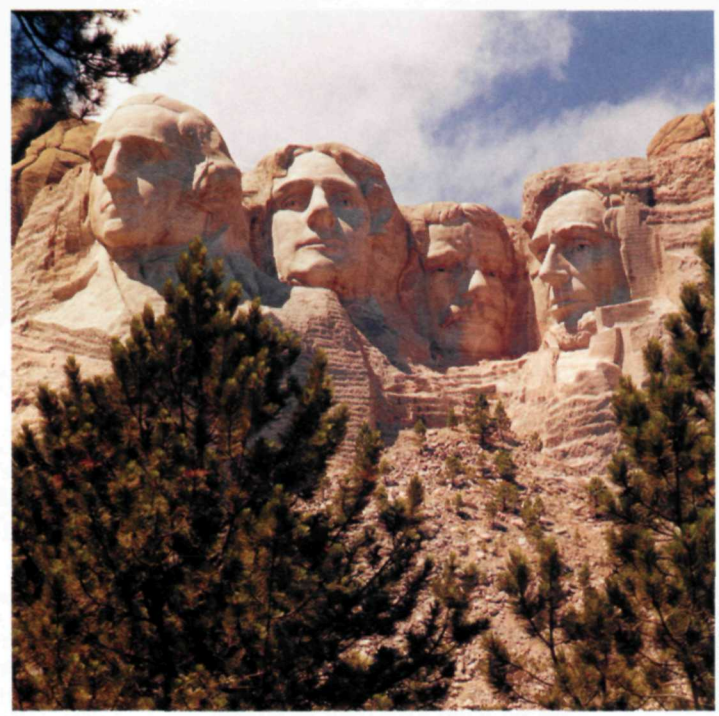
*Any applicable sales tax will be billed with shipment. Higher shipping and handling outside U.S.

N • P • C • A
NEWS

Mount Rushmore Plan Found Deficient

A National Park Service plan to overhaul visitor facilities at Mount Rushmore National Memorial emphasizes new construction at the expense of the park's history and resources, NPCA contends.

In 1990 the Park Service approved a four-phased construction project at the nearly 70-year-old park, where the busts of Presidents George Washington, Thomas Jefferson, Abraham Lincoln, and Theodore Roosevelt pay tribute to freedom and democracy. In addition to a large Greco-Roman entrance portal that has already been built, NPS plans to construct a multilevel parking structure and new amphitheater, interpretive center, and concessions buildings. NPCA concedes that additional parking is necessary but believes that the scope of the project has unnecessarily expanded beyond this identified need.



DAVID MUENCH

Mount Rushmore, a nearly 70-year-old tribute to democracy and freedom, is at the center of debate over a new construction project.

Although NPCA supports an improvement in visitor services, particularly interpretation, it believes that the project contradicts the anti-development park ethic espoused by the Clinton Administration and recommended by the Vail Agenda, the 1991 Park Service plan for the future of national parks. Among other things, NPCA is concerned that the Park Service has concentrated its efforts on acquiring funding for the amphitheater and other structures but not for a much-needed upgrade of interpretive exhibits and programs and restoration of the historic studio of Mount Rushmore sculptor Gutzon Borglum.

"By concentrating on funding for the amphitheater and not for the exhibits, the Park Service shows more interest in creating 'sound and light' shows for the visitor, rather than interpreting the history of Mount Rushmore," said NPCA President Paul C. Pritchard. "I am disappointed with the lack of commitment to interpretation that the plan reflects."

NPS undertook the overhaul project to respond to increasing visitation, which is at 2.6 million visitors a year and growing. Most of the funding for the $57-million project—as much as $40 million—is expected to come from the park's friends group, the Mount Rushmore National Memorial Society. The rest is to come from federal appropriations, individuals, foundations, and possibly the state of South Dakota.

Mount Rushmore Superintendent Dan Wenk estimates the cost of constructing the new amphitheater to be more than $2 million, of which $1 million has already been donated by the Freedom Forum, formerly known as the Gannett Foundation. Approximately $7 million from the sale of a Mount Rushmore commemorative coin is intended to make up the remainder of the money needed for the amphitheater, as well as pay for the construction of an interpretive center and an "avenue of flags" promenade.

Because of the Memorial Society's inability to raise more than a fractionof its goal, NPCA is concerned that funding for the interpretive exhibits will not be acquired in time for the opening of the center in spring 1998. In all, only $27.5 million of the $57 million has been raised.

Reorienting funding priorities at Mount Rushmore, NPCA says, would mitigate the effects of a project so expensive and expansive that it should have warranted the preparation of an environmental impact statement. "This

is an example of an abuse of agency discretion by sacrificing a park's resources to promote its own agenda," said NPCA Heartland Regional Director Lori Nelson.

Under the current plan, the park concessioner will pay for the construction of a new $9-million concessions facility as well as a dormitory for concessions employees on park grounds, at the expense of trees, rocks, and other natural resources. Although the park contends that most new structures will be built on the "footprint" of existing buildings, the new buildings will be larger in scale. This is inconsistent, NPCA points out, with the Vail Agenda mandate to "minimize the development of facilities within park boundaries."

Plans for the multilevel parking structure have also come under fire. One funding option Superintendent Wenk has explored is the issuance by South Dakota of a tax-exempt bond for construction of the facility, which would then be paid off by implementing parking fees of about $4-$5 per car. Although this would not technically breach Mount Rushmore's authorizing legislation, which prohibits entrance fees, the parking fee is, in effect, a charge for viewing the memorial. Another option is to allow a concessioner to manage the parking facility.

NPCA criticizes NPS for planning the parking structure around an unrealistic assumption that visitation will level off. If the park "will be maxed out in terms of parking facilities when we build this structure," as Wenk has admitted, the plan should consider long-range alternatives to more parking such as mass transit or day-use restrictions.

NPCA and former South Dakota Sen. Jim Abourezk have alerted Rep. Bruce Vento (D-Minn.) and Sen. Dale Bumpers (D-Ark.), respective chairs of the House and Senate subcommittees on national parks, as well as Interior Secretary Bruce Babbitt and NPS Director Roger Kennedy, to the deficiencies in the plan. "NPCA is prepared to use whatever resources are available," Nelson said, "until we feel satisfied that NPS will put interpretation and park resources first at Mount Rushmore."

Concessions Reform Approved by House

NPCA is celebrating a victory for national parks. On July 28, the House of Representatives passed the Concessions Policy Reform Act, NPCA's top priority for nearly five years.

By an overwhelming bipartisan margin of 386 to 30, the House voted to reform the way private companies that provide food, lodging, and other services in national parks do business with the federal government. Concessioners now pay only a pittance of their gross revenues in franchise fees to the government, money that is not returned to the parks.

The reform bill would open concessions contracts to competitive bidding, increase franchise fees, and ensure that at least some fee revenue is returned to the parks. Additional annual revenue will help mitigate park problems such as limited staff and maintenance backlogs.

The House defeated an amendment, offered by Rep. Austin Murphy (D-Penn.) and opposed by NPCA, to continue costly public buyouts of concessioner-financed building improvements when contracts end. The Senate, which passed the measure in April by a 90-9 vote, and the House will now confer about the bill.

"That both houses of Congress approved the bill by a 10 to 1 margin demonstrates that legislators agree that parks need more funds," said NPCA President Paul C. Pritchard.

JOHN HENDRICKSON

Cave formations in the Big Room are near the underground lunchroom at Carlsbad.

Congress Ends Debate Over Carlsbad Caverns

The National Park Service's plans to remove an underground concession from Carlsbad Caverns National Park in New Mexico were recently thwarted by Congress.

In June, New Mexico members Rep. Joe Skeen (R) and Sen. Pete Domenici (R) added to an Interior funding bill amendments that, in effect, prevent NPS from removing the underground lunchroom and gift shop. The present concessions contract has expired, and NPS planned to include the removal of the lunchroom in its upcoming bids for a new contract. Located 755 feet below the surface, the lunchroom is near a huge chamber called the Big Room,

NEWSUPDATE

▲ **Artistic freedom.** In late July, President Clinton signed legislation to transfer control of the John F. Kennedy Center for the Performing Arts in Washington, D.C., from the National Park Service to the center's board of trustees. The Park Service has been responsible for management, repairs, security, and maintenance since the center was established in 1972. The center's trustees say that full autonomy will allow them to receive federal and private funds for a plan to upgrade and modernize the structure. Drawing 3.5 million visitors a year, the Kennedy Center includes three theaters, an opera house, and a concert hall.

which contains cave formations called the Twin Domes and the Rock of Ages, among others. NPCA, which strongly supports removing the concession, has criticized Congress for interfering in NPS plans.

In January, the Park Service's recommendation for removal of the concession was upheld by a committee that the New Mexico congressional delegation insisted review the issue. The committee concluded that the concession has a negative impact on the cave and that "this existing and potential threat ...outweighs any need for these services at this location." Some of the impacts to the caverns include toxic fumes, dust from tables, boxes, and merchandise, and leakage from refrigerants in commercial coolers.

NPCA is also concerned that the lunchroom goes against the system-wide trend of limiting or eliminating in-park commercialism. With similiar facilities located at the surface only a minute-long elevator ride away, NPCA believes that the concession violates the "necessary and appropriate" standard set in the Concessions Policy Act. "We may have lost this battle temporarily, but we shall win the war," said Dave Simon, NPCA Southwest regional director.

Salt River Bay Development Banned

After eight years of litigation, conservationists have successfully opposed plans to develop Salt River Bay National Historical Park and Ecological Preserve on St. Croix in the U.S. Virgin Islands.

In June a U.S. district court judge declared invalid a coastal zone management permit obtained by Sugar Bay Land Development that would have allowed the construction of a massive recreation complex at the park. The Virgin Islands Conservation Society (VICS), represented by the Sierra Club Legal Defense Fund, challenged the issuance of the permit before the local board of land use appeals. NPCA was one of several conservation and historical groups to file court-admissible briefs in support of the VICS position.

CAROL LEE

The many riches of Salt River Bay were recently protected from a development threat.

Sugar Bay Land Development sought the permit to create the "Virgin Grand," a 588-unit hotel, condominium, and marina complex covering a quarter of the park's 912 acres. Special conditions of the permit allowed the project, which would have dredged marine areas for development, to proceed without a previous environmental impact assessment. VICS, NPCA, and others were concerned about the project's effect on Salt River Bay's water quality and archaeological resources.

Established in 1992, the park preserves the habitats of more than 100 species of birds and more than 20 federally and locally listed endangered species. Burial grounds with remains that date from A.D. 665 to 1015 can be found at the site, where more than 500 years ago Christopher Columbus laid anchor on his second voyage to the New World. Salt River Bay was also home to three Caribbean peoples—the Igneri, the Taino, and the Carib—from as early as A.D. 50.

NPCA was instrumental in the federal protection of Salt River Bay, by building local and administration support for the park and by helping to draft enabling legislation. Although the land that would have been developed falls within park borders, the National Park Service, which manages the site with the Virgin Islands government, has not yet had the funds to purchase it.

"We are grateful that the acquisition of the lands for this beautiful national park will not be complicated and made more expensive by development threats," said NPCA Staff Attorney Elizabeth Fayad.

NPCA trustee and long-time Virgin Islands conservationist Virdin C. Brown was a leader in the fight to protect the park. "I recognized the history of Salt River Bay and was aware of the archaeological values of the site," Brown said. "The hotel would have encompassed these archaeological sites. There was a strong fight on our side to stop it."

VICS, NPCA, and the other groups contended that the public and governmental review process had been subverted. The granting of the permit "encouraged tolerance of environmental degradation and encouraged the developer to submit insufficient information," stated the St. Croix Environmental Association, the local chapter of VICS.

Because Salt River Bay has become a national park since litigation began, conservationists believe that the Coastal Zone Management Commission would deny any reapplication by Sugar Bay to develop the area. "It's a great one for us to celebrate," Brown said.

House Votes To Protect California Desert

Despite a barrage of stalling tactics by Rep. Jerry Lewis (R-Calif.) and other Republican opponents, the House of Representatives passed the California Desert Protection Act on July 27.

After weeks of testy piecemeal debate, the House passed by a 298-128 vote an amended version of a bill to protect nearly 8 million acres of wilderness in arid southeastern California. Although the vote is a major victory for NPCA and other long-time supporters of the legislation, NPCA is disappointed that the House approved several amendments that weaken the original bill.

As approved by the Senate in April, the California Desert Protection Act would establish 4 million acres of federal land as wilderness, expand Death Valley and Joshua Tree national monuments and redesignate them as national parks, and preserve 1.2 million acres of Mojave Desert as a national park. In the House, an amendment offered by Rep. Lewis and Rep. Larry LaRocco (D-Idaho) that downgrades the status of the Mojave to a national preserve to allow hunting and trapping passed the House by a 239-183 vote, although it was strongly opposed by Interior Secretary Bruce Babbitt, NPCA, and other conservationists.

"By creating a hunting preserve in the Mojave," said Tom Adams, an NPCA Washington representative, "this amendment denies the American people the sanctuary and safety of a national park in an area possessing an abundance of park-quality resources." The House also passed an amendment that would prohibit the Interior Department from considering the Endangered Species Act when appraising private property within the new parks, which would make future land purchases more expensive.

Although the House voted down an NPCA-supported amendment by Rep. Bruce Vento (D-Minn.) to limit cattle grazing, NPCA applauds the defeat of two other weakening amendments. One, offered by Rep. Richard Pombo (R-Calif.), would have allowed the continued use of 1,068 miles of roads and trails in the new parks; the other, backed by Rep. Lewis and Rep. Ken Calvert (R-Calif.), would have delayed the bill's effective date until NPS reduced its land acquisition backlog by 50 percent—essentially a delaying tactic.

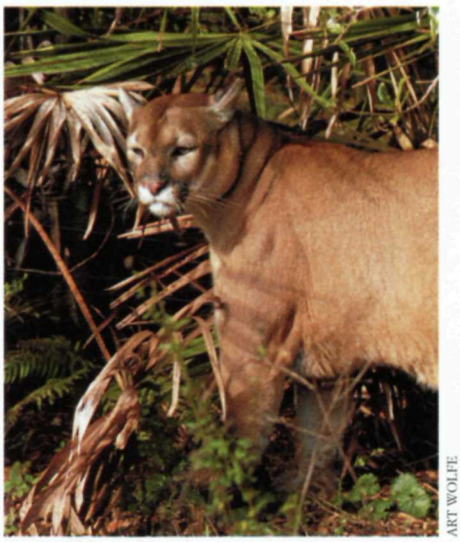
Both chambers of Congress will now resolve differences in the bill before it is sent to the president for approval. Meanwhile, NPCA continues to fight for park status for the Mojave.

Intercross Plan May Save Florida Panther

A plan to interbreed the endangered Florida panther with the nearly identical Texas cougar may soon give the predator a fighting chance for survival.

In June the U.S. Fish and Wildlife Service (USFWS) approved a year-old proposal by an interagency recovery team to use the cougar to enhance diversity in the panther gene pool. The agency has required, however, that the team establish intercross controls to protect the characteristics of the endangered animal, of which fewer than 50 remain. Although the USFWS took an entire year to reach a decision, NPCA is heartened by the agency's goal to implement the plan by early 1995.

USFWS Director Mollie Beattie



ART WOLFE

The endangered Florida panther may get a genetic boost from the Texas cougar.

MARKUP

Key Park Legislation

Bill	Purpose	Status
Concessions reform H.R. 1493 S. 208	Increases concessions fees and returns them to the park system; establishes competitive bidding for contracts; reforms possessory interest. NPCA supports.	The House approved H.R. 1493 on July 28 by a 386-30 vote. The Senate approved S. 208 in March by a 90-9 vote.
California Desert Protection Act H.R. 518 S. 21	Establishes Mojave National Park, expands Death Valley and Joshua Tree national monuments, redesignates them as national parks, and designates 4 million acres of Bureau of Land Management wilderness. NPCA supports.	The House passed H.R. 518 on July 27 by a 298-128 vote. The House downgraded the Mojave to a national preserve to allow hunting. The Senate passed S. 21 on April 13 by a 69-29 vote.
Presidio H.R. 3433 S. 1639	Preserves the historic Presidio in San Francisco intact and allows for leasing many of its buildings to offset the cost of turning it over to the Park Service. NPCA supports.	The House Natural Resources Committee approved H.R. 3433 in late July. A vote on the House floor is expected soon. S. 1639 is still awaiting action by the Senate.
Overflights H.R. 4163	Regulates airtour operations over national parks by requiring operators to comply with national park concessions regulations. NPCA supports.	H.R. 4163 is pending before the House Public Works and Natural Resources committees. The House subcommittee on aviation held a hearing July 27.

NPCA is currently working on more than 60 bills.

asked the recovery team to revise the plan to identify those characteristics that distinguish the Florida panther, to ensure that the intercross would produce those characteristics in the offspring, and to protect the offspring under the Endangered Species Act. "We are telling the recovery team that whatever you do, the outcome must produce Florida panthers," Beattie said. "The federal responsibility here is to save a specific animal, the Florida panther."

Now found only in Florida, the panther once roamed from Louisiana and Arkansas east to South Carolina and south to the area now encompassed by Big Cypress National Preserve and Everglades National Park. The animal's recent decline is attributable in part to the rapid development of south Florida in the last half-century, which has resulted in the depletion of vital wetlands and wildlife that make up the panther's prey base. Now, because of inbreeding and a nearly bankrupt gene pool, the small Florida panther population suffers from reproductive disorders and physical deformities.

USFWS has mandated that the cougar not genetically overwhelm the panther, as some biologists have feared would happen should the cougars be released in the wild. One of 29 subspecies of mountain lion, the Florida panther weighs less and has longer legs, smaller feet, and a darker coat than the Texas cougar.

The USFWS recovery team is examining several methods to control genetic augmentation, including using electronic devices to monitor cougars released in the wild, captive breeding of the Florida and Texas animals with the release of kittens in the wild, and artificial insemination.

NPCA is working with the Florida delegation and the interagency team to ensure that the project proceeds effectively. "We have reached a critical point at which the survival of the Florida panther is in doubt," said Will Callaway, an NPCA Washington representative. "The intercross program may be the animal's best hope. We're encouraging USFWS to move forward with genetic restoration as quickly as possible."

NPS To Regulate Sales in D.C. Parks

The scores of T-shirt vendors who clutter national memorials and parklands in Washington, D.C., may soon have to sell their wares elsewhere.

Denouncing what in the last few years has become a "flea market" atmosphere, the National Park Service proposed new regulations in May that would bar the sale of anything but written material at National Capital parks, which include the National Mall, the Washington Monument, and the Lincoln, Jefferson, and Vietnam Veterans memorials. Current regulations allow the sale of T-shirts, buttons, bumper stickers, posters, and other items as long as they are related to a particular cause or demonstration.

In July NPCA submitted to the Park Service its comments and suggestions on the proposed rule change. "Commercial sales on National Park Service lands should be strictly limited," stated Elizabeth Fayad, NPCA staff attorney. "NPCA commends the National Park Service for proposing a rule that will restore an air of dignity to important areas in the National Capital Region of the National Park System."

Although it supports the intent of the new restrictions, NPCA is concerned that legitimate causes, for which T-shirt sales can foster solidarity and raise money, may suffer because of the sweeping nature of the regulations. NPCA suggested that permits allowing T-shirt sales be granted only for the hours of a demonstration and that stiffer penalties be enforced for violating permit conditions. Under the current rule, vendors can reapply for 21-day permits indefinitely and, if a permit is revoked for a violation, can obtain another one the same day.

The Park Service should limit goods for sale, NPCA suggested, to those that clearly represent a cause or demonstration. Many vendors loosely interpret this regulation; for example, some vendors have stamped "Save the Environment" or a similar message on T-shirts with pictures of wildlife in order to obtain a demonstration permit. At other vendor

SAVE THE EAGLE, PROUD AND FREE

Save the Eagle, Proud and Free. The first Eagle Fine Art Print ever created for the famed Alaska Chilkat Bald Eagle Preserve, the world's largest Eagle preserve.

Created—and *personally hand-signed* by Ted Blaylock, who ranks among the world's most widely collected wildlife artists.

Handsomely matted and mounted in a custom-designed hardwood frame. Certified authentic by an *official commemorative medallion—authorized by the State of Alaska and richly embellished with 24 karat gold.* Just $195, payable in monthly installments.

SATISFACTION GUARANTEED

If you wish to return any Franklin Mint purchase, you may do so within 30 days of your receipt of that purchase for replacement, credit or refund.

Print assembly shown smaller than actual size of 24¼" (61.60 cm) x 18" (45.72 cm) x 1½" (3.81 cm).

Official commemorative medallion rich with 24 karat gold is shown actual size of 28mm.

Official Issue of Alaska's Chilkat Bald Eagle Preserve.

Order Now For Christmas

Please mail by October 31, 1994.

The Franklin Mint • Franklin Center, PA 19091-0001

Please enter my order for Save the Eagle, Proud and Free, authenticated by Alaska's Chilkat Bald Eagle Preserve.

I need SEND NO MONEY NOW. I will be billed in 5 equal monthly installments of $39.* each, with the first installment due prior to shipment.

**Plus my state sales tax and a one-time charge of $3. for shipping and handling.*

SIGNATURE _____
ALL ORDERS ARE SUBJECT TO ACCEPTANCE.

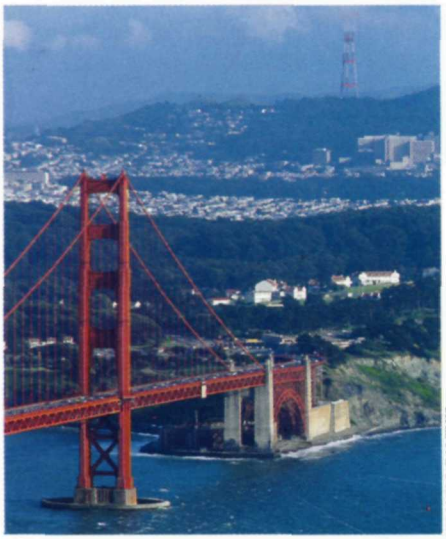
MR/MRS/MISS _____
PLEASE PRINT CLEARLY.

ADDRESS _____ APT. # _____

CITY/STATE _____ ZIP _____

TELEPHONE # (_____) _____

15926-128-001-8OOB



FRANK S. BALTHIS

Near the Golden Gate Bridge, the Presidio joins the National Park System this fall.

stands, the cause or demonstration is not discernible.

Before the 1982 dedication of the Vietnam Veterans Memorial, only newspapers, leaflets, and pamphlets were permissible for sale on parkland. When annual visitation to "The Wall" began numbering in the millions and applications for demonstration permits in the hundreds, the Park Service expanded its sales guideline to include other written materials such as T-shirts and bumper stickers. In 1994 alone, the Park Service expects to issue approximately 3,500 demonstration permits, nearly half of which would be for the small area around the Vietnam memorial.

Urging NPS to enforce stronger guidelines, conservationists, Vietnam veterans, and other park visitors expressed concern that the T-shirt stands impede access to the monuments; cause tree, shrub, and turf damage; and violate the sanctity of The Wall.

"The National Park Service has concluded that sales activities...have severely disrupted the quality of the park visitor experience and have had a negative impact on the aesthetic values of the parks," said Robert Stanton, NPS National Capital regional director. "We believe that these regulations, if approved, will protect both persons engaged in First Amendment activities as well as the visitors and the parkland that we are entrusted to preserve."

Historic Presidio Joins National Park System

The Presidio Army base, which has been the center of debate for the past year, will become part of Golden Gate National Recreation Area (GGNRA) on September 30.

Encompassing nearly 1,500 acres of historic buildings, wetlands, wild coastal bluffs, and other areas of spectacular scenery in San Francisco, the Presidio has been an active military base since 1776. In 1972, Congress enacted legislation to include the Presidio in the adjoining GGNRA should it ever be phased out of military service, as was eventually decided by the Army in 1988.

Citing the base's cultural, natural, and historic significance, NPCA has been a staunch advocate of a bill sponsored by Rep. Nancy Pelosi (D-Calif.) that would set up a public benefit corporation to manage the site's historic buildings. To offset operating costs, the bill would allow many of these buildings to be leased to nonprofit groups, as is now done at GGNRA's Fort Mason Center.

The potential expense of managing and operating the Presidio as a national park has been the focus of opposition led by Rep. John Duncan (R-Tenn.). Duncan offered an amendment to the House Interior Appropriations bill for fiscal year 1995 that would have cut $14 million from the Park Service budget for operating the Presidio. Strongly opposed by NPCA, this amendment was soundly defeated. A separate bill introduced by Rep. Duncan to dismantle and sell off portions of the Presidio was no longer considered when the House Natural Resources Committee approved the Pelosi bill.

The House has been working on provisions in the Pelosi bill over which jurisdiction is shared with other committees, such as Ways and Means. At press time, a vote by the full House was likely before the mid-August congressional recess. A companion bill introduced by California Sens. Dianne Feinstein (D) and Barbara Boxer (D) is awaiting action by the Senate Energy and Natural Resources Committee.

Do Good.

Help NPCA and Hi-Tec® preserve and protect our National Parks.

When you buy our official NPCA poster or T-shirt, the net proceeds will be applied directly to underwrite funding for our national parks, monuments, and historical sites, via the National Parks and Conservation Association, a national non-profit citizen group dedicated to preserving and protecting our national parks. Choose from this stunning 30" x 19" poster depicting the wildlife of America's national parks for $9.90 or a beautiful 100% cotton, silk screened T-shirt for just $12.00. You'll be doing something good for our most priceless American treasure, our National Park System.

75™ NPCA ANNIVERSARY 1919 1994 *Citizens Protecting America's Parks*

NATIONAL PARKS AND CONSERVATION ASSOC.

To order your special edition NPCA Poster or T-shirt, send your check or money order made payable to "1994 National Parks Offer" to: 1994 National Parks Offer, P.O. Box 5894, Stacey, MN 55078-5894

	Quantity	Price Each	Subtotal
Poster	_____	$ 9.90	_____
T-shirt: Medium	_____	$12.00	_____
Large	_____	$12.00	_____
X-Large	_____	$12.00	_____
Total Enclosed (Check or money order):			_____

Name _____

Address _____

City _____ State _____ Zip Code _____

Offer Expires 3/31/1995. Please allow 8 weeks for shipment. Offer valid in USA only. 06

Space for this ad was made available by:

National Parks

The Posters For Parks Series is sponsored by Hi-Tec Sports

HI-TEC®

For more information or to become a member of NPCA, call or write: NPCA, 1776 Massachusetts Ave., N.W., Washington, DC 20036 1•800•NAT•PARK

Regulations May Lessen Road Threats to Parks

The Department of the Interior (DOI) recently took significant steps toward curbing the onslaught of claims for highway rights-of-way across parks and other public lands. But additional reforms are needed to adequately protect federal lands, NPCA says.

In late July, DOI released draft regulations interpreting Revised Statute 2477, a Civil War-era law that granted rights-of-way for the construction of "highways" across federal lands not reserved for other public uses. R.S. 2477 was repealed in 1976, but claims of pre-existing rights-of-way soared when a loose interpretation of the statute was issued in 1988 by then-Secretary of Interior Donald Hodel. Counties and states across the West and Alaska have since claimed rights-of-way to thousands of roads, vehicle tracks, footpaths, and dogsled trails. Many assert the right to turn these routes into major highways, even if they traverse national parks, wildlife refuges, and other public lands.

"Regulations are sorely needed to protect our national parks and public lands from the rash of road claims taking place under R.S. 2477," said NPCA President Paul C. Pritchard.

The draft regulations establish a deadline for filing R.S. 2477 right-of-way claims and create an administrative process for reviewing these claims. However, NPCA believes the regulations fail to establish sufficiently strict criteria for determining which routes qualify as rights-of-way. The definition of "highway," for example, could allow only occasionally used routes across remote federal lands to qualify as R.S. 2477 "highway" rights-of-way.

NPCA supports provisions in the regulations that limit the "scope" of any validated right-of-way to the "width, surface treatment, and location actually in use" in 1976 and that allow road improvements only if they have been separately authorized under contemporary laws. NPCA takes issue with language in the preamble that implies that dirt roads recognized as valid rights-of-way may sometimes be graveled or paved without such authorization.

NPCA also recommends that the regulations direct federal land managers to exercise full authority to avoid harmful impacts to public lands and improve opportunities for public participation in determining the validity of claims.

"R.S. 2477 could mean a tangled web of expanded, paved, and unneeded roads across our public wildlands and national parks," said Terri Martin, NPCA Rocky Mountain regional director. "Reasonable access over federal lands is readily available under contemporary laws designed to balance right-of-way claims with environmental protection. New regulations should ensure that the archaic R.S. 2477 is not used to evade these reasonable policies."

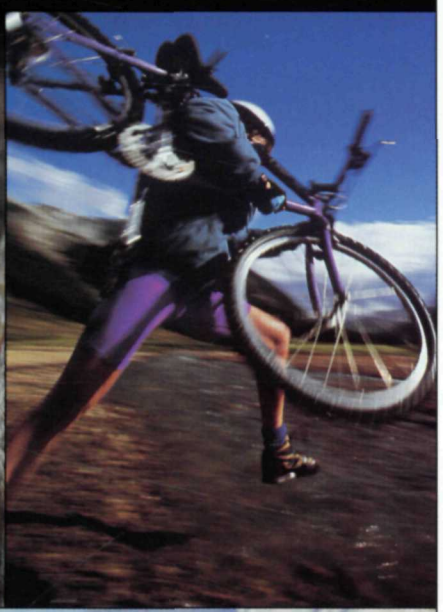
This also holds true in Alaska, NPCA asserts. "R.S. 2477 was enacted when Alaska was still owned by Russia," said Chip Dennerlein, NPCA Alaska regional director. "The laws that settled Native land claims and established national parks in Alaska adequately provide for access and transportation needs."

✍ *Public comment on the draft regulations will be accepted until September 30. Write to Secretary Bruce Babbitt (Department of the Interior, 18th and C Streets, N.W., Washington, DC 20240) supporting regulations that fully protect national parks and other public lands from invalid right-of-way claims. Urge him to strengthen the regulations in the ways mentioned above.*

NPCA and Others Fault Denali Bus Contract

A new bus contract at Denali National Park neglects environmental compliance laws and could pose a risk to the park road, NPCA and other groups say.

In June the National Park Service approved a contract to allow ARA Leisure Services to take over the bus transportation system along the only road through Denali, one of Alaska's premier wilderness parks. Denali Superintendent Russell Berry and other park officials say that the contract will meet



Feel Good.

When you put on a pair of Hi-Tec® boots, it's hard to believe that anything so rugged and durable can be so comfortable right out of the box. From park to peak, from trek to trail, mile after mile, Hi-Tec rugged footwear provides sure-footed comfort every step of the way. Nobody knows better than Hi-Tec how important comfort, durability, and stability are when you're out there enjoying your latest adventure.

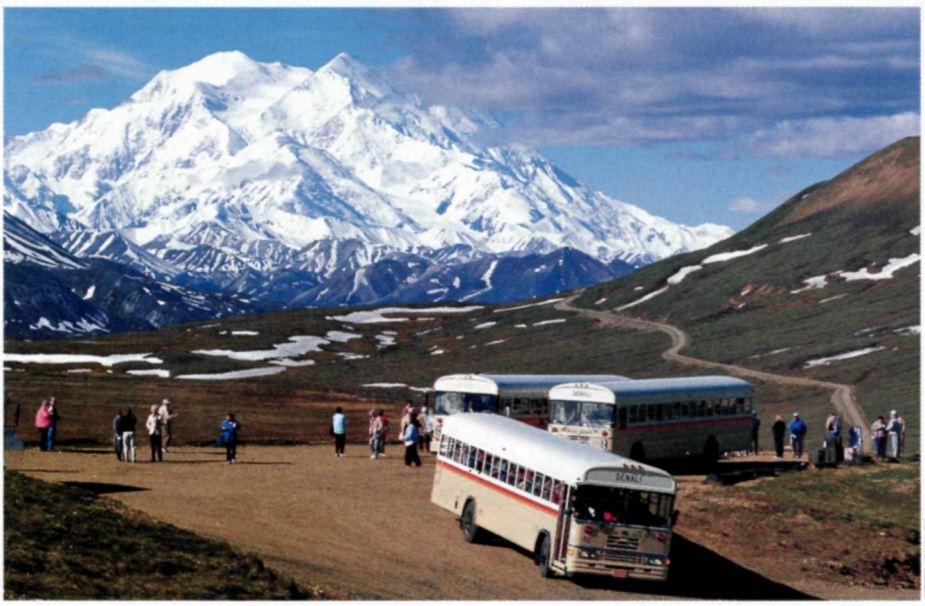
So, if you're looking to expand your horizons, put on a pair of Hi-Tec boots and see how they can change the way you view the world.

HI-TEC®

Rugged Footwear For Out There... And Beyond

Proud Sponsor of
Trailside
Make Your Own Adventure
The National Public Television Series

Hi-Tec Sports USA, Inc., 4801 Stoddard Rd., Modesto, CA 95356. 1(800) 521-1698. Canada (416) 564-0414.



JEFF GNASS

Buses along the Denali road, now being studied, offer visitors views of Mount McKinley.

public demand for a more comfortable and accommodating transportation system and, by allowing ARA to finance and manage the bus system, will free up funds for other services.

ARA had planned to purchase 40 coach-style buses, which are larger and heavier than the school buses also being considered, to take visitors from the park entrance to the Toklat ranger station, the Eielson Visitor Center, and finally to the Wonder Lake campground deep within the park. NPCA and other critics of the bus deal point out that the Park Service sidestepped the standard public review and comment process and performed "after-the-fact" environmental assessment. In addition, the Denali Task Force, a special committee of the National Park Advisory Board set up by Interior Secretary Bruce Babbitt, was not informed of the bus contract until after it was approved.

More than two weeks after signing the contract, NPS conducted a test of the impacts of the coach bus on the particularly primitive stretch of dirt road to Wonder Lake. The study found that the increased weight and high center of gravity of the coaches, along with the soft edge of the road and other factors, may contribute to rollover accidents. The test findings also noted that the Wonder Lake road would have to be significantly upgraded and widened to safely accommodate the coaches.

Such a road upgrade and increased traffic, NPCA contends, are in direct conflict with the primitive nature of the Denali road, across which roam caribou, bears, and other wildlife. NPCA encouraged NPS to accommodate visitors by using new or upgraded smaller school buses that have larger windows, luggage racks, and better seating than those designed for children.

"We agree with NPS that the park visitor should be able to experience the essence of Denali National Park with better buses and opportunities for wildlife viewing, but we cannot sacrifice the park's wild character in the process," said Chip Dennerlein, NPCA Alaska regional director and Denali Task Force member. "The road should determine the character of the equipment, not the other way around."

In addition, in exchange for operating the transportation system, the contract waives for ARA the franchise fee usually paid by concessioners. To offset its costs, ARA plans to charge visitors, who now pay a $4 reservation fee, an average of $20 to travel along the Denali road. NPS and ARA Leisure Services have not, however, released financial information to the public to assure visitors that they are being fairly charged. "We realize that today's budget realities sometimes require user fees," Dennerlein said. "But if the Park Service is taking services instead of a franchise fee, the public has a right to know the value of these services."

Since approving the contract, NPS has struggled to address the concerns of critics. The agency is now also conducting an after-the-fact environmental study of the front-country construction associated with the bus deal, which NPCA and others argue is a backwards approach. In late July, NPS had agreed to use only school buses on the Denali road; by early August, the agency had retracted this position and decided to put together a committee to reevaluate the issue. NPCA and others are awaiting the committee's decision before taking further action.

Tallgrass Legislation Ready for Congress

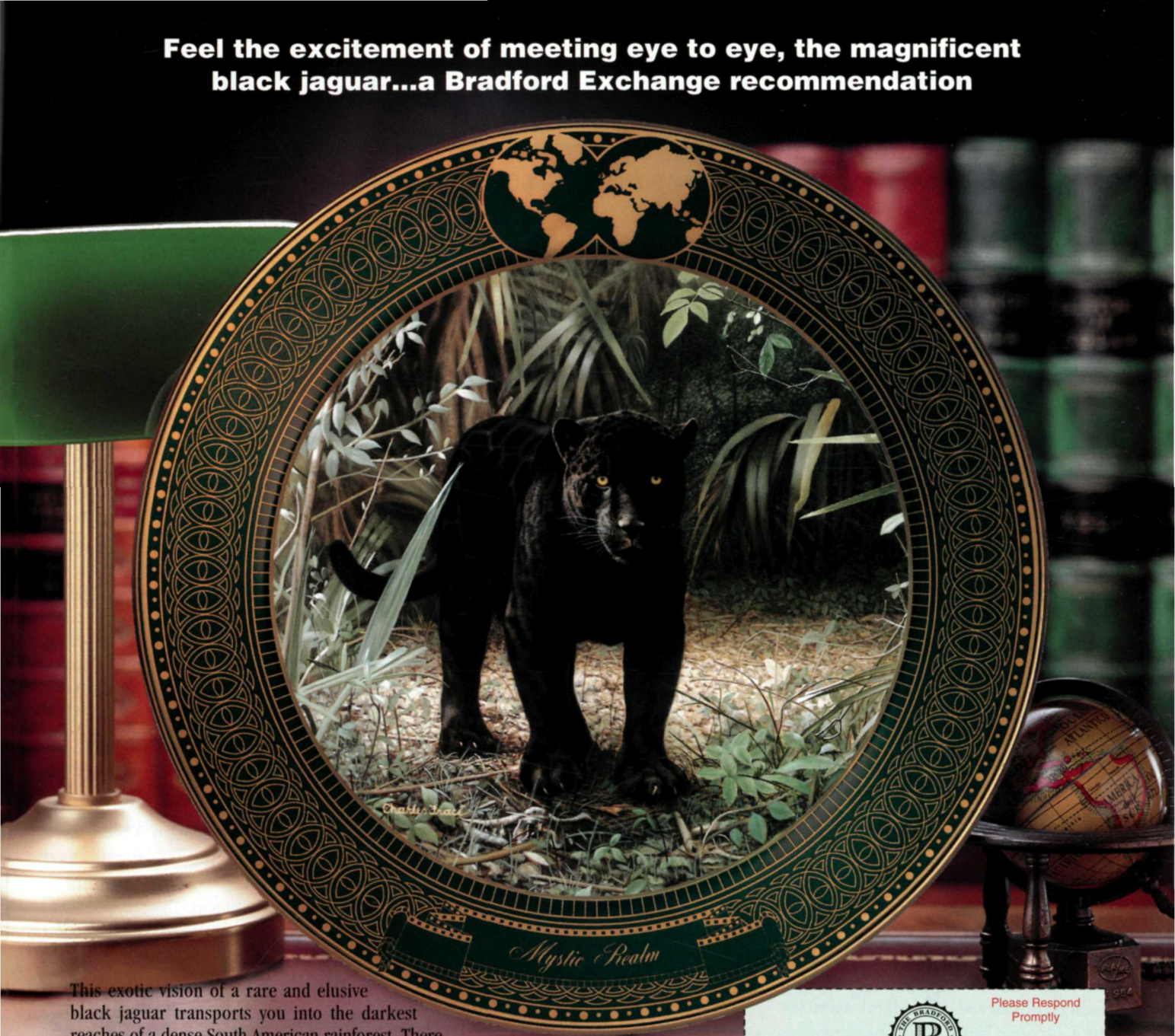
At press time, legislation to establish a new national park unit on the Z Bar Ranch, an 11,000-acre tract of tallgrass prairie in east Kansas, was set to be introduced in Congress by mid-August.

The bill, which would create the Tallgrass Prairie National Preserve, is the result of an unprecedented private-public planning effort involving NPCA, the National Park Trust (NPT), Kansas citizens, and the entire Kansas congressional delegation—Sens. Nancy Kassebaum (R) and Bob Dole (R) and Reps. Jan Meyers (R), Dan Glickman (D), Pat Roberts (R), and Jim Slattery (D). The legislation settles a 40-year debate over how the land should be managed.

The bill would allow 98.3 percent of the land to remain privately owned. The National Park Service would own the remaining 180-acre portion and manage the ranch in its entirety. To mollify local concerns about federal land ownership, the bill provides for local input through an advisory committee of local citizens. (See page 4 for more on the proposed park.)

✍ *Write to your senators (U.S. Senate, Washington, DC 20510) and your representatives (U.S. House of Representatives, Washington, DC 20515), urging them to support this legislation.*

Feel the excitement of meeting eye to eye, the magnificent black jaguar...a Bradford Exchange recommendation



This exotic vision of a rare and elusive black jaguar transports you into the darkest reaches of a dense South American rainforest. There you are among the privileged few to view this powerful and endangered creature close-up, moving silently within his leafy kingdom.

This mesmerizing vision from internationally acclaimed wildlife artist Charles Fracé is now yours to cherish on a fine porcelain collector's plate. Elegant gold-designed border, plate title and artist's signature re-created in gold on the plate face, as well as the dramatic 9⅛ inch size, make this plate unique.

"Mystic Realm" is hand-numbered, comes with a Certificate of Authenticity, and is backed by the Bradford Exchange 365-day guarantee. All of which makes the edition of "Mystic Realm"—priced at $39.90—a one-of-a-kind art value. It is issued in a strictly limited edition, so to avoid disappointment order your plate today. Simply fill out and mail the coupon at right. No need to send money now. You will be billed in two monthly installments. And soon this awesome lord of the jungle will be yours!

FCB-772

"Mystic Realm"

- A stunning work of art on porcelain
- Surrounded by an elegant gold-design border
- With title and artist signature in gold on face of plate
- Shown smaller than unique 9⅛ size

Your Bradford Exchange Advantages:

- A hand-numbered limited-edition plate with a correspondingly hand-numbered Certificate of Authenticity
- A complete plate story introducing the artist and detailing the significance of this recommendation
- Mesmerizing close-up view of the exotic and powerful black jaguar
- An unconditional 365-day guarantee allowing you to return your plate for a full refund of everything you have paid—including postage

Please Respond Promptly

THE BRADFORD EXCHANGE
9345 Milwaukee Avenue • Niles, IL 60714-1393

RECOMMENDING TOMORROW'S TREASURES TODAYSM

YES. Please enter my order for "Mystic Realm." I understand I need SEND NO MONEY NOW. I will pay for my plate in two monthly installments of $19.95 each, the first being billed before shipment.
Limit: one plate per order.

Signature _____

Mr. Mrs. Ms. _____
Name (Please Print Clearly)

Address _____

City _____

State _____ Zip _____

Telephone (_____) _____

*Plus a total of $3.49 postage and handling.
Illinois residents add state sales tax.
The plate price in Canada is higher. Pending credit approval.

3611-E26391

REGIONAL REPORT

News Briefs from NPCA's Regional Offices

ALASKA

Chip Dennerlein, Regional Director

Backed by NPCA and other conservation groups, legislation has been submitted to Congress to authorize an agreement between Alaska Natives and NPS over all-terrain-vehicle (ATV) use in Gates of the Arctic National Park and Preserve. Introduced in somewhat varying versions by Rep. George Miller (D-Calif.) and by Alaska members Rep. Don Young (R) and Sen. Frank Murkowski (R) in both houses, the legislation allows the continued use of ATVs on certain parklands for Native subsistence hunting, reconfigures wilderness boundaries, and provides public recreation access to many acres of Native-owned land. NPCA supports Miller's version of the bill, which incorporates two other provisions: first, 41,000 additional acres of adjacent federal land will be designated as wilderness; second, a cooperative management process will be established.

◆

NPCA is opposed to an amendment to the 1995 Senate transportation funding bill that exempts Alaska parks and public lands from protective measures now being considered by federal agencies. In a surprise move, Murkowski added an amendment that prohibits the appropriation of any funds to implement and enforce aircraft overflights restrictions expected to be promulgated by NPS and the Federal Aviation Administration (FAA). The language may also prevent FAA from participating in environmental reviews of military requests to fly over public lands. NPCA is working to defeat the amendment.

HEARTLAND

Lori Nelson, Regional Director

NPCA is encouraging the removal of approximately 20 feral, non-native horses from Ozark National Scenic Riverways in Missouri. The horses are now free to graze and range across parklands, which has caused erosion and negative impacts to natural resources. NPS initially planned to work with the Humane Society to implement an "Adopt-a-Horse" program but was stalled by local opposition from the Wild Horse League, a group formed to keep the horses in the park. Led by Rep. Bill Emerson (R-Mo.), these opponents have suggested confining the animals to certain park areas. NPCA favors the "Adopt-a-Horse" program and urges NPS to proceed with removal. ✍ *Write to NPS Director Roger Kennedy (18th and C Streets, N.W., Washington, DC 20240) and NPS Midwest Acting Regional Director Bill Schenk (1709 Jackson Street, Omaha, NE 68102), asking them to remove the horses.*

◆

For years, NPCA has worked to preserve as a national park the sites associated with the 1890 massacre of more than 300 Lakota Sioux at Wounded Knee in South Dakota. In 1993, bills to establish the Wounded Knee National Tribal Park were introduced in Congress by South Dakota members Sen. Thomas A. Daschle (D) and Rep. Tim Johnson (D), but are still awaiting hearings in both chambers. NPCA is working to revive this legislation, which would preserve sacred ground and provide management opportunities for the Oglala and Cheyenne River Sioux tribes. ✍ *Write to Rep. Bruce Vento (D-Minn.) and Sen. Dale Bumpers (D-Ark.), respective chairs of the House and Senate subcommittees on national parks, as well as Daschle, Johnson, and Sen. Ben Nighthorse Campbell (D-Colo.), urging them to push for passage of the Wounded Knee bills. Their addresses are: U.S. Senate, Washington, DC 20510 and U.S. House of Representatives, Washington, DC 20515.*

NORTHEAST

Eileen Woodford, Regional Director

NPCA welcomes Woodford as its new Northeast regional director. Based in Cambridge, Massachusetts, Woodford has years of governmental planning experience and has volunteered her interpretive skills at Frederick Law Olmsted and Morristown national park sites.

◆

This summer, NPCA encouraged Congress to establish the Hudson River Artists National Historical Park and the Thomas Cole National Historic Site in New York. Containing the home and studio of one of the premier American landscape painters, the Thomas Cole House inspired in the first half of the 1800s a national painting tradition known as the Hudson River School.

◆

In July, the Senate voted in favor of a bill to preserve ten Civil War battlefields in the Shenandoah Valley as a national park. "Time is critical," said Will Callaway, an NPCA Washington representative, before the House subcommittee on national parks. He urged the House to pass the measure before more sites are lost to development.

PACIFIC

Brian Huse, Regional Director

A California court recently handed NPCA a sound victory in a lawsuit it had filed opposing a proposed landfill near Joshua Tree National Monument. The Mine Reclamation Corporation had planned to turn existing open pits from the defunct Eagle Mountain iron ore mine into a 2,262-acre landfill. The court agreed with NPCA's contention that the landfill, which would have been located only one and a half miles from Joshua Tree, would have destroyed air quality and pristine desert and threatened the endangered desert tortoise.

PACIFIC NORTHWEST

Dale Crane, Regional Director

Legislation to establish the Vancouver National Historical Preserve was introduced in Congress this summer by Rep. Jolene Unsoeld (D-Wash.). Although the national park unit would preserve historic areas including and around Fort Vancouver National Historic Site, the bill allows the Pearson Airpark, built in the early 1920s, to maintain operation as a commercial airfield until 2022, 20 years after its lease is to expire. NPCA has argued that commercial airpark operations should be moved in 2002 and the area restored as a historic airfield with antique aircraft and grass runways. "The current agreement between the city and the Park Service that calls for closing in 2002 should be held to," Crane said. "Extension of the operation of the commercial airfield is detrimental to the purposes of the park."

✍ *Write to Unsoeld and other representatives (for address, see Heartland report), opposing commercial use of Pearson Airpark beyond 2002 and supporting its change to a historic airpark.*

ROCKY MOUNTAIN

Terri Martin, Regional Director

Colorado's Rocky Mountain National Park could receive increased protection from two bills sponsored by Rep. David Skaggs (D-Colo.). In April, Skaggs introduced a bill that would designate 91 percent of the national park as wilderness. The wilderness designation would include four areas comprising the park's varying ecosystems—from wetlands to subalpine forest. NPS already manages most of the park as wilderness, but the formal designation would ensure that new roads and other development would be prohibited in perpetuity.

Although NPCA and NPS have supported wilderness designation for years, debate over who owns the water flowing through the park has discouraged congressional action. Last December, however, a Colorado court ruled that the park has a right to undeveloped streamflows on its eastern side. Now before the House subcommittee on national parks, Skaggs' bill also recognizes this water right. His other bill, which would expand the park by 120 acres and protect other areas, passed the House July 12 and is before the Senate committee on natural resources.

SOUTHEAST

Don Barger, Regional Director

NPCA is celebrating a recent win for Kings Mountain National Military Park in South Carolina, site of an important battle of the American Revolution. In June, a local planning commission denied a developer's request to build a housing development adjacent to the park. The commission found that the potential impacts of the project included increased traffic, runoff from disturbed areas, and loss of a historic road. "These modern battles are being fought to save the very qualities that make special places special," Barger wrote to the county council. "The County Planning Commission is to be commended."

SOUTHWEST

Dave Simon, Regional Director

A bill to expand Walnut Canyon National Monument in Arizona by about 1,300 acres was introduced in the House this June by Rep. Karan English (D-Ariz.). NPCA proposed expanding the monument by 6,700 acres in its 1988 *National Park System Plan* and has been working to get expansion legislation introduced. The bill would add two significant archaeological sites and scenic wild stretches of Walnut Canyon, which preserves sites associated with the Sinagua Indians of 800 years ago.

◆

In July, Simon was named to the new National Advisory Committee created by Environmental Protection Agency Administrator Carol M. Browner to assist in the application of the environmental side agreement to the North American Free Trade Agreement. Under the side agreement, the United States, Mexico, and Canada agreed to cooperate to ensure environmental protection across the continent. Simon is one of 15 members.

Green by Design

NPS is undergoing a philosophical shift toward sustainability, potentially affecting all aspects of its operation.

By Sue E. Dodge

IN THE HEART OF Virgin Islands National Park on the island of St. John, a luxury resort called Harmony is among the most environmentally friendly in the world. All components of the cottages, from the floor tiles to the countertops, are made of recycled materials. The low-voltage appliances and electrical systems run entirely on solar and wind power. Cisterns collect rainwater for nondrinking purposes, and wastewater is used for irrigation. And, rather than dominate the scenery, the buildings blend in with the tropical paradise that surrounds them on a hill above Maho Bay.

In many ways, Harmony is a model for the principles of sustainable design, a concept that recognizes people as an integral part of nature and acknowledges the importance of preserving the natural world if civilization is to sustain itself. Emerging over the past 20 years, the concept holds that development technologies should contribute to the health of the environment and limit the effects of human use. Implementation of the idea is not a simple matter; it calls for a dramatic shift in values and a commitment to social responsibility, environmental stewardship, and economic viability in all aspects of our lives.

In the last few years, sustainability has become a hot topic among environmentalists, federal officials, and business leaders. The concept is now embraced by the "global community"; the United Nations has a Commission on Sustainable Development, and the 1992 Earth Summit adopted a doctrine on it. In 1993 the Clinton Administration created the President's Council on Sustainable Development to address integration of economic and environmental concerns. The same year, the National Park Service (NPS) began its Sustainable Design Initiative, described by NPS Deputy Director John Reynolds as an effort to "learn how to do our jobs with more sensitivity and less impact."

Sustainable design recognizes that people are an integral part of nature and acknowledges the importance of preserving the natural world.

Reynolds says one impetus for the initiative was the sense that "there were people in the design world who were ahead of the Park Service in learning about construction materials and techniques that are protective of the environment." He and others thought the Park Service should be doing low-impact design and construction as well as or better than anyone else because of the agency's ethical and philosophical obligations to the environment.

The Park Service's commitment to sustainable design was forged at the 1991 Vail symposium, where a number of working groups gathered to chart the agency's course for the next century. NPS realized that park managers must acknowledge the interconnectedness of all biological and cultural systems if the degradation of resources was to end. The National Parks and Conservation Association and Stanley Selengut, developer of Harmony and Maho Bay camps, subsequently sponsored a meeting of landscape architects, architects, and NPS personnel. This meeting, in turn, led to a November 1991 workshop at Maho Bay, where architectural, engineering, ecotourism, and conservation professionals set guidelines for managing sensitive natural and cultural areas.

Considered the official beginning of the design initiative, the workshop resulted in publication of *Guiding Principles of Sustainable Design*, an NPS book that outlines how the concept can be applied to every aspect of planning. The book is used throughout the Park Service as a reference and a philosophical base to the initiative.

Out of this book has evolved another phase, the creation of a database of construction materials. Developed by Sally Small, historical architect at the Park Service's Denver Service Center, the database will list available materials and rate them. The information will help designers choose materials based on environmental concerns, not merely cost or aesthetic considerations.

The Park Service has plans for wide distribution of the database. Although it is now used only by Park Service designers, architects, and engineers in the Denver Service Center, eventually it will be transmitted electronically to park units nationwide. The long-term goal is to make it available to the public via the Internet. According to Small, the Park Service is "looking into opportunities for partnerships with other groups doing similar work. If that happens, I would think we'd be changing the database somewhat to combine their best

thoughts with ours, and it may take some time to get it hashed out." She also cited concerns about creating objective rating criteria as well as funding and staff to maintain the database.

Although the initiative is an attempt to bring NPS up to speed on sustainable practices, implementation is proceeding in the slow lane. Philosophical shifts never happen overnight, of course, but despite perennial funding shortages and bureaucratic tangles, the Park Service is progressing toward its goal of incorporating this new thinking in every aspect of its daily operations. "We must continue to educate people about their ethical and philosophical responsibilities, underpinning that with new technical knowledge....This applies not only to designers but to those creating expectations for the design—park managers, chiefs of park maintenance, people managing the designers. All of these people have to continue their education." Unfortunately, Reynolds notes, "when funds are tight, continuing education is often the first thing that goes."

The Park Service has made a start, however, by rewriting the selection requirements for architectural and engineering firms. To win a contract with NPS, the firms must show competence in sustainable design. The Denver Service Center has also begun to rewrite policies and standard specifications to procure some materials. Specifications for paint used inside water tanks were rewritten, for example, so that vinyl paints, which eventually leak gas or other components into the atmosphere, are no longer used by the agency. The Park Service has also begun saving millions of gallons of water a year by switching to low-flow water faucets and shower heads.

Asked whether NPS is building any facilities that incorporate these design principles, Senior Architect Bob Lopenske said, "We've applied some aspects of sustainability to projects already in the works, but front-end decisions precluded them from being as environmentally friendly as they could have been." But he adds that awareness has increased as a result of the initiative, and "planners and designers are trying to put as much thinking on behalf of the environment as they can in their work." Construction projects in the early planning stages now will be designed and built using the new principles and will serve as the Park Service's first pure examples of sustainable design.

Among the projects now being planned are passive solar housing at Grand Canyon and Yosemite national parks, a cooperative effort with the National Renewable Energy Laboratory. Also in the works are plans for a visitor center at El Malpais National Monument in New Mexico that will incorporate passive solar heating, "green" building materials, and water conservation technologies. In converting the Presidio in San Francisco, California, from a military base to a national park, the Park Service will renovate and rehabilitate the buildings using these new sustainability principles. And at Rocky Mountain National Park in Colorado, NPS is working with the gateway town of Estes Park to develop low-income housing using recycled materials and keeping resource degradation to a minimum. Says Lopenske, "We will be working together to build housing that their service people can afford and our rangers can live in."

Stanley Selengut's Harmony resort overlooking Maho Bay, St. John, U.S.V.I.

Public education, always a priority for the National Park Service, is a major component of the sustainable design initiative. In accordance with the new philosophy, NPS interpretive programs seek to influence human values and to instill an understanding of parks as part of the "big picture": the broader ecological and cultural context. In addition, all the construction projects now being planned will serve as "classroom opportunities to demonstrate new technologies," according to Lopenske. "We're hungry to start putting these principles into some kind of built facility that will demonstrate and communicate [sustainability] values to our visitors. When people visit parks that demonstrate low impact on local or global resources, it is a take-home example for them. We can start effecting some change in the rest of the country and bring about a healthier environment for everybody."

This principle is applied routinely at Stanley Selengut's Harmony resort in Virgin Islands National Park. Each unit has an interactive computer program that enables visitors to learn how the resort's environmental features operate. Using color graphics, the program also tracks daily weather conditions and monitors each unit's energy consumption. The idea is for visitors to go back to their daily lives with a much better understanding of their connection with and responsibility to the environment.

What Harmony also teaches is that development does not have to mean destruction. The Park Service regards Selengut and his environmentally friendly resorts as an inspiration for future developments within the park system. John Reynolds says, "More than anything, Stanley is a catalyst, a light that keeps all of us going."

Sue E. Dodge is editor of National Parks *magazine.*

Blue Ridge Blues

A new grassroots coalition is working to save scenic views along the historic Blue Ridge Parkway from encroaching development.

By Chris Fordney

A FEW MILES SOUTH of Roanoke, Virginia, the Blue Ridge Parkway splits the floor of a small valley, an oasis of rural serenity with broad pastures rising to tree-silhouetted crests on both sides. Bracketing both ends of the gently sloping "bowl and knoll," as local people call it, are picturesque vistas of Blue Ridge peaks. Only one man-made structure disturbs the scene: a large house perched along the tree line on the southern ridge.

This farmland has been the focus of an emotional confrontation between a group of Roanoke citizens and an influential developer who has a contract to buy the land and is seeking the right to build up to six houses per acre. His opponents are fighting to preserve this pastoral view along the parkway as subdivisions creep farther into the hills and crowd up against the thin band of National Park Service land.

The shock waves from the uproar in Roanoke County have reverberated along the 470-mile-long parkway and beyond to New York and Miami. Parkway lovers, state officials, business owners who cater to tourists, and tourist organizations realize that one of the most important scenic attractions through the southern Appalachians is increasingly threatened by development. They have formed a coalition for the Blue Ridge Parkway to apply the lessons of the Roanoke experience and develop strategies for other communities to preserve their scenic and cultural resources while accommodating growth. How well the coalition performs will have implications for parkways, seashores, and other linear parks such as the Natchez Trace Parkway in Mississippi and Colonial National Historical Park in Virginia.

The parkway begins at Waynesboro, Virginia, about 125 miles southwest of Washington, D.C., and ends near Waynesville, North Carolina, about 125 miles northeast of Atlanta. It links the two national parks of the southern Appalachians, Shenandoah National Park in Virginia and Great Smoky Mountains National Park in North Carolina and Tennessee. It brushes two urban areas: Roanoke, with a population of about 250,000, and Asheville, North Carolina, with a population of about 100,000.

Parkway designers used construction techniques learned from the earlier building of Skyline Drive through Shenandoah National Park, but the concept was somewhat different. The idea of the modern parkway—a scenic road for

Construction began in 1935 on the Blue Ridge Parkway, which passes two urban areas and links the two national parks of the southern Appalachians.

GENE AHRENS

Lynn Davis, of Friends of the Blue Ridge Parkway, stands on the "bowl and knoll," the focus of a development battle.

leisure driving—was actually born on the outskirts of New York City around World War I with the building of the Bronx River Parkway.

Rather than just providing spectacular mountain views, the Blue Ridge Parkway was intended to expose visitors to a variety of rural scenes, from mountain peaks to valley farms. Much care was taken to sculpt the road into the surrounding landscape. The goal was to leave the impression of a park without borders.

The fight in Roanoke has been "the parkway's Pearl Harbor," says Superintendent Gary Everhardt. Now the challenge is to make everyone along the parkway understand the threat. "We need to develop a consensus that the parkway is worthy of protection. We've reached the point...that it may be our last chance."

The Roanoke controversy erupted in December 1992, when the county planning commission recommended a change from agricultural to residential zoning for hundreds of acres of private land that border the parkway. Although the commission had been studying land use in the region for six years, the change seemed to come as a result of political and developer pressure. Immediately after the change was announced, local developer Len Boone announced a proposal to build houses on 317 acres of open fields bisected by the parkway that he plans to buy from Nicholas Beasley.

After a public outcry and an urgent appeal from Friends of the Blue Ridge Parkway, a citizen advocacy group, the county board of supervisors agreed to temporarily retain agricultural zoning on hundreds of acres of scenic tracts, including the Beasley property, until an ad hoc Viewshed Committee could study the effect of development on parkway vistas. Boone and another developer were appointed to the committee, which included county planners, conservationists, and a parkway landscape architect.

The following month Boone sued the county, claiming that its action to retain the agricultural designation was arbitrary because other property near the parkway was zoned for residential use. Another developer whose property fell under the lower-density zoning also sued.

Fearing that it would lose if Boone's case went to trial, the county in October 1993 endorsed a settlement on half of the Beasley land that allows Boone to build about 150 houses and gives parkway supporters five years to buy an eight-acre parcel that the committee has deemed a "critical viewshed," an area considered important to the scenic view from the parkway. Even if they are able to buy the eight-acre parcel, parkway advocates say that a dozen houses will be visible from the parkway. If they do not buy it, Boone will be able to build five houses on the land. Still undecided is the fate of 150 acres on the other side of the parkway, property that is also considered to be a critical viewshed.

Parkway advocates say the settlement is a clear victory for Boone and that his price for the eight-acre parcel—estimates range from $400,000 to as high as $750,000—is beyond their reach. And the goal of keeping houses out of the valley will not be met. "I don't see it as an acceptable solution," said Vera Guise, executive director of the Friends of the Blue Ridge Parkway.

Boone declined to discuss the situation except to say that he has "no desire

C.M. GLOVER

DAVID MUENCH

WILLIAM A. BAKE

The Blue Ridge Parkway was designed as a scenic roadway for leisure driving. The roadway provides access to rustic cabins, small farms, and breathtaking vistas.

to be anything other than a good citizen." He said he would announce more detailed plans for his development within the next year.

Beasley, owner of the farm, also declined to comment, saying that he is still smarting from the controversy and the press attention it has generated. "We're bruised," he says.

Parkway advocates, some of whom virtually gave up family life during the fight, say they have also taken their lumps and are drained of energy and resources. Many agree that the parkway got involved too late and, despite considerable public support, volunteers could not muster the clout to counter politically connected developers and builders. "We weren't really structurally ready to take on something of this magnitude," says Lynn M. Davis, founding member of the Friends of the Blue Ridge Parkway and an avid parkway advocate.

The episode has also exposed the limits of zoning as a tool to stop development along the parkway. The county's strictest agricultural zone, for instance, allows one house on every three acres. Planners in Virginia who try to insert creative wrinkles into their zoning codes—such as transferable development rights, a concept that allows a property owner to sell building rights to another landowner—have run up against the state's adherence to the Dillon Rule, a 19th century legal principle that restricts localities to only those powers specifically allowed by a state legislature.

Even more sobering for those trying to limit development is the realization that only two of the 29 counties along the parkway have any kind of zoning. An indication of local attitudes toward land-use controls came last November, when voters in Franklin County, Virginia, overwhelmingly rejected the idea of zoning for two districts near the parkway. The region is a conservative one where reverence for property rights runs deep. "We don't really have a whole lot of tools or the desire to restrict development along the parkway," says Janet Scheid, a Roanoke County planner.

Despite their dissatisfaction with the way the Boone dispute is turning out, parkway advocates can claim some victories. Roanoke County has moved toward limiting density on 2,300 acres near the parkway, and the county planning staff is working on an "overlay district" that would enact state-sanctioned controls on nine remaining critical viewsheds—affecting nearly 500 acres and 100 property owners—identified by the Viewshed Committee. These include buffers between the parkway and nearby homes, height restrictions on buildings, landscape requirements, and standards for fences.

Other changes have occurred as well. The Roanoke experience has prompted a fresh look at a public treasure that has remained essentially unchanged since the first segment was carved into the spine of the Blue Ridge during the Depression. Accessible from the parkway are old cabins, small farms, mills, and craft exhibits that provide visitors a glimpse of a "cultural landscape that will probably never be duplicated again," says Superintendent Everhardt.

However reluctantly, parkway supporters have come to realize that it will no longer remain frozen in time. "I don't know how we can keep it as a snapshot of life 50 years ago," says Wayne Strickland, executive director of Virginia's Fifth Planning District Commission and an organizer of the new coalition.

Construction began in 1935 as a make-work project, and the final leg

near Grandfather Mountain in North Carolina was completed in 1987. A 1970s plan to expand the parkway south to Marietta, Georgia, prompting the move of its headquarters from Roanoke to Asheville, has since been scrapped.

The parkway covers 85,000 acres of land, averaging about 1,000 feet wide—primarily the roadbed. It broadens at several points, such as the Peaks of Otter and Bluff Mountain, to include areas of several thousand acres. It passes through four national forests and a Cherokee Indian reservation.

For the first 80 miles from its northern entrance, the parkway cuts through Jefferson and George Washington national forests. Managed by the U.S. Forest Service, the national forests provide considerable protection for views along the most rugged sections of the Blue Ridge in Virginia.

But south of Roanoke, the parkway travels through hundreds of miles of private land over which there are few controls. In recent years, the region's scenic and recreational attractions have drawn more developers, retirees, vacationers, and builders of second homes. Sometimes the sprawl has sparked opposition; when the ten-story Sugartop condominium resort was built on the crest of a ridge near Grandfather Mountain in 1982, North Carolina passed what is known as the "ridge law," which now restricts the height of mountaintop structures.

Every year about 22 million people visit the parkway, which is nearing a total of 600 million visitors since the park started counting in 1939. The Blue Ridge Parkway has 11 campgrounds, nine visitor centers, and 280 employees. Its annual budget is $9 million, of which $5 million goes toward maintenance. This past year, the parkway overspent its budget by an estimated $1 million, most of which was used to clear away thousands of trees felled by the harsh winter.

Although the parkway is usually able to buy some land every year, it must request money on a case-by-case basis. Its 1988 Land Protection Plan is being updated and may include some of the land in Roanoke identified as "critical viewsheds," but the highest priority remains the acquisition of land where hundreds of private roads intersect and have access to the parkway. Even the purchase of viewsheds would be limited to those deemed especially sensitive and closest to the parkway, says Jim Fox, a parkway ranger specializing in adjacent land issues. "It was never intended for the Blue Ridge Parkway to acquire a lot of land."

The parkway has condemnation authority but is hesitant to use it for fear of igniting animosity. Both Virginia and North Carolina used condemnation authority to acquire the land originally before turning it over to the federal government. Now, almost all purchases from adjacent landowners are voluntary. "We don't need to buy trouble," says Fox.

The parkway management's careful approach has prompted criticism from advocates for what is perceived as a lack of zeal to protect parkway views. Minutes of a meeting of the Friends of the Blue Ridge Parkway in July 1992 show that the "board impressed upon the superintendent the need for the parkway to take an offensive rather than the defensive" approach to conserving viewsheds.

Friends director Vera Guise acknowledges the group's frustration but says she understands the superintendent has to tread lightly as a result of the area's strong property-rights ethic. "Had he stepped out in front and waved the flag, he would have been shot down," she says.

Everhardt stresses that the effort to protect the parkway must involve a partnership between the federal government and communities along the parkway. "If the people want it, it will happen," he says.

The Coalition for the Blue Ridge Parkway is also basing its strategy on grassroots support. At its third meeting, held in February in Roanoke, 36 representatives from government agencies, conservation groups, tourism organizations, and universities approved a mission statement to conserve the parkway's "physical, cultural, and scenic integrity" through a "community-driven process that accommodates growth in a changing environment."

DAVID MUENCH

Communities along the parkway are considering a number of measures to preserve scenic vistas, such as this one featuring a rhododendron in bloom.

Exactly how that will be done has yet to be decided. "We're not at the point of defining solutions," says Bill Shelton, director of the Virginia Center on Rural Development, a division of the state government that provides planning and technical assistance to rural communities and is facilitating the meetings of the coalition. Even after some strategies are identified, they will not necessarily apply to all the jurisdictions along the parkway. "This is not going to be a one-size-fits-all solution," says Shelton.

Given the local attitude toward land-use controls, some say the concept of zoning as one solution must be embraced first at the local level, not touted by coalition leaders as the answer.

The consensus is that zoning has to remain part of a "toolbox" that would also include such things as scenic easements, tax incentives, land trusts, and architectural standards. "I believe it needs to be considered as an option," says Don Barger, Southeast regional director of the National Parks and Conservation Association and its representative on the coalition.

But nearly everyone agrees that the first step is to get communities to understand that the parkway is their main economic resource and that unrestrained development will destroy the features that draw so many visitors.

Everhardt says a federal study in 1987 determined that parkway visitors brought $1.3 billion to adjoining localities, a figure that is probably significantly higher today. That spending boosts local businesses—gift shops, motels, gas stations, and restaurants—and is also the major component of the local communities' tax bases.

The loss of that money should be the attention-grabber, says coalition organizer Strickland. "You have to hit them in the pocketbook. You're talking about dollars here."

Coalition organizers say they also want to avoid the type of polarization and confrontation that has occurred between conservationists and developers in Roanoke. Growth cannot be stopped along the parkway, but perhaps it can be managed, they say. "We're not trying to say, 'Stay away from the Blue Ridge Parkway,'" says Barger. "We're trying to guide development."

The ridges and valleys can themselves be effective tools for blending new houses or resort communities into the landscape, planners say. Structures can be clustered into hollows and other areas where they will not affect views. Barger points to the Doe Run Lodge in Patrick County, Virginia, as an example of compatible development near the parkway. "It sits directly adjacent to the parkway, but because it's downslope...you can literally drive right by the thing and not see it."

To provide some formal standards for construction, architect Carlton Abbott of Williamsburg, Virginia, is drawing up new design guidelines that would help planners bring some architectural harmony to new structures within sight of the parkway. Abbott's father, Stanley Abbott, was the parkway's first employee, the landscape architect who crafted the grand design.

The guidelines would include regulations for color, texture, building materials—stained wood in place of vinyl siding or fieldstone rather than brick—and a sense of scale. The parkway's visitor centers, for example, look similar to traditional Appalachian homes. Highway engineers who improve roads that cross over the parkway can use Abbott's guidelines to preserve the distinctive arched bridges. Even for smaller details, such as the color of roofs and gates, much can be done that will allow new development to blend in gracefully. "What we're talking about is sensitive planning," he says.

Chris Fordney is a free-lance writer based in Winchester, Virginia.

On a Wing and a Prayer

The national parks play a central role in the conservation of butterflies, which are under siege from an increasing number of threats.

By Linda M. Rancourt

FOR NEARLY TEN YEARS, three collectors worked to obtain the rarest and hardest to acquire butterflies. They combed national forests, wildlife refuges, parks, monuments, and seashores seeking their prey. The men hunted butterflies in national parks and on other federal lands because they provide some of the best habitat in the country, and some species can be found nowhere else.

By the time wildlife investigators caught on to the scheme, the men had poached thousands of specimens, many of them belonging to species federally listed as endangered or threatened. Among the prizes was the Palos Verdes blue butterfly, believed to be extinct when one of the men mounted it in a cabinet. A small population has since been rediscovered on formerly inaccessible military property on the Palos Verdes peninsula in California.

"It was the Imelda Marcos syndrome," says A.B. Wade, public affairs officer in the U.S. Fish and Wildlife Service's law enforcement division in Washington, D.C. "They just had to have the best and biggest collections."

L. WEST/BRUCE COLEMAN

The uncommon bog copper is found in the wetlands of Acadia National Park and other protected areas in the Northeast.

In December, a U.S. Grand Jury indicted the three for conspiracy to violate U.S. wildlife laws, including the Endangered Species Act. The 80-page indictment says the trio stole butterflies between 1983 and 1992 from Mexico and from U.S. parks and other public lands, including Point Reyes National Seashore, Golden Gate National Recreation Area, Death Valley National Monument, and Yosemite, Olympic, Big Bend, Rocky Mountain, Everglades, and Grand Canyon national parks. Among the evidence against them were more than 2,200 species of butterflies carefully marked with labels identifying the species and where, when, and by whom it had been collected. One man's collection alone was estimated to be worth $90,000.

National parks and wildlife refuges protect some of the last unfragmented habitat in the country, but the parks and wildlife refuges also are supposed to provide some of the best protection for the creatures and plants living within their confines. When greed is the driving force, however, even the best protection can sometimes falter. (See "Illicit Harvest," May/June 1994.)

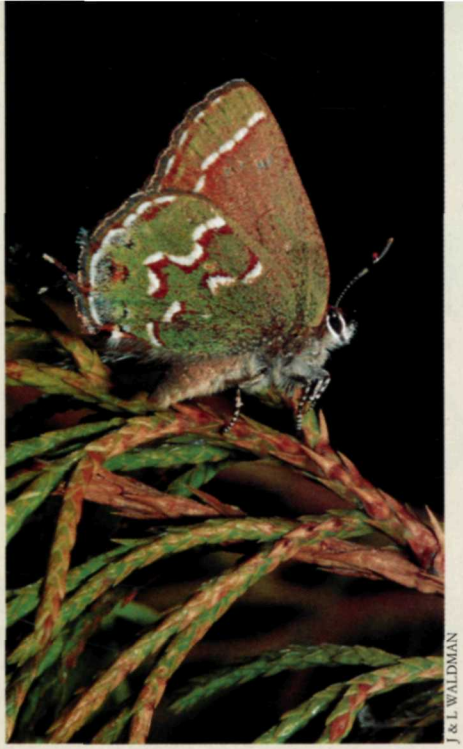
Despite the notoriety of this case and the animosity it has drawn from conservationists, poachers and collectors are only a small part of the reason many butterflies are in trouble. The alteration and fragmentation of meadows, fields, and other habitats; insecticides, herbicides, and other chemicals; automobile windshields; and a lack of knowledge about invertebrates present greater dangers. Although national parks offer some of the best habitats available, even these lands can be compromised by grazing, mining, and other activities that diminish the integrity of the land. For instance, Great Basin National Park, among the newest and the only one in Nevada, allows grazing, anathema to the grasses and sedges important to the larvae of some butterflies.

J & L WALDMAN

Great Smoky Mountains and other parks protect unfragmented habitat for the great spangled fritillary, which remains fairly common despite recent population losses.

ROBERT L. SLACK

Monarchs migrate each fall to Mexico, stopping at many parks along the way.



J & L WALDMAN

The olive hairstreak has benefited from agriculture's decline in the Eastern U.S.

DAVID H. AHRENHOLZ

The larva of the federally endangered Karner blue feeds primarily on lupines.

In North America more than 700 species of butterflies and more than 14,000 species of moths compose the order Lepidoptera, a term that refers to the colored scales found on the wings of these insects. Currently 15 species of U.S. butterflies are listed by the federal government as endangered or threatened. The Karner blue, for example, once ranged from the Midwest to New England. Named by novelist and lepidopterist Vladimir Nabokov, the Karner blue's numbers have dropped significantly in recent years. Development has eliminated vast tracts of the wild lupines on whose leaves and flowers the Karner blue caterpillar (larva) feeds.

The regal fritillary—once found along the central and north Atlantic coastal states west to Colorado—is not on the federal list yet but is considered a candidate. It has essentially disappeared east of the Appalachians. Most of its remaining populations are found in tall- or mid-grass prairie preserves. More than 90 percent of prairie land has been converted to agriculture. Other butterflies that rely on these grasses are just barely surviving, including the Powesheik and Dakota skippers. Their chance for survival may be enhanced by the recent acquisition of Z Bar (Spring Hill) Ranch in Kansas, one of the last significant areas of tallgrass prairie. The National Park Trust, a private land conservancy founded by the National Parks and Conservation Association (NPCA), bought the ranch in June. NPCA contributed a $1.5-million loan to help the trust acquire the property.

Another species, the endangered Myrtle's silverspot, has been extirpated from most of its former range in California. Point Reyes National Seashore contains one of the silverspot's largest remaining colonies. "There are lots of species, especially in the West, that have narrow ranges," says Dr. Paul Opler, the first entomologist in the endangered species program for the U.S. Fish and Wildlife Service, who now works for the National Biological Survey as well as Colorado State University. "Most of the places in California where the species are, people like to live."

Increases in population and development are not problems limited to California. The demand for more homes, shops, and golf courses competes with butterflies and other invertebrates for space. As the needs of human populations compromise more and more habitats, the relatively untouched national parks, monuments, seashores, and recreation areas become even more important for conserving and studying butterflies and other invertebrates.

"The national parks play an absolutely dramatic role in the conservation of butterflies," says Robert M. Pyle, an author, lepidopterist, and founder of the Xerces Society, a nonprofit group dedicated to the study and conservation of butterflies and other invertebrates. "The national parks are extremely important because they preserve those rare habitats. They tend to cover the gamut of ecosystems."

More than a dozen butterfly species can be found only in national park units. These include the green Behr's sulphur in Yosemite, the beautiful Kaibab swallowtail in Grand Canyon, the Point Reyes blue in Point Reyes National Seashore, and the Valerata Arctic, a tawny golden butterfly endemic to Olympic. Other populations of butterflies, although not currently restricted to parks, could easily become so as a result of clearcutting, grazing, or other practices on adjacent lands.

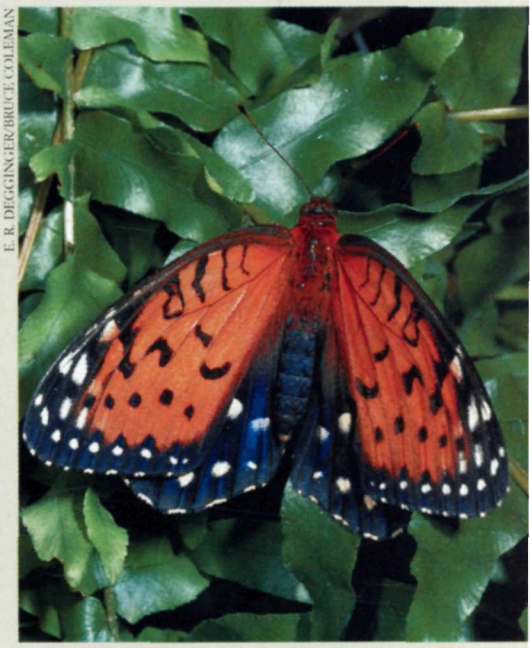
For instance, the Vidler's alpine is one of the few butterflies limited entirely to the Pacific Northwest. The cinnamon-and-chocolate-hued insect can be found in alpine tundra of Olympic

JOHN HENDRICKSON

The California sister is found in oak-lined canyons at Yosemite and other parks.

L. WEST/BRUCE COLEMAN

A prairie species, the Powesheik skipper is barely surviving because of habitat loss.



E. R. DEGGINGER/BRUCE COLEMAN

The regal fritillary is a candidate for federal listing as an endangered species.

and North Cascades national parks, a habitat that could easily be overgrazed or otherwise impaired if it were outside the confines of the park. In fact, if the butterfly were found only in the national forests that surround these two parks, says Pyle, it could be in serious trouble. The same is true for the West Virginia white, a butterfly found in Shenandoah National Park, and the Diana fritillary, found in Great Smoky Mountains National Park.

"The parks are major repositories of butterfly habitat, and if that's true, it is going to be necessary to encourage the parks to do research on those populations so that management needs are better perceived," says Pyle. "We don't even know where things are."

The lack of baseline data, or natural and cultural resource information, is a problem throughout the National Park System. The recently established National Biological Survey (NBS) is addressing the problem, but the job of gathering this information is immense. And it is not likely that invertebrates—which range from butterflies to slugs to lobsters and lack the appeal of wolves or whooping cranes—will be high on the list. Invertebrates constitute more than 70 percent of the roughly 1.5 million species of organisms that have been described to date. There are 25 times more species of invertebrates than mammals, birds, and all other vertebrates together; yet, scientists readily admit that not enough is known about them.

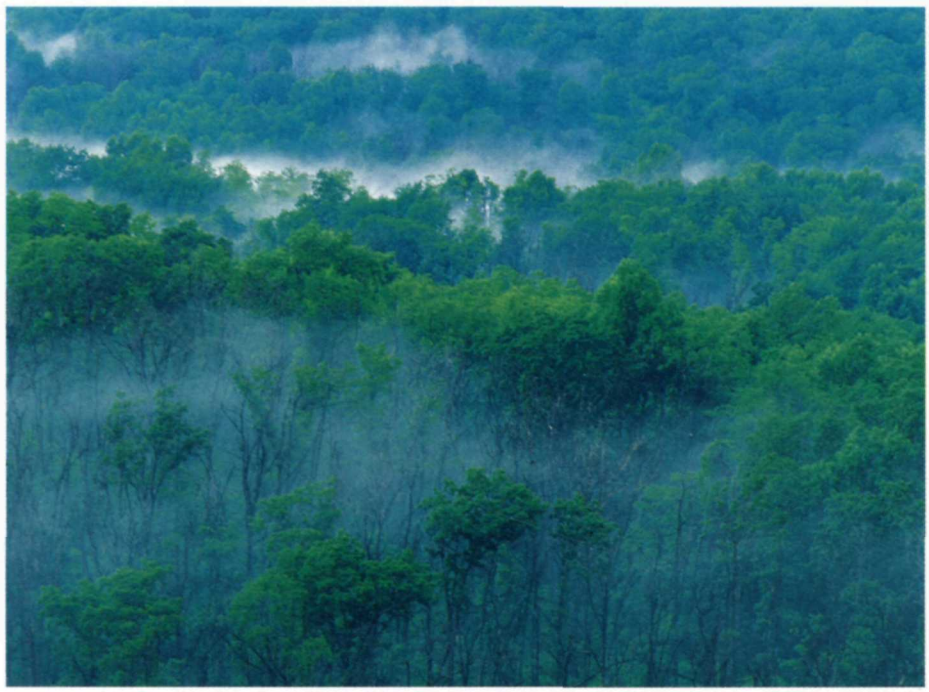
"Not much money has gone into studying invertebrates," says Thomas Stohlgren, formerly with the Park Service's inventorying and monitoring program and now with the National Biological Survey. "Usually, any work that is done is by individuals who do it on their own time."

Of the 367 national park units, 252 have species inventories, says Stohlgren. Only a handful of those with inventories have lists of invertebrates, and those lists are only in selected groups such as beetles, bees, or butterflies. "Parks are given only so much money for vegetation and soil mapping and inventories. These items compete for the same funding, and maps have a fairly high priority," Stohlgren says.

Howard Ginsberg, another NPS scientist who moved over to the National Biological Survey, says the difficulty of doing invertebrate studies becomes evident after looking at work performed by scientists William Proctor and Charles Johnson at Acadia National Park in Maine. Along with Chiricahua National Monument in Arizona, Acadia has one of the most complete invertebrate inventories in the park system. In 1946, Proctor and Johnson published their inventory of insects found on Mount Desert Island, a portion of which is within Acadia. Today, their collection of 6,578 species is housed at the University of Massachusetts at Amherst.

"They got very good baseline data, but whenever people go to Acadia to do research they find new things. And sometimes they can't find things that Proctor and Johnson did," Ginsberg says. "So what does this tell you? Are the species missing now because populations have fluctuated? Are these new species, have old ones disappeared? We really cannot tell. Proctor and Johnson took 25 years to do their study, identified 6,578 species, and they still missed things. Invertebrates are a very big group."

Elsewhere in the park system, when research does exist, the testing methods are not standard—making comparisons next to impossible. Dr. Paul Opler has sampled butterflies in Rocky Mountain National Park in Colorado, as well as at Grand Canyon National Park in Arizona, but most of his work has been



JOHN SHAW/TOM STACK & ASSOC.

JOHN SHAW/TOM STACK & ASSOC.

Attempts to control the destructive gypsy moth caterpillar (above) with insecticides and parasitic flies inadvertently kill other insects as well, including native butterflies.

Defoliated trees at Shenandoah National Park in Virginia (left) show the devastating effects of the gypsy moth.

done through his affiliation with Colorado State University, on his own time, and with his own money. "I do it because I love to do it. But it has been hit-or-miss research in the parks. There may be small grants available, but it's not enough to do a complete survey."

Another problem, Opler says, is that there is no way of knowing what research has already been done, because a central collection point does not exist. "There could be 20 different papers published on grasshoppers, but no one has put them all together," he says.

Ginsberg and members of the Park Service's inventory and monitoring program conducted a workshop in 1992 to address this issue. Following the workshop, a report called *Invertebrate Monitoring in the National Park System* suggested that an inventorying program aimed at invertebrates be initiated. Soon thereafter, the National Biological Survey was formed. Both Stohlgren and Ginsberg said that NBS intends to initiate this sort of program, but no one knows when it may happen.

Scientists would like to know more about butterflies, moths, and other invertebrates to understand how they fit into ecosystems, and because, as Pyle says, "they are windows on the world of evolution." Butterflies, for instance, reflect a landscape's uniqueness through specific adaptations. Scientists also suspect that butterflies, along with other invertebrates, can provide an early warning system for environmental hazards. Butterflies are so intimately connected with plant communities that their populations can quickly reflect dangerous changes. Research also is needed to ensure that the Park Service can properly manage or plan for butterflies, which require specific caterpillar host plants, adult food sources, and space for courtship and mating.

And a lack of knowledge can be dangerous. Lands may be burned as part of a fire ecology plan when butterflies are still immobile as chrysalides and incapable of escaping the flames. The insecticide *Bacillus thuringensis* (Bt), used by many state and federal agencies to kill the spruce bud worm and the gypsy moth caterpillar—an exotic species imported during the 1860s on the mistaken belief that it could produce silk—inadvertently kills other caterpillars feeding on leaves at the time of spraying. "Many are not around then, because their life cycles are such that they lay eggs later in the season. But if they are out there eating foliage, they will be affected by the spray," says Linda Butler, an entomologist with the University of West Virginia, who performed a study for the U.S. Forest Service examining Bt's effects on species other than gypsy moth caterpillars.

Although spraying of national forests, which frequently abut parks, has been going on for more than a decade, the information about the effects of Bt on nontarget species is relatively new. Environmentalists have been pressuring the Forest Service for years to study the effects of the insecticide on the food sources of birds and bats.

Yet another attempt to control gypsy moth caterpillars may be having a devastating effect on native Lepidoptera: the introduction more than 70 years ago of parasitic flies. Parasitic wasps introduced more recently feed almost exclusively on the eggs of the gypsy moth caterpillar and its close relatives. The flies, however, are not so discriminating. Twelve species have become established in the United States, and Butler says some of them have the capacity to drive native butterfly species to extinction. "We have been picking up some of these parasitic flies on our native caterpillars. They hit on them, and they hit pretty hard." Part of the problem in determining the extent of the damage caused by the flies is the lack of historic

Please turn to page 51

GEORGE H. H. HUEY

The War on Waste

Although national parks are perceived as pristine areas, many are dumping grounds for hazardous materials—everything from industrial toxins to unexploded munitions.

By Elaine Appleton

IT IS ANOTHER HOT, WINDY DAY at Padre Island National Seashore on Texas' Gulf Coast. A family visiting the beach searches for the perfect spot to have a picnic. Wind whips in their faces; a picnic is next to impossible. They spot a rusty 55-gallon drum that, ugly though it may be, will serve as a good wind break. They set blankets and baskets near the drum and prepare to enjoy their picnic.

What they do not know is that this drum is one of hundreds of barrels of poisonous or flammable chemicals that washes onto the island each year, dumped overboard illegally by passing commercial ships, including oil distributors and freighters. "Many of the barrels contain extremely toxic types of material," says Don Herring, chief of the division of engineering and safety services for the National Park Service (NPS). "Some are so deadly that opening the barrel and taking a whiff will kill you."

The Park Service annually spends between $325,000 and $500,000 identifying and removing hazardous waste that washes onto Padre Island. "We don't see any immediate end to the Padre Island problem as long as there's illegal dumping taking place at sea," says Herring.

Sadly, the hazardous waste on Padre Island is only a tiny example of the solid waste problem facing the Park Service. According to a July 1993 congressional study, the federal government has for more than a century engaged in activi-

ties that created environmental crises. Along with other federal landowners, NPS lacks the resources to clean up existing environmental hazards and deal with ongoing ones. Moreover, as our society's consumption of materials increases and park visitation soars, the waste issues confronting the parks and the communities along their borders are escalating.

Many environmentalists and park personnel say NPS, charged with protecting natural resources on more than 80 million acres of public land, should lead education efforts in waste reduction and conservation. But, with a $12.88-million hazardous waste budget—half of what park managers requested—and a paltry $700,000 solid waste budget for the entire park system in fiscal year 1994, the Park Service has few resources with which to wage a campaign. At Yosemite alone in 1991, garbage disposal and recycling cost $850,000.

Besides a lack of funds, some say the Park Service must undergo a change in attitude to become a leader in waste reduction and education. Dave Simon, NPCA's Southwest regional director and former natural resources program manager, says, "For the Park Service to tell all of its vendors that they will only purchase products with reduced packaging and recycled content requires a fundamental shift in thinking by the agency and our entire society."

Indeed, many park managers are doing all they can simply to keep their parks clean. Sometimes, it is a losing battle. Along with drums of toxic chemicals, the currents wash an amazing potpourri of garbage onto Padre Island National Seashore's 60-mile coastline. "[Daily] we average a ton per mile of just junk—plastic bottles, neon light bulbs, sacks, plastic sheeting, shoes, sandals, computer monitors," says Superintendent Butch Farabee. "I wouldn't camp on my beach."

The severity and types of hazardous and solid waste problems within the park system are as varied as the parks themselves. They range from the mundane but critical issue of how to reduce trash—a problem with which every park manager contends—to the extremes of reclaiming dangerous abandoned mine lands and removing live grenades and torpedoes from beaches and hiking areas. The Park Service spends $7 million annually to replace or fix the 1,500 fuel storage tanks on or buried beneath its lands; the Environmental Protection Agency (EPA) estimates as many as 30 percent of all underground storage tanks in the nation are leaking.

GEORGE H. H. HUEY

Problems such as these have NPS considering ways to solve today's sticky issues and to forestall new ones. Although managers such as Farabee are frustrated by recurring problems, some observers praise the Park Service's intentions, while acknowledging that it has a long way to go in its waste management practices. "The Park Service, compared to most government agencies, is way ahead of the game. They can do better, but they're thinking about it. A lot of others aren't," says Steve Hammer, a consultant to NPS on waste management issues based in Brooklyn, New York.

Solutions to such varied problems are complex and difficult and require the Park Service to address issues that range from product procurement to visitor education to hazardous materials training to effects on gateway communities. Today, although the agency publishes directives on waste management, many decisions are left to the individual parks, which usually do not have the funds, training, or staff to create comprehensive waste management strategies. "I can't say that we have done a

GEORGE WUERTHNER

The severity and types of hazardous and solid waste problems in the park system are as varied as the parks themselves. Whether the problem involves the tons of plastics and other debris that wash onto the beach at Padre Island National Seashore in Texas or abandoned mine ruins at Wrangell Mountains in Wrangell-St. Elias National Park and Preserve in Alaska, disposal is both costly and time consuming.

good job of sitting down and analyzing waste reduction and disposal," says Andy Ringgold, superintendent of Cape Cod National Seashore.

Since 1989 when Ringgold first arrived at the national seashore's Marconi Station offices near Wellfleet, Massachusetts, he has been dealing with one of the most controversial waste problems in the park system. Cape Cod National Seashore is, at first glance, 40 miles of pristine beach and oceanfront woodlands. The national seashore winds in and around the city of Provincetown and the smaller towns of Truro, Wellfleet, Eastham, and to Chatham at its southwestern end. The towns and the seashore are inextricably linked. As Ringgold says, "The nature of Cape Cod National Seashore is that you cannot operate the park as an entity unto itself." Nothing could have illuminated that fact more clearly than a municipal landfill used by the city of Provincetown that the park inherited in 1961 when it was formed.

For the last decade, both the Commonwealth of Massachusetts and NPS have been trying to close the landfill, which is located on top of an aquifer and poses a hazard to adjacent wetlands and wildlife. But residents of Provincetown, which sits at the tip of the Cape Cod peninsula, felt they had a vested right to use the old landfill. Furthermore, they had no place else to go. Five to six million people visit the seashore yearly, most of them during the summer months. Tourism dollars boost the local economy but create tremendous burdens on the municipal waste disposal system. Provincetown residents vehemently protested the landfill closing, even going so far as to dump trash at the doorway of national seashore headquarters. The Park Service maintained that landfills do not have a place in park units. "If you had to create a scenario destined to be more complex, more controversial, you couldn't do better," says Ringgold. "It's been an abomination over the years—pure hell."

Today little evidence of the landfill remains; it will be officially closed by the end of the year. Green sod covers a sloping hillside where trash is buried. On a hazy, still day in May, a few gulls gather on an open dirt field that awaits more sod. Down the hill, an 18-wheeler awaits the first trash from this season's tourists. The truck is the emblem of a new temporary station that will operate on top of the old landfill. Trash will be brought to the station but then transferred to another site off the Cape. According to national seashore personnel, the solution, forged by a handful of agencies in only a few months, has pleased locals and Park Service personnel alike. By capitulating to local demands that the landfill site be used for the new transfer station, NPS was able to close the landfill. The solution was so long in coming, says Ringgold, because "we never drew back from emotion and complexity and looked at it from an ecosystem approach. If you have a 25-acre site that's already destroyed by a landfill, doesn't it make sense to build a facility on that site? But we're hung up on the Park Service boundary: bad things shouldn't occur inside the boundary."

But bad things, often created decades before a park's establishment, do occur inside boundaries. Just ask Alex Carter, a mining expert for the Park Service. Carter is chief of the Alaska Minerals Management Division Resource Assessment Branch, the only NPS division devoted to reclaiming abandoned mine lands and enforcing environmental regulations at existing mine claims. A mine claim is a 20-acre site under which a miner has a right to extract minerals; the Mining Act of 1872, still in effect,

allows miners to buy such claims on federal lands for $5 an acre. Although a recent act outlawed new claims in national parks, it could do nothing to rescind existing claims. On Alaska's 54 million acres of national parklands alone exist between 1,200 and 1,400 mine claims and 40 abandoned mine lands, each of which could be many hundreds of acres in size, says Carter. Both active and abandoned mines are hazardous, says Carter, disrupting stream habitat, poisoning fish populations with mercury and cyanide, and polluting the water. They also present a safety hazard to visitors, not only because of the mine's delapidated condition but because many abandoned sites are littered with live explosives.

"Some old T&T, nitroglycerine-based explosives, can blow an individual to smithereens if you happen to step on the wrong stuff at the wrong time," says Bud Rice, an NPS environmental protection specialist. "You can't move abandoned blasting caps and dynamite—sometimes the static electricity from your fingertips can set the thing off."

In 1985, the Sierra Club, the Denali Citizens Council, and the Northern Alaskan Environmental Center sued NPS, charging the agency had not enforced its own mining regulations. The environmental groups won the lawsuit in 1990. As a result, NPS must buy existing mine claims in Denali and Wrangell-St. Elias national parks and preserves and Yukon Charley Rivers National Preserve and reclaim 60 miles of stream channel, 3,100 acres of vegetation, and 190 miles of mine access roads in the three parks. The Park Service estimates that it needs up to $5 million over a ten-year period to fulfill its legal obligation. But four years after the ruling, "there is no such thing as a funded mine cleanup in the National Park Service in Alaska—or anywhere," says Carter. Without a congressional appropriation for mine cleanup, NPS remains in violation of court orders.

To date, NPS in Alaska has spent $142,000 to dispose of mine waste, including 55 lead acid batteries; 2,000 gallons of waste fuels and oils contained in 344 abandoned fuel drums; and 25 tons of abandoned mining equipment, scrap steel, and garbage in Denali National Park and Preserve. The money came from the Alaska national parks' operating budget, and it is literally a drop in the bucket. "Minerals management in the Park Service is kind of an orphan child," says Carter. "The mining issue is an alien topic to park managers. It is a constant uphill battle to educate our managers to the issues...but up here you can't ignore it."

JEFF & ALEXA HENRY

Visitors also generate garbage, causing clean-up problems for the Park Service. A pile of garbage, including empty horse feed bags, left behind near Turbid Lake at Yellowstone.

When manpower and funding are slim, however, many problems are ignored. For instance, unexploded munitions used during military training exercises over the years remain on many different kinds of public lands, including National Park Service acreage. The Department of Defense is responsible for clearing unexploded munitions from the Davis Range, a popular hiking area in Denali. At Cape Cod National Seashore, even though Ringgold downplays munitions as a problem, both torpedoes and grenades have been found there. Dune erosion, particularly following storms, exposes live grenades left behind by the now-inactive Truro Air Force base. Live munitions also wash up on shore. Says Park Ranger Kiefer Gier, "In my three years here, I've probably picked up five or six torpedoes." Rangers stabilize live rounds in buckets of sand and then call the Air Force to dispose of them. "We're definitely not trained to be a bomb squad," Gier says. "We're probably more nonchalant about munitions than we should be." Thus far, no one has been hurt by munitions at the national seashore.

The Park Service is hampered by its mother agency, the Department of the Interior, in its efforts to deal with hazards. Interior has a reputation for downplaying the problems on its 440 million acres of public land. Last year, a congressional report and a Senate study both charged the department with moving too slowly to inventory and eliminate hazards on its land. Both studies stated that cleanup on Interior Department lands, which include those managed by the Bureau of Reclamation, the Bureau of Land Management, U.S. Fish and Wildlife, and the Bureau of Indian Affairs in addition to the Park Service, will ultimately cost taxpayers hundreds of millions, if not billions, of dollars. Interior is forging new policies designed to keep the agency from acquiring lands already contaminated by mines, landfills, munitions, and other wastes. It is also creating a more com-

JIM WEST

A mule train hauls trash along Kaibab Trail in the Grand Canyon, Arizona. As park visitation soars and our society's consumption of materials increases, the waste issues confronting the parks and communities along their borders are escalating.

prehensive inventory of hazards and revamping its funding process, according to Jonathan Deason, director of Interior's Office of Environmental Policy and Compliance.

In spite of political resistance and lack of funds, NPS is making some progress. As part of an Integrated Solid Waste Alternatives Program (ISWAP) that began in 1991, NPS has instituted recycling programs at many parks and is now revamping procurement guidelines to comply with a recent presidential directive requiring government agencies to buy "environmentally preferable" products. Under the guidance of Shawn Norton, NPS solid and hazardous waste management program manager, the Park Service has developed a "Green Alert" database, an electronic bulletin board that allows park personnel to rapidly share "green" tips with one another. NPS and the Forest Service, which has its own electronic bulletin board, also share information.

The Park Service has also created a sustainable design and construction database (see story, page 24), now in a pilot stage. Another electronic bulletin board, this database allows Park Service personnel and others to find places that sell construction supplies that are environmentally preferable, such as recycled-content plastic lumber. The database lists places to recycle construction debris as well as other resources that managers can use to learn more about sustainable design.

Park managers, too, have taken mat-

CONNIE TOOPS

A garbage truck, above, at Madison Campground in Yellowstone. Any effort on the part of the Park Service to reduce waste must be complemented by the public's commitment to do the same both inside and outside of the parks.

ROB BADGER

Right, workers clean up the beach at Olympic National Park. Although the system's waste problem seems overwhelming, the Park Service has made some progress, which includes instituting recycling programs at many parks.

ters into their own hands: at Padre Island, Butch Farabee and his staff have created what he calls "probably the most sophisticated marine debris monitoring program in the world." Working with the Coast Guard and the Federal Bureau of Investigation (FBI), Padre Island's staff set up a week-long, 24-hour-a-day surveillance operation using night-vision equipment and other high technology to uncover the identities of people dumping refuse offshore—mostly commercial shrimpers and fishermen. "I think we're actually starting to see enforcement take place," says Farabee. "This is the first time the FBI has ever been involved with this kind of thing." However, the debris has not yet declined, and Farabee's resources are overwhelmed by the tons of trash on his beach.

The singular efforts of park managers are not enough to battle the waste problems created by visitors, gateway communities, offshore dumping, and inherited activities such as mining. Without increased funding, a commitment to candor about hazards on parklands, and a comprehensive waste management plan for the Park Service, the parks' problems will continue to grow. Just as necessary, says NPCA's David Simon, is a commitment by the public to reduce waste in and out of the parks: "The parks are a small fragment of our problem. If I'm not doing the right things on the 340 days a year that I'm not in national parks, I'm not really making a difference to reduce our country's waste problem."

Elaine Appleton is a free-lance writer living in Newburyport, Massachusetts. She and her partner, Bill Sharp, last wrote for National Parks *about piping plovers.*

Digging into the Past

Archaeological projects give visitors a chance to unearth artifacts at several national parks.

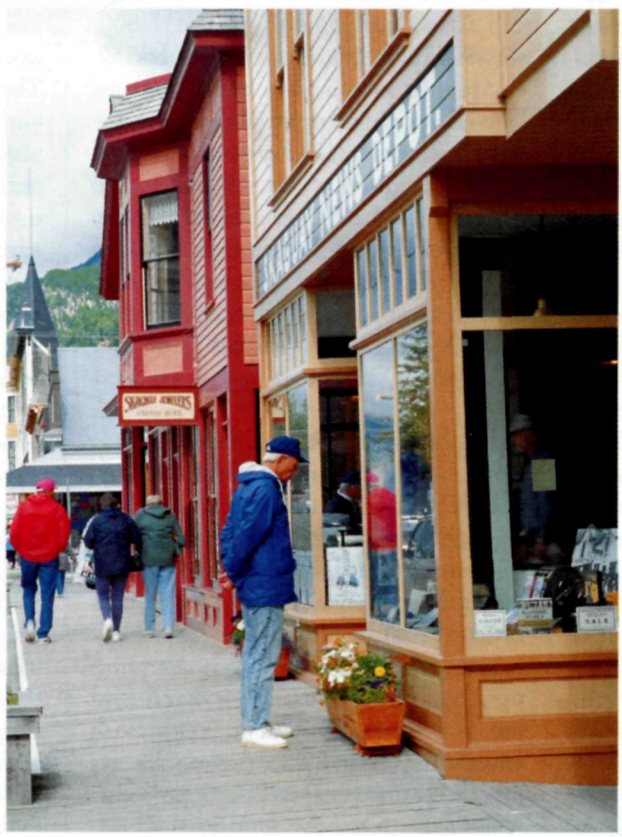
by Kim A. O'Connell

TO THE NAKED EYE, the landscape around the Anasazi ruins of Chaco Culture National Historical Park in New Mexico offers sagebrush and a dusty canyon. To archaeologists, the area's vegetation offers something more—clues to 1,000 miles of ancient roads that until recently were thought to serve only utilitarian functions for the Anasazi of a millennia ago.

Using aerial remote sensing devices that detect subtle changes in vegetation, archaeologists discovered in the late 1980s that the Anasazi road system is far more extensive and complex than originally believed. Some archaeologists now infer that the roads also had ceremonial functions and were built to replicate the landscape described in Native American origin myths.

Remote sensing has for decades aided the study and preservation of archaeological sites through devices such as aerial photography or thermal sensors. In a 1993 Department of Interior report to Congress, the National Park Service (NPS) also said it used remote sensing equipment to enforce the Archaeological Resources Protection Act. The act prohibits the removal, damage, alteration, defacement, or trafficking of archaeological resources on federal land. As a protective measure against looting, remote sensing is used to monitor several park units, including Amistad National Recreation Area in Texas and Wupatki and Canyon de Chelly national monuments in Arizona.

Although the 1994 archaeological season includes a remote sensing survey of Jamestown Island in Virginia, the trowel and the whisk broom are still effective tools for uncovering the hidden pasts of national parks. Several park units host archaeological excavations this year.



FRED HIRSCHMANN

Visitors window shop in Skagway at Klondike Goldrush NHP in Alaska.

Klondike Gold Rush

Conservationist John Muir once called the miners of the 1897–1898 Klondike Gold Rush "a nest of ants taken into a strange country and stirred up by a stick." Lured by the promise of an endless supply of gold nuggets in Alaska's Klondike River, an estimated 30,000 prospectors boarded ships at Seattle and other ports and headed north, settling in the shack town of Skagway.

Established in 1980, Klondike Gold Rush National Historical Park preserves historic structures in Skagway as well as the Chilkoot and White Pass trails, treacherous routes that led miners to the Yukon Territory. Before renovations of any of Skagway's historic buildings begin, archaeologists study soil layers and rotted foundations for clues to miner life during and after the gold rush.

This year, an excavation in the town of Skagway will focus on the house of J. Bernard Moore, son of the founder of Skagway. Previous archaeological digs at the Moore house have uncovered trenches cut for housing foundations and portions of the homemade dresses and long underwear of Moore's wife, clothing used to chink the logs of their cabin. Park visitors are invited to watch archaeologists as they excavate, and the site is part of ranger-led walking tours.

An ongoing project at the Chilkoot Trail will survey and map the section stretching from Pleasant to Sheep Camp. Thousands of artifacts such as boots, tin cans, bedsprings, horseshoes and bones, and broken china and stemware can still be seen along the historic Chilkoot Trail and should not be disturbed. The Park Service warns that the trail is not for inexperienced hikers.

Primitive campsites are located near Skagway, and other overnight accommodations are available in both cities. Although neither section of the park offers meals, groceries and limited supplies can be bought in Skagway. For more information, contact the Superintendent, Klondike Gold Rush National Historical Park, P.O. Box 517, Skagway, AK 99840, 907-983-2921.

Mesa Verde

About 1,400 years ago, a group of Puebloan Indians, known to us as the Anasazi, lived on and around the Mesa Verde Plateau in southwestern Colorado. They developed settlements composed of cliff dwellings, crop fields, and underground ceremonial rooms called kivas. They were proficient potters, toolmakers, and basket-weavers. But by the end of the 13th century, the Anasazi had abandoned Mesa Verde.

For the past nine years, the Crow Canyon Archaeological Center, located ten miles from Mesa Verde National Park, has focused its excavations on the Anasazi occupation. A nonprofit research and preservation organization, Crow Canyon offers archaeological expeditions to the public. This year, the center expands its study to determine how larger villages were formed and when and why the region was abandoned. Some villages, archaeologists have found, seem to have come together quickly whereas others date back to earlier settlements. It is unclear whether the Anasazi abandoned the area gradually in the mid-1200s or suddenly several decades later.

Each week-long expedition at Crow Canyon begins with an introduction to the prehistory of the Southwest as well as archaeologist-led tours of the area. A day of lab work, during which participants wash, sort, analyze, and catalog artifacts, is followed by two days of excavation alongside seasoned archaeologists. Using trowels and whisk brooms, participants may uncover potsherds, stone tools, and other ancient archaeological remains. The final day of the expedition may be spent excavating or touring Mesa Verde National Park. Some evenings have planned archaeological lectures and programs; others are free for sightseeing.

CROW CANYON ARCHAEOLOGICAL CENTER

Crow Canyon Archaeological Center workers digging for clues in Colorado.

Participants stay and eat at the Crow Canyon lodge. For more information, call Crow Canyon toll free at 1-800-422-8975. The park also offers hiking, camping, tours, and other programs. The Morefield campground is open for tents and trailers, and groceries, souvenirs, meals, gasoline, showers, and laundry facilities are all available at the site. Other overnight lodging and dining halls are located at Far View. For more information, contact the Superintendent, Mesa Verde National Park, CO 81330, 303-529-4465.

Big South Fork National River

Long before rafters, kayakers, hikers, and other recreational users traversed the Big South Fork National River and Recreation Area in Tennessee and Kentucky, loggers and miners sought timber and coal in the area. As they built logging camps and mining communities, they laid roads that crisscrossed the tablelands of the Big South Fork without regard to cultural resources below the surface.

NPS acquired the land in the mid-1970s to manage and protect. Although many of the old roads are now covered with vegetation, a Park Service survey unearthed some prehistoric sites in dirt roadways that were on the verge of being destroyed by periodic maintenance and off-road vehicles.

This discovery prompted NPS and Roane State Community College to develop the Summer Public Archaeology Program to locate archaeological sites in roadways and to recover the remains and record their archaeological content before it is destroyed by modern uses.

Stonework found during previous digs has led archaeologists to believe that these sites served specialized functions. The number of unused arrowheads and other projectile points found in one spot, for instance, indicates that activities at the site focused on tool maintenance and manufacture. Different types of stone pieces found at another site offer clues to the migration patterns of prehistoric communities.

Since only an estimated 10 percent of the archaeological resources of the region have been inventoried, the program is ongoing. Old logging roads are open for hiking and horseback riding. The park has three major campgrounds —the Alum Ford campground has no water—as well as backcountry camping and lodging at Charit Creek. Although no meals are served in the park, food, supplies, and other overnight lodging are available in nearby towns in Tennessee and Kentucky. For more information, contact the Superintendent, Big South Fork National River and Recreation Area, Rt. 3, Box 401, Oneida, TN 37841, 615-569-9778.

Mammoth Cave

Between 2,000 and 3,000 years ago, the entrance of Mammoth Cave National Park in Kentucky provided shelter but also yielded gypsum and other salts. The cave, encompassing 350 miles of underground passages, was also mined for saltpeter and other minerals around the time of the War of 1812 and was later used as a hospital to treat tuberculosis.

This year, Mammoth Cave is the site

HARRY H. RAINEY, JR.

CROW CANYON ARCHAEOLOGICAL CENTER

Above, assorted spear points, and, right, researchers with the Crow Canyon Archaeological Center at Mesa Verde.

of four archaeological expeditions sponsored by Earthwatch, an organization that recruits volunteers to serve as assistants to scientists on research quests worldwide. The objective of the cave research is to document the location and condition of archaeological resources so that management strategies can be developed to protect them. This exploration is unusual in that artifacts are not buried and thus require no excavation. In the cave's 12 miles of passageways identified as archaeologically significant, survey parties of ten people will locate, photograph, map, and videotape cultural remains.

In addition to saltpeter mining works and huts associated with the hospital, many artifacts, such as cane torches and digging sticks, can be found in the cave sediment, along with squash and gourd containers, baskets, bags, and twine. Also found at the cave are prehistoric desiccated human excrement known as paleofeces, which provide information on what early cave users ate.

After hours, archaeologists, biologists, park rangers, and others give presentations on different aspects of Mammoth Cave. Teams stay in the park lodge at the Maple Springs Research Center north of the Green River in the park. For more information, contact Earthwatch at 680 Mount Auburn Street, Box 403, Watertown, MA 02272. Visitors can also take part in guided cave tours, hike on 70 miles of trails, or camp at one of the more than 100 campsites. Meals, supplies, gasoline, and lodging are available at the Mammoth Cave Hotel Complex. For more information, contact the Superintendent, Mammoth Cave National Park, Mammoth Cave, KY 42259, 502-758-2328.

Ozark National Scenic Riverways

The more than 134 miles of Ozark National Scenic Riverways in Missouri are located amid swamplands to the south, tallgrass prairie and great plains to the west and north, and hardwood forests to the east. Because of its location, the park, comprising the Jacks Fork and Current rivers, is thought to contain a variety of archaeologically significant sites that date from the Ice Age to America's Civil War.

The two major archaeological projects at Ozark this year are sponsored by the Park Service's Midwest Archaeological Center. Similar to the excavations at Big South Fork , the first project completes a multi-year investigation of a Middle Archaic period (5,000 to 3,000 B.C.) site threatened by road improvements near the park's Big Spring Campground. Large-scale excavations of the site are performed cooperatively by archaeologists and students from NPS and the University of Missouri. This excavation will provide the first detailed and carefully recorded data on occupation of the Current River Valley during the Middle Archaic period.

Similar to the Mammoth Cave project, a five-year study of the approximately 200 caves along the Current and the Jacks Fork rivers begins this year. The first three seasons will locate caves with archaeological deposits; the latter two years will feature limited excavations where deposits are found. Archaeologists believe that many human uses of the caves will be documented. One cave, for instance, was used as a makeshift hospital during the Civil War. Floral, faunal, and pollen data relating to environmental change since the Ice Age will also be collected.

For more information, contact Mark J. Lynott, NPS Midwest regional archaeologist, at 402-437-5392. Many miles of old logging roads are open for hiking, including nine miles of the Ozark Trail. The park also offers camping areas, stores, canoe and boat rentals, showers, food, and supplies. Restaurants and lodging are also available in nearby towns. For more information, contact the Superintendent, Ozark National Scenic Riverways, P.O. Box 490, Van Buren, MO 63965, 314-323-4236.

Kim A. O'Connell is news editor for National Parks *magazine.*

MAKING STRIDES

March Partners find new ways to raise money in their communities and educate students about the significance of parks.

ONCE AGAIN, March for Parks had a tremendously successful year supporting parks across the country. This year NPCA is proud to recognize three marches that employed particularly inventive fund-raising ideas. Each march provides an example of what citizens can do to help their local parks.

■ Elizabeth Reid of Cincinnati, Ohio, held a march for the Little Miami River, a national scenic river in southwest Ohio. She and some 100 volunteers raised more than $10,000 for river valley forest protection. "Earthday bucks" were created for pledge collectors. Marchers collecting a minimum of $25 received 15 percent of their collected pledge dollars in gift certificates from local environmental retail sponsors.

■ Peter Huemann of Agoura Hills, California, and his volunteers raised more than $13,000 for the Santa Monica Mountains National Recreation Area. A ranch in the Santa Monica Mountains, currently used as the set for *Dr. Quinn, Medicine Woman,* was used as the march location. The popular television series offered an appearance on the show for the highest pledge collector, and local businesses provided transportation, lunch, and pony rides for 100 inner-city school children attending the march.

■ Larry Smith of Jacksonville, Oregon, organized a march with the Jacksonville Woodlands Association and raised $3,900 toward the purchase of 95 acres of forest near Jacksonville. The area includes graves of pioneers who crossed the Oregon Trail and remnants of quartz mining in the 1800s. Smith offered two ways for marchers to participate, by collecting pledges per mile walked or by paying an entry fee and marching any distance they wanted. Participants received a "mileage validation card" that was stamped for each mile walked.

Six schools were honored for incorporating environmental education into their lesson plans using March for Parks:

■ Students in the International Business Club at Martin Luther King, Jr., Senior High School in Detroit, Michigan, coordinated with their Peace Corps pen pal in Krakow, Poland, to organize a sister march.

■ In Washington, D.C., students at Paul Laurence Dunbar High School helped clean up Children's Island, a park site threatened by development of a new stadium. The march was part of community service required by students in D.C. public schools.

■ The fourth-grade class at Club Boulevard Elementary School in Durham, North Carolina, helped Northgate Park get a $1,285 face-lift by planting trees and building bird-watching and water stations. The students wrote essays on "Why We March for Parks" to learn about the importance and value of parks.

■ Students with Hayes Learning Center in Youngstown, Ohio, tested the water at Crandall Park to determine whether the park was really clean.

■ Students at Deltona Lakes Elementary School in Deltona, Florida, organized a learning tour of Sand Pine Nature Center. The students served as guides and pointed out ecological facts to marchers.

■ At Short Pump Middle School Ecology Club in Glen Allen, Virginia, students organized "environmentally correct" games to play during the march at Pouncey Tract Park and made jewelry from "junk."

Songs were written and performed at the march in Cincinnati, Ohio, while student-made posters hung in the background.

We hope that everyone who participated in March for Parks this year learned something new about parks and the role parks can play in protecting and preserving our natural, cultural, and historic resources. We hope these examples inspire you to hold a March for Parks in your area next year to celebrate the 25th anniversary of Earth Day on April 21–23, 1995. If you would like more information on organizing or participating in a March for Parks next year, contact: March for Parks, NPCA, 1776 Massachusetts Ave., N.W., Washington, DC 20036.

Outstanding offers from Alamo and American Airlines.

In celebration of the new Alamo and American AAdvantage partnership, Association Members are sure to stand out with these great savings.

Alamo is now offering outstanding savings with One Free Upgrade or $10 off any rental of 5 to 14 days. You can save even more when you fly American. Use the same coupon and receive $15 off any 5 to 14 day rental. And the savings continue with 500 American AAdvantage miles with every Alamo rental for AAdvantage members.

As always, Association Members will receive the friendliest service, finest selection of General Motors cars, and *unlimited free mileage* you've come to expect from Alamo.

With these great savings, Alamo and American Airlines stand out of the crowd. For member reservations, call your Professional Travel Agent or call Alamo at **1-800-354-2322** and request **I.D. number** _____ and **Rate Code BY**.

AmericanAirlines

Alamo Rent A Car
Where all the miles are free®

Alamo features fine General Motors cars like this Buick Regal.

▲ Circle number 63 on the Reader Service Card 38710A

$10 or $15 OFF

- Certificate is valid for $10 OFF on any rental.
- **Certificate is valid for $15 OFF on any rental in conjunction with an American Airlines flight.**
- Valid on an intermediate through a premium car.
- Valid on rentals of 5 to 14 days.
- Only one certificate per rental, not to be used in conjunction with any other certificates/offers.
- A 24-hour advance reservation is required. Reservations are subject to availability at time of booking.
- Certificate must be presented at the Alamo counter on arrival.
- This certificate is redeemable at all Alamo locations in the U.S.A. only. Once redeemed, this certificate is void.
- This certificate and the car rental pursuant to it are subject to Alamo's conditions at time of rental. Minimum age for rental is 21. All renters must have a valid driver's license.
- The maximum value of this certificate which may be applied toward the basic rate of one rental is $10 off or $15 off with an American Airlines flight. The basic rate does not include any taxes or other optional items. Valid on self-drive rentals only. No refund will be given on any unused portion of the certificate. Certificate is not redeemable for cash.
- This certificate is null and void if altered, revised or duplicated in any way. In the event of loss or expiration, certificate will not be replaced.
- Offer valid through 02/15/95 except: 05/26/94–05/28/94, 06/30/94–07/02/94, 07/22/94–08/20/94, 09/01/94–09/03/94, 10/06/94–10/08/94, 11/23/94–11/25/94, and 12/15/94–01/01/95.

For reservations, call your Professional Travel Agent or call Alamo at **1-800-354-2322** and request **I.D. number** _____ and **Rate Code BY**.

D05B $10 Off **D08B** $15 Off

Alamo Rent A Car
Where all the miles are free®

38710A

ONE FREE UPGRADE

- Certificate is valid for ONE FREE UPGRADE to next car category. Upgrade subject to availability at time of rental, as certain car types may not be available.
- In the U.S.A., valid from a compact car and above, luxury and specialty cars excluded. In Europe* valid from an economy car and above, up through a fullsize car with comparable transmission.
- Offer valid on rentals of 1 to 14 days. Free upgrade valid for up to 7 days.
- Only one certificate per rental, not to be used in conjunction with any other certificates/offers.
- A 24-hour advance reservation is required. Reservations are subject to availability at time of booking.
- Certificate must be presented at the Alamo counter on arrival.
- This certificate is redeemable at all Alamo locations in the U.S.A. and Europe*. Once redeemed, this certificate is void.
- This certificate and the car rental pursuant to it are subject to Alamo's conditions at time of rental. Minimum age for rental is 21. All renters must have a valid driver's license.
- Certificate does not include any taxes or other optional items. Valid on self-drive rentals only.
- This certificate is null and void if altered, revised or duplicated in any way. In the event of loss or expiration, certificate will not be replaced.
- Certificate cannot be used in conjunction with an Alamo Express Plus℠ rental.
- Offer valid through 02/15/95 except: 05/26/94–05/28/94, 06/30/94–07/02/94, 07/22/94–08/20/94, 09/01/94–09/03/94, 10/06/94–10/08/94, 11/23/94–11/25/94, and 12/15/94–01/01/95.

For reservations, call your Professional Travel Agent or call Alamo at **1-800-354-2322** and request **I.D. number** _____ and **Rate Code BY**.

**Alamo's European locations: Belgium, Germany, Republic of Ireland, The Netherlands, Switzerland, and the United Kingdom.*

U52B

Alamo Rent A Car
Where all the miles are free®

G-38710A

Park Partners

Working together to encourage partnerships for the parks, NPCA, the National Park Service, and the National Park Foundation presented the first annual Vail Partnership Awards at the Park Service's 78th anniversary celebration August 25 in Washington, D.C. The awards recognized ten partnerships—including six honorable mentions—among local park managers, NPS program managers, and park support groups such as nonprofit organizations, government agencies, and corporations. First-time honorees included a partnership at Timucuan Ecological and Historic Preserve in Jacksonville, Florida. Timucuan is a 46,000-acre preserve located within a metropolitan community with 900,000 residents. Through a partnership with the city of Jacksonville, Timucuan Superintendent Suzanne Lewis has secured special management status for lands surrounding the preserve. The city has acquired a 275-acre buffer zone bordering the preserve.

The awards grew out of the Vail Agenda, the recommendations for national parks that came out of the Park Service's 75th anniversary conference in Vail, Colorado, in 1991. The Vail Agenda noted that the future of the national parks would depend on fruitful partnerships between the Park Service and park support groups.

Call for the Parks

NPCA is set to unveil a long-distance calling card designed for national park enthusiasts. The NPCA telecard, featuring limited-edition national park images, provides substantial savings over conventional calling card rates and the opportunity to help the parks with every call. With its new prepaid telecard, NPCA offers its members access to a phone card concept used by more than 1 billion customers in Europe and Japan. Through the Sierra Group telecommunications firm, the NPCA telecard provides quality customer service and access to state-of-the-art line carrier MCI. With the purchase of an NPCA telecard, you establish a prepaid balance on the card, and the toll for each call is automatically deducted. When the balance runs low, you can add funds to your telecard account with a quick phone call. Call 1-800-987-5330 to learn more about NPCA's telecard.

Earth Share: Giving at Work

Federal employees can donate to NPCA through the Combined Federal Campaign (CFC) by designating NPCA (agency #0910) on their CFC pledge forms. Last year's campaign yielded more than $400,000 for NPCA.

Earth Share, a workplace giving program founded by NPCA and other organizations in 1988, allows corporate, government, and institutional employees to donate to NPCA and 40 other environmental groups. The following states have also included NPCA and Earth Share in their workplace giving campaigns: Arizona, California, Connecticut, Florida, Maryland, Michigan, Minnesota, New Jersey, New York, North Carolina, Rhode Island, Texas, Utah, Vermont, Washington, and Wisconsin. Cities, counties, universities, and corporations also sponsor workplace campaigns with Earth Share.

Contact Diane Clifford at 1-800-NAT-PARK, extension 131, for a complete listing of Earth Share workplace campaigns or for information on including Earth Share and NPCA in your employer's workplace giving campaign.

March for Parks: A Class Act

Kids and parks go hand in hand, and with school back in session, parks in your neighborhood can provide lessons in science, social studies, language arts, and more. NPCA's March for Parks program has developed a teacher's guide showing how to bring parks into the classroom and how schools across the nation can take part in March for Parks events to benefit their local parks. The in-school program highlights issues and activities for students of all ages, building toward the celebration of the 25th anniversary of Earth Day in April 1995 and participation in March for Parks 1995. For information, write to: Ellen Wilson, March for Parks/school program, NPCA, 1776 Massachusetts Ave., N.W., Washington, DC 20036.

Southeast Regional Conference

To continue the momentum and build on the accomplishments of NPCA's 75th anniversary conference last May, the first followup regional conference for park activists will be in early 1995 in Atlanta, Georgia. NPCA's grassroots staff will be on hand to work with local citizen activists and park support groups to create a strong regional alliance and lay the groundwork for a national network of park advocacy groups. To learn more about the Southeast regional conference and plans for conferences in other regions, contact Tom St. Hilaire at 1-800-NAT-PARK, extension 220.

Where Credit Is Due

NPCA's no-annual-fee credit card offers an opportunity to save money and support our national parks. Features of the NPCA Mastercard and VISA Gold include a low annual percentage rate, a credit line of up to $25,000, purchase security, extended warranty protection, cash advance checks, travel, theft, and car rental insurance, and more. A percentage of each month's purchases on the card directly supports NPCA's mission, at no extra cost to the cardholder.

With the NPCA credit card, you can choose from three images of national parks on your card. NPCA's credit card will generate more than $800,000 in the next five years for park preservation

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, let us know and we will remove your name from the list.

Just attach a current label from *National Parks* magazine and send it to us at the address below.

We'd like to assist you with your membership concerns!

☐ I missed an issue of *National Parks* magazine (please specify)

☐ I am receiving duplicate mailings (please include both mailing labels)

☐ I changed my name or address (please indicate your change below)

☐ Please do not exchange my name

Identification number

Name

Address

City, State, & Zip

If your membership concern is not addressed above, please write or call us at 1-800-NAT-PARK. Attach the mailing label from the latest issue and mail to:

(Place label here)

Membership Department
NPCA
1776 Massachusetts Ave., N.W.
Washington, DC 20036

programs. Proceeds from the card have already benefited the Red Wolf Recovery Fund in Great Smokies. For more information and an application, call **1-800-252-9002**.

Online with NPCA

The "NPCA-NATIONAL PARKS" message board on CompuServe and America Online gives NPCA members and other park advocates a new link to news on the parks.

On CompuServe, at "Go:" type "NPCA" to get to the NPCA message board. NPCA also maintains a library of files in the Outdoors Support Forum. E-mail NPCA at 73441,1406.

On America Online, type keyword "Network Earth" and select the message boards. E-mail NPCA at "DKhanna" or "NATPARKS".

Any computer user with access to the Internet can also send and receive E-mail via CompuServe and America Online. For CompuServe, use "Internet:73441,1406@cis.com" and for America Online, use "Internet:dkhanna @aol.com".

Volunteer Opportunities

Two organizations have recently published directories of volunteer opportunities in national parks and other public lands. The American Hiking Society has released the 1994 "Helping Out in the Outdoors" directory, which lists more than 2,000 volunteer jobs. Birders interested in increasing information on bird populations will benefit from the American Birding Association's "Directory of Volunteer Opportunities for Birders," listing more than 300 jobs. For the former directory, send $7 to AHS Helping Out, P.O. Box 20160, Washington, DC 20041-2160; for the latter, send $2 to the American Birding Association, P.O. Box 6599, Colorado Springs, CO 80934-6599.

Next Issue...

The November/December issue will feature the black-footed ferret, the impact of grazing, and the proposed Disney's America theme park. "Access" will look into haunted parks.

BUTTERFLIES—*from page 36*

information on native populations.

Although it could be years before the National Biological Survey begins researching the invertebrates, other associations could help provide information to the Park Service as well as fill an interpretive void to encourage people to look at and understand invertebrates.

Each year for the past 20, volunteers with the Xerces Society and now the North American Butterfly Association (NABA) have fanned out across the country on or about the Fourth of July to count butterflies. Some counts occur in national parks such as the Blue Ridge Parkway; others are in a favorite canyon or state park. Ann Swengel, vice president of membership for NABA, says the information provided by these annual counts should not be overlooked as a complement to scientific studies.

"They are not designed to provide rigorous scientific information, but you can provide some interesting field data," she says. "You can tell from year to year which butterflies have had a population outbreak and which show dwindling numbers." The most significant contribution of these annual counts, however, is education.

"When you can identify the difference between one kind of butterfly and another, you realize things are a lot more complex than you thought they were," Swengel says. "Once you've had your eyes opened, you can appreciate things more."

Twenty years ago, Robert Pyle wrote about butterflies for *National Parks* magazine. What he wrote then still applies today. The national parks, he wrote, are the best single resource this country has for moth and butterfly conservation, and they will continue to be the cornerstones of the movement "if the parks can be expanded where needed, stringently protected once set aside, studied and managed for optimum results, and used to their fullest for increasing awareness and appreciation of insects."

Linda M. Rancourt is associate editor of National Parks *magazine.*

Endangered Parks

Our Endangered Parks: What You Can Do To Protect Our National Heritage is the best book ever produced on how individuals and groups can organize to help protect and create national parks. Initiated by the National Parks and Conservation Association, and researched and written by its staff (with the addition of eight lively park activist profiles by Jeffrey Davis), this handbook works at precisely the right level.

For individuals who have not played a role in park activism, the book tells them why they should. For beginners, it operates as a primer, setting out procedures for creating advocacy groups or for influencing the media, the legislative process, and the National Park Service (NPS). Even those who consider themselves well informed will find material of interest. Nowhere else, for example, have I seen as clear a statement of the annual budget cycle. Anyone who cares about the park system should read and use this book.

One of the greatest threats to our national parks is ignorance. More discrete and often site-specific threats, whether water and air abuse, visitor impact, or park inholdings, cannot be addressed without broad awareness of why the national parks matter or fuller information about how to take action. This book speaks to the greatest threats of all: indifference, ignorance, and even hostility to the national park ethic.

Along the way, the reader will learn much. Confused about the nomenclature used to designate the 367 units of the park system? A terse sidebar will help you. Concerned with inadequate park boundaries, framed in the day when focus often was on a single "scenic wonder" and not on the ecosystem on which the wonder depended? Here is a chapter to help you think your way through the problem. Need addresses for NPS regional offices, a list of other advocacy and friends groups that have been effective with respect to a single national park unit? Valuable appendices accompany this information.

The standard of writing is high. The bibliography could be slightly fuller. The historically oriented units of the park system receive less attention and somewhat less sophisticated discussion with respect to the unique perils they face, but these are minor matters set against the straightforward common sense of the book. The profiles of successful activists also support an important conclusion: an activist is likely to be most effective working with a single unit, and one that is nearby. Allies are more easily won by being a "local," and victories are best achieved by undeviating focus on the rich particularity of place. One profile concerns a person who concentrated on returning a single public park to service in Utica, New York. The relevance to national parks may not be evident, but strengthening the park ethic within a locale is the first step to making people aware of, and concerned for, that ethic nationwide.

Foghorn Press, known for its outdoor recreational publications, has produced an activists' manual at a cost we surely must afford. We cannot all read Title 16 of the U.S. Code, which contains the parks' enabling acts, but we can all read—and act upon—this succinct handbook. A citizen can render no better service to future generations.

Our Endangered Parks: What You Can Do To Protect Our National Heritage, paperback, $10.95; published by Foghorn Press, San Francisco. To order, call 1-800-364-4676.

—Robin W. Winks, Townsend Professor of History at Yale University

Trustees for the Parks

Trustees for the Parks are dedicated members and friends of NPCA who, by their annual general contribution of $1,000 or more, continue to ensure the thoughtful stewardship of our National Park System. We gratefully acknowledge these individuals and their recent support of NPCA's park protection programs.

$10,000+
American Conservation Association, Inc.
The Bullitt Foundation, Inc.
Earth Share
Faultless Starch/Bon Ami Co.
Teresa Ferster Glazier
Dr. and Mrs. Benjamin C. Hammett
Hi-Tec Sports USA, Inc.
Henry M. Jackson Foundation
Mrs. Roy Johnson
Ambassador and Mrs. L. W. Lane, Jr.
Maryon Davies Lewis
Marpat Foundation Inc.
The New-Land Foundation, Inc.
Pacific Gas and Electric Company
Rocking K Development Company
R.W.H. Foundation
Mr. and Mrs. Fred J. Stanback, Jr.
Stephenson Printing
Town Creek Foundation, Inc.
University Of Washington
2 Anonymous donors

$5,000-$9,999
Mr. and Mrs. Jim Alexander
American Express Company
Chauncey and Marion Deering McCormick Foundation
Chevron Corporation, Inc.
Delaware North Companies, Inc.
The Dow Chemical Company
Energy Fuels Nuclear, Inc.
Mrs. Vernon W. Furrow
Mrs. Leslie H. Geddes
Mr. and Mrs. Francis R. Guyott, Jr.
Harder Foundation
Mr. and Mrs. Paul Hallock
Loren Jahn
Merrill Lynch and Company
Robert B. Millard
The New York Times Company Foundation, Inc.
Red and White Fleet
Roma Philbrook Rentz
L. J. Skaggs and Mary C. Skaggs Foundation
Mr. and Mrs. T. H. Wiancko
Stuart S. Wright
3 Anonymous donors

$2,500-$4,999
Alamo Rent A Car
Bank of America
Gordon T. Beaham III
Richard C. Blum and Senator Dianne Feinstein
Rev. and Mrs. C. Frederick Buechner
Russell D. Butcher
Georgia-Pacific Corporation
Margaret S. Hart
The Hearst Monument Foundation
K. C. Publications
The Kamber Group
Mr. and Mrs. Arthur R. Littleton
Mr. and Mrs. James MacFarland
National Maritime Museum Assn.
Norcross Wildlife Foundation
Dr. and Mrs. Ronald L. Pacifico
Mr. and Mrs. H. Canfield Pitts III
Paul and Susan Pritchard
Edward R. Roberts
Santa Fe Southern Pacific Foundation
Sequoia Grove Winery
Southern California Edison Co.
Dr. Hilda C. Standish
Lowell Thomas, Jr.
Martha W. Tolman
Triplex Direct Marketing Corp.
United Parcel Service
1 Anonymous donor

$1,000-$2,499
American Park Network
Anticosti Paper Corporation
Mr. and Mrs. Lawrence E. Aten
Dr. Jonathan C. Beeler
Joan and Bert Berkley
William R. Berkley
William E. Bierer
Mrs. Edward A. Blackburn, Jr.
D. Claire Blackwell
Blue Jay Incentive Marketing
Dorothy E. Blum
Body Shop Of America, Inc.
Clarita Heath Bright
Jessie A. Brinkley
George Lambert Bristol
Muriel Brower
Mr. and Mrs. Drury R. Brown
Eugene D. Brown
Frances W. Budlong
Mary Goodwin Cabot
Eva B. Campbell
Mr. and Mrs. Fred C. Campbell
Canadian Earthcare Society
Dr. and Mrs. Jerome W. Canter
Peggy and Thomas Cavanaugh
Diane J. Clifford
Norman G. Cohen
James Coors
Jerry and Diane Cunningham
Mr. and Mrs. Edward N. Dayton
Steven A. Denning
Gaylord and Dorothy Donnelley Foundation
Alice P. Doyle
Mary Anna Dyar
Dr. Gary Fisher Earle
Josie Van Gent Edell
Lori and Dan Efroymson
Dr. Virginia J. Ehrlicher
Thomas J. Engelman
Lois and Richard England
Estelle W. Ferguson
Mary Jane Fisher
Mrs. Robert M. Foster
Eve D. Fout
Anne P. Frame
Freeport-McMoran, Inc.
Suzanne J. Fuller
CMSGT (RET) David J. Galvan
Golden Gate National Park Association
Mr. and Mrs. John J. Gilbert
Mr. and Mrs. Martin L. Gleich
Golden State Warriors
Leslie V. Goldsmith
Mary Vodden Good
Maridel E. Green
Ruth W. Halpenny
Joanna D. Hanas
Thomas and Gail L. Hansberger
Doris M. Haverstick
Shirley Hicklin
Hix-Rubenstein Companies
HMS Associates
Mr. and Mrs. John W. Holloway
Ernest W. Horak
Gretchen S. Hull
Barbara Hunter
Mary A. Hutchins
IBM Corporation
Mrs. Vaughn A. Ide
Bulent and Gladys Jajuli
Richard L. Jentgen
Mrs. Niels W. Johnsen
Didier Journeaux
Mrs. G. H. Kaufman
Mrs. Spencer R. Keare
Ellen H. Kelly
Mr. and Mrs. Richard B. Kemp
Carolyn King
Koll Real Estate Group, Inc.
Marjorie F. Krantz
Mrs. E. H. Land
Allene and Jerome Lapides Foundation
Bruce R. Larash
Eric Allan Lauha
Arthur Lawson, Sr.
Elizabeth Ann Le Fevre
William H. Leedy
Orin Lehman
Robin Lehman
Mr. and Mrs. James R. Lilienthal
John S. Livermore
Putnam Livermore
Dr. and Mrs. Robert Luke
Michael Macklin
Phil and Paula Mark
Ellie Maynerick
Kathryn K. McNeil
Dr. John E. McWilliams
Priscilla McDougal
Mendelsohn and Associates
Catherine C. Miller
Gary J. Miller
David Mock
Vyvian C. Mohr
Jan McM. Montgomery
Morse Diesel Construction
National Park Trust
Mr. and Mrs. F. I. Nebhut, Jr.
Dr. and Mrs. Ruprecht A. Nitschke
William T. O'Donnell, Sr.
Harry B. Overesch, M.D.
Larry G. Pakmei
Linda and Peter Phelps
Linda A. Pirog
Anne Powell
Production Solutions
Mary and Vernon Rail
Mr. and Mrs. Richard Raney
Mr. and Mrs. Roy W. Reaves III
Nicholas Renzi
Mrs. Harold Reynolds
Mrs. Marie W. Ridder
Robins, Kaplan, Miller and Ciresi
Jean Rosenbluth
Julius Rosenwald II
Dr. Alfred Runte
Holly Rutkowski
Mr. and Mrs. Leonard R. Sargent
Edith Ester Sayers
Audrey M. Schneiderman
John D. Schubert
Charles R. Schwab
M. H. Schwartz
Sally Sears
Dr. Petrena A. Shea
Dr. and Mrs. Roger J. Shott
Dolph C. Simons, Jr.
Mr. and Mrs. R. S. Singers
Valerie Smallwood
Austin C. Smith
Eleanor D. Spilman
Rae Spitler
Mr. and Mrs. Lyman Spitzer, Jr.
Mrs. John J. Strandberg
Mark and Joan Strobel
Gilbert and Alma Stucker
Ned Stone Tanen
Tension Envelope Corporation
Ruth Thompson
Mr. and Mrs. Clayton M. Timmons
Transamerica Corporation
Mrs. William C. Trimble
Hendrik A. Vanbueningen
R.T. Vanderbilt Trust
Esther L. Voorsanger
Mrs. Edward J. Walsh, Jr.
Waste Management, Inc.
Peter M. Wege
Ellen Weiss
Elisabeth A. Wells
Wells Fargo Bank
Ken and Muriel Wemmer
Mr. and Mrs. Francis M. Wheat
Peter A.B. Widener
Mr. and Mrs. Alfred S. Wilsey
Margaret Dauler Wilson
Dr. Robin W. Winks
The Wood Family Foundation
Mary Edith Woodward
C. Ray Wylie Jr.
5 Anonymous donors

HOLIDAY GIFT CATALOGS

Send NOW to receive these catalogs in time for holiday gift giving!

SAVE 35-70%
SIERRA
TRADING POST

Save 35-70% off name-brand outdoor clothing and equipment—Every Day! Save on names like Marmot, Kelty, Lowe, Jansport, Hanes, Duofold, Sierra Designs, Asolo, Columbia, Sportif USA and many more... **Satisfaction is always Guaranteed!** Call 307- 775-8000, fax 307-775-8088. 5025 Campstool Rd., Dept. NP0994, Cheyenne, WY 82007. **FREE CATALOG.**

Circle number 1 on Reader Service Card

THE BINOCULAR EXPERTS
Since 1914
National Camera Exchange
+Video

Free Binocular Buying Guide. Call 1-800-624-8107. Hundreds of binoculars in stock including Nikon, Swift, Leica, Bausch & Lomb, Zeiss and more! We've been selling top quality binoculars and spotting scopes at low prices since 1914. Give our Binocular Experts a call! National Camera Exchange, 9300 Olson Highway, Golden Valley, MN 55427.

Circle number 2 on Reader Service Card

BOOKS ON TAPE®
World's Largest Selection of Audio Books

Books on Tape, Inc. Best-sellers on cassette, more than 3,000 current and classic favorites. Twenty new titles monthly. All are full length. Your satisfaction is guaranteed. Call 1-800-626-3333 for color brochure. **Free.**

Circle number 3 on Reader Service Card

Resound Recordings
Audio • Video • Taping
Duplication • Marketing

Audio Tapes of NPCA 75th Anniversary Conference "Citizens Protecting America's Parks: Joining Forces for the Future," $9.95 ea. plus S/H. Also Rocky Mountain National Park 1994 Lyceum Speaker's Series, $9.95 ea. plus S/H. Call for FREE catalog 303-586-0813. P.O. Box 5333, Estes Park, CO 80517

Circle number 4 on Reader Service Card

Coldwater Creek
A NORTHCOUNTRY CATALOG

Come where only geese honk, and only trees scrape the sky. City cares slip away like the last rays of a northcountry sunset as you explore the Coldwater Creek catalog. Page after beautiful page of apparel, jewelry and special gifts you'll find nowhere else. Experience a world you thought lived only in your heart. Call for your *free* catalog subscription any time: 1-800-262-0040, dept. 1000.

Circle number 5 on Reader Service Card

SIMPLICITY · STYLE · ADVENTURE
ekko
CLOTHING COMPANY
ESSENTIAL FUN EXISTENCE

"I don't wear quality clothing that's durable, comfortable, or stylish. I'd rather save a few bucks, fight the crowds at the local mega-store, and buy cheap clothing that is going to shrink, pill, or self destruct after a few washes."

"On second thought, send me a free catalog." Call 1-800-577-8833.

Circle number 6 on Reader Service Card

WinterSilks®

WinterSilks. Discover luxurious silk clothing 10-40% off normal retail from WinterSilks. Exclusive men's and women's silk long johns provide lightweight warmth and comfort. WinterSilks also offers a variety of colors and styles of silk sportswear, sleepwear, outerwear and more! All items guaranteed. 72-page catalog. ONE YEAR SUBSCRIPTION FREE. 1-800-648-7455.

Circle number 7 on Reader Service Card

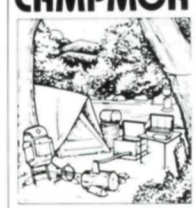
Recorded Books™

"The sound of good books since 1979"

RECORDED BOOKS, INC. Listen to unabridged best-sellers, mysteries, histories, and much more while you drive. Expert narrators bring great books to life. For a brochure of unabridged Recorded Books, call 1-800-638-1304. Ask about easy rentals by mail. Free.

Circle number 8 on Reader Service Card

CAMPMOR



FREE CAMPMOR CATALOG - Packed with everything you need for all your outdoor adventures. Highest quality name brands at the lowest prices. Equipment for backpacking, camping, climbing, kayaking and canoeing. Plus rugged clothing and footwear for men, women and children! Call 1-800-CAMPMOR or write to Campmor, P.O. Box 700-94NP, Paramus, NJ 07458-0700.

Circle number 9 on Reader Service Card

ECOOPPORTUNITIES

BOOKS/PUBLISHING

BROOKS CAMP -- KATMAI NATIONAL PARK, ALASKA
BROWN BEARS OF BROOKS RIVER
"...expressed so honestly the life of a creature struggling to coexist and survive in a changing world." --Denver Post
5 years of research reveals subtle impacts of ecotourism.
31 color photos, 9 drawings. Send $7.95 + 2.00SH
NRRC, POB 3904 Kodiak, AK 99615

▲ Circle number 10 on the Reader Service Card

BEARS, BIGTREES, BATTLEFIELDS
buttes, bajadas, boulders, butterflies.

Enjoy them more with books, maps, videos.
FREE LIST of 1,300 by park ranger-naturalists, historians, others. **NATIONAL PARK PUBLICATIONS**
Box 2867-NSO Dillon CO 80435

▲ Circle number 11 on the Reader Service Card

ZION'S ANCIENT OBSERVATORY

Amazing discovery of 1,000 year-old secret! Witness coyote shadow phantom devour Anasazi petroglyphs during summer solstice. Book includes easy directions and photos.
ANASAZI SUNRISE, $6.95 ppd
The Rugged Individualist Box 2565 El Cajon, CA 92019

▲ Circle number 12 on the Reader Service Card

ANIMALWATCH
your personal update
Send $13.95 U.S. to
ANIMAL KNOWLEDGE & INFORMATION NETWORK
Box 402 Stn M, Calgary, (#12A) Canada, T2P 2J1
Pin & Ten 16 page Newsletters

▲ Circle number 13 on the Reader Service Card

CAREERS/EMPLOYMENT

OUTDOOR CAREERS!
Home study. Train for careers in conservation, forestry, wildlife, parks, and more.
Free career literature: 800-223-4542.
Name _____
Address _____
City _____ State ____ Zip ____
School of Conservation, Dept. NNK442
PCDI, 6065 Roswell Rd., Atlanta, GA 30328

Animal lovers!
Home study prepares you for *great* jobs in animal care and veterinary assistance.
Free literature: 800-223-4542.
Name _____ Age ____
Address _____
City _____ State ____ Zip ____
School of Animal Science, Dept. CF442
6065 Roswell Road, Atlanta, Georgia 30328

Environmental Careers
Environmental & natural resource vacancies from non-profit, private, & government employers. Two issues each month list opportunities nationwide. A 6 issue trial subscription is only $19.50. **Subscribe today!**
The Job Seeker
Dept NP, Rt 2 Box 16, Warrens, WI 54666

▲ Circle number 15 on the Reader Service Card

OPTICS

Binoculars, Spotting Scopes, Tripods & Accessories
Leica * Zeiss * Swarovski * Bausch & Lomb
Nikon * Kowa * Swift * Bushnell * Redfield
Brunton * Leupold * Celestron * Op Tech
Bogen * Burris * Fujinon * Sog Tools
Magellan * Gerber * Swiss Army * Spyderco
Discount Price List & Comprehensive Catalog
EAGLE OPTICS
716 S. Whitney Way - Madison, WI 53711 (608) 271-4751

▲ Circle number 16 on the Reader Service Card

FREE Binocular Buying Guide
CALL 1-800-624-8107
Best Prices on Bausch & Lomb, Leica, Nikon, Zeiss and More!
National Camera Exchange
Golden Valley, MN (612)546-6831
THE BINOCULAR EXPERTS

▲ Circle number 2 on the Reader Service Card

PRODUCTS/GEAR

Yellowstone, Grand Canyon, Zion, Arches, Yosemite, Rocky Mountain
and the list goes on - 110 maps of over 45 National Parks plus recreation areas throughout the USA

"Perhaps the best topographic maps of national parks are being produced by Trails Illustrated"
Spokane Chronicle

"The nicest topos we've ever seen"
Backpacker Magazine

"...accurate, weather-worthy"
Outside Magazine

"...handsomely illustrated"
The Denver Post

"...a boon"
USA Weekend

For a free catalog, contact:
Trails Illustrated
PO Box 3610
Evergreen, CO 80439
(800)962-1643

Trails Illustrated - More than a map
Sold around the world - Ask for them by name

TRAILS ILLUSTRATED TOPO MAPS

▲ Circle number 18 on the Reader Service Card

BUFFALO RANCHING makes good ecological sense for the American prairie. Please write or call for free catalog of a full range of buffalo products to:
Thundering Herd Buffalo Products
PO Box 1051, Dept. NP1
Reno, NV 89504
1-800-525-9730

▲ Circle number 19 on the Reader Service Card

Intriguing and Unique Stationery
You'll really love our envelopes and stationery made from government surplus topographic maps. (Even non-map lovers are intrigued by our "Geolopes"™.) A truly inspired recycling idea! "Geolopes"™ come in various sizes and meet U.S.P.S. requirements. We guarantee your correspondents will open the mail when they see this unique, fascinating item. Very affordable. **Free samples.** New England Cartographics, P.O. Box 9369-N, North Amherst, MA 01059, (413) 549-4124.

▲ Circle number 20 on the Reader Service Card

RESORTS

A L A S K A
KENNICOTT GLACIER LODGE
GHOST TOWN & GLACIERS
Explore North America's most memorable show from the comfort of our modern lodge in the heart of the Wrangell-St. Elias National Park. Soaring peaks, massive ice fields, wilderness rivers and the world's largest ghost town—all at our front door. Write or call **toll free** for brochure.
1-800-582-5128
P.O. Box 103940, Anchorage, AK 99510

▲ Circle number 21 on the Reader Service Card

DISCOVER
A NEW OUTLOOK

Imagine exploring the peaceful beauty of secluded coves. Swimming in sparkling blue waters. Hiking through unspoiled wilderness. All along with the comforts of home. Sound like your dream vacation? **Seven Crown Resorts**, one of the nation's largest houseboat companies, has houseboats waiting to make your dream come true on four of the West's most spectacular waterways – **Lake Mead**, **Lake Mohave**, **Lake Shasta** or **California Delta** resorts. Call today for more information and reservations, or your dream vacation could be just a passing fancy.

CONCESSIONAIRE U.S. FOREST SERVICE IN THE SHASTA TRINITY NATIONAL FOREST
AUTHORIZED CONCESSIONAIRE OF THE NATIONAL PARK SERVICE

SEVEN CROWN RESORTS
1-800-752-9669

▲ Circle number 22 on the Reader Service Card

ECOOPPORTUNITIES

Star Hill Inn

an astronomer's retreat in the rockies

The ideal vacation getaway! 7 charming cottages, 200 wooded acres, 7300' elev. Near 2 NWR, Nat'l Forests, 270+ sp. birds, Santa Fe, skiing, private, fireplaces. On-site observatory, rental 'scopes, ast. & ornith. wkshps.

Star Hill Inn-NP, Sapello NM 87745, 505/425-5605

▲ Circle number 23 on the Reader Service Card

VIRGIN ISLANDS NATIONAL PARK

All units are waterfront with fully equipped kitchens, freshwater pool, superb snorkeling, scuba diving, parasailing, ocean kayaking, wind surfing and hiking. Dive and honeymoon packages, fine dining at Ellington's, full hotel services & amenities, including transfers from ferry, bell service and concierge. AAA♦♦♦

GALLOWS POINT SUITE RESORT

P.O. Box 58, St. John, USVI 00831
1-800-323-7229
809-776-6434 • Fax 809-776-6520

▲ Circle number 24 on the Reader Service Card

Afognak Wilderness Lodge

"in Alaska's newest State Park"

Enjoy photographing, at close range, our unique combination of land and sea wildlife from **EAGLES** to **AUKLETS, KODIAK BROWN BEAR** to **SEA OTTER** and excellent salmon/halibut fishing. Elegant log lodge and guest cabins with superb local cuisine for 12 guests. Floatplane access. Color brochure.International references.

Roy & Shannon Randall
Seal Bay, AK 99697-NP

Radio-phone 907-478-6442
800-478-6442
FAX 907-486-2217

▲ Circle number 25 on the Reader Service Card

TOURS/TRAVEL

AMAZON RAINFOREST EXPEDITIONS

Explore Manu, Tambopata and Madidi in SW Peru-Bolivia. Spectacular congregations of rare wildlife. Join scientists and indigenous guides on rainforest hikes. Help with research and conservation.

Free Peru-Bolivia Travel Planner

1-800-345-4453

WILDLAND ADVENTURES
3516 NE 155TH ST SEATTLE, WA 98155 (206)365-0686

▲ Circle number 26 on the Reader Service Card

Rico Tours SM

Simply Costa Rica

(800) 280-7426

- Adventure Travel
- Horse Trekking
- Sailing Safaris
- Nature Tours
- Volcano Tours
- Diving Explorations
- Photo Safaris
- Beach Vacations
- National Park Tours
- White Water Rafting
- Customized Itineraries

an Anderson Mill Travel, Inc. Company

▲ Circle number 27 on the Reader Service Card

Tours For Active Folks Over Fifty

Experience Fine Hotels and Regional Cuisine As You Trek Across the West With Our Knowledgeable Guides. Lodging, Meals and Ground Transport. Free Brochure!

Walk About The West
3760 Rockrimmon Blvd • Colorado Springs, CO 80919
(719) 531-9577

▲ Circle number 28 on the Reader Service Card

ALASKA

DENALI NATIONAL PARK

CAMP·DENALI
NORTH FACE LODGE

Small, remote lodgings in the heart of the park in view of Mount McKinley

Respected specialists in guided hiking and natural history. Since 1951.

DENALI NATL. PARK WILDERNESS CENTERS
PO BOX 67 DENALI NATL. PARK, AK 99755
SUMMER (907) 683-2290 WINTER (603) 675-2248

▲ Circle number 29 on the Reader Service Card

Point Reyes National Seashore

TAMAL SAKA

Tomales Bay Kayaking

Rentals - Instruction - Guided Excursions
Reservations Recommended

19225 State Route 1 - P.O. Box 833
Marshall CA 94940-0833
415/663-1743

▲ Circle number 34 on the Reader Service Card

MAYAN ADVENTURES

ARCHAEOLOGICAL ADVENTURES

from Anasazi to Zapotec

Visit ruins of Mexico, U.S.A & Central America with an archaeologist!

camping, hikes, river trips

free brochure - 206/523-5309

P.O. Box 15204
Seattle, WA 98115

▲ Circle number 31 on the Reader Service Card

FAR AND AWAY ADVENTURES

Paddle Yellowstone

The wilds of Yellowstone instill travelers with adventure early explorers found. Paddling stable touring kayaks and canoes in the most remote reaches of Yellowstone Lake, you'll view undisturbed wildlife, fly fish for enormous trout, and relax with the service of a world class safari.

1-800-232-8588

Yellowstone - Middle Fork of the Salmon - Costa Rica - San Juan Islands

▲ Circle number 32 on the Reader Service Card

TOUCH THE PAST

WORK WITH ARCHAEOLOGISTS EXCAVATING 13TH CENTURY ANCESTRAL PUEBLOAN (ANASAZI) SITES

JOIN LEADING SOUTHWESTERN SCHOLARS HIKING & RAFTING TO ANCIENT RUINS

FOR A **FREE** CATALOG, PLEASE CALL: **1-800-422-8975**

CROW CANYON ARCHAEOLOGICAL CENTER
DEPT. NPK , 23390 COUNTY ROAD K
CORTEZ, COLORADO 81321

▲ Circle number 33 on the Reader Service Card

AUSTRALIA & NEW ZEALAND *Walkabouts*

Nature, Hiking & the Outdoors

Hiking and camping safaris, lodge stays, and island resorts in New Zealand's scenic National Parks & Milford Track; Australia's Outback, Tropical North, & Great Barrier Reef.

PACIFIC EXPLORATION CO.
Box 3042-P, Santa Barbara, CA 93130
(805) 687-7282

▲ Circle number 30 on the Reader Service Card

Going to the Grand Canyon?

Travel by authentic steam train and experience the history of the West. Ride in turn-of-the-century style from Williams, Arizona, to the breathtaking Grand Canyon. Leave the driving and parking worries behind. For tickets and great package deals including lodging and meals, call your travel agent or **1-800-THE-TRAIN.**

First train Sept. 1901

GRAND CANYON RAILWAY
Preserving our national heritage.

Authorized concessioner of the National Park Service

▲ Circle number 35 on the Reader Service Card

Just two weeks can make a difference

on an Earthwatch project.

Help preserve endangered songbirds, study coral reef ecology, or monitor the impact of tourism on a national park. Work side-by-side with renowned scientists around the world, where your time and tax-deductible contribution can make a big difference on studies ranging from archaeology to volcanology. Bring your enthusiasm and your curiosity—we'll teach you the rest.

EARTHWATCH

a nonprofit founded in 1972
PO Box 403GNK, Watertown, MA 02172
1-800-776-0188

▲ Circle number 36 on the Reader Service Card

WILDERNESS SOUTHEAST
711 SANDTOWN RD.
SAVANNAH, GA 31410
(912)897-5108

Discover the Okefenokee Swamp. Paddle the Everglades. Kayak coastal Georgia, hike through rainforest, or snorkel the reefs of Central America. Wilderness adventures emphasizing natural and cultural history and ecology. **Free catalog.**

▲ Circle number 37 on the Reader Service Card

TOUR THE HIGH WEST WITH AMERICAN DREAM SAFARI

Vintage 1950's automobile & trailer tours of Nat'l Parks, monuments, and forests in N. Colorado, Wyoming, S. Dakota. Driver/guide will lead small groups (3-6 travelers) into the heart of the American High West. Incl. transportation, safari camping, and 2 meals daily. Arrive & depart from Denver. Call for newsletter, brochure, 1994 Autumn schedule. Now Booking. 1 800 552-2397

▲ Circle number 38 on the Reader Service Card

BROWN BEAR
Photography Excursions - Wildlife Viewing
Explore the Shelikof Coast of
KATMAI NATIONAL PARK
aboard the M/V Waters
DOCKSIDE TOURS
1-800-532-8338
P.O. Box 1503 • Homer, AK 99603

▲ Circle number 39 on the Reader Service Card

WILDLIFE EXPEDITIONS
YELLOWSTONE
AND **GRAND TETON** NATIONAL PARKS
BIOLOGIST-GUIDED
VERY SMALL GROUPS
FOR A DAY OR A WEEK
BEST HOTELS AND FOOD
GREAT PLAINS WILDLIFE INSTITUTE
307-733-2623
BOX 7580 JACKSON HOLE, WY 83001

▲ Circle number 40 on the Reader Service Card

CHURCHILL WILDERNESS ENCOUNTER

Group Package and Individual Tours of:
BIRDING * POLAR BEARS
BELUGA WHALES
Bus Tours, Nature Tours, Tundra Tours, History Tours and Natural History Tours

Churchill Wilderness Encounter
POB 9, Churchill, Manitoba
ROB 0E0, Canada 1-800-265-9458
204-675-2248, fax 204-675-2045

▲ Circle number 41 on the Reader Service Card

Archaeology Tours—Maya cities of Yucatán Peninsula, Palenque, Chichén Itzá, Uxmal. Guatemala Highlands tour, Tikal, Antigua, Chichicastenango. Southwest Rock Art, Chaco Canyon, Canyon de Chelly, Santa Fe. First Class. Expert archaeologist guides.

The Archaeological Conservancy
5301 Central NE, # 1218 Albuquerque, NM 87108 (505) 266-1540

▲ Circle number 42 on the Reader Service Card

WILDERNESS CANOE CAMPING TRIPS
NO EXPERIENCE NEEDED!
- *Boundary Waters Canoe Area Wilderness - MN*
- *Quetico Provincial Park - Ontario*

CANADIAN BORDER OUTFITTERS
P.O. Box 117 - Ely, MN 55731
Call 1-800-247-7530 for trip planning packet

▲ Circle number 43 on the Reader Service Card

Afoot in ... EUROPE'S ALPS

World class walking vacations in the hidden corners and unspoiled countryside of Switzerland, Germany and Austria.

Wayfaring Travelers
27 Sunnyview Drive
Phoenix, Maryland 21131-2036
(410) 666-7456

▲ Circle number 45 on the Reader Service Card

SHENANDOAH!

Afoot along the backroads and hidden corners of the beautiful Shenandoah Valley and Colonial Virginia.
The most scenic & historic vacation you'll ever walk!

Wayfaring Travelers
27 Sunnyview Drive
Phoenix, Maryland 21131-2036
(410) 666-7456

▲ Circle number 46 on the Reader Service Card

ROW FREE 20 PAGE BROCHURE! CALL 1-800-451-6034

WHITEWATER RAFTING IN IDAHO AND ECUADOR
MEDITERRANEAN YACHTING IN TURKEY
SELF-DRIVE BARGE RENTALS IN FRANCE
Magical Adventures
SINCE 1979 - ROW PO Box 579-NA, COEUR D'ALENE, ID 83816

▲ Circle number 47 on the Reader Service Card

VIDEOS

Don't camp site unseen!

RV'ers & Tenters: Our scenic VHS reference guides let you "visit" your campsite before making reservations!
California Camping:
The California Coastline
(909) 980-8916
$24.99 + Shipping & Handling

▲ Circle number 48 on the Reader Service Card

NATURAL DREAMSCAPES & RELAXATION VIDEOS

Enjoy scenic waterfalls/rolling waves/parks/sunsets+ in gently paced relaxation video (110) and in fast-moving nature video (111)
$19.95 each Specify 110 or 111 Both for $29.95
Perfect Image Presentations #271 2227 Rt. 1, No. Bruns. N.J. 08902
Check or money order only. Allow 4-6 weeks for delivery

▲ Circle number 49 on the Reader Service Card

WASTE/RECYCLING

THE EARTH IS A TERRIBLE THING TO WASTE!
• Energy saving lighting • Water conservation devices • Water filters • Electrostatic air filters • Composters & food waste recyclers • Household cleaners • Air fresheners and more •

ENERGY EFFICIENT ENVIRONMENTS, INC.
Free catalog 1-800-3ENERGY

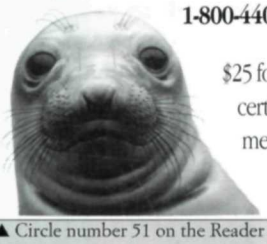
▲ Circle number 50 on the Reader Service Card

WILDLIFE

ADOPT-A-SEAL

Support a special wildlife hospital in coastal national parklands. A unique gift that helps injured seals and sea lions.

Call The Marine Mammal Center at
1-800-440-SEAL



$25 for a photo, certificate and membership.

▲ Circle number 51 on the Reader Service Card

ADOPT-A-HAWK
and contribute to wildlife conservation
Sponsors receive a beautiful color photo of a banded raptor on certificate and other benefits.
Call 1-800-726-4295
A GREAT GIFT IDEA!

HAWKWATCH INTERNATIONAL, INC
Protecting Raptors And Our Environment

▲ Circle number 52 on the Reader Service Card

Park Peaks

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

The September/October quiz focuses on mountain ranges within the park system, and information has been provided to aid you in identifying those depicted.

Mountains serve as natural barriers as well as guides along migration routes. Ascend any mountain, whether along the rugged trails of the Colorado Rockies or the gentler slopes of the ancient Appalachians, and you can understand why these landscapes have inspired paintings and poetry. From the breathless awe inspired by the rarefied air of the highest mountains to the crumbled spine of the oldest, mountains tell a dramatic story of nature's constant efforts to create and destroy.

Running from Alabama to Newfoundland, the rounded ridges of the East reveal remnants of peaks once as lofty as those in the West. Earthquakes and other dramatic geologic events may create the peaks and mounds of earth that jut above the landscape. The effects of wind, rain, and streams wear them down again until, after millions of years, they resemble a flat plane.

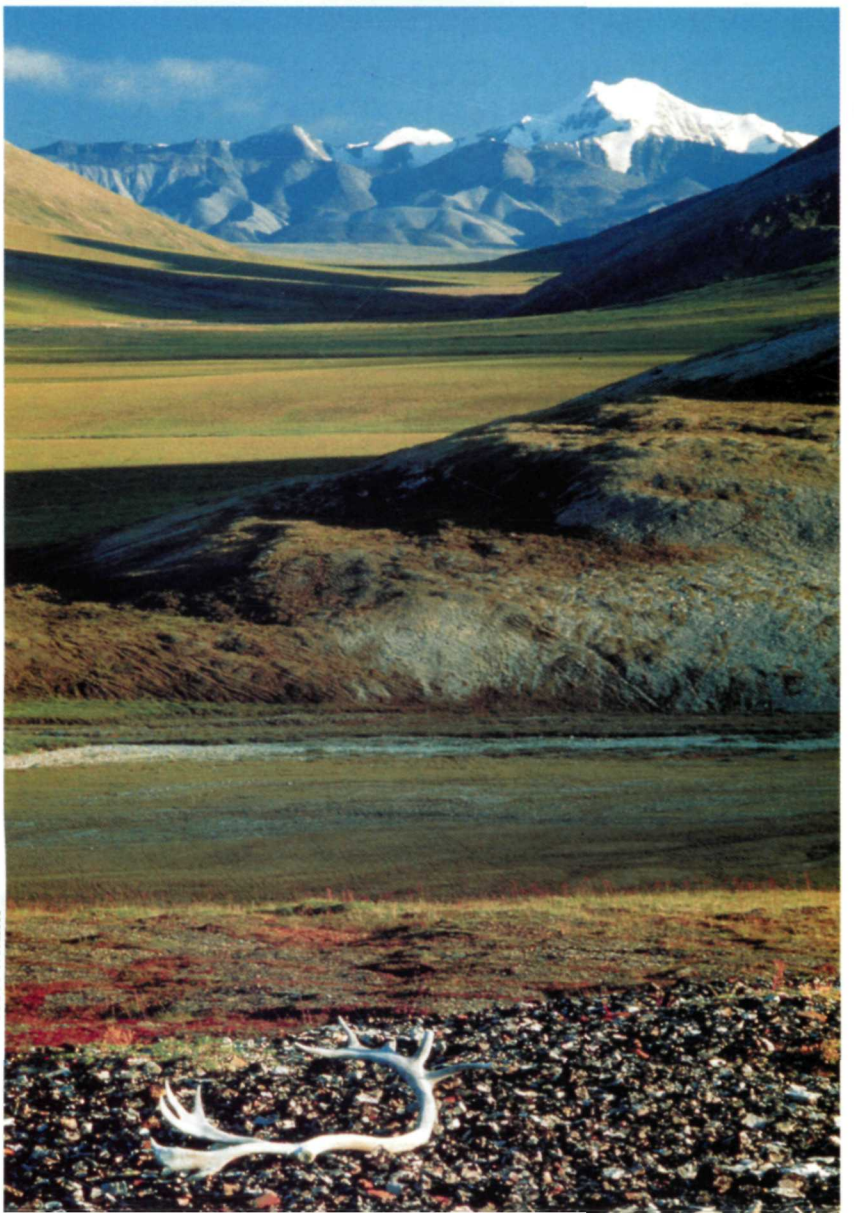
Many national parks contain mountains or high-elevation plains, places that have always inspired awe and respect for nature's grandeur. If you are unable to wait until the next issue for the answers, call our 900 number from a touch-tone phone (see page 8). Answers to the July/August quiz are: 1. South Manitou Lighthouse at Sleeping Bear Dunes National Lakeshore in Michigan; 2. Old Point Loma Light at Cabrillo National Monument in California; and 3. Race Point Light at Cape Cod National Seashore in Massachusetts.

1. Named for a 19th-century explorer, this mountain range is contained in its entirety in a northern national park. The range contains lofty, snow-covered peaks along with glacier-sculpted valleys and lakes. What mountain range is this, and what national park site is this?

FRED HIRSCHMANN

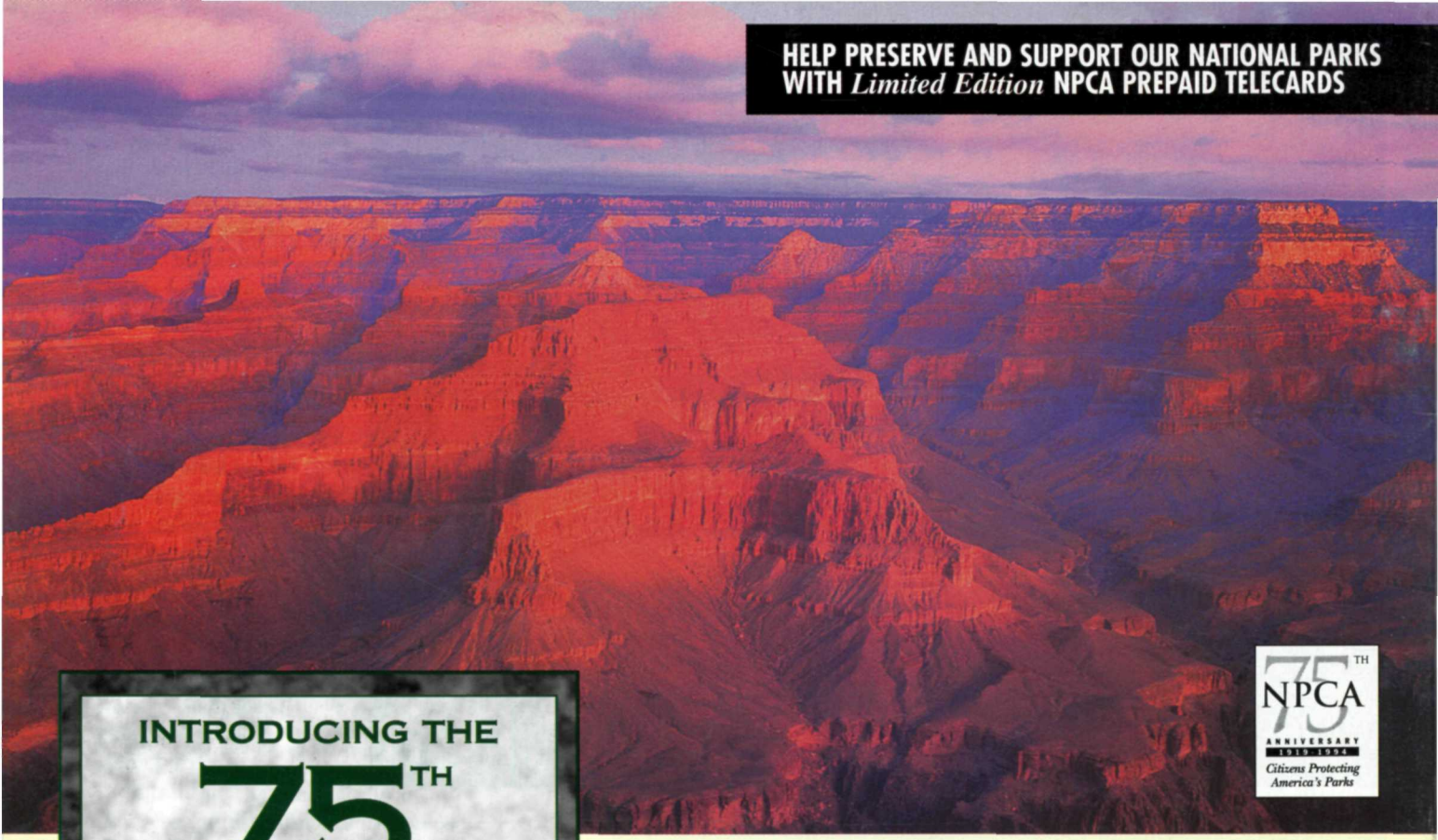
BILL LEA

2. This park site carries the name of the mountain range that passes through it. During the autumn months, the thousands of acres of trees are ablaze with red, gold, and orange. At other times of the year, these mountains are shrouded in the cloud mist that encourages the lush plant growth found in this park. What is the name of the mountain range, and what national park site is this?

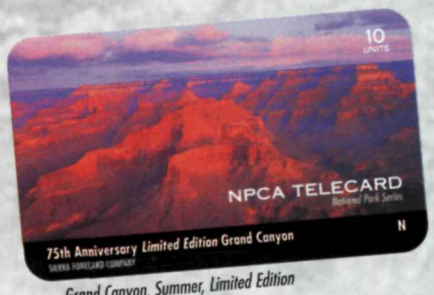


SCOTT T. SMITH

3. Here in the northernmost Rocky Mountains, foothills become ragged peaks, and vast acres of tundra stretch before the foothills. The natural forces of wind, water, temperature, and glacial and tectonic action have sculpted a widely varied landscape here. The name of the park comes from wilderness advocate Bob Marshall, who described two of the range's peaks as the gates from the mountain range into the regions of the far north. What is the name of this mountain range, and what national park site is this?



INTRODUCING THE 75TH NPCA AND GRAND CANYON ANNIVERSARY *LIMITED EDITION* TELECARD



Grand Canyon, Summer, Limited Edition

Portion of proceeds are given to NPCA to support their continued efforts in the preservation of our national parks.

ORDER YOUR $10 NPCA TELECARDS TOLL FREE 24 HOURS

1-800-987-5330

Fax orders to 209-658-8004
Visa and MasterCard accepted

Mail check or money order payable to:
SIERRA FONECARD CO., P.O. BOX 1922
OAKHURST, CA 93644-1922
S/H $2.75. California residents add 7.75% sales tax.

THE NEW CONVENIENT AND LESS EXPENSIVE WAY TO MAKE LONG DISTANCE CALLS ANYTIME, ANYWHERE!

National Parks and Conservation Association (NPCA) Prepaid Telecards offer the following features:

- *Save up to 52% on all your Long Distance calls*
- *International Calling*
- *Voice Prompt in multiple languages*
- *No coins required, no monthly phone bill*
- *800 number for unlimited recharging on major credit cards*
- *No surcharge on calls*
- *Smart gift idea for students, travelers and collectors*

The new $10 NPCA Prepaid Telecard allows you to make phone calls anytime, anywhere. It's just that simple.

HIGHLY COLLECTIBLE NPCA *LIMITED EDITION* TELECARD

Telecards are one of the fastest growing collectibles around the world. The NPCA National Park Series will depict 13 of the most spectacular parks. Each card is numbered, dated and lettered. The complete set will spell out "NATIONAL PARKS."

HELP PRESERVE AND SUPPORT OUR NATIONAL PARKS. ORDER YOUR *LIMITED EDITION* 75TH ANNIVERSARY NPCA TELECARD TODAY!

For more information circle Reader Service Number 55