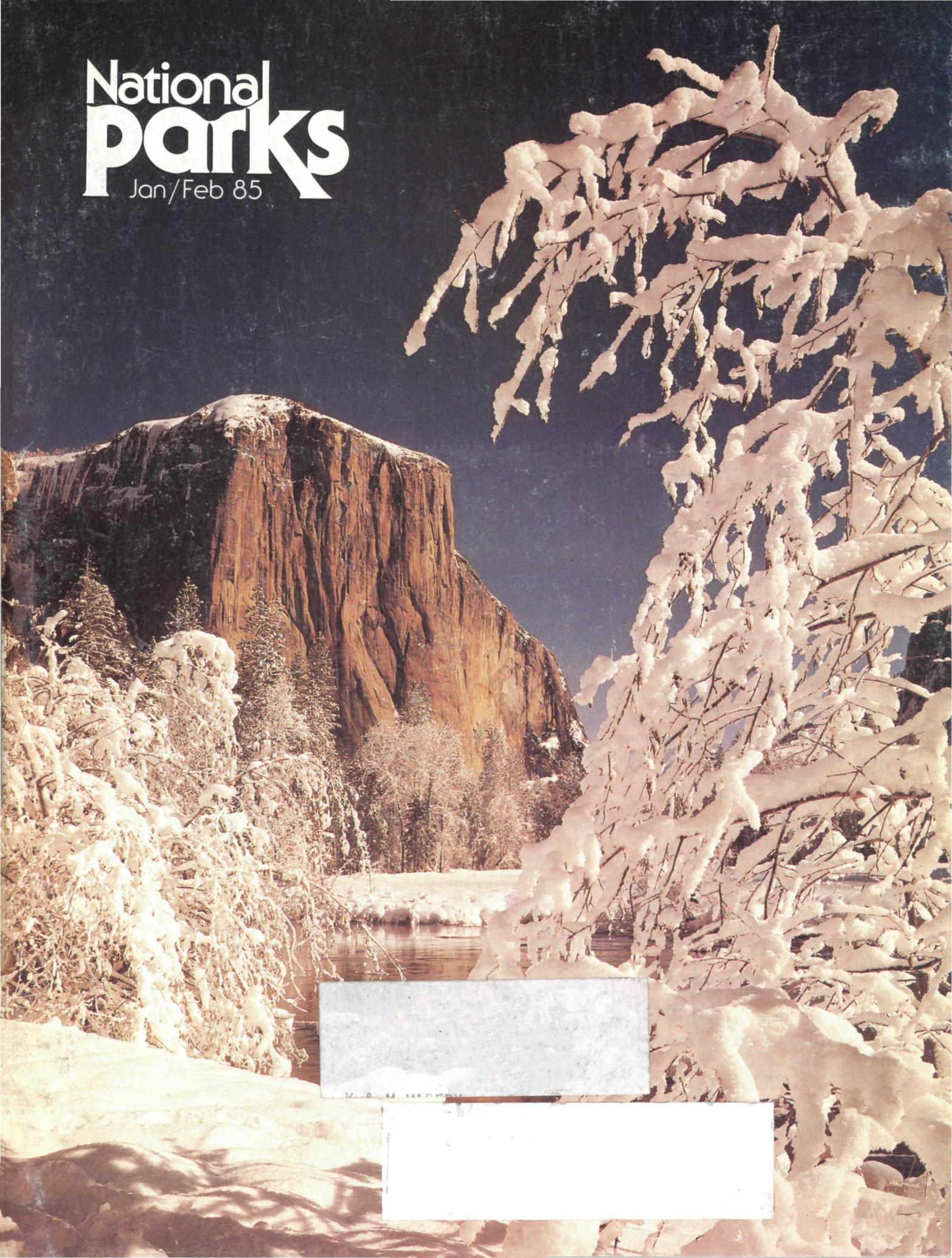


# National parks

Jan/Feb 85





#### TRUSTEES EMERITUS

Horace M. Albright, *Studio City, California*  
Mrs. W. L. Lyons Brown, *Harrods Creek, Ky.*  
Richard H. Pough, *Pelham, New York*

#### BOARD OF TRUSTEES

\*Stephen M. McPherson, *New York, New York*  
*Chair*

\*A. James Matson, *St. Louis, Missouri*  
*Vice Chair*

\*Mary C. Carroll, *Philadelphia, Pennsylvania*  
*Vice Chair*

\*W Mitchell, *Crested Butte, Colorado*  
*Vice Chair*

\*Charles W. Sloan, *Vienna, Virginia*  
*Secretary*

\*Bernard R. Meyer, *Washington, D.C.*  
*Treasurer*

Kathleen Abrams, *Miami, Florida*

Gordon T. Beaham III, *Kansas City, Missouri*

James Biddle, *Cornwell Heights, Pennsylvania*

Michael F. Brewer, *Chevy Chase, Maryland*

Charles J. Brink, *Houston, Texas*

Eugenie Clark, *College Park, Maryland*

Norman Cohen, *West Palm Beach, Florida*

Dorman L. Commons, *San Francisco, California*

Stuart G. Cross, *Oakland, California*

\*Donald S. Downing, *Atlanta, Georgia*

Anne Elliman, *New Canaan, Connecticut*

Priscilla C. Grew, *San Francisco, California*

Susan Hanson, *New Canaan, Connecticut*

Samuel P. Hays, *Pittsburgh, Pennsylvania*

Terry McWilliams, *Anchorage, Alaska*

Clarence E. Martin III, *Martinsburg, West Virginia*

Jean Packard, *Fairfax, Virginia*

William Penn Mott, Jr., *Oakland, California*

John B. Oakes, *New York, New York*

William E. Odum, *Charlottesville, Virginia*

Harry Robert Page, *Arlington, Virginia*

\*Mrs. E. Hood Phillips, *Washington, D.C.*

Charles D. Stough, *Lawrence, Kansas*

\*Gilbert F. Stucker, *Mt. Vernon, New York*

April L. Young, *Oakton, Virginia*

Robert I. Younker, *Coos Bay, Oregon*

William B. Wiener, Jr., *Shreveport, Louisiana*

Robin Winks, *New Haven, Connecticut*

\*Executive Committee

#### EXECUTIVE STAFF

Paul C. Pritchard, *President*

T. Destry Jarvis, *Vice President for*

*Conservation Policy*

Karen Bates Kress, *Vice President for Operations*

Shirley U. Skirvin, *Comptroller*

William C. Lienesch, *Director of*

*Federal Activities*

Laura Beaty, *Administrative Assistant,*

*Historic Heritage*

Laura Loomis, *Director of Grassroots and Outreach*

Robert Pierce, *Administrator, National Park*

*Trust*

Russell D. Butcher, *Southwest & California*

*Representative*

Terri Martin, *Rocky Mountain Regional*

*Representative*

*Special Counsel:* Anthony Wayne Smith

# Commentary

## A Delicate Balance

If you have recently been to Yellowstone, Yosemite, or the Great Smokies, you are aware of the tremendous allure our national parks have not only for Americans, but for foreign visitors as well. Traffic congestion and crowds are some of the more obvious signs of the popularity of the parks.

In the 1930s, there were ten million visitors per year. By the 1950s, the number of visitors grew to 30 million per year. Last year, more than 280 million people visited the 335 units of the National Park System. This increase seems astronomical. We are now faced with the problem of crowding in our national parks and wonder how many people can visit the parks before there is nothing left but people.

Part of the problem in evaluating the crowding in our parks is that there is no accurate way of counting visitors. There are traffic counters, turnstiles, and visual head counts; but there is no way of distinguishing the visitors who are vacationing in the parks from those who are merely passing through on park roads.

We do know that most visitation occurs in the three summer months. We also know that within heavily used parks, such as Golden Gate and Gateway national recreation areas and Great Smoky Mountains National Park, 90 percent of the visitors rarely venture more than a mile from the roads and campgrounds. A very low percentage of visitors travel into the backcountry.

The job of the National Park Service is to protect wildlife and natural and cultural resources, but because of the great number of visitors, many historic sites and natural habitats are being "loved to death."

NPCA has urged the National Park Service to comply with the law requiring visitor carrying capacity studies of all units in the National Park System. In an effort to help the NPS determine the optimum visitation for the parks, we have raised funds from private sources and have

involved the best minds from the public and private sectors—from universities, the Forest Service, and the NPS—to put together a prototype process so the NPS will have a model for developing visitor carrying capacity studies.

The solution lies not just in better management of the existing parks, but also in expanding the National Park System to include areas that contain natural and cultural resources not yet represented in the system, such as the Tallgrass Prairie in the Midwest and the Great Basin in Nevada. As it is today, the National Park System cannot accommodate all the demands that will be put on it in the future.

We need goals and objectives for the parks. Some goals are summarized in *Toward a Premier National Park System*, a report put together by four citizen groups: NPCA, the Audubon Society, the Sierra Club, and the Wilderness Society.

NPCA also presented an outline of a comprehensive park plan to the NPS and urged the development of a plan for the entire National Park System. The parks need a system of checks and balances. Programs need evaluation and revamping.

We as a society have the capacity to care about our natural and cultural resources and we must use the scientific information available to us to make decisions. The facts we have point to a need for year-round preservation, recreational opportunities, and environmental education.

Therefore, we must have a National Park System that can meet these challenges head on.

NPCA has been in the forefront of this difficult issue. We must continue to deal with the problems of crowded national parks before there are no quiet places left to refresh and inspire us.

—Paul C. Pritchard  
*President*

---

## Commentary

---

- 2 **A Delicate Balance**, by Paul C. Pritchard
- 

## Features

---

- 8 **Field Studies**  
*A guide to courses—natural, cultural, and scientific—in the national parks*, by Judith Freeman
- 10 **Ascent of the Peregrine**  
*Dinosaur National Monument's successful program has reintroduced these endangered raptors to the West*, by Justin Lowe
- 12 **Pushing the Limits**  
*NPCA's plan will help park managers determine how to protect national parks from overuse*, by Laura Loomis
- 18 **Proceed at Your Own Risk**  
*For those who believe the wilderness experience has become too sanitized: a plan for restoring self-reliance*, by Roderick Nash
- 20 **Stranded on Yosemite's Big Wall**  
*At the age of 13, the author is saved from a climbing disaster; years later, he helps to rescue a boy in a similar situation*, by Doug Robinson
- 26 **Search & Rescue**  
*National Park Service emergency teams navigate whitewater and narrow caves to save the lives of park visitors; but who pays the price?* by Connie Toops
- 

## Departments

---

- |                          |                          |
|--------------------------|--------------------------|
| 5 <b>Feedback</b>        | 38 <b>Images</b>         |
| 6 <b>The Latest Word</b> | 45 <b>Members Corner</b> |
| 32 <b>NPCA Report</b>    | 46 <b>Park Portfolio</b> |
- 

**Cover:** Yosemite National Park, by David Muench  
An icy Merced River flows below Yosemite's famed El Capitan.

---

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

Life memberships are \$1,000. Annual memberships are \$200 Sustaining, \$100 Supporting, \$50 Contributing, \$25 Cooperating, \$18 Associate, and \$13 Student and Retired. Dues in excess of \$7 are deductible from federal taxable incomes; gifts and bequests are deductible for federal gift and estate tax purposes. Mail membership dues, contributions, and correspondence or change of address to address below. When changing address, please allow six weeks' advance notice and send the address label from your latest issue along with new address.

POSTMASTER: Send address changes to:

National Parks and Conservation Association, 1701 18th Street, NW, Washington, D.C. 20009 / (202) 265-2717



Gordon Wiltsie

Yosemite Rescue, page 20

**Editor's Note:** When Congress created the National Park Service almost seventy years ago, it took into account more than just protection of park resources. The parks are also meant for people to enjoy. With such vast amounts of uninhabited terrain, those legislators must have felt secure in the people-to-parks ratio.

Who would have imagined bumper-to-bumper traffic on Skyline Drive in Shenandoah, hang gliders sailing off the top of Yosemite's El Capitan, two- and three-year backlogs for permits to run the Colorado River through Grand Canyon? No one wants to line up and take a number to get into a national park. But there are so many people engaged in such a scope of activities, that the National Park Service has to start coming up with some solutions to overuse.

In this issue we explore the problems engendered by visitors—and a few tight situations.

---

### NATIONAL PARKS STAFF

Senior Editor: Michele Strutin  
Associate Editor: Judith Freeman  
Editorial Assistant: Deirdre McNulty

---

National Advertising Office (216) 243-8250  
Patricia Dowling, Director  
10 Beech Street, Berea, OH 44017

---

*National Parks* is published bimonthly. Single copies are \$3. 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. Title registered U.S. Patent Office, © 1985 by National Parks and Conservation Association. Printed in the United States. Second-class postage paid at Washington, D.C., and at additional offices.



## For You . . . For Gifts! NPCA Bargains in Books and Collectibles

Order now from the NPCA mini-catalog above. Just match the catalog item identifying letters to those in the order coupon below. Complete the coupon and mail it to NPCA with your payment. Prices include postage and handling.

**A.** Polo shirt, green with white NPCA emblem. Cotton/polyester knit. Order men's sizes S(34-36), M(38-40), L(42-44), XL(46); women's sizes S(6-8), M(10-12), L(14-16)—\$16.95 **A-1.** Same as above, white with green emblem—\$16.95. **B.** Full-color Parks poster by famed *New Yorker* cover artist. Ready to frame—\$4.95. **C.** NPCA Citizen Action Guide tells how to deal with destructive OSVs on National Seashores; softcover—\$2.00. **D.** *National Parks in Crisis*; conservation leaders explore the problems and future of our National Parks; hardcover—\$13.95. **E.** *Greenline Parks* explores land conservation trends for the '80s and beyond; softcover—\$9.95. **F.** *The Moore House*, a case history in historic structures restoration; softcover—\$4.20; hardcover—\$8.45. **G.** Historic Bass Harbor Light notecards and envelopes,

15 ea. per box—\$7.50. **H.** Metal litho full-color pins (9 different Parks emblems & NPCA emblem); all 10—\$7.50.

**I.** NPCA lapel pin, green and gold enamel—\$3.50. **J.** NPCA decal—\$.50

each. **K.** NPCA patch, green and gold embroidered—\$2.00.

Order all merchandise with money-back guarantee of satisfaction.

National Parks and Conservation Association Member Services  
1701 Eighteenth Street, N.W., Washington, D.C. 20009

Please send me the quantities I have specified of NPCA products and publications listed below. I understand that all prices include postage and handling.

Cat. No.	Quant. Ordered	Name of Product	Product Description	Size	Price Each	Total
A		Polo shirt	Green w/white emblem		\$16.95	
A-1		Polo shirt	White w/green emblem		\$16.95	
B		National Parks Poster	Full color	24" x 36"	\$ 4.95	
C		Citizen's Action Guide	Softcover Book		\$ 2.00	
D		Nat'l Parks in Crisis	Hardcover book		\$13.95	
E		Greenline Parks	Softcover book		\$ 9.95	
F		The Moore House	Hardcover Ed.		\$ 8.45	
			Softcover Ed.		\$ 4.20	
G		Boxed Stationery	15 notes & envs.		\$ 7.50	
H		Nat'l Parks Pins (1 NPCA)	Sets of 10		\$ 7.50	
I		NPCA Lapel Pin	Green & gold emblem		\$ 3.50	
J		NPCA Decal			\$ .50	
K		NPCA Patch	Embroidered		\$ 2.00	

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

TOTAL ORDER \_\_\_\_\_  
 I enclose \$ \_\_\_\_\_

D.C. residents add  
6% sales tax.

# Feedback

*We're interested in what you have to say. Write Feedback, 1701 18th Street, NW, Washington, D.C. 20009. (Letters may be edited for space considerations.)*

## Skiing Out of Bounds

I received a copy of "A Perception of the Ski Yellowstone Decision," by Ross MacPherson, and it contained no reference to the reported grizzly sightings in the area that *National Parks* [NPCA Report, July/August] mentioned. I strongly oppose this resort and infringement on wildlife habitat.

Ski Yellowstone, however, appears to be a reality thanks in large part to the "no evidence of grizzlies here, go ahead and build" mentality.

Have the decision-makers acquiesced to the selfish concerns of the local citizens regarding jobs and economic stability at the ultimate expense of the land and wildlife?

*Thomas Strutz  
White Bear Lake, Minnesota*

## Death by Starvation

I wish to take issue with Pinckney Wood's article on the Grand Teton elk hunt [September/October]. I feel his solution is more deplorable than the hunt.

Since people have taken over the elk's range, letting nature take its course would involve letting the excess animals die of starvation.

I recently read another article by a "friend of animals" type who, in essence, said "let the excess animals die of starvation, starvation doesn't hurt."

I doubt he has tried it.

*Ed French  
Lake Mary, Florida*

## Bad Blood

The article "Frontline Attack on the NPS" [September/October] misses the important point. That there are inaccuracies in the film describing the Park Service's land acquisition at Cuyahoga Valley NRA, and that the film is being "misused" to scare landowners does not detract from

the indisputable fact that the NPS has created a bad record for itself in dealing with a number of communities within park boundaries.

The salient fact is that the NPS has not had a coherent or satisfactory policy for dealing with established communities within the newer types of parks.

You ought to have emphasized that the NPS has itself to blame for the bad relations and bad press it has generated. The NPS should be strongly urged to move forward with an intelligent new policy; and it should be praised for the steps it is now beginning to take at Buffalo National River.

*Joseph Sax, Professor  
Environmental Law  
University of Michigan*

## Speak Up, Be Heard

I wish to encourage all NPCA members to recognize the valuable follow-up potential so frequently supplied within the pages of *National Parks*. I refer to the many issues and conflicts addressed in such departments as "Latest Word" and "NPCA Report," where persons to call or write are listed.

Many times I've heard of a congressman or a department official who is inspired or educated by the sincere words of a constituent. It can make a difference.

Speak out. Be heard. If we don't each occasionally serve this role of spokesperson, who will?

*Bruce Thompson  
Dubois, Wyoming*

## A Victory for Florida

The decision by the FDIC to sell the Grayton Dunes beachfront and related property is a major victory for Florida's future.

In years ahead, NPCA can point to the area around Grayton Beach and say that you helped preserve a beautiful and environmentally sensitive portion of this state for the enjoyment of future generations.

That you and so many other good people joined in this effort is an encouraging sign of commitment to the protection of our natural resources.

*Bob Graham  
Governor of Florida*

## Best-Kept Secret

The articles by Helen Moss and Bob Pierce [November/December] were very well done and hopefully have given added perspective to one of the National Parks Service's best-kept secrets, Big Bend National Park.

Thanks again for a lovely magazine and a good discussion about one of my favorite places.

*H. Gilbert Lusk, Superintendent  
Big Bend National Park*

The articles on Big Bend brought back fond memories of a week spent there ten years ago. We hiked parts of that magnificent landscape from riverbank to mountain tops, and were continually amazed by the mixture of the rough-edged and the delicate that makes the scenery, plants, and animal life there unique.

The articles have revived our determination to return to Big Bend soon. They also reminded us of just how vulnerable such special places are, and the responsibility we have to protect them.

*Ross Ward  
Huntsville, Alabama*

## Playgrounds or Preserves

I've just read "Playgrounds or Preserves: Park Tourism as Big Business" [November/December]. Michael Frome points to some of the unwise choices we've made in managing our parks and correctly challenges tourism interests to help protect our national treasures.

But there is more to the issue than that. It is through visits to our great outdoor places that Americans will understand their role in nature—and the importance of protecting our parks. These visits can be controlled; we can reduce the seasonal and geographic imbalance of park visitation.

Let's not create pressure for a simple solution to our park problem: mandatory curbs on visits. That solution is simple—and wrong.

*Derrick Crandall, President  
American Recreation Coalition  
Washington, D.C.*

*We agree. See page 12 for more information on managing the problems of visitor impacts.*  
—Ed.

# The Latest Word

## Time for Action Against Nuke Dump At Canyonlands

"Not in my state" is the general reaction to a national nuclear waste dump, especially now that the Department of Energy (DOE) is close to selecting the three final site candidates. Without prompt and strong support for the protection of Canyonlands, this national park in Utah could be the big loser in the dump selection process.

Despite repeated delays, by the end of December 1984, the DOE should have released environmental assessments on the nine sites under consideration for further testing. After receiving public comments on the environmental assessments, the DOE will reduce these nine to three sometime later this year.

Unless the DOE receives a resounding "no" from individuals and organizations within the 90-day comment period, the site next to Canyonlands will undoubtedly be chosen for testing.

Although Utah's congressional delegation has not opposed the Canyonlands dump site, Utah Governor-elect Norman Bangerter has. Bangerter has asked to meet with President Reagan and DOE Secretary Donald Hodel to discuss this matter.

Even if the Canyonlands area is not chosen as the final repository for this country's nuclear wastes, the testing program is so extensive that

it alone would ruin the Canyonlands Basin, including the park. Testing at Canyonlands would involve the following:

- Four to seven years of constant drilling just outside park boundaries. Drill rigs would bore out 47 deep holes (2500-8000 feet deep) and 740 shallow holes (5-50 feet deep).
- DOE admits they may even have to drill *inside* the park.
- Constant blasting to create two huge, 3,000-foot shafts, each less than a mile from the park.
- Salt mining to create underground chambers at the bottom of the shaft; plus the salt pile itself.
- Construction of a network of roads to provide access for drilling.
- A major seismic testing program.
- Truck traffic to and from the drill rigs plus an influx of people and support services.

To protest nomination of Canyonlands, write Donald Hodel, Secretary; Department of Energy; Forrestal Bldg., Independence Ave.; Washington, D.C. 20585.

For more information, write NPCA Rocky Mountain Regional Representative Terri Martin, Box 1563, Salt Lake City, Utah 84110-1563.

## Rifle Club Seeks Judgment on Park Hunting

The National Rifle Club lawsuit that strives to allow more hunting and trapping in the National

Park System has taken a new turn. The Justice Department, which is defending the Interior Department in this suit, filed a request for summary judgment on December 6. This request asks the judge to rule on the case without its going to trial.

A few days later, NPCA filed a support brief, which details the consequences of opening up 80 percent of the parks to hunting.

## NPCA Cosponsors Conference on World Biospheres

Biosphere reserves are ecosystems of singular importance to the worldwide community; and these areas were the focus of a November conference among biosphere managers from the United States, Canada, China, and Mexico, as well as a number of other nations.

NPCA cosponsored the conference, which was held at Great Smoky Mountains National Park (a biosphere reserve). The Association also displayed an exhibit on visitor impacts.

The goal of the conference was to establish a unified understanding of what a biosphere reserve should be and create strategies for managing these areas.

Because U.S. biosphere reserves are usually in national parks or national forests, they are set apart for preservation by the laws that govern national

parks and forests. But in most of the world biosphere reserves include local communities, agriculture, and the like; and they are used as demonstration areas for wise management.

NPCA President Paul Pritchard, who was a featured speaker at the conference, said, "We need some good models right now. Biosphere reserves are all talk and no action. In the Smokies, Glacier, and the Virgin Islands the concept has never been fully realized.

"Biosphere reserves cannot be an excuse for other public and private managers to get their hands on the national parks or forests. The park or forest is the core area. The question is, how can we create a win-win situation whereby both national park resources and the surrounding lands benefit. Any other alternative is simply unacceptable."

## Call for Annual Mather Award Nominations

NPCA is calling for nominations of worthy recipients for its second annual Stephen T. Mather Award. The award, named after the first director of the National Park Service and a founder of NPCA, honors "the stalwart defenders of America's natural heritage who put commitment to principles ahead of personal gain."

Nominees include people who have demon-

strated initiative and resourcefulness in promoting the protection of this country's natural resources, including archeological sites.

Eligible for the Mather Award is any part-time or full-time employee of federal, state, or local government working in the field of natural resource management. The award winner receives a \$1,000 cash prize and a certificate of recognition.

Nominations should be accompanied by a letter of no more than three single-spaced, typewritten pages stating the accomplishments of the nominee.

The deadline is March 1, 1985; and nominations should be sent to the Mather Award Coordinator, NPCA, 1701 18th St. NW, Washington, D.C. 20009.

### **NPCA Helps Form Committee on Arizona Parks**

Mid-December saw the first meeting of the Arizona National Parks Committee, which was formed to watch over national park areas in that state, such as Grand Canyon National Park, and Organ Pipe Cactus and Saguaro national monuments.

NPCA Southwest/California Representative Russ Butcher organized the Arizona National Parks Committee, which includes approximately 30 people from business, the state park system,

museums, and universities, as well as former members of the National Park Service.

The goal of the committee is to monitor and help mitigate threats to national park areas in Arizona, such as encroaching urban development at Saguaro and grazing questions at the Grand Canyon.

### **EPA Slack on Upholding Rules For Clean Air**

The Environmental Protection Agency (EPA) is in the process of reviewing and revising clean air regulations and, if industry lobbying wins the day, clean air standards may be thrown out the back door.

During the past four years, standards for maintaining clean air have been threatened again and again. The present Administration has shown a lack of interest in protecting citizens and resources from air pollution and acid rain. And the EPA, especially under the administration of Anne Burford, actively worked to dismantle pollution controls. Clean air supporters in Congress, however, held the line against weakening the Clean Air Act.

Now, clean air advocates say, the EPA is waver- ing on a number of rules that, if revised, could knock out the heart of air protection as surely as a direct attack on the act itself. If the EPA downgrades any rules, it

will be both bowing to industry pressures and avoiding a battle for the act in Congress.

The following is a partial list of the issues EPA Administrator William Ruckelshaus or his successor, Lee Thomas, will be considering:

- **Particulates.** Rule changes would allow as much as a two-thirds increase in particulate levels. Particulates are one of the most health-threatening of the air pollutants.

- **Visibility.** The EPA was negligent in enforcing a visibility protection program. (Law mandates that a visibility program should protect the beauty of scenic vistas in our national parks.) The courts recently ordered the EPA to comply, but the visibility monitoring program the agency has come up with has been called "grossly inadequate."

- **Tall Stacks.** During the past decade, electric utility companies have built more than 170 extremely tall smokestacks—as tall as skyscrapers—in defiance of the Clean Air Act. Past EPA estimates point to tall stacks as adding one to three million tons of sulfur dioxide to the air per year. Yet, proposed EPA rules have no muscle for reducing these emissions.

Rule revisions are happening right now. To protest laxity in air regulations, write William Ruckelshaus, Administrator; Environmental Protection Agency; 401 M St. SW; Washington, D.C. 20460. For more in-

formation write NPCA, 1701 18th St. NW, Washington, D.C. 20009.

### **President's OK Expected for Recreation Board**

ORRRC—the Outdoor Recreation Resources Review Commission—did not pass in the last Congress, but President Reagan is considering establishing the commission by executive order. The commission would explore what new recreational opportunities exist or could be developed and would recommend ways of managing what resources exist at present.

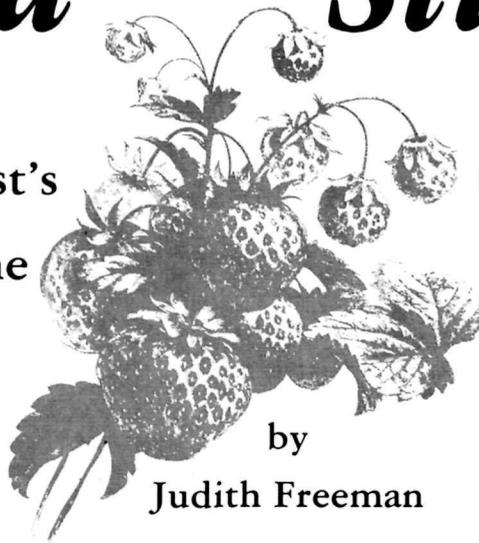
In its last stages in the Senate, the ORRRC bill included a 21-member commission: seven appointed by the Administration; four House members plus three House-appointed private citizens; and four Senate members plus three Senate-appointed citizens. NPCA supports this concept of the committee.

Besides the composition of the commission, three factors concern NPCA in the creation of ORRRC: the amount of money allotted to the program, whether the commission will be publically or privately funded; and how long this commission will last. If funded privately, the commission could be troubled by conflicts of interest. The Senate had planned on giving the commission an 18-month life; but there has been talk of scaling down that amount of time.

# Field Study

A Naturalist's  
Learning in the

Guide to  
National Parks



by

Judith Freeman

## CHIHUAHUAN DESERT RESEARCH INSTITUTE

P.O. Box 1334; Alpine, Texas 79831;  
915/837-8370

The Chihuahuan Desert is one of the least-known natural areas in the United States. The institute sees itself primarily as a scientific agency and works closely with schools, museums, and similar groups as well as individuals teaching skills such as telemetry and mapping at Big Bend National Park and nearby areas.

They offer films and audiovisual presentations, books, lectures, and field seminars that have a strong scientific and mathematical basis. The institute has also created a 540-acre desert arboretum with a visitor center. For the more casually interested, Chihuahuan Desert Research offers classes in primitive pottery and dry climate landscaping.

## POCONO ENVIRONMENTAL EDUCATION CENTER

R.D. 1, Box 268; Dingman's Ferry,  
Pa. 18328; 717/828-2319

Originally built as a "honeymoon haven," the cabins at the Pocono Environmental Center are heated and have sunken bathtubs. Now part of Delaware Water Gap National Recreation Area, it is the largest residential center for environmental education in the country.

With weekend and weeklong programs throughout the year, special events, and a summertime family camp, each year the Pocono Center attracts more than 20,000 people. Special events include weekends devoted to hawk-watching, canoeing,

and urban environmental education. The facilities include an indoor swimming pool, a darkroom, weather station, library, and audiovisual center.

Elderhostel, an inexpensive educational program geared for people in their 60s, is offered at least four times a year. All Pocono Center programs are remarkably reasonable in price and include food and lodging.



## EARTHWATCH EXPEDITIONS, 10 Juniper Rd.; Belmont, Mass. 02178; 617/489-3030

Earthwatch is the third-largest private source of funds for scientific expeditions. Among the organization's advisors are some of the most prestigious scientific organizations in the country; and Earthwatch bills itself as "a company of citizens and scholars working together." It funds expeditions; and volunteer workers pay their own share on an expedition, thereby supporting the project in two ways.

Their worldwide programs include a number in the national parks. You can study the wild ponies of Assateague as well as dinosaur fossils at Colorado National Monument or marine ecology in Everglades National Park. Most importantly, your effort will have scientific value.

## PETERS VALLEY

Layton, N.J. 07851; 201/948-5200

Peters Valley, in Delaware Water Gap Recreation Area, is a year-round professional crafts community that offers a wide variety of programs in ceramics, blacksmithing, fine metals, photography, wood, and other media. Invited artists live, work, and teach at Peters Valley for up to three years.

The summer program is rich, varied, and designed for the general public. Last summer you could spend nine weeks learning the secrets of a six-foot-long traditional Japanese kiln—or two days learning hand-building techniques in pottery, two days spent bookbinding, or five days working on stained glass.

**I**F you have ever stood at a geyser and wondered about its strange relationship to the earth beneath you, or daydreamed about spending a week wandering the wilderness on horseback, you could use an introduction to the field school programs available in national parks.

Field school is a loose term. It includes an afternoon spent with a famous nature photographer at Point Reyes National Seashore—as well as three days for children only at the Buffalo Ranch of the Yellowstone Institute.

Rick Reese, founder of the Yellowstone Institute, describes field schools as “one step beyond Park Service interpretation programs.” The courses differ in length, intensity, and subject matter.

“We offer a course in grizzly management,” said Reese. “A person can come here and spend a week studying grizzlies directly. That’s available nowhere else in the park system.”

Field schools are often sponsored by a university or a scientific organization, with college credit available to those who want it. Some of

the scientific expeditions support ongoing research projects, with volunteer workers paying their own share and with additional funding from the sponsoring organizations.

The following listings are only a sample of the kinds of field schools available. Many that have been included have not yet determined their programs for the summer. If you are interested in taking a course, you should contact them or the visitor center at the park that interests you for information regarding current schedules and fees.

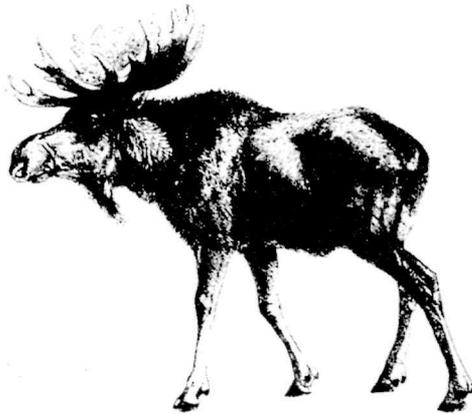
### CENTER FOR AMERICAN ARCHEOLOGY

Crow Canyon; 23390 County Road K; Cortez, Colorado 81321; 303/565-8975

The Center for American Archeology has pioneered a new, multidisciplinary approach to archeology that examines the civilization as well as the artifacts of an excavation site.

Crow Canyon, one of three center locations, is a 70-acre facility with a lodge, a library, and a fully equipped research laboratory. Because of the center’s location in the Four Corners area, Crow Canyon students have easy access to the Anasazi ruins in Mesa Verde National Park and other pueblo cultures.

The center has numerous programs for students and teachers, as well as an adult associate program. Associates assist scholars in long-term research projects, such as archaeoastronomy and the documentation of ancient rock art.



### THE YELLOWSTONE INSTITUTE

P.O. Box 117; Yellowstone National Park, Wyoming 82190; 307/344-7381, ext. 2384

The Yellowstone Institute is one of the most venerable of the field schools. During the summer it offers some of the most intensive and specialized courses available in the national parks, which are usually taught by Ph.Ds or distinguished national park naturalists.

Although the 1985 schedule will not be finalized until February, the institute will be offering Large Mammals of Yellowstone; Edible, Poisonous, and Medicinal Plants; and Calderas and Hydrothermal Systems. It also hopes to include Wilderness Horsepacking and the Ways of Mountain Men. One course worth noting is the Yellowstone-Teton Connection: Two Parks, One Ecosystem, in which participants split their time between the two parks, investigating how Yellowstone and Grand Teton are the same and in what ways they differ.

### CENTER FOR CAVE AND KARST STUDIES

Western Kentucky University; Bowling Green, Ky. 42101; 502/843-4979 or 745-4555

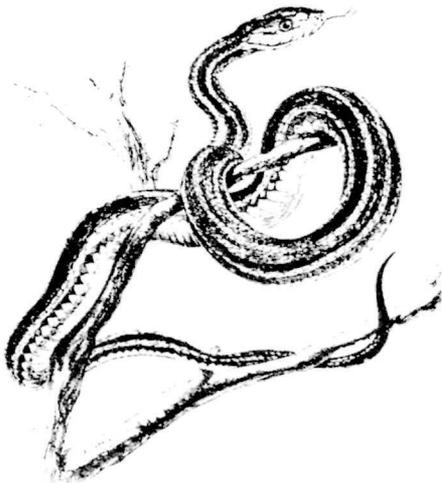
Mammoth Cave is the longest in the world and Western Kentucky University uses this national park as an outdoor laboratory for university students and interested cavers. During the summer the university holds weeklong classes in karst geology, cave archeology, and speleology, many taught by internationally recognized visiting professors.

Programs include daily lectures with three- to seven-hour expeditions, most underground. Students can earn credit, but others can take the program as a workshop.

### OTHER FIELD SCHOOLS

BAY ADVENTURES! San Francisco Bay National Wildlife Refuge, P.O. Box 524, Newark, CA 94560-0524 (415) 729-3271; LAKE POWELL INSTITUTE, P.O. Box U, Page, AZ 86040 (602) 645-5113; OLYMPIC NATIONAL PARK FIELD SEMINARS, 600 East Park Ave., Port Angeles, WA 98362-6798 (206) 452-4501; POINT REYES FIELD SEMINARS, Point Reyes, CA 94956 (415) 663-1200; REDWOOD NATIONAL PARK, College of the Redwoods, 883 West Washington Blvd., Crescent City, CA 95531 (701) 464-7457; ROCKY MOUNTAIN NATIONAL PARK, Estes, CO 80517 (303) 586-2371; SMOKY MOUNTAIN FIELD SCHOOL, 2016 Lake Ave., Knoxville, TN 37916 (615) 974-1000; TETON SCIENCE SCHOOL, P.O. Box 68, Kelly, WY 83011 (307) 733-4765.

*Judith Freeman has recently joined National Parks magazine as associate editor.*



# Ascent of the Peregrine



## Program to Save Endangered Raptors Takes Flight

*By Justin Lowe*

A few years ago, Steve Petersburg, a ranger at Dinosaur National Monument, was taking a trial judge to view the site of a crime that had been committed within the monument. As they neared the area, they sighted four immature peregrine falcons attacking an adult golden eagle. They watched—fascinated—as the peregrines dove, or “stooped,” on the eagle in pairs.

As the first bird approached, the eagle rolled over in flight and presented its talons to defend itself, rolling back as the peregrine flared off. Immediately, the next falcon stooped, hitting the eagle on the back before continuing on. Then the

second pair executed the same carefully choreographed duet upon the hapless eagle.

This remarkable performance continued for more than ten minutes as the spectators watched the young peregrines drive the eagle down a thousand feet in altitude and out of their territory.

Before World War II, it was not unusual to see such spectacular displays of flight by these birds. Peregrine falcons are raptors, or birds of prey; and formerly they nested in significant numbers on high rock outcroppings along rivers from New England to California. Capable of reaching up to 200 m.p.h. in a full

stoop, peregrines are superb fliers and deadly predators.

During the mid-1960s, however, it became clear that peregrine populations were declining rapidly. By the time researchers had determined that DDT was causing thin-shelled eggs to break beneath nesting adults, remnant populations had disappeared in the East and western peregrines were down to 10 percent of pre-1950 levels.

In order to reverse the catastrophic decline of the peregrine, which has been on the endangered species list since 1973, the Peregrine Fund was established at Cornell University in 1975. Since then, the Fund has been

breeding, rearing, and releasing peregrine falcons throughout the United States.

In 1976, a laboratory was established in Fort Collins, Colorado, and researchers began working with the Colorado Division of Wildlife (CDW) to reintroduce peregrines into the West. One of their main peregrine release programs in Colorado is a cooperative effort among the Fund, the CDW, and the National Park Service (NPS) in Dinosaur National Monument.

Jerry Craig, raptor specialist for the CDW, explained that the enthusiasm of Steve Petersburg, the resource management specialist at Dinosaur, was instrumental in the choice of that site. Other factors were the presence of a remnant peregrine population as well as a number of historical nesting sites in the monument.

**M**any of these eyries were inactive or unsuccessful in producing sufficient numbers of young birds to sustain the area's population. It was this obvious need for assistance that launched the Dinosaur peregrine program in 1977. Other peregrine release programs exist throughout the West and in national parks such as Yellowstone, Grand Teton, and Rocky Mountain; but Dinosaur's program is the most extensive.

Since 1977 two methods of falcon introduction have been used in Dinosaur: "manipulation" and "hacking." Manipulation refers to a technique, also called direct fostering, in which fertile eggs are removed from eyries and replaced with plastic dummies. The fertile eggs are incubated and hatched in the laboratory. Then the young falcons are placed in high-ceilinged breeding chambers where they are cared for by captive adult peregrines.

When the chicks are three weeks old, they are returned to nests to be raised by wild adult falcons. The adults show no reluctance in accepting the young birds, although the female may appear confused at first and attempt to brood the chicks for

*Continued on page 42*



Top: This immature peregrine will not begin reproducing until its second year.  
Above: Peregrine chicks remain dependent on their parents for up to ten weeks.



# PARK CROWDS ARE PUSHING THE LIMITS NPCA HAS A PLAN

by LAURA LOOMIS

It's cold outside and New Year's Eve has just passed, yet you are already thinking of a camping trip to Yosemite National Park for Memorial Day weekend. You call a Ticketron office to reserve a campsite in your favorite campground and you are told that you have just gotten the last available site for that weekend.

Futuristic? Unfortunately, no. This scenario is becoming more and more typical as ever-increasing numbers of Americans throng to the national parks.

Since World War II, park managers have witnessed a phenomenal

**The number of people at Rocky Mountain National Park are part of a growing problem. And a carrying capacity plan is needed.**

growth in the number of park visitors. Although the number of acres devoted to the National Park System has tripled since the 1930s, visitation has increased tenfold.

Last year parks recorded more than 280 million recreational visits to the 335 units of the park system. Great Smoky Mountains, the most visited park in the system, recorded more than 1 million visits during October (its busiest month) of 1983. And the National Park Service (NPS) estimates that the number of visits to the parks will continue to increase by 3 percent annually.

Not only are the parks experiencing an explosion in the sheer number of visitors, they also find that park visitors are pursuing a much wider range of recreational activities. Windshield tours of scenic vistas are

no longer enough. Americans want to experience nature. As a result, activities such as backcountry camping and river running are undergoing exponential growth.

For instance, prior to 1965 fewer than 600 people floated the Colorado River through the Grand Canyon annually. Within a few years, the number approached 15,000. Today the Grand Canyon would be clogged with boats if, in 1978, the NPS had not set a ceiling on the annual number of rafters and other boaters permitted on that part of the Colorado.

Advancing technology has also added to the number and variety of recreational activities. In the 1960s, snowmobiles began roaring through the parks; in the 1970s, hang gliders began swooping across park cliff faces; and now fat-tired trail bicycles are whizzing down backcountry trails.

The popularity of the parks is not without its costs. Burgeoning visitor use has brought with it crowding and resource abuse.

Once-narrow backcountry trails have become hiking highways, raft jams are commonplace on many popular park waterways, and on summer weekends scenic park roads resemble city streets during rush hour.

## Loving Parks Too Much

The extent of visitor abuse facing the parks was revealed in 1980 when the NPS issued its premier "State of the Parks" report. According to the report, the fourth most prevalent threat facing the parks was overuse and related problems such as vandalism. Both the loss of resources and the quality of a visitor's experience are being threatened by America's love affair with its national parks.

Not surprisingly, park managers and resource experts are demanding that ceilings on visitor use—"carrying capacities"—be established for the parks.

Originally, carrying capacity defined the number of livestock that pastureland could support. Land managers and recreation experts now use the term to define the level of recreation an area can sustain.

In 1978, Congress passed the National Recreation and Park Act that directed the NPS to establish carrying capacities for each park unit.

Despite this mandate, the NPS has only begun to comply. Visitor carrying-capacity studies have been conducted on some of the more popular trails and waterways, such as the Colorado River. The National Park Service, however, has not developed

a consistent process for evaluating recreational carrying capacities.

A major stumbling block to developing a plan lies in the Organic Act, which established the NPS in 1916. The act states that the agency is to preserve the natural and cultural resources of the national parks while providing for visitors' enjoyment of those resources.

People enjoy visiting Yellowstone

to see its natural wonders, including the bears. Yet, the very presence of so many visitors is driving off the grizzlies and creating a crisis in grizzly management.

### Managing the Crowds

In the early days of the system, when the parks were remote and transportation difficult, the NPS actively encouraged Americans to see

## How People Play in the National Parks

A year ago the National Park Service cosponsored a survey that asked 5,757 Americans how they spent their time outdoors. Recreation surveys have been done since 1960 and responses have shown an ever-increasing participation in outdoor activities. In fact, the interest in bicycling, camping, canoeing, and snow skiing has tripled since the last survey.

People were asked why they liked these activities. Most of them, 68 percent, said they enjoyed being out in

nature. When asked if they thought they would be spending more or less time outdoors in the future, 34 percent said they expect to spend more time; and 51 percent expect to spend the same amount of time. Clearly the parks can plan on more use.

The chart below lists the most popular national park activities. More people have been exploring the outdoors since 1960 and will in the future. The question is how to prepare the parks.

PERCENTAGE OF RESPONDENTS WHO PARTICIPATED IN RECREATIONAL ACTIVITIES

Activity	Total Sample	Sex		Age				Annual Family Income (Dollars)				
		Male	Female	12-24	25-39	40-59	60+	Under 5,000	5,000 to 14,999	15,000 to 24,999	25,000 to 49,999	50,000 and Over
Bicycling	32	33	32	55	37	22	7	23	24	35	41	42
Horseback riding	9	8	10	18	10	5	1	7	6	9	11	15
Boating	28	32	24	38	35	25	9	16	20	27	39	43
Canoeing or kayaking	8	10	7	14	9	6	1	6	5	8	12	10
Sailing	6	7	5	9	7	5	2	4	3	5	9	14
Motorboating	19	22	16	25	23	17	7	10	13	18	27	32
Swimming outdoors	53	56	51	79	65	41	16	34	39	57	68	72
Fishing	34	47	23	43	40	31	17	24	30	38	38	35
Hunting	12	22	3	15	13	13	5	8	12	14	14	8
Camping	24	28	22	36	30	19	6	15	19	29	31	25
Backpacking	5	6	3	9	5	2	x	3	3	5	7	5
Camping in developed campgrounds	17	18	16	24	22	15	5	8	13	20	25	17
Camping in primitive campgrounds	10	11	8	17	11	6	2	7	7	12	13	9
Day hiking	14	15	13	19	17	12	5	10	10	13	18	25
Walking for pleasure	53	45	61	57	58	53	42	45	46	54	61	62
Running or jogging	26	30	23	51	31	13	2	21	20	27	33	37
Birdwatching/nature activities	12	11	12	10	12	12	13	9	10	12	14	19
Picnics	48	45	51	52	59	46	29	36	41	53	56	58
Driving for pleasure	48	47	49	48	59	46	35	29	43	53	55	60
Sightseeing	46	45	46	46	54	47	31	27	38	48	57	67
Off-road vehicle driving (includes motorcycles but not snowmobiles)	11	14	8	20	11	6	2	9	8	10	15	13
Snowskiing	9	10	7	15	11	5	1	5	5	7	13	21
Downhill skiing	6	8	5	12	8	3	1	4	4	5	9	18
Crosscountry skiing or ski touring	3	4	3	5	4	3	x	2	2	3	5	8
Snowmobiling	3	4	2	6	3	2	x	2	2	4	4	4
Sledding	10	12	9	22	11	5	x	9	6	12	13	15
No participation	11	8	14	3	5	13	30	28	18	6	4	3
PERCENTAGE OF TOTAL SAMPLE INCLUDED IN EACH CATEGORY	100	48	52	27	29	25	19	9	27	24	25	5

their parks. Unfortunately, old traditions die hard and the NPS is hesitant to say no to the visitor it had previously courted.

In an effort to help the NPS grapple with these kinds of problems, NPCA has been developing a process for analyzing and managing visitor use and its impact. Since the project's inception, three years ago, NPCA has received the full support and cooperation of the National Park Service.

NPCA felt it was imperative that the carrying capacity study have a sound scientific basis. Consequently, NPCA contracted with a team of three scientists from the University of Maryland.

Professors Fred Kuss, Alan Graefe, and Jerry Vaske, who all have interdisciplinary backgrounds and extensive research experience, are developing a process for analyzing how recreation affects natural environments. To guide the study, NPCA selected an advisory panel of seven scientists and recreation managers.\*

Developing a process to manage visitor impact has not been easy. Contrary to what some park managers hope, recreational carrying capacity cannot be determined as a single number calculated by a simple formula or by plugging data into a computer.

When recreation managers first began applying the concept of carrying capacity to visitor use, they mimicked the processes used for livestock management. Recreation activities were measured against the

\*The carrying capacity advisory panel includes Roger Contor, NPS Alaska Regional Director; Don Field, social scientist with the Cooperative Park Study Unit at Oregon State University; Denis Galvin, chief of the NPS Denver Service Center, which is responsible for much NPS planning; John Hendee, assistant director of the Forest Service's Southeast Experiment Station and co-author of *Wilderness Management*; Raymond Leonard, director of Sea Sense recreation consultants and formerly a backcountry scientist with the U.S. Forest Service; Clay Peters, director of the Wilderness Society's national park program and a former park ranger; Richard Schreyer, social scientist with Utah State University; and Roland Wauer, assistant superintendent of Great Smoky Mountains National Park and formerly chief of NPS Natural Resources Management in Washington, D.C.



At Great Smoky Mountains National Park, the most visited park in the system, the sight of a black bear instantly draws crowds with their cameras at the ready.

amount of physical space available and the ability of the environment to accommodate these activities.

Since the early 1960s, however, recreational carrying capacity has evolved to include both the effect recreation has on the visitor's experience as well as on the environment.

Dave Lime and George Stankey, two scientists who have pioneered recreation impact research, define recreational carrying capacity as the amount and type of use an area can sustain over a specific time without impairing the environment or the visitor experience.

Consequently, what constitutes carrying capacity can be highly subjective. Managers need to define not only what resources to preserve, but also what type of visitor experience an area should provide.

### NPCA's Role

Although NPCA's carrying capacity study is not the first, its format is unique. For the first time, biophysical considerations—vegetation, soils, water quality, and wildlife—are being integrated with social questions into one process.

This new approach to carrying capacity is controversial. Detractors say that not enough is known about visitor-caused impacts.

They also argue that the psychological aspects of carrying capacity are too abstract—and subjective. Is it possible, they ask, to accurately measure a park visitor's enjoyment or equate the level of one visitor's experience with another's.

NPCA agrees that we need to know more about the impact of visitor use. But NPCA disagrees with those who would use the "research dodge"—studying a subject ad infinitum to avoid dealing with complex issues.

Carrying capacity information can and should be obtained—on a continuing basis—in order to develop a method to manage visitor impacts. We can't afford to ignore the problems of overuse.

During the past two years, NPCA's team has compiled a reference file of more than 2,000 studies and papers. These references include the latest information on plants, soils, water, wildlife, visitor impacts, sources, and the kinds of experiences people seek in the parks.

---

## Strategies for Managing Recreation

### Indirect

---

#### Physical Alterations

- Improve or cease maintenance for selected roads and trails
- Improve or cease maintenance for selected campsites

#### Education

- Advertise areas targeted for recreation
- Identify recreation opportunities in surrounding region
- Inform public about benefits of minimal-impact camping
- Display chart of use patterns to encourage or discourage visitors

#### Economic Constraints

- Charge set entrance fees
  - Charge activity fees
- 

### Direct

---

#### Enforcement

- Increase surveillance
- Impose fines

#### Zoning

- Separate visitors by experience level
- Separate incompatible activities

#### Rationing Use

- Limit access to park areas
- Limit use of campsites
- Rotate use of areas, campsites
- Require reservations

#### Restricting Activities

- Restrict type of use
  - Limit size of group
  - Limit length of stay
  - Restrict camping practices
  - Prohibit use at certain times
- 

The report derived from these studies is *Recreation Impacts and Carrying Capacity: a Review and Synthesis of Ecological and Social Research*. The study states five main principles:

- First, there is no single, predictable response to recreational use. Flora, fauna, and visitors can be affected in any number of ways, both directly and indirectly.

For instance, trail erosion is only one result of heavy trail use. An onslaught of visitors can actually change the composition of plant species alongside the trail. Blackberry bushes and other plants that like disturbed soils can crowd out more indigenous species.

Often, it makes more sense to locate campgrounds in a well-drained meadow rather than under a canopy of trees. Too many campers can trample and compact the earth so that saplings have no chance to develop healthy root systems.

Wildlife, too, can be affected—frightened away from an area because of high visitor use or because certain food plants have been destroyed. Even visitors can be put off by overused campgrounds and trails.

- Second, there is not always a linear correlation between the extent of an impact and the amount of visitor use. Lawrence Merriam and C.K. Smith showed this dramatically in their studies of the Boundary Waters Canoe Area. The studies demonstrated that the greatest amount of change to a campsite occurred the very first time it was used. Although continued camping damaged an area, it was the initial use that caused the most harm.

- Third, not all resources and visitors respond the same way to increasing levels of recreation. Scavenging species, such as ground squirrels, actually may increase with the introduction of campsites whereas people-shy species, such as deer, may avoid the site. As recreation such as snowmobiling increases in a certain area, visitors who desire solitude may go elsewhere for their recreation.

- Fourth, different types of recreation will affect the environment and visitors in different ways and to different extents. For example, off-road vehicles disturb most plants far more than hikers do.

- Fifth, the time and location of an

activity can greatly determine the extent of impact. Studies have shown that wet soils are more sensitive to use than dry soils. So, a trail that may hold up to heavy use during the summer and autumn may be susceptible to damage in the spring if the area becomes sodden with snowmelt.

In addition, wildlife is more sensitive to visitor use during breeding and nesting seasons. Each spring at Big Bend National Park, the NPS prohibits motorized boat traffic on certain stretches of the Rio Grande River. By limiting the noise, the NPS hopes to protect the endangered peregrine falcons that nest along the canyon walls.

### A View to the Future

Taking all these principles into consideration, during the past year NPCA has been developing a procedure to evaluate visitor carrying capacity. This process should help define the most appropriate recreational use of any given area. It should also fit into the NPS general management planning process—or the recreation planning process of any other agency. [See sidebar for NPCA's Carrying Capacity Process.]

This management process can be used to remedy problems caused by visitor overuse. But NPCA's greatest hope for the process is that it will be used to *prevent* the sort of damage that visitors can inflict on a fragile natural or cultural area.

As we gain more and more leisure time, even greater amounts of people will be flocking to the national parks to participate in an ever-growing range of activities. Yet the system itself is not expanding to accommodate this explosion in recreation.

Our parks are becoming green islands amid encroaching development. We must continue to explore new ways of managing park recreation so that the natural and cultural fabric of our heritage will be protected—and so that the parks will continue to delight the eyes and minds of all visitors.

---

*Laura Loomis, NPCA Director of Grassroots/Outreach, organized NPCA's carrying capacity study.*

---

## How to Determine Carrying Capacity

1. Review congressional mandates and NPS policies for an area, and examine existing data. Managers should find out what endangered species live in their parks, when peak visitation occurs, and similar concerns.

2. Evaluate existing objectives. Park managers should focus on the resources important to their particular parks, how to protect those resources, and what kind of visitor experience to provide.

3. Identify key impact indicators. These indicators can be certain types of plants, animals, social interactions, or water conditions that show park managers the extent of visitor use—or overuse.

For example, if it is important to retain a certain mix of plants as part of a healthy riverbank zone, park managers might watch one or two plant species known to be most sensitive to recreational impacts.

4. Set up standards for the key impact indicators. For instance, a park manager may determine that riverine habitat can afford to lose up to 20 percent of a key indicator plant before the environment begins to suffer.

5. Compare the actual condition of the key indicator with the standards set.

6. If there is a discrepancy between the key indicator and the standard, determine the cause: visitor impact or some other factor, such as acid rain.

7. If recreation use is responsible, managers should devise strategies to change the impact on the environment.

8. Implementing the strategies is the final step in solving a problem related to overuse.

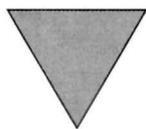
---



Rocky Mountain National Park; photo by National Park Service

# Proceed at your own risk

## Restoring Self-Reliance to the Wilderness



by Roderick Nash

**A** few years ago the late Walt Blackadar, an Idaho physician and well-known river runner, decided to kayak through a canyon on Alaska's formidable Alsek River. It would be a first run, admittedly dangerous, perhaps impossible, and Blackadar could not find anyone to paddle along. Undaunted and probably even relishing the opportunity for complete self-reliance, he proceeded with trip preparations.

Blackadar established a search-and-rescue trust fund in the event he did not paddle out of the lower end of the canyon on schedule. Should he not complete the trip, his trustees were to use part of the money to hire an aircraft and fly up and down the Alsek. If he still could not be located, the pilot was to wait a week and repeat the flight. The final instructions called for the remaining funds to be used to erect a small plaque in Blackadar's memory at the mouth of the canyon.

As it turned out, Blackadar made

it, but a few years later his kayak wrapped around a log on the south fork of Idaho's Payette River. He paid the whitewater boater's ultimate dues.

There should be a place in America's national parks and designated wildernesses for people like Walt Blackadar. What they are seeking is, arguably, the most authentic wilderness experience. Wilderness, in the most traditional sense, is uncontrolled environment.

The demarcation between wilderness and civilization dates back some 12,000 years ago to the beginnings of herding and agriculture. Taming animals and land reduced risk. The untamed hinterland seemed chaotic, disordered, bewildering, and risky.

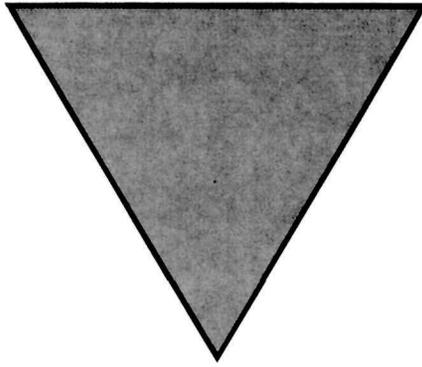
Historically, people passed through wilderness as quickly as possible, moving from one island of security to another. But then one of the most dramatic revolutions in the history of thought transformed wilderness from a liability into an asset.

Appreciation and eventually preservation began.

Wilderness came to be regarded as a sanctuary, the subject of Sierra Club centerfolds, a pleasant place for the family vacation. Somewhere along the way something was lost and perhaps it was the very essence of wilderness.

The parkland and wilderness requiring management today has been romanticized and sanitized to the point of losing its original identity. The uncontrolled qualities of the old wilderness could exhilarate as well as intimidate. Wilderness once meant challenge; it was a superb place to build self-confidence. The lack of civilization's support systems threw the visitor on his or her own resources.

The new wilderness, on the other hand, is tightly controlled and less wild. In fact, the term "wilderness management" is a contradiction. Signs that point the way to "Lost Lake, 2.3 km." ironically underline



the difference between the modern visitor's experience and that of the person who originally named the lake. Maps and guidebooks similarly dilute wilderness as do the commercial guides who regularly lead thousands through the unknown.

Indeed as Joseph Sax has ably argued in *Mountains Without Handrails*, the modern parks are full of rules designed to make wilderness resemble civilization. Sax prefers that parks provide the antipode of the visitor's everyday environment. He wants challenge rather than accommodation. I agree.

Search-and-rescue operations are part of the control syndrome that strikes at the very essence of wilderness. This is not to say that every part of every park should be off limits to ranger patrol. A strong case can be made, however, for designating some places *no-rescue wilderness*. Call them zones of self-reliance: no trail signs, no established campsites, no bail-out.

This means thinking about wilderness recreation in terms of a spectrum of self-reliance. At its less intense end we can imagine areas with daily ranger "sweeps" similar to those ski patrols make after the lifts close for the day. Some visitors will welcome this backcountry social security. However, there is a need for places that are less frequently or never patrolled.

Of course, private rescuers can always come to the aid of an overdue friend. Walt Blackadar made this kind of arrangement. However,

when government regulations include search and rescue, travelers in the wilderness have no choice. The cavalry arrives whether the wagon train wants it or not.

Even the length-of-stay information that one fills out on backcountry permits is a covert encroachment on self-reliance. Why not manage some wildernesses with permits that are time-specific only for entry?

Obviously, visitors should be clearly informed of the absence of search and rescue in a designated zone of self-reliance—as a warning and for legal reasons. Enter the truly wild areas at your own risk—even be prepared to die a horrible, lonely death. Or go elsewhere and accept search and rescue along with a less authentic wilderness experience. Skiers who venture out of the patrolled area know they are leaving an island of security and legal responsibility. Some recoil from this prospect; others relish it.

National park zones of self-reliance could be rated for visitor competency and should be accompanied by a program of wilderness licensing. The principle is the same one your mother used in letting you cross the street alone. First you walked hand in hand (the commercially guided trip); then you received careful instruction and crossed under mother's watchful eye (the permit and patrol system). Finally the big day arrived when, properly prepared, you struck out on your own. Remember the exhilaration?

Some seek the same feeling from

wilderness. They crave places where society relaxes its watchful eye and allows a person the freedom to be self-reliant.

As I proposed in *Backpacker* magazine (March 1981), a wilderness license scheme should be keyed to a system of wilderness zones. Let those who wish to enter no-rescue wilderness prepare themselves for that privilege.

Individuals would complete training and competency tests similar to those that are taken by would-be drivers, pilots, scuba divers, and hunters.

The result would be a more competent visitor, capable of protecting self, group, and also the wilderness resource. Occasionally, to be sure, preparation would be inadequate, accidents would happen. People are killed crossing streets. But no one argues that people should cease crossing streets.

We accept these risks in exchange for personal growth and development. Managed so as to create a spectrum of self-reliance, wilderness could play a similar role in an increasingly regulated civilization.

The starting point is to give some wildernesses a chance to be really wild.

---

*A professor of History and Environmental Studies at the University of California-Santa Barbara, Roderick Nash has written several books, including Wilderness and the American Mind; and he is a leading voice in the environmental movement.*

# *Stranded on Yosemite's Big Wall*

*In Which the Author  
Sees the Problem at Close Quarters  
and From Both Sides*

*by Doug Robinson*

**A**t thirteen years of age I laced on my first pair of lug-soled mountain boots and I knew it made me a climber. Actually, I had been going to the mountains most of my life even then. The last three summers had been spent at Boy Scout camp, backpacking deeper into the gentle wilderness of the Sierra each year, finally catching sight of the crest peaks, and scrambling up some of the lower knobs in Sears work boots.

For years before that I'd been going to Yosemite National Park with my family. Every autumn we camped at the edge of Tenaya Lake, where two big domes frame the view. That was part of the problem. Pywiack and Polly domes seemed like backyard landscape to me, and anyone could see that they weren't *really* steep. Now that I was a climber, an afternoon scramble 400 feet up the gentlest slopes of Pywiack, on the smooth slabs facing the lake, would do for exercise until I could set a boot to some real mountains.

Without telling anyone where I was going, I took the trail around the lake and cut onto the skirt of the dome. The mountain sunlight was as seamless as the rock, glinting off patches of glacier polish. The trail

was already steep, switchbacking past those mirrored sections. The same grinding ice that last oozed by here just as men were beginning to domesticate grains had also sheared off most of the feldspar knobs that make such good climbing holds on higher outcrops of this Tuolumne granite.

A few minutes later I was on a wide ledge three-fourths of the way up. From there a ramp cut diagonally up and left. I followed. It was really just an undulation in a sea of granite, but on a smooth slab it doesn't take much of a ledge to turn tiptoeing into a stroll. As the ramp narrowed to a succession of small bumps, I turned to face the dome and balanced sideways like a crab, using the same knob for my trailing foot that my lead foot had just left. Then the knobs petered out, too.

Twenty feet above, the angle flattened out and began rounding toward the top of the dome, another hundred feet above. But domes are deceptive. Often the steepest rock comes right before the angle eases at the top. The blank wall above me was indeed steeper, and it was completely smooth. No cracks, no ledges, no obvious holds. Just ripples in faultless granite with a few small patches of coarse rock that allowed

me to smear a boot sole for a friction hold.

I was nearly there. I just had to maneuver past the steep spot. Only twenty feet away the going was easier, and beyond that—the top. I knew enough about friction climbing to realize that balancing over my feet was essential. Giving in to the urge to lean in, to hug the rock, is a sure way to lose traction. So I balanced up onto the friction patches, and that went pretty well until I couldn't step high enough to reach the next one. I stopped, reconsidered, tried again. It was no closer. Well, I can always go back down, I thought, glancing over my shoulder.

**I**saw the full 350-foot sweep of rock dropping away to the trees below. A little wave of fear washed through me, rolling out to my fingertips, which were pressed against the cool stone. The nausea would have tightened my grip if there had been anything to hold.

Then I discovered what every climber learns sooner or later: climb-

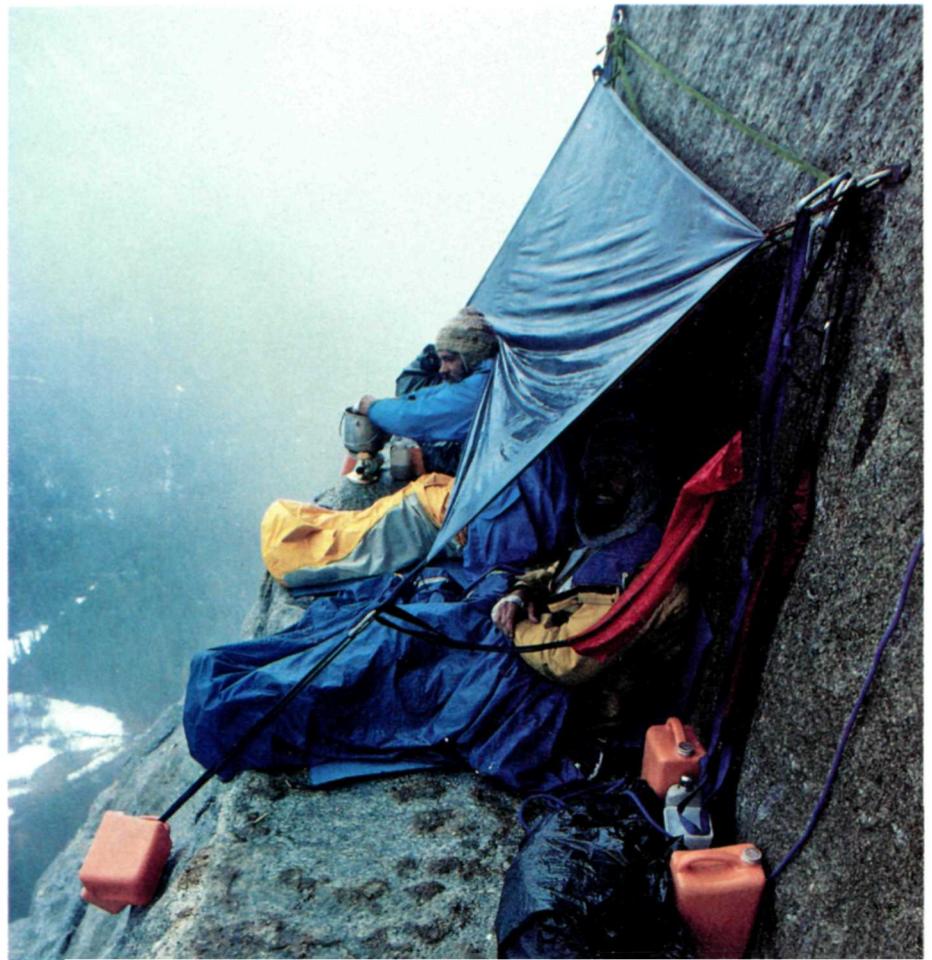
**The search-and-rescue team at Yosemite National Park uses helicopters, such as the one at the right, to pluck stranded park visitors from dangerous spots on walls and in canyons.**





Photos by Gordon Wiltsie

Top: El Capitan is a Yosemite landmark and one of the most famous climbing walls in the country. Right: About 1,000 feet from the base of El Cap, Doug Robinson (left) and Jay Jensen set up camp on a ledge. Because climbers are usually prepared for anything, they are seldom the object of a rescue mission. The day after this photo was taken, however, Robinson, Jensen, and Gordon Wiltsie had to effect a self-rescue, rappelling eight hours in a rainstorm. "It was really kind of desperate," says Robinson.



ing down is harder than climbing up. The problem has something to do with not having eyes in your feet, and something to do with the awkwardness of pushing away from the rock to balance down onto holds.

Pushing out is even more difficult when there is nothing to hang onto, so downclimbing sheer, smooth rock is harder than descending any other terrain short of an overhanging crack. After a few tentative pokes with my new boots at the friction spot below, that horrible truth was becoming clear to me. I had already stretched my limit to get here. I looked back up with dismay. The top was so close.

I had practiced friction climbing enough on low rocks by the trailside to realize that without a good handhold a slip of the foot becomes a fall. So I wasn't about to just rush at those few feet of rock above me in the vain hope that momentum would carry me over the top. I shuddered again and shifted my toes gingerly on the two little rough patches of rock that served for footholds. My heels hung out in the breeze and I could look between my legs at the treetops that edge Tenaya Lake.

At first I tried not to move, but after fifteen minutes locked in the same position, my muscles cooled and stiffened. I just plain couldn't move. I stood there, toes pressed against the face of the dome, palms flat against the smooth rock. An afternoon wind arose and played over the curved sheets of stone. I felt goose bumps on my bare legs and arms, and I could see wind riffs skidding across the surface of the lake.

Suddenly my hat blew off, and without thinking I reached to snatch it back, teetered on footholds, and slammed my hand back down to regain balance. Hat in hand, another surge of adrenaline washed through me.

Looking between my legs I could see a car pull off the road. Two people got out and stared.

"Are you in trouble?"

"Yes!"

I directed them to the ranger station ten miles away.

After a seemingly endless wait, the ranger's patrol car finally ar-

rived. The small figure below was looking in my direction through a pair of field glasses. A motor scooter pulled up and the two men passed the glasses and talked. Then they drove away.

Couldn't they see how precarious my position was? Didn't they know that I'd been standing there on tip-toe for hours. Finally, there were voices above me.

From that ignoble spot, I got to meet my first famous climbers. Wayne Merry, a Yosemite Park

---

---

*No matter what  
glorious illusions I  
had about my new boots,  
a naiveté about difficult  
terrain tricked me  
into a tough spot.*

---

---

ranger at the time, slowly rappelled down from the top of the dome, cautioning me not to lunge for the rope as it came into range. He tied me onto the end of another rope and I was belayed to the top by a second climber, George Whitmore.

After shaking out my cramped legs, I actually finished the climb under my own power. The rope made all the difference. I hobbled stiffly over the top of the dome only to find a 40-foot rappel down a steep wall off the back side. Even if I had made it up the dome that afternoon, I would have been marooned on top.

**M**y parents were pretty surprised when a ranger escorted me back into camp that evening. Wayne Merry was kind but firm; and after hearing the whole story, my parents grounded me, literally: no climbing for a year. (Two months after rescuing me, Merry and Whitmore and Warren Harding completed the first ascent of El Capitan, thus ushering in the golden age of Yosemite climbing.)

No matter what glorious illusions

I had about my new boots, a naiveté about the true difficulty of harmless-looking terrain tricked me into a tough spot. Each year, the National Park Service has to rescue hundreds of other park visitors who get stranded. The vast majority of these people are not climbers, but tourists who innocently wander up mountainsides or down canyons. Some get themselves into trouble just by trying to get a better look from the edge of a waterfall.

Rescuing climbers stuck on truly serious terrain is a relatively minor problem by comparison. With the help of long ropes and an NPS helicopter, an efficient rescue squad can even pluck climbers off overhangs on the face of El Capitan. But serious climbers rarely get stranded or hurt on difficult mountainsides. A British actuarial table, for instance, shows that climbing on the cliffs in England is actually safer than driving on the motorways that lead to the cliffs.

No, most park rescues involve naive tourists who stray—as I did—onto terrain that turns out to be harder than they think. I was lucky to be in sight of the road; lucky too that I didn't panic and end up being scraped off the rocks below.

**A** dozen years later—after I had become a Yosemite climber, camping in the park for months at a time so I could climb the hard routes—I had a chance to see the NPS at work from the other side. One summer day, I got tapped to help on a rescue.

The view of Half Dome reflected in Mirror Lake is prized among Yosemite's vistas. The magnificent dome towers nearly a vertical mile over the reflecting pond, the final 2,000 feet of vertical wall looking oddly squat in the foreshortened upward view. But the view can be deceiving, especially the apron of slabs leading up to the base of the wall. Not only do the slabs look more horizontal than they really are, but even the hike up from Mirror Lake looks misleadingly short. From the lake one tends to see ledges and ramp systems and disregards the blank vertical slabs in between.

That's just the view the two teenage boys must have had the morning they scrambled up from Mirror Lake, hoping to get to the base of Half Dome. Hours later one came back, telling rangers that his friend had fallen and broken an arm. Like the man on the motor scooter, proximity elected me to the rescue squad.

Several of us climbers were hired on the spot and put under the direction of an NPS rescue ranger. After a quick visit to the rescue cache, we toiled up the slabs carrying several coiled climbing ropes, a collapsible Stokes litter, climbing hardware, first-aid supplies, and a walkie-talkie. The park's fire helicopter stood by.

We fanned out in a search pattern. Efficient, but it meant that each of us had to bear alone the dread of what he might find. So we were relieved to hear answering shouts. We found the boy conscious and cheerful in spite of the pain in his arm, and soon had him strapped into the Stokes. The litter, with its rigid pipe framework and mesh bottom, was then rigged with a harness that could be suspended from a single point. A rope was tied into the harness and run through a friction brake anchored to a nearby tree. Then came the hard part.

Vertical rescue is easy: gravity does the work, and rescuers just have to keep the litter from getting snagged on the way down. A special winch has even succeeded in raising a litter up the face of El Capitan to a helicopter waiting on the summit. Horizontal rescue is easy, too—if you happen to have 30 people willing to take turns carrying a stretcher through brush and over boulders.

It's the intermediate angles that are tough. We had to strain, pulling the litter away from the rock as we lowered it. So we traded off attending the litter, running the friction brake, and rappelling ahead to set up further anchors. Hours later we were hundreds of feet down the slabs, but still high above Mirror Lake.

Then we found what we had been looking for. It wasn't much, just a wedge of gravel stacked against the



Kennan H. Ward

**Above:** Yosemite Falls is one of the most dangerous spots in the park because unwitting tourists get into trouble trying for a better view. **Right:** Ranger Rick Brown rappels down the face of a high wall with a rescue litter.

slabs. But at its top, a thin horizontal ridge of gravel jugged out 15 feet from the slab: just enough clearance to set down one skid of the helicopter without having the rotors hit the rock.

As we watched, the rescue helicopter flew into range, a fragile bubble suspended under a roaring demon of gyration.

What happened next happened fast, but it has been etched in my memory ever since. We huddled over the stretcher as the chopper inched closer and closer to the narrow ridge. Dust spun everywhere. Finally the pilot—he was so good, he must have been one of those schooled in Vietnam—gently rested his inside skid onto the outermost section of gravel, and hovered.

We scrambled up to his perch, dragging the stretcher. Under a cyclone of propwash we could not yell, only gesture. A stray gust of wind

could have upset the machine and decapitated us all. We helped slide the stretcher onto the skid framework, and when it was lashed in place we signaled—thumbs up, heads down—and the chopper arced off toward the valley. We had just synchronized a life-and-death maneuver with a pilot we would never meet. Three minutes later he settled the helicopter into Ahwanee Meadow, just a few steps from the hospital.

Then all we had to do was get ourselves down. But we had our ropes and our knowledge, and we had what was left of the afternoon.

*Writer and mountain guide Doug Robinson is at work on a book that will explore why people climb mountains. He took part in another rescue operation at Yosemite National Park just before this issue went to press.*

Connie Toops



# Search & Rescue

*Park Service emergency teams  
navigate whitewater and caves to save lives . . .*

*by Connie Toops*

“Coast Guard Station Pascagoula, this is Horn Island Ranger Station, WZ 2132.” I waited for the usual crisp reply on the marine band radio.

“Coast Guard Station Pascagoula, go ahead.”

“Station Pascagoula, this is Horn Island. We have a report of a pleasure boat sinking in Dog Keys Pass, seven POBs [passengers on board]. The ranger is en route. Request your assistance for possible evacuation.”

“Roger, Horn Island,” came the reply. “Point Estero departing station at this time. Stand by Channel 23 for further.”

I glanced out the window of our outpost at Gulf Islands National Seashore, ten miles off the Mississippi coast. It was nearly dusk and the wind was howling. Fat drops of rain splattered on the sand.

A few moments earlier there had been a knock at the door. A fisherman happened to be near our dock when he picked up a faint but frantic call for help on his boat’s CB radio. He hurried to the ranger sta-

tion for assistance. My husband Pat, a National Park Service (NPS) ranger, launched the patrol boat and headed to the scene. I took charge of communications.

“Horn Island Ranger Station, this is Coast Guard Pascagoula,” the radio crackled. “Rescue chopper is standing by. Please advise when ranger is on scene.”

We had lived on Horn Island nearly three and a half years, and during that period there had been many calls for assistance. Boating accidents, overdue vessels, missing persons, drownings, hurricane warnings. The names and faces changed but a seriousness—that thin line between life and death—pervaded them all.

“Horn Island, 220.” This time it was our radio that transmitted; “220” was Pat’s voice.

“Advise Coast Guard I’ve located the boat and recovered all seven POBs,” he reported. “They’re wet and very cold. I’d like to rendezvous with Point Estero as soon as possible to shuttle them to the mainland.”

I relayed the information to the Coast Guard dispatcher. In a short time their vessel had the stranded boaters aboard and headed for home.

## **Parks Are Not Disneylands**

Approximately 280 million people visited the national parks in 1983. During that time there were 3,261 search-and-rescue (SAR) incidents varying in seriousness from lost children at Independence National Historical Park to climbing accidents on Mount McKinley. These incidents resulted in 674 serious injuries and 161 fatalities.

Mention search and rescue, and images of hang gliders, mountaineers, and whitewater kayakers come to mind. But these are not usually the people rangers have to save.

According to Dan Sholly, NPS Chief of Ranger Activities, “The biggest cause of accidents is lack of visitor recognition of environmental hazards. National parks are not Disneylands. The dangers are real. Drowning is the leading cause of

*but who pays the price?*



Connie Toops

death. Motor vehicle accidents and climbing also rank high."

Carl Hinrichs, chief ranger at Buffalo National River, remembers a boom in rescue incidents in the mid-1970s. "That was a time of outdoor awakening," Hinrichs recalled. "There was a big push on backpacking and whitewater activities, but people weren't as familiar with risks of off-season use and hypothermia. It seems to have leveled off now with more informed users."

According to its mandate, the National Park Service is obligated to respond whenever a visitor is injured or requests assistance. Rangers have had to rappel from cliffs, scuba dive, enter treacherous cave passages, or navigate swirling whitewater to reach accident victims. Once on the scene, rangers may be required to give emergency treatment, sometimes requiring splinting fractures, administering drugs, or making complex medical diagnoses.

**Above: Tricky tides, currents, and heavy surf cause problems for many visitors at the Gulf Islands National Seashore. This park area, like many others with large bodies of water, has a special dive team who are trained in the most current underwater search-and-rescue techniques. These rangers are getting ready to practice an underwater grid search.**



## Training and Testing

The National Park Service prepares rangers to meet these challenges with training and physical fitness programs. Rangers involved in arduous tasks including firefighting and scuba diving must pass fitness tests, and some parks have established aerobic exercise programs. Service-wide training courses teach how to manage disasters such as plane crashes or bus wrecks.

Border Patrol agents train rangers in tracking skills used to locate missing hikers. Scuba teams learn advanced techniques for underwater searches and rescues. But in many cases the hazards and terrain of individual parks dictate unique rescue procedures.

Buffalo National River, for example, includes innumerable steep bluffs and over 100 wild caves. The park's Cave and Cliff Rescue Team, a cadre of a dozen rangers picked for their climbing and emergency medical skills, practices by "planting" one member in a tight cave passage, between broached canoes, or on a treacherous cliff. Then the rest of the team works out a rescue. First-hand knowledge of the terrain and coordinated teamwork are benefits of this type of training.

Rescues on high peaks are frequently complicated by foul weather, impaired communications, and the difficulty of functioning in thinner air. In preparation for such incidents, Mount Rainier's rangers have scouted likely rescue sites on joint training missions with the 243rd Army Aviation Battalion from Fort Lewis, Washington.

The 243rd operates Chinook helicopters, one of the few models that can maneuver safely over 10,000 feet. Park rangers and military crews have practiced communications, rigging litters, and raising or lowering personnel from hovering helicopters,

**Left: A ranger was "planted" in a remote section of Fitton Cave in Buffalo National River. The Cave and Cliff Rescue Team crawled a half-mile to find him. Here they practice the special procedures required to move a stretcher through narrow cave passages.**

often poised on precarious ledges. When a serious incident occurs, this specialized team is prepared.

## Who Pays?

Certainly the NPS cannot ignore its mandate to rescue visitors, but as some rescues are becoming more technical and costly, the question "Who pays?" is receiving more attention. According to Dan Sholly, the NPS spent approximately \$700,000 on search-and-rescue incidents in 1983. "Typical" incidents—which cost \$200 to \$300 in employee time and equipment—are paid for

---

***Overdue vessels,  
missing persons,  
drownings. . . . The  
names and faces  
changed but a seriousness—that thin line  
between life and death  
—pervaded them all.***

---

by the park's operating budget. Elaborate actions can cost more than \$500 each and are covered by a servicewide reserve fund.

Various approaches to rescue cost-efficiency are being tested throughout the NPS. Small monuments and historic sites may require rescues so infrequently that there is no need to keep a cadre of SAR-trained rangers on the staff. Instead managers can call on local sheriff's patrols or medics when necessary.

Yosemite, Olympic, and Mount Rainier national parks maintain cooperative agreements with nearby mountain rescue units and alpine clubs. Members donate their time to assist in serious rescue situations. Sometimes the parks reimburse them for travel and equipment expenses. Military service units are another welcome source of aid on major rescues. In 1983 approximately \$800,000 worth of outside services were contributed to support park SAR operations.

## A Plan That Works

The steep cliffs and slick waterfalls at Shenandoah National Park precipitate numerous sprains, broken bones, and other injuries. Skyline Drive, the park's often fog-bound highway, is a source of frequent motor vehicle accidents. Several years ago Shenandoah's rangers teamed with emergency-room personnel from the University of Virginia Medical Center.

Rangers donate their own time to qualify for the park's Emergency Medical Services (EMS) team. Approximately 30 employees have had emergency medical training and a dozen have completed the 274 hours of study required to become a medic.

Rescuers communicate via radio with the hospital staff, transmitting patients' vital signs and describing injuries. Medics can then administer drugs and intravenous solutions according to doctors' relayed instructions. The park maintains its own fleet of three ambulances plus a "crash" truck that responds to motor vehicle accidents. If faster transportation is necessary, helicopter ambulance service is available from the hospital.

Although Shenandoah does not bill patients for medical services rendered in the park, overall costs of the program are kept fairly low. The hospital provides life-support supplies and drugs. Those used by the medics during the rescue are charged to the patient as part of his or her hospital costs. The air ambulance, if used, is also billed directly to the patient. Last year Shenandoah's costs for medical supplies, such as bandages, splints, and backboards, was only \$4,000. Yet to date, the park's EMS program is credited with saving the lives of at least 17 people who otherwise would not have survived their injuries.

Well over 50 metropolitan hospitals now incorporate emergency flight programs in their services. Rescue helicopters, staffed with trauma teams and carrying thousands of dollars' worth of sophisticated medical equipment, will respond to park emergencies day or night.

For example, units from both

Springfield, Missouri, and Little Rock, Arkansas, serve Buffalo National River. Their fees—\$150 for initial response plus \$5.00 per mile traveled—are billed to the patient and are usually covered by medical insurance. But the cost, about \$1000 for a Buffalo River evacuation, points out the fact that transportation is presently the most costly facet of park SAR operations.

Dan Sholly feels the public expects the National Park Service to provide basic emergency and rescue services. "We are here to assist," he says. "Payment is not considered while doing the rescue. We don't ask to see someone's insurance or credit card."

"Right now we are trying to standardize our policies," he continues. "In some areas we charge for ambulance runs, in others we don't. We do not hesitate to bill violators or continuous offenders when they have to be rescued."

As an example, Sholly cites the situation at Grand Canyon. "Last year about 400 people found themselves in physical distress at the bottom, despite numerous warnings before descending. Of those, about 180 just couldn't hike out. So rangers called private helicopters to evacuate them. This costs \$60 to \$100 per trip, and helicopter operators were instructed to bill the evacuees directly. So far they've collected from 80 percent of those people—most of whom paid quite willingly."

The more costly incidents can be separated into two types: labor-in-

tensive and high-technology. Except in Alaskan parks, most mishaps can be reached by vehicle, boat, or foot.

"Alaska rescues are different," comments Ralph Tingey, acting chief ranger at Denali. "The mountains are huge and hard to reach. You can't hand-carry someone out. Generally we fly to find the injured person; then we use a big helicopter to winch them out. The high-tech military helicopters cost about \$300 per hour. Sometimes the military performs rescues as training exercises. Other times they need to be reimbursed."

### The Best Cure

Over the last couple of years rangers at Denali have discovered that prevention is the best cure. Cooperating with the University of Alaska and private doctors researching high-altitude sickness, the park established a clinic on Kahiltna Glacier. Climbers who stop by are tested for symptoms of pulmonary or cerebral edema—high-altitude killers. Doctors advise affected climbers to rest, descend, or breathe oxygen, thus averting physical problems that might require a full-scale rescue.

In 1977, for every hundred climbers reaching the summits of Mount McKinley or Foraker, three died in the attempt. Three years ago those statistics were reduced to a 1 percent rate. Presently, even with more successful climbers, the death rate has dropped to about 0.5 percent. Associated rescue costs are also mitigated.

Another approach to reducing

SAR costs might be to exclude inexperienced visitors from certain areas or activities with a high accident potential. This would undoubtedly be a controversial policy. Would it be right to deny access to visitors on the assumption they will get into trouble? Veteran climber Galen Rowell states, "At stake is the most basic of wilderness values, the right to risk life and limb in the wilds." On the other hand, should rangers' lives be endangered trying to rescue individuals who were obviously ill-prepared?

Hawaii Volcanoes ranger Tim Setnicka, author of *Wilderness Search and Rescue*, cites two incidents that occurred a few years ago at Yosemite:

Unpredictable late spring weather had turned foul and two climbers were trapped in the freezing rain and snow on the nose route of El Capitan. Communications were nearly impossible, but the climbers managed to shout "hypothermia" to rangers below.

In a very risky maneuver, a rescue helicopter hovered near the pair and pendulumed them a bag containing food, warm clothes, and a two-way radio. With these provisions, the pair reported that they could wait out the storm.

The following day park rangers talked them down. Back on the ground the climbers admitted they were not prepared. They carried no tube tents, no bivouac sacks, no rain gear. They knew of a route that they could have rappelled down, but de-

## Advice for Self-Rescue

Tim Setnicka, a Hawaii Volcanoes National Park ranger and author of *Wilderness Search and Rescue*, is hesitant to offer hard and fast recommendations for self-rescue. He cautions that each wilderness area and sport requires specific preparation and protections. He did suggest that responsible people cultivate certain attitudes and research information about self-rescue.

1. Think ahead about self-rescue as part of planning your trip. Although you should plan on having a good time, you also need to consider possible problems. Do you have the right equipment, and do you know how to save yourself?
2. Make an honest assessment of your skills and abilities. Pushing yourself to the limit may be courageous or stupid, depending on how realistic you are about your survival skills.
3. Before you explore a new area,

do some local research. Talk to people who know those mountains or that body of water. How has the weather been? Ask about the short-term and long-term conditions.

4. *Do not rely on books only* for advice on a particular sport. Ask people who are experts in that sport. Talk to a climber, diver, crosscountry skier who is familiar with the area you will be entering, and don't be embarrassed to ask direct and searching questions. Your life may depend on it.

cided not to try it. Instead they placed the chopper crew in perhaps greater peril than they were. And they cost the federal government \$3,291.50.

Two months later, on the same cliff, another climber slipped and smashed into the rock face. He got down and to the hospital with only his partner's aid, although he suffered a ruptured spleen. When asked why he didn't call on the rangers for help, the climber replied, "I was responsible for getting myself up there, and I was responsible for getting myself down."

At this time stiffer regulations are probably not needed. But recreationists who do not prepare for self-rescue may eventually bring pressure for tighter controls. [A plan such as that is proposed by Roderick Nash on page 18.] It would be unfortunate for everyone if a lax attitude among a few users unfairly affected the majority of safety-conscious outdoor enthusiasts.

Rangers know that they may be called to a crisis situation at any time, and they take pride in their excellent past record of success. Even though park officials emphasize visitor safety, it is unrealistic to expect that more than 280 million people will visit the many national parks this year without there being any mishaps.

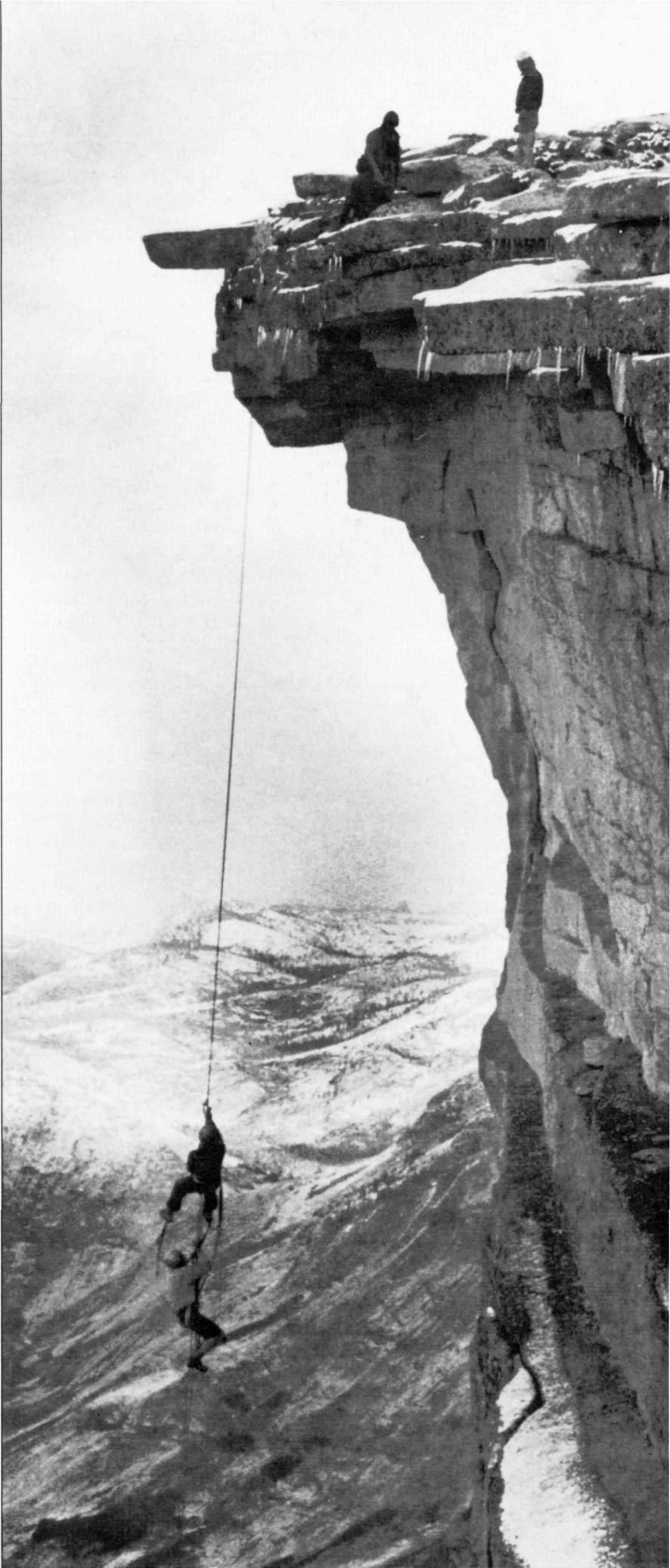
That's why there are approximately 2,000 skilled rangers who are standing by at this very moment in our national parks, ready for the next rescue.

---

*Author and photographer Connie Toops has lived in the Everglades, Shenandoah, Crater Lake, Gulf Islands, and Buffalo River national park areas where she has assisted her ranger husband on a number of rescues.*

---

**Right: Two men stranded beneath an overhang are rescued by rangers from the face of Half Dome in Yosemite National Park. Both were experienced climbers. In fact, one had taught courses in mountaineering. Although it was only early fall, they were trapped by an unexpected storm that left them cold and vulnerable.**



Tim Setnicka

# NPCA Report

## Director Russell Dickenson Retiring From Park Service



National Park Service

National Park Service Director Russell E. Dickenson will be leaving the Interior Department this year. On November 21, the National Park Service (NPS) announced Director Dickenson's retirement after nearly 40 years of service with the federal agency.

NPCA Vice President Destry Jarvis said, "We don't believe the directorship of the National Park Service should be allowed to become a political football. While we regret Secretary Clark's replacement of Russ Dickenson, we hope his successor will be a career professional with similar credentials."

Dickenson, appointed as director in 1980 by former Interior Secretary Cecil D. Andrus, was the only high-level Interior official retained when the Reagan Administration came in. And Interior Secretary William Clark has asked Director Dickenson

for his advice in choosing a successor.

After the new NPS director is chosen, Dickenson will become a special assistant to Secretary Clark until June 1, his official retirement date.

Russell Dickenson, 62, is originally from Melissa, Texas, and has spent the greater part of his life with the National Park Service. He signed on as a seasonal employee at Grand Canyon National Park in 1946 while still a student at Northern Arizona University.

After some time on permanent assignment at Grand Canyon, Dickenson went on to ranger and chief ranger positions at Big Bend, Glacier, and Grand Teton national parks—among the grandest natural areas in the system.

Dickenson served as chief of resources for the NPS Midwest region before coming to Washington, D.C.,

## NPS Squelches Talk Of Saratoga Deer Hunt

White-tailed deer are part of the natural scene at Saratoga National Historical Park in upstate New York, but the numbers of deer are worrying park managers.

The deer population needs to be controlled and, until recently, talk circulated of a public deer hunt in the 2,600-acre park. To the relief of conservationists, the National Park Service (NPS) recently confirmed their opposition to a public hunt on park land.

The NPS is concerned, however, that the deer may be undermining efforts to restore characteristic vegetation at this Revolutionary War battlefield, where General John Burgoyne's British troops were soundly defeated, thus marking a major turning point in the course of history. There is also concern that the deer are damaging crops in and around the park.

As a result of this concern, Saratoga officials convened an open public meeting this past autumn in order to introduce a three- to five-year study that will examine the connection between the deer and park vegetation. The NPS will undertake the \$135,000 study in co-

operation with the State University of New York. One of the goals is to determine the best ways of controlling the deer population.

Of particular concern to NPCA and others at the packed meeting was whether the NPS would recommend sport hunting as a population control measure. Park Superintendent W. Glenn Gray made clear, however, that the park would remain closed to hunting in accord with federal statutory regulations.

Individuals interested in receiving further information on the deer problem and research activities at the historical park should contact Superintendent Gray, Saratoga National Historical Park, RD 2, Box 33, Stillwater, N.Y. 12170.



National Park Service

Deer at Saratoga may be ruining efforts to restore vegetation at this Revolutionary War park.

## Environmental Jobs Available For Summer

The Student Conservation Association (SCA) will again offer 1,500 volunteer positions in conservation and resource management during 1985. The SCA is the only organization that places volunteers in conservation positions on a nationwide basis in 225 federally administered areas.

Volunteers assist professionals in interpretive programs, field research, backcountry patrol, and various other duties that help preserve our public lands.

The SCA operates two volunteer programs: the Park, Forest, and Resource Assistant Program (PFRA) and the high school program.

PFRA is designed for those over 18 and a year out of high school. Positions last approximately 12 weeks with transportation, housing, and living expenses provided by the SCA.

The high school program is designed for students 16 to 18 years old. Under supervision in the backcountry, students live, work, and learn together for a period of three to five weeks.

Projects include maintaining and constructing trails, building bridges

in 1967. In the nation's capital, he was chief of new area studies for the NPS, director of the National Capital Region, and—in 1973—deputy director of the NPS.

When Gary Everhardt became director in 1974, Dickenson moved to Seattle to become NPS northwest regional director. But he returned to Washington in 1980—this time as the director of the National Park Service.

In his long and distinguished career, Dickenson has received many awards. Indicative of his influence in worldwide park policies and planning is an award he received in 1983 from the government of West Germany: the Golden Flower Rheydt Award. It was the first time this prestigious biannual award, which honors those contributing to international environmental preservation, was presented to an American.

or shelters, and revegetating heavily used areas. The final week of the program is devoted to a recreational wilderness trip.

Volunteers in this program will be responsible only for transportation to and from the area. Financial assistance for traveling costs are available to those who apply and can demonstrate need.

For applications and information, contact: Student Conservation Association, Dept. RM, P.O. Box 550, Charlestown, N.H. 03603.

The National Park Service also has seasonal jobs available: both paid and volunteer positions. This work includes fee collection, trail maintenance, interpretive programs, patrol of visitor areas, and many other duties.

To apply for a paid position, contact the National Park Service, Seasonal Employment Unit, 18th and C Streets NW, Room 2227, Washington, D.C. 20240, (202) 343-6901. The deadline is January 15, so don't delay if you are interested.

Volunteers can become part of the Volunteers in the Parks (VIP) program by applying directly to the superintendent of the national park area that interests you.

—Kimber Craine

## Thieves Dig Up Relics At Civil War Battlefield

On October 10, three men were arrested and charged with digging up more than 50 Civil War relics in Richmond National Battlefield Park's Cold Harbor unit. The battlefield commemorates two significant Civil War battles: George B. McClellan's peninsula campaign of 1862 and Ulysses S. Grant's campaign at Cold Harbor in 1864.

Using metal detectors, the men dug between 50 and 60 holes in the park's main area, and removed several bayonets, small cannonballs, grapeshot, buttons, and other artifacts. The digging began at 1:30 a.m. and continued for about four hours.

After noticing the men enter the park after hours, park rangers and Hanover County deputies joined in a stakeout, and remained hidden until the thieves attempted to leave.

"They almost walked right into my car," said Chief Ranger Charles Rafkind.

All three men were charged with several counts of violating the 1979 Archeological Resources Protection Act (ARPA). These counts include: possessing and using metal detectors

in a national park; destruction of natural resources; destruction and removal of archeological resources; theft and destruction of government property; and conspiracy.

This is the first known case of ARPA violators being caught east of the Mississippi River. The maximum penalty for each could be as much as \$24,000 and six years in jail.

"This is the largest known removal of artifacts from the park," said Rafkind.

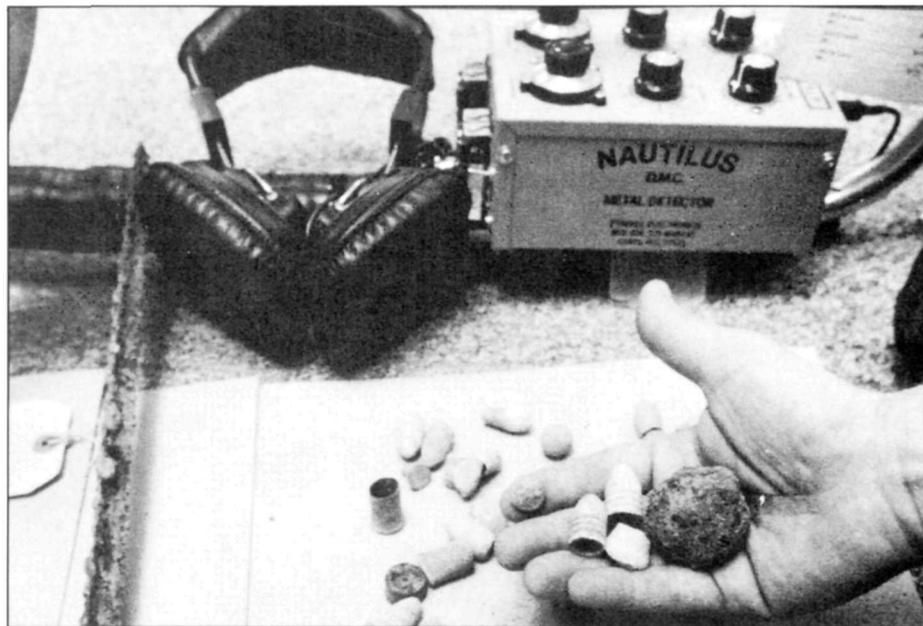
The artifacts themselves are of little market value, but what artifacts can tell historians and archeologists is often extremely valuable. Also, the National Park Service (NPS) is concerned about the damage to the landscape and to other artifacts.

Artifact thefts are not uncommon in our national battlefields and monuments; and the incidence of theft has increased during the past ten years because of the technological advances in the manufacture of metal detectors.

NPS officials hope the thieves will receive stiff penalties, which could deter others from looting park artifacts and pieces of our heritage.

—David Reyda, NPCA intern

This state-of-the-art metal detector was covered with black tape to avoid discovery and was recovered along with an Enfield bayonet, bullets, and casings.



## The Second Four Years: Changes in the Offing

With the elections over, conservationists are now looking toward the next few years and what they can expect from a second Reagan Administration. The President did not include any clear direction for environmental policy in his campaign, so conservationists are using the policies of the first four years as a guide to the second four.

With a crushing deficit to deal with, an obvious move for the Administration might be to cut the Land and Water Conservation Fund (LWCF), as it tried to do a few years ago. The LWCF, which is funded in large part by oil-company leasing fees, is a main source of money for parkland purchases.

Even though the Interior Department has balked at requesting more than minimal amounts for parklands, each of the past four years

Congress has substantially upped the amount of money that Interior requested.

Another Administration trend is an aggressive leasing program, which the Interior Department promoted as a way of obtaining revenue for the government. The most obvious leasing excesses—lack of competitive bidding, leasing parcels for a fraction of their worth, leasing environmentally sensitive lands—were curtailed.

Although the Administration has changed some of its leasing procedures, it has not fundamentally changed its ideology about leasing.

Interior Secretary William Clark may not be as controversial as his predecessor, James Watt, but conservationists expect many of the Administration's basic public lands policies to continue.

In mid-November a new wrinkle was created by the unexpected resignation of three top Interior offi-

cial: G. Ray Arnett, Assistant Secretary for Fish, Wildlife, and Parks; Garrey Carruthers, Assistant Secretary for Land and Minerals Management; and Kenneth Smith, Assistant Secretary for Indian Affairs. Conservationists believe the men, who were held over from Watt's tenure, were eased out to make room for Clark's own choices.

Of the three who resigned, Arnett has proved the biggest nemesis of conservationists, who often expressed outrage at his proposals. For example, Arnett was the chief proponent of killing cougars in Carlsbad Caverns National Park; and he led the fight to allow hunting and trapping in a number of park areas.

NPCA President Paul Pritchard said, "Our concern is not personalities, but rather policies. We believe that any effort by Secretary Clark to focus on and improve the management of the national parks is of great benefit.

"Assistant Secretary Arnett's background is clearly more oriented toward fish and wildlife and not toward park issues."

Some change is also expected among the congressional committees that deal with park issues. On the surface, the Senate Energy Committee has not changed much.

Former Senator Paul Tsongas (D-Mass.), who championed environmental issues—especially those concerning Alaska—has retired, leaving a seat open. Otherwise, the 21-member committee is expected to remain fairly stable.

As the most conservative member of the five Republicans who ran for Senate majority leader, Energy Committee Chairman James McClure (Idaho) was a strong contender in the opinions of many. McClure also chairs the Senate Interior Appropriations Subcommittee, which controls the purse strings for national parks and other public lands.

Senator Robert Dole (Kan.) was chosen as majority leader from a field that included other senators who sit on committees that affect the environment: Senator Pete Domenici (N. Mex.), Energy Committee; Senator Ted Stevens (Alaska), Interior Appropriations Subcommit-

## Senator Chafee Honored as NPCA Conservationist of the Year

In recognition of his continued support for the environment, NPCA presented Senator John Chafee (R-R.I.) with its 1984 Conservationist of the Year Award. This past year, Senator Chafee introduced a wide-ranging bill that would protect wildlife and their habitats in and around national parks; he was one of the initial sponsors of the 1982 Coastal Barrier Resources Act; he led the fight against the jetty plan for Cape Hatteras; and he has been a consistent supporter of clean air and water. Below: Chafee (left) receives his award from NPCA Board Chairman Stephen McPherson at the annual dinner on November 15.



Mark Kaminsky

## News Update

### American Conservation

#### Corps Veto.

On October 30 President Reagan vetoed the American Conservation Corps bill, which Congress had passed a couple of weeks earlier. The bill would have benefitted both federal lands and unemployed youth. Representative John Seiberling, chairman of the House Subcommittee on Public Land and National Parks, said of the veto: "President Reagan likes to say that Franklin Delano Roosevelt is his hero. But given another opportunity to emulate Mr. Roosevelt, Mr. Reagan flunked again."

**Tuolumne River Saved.** The California Wilderness Act, passed by Congress this autumn, designates the Tuolumne as part of the Wild and Scenic River System. This designation negates water diversion plans that would have degraded the river. Organizations such as American Rivers Conservation Council worked hard to get the Tuolumne and the Verde River in Arizona designated—the only two rivers added to the Wild and Scenic System in almost four years.

**Glacier Highway Solution.** After years of wrangling, conservationists and the Montana Highway Department have settled the dispute over Highway 2—the main approach to Glacier National Park. The highway department had argued to widen the dilapidated two-lane to a four-lane, which would have disrupted wildlife migration. Because of the diligence of Sharlon Willows and others, the compromise solution states that the section of highway nearest the park will be repaired, but only

widened to three lanes on hills and for left turns. Plants will be added on the verge of the highway to provide cover for wildlife.

**Wind Cave Out of Danger.** South Dakota's push to take over management of Wind Cave National Park is now on a back burner. Though the issue may arise again, the state's interest has waned for two reasons. The threat of brucellosis, a disease that affects bison and cattle, has been reduced at Wind Cave and, thus, at the adjacent state park. Also, the park is now willing to provide the state—and, ultimately, hunters—with surplus elk from the park herd.

**Upper Delaware Opponent Fired.** The Upper Delaware Citizens Alliance (UDCA) has fired advisor Charles Cushman, who also heads the National Inholders Association, because of a disagreement over money. Cushman was advising the UDCA on how to oppose certain policies at Upper Delaware Scenic and Recreational River. It is widely believed that Cushman contributed to a fevered atmosphere against the National Park Service in that region.

**Action at End of Congress.** Just before it adjourned for the November election buildup, Congress added approximately 500 acres to Chattahoochee River National Recreation Area. Congress also appropriated \$75 million for parkland purchases from the Land and Water Conservation Fund. In addition, NPS managers at Fire Island will be able to get 180-day restraining orders on any development that would harm that national seashore. An order would allow the NPS time to negotiate with the developer.

tee; and Senator Richard Lugar (Ind.), whose accession would not have seriously affected environmental concerns.

If McClure had won, the chairmanship of the Energy Committee would have come into question because Senator Lowell Weicker (R-Conn.) is next in line as chairman. The position traditionally goes to a senator from the West because the public land issues that the Energy Committee handles concern mostly western lands.

The House Subcommittee on Public Lands and National Parks, chaired by Representative John Seiberling (D-Ohio), is the starting point for most park legislation on the House side. Except for the loss of one Democratic seat, this crucial subcommittee will remain the same.

The full Interior Committee,

chaired by Morris Udall (D-Ariz.), will change and environmentalists see tougher battles ahead. Potentially, the Democrats have six seats to fill on the committee because of election losses. Few obvious environmental advocates stand out as possible committee members.

The Republicans have one open seat and may pick up another if recent Republican election wins are divided among committees.

The House Interior Appropriations Subcommittee, chaired by Representative Sidney Yates (D-Ill.), will not face the amount of changes confronting the Interior Committee. However, one of the most pro-park legislators, Representative William Ratchford, (D-Conn.) was not re-elected. At this time it is not clear if his position on the committee will be filled and, if so, by whom.

### Concern for Harvesting Of Timber Near Bandelier

NPCA is concerned about upcoming timber harvests in the area around Bandelier National Monument, New Mexico. The Forest Service bids out selected areas of the national forests for timber harvesting; and some of these sites lie in the Dome Area adjacent to and within view of Bandelier.

Russ Butcher, NPCA Southwest and California Representative, commended the Forest Service for the careful timber harvest on Sawyer Mesa, also next to Bandelier.

However, Butcher did point out, "I think a thorough study of the Sawyer Mesa area—with a multi-agency team—would be helpful to see what, if any, impacts upon archeological sites may have occurred."

## Operation Trophy Kill Nets Wildlife Poachers

Operation Trophy Kill has succeeded in breaking up four rings of wildlife poachers that have been killing bighorn sheep, eagles, bears, and other animals in Yellowstone National Park and the surrounding ecosystem.

The 34 people indicted so far are part of an organized criminal effort to sell animal parts on the world

black market. Elk antlers and bear gall bladders are sold in the Orient and bighorn sheep heads are bought as trophies for decorating walls.

The National Park Service, Fish and Wildlife Service, Forest Service, Montana Game and Fish, and a number of U.S. marshalls have been working to uncover illegal poaching during the past three years. Because the problem is so extensive, the sting operation will continue.

The poachers not only sold animal parts from Yellowstone, but they also imported jaguars and ocelots illegally killed in Mexico. The Trophy Kill team arrested poachers in California, Oklahoma, and Colorado, as well as in Montana. In one case, bail was set at \$350,000, which is the highest amount ever for a wildlife poaching crime—and is some indication of how serious this problem has become.



Taxidermy work was part of the illegal poaching operation that included killing the bighorn sheep shown above.

U.S. Fish and Wildlife Service

### 19 State Wilderness Bills Pass Congress During 1984

Congress passed 19 state wilderness bills during its ninety-eighth session for a total of 8.2 million acres. Below is the final tally with the number of wilderness acres gained by each state. In California, Yosemite and Sequoia-Kings Canyon national parks gained 681,150 and 736,980 acres of wilderness, respectively.

#### Passed/Signed into Law

Arizona	1,043,930
Arkansas	91,103
California	3,200,000
Florida	49,000
Georgia	14,439
Mississippi	5,500

Missouri	16,500
New Hampshire	77,000
North Carolina	68,750
Oregon	859,300
Pennsylvania	9,705
Tennessee	24,942
Texas	34,346
Utah	750,000
Vermont	41,260
Virginia	56,000
Washington	1,029,250
Wisconsin	24,339
Wyoming	884,049

#### Not Passed in 1984

Alabama
Colorado
Idaho
Montana

### Park Advisory Board Puts Landmark Studies on Hold

In late October, the National Park Service Advisory Board recommended that the NPS halt further work on two important historic landmark studies: the "Man in Space" study and the "War in the Pacific" study. The studies must be completed before landmarks can be designated. Only two years earlier the Board had taken the NPS to task for not completing landmark studies. Apparently, the armed services are opposed to preserving space launch complexes and World War II sites because of planned development.

*NPCA Report continued on page 40*

OFFICIAL COMMEMORATIVE ART PRINT  
*Great Smokies 50th Anniversary*



*Wild Heritage* by Lee Roberson IMAGE SIZE 24"x16"

*"It seems fitting that artists Lee and Dolores Roberson, whose farmstead/gallery is nestled in a remote mountain cove of Smoky Mountains National Park, should be chosen to create the official limited edition art print and official art poster commemorating the 50th Anniversary of the Great Smokies."*

—ART BUSINESS NEWS, September 1984

The very essence of our most visited national park — The Great Smokies — has been captured in this superb work. It is available, while it lasts, as a limited edition signed and numbered print, on fine quality art print paper. Artist Lee Roberson, a native son of this mystical and captivating land, has produced a fitting tribute for this special occasion. Like the morning mist over these ancient mountains, this opportunity will soon be gone — get yours, now, before the supply is sold out.

NATIONAL PARKS AND CONSERVATION ASSOCIATION  
1701 18th Street, N.W., Washington, D.C. 20009

Please send me \_\_\_\_\_ copies of WILD HERITAGE by Lee Roberson. I have enclosed my payment of \$\_\_\_\_\_ (\$55 per print). I understand that shipping and handling is included in the purchase price, and if I am not 100% satisfied I can return the print(s) in their original condition for a full refund.

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

# Images

## A Conversation With Photographer David Muench

by Marjorie Corbett

For the past twenty years, David Muench photographs have shown up on hundreds of calendars, art books, posters, and park interpretive displays. He has become one of the select few nature photographers whose work encompasses the entire national landscape yet projects a very personal viewpoint.

When asked about his personal mission to express the outdoors in photographs, Muench says, "I grew up with it. My mother was a travel writer and my father is a nature photographer—he's been with *Arizona Highways* since it began. I traveled the Southwest with my parents and watched them work from an early age."

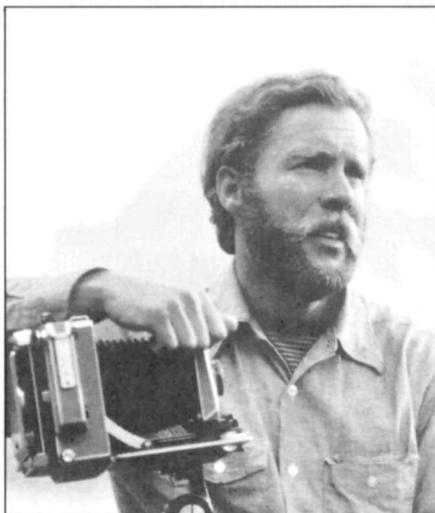
Muench received art training when young, but he says a knowledge and appreciation of the outdoors are what make good photographs.

"I have a deep love for the outdoors, and during the time I spent in the Southwest I developed a strong relationship with the landscape and plants of that area."

Muench specializes in "plant-scapes" more than wildlife shots; and, in creating these images, he flatly states, "I avoid technical books. I use a direct relationship with nature to work with each landscape on a personal level."

Since 1964, Muench has spent most of his time away from his home base in Santa Barbara, exploring the western United States with a 4x5 camera and tripod. Staunchly avoiding commercial assignments, he goes wherever he can find a touch of the primeval. He returns repeatedly to favored sites, trying to capture the range of seasons and the full spectrum of light.

"My heart and mind remain in Canyonlands, the San Juan Moun-



Bonnie Muench

---

*"I've tried to express with each photo a sense of place—a sense of three-dimensionality—that is more powerful than the photo itself."*

---

tains, and the countless forms of Arches National Park," Muench says.

Yet, his forays outside the Southwest have produced a number of books and thousands of photographs of seashores, eastern historical parks, the Rockies, and the Sierra Nevada.

David Muench feels a little uncomfortable talking about his photographs. He says he likes his pictures to speak for themselves.

"I've tried to express with each photo a sense of place—a sense of three-dimensionality—that is more powerful than the photograph itself.

"I try to show the tension and mystery in a natural scene rather than an exact replication of detail. I also want to show the fourth dimension, time. In the Grand Canyon, a million years are expressed in rock. I try to show how the present forms are tied to a primeval past."

One technique Muench uses to show these dimensions is exagger-

ated framing of distant images with closeup details, so that the viewer feels present in the scene. "The foreground must be sharp to give a sense of where you are, not just a view of a distant scene. It's not 'framing' so much as placing the mind where the feet are."

Muench's sharp foregrounds and distant vistas are explained, in part, by his mastery of the 4x5 format camera, which allows far greater depth-of-field than most 35mm cameras. But there's more to it than technique. Muench believes in keeping his images accessible and intimate.

"I really stick to trying to create images. I never think about my travels in the outdoors as adventures. It's a very internal experience for me. We climb peaks, and I take pride in making the top with a 4x5 camera.

"I'd spend half my life on rivers, if I could, but never just for the sake of adventure."

As he avoids adventure for adventure's sake, Muench also stays away from traveling in groups. He works alone, or with his partner and wife Bonnie.

"I avoid group situations. Even with the environmental movement, I'm not much of a joiner."

Muench's work, however, has made him painfully aware of threats to the wilderness he portrays. Still, he maintains a steadfastly optimistic view.

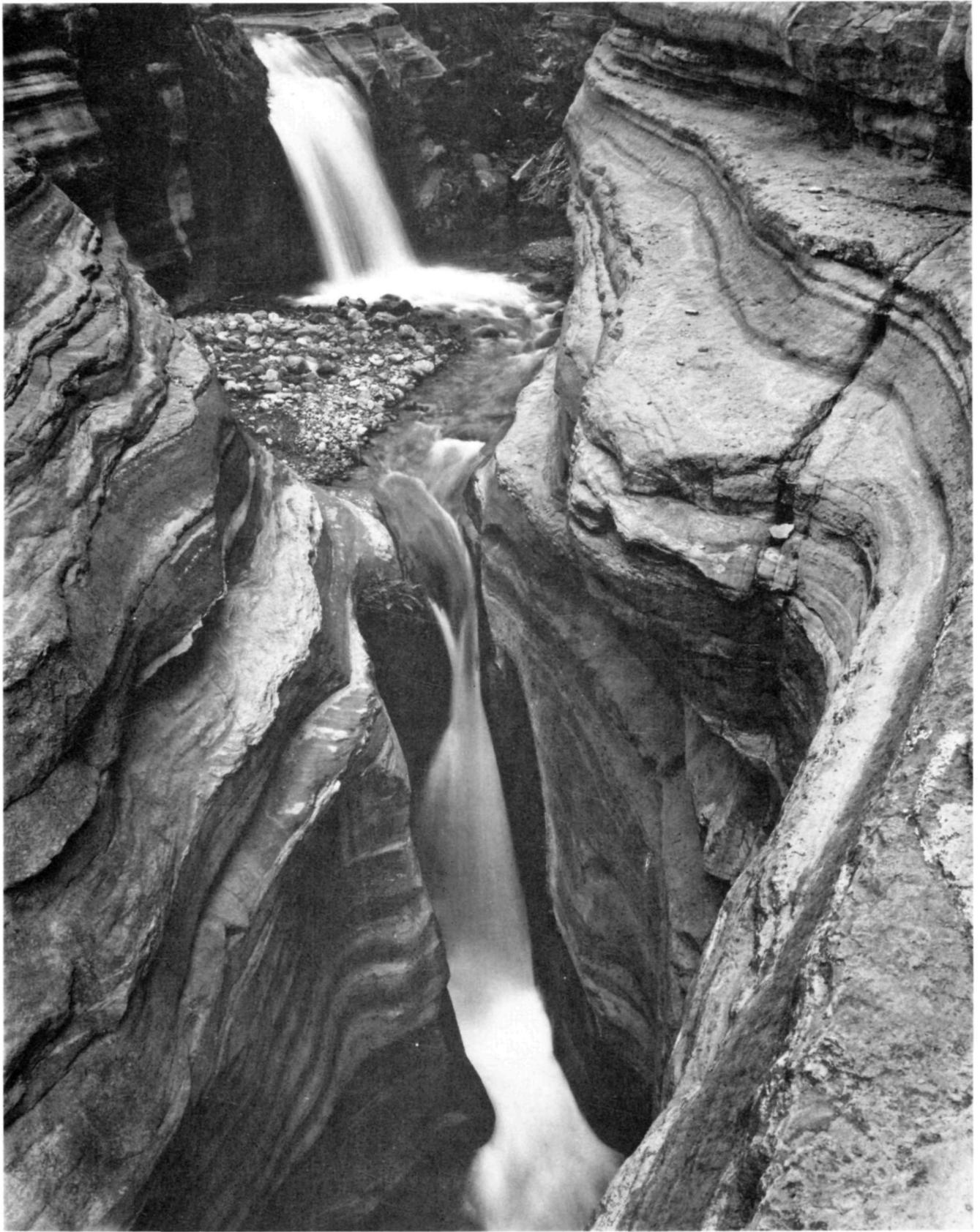
"I still like to look at Yosemite Falls, the Grand Canyon—the classic park scenes. It's the feeling of escape from the cities, the pressures of modern living, that I look for and still find in the parks."

Although Muench is tempted to travel to the wild rivers of Central America and to the Himalayas, he finds more than enough to document in the landscapes of this country. He has completed five books including *Desert Images* and *Colorado*.

David Muench's most recent book, *Nature's America* (Arpel Publishing, 1984), is a personal monograph that features a range of selected works.

---

*Marjorie Corbett is a regular contributor to National Parks.*



Upper Deer Creek Falls, Grand Canyon National Park; photo by David Muench



## Rescue Your Feet From the Icy Cold! Do You Have Cold Feet?

Now you can chase away the cold and cradle your feet in natural sheepskin warmth! Discover **UGG-BOOTS**, the sensation from Australia, now in America!

Sheepskin is one of nature's finest insulators. It is warm, soft and light. **UGG-BOOTS** are handcrafted from the finest Australian sheepskin. A full 1/2" of fleece lining surrounds your feet with soothing comfort. With their lightweight rubber soles, you can wear your **UGG-BOOTS** after ski, after work, indoors or out.

Bathe your feet in natural sheepskin comfort! Satisfaction guaranteed or your money back! Mail this coupon today or phone (203) 655-9409. Colors: Brown, White  
Sizes: Men/Women 3-12 (no half-sizes)

Style	Price	Specify		
		Size	Color	Sex
Ankle High	\$49.95			
Calf High	\$59.95			
Knee High (shown)	\$69.95			
Knee lace-Up	\$79.95			

Add \$2.95 SHP/HDLG. Conn. residents add 7 1/2%

Check enclosed       VISA       M/C  
Card No. \_\_\_\_\_ Expires \_\_\_\_\_

Include NAME, ADDRESS, CITY, STATE & ZIP

Aus Imports, 45 Hecker Ave., Darien, CT 06820 #NPO185

**More Information**



**National Parks**

- Alaska Discovery
- Alpine Adventure Trails
- Aus Imports
- Norman Berger Productions
- Deva Natural Clothes
- Freeform R & D
- Koksetna Camp
- Maupintour, Inc.
- Outdoor Alaska
- P & S Sales
- Questers Tours & Travel
- TrailWind Travel, Ltd.
- Wilderness Southeast

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_

Send to: National Parks, Advertising  
Office, Ten Beech St.,  
Berca, OH 44017

Jan/Feb 1985

NPCA Report continued from page 36

## Philadelphia Open House An NPCA Special Event

NPCA will be hosting a Philadelphia Open House May 16 to 19 in order to present the best of historic interpretation in combination with views of famous landmarks.

In conjunction with Travel Anywhere, NPCA will showcase three centuries of history, antiques, and art during the tour. Philadelphia Open House includes accommodations in a landmark hotel, twilight walks through Society Hill's 18th-century streets, and self-guided tours of historic homes, carriage houses, and gardens. Park interpreters will bring to life the events of America's "most historic square mile"—Independence National Historical Park.

The open house also includes a special tour of Valley Forge National Historical Park and Maxwell House, which the National Park Service has not yet opened to the public.

For more information, contact NPCA, Philadelphia Open House, 1701 18th St. NW, Washington, D.C. 20009, (202) 265-2717.



National Park Service

A tour of Independence National Historical Park (above) will be one of the highlights of NPCA's tour of the City of Brotherly Love.

## Globescope Takes On World Environment

From April 17 to 21, national and international conservation leaders will participate in the Globescope conference to be held in Portland, Oregon.

NPCA, a cosponsor of this conference, and other organizations will discuss our planet's current environmental state; the impact of international and U.S. domestic policy on the global environment; and ways to encourage positive involvement in these issues by individuals and organizations.

Topics will include everything from genetic diversity in wildlife to hazardous exports and acid deposition. Workshop participants will include not only conservationists, but also people from many other fields—journalists, corporate planners, educators, and concerned individuals.

David Lesh, director of the Global

Tomorrow Coalition, which is organizing the conference, states: "Global Tomorrow recognizes that there are no simple solutions to long-term global challenges. . . . [but] Globescope is particularly exciting because it represents a major step toward one of our goals: to expand the dialogue on long-term global issues at the community level across the United States."

The goals of Globescope are:

- increasing public understanding of long-term trends in the global environment;
- encouraging involvement by individuals and nongovernmental organizations at the local level;
- highlighting the U.S. role and responsibility in meeting these environmental challenges.

For further information contact: Diane Lowrie, Globescope National Coordinator, P.O. Box 15264, Portland, Oregon 97215, (503) 232-3495.

—Kimber Craine

## Fish & Wildlife Service Plans Camping, Photo Taxes

A plan is afoot to raise funds for nongame wildlife and their habitats on federal land. Campers, hikers, national park visitors, and others may not argue with the worthiness of such a goal, but the sources of these funds have some people worried.

The U.S. Fish and Wildlife Service, which is in charge of the program to find nongame revenues, completed a proposal in November. Their proposal would add excise taxes—as much as 10 percent—to a wide range of items used by visitors to the national parks and other public lands.

The Fish and Wildlife Service list includes tents, sleeping bags, and other camping equipment; photographic equipment and film; birdseed; motor homes; and diving equipment.

According to the Fish and Wildlife Service plan, a camper interested in purchasing a \$300 tent would have to pay as much as \$30 extra as part of the nongame wildlife tax.

In addition, the plan suggests new use fees for federal lands and waters. Hikers, campers, boaters, and others would pay a couple of dollars extra to use areas administered by the Forest Service, the Bureau of Land Management, and other federal agencies.

In its guidelines, the Fish and Wildlife Service states that it should examine the relationship between potential revenue producers and the program's beneficiaries—the wildlife on our public lands.

Hikers are questioning their relationship to nongame wildlife programs, and are therefore questioning the need for the tax to come directly from hikers and others involved in similar recreation.

Another source of money might be appropriations from the U.S. Treasury's general fund.

NPCA is concerned about the Fish and Wildlife Service plan, which could be brought up in Congress early this year. The association would like to hear your opinion and has included the accompanying survey on taxes and fees.

## Survey

### Equipment Taxes and Trail Fees

- |   | YES                      | NO                       |
|---|--------------------------|--------------------------|
| 1. a. Hikers should pay excise taxes on their purchases of hiking equipment.  | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Hikers should pay fees for use of trails.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. If Congress decides to raise money from hikers, the less objectionable choice is: (circle one)   |                          |                          |
|   | Excise Taxes / Use Fees  |                          |
| 3. If Congress legislates excise taxes or use fees, the funds should be spent for:  |                          |                          |
| a. trails and backcountry camping   | <input type="checkbox"/> | <input type="checkbox"/> |
| b. "nongame" wildlife (as proposed in the <i>Federal Register</i> )   | <input type="checkbox"/> | <input type="checkbox"/> |
| c. management of wilderness areas   | <input type="checkbox"/> | <input type="checkbox"/> |
| d. backcountry search and rescue  | <input type="checkbox"/> | <input type="checkbox"/> |
| e. all general programs in parks, forests and other public lands  | <input type="checkbox"/> | <input type="checkbox"/> |
| f. any federal government expense   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. As an alternative to daily use fees, hikers should be able to purchase an annual entry permit, such as the Park Service's Golden Eagle Passport. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Only hikers who cause heavy impacts—such as hikers who camp overnight or hikers who enter fragile biologic areas—should be charged use fees.     | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. I would reduce my usage of trails where use fees were charged.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. I would reduce the number, quality or frequency of my equipment purchases if a 5-10% excise tax were charged.                                    | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. a. Do you buy birding books and/or equipment?  | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Do you use birding equipment on public lands?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. a. Do you buy photographic equipment?  | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Do you use photographic equipment on public lands?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. a. Do you buy camping/hiking equipment?   | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Do you use camping/hiking equipment on public lands?   | <input type="checkbox"/> | <input type="checkbox"/> |

Comments:

Please Return to: NPCA Tax Survey, 1701 18th St., NW, Washington, D.C. 20009

## OLYMPIC NATIONAL PARK FIELD SEMINARS 1985

Experience this great park with a 2-5 day field course in natural history, art, photography, backpacking and many others.

To Receive a Brochure, Contact:

### Olympic National Park Field Seminars

600 East Park Avenue  
Port Angeles, WA 98362-6798  
Telephone: (206) 452-4501 Ext. 227



## FAMOUS FEDORA

19<sup>95</sup>

Money-back  
Guarantee

A revival of an old favorite. You saw a fedora like this in "Indiana Jones & the Temple of Doom" — reminding us all of how much adventure a man in a fedora can find. Our version is of special wool felt, finer textured and stiffer for improved shape retention over ordinary felts. Features a tapered 5" crown with triangular crease and 2 side licks, a 2 1/2" brim and a deep brown grosgrain band. Fully lined with rayon satin. Sizes 6 3/4 thru 7 1/2 (runs large).

We honor VISA and MASTERCARD  
Call Toll Free 800-334-5476  
Write for FREE Catalog:

**P&S Sales** Dept. NP-15  
P.O. Box 1600, Chapel Hill, NC 27515



## QUESTERS

### The world through nature tours.

Travel with a purpose.

Search out plants and animals, birds and flowers. Explore rain forests, mountains and tundra, seashores, lakes and swamps. With Questers you have ample time to photograph, absorb, reflect. Your guide is a naturalist, tour parties are small, accommodations first-class.

Our current Directory of Worldwide Nature Tours describes tours to: *In the Americas*—Okefenokee, Alaska, Hawaii, Canadian Rockies, Churchill, Mexico, Amazon, Patagonia, Galapagos, Peru; *In Asia*—Nepal, Bhutan, Sri Lanka, Japan; *In Australasia*—New Zealand, Australia, Papua New Guinea; *In Africa*—Madagascar, Mauritius, Kenya; *In Europe*—Iceland, Greece, Ireland, Switzerland, Scotland.

Learn and discover with Questers. Write or call today for your free copy of the Directory of Worldwide Nature Tours.



## QUESTERS

Worldwide Nature Tours  
Dept. NPC, 257 Park Avenue South  
New York, NY 10010 • (212) 673-3120

## Peregrine

*Continued from page 11*

several hours before realizing that they would rather be fed than sat upon.

In hacking, six-week-old peregrines are taken from the breeding chambers and placed in plywood hack boxes, which are located on inaccessible rock ledges and have barred front doors that allow the birds visual contact with the outside world. Researchers feed the birds and remove the hack box door after about a week, when the birds are ready to fly. The peregrines freely return to the box until they are able to feed themselves, which takes up to ten weeks.

**T**he peregrine season begins in Dinosaur in March or April when adult and yearling birds return to nesting sites in the monument. The peregrine team looks for birds at eyries that have histories of occupation and at other likely sites. NPS seasonal employees observe the birds during courtship, egg-laying, and incubation, precisely recording these events because successful manipulation depends on careful timing.

Toward the end of April, about a week after incubation begins, Jerry Craig arrives with his assistants to remove the fertile eggs. Craig does not like climbing, especially when it involves rappelling 600 feet down a sheer cliff; but it is often the only way to reach eyries.

When he finds a ledge where a peregrine pair is nesting, Craig removes the eggs and puts them in a rigid foam container in his climbing pack and places plastic dummies in the nest. He returns fledglings to nests in a similar fashion.

The hack sites are not operated until May or later and observers stay on at both the hack sites and the eyries until the birds have dispersed from the monument, which may be as late as September.

Dinosaur's peregrine release program has been quite successful, especially by endangered species standards. More than 60 percent of the birds survive to dispersal.

The survival rate would be even higher, says Bill Burnham, manager of the Fund's Rocky Mountain peregrine program, if immature peregrines did not suffer predation by golden eagles and great horned owls. Little can be done about these losses, however, except to try and scare away the predatory birds.

Ultimately, the survival rate—not the number of birds returning to the monument—is the final measurement of success. The purpose of the program is not limited to increasing the peregrine population at Dinosaur, Petersburg points out. Rather, the goal is to establish a core group of birds to populate the region.

**R**epresentatives of the cooperating groups express great enthusiasm for the Dinosaur project, which Petersburg says is working "exceptionally well" and Burnham calls a "super cooperative effort." The project—including hacking and direct fostering—may continue in the monument for 10 more years, or until a reliable number of nestings are documented for several successive years. The ultimate duration of the Dinosaur program depends on many factors, not the least of which is the use of insecticides containing DDT in the United States and in South America, where DDT spraying is still permitted.

Next year, Petersburg and Craig plan to operate two hack sites and to manipulate two to three eyries, placing three or four fledglings at each location. They hope that four to six nesting pairs eventually will settle in Dinosaur to live and reproduce.

Their overriding concern at all times, according to Petersburg, is the preservation of this remarkable and graceful raptor.

"It's an exciting thing," Jerry Craig says. "On the one hand it can be dismal to deal with an endangered species—the expenses and logistics of trying to save it and so forth. What's great, though," he continues, "is that it's working—the peregrine is one of the few endangered species that is coming back."

*Justin Lowe is a conservationist and part-time writer for National Parks.*

# National parks

# TRAVEL TOUR GUIDE



**TailWind Travel Ltd.**

3608 Darby Rd., Bryn Mawr, PA 19010

Two Summer 1985 Small Group Tours

Walk the coastal paths, inn-hop Devon/  
Cornwall England. British humour, wildflowers, birds,  
quaint villages and harbours, castles and local pubs.

Accompany Archaeologist/Curator to U.S. Southwest  
mountains, canyons. Santa Fe, crafts, Indian Cultures.

Drawstring pants, tops,  
skirts & more. Timeless  
styles, gentle prices. in . . .

**PURE COTTON**

FREE CATALOG SWATCHES 50¢

Deva, a Cottage Industry  
Box NPX5, Burkittsville, MD 21718  
(301) 473-4900



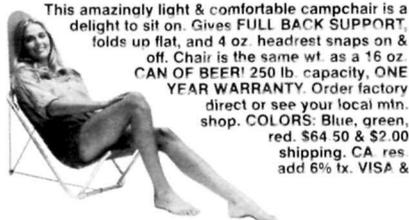
## ALASKA DISCOVERY



Alaska's oldest and most respected guiding  
company offers wilderness adventures by kayak,  
canoe, raft, backpack and skis. Completely  
outfitted expeditions into the wilds of Glacier Bay,  
Admiralty Island, W. Chichagof, Russell Fjord,  
Tatshenshini/Alsek and Stikine rivers. **Group  
and specialty trips** for photographers, fisher-  
men. University credit available. Experienced,  
certified Alaskan guides. **Limited party size.**

For information write P.O. Box 26NP, Gustavus,  
AK 99826. Phone (907) 697-2257.

## Sling-Light



This amazingly light & comfortable campchair is a  
delight to sit on. Gives **FULL BACK SUPPORT**,  
folds up flat, and 4 oz. headrest snaps on &  
off. Chair is the same wt. as a 16 oz.  
**CAN OF BEER!** 250 lb. capacity, **ONE  
YEAR WARRANTY.** Order factory  
direct or see your local mtn.  
shop. **COLORS:** Blue, green,  
red. \$64.50 & \$2.00  
shipping. CA res.  
add 6% tx. VISA &

MC or check. Shipped within 48 hrs. via U.P.S.  
**SATISFACTION GUARANTEED OR FULL REFUND!**  
Since 1977 by:

**SEND FOR FREE INFO.**

**FREEFORM R & D**  
1539 Monrovia Ave. #23 N  
Newport Beach, CA, 92663  
(714) 646-3217

## GET INTIMATE WITH A WILD PLACE!

### Naturalist Led Expeditions

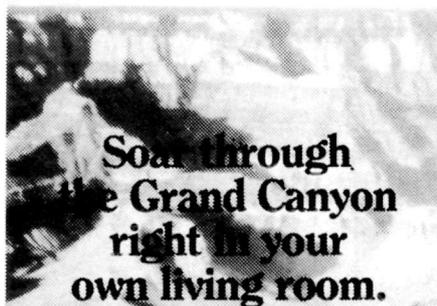
Bahamas, Smokies, Georgia  
Islands, Okefenokee, Everglades,  
Summer Camps



Wilderness Southeast  
711 NP Sandtown Rd.  
Savannah, GA 31410  
(912)897-5108

non-discriminatory

It's vacation planning time!  
Support our advertisers and  
plan a trip with them!



Soar through  
the Grand Canyon  
right in your  
own living room.

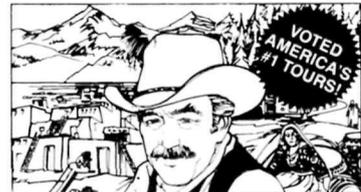
A gripping, 2 hour aerial adventure  
you'll never forget.

Five years in the making, this life-like videotape  
takes you on the most thrilling panoramic flight  
ever recorded of the Grand Canyon. You'll shoot  
the rapids and soar through narrow gorges to  
breath-taking music. A must for every VCR li-  
brary. Available in VHS or Beta — \$49.95  
Hi-Fi or Stereo — \$59.95

Send check or money order to:

Norman Beerger Productions®  
3217 S. Arville Street Call Collect  
Las Vegas, Nevada 89102 702-876-2328

Postage and handling included along with Grand  
Canyon map and route of flight and geological  
data. Dealer inquiries invited. Allow 3 weeks for delivery.



## Maupintour Escorted Tours

Make sure you see the most, all you  
should see. Great fun, most meals,  
companions with same interests,  
good people. Escorted tours include:

- |  |  |
|--|--|
| <input type="checkbox"/> Death Valley      | <input type="checkbox"/> Arizona,              |
| <input type="checkbox"/> National Parks    | <input type="checkbox"/> Grand Canyon          |
| <input type="checkbox"/> Colorado          | <input type="checkbox"/> New Mexico            |
| <input type="checkbox"/> Oregon            | <input type="checkbox"/> Idaho                 |
| <input type="checkbox"/> California        | <input type="checkbox"/> East Coast            |
| <input type="checkbox"/> Pacific Northwest | <input type="checkbox"/> Canada, East and West |

Send for folders to Maupintour, 1515  
St. Andrews Dr., Lawrence KS 66044  
PHONE 800-255-4266 TOLL FREE.

quality  
escorted tours  
since 1951



name \_\_\_\_\_

address \_\_\_\_\_

city/state/zip \_\_\_\_\_

npc-est-5

## KOKSETNA LODGE

Lake Clark National Park & Preserve  
for a wilderness experience you will  
always treasure

- hiking
- boating
- wildlife and bird observation
- photography
- quiet

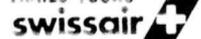
Write: Hornberger  
KOKSETNA  
P.O. Box 69  
Iliamna, Alaska 99606

## SWISS ALPS

Moderate DAY hiking tours, 2 or 4 weeks. Ride up above tree  
line and hike down. Over 50 optional length hikes basing one  
week at 10 charming mountain villages in 3 or 4 star hotels.  
Write for free brochure.

ALPINE ADVENTURE TRAILS TOURS

7831 Cliffside Dr.  
Akron, OH 44313



## MISTY FJORDS

NATIONAL MONUMENT TOURS  
50' MV. *Misty Fjord Day*  
Cruise and Overnight Kayaking.



Dale Pihlman  
Box 7814 NP  
Ketchikan, AK 99901  
(907) 247-8444  
225-3498



# Classifieds

75¢ per word—minimum \$12.00. Send copy with check to Classified Advertising Manager, National Parks, 10 Beech Street, Berea, OH 44017, or call 216/243-8250.

## Travel/Tours

**NATURALIST'S DELIGHT!** Baja California, Mexico. Abundant Birds, Marine Mammals! Sea of Cortez Islands! Desert Flowers! Cave Paintings! Pacific Lagoons! Photographer's Paradise! Personalized Wilderness Travel since 1966. Write for Brochure: Baja's Frontier Tours, 3683-B1 Cactusview Drive, San Diego, California 92105. (619) 262-2003.

**SOUTHWEST ARCHAEOLOGY.** Nine-day camping safari to archaeological sites in New Mexico and Colorado. Fully escorted by professional guides. June 15-23, 1985. \$725.00 per person, complete. **DESERT TRAILS TOURS**, P. O. Box 1923, Barstow, CA 92311. (619) 256-3430.

**NEW ZEALAND/AUSTRALIA WALKABOUTS:** Escorted and independent hiking and nature tours. New Zealand's scenic National Parks and Milford Track; Australia's Outback and Great Barrier Reef. **PACIFIC EXPLORATION CO.**, Box 3042-W, Santa Barbara, CA 93130. (805) 687-7282.

**EXPLORE SONORAN DESERT** Archeology, Ecology, Birding. Small camping groups. Ten-day winter trips. **LEARNING ADVENTURES**, 1556 Georgia, Boulder City, Nevada 89005.

**EXPEDITIONS** July 1985 East Africa; Kilimanjaro and

Mt. Kenya. January 1986 Hike and Climb in New Zealand. July 1986 Peru; Pucaranra, Chinchey, San Juan, Huascarán. Inquire: Iowa Mountaineers, P.O. 163, Iowa City, Iowa 52244.

**CANYONLANDS EDVENTURES. FAMILY LEARNING VACATIONS.** Canyonlands and Arches National Parks, Colorado River. Natural history-geology-archeology. Rafting, horseback jeeping, motel/camping options. Canyonlands Field Institute, Box 68P, Moab, UT 84532.

**DEATH VALLEY and MOJAVE DESERT:** Guided camping safaris via 4-wheel drive vehicles. Scheduled and custom tours. Brochures. **DESERT TRAILS TOURS**, P.O. Box 1923, Barstow, CA 92311. (619) 256-3430.

**ALLAGASH CANOE TRIPS.** Wilderness adventure in Maine and Canada. Trips for teens, adults, families. Brochure. Warren Cochrane, Box 713, Greenville, Maine 04441.

## Jobs Available

**SUMMER JOBS - Alaska - Denali Park (McKinley Park) Hotel jobs, transportation, tour drivers, etc. . . .** Send for an application. **ARA Outdoor World**, 307 S B St., San Mateo, CA 94401.

## Real Estate/Rentals

San Juan Islands, Washington State. Some of the most inviting property in the world. Year round boating and fishing in protected Puget Sound. Mild marine climate. Quiet, uncomplicated island living in a safe, clean, unspoiled environment of extraordinary beauty. Strict, protective land use planning. Striking waterfront, farms, spectacular view sites, quality homes in wide price ranges. Ask for our portfolio of homes and properties and information on island living. **Century 21 Dave Church Realty, Inc.**, PO Box 276, Eastsound, WA 98245. (206) 376-2262.

## Schools

**COLORADO OUTWARD BOUND SCHOOL.** Outdoor excitement in the Rockies, Utah canyonlands, and on the rapids. Ages 14 and up. Contact 945 Pennsylvania St., Dept. NP, Denver, Colorado 80203. (303) 837-0880.

## Resorts/Ranches

**IDAHO WILDERNESS.** Small family homestead on beautiful Selway River. No roads. Access by horseback along historic Nez Perce Trail. Comfortable cabin accommodations, home-style meals, fine trout fishing, riding, hiking, nature study. Two weeks - \$895. Selway Lodge, Box 1100-N, Hamilton, MT 59840.

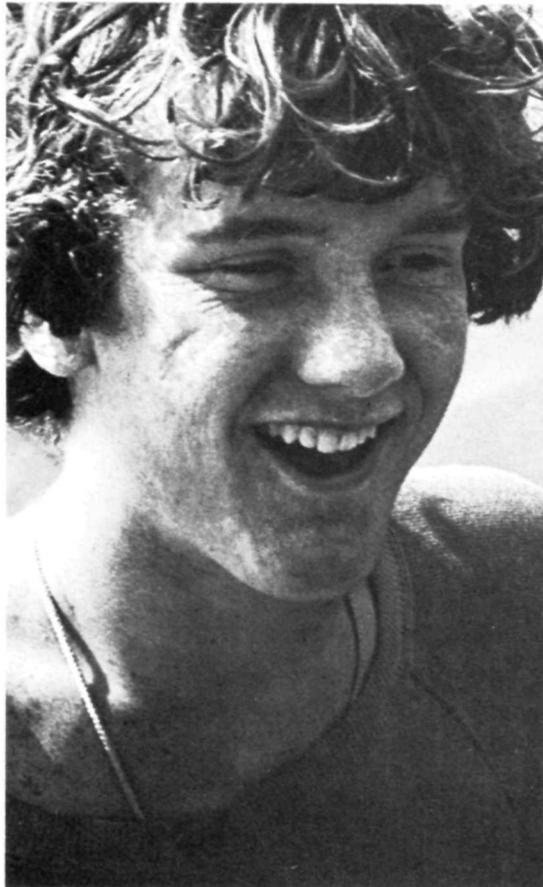
**LOS PINOS RANCH,** Cowles, New Mexico, near Santa Fe, Peco Wilderness. Accommodates 16 in relaxed atmosphere. June to October. No poisonous snakes, scorpions, mosquitoes. Magnificent riding, trips, trout, excellent food. Address: 13 Craig Road, Morristown, NJ 07960, May to September, Rt. 3, Box 8, Tererro, NM 87583.

From **DOUBLE K**, hike Washington's William O. Douglas and Norse Peak Wilderness, Rainier National Park. Comfortable Accommodations. Excellent Food. Brochure. Goose Prairie, WA 98929.

**MIDDLETON RANCH** in southern Arizona accommodates 8 in comfortable ranch house. Excellent riding, food, Jacuzzi, and pool. Ideal for small groups who enjoy privacy. Bed & Breakfast or full service September-April; single, double, group rates. Write **MIDDLETON RANCH**, P.O. Box 504, Amado, Arizona 85640.

## Merchandise

**AMERICA'S FINEST SQUIRREL/STARLING-PROOF DIALABIRD FEEDERS, HOMES.** Free Catalog. **KOPECKY**, 1220N Ridge Road, Hypoluxo, Florida 33462.



***"The me that looked out at the world was friendlier, more relaxed and also a little braver.."***

At Outward Bound® it's not just what you do, but how you feel about it afterwards that counts.

We teach you outdoor skills at Outward Bound, we



*"We lived, ate, worked and slept together. We drove each other crazy and kept each other sane."*

teach you safety and we make our courses challenging. On purpose. After that it's up to you.

The independence and the trust, the insight and the fun that people find at Outward Bound—that, we like to think, you teach yourself.

Outward Bound is a non-profit, nondiscriminatory organization.



**Outward Bound!**

For information and brochure:

**800-243-8520**

Outward Bound National Office, Dept. F, 384 Field Point Rd., Greenwich, CT 06830.

---

## Members Corner

---

### Annual Dinner

NPCA thanks those members and friends who participated in two successful events held in November: our third annual art exhibit and our fifth annual members reception and dinner, where we celebrated NPCA's 65th anniversary.

This year's art exhibit, sponsored by CSX Company and Terranomics, showcased the fine photographs of nature photographer David Muench. Our third annual art exhibit was held in the conservation library at NPCA's Washington, D.C., office. NPCA's Board of Trustees, local members, and supporters were given a preview of the art show at a sparkling wine and cheese reception on November 14.

The show included a fine sampling of both color and black-and-white images. Also on display and for sale were two large-format books, a variety of posters, and note cards featuring the work of David

Muench, who was available for autographs.

On November 15, NPCA held its annual dinner at the Shoreham Hotel, where the association honored Senator John H. Chafee (R-R.I.) as its 1984 Conservationist of the Year. Another highlight of the evening was guest speaker Gene Perret, a comedy writer for Bob Hope.

There was also a silent auction, which offered opportunities to win camping equipment, rafting trips, and tours of the national parks. The week ended with NPCA's Board of Trustees annual meeting.

### Regional Events

Beginning this year, NPCA will be experimenting with regional travel programs and receptions. We think that these programs will give our members the opportunity to learn more about NPCA and about our national parks.

Our first regional travel program will be a tour of historic Philadelphia. The May 16-19 tour includes visits to Independence and Valley Forge national historical parks, Fairmont Park, the Philadelphia Art

Museum, and Society Hill. Please see page 40 for more details.

Of course you won't want to forget our Memorial Day rafting trip. It has become an NPCA tradition to raft down the New River with Wildwater Expeditions.

NPCA will also be working with Rivers and Trails Outfitters to provide Potomac River raft trips this summer—near the C&O Canal area. And for those of you who are really adventurous, you won't want to miss the Quester's trip to Alaska.

Please address any correspondence to NPCA/Special Events, 1701 18th St. NW, Washington, D.C. 20009.

---

Beginning in 1985, NPCA will exchange membership lists with other conservation organizations whose programs and goals may interest you. These exchanges provide NPCA with an opportunity to increase membership and, therefore, our effectiveness.

If you would prefer *not to receive* these mailings, please write us, expressing your wish: NPCA Membership, 1701 18th St. NW, Washington, D.C. 20009.

---

# Explore America's Parks

## The 1985 NPCA & Questers Joint Travel Program

Our program for 1985 is part of the on-going objective of NPCA to offer members and friends the opportunity to observe first-hand the natural history and beauty of our national parks. You will be accompanied by an interpretive naturalist from Questers, America's leading operator of nature tours. One fee covers all costs, including first class accommodations and all meals. The group is small. You are cordially invited to join us.

### Alaska

June 21-July 7, 1985

Regular and charter aircraft, boat, motorcoach and the Alaska Railway take us through our wonderful itinerary. We visit Tongass National Forest, take field trips to Sitka, and photograph in Glacier Bay. We journey to Skagway and Whitehorse in the Yukon, visit the University of Alaska Experimental Farm in Fairbanks, view the pipeline, observe the arctic terrain in Mt. McKinley (Denali), and explore Anchorage and Katmai National Monument. The scenery, wildlife, the very idea of Alaska as the last frontier will excite you and leave you more knowledgeable about our parks.

For complete information and an official Tour Registration Form, call or write:



### National Parks and Conservation Association

Public Affairs Office  
1701 18th Street, N.W.  
Washington, DC 20009  
(202) 265-2717



Robin T. Holcomb

*Lava fountains in the Ka'u Desert.*

# Hawaii Volcanoes

David Muench

---

*We are pleased to introduce a new regular feature, Park Portfolio, as an endpiece to National Parks magazine. Thanks to the generosity of KC Publications, we will be excerpting photographs and copy from their series, The Story Behind the Scenery. In Park Portfolio we plan to showcase the national parks with some of the best photography available.*

---

*Following is an excerpt from Hawaii Volcanoes: The Story Behind the Scenery, by Glen Kaye, KC Publications, Box 14883, Las Vegas, NV 89114. \$3.95 postpaid.*

---

Hawaii Volcanoes, where the earth is born and then born again—an awareness of a land in change. Fume and steam, flows of raw lava and occasional earthquakes are dramatic reminders of the energy pent up within these mountains.

A rim appears—then a lake of lava, smooth and covered with a black crust that restlessly stretches and pulls itself apart to expose the bright melt beneath. The pattern is a mirror image of lightning across the sky. The orange glow of these new accre-

tions fades within moments, and the rock looks as cold and as permanent as the surrounding land.

It's a hypnotic scene, and hours pass unnoticed as the thick substance constantly changes and rearranges its incandescent form. And for volcano-watchers there are dreams that always follow—dreams in which the sights and sounds of the volcano appear again and again, vivid and disturbing. Men and women of all cultures respond in like manner to the power of an Hawaiian eruption, truly one of the most



*Tropical rain forest along Crater Rim Drive.*

awesome events on earth. Yet there is more to this beautiful island and park than the excitement of its volcanic eruptions.

The rich diversity of Hawaii's landscape adds new dimensions: in its rain forests and dry forests inhabited by rare plants and animals, some of which exist only here; in its deserts and subdued wilderness; and in its snow-capped summits.

Through these photographs we invite you to visit the wonders of Hawaii Volcanoes National Park.



Paul Banks

*The i'iwi bird, found only in Hawaii.*



East Rim, Big Bend National Park

# Parks, Packs and Pet.

We make good things for you to pack in. But, please, pack them out, too — along with any other containers you take into our national parks.



**PET**

An **ic industries** Company