

# National parks

Nov/Dec 83





---

## Commentary

### The Parks Are Central

This November, my eight years as Chairman of the Board of Trustees of NPCA come to a close. They have been good years, memorable in the opportunities they have given me to serve; in the warm friendships and associations with my fellow officers and trustees and staff personnel; and in the knowledge that we, together with our members, are engaged in one of history's monumental undertakings. Especially have they been exciting, productive years—years that witnessed the transformation of our organization.

Paul Pritchard, our President, accomplished this remarkable rebirth through his extraordinary leadership and with the aid of a devoted, hard-working staff and a dedicated board. The board prepared the ground for it and helped bring it to fruition, chiefly through the courageous efforts of such of its members as Bernie Meyer and John Quarles, Mike Brewer, Sally Brown, Eugenie Clark, Betty Phillips, Dick Pough, and April Young. The result is a new NPCA—young in spirit, in the age and outlook of its board and staff, and, most importantly, in the loyalty and active participation of its members.

This revitalization has come none too soon. The national parks are in jeopardy. No longer can we feel secure in the protection afforded them by an overburdened Park Service. Long a model for its *esprit de corps* and efficient operation, the agency is now being politicized and fragmented—and this at a time when the parks are rapidly increasing their role in our national life, providing people with a sense of the American land and nationhood, in short, a sense of what makes them Americans. The situation calls for stepping up the involvement of private citizens and making them more aware of the parks as dynamic factors in their society.

To be strong for the parks means to see them in an on-going light, creatively. It means seeing them in terms of our own personal growth and self-realization—as having a pivotal function in the world. The parks are not peripheral to the course of human endeavor; they are central to it. They center us on our origins, and the origin of all life. In what they preserve of nature, they make accessible the universal ground out of which our humanity and its civilization emerged. In what they preserve of history and culture, they mark the form taken by that civilization.

We may think of them as fun places, sanctuaries from the commonplace and the humdrum of daily living. We may go to them for their grandeur, for peace, for communion with nature. Yet, this is only to touch their surfaces. If we are to truly know the parks, our comprehension of them needs to grow, as we ourselves grow in our persons, in our capacity to perceive and understand.

Coming to know the parks is a continuing revelation, for they exist in numberless dimensions. It is like going into the mountains. As we move into them, unexpected vistas open out, new levels of meaning are disclosed. But—there is no end. As long as human perception grows, as long as we are alive to the world as possibility and as an on-going open-ended miracle, there will be no end to what the parks can be for us.

This is how we see the matter at NPCA. This is why NPCA is an organization growing into the future. I feel honored to have served as its chairman.

—Gilbert F. Stucker  
Chairman of the Board

---

## Editor's Note

Again, the November/December issue of *National Parks* brings with it the index to all the issues published during the year. Not only will the index prove useful for research in years to come, but, perused now, it constitutes a summary of NPCA's concerns, interests, and activities during 1983.

This month we focus on rivers—some in national parks and some in the National Wild and Scenic Rivers System. Not only have rivers served as avenues of exploration and settlement and have provided us with food and power, but, as Mike Frome points out (p. 17), they serve as fountainheads of inspiration and hope.

Rivers also provide recreation, as Joseph Sternberg vividly describes in his article about his first adventure on a river wild with rapids (p. 12). Experienced river-runner Verne Huser discusses the status of the Wild and Scenic Rivers System (p. 20) and provides tips on selecting a river outfitter (p. 26), and outfitter Steve Shephard gives insight into the specialized techniques of river camping (p. 27).

We once accompanied Cindy Burns (p. 8) on a National Park Service river patrol, and we still recall fondly the culinary magic she performed each evening at the bottom of the Grand Canyon after a long, sweltering day, all the while delighting everyone with her cheerful, sunny disposition.

We urge all members who can to attend NPCA's Annual Reception and Dinner on November 17. Scheduled for the night between two days of Board meetings, the event promises to be a gala affair with many of NPCA's trustees and staff present.

Watch for your next issue of *National Parks*, which will focus on wilderness—in national parks and elsewhere. Meanwhile, the staff of NPCA wishes all our members and friends a happy holiday season.

—EHC



# National Parks

ISSN 0027-9870

Vol. 57, No. 11-12, November/December 1983

The magazine of the National Parks & Conservation Association

## 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

\*Gilbert F. Stucker, *Mt. Vernon, New York*  
*Chair*  
\*April L. Young, *Oakton, Virginia*  
*Vice Chair*  
\*Mary C. Carroll, *Philadelphia, Pennsylvania*  
*Vice Chairperson*  
\*W Mitchell, *Crested Butte, Colorado*  
*Vice Chairperson*  
\*Charles W. Sloan, *Vienna, Virginia*  
*Secretary*  
\*Mrs. E. Hood Phillips, *Washington, D.C.*  
*Treasurer*  
James Biddle, *Cornwell Heights, Pennsylvania*  
Michael F. Brewer, *Chevy Chase, Maryland*  
Carl W. Buchheister, *Chapel Hill, N.C.*  
Eugenie Clark, *College Park, Maryland*  
Stuart G. Cross, *Salt Lake City, Utah*  
Donald S. Downing, *Atlanta, Georgia*  
\*John L. George, *University Park, Pennsylvania*  
Priscilla C. Grew, *San Francisco, California*  
Reginald Griffith, *Washington, D.C.*  
Susan Hanson, *New Canaan, Connecticut*  
Samuel P. Hays, *Pittsburgh, Pennsylvania*  
Thomas A. Herbst, *Minneapolis, Minnesota*  
William Kemsley, Jr., *Greenwich, Connecticut*  
James A. Kern, *Miami, Florida*  
Mrs. Fairfax Leary, Jr., *Villanova, Pennsylvania*  
Judge Jon Lindsay, *Houston, Texas*  
\*Stephen Mather McPherson, *New York, New York*  
Terry McWilliams, *Anchorage, Alaska*  
Clarence E. Martin III, *Marlinsburg, West Virginia*  
Robert C. Mathis, *Bozeman, Montana*  
A. James Matson, *St. Louis, Missouri*  
Lawrence C. Merriam, Jr., *St. Paul, Minnesota*  
\*Bernard R. Meyer, *Washington, D.C.*  
Leon S. Minckler, *Blacksburg, Virginia*  
William Penn Mott, Jr., *Oakland, California*  
Roderick Nash, *Santa Barbara, California*  
John B. Oakes, *New York, New York*  
William E. Odum, *Charlottesville, Virginia*  
Harry Robert Page, *Arlington, Virginia*  
Henry C. Phibbs II, *Jackson, Wyoming*  
Charles D. Stough, *Lawrence, Kansas*  
Charles Ray Wagner, *Indianapolis, Indiana*  
Robert I. Younker, *Coos Bay, Oregon*

## \*Executive Committee

## EXECUTIVE STAFF

Paul C. Pritchard, *President*  
Eugenia Horstman Connolly, *Director of Publications*  
Maura F. Hennessy, *Public Affairs Officer*  
T. Destry Jarvis, *Director of Federal Activities*  
M. Steven Kell, *Director of Membership*  
Karen M. Raible, *Director of Development*  
Shirley U. Skirvin, *Comptroller*  
Laura Beaty, *Administrative Assistant,*  
*Historic Heritage*  
Stephen E. Burr, *Midwest Regional Representative*  
Russell D. Butcher, *Southwest Regional*  
*Representative*  
William C. Lienesch, *Assistant Director of*  
*Federal Activities*  
Laura Loomis, *Program Associate*  
Terri Martin, *Utah Representative*  
Robert Pierce, *Administrator, National Park*  
*Trust®*  
James F. Welsh, *Grassroots Coordinator*

## NATIONAL PARKS STAFF

*Editor:* Eugenia Horstman Connolly  
*Features Editor:* Marjorie Corbett  
*News Editor:* Michele Strutin  
*Editorial Assistant:* Deirdre McNulty

*Special Counsel:* Anthony Wayne Smith

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

## Commentary

### 2 THE PARKS ARE CENTRAL, by Gilbert F. Stucker EDITOR'S NOTE

## Features

### Special Issue: Wild & Scenic Rivers

- 8 BOATWOMAN ON THE COLORADO  
Navigating Lava Falls and cooking up gourmet meals are all in a day's work for an intrepid park ranger, by Mitzi Chandler
- 12 THE YAMPA—WHITE WATER AND ANCIENT ROCK  
In the wake of rough waters, find the heart of a wild river, by Joseph Sternberg
- 17 FOR THE LOVE OF RIVERS  
Rivers are a source of inspiration and hope . . . especially for those who have worked to save them, by Michael Frome
- 20 RIDING THE CURRENT: OUR WILD AND SCENIC RIVERS SYSTEM  
At fifteen, the National Wild and Scenic Rivers System is experiencing growing pains, by Verne Huser
- 27 CLEAN RIVER CAMPING  
Camping in fragile riverine environments requires special care, by Steven Shephard
- 44 INDEX TO NATIONAL PARKS, VOLUME 57, 1983

## Departments

- |                  |                    |
|------------------|--------------------|
| 4 MEMBERS CORNER | 29 NPCA REPORT     |
| 5 FEEDBACK       | 42 THE LATEST WORD |
| 7 PHOTO TIPS     |                    |

FRONT COVER Colorado River in the Grand Canyon, by John Blaustein  
BACK COVER Seven-foot Falls on the Chattooga River, by Slim Ray

**Whether they be rivers in national parks or their cousins in the National Wild and Scenic Rivers System, America's waterways have become increasingly valuable as natural and recreational treasures. (See pages 8-28.)**

National Parks & Conservation Association—established in 1919 by Robert Sterling Yard with the support of Stephen Mather, the first Director of the National Park Service—is an independent, private, nonprofit, public service organization, educational and scientific in character. Its responsibilities relate primarily to protecting, promoting, and enlarging the National Park System, in which it endeavors to cooperate with the National Park Service while functioning as a constructive critic. Life memberships are \$1000. Annual membership dues, which include a \$7 subscription to *National Parks*, are \$200 Sustaining, \$100 Supporting, \$50 Contributing, \$25 Cooperating, and \$18 Associate. Student memberships are \$13. Single copies are \$3. Contributions and bequests are needed to carry on our work. Dues in excess of \$7 and contributions are deductible from federal taxable incomes, and gifts and bequests are deductible for federal gift and estate tax purposes. Mail membership dues, correspondence concerning subscription or changes of address, and postmaster notices or undeliverable copies to

National Parks & Conservation Association, 1701 Eighteenth Street, NW, Washington, D.C. 20009. When changing address, please allow six weeks' advance notice and send the addressing label from your latest issue along with new address. *National Parks* is published bimonthly. Contributed manuscripts and photographs are welcome on speculation. They should be addressed to the Editor at Association headquarters 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, Copyright © 1983 by National Parks & Conservation Association. Printed in the United States. Second-class postage paid at Washington, D.C., and at additional offices.

POSTMASTER: Send address changes to National Parks & Conservation Association, 1701 18th Street, NW, Washington, D.C. 20009.

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

## Members Corner

### 1984 Members' Tours Announced

NPCA is pleased to announce that we will be working with Questers Worldwide Nature Tours to provide you with two spectacular national park tours during 1984. For eleven years Questers has been providing travelers with first-rate trips to approximately thirty countries and to all continents but Antarctica.

NPCA members and friends are invited to join us as we travel to the Pacific Northwest for twelve days in August and to the Hawaiian Islands for fifteen days in October.

#### Pacific Northwest

Our tour begins in Seattle on August 6, and for the next twelve days we will enjoy the incredibly diverse wildlife and plant habitats of Washington state and British Columbia.

From the Olympic rain forest to the arid Sequim Valley and from the Pacific shore to lofty Mt. Rainier—each area offers its own visual de-

lights. We will tour San Juan Island, Olympic National Park, the Cascade Range, and Mt. St. Helens. Sea lions, eagles, killer whales, glaciers, alpine meadows—the beauty of the Pacific Northwest will be ours to explore.

Accommodations are first class, all meals are included, as well as taxes, gratuity, transportation during the program, interpretive naturalist guide, and NPCA staff escort. The total cost—excluding air fare to and from Seattle—is \$1,595. (Single rooms cost an additional \$340.)

#### Hawaiian Islands

Geologically, biologically, and ecologically singular, these tropical islands are also scenically breathtaking. From October 18 to November 1, we will visit six of the eight major islands, and each presents different cultural and ecological aspects.

The pace of life on Lanai and Molokai is one of relaxing slowness. In contrast, Honolulu, on Oahu's southern shore, bustles day and night.

We will enjoy the sandy beaches of Maui and the Garden Isle of Kauai, which has set strict limits on

the height of any building: no higher than a coconut tree. Hawaii, the Big Island, is one of the most active volcanic areas in the world. Kilauea and Mauna Loa constantly change the contours of the Big Island. From snow-capped peaks to white and black sand beaches, this island has the most variable environments.

Come see for yourself. Flowers bloom year-round, and the climate is delightful.

Our tour begins and ends in Los Angeles, and includes trips to Hawaii Volcanoes National Park, Haleakala National Park, Hanalei National Wildlife Refuge, and many other natural areas.

This program also includes first class accommodations, all meals, taxes, gratuities, transportation during the tour, a naturalist, and an NPCA escort. The \$2,547 cost includes air fare from Los Angeles to the islands and back. (Single rooms cost an additional \$336.)

For details please write NPCA Office of Public Affairs, 1701 18th St., NW, Washington, D.C. 20009. Space is limited, so please make your plans to join us now.

*The Board of Trustees and the Staff of the*

NATIONAL PARKS & CONSERVATION ASSOCIATION

*invite you to join them at*

*The NPCA Annual Members' Reception and Dinner*

*Thursday, November 17, 1983*

*The Blue Room The Shoreham Hotel*  
2500 Calvert Street, N.W. • Washington, D.C.

Cocktails  Dinner  Dancing

*\$50.00 per person*

*Presentation of the Freeman Tilden Award for Best National Park Service Interpreter*

RSVP: Public Affairs Office  
(202) 265-2717

NPCA  
1701 18th Street, N.W. • Washington, D.C. 20009



# 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.)

## Protest From Canada . . .

The Kluane Game Sanctuary and Kluane National Park in northern Canada directly adjoin conservation lands in Alaska, such as Wrangell-St. Elias, that may allow sport and trophy hunting. Not only is the Alaska hunting bill a threat to the integrity of the U.S. National Park System, it is a threat to the Dall sheep and grizzly populations in these two Canadian natural areas.

The Kluane/Wrangell-St. Elias area was declared a World Heritage Site in 1979. This was the first joint international nomination of a natural heritage area and was a significant accomplishment in that our two countries demonstrated that protection of natural heritage can transcend political and international boundaries.

We hope that the American government will defeat any legislative proposals that will downgrade a National Park System that is highly regarded around the world.

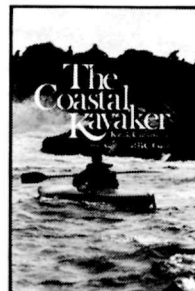
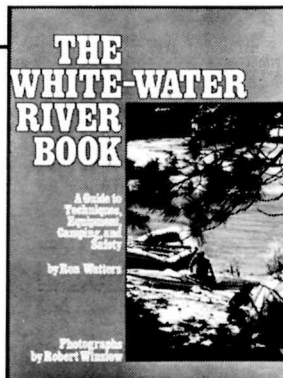
*Kevin A. McNamee, Director  
National and Provincial Parks  
Association of Canada*

## . . . and a Threat

In September/October you reported that the Federal Highway Administration decided not to pave a road near Glacier National Park because upgrading would compromise wolf and bear habitats.

Unfortunately, the greatest threat to these habitats still looms on the Canadian horizon. The open-pit coal mine planned for the park's northwestern doorstep is still a live issue. Those who think it incompatible with a national park might urge British Columbia Premier Bill Bennett to consider the ramifications of the Cabin Creek Mine.

*Malcolm R. Campbell  
Marietta, Georgia*



## Books for Boaters

### **The White-Water River Book** by Ron Watters

A comprehensive, photo-illustrated source book of techniques, equipment, camping and safety for kayakers, canoeists and rafters. **\$12.95**

*Please include \$1.50 per order for postage and handling.*

### **The Coastal Kayaker:** **Kayak Camping on the Alaska and B.C. Coast**

by Randel Washburne  
An instructional handbook and informative guidebook to sea kayaking some of the last unspoiled coastal stretches of subarctic North America. For novice and experienced kayakers alike. **\$10.95**

## Pacific Search Press

222 Dexter Ave. N., Seattle, WA 98109  
206/682-5044

*We agree. (See National Parks, September/October 1982.)*

## Wildlife Can Kill You

In the May/June issue, park management in Kenya was compared with the free U.S. style. I am sure we would not like to have their rigid people management, but something must be done to protect people in order to preserve the animals.

We raise buffalo, so we respect them; but Yellowstone has just reported the third serious accident between buffalos and people due to human stupidity. Before we restrict all tourists to their cars, more emphatic warnings must be posted: "All big game can kill you."

*May Reynolds  
Lander, Wyoming*

## Point, Counterpoint

All three points made by M.M. Graff [July/August Feedback, on Frederick Law Olmsted] are erroneous:

1. Though Andrew Jackson Downing was working on a plan to landscape the Capitol grounds, he

was tragically drowned in the Hudson River. Later, Olmsted was called on to design the Capitol grounds.

2. The greensward plan of Central Park was designed by Olmsted and Vaux. Olmsted was appointed Architect-in-Chief, and Vaux collaborated.

3. Vaux called on Olmsted in the planning and construction of Prospect Park.

Olmsted beautified our cities through parks, preserving the rural beauty of our country.

*Marshall Wershaw  
Forest Hills, New York*

## NPS on Its Own

The concept of converting the National Park Service (NPS) into an independent agency [July/August Commentary] deserves careful research and study.

The NPS is an outstanding organization whose standards of excellence are second to none. NPS rangers continually strive to provide quality services to the public, but recently morale among many rangers has dropped to a low level. As a

# America's Ancient Treasures

THIRD REVISED & ENLARGED EDITION

Franklin Folsom & Mary Elting Folsom

*America's Ancient Treasures* is an indispensable traveler's guide to archaeological sites and museums throughout the U.S. and Canada. Earlier editions included nearly 200 sites; this new edition profiles nearly 400 archaeological areas that are open to the public, as well as museums and other collections that contain prehistoric relics and artifacts. The book has also been completely redesigned for easier use as a reference and vacation planner. With over 300 photographs and line drawings complementing the text, it is the most comprehensive and useful guide available on the rich and varied archaeological heritage of North America.

Cloth: \$35.00 Paper: \$16.95

"An indispensable reference work for anyone who cares about the American past."—*Scientific American*



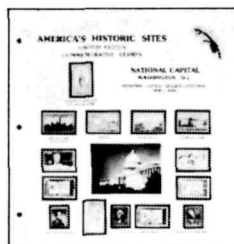
At  
bookstores  
or directly from  
University of New Mexico Press  
Dept. ATG, Albuquerque, NM 87131

## NATIONAL PARKS HISTORIC SITES STAMP DISPLAY PANELS

United States Stamps  
F-VF NH in Mounts  
Actual Photographs  
Story of Park



Yosemite



National Capital

1934 National Parks  
740-749 Set of 10  
\$90.00 less covers  
\$100.00 with Album

Full Color  
11" x 11½" size  
Sheet Protector  
Attractive Cover



Great Smoky Mts.

Panels Suitable for Framing

(740) Yosemite	\$ 6.50	(745) Crater Lake	\$ 9.50	(797) Gr. Smoky Mts.	
(741) Grand Canyon	7.00	(746) Acadia	9.00	Souvenir Sheet	\$ 8.00
(742) Mount Rainier	7.50	(747) Zion	12.00	(1084) Devils Tower	6.50
(743) Mesa Verde	8.00	(748) Glacier	12.00	National Capital	7.00
(744) Yellowstone	9.00	(749) Gr. Smoky Mts.	15.00	Custom Album	12.00

SNOWLIGHT

Shipping and handling \$2.00  
No shipping charge on orders over \$50

7651 Sugar Bush Trail Hudson, Ohio 44236

Allow 30 day delivery

National Park Service ranger, I feel my views are shared by many others in this field.

The opportunities for broadening one's knowledge of the NPS has decreased significantly, and promotional opportunities are rare. Political pressure and governmental bureaucracy have effectively stifled upward mobility among park rangers.

Can this situation be improved by forming the NPS into an independent agency? I think it would be worthwhile to determine the benefits to be reaped by the government, the NPS, and the American people.

Mark J. Coppersmith  
St. Louis, Missouri

## Elk Count

Summarizing his interpretations of the history of Yellowstone's northern elk herd [July/August Bookshelf], author Dr. Douglas Houston states in his book: "The magnitude of change from the 1870s through the 1920s may be that winter herds were reduced to 5,000-8,000 and increased to 12,000-16,000." Houston states there never were as many as 20,000 elk in Yellowstone's northern herd.

Yet, in his review, Mr. Schullery states that 20,000 elk now exist in the northern herd. Where did he get the 20,000 figure?

A more serious question is that if the hypothesis presented in Houston's book is not correct, then what the NPS calls a "naturally regulating" system in Yellowstone is really range damage and ecological destruction of our oldest national park.

W. Leslie Pengelly, Director  
Wildlife Biology Program  
University of Montana

Paul Schullery replies: The confusion my review caused Mr. Pengelly is my fault. After years of dealing with these population figures as a historian, I somehow inadvertently wrote 20,000—a figure generally regarded as the elk population of the entire park. Of course, the northern range population is smaller, as he says. I believe his "more serious question" is adequately addressed in Dr. Houston's book.



# Photo Tips

by John Blaustein

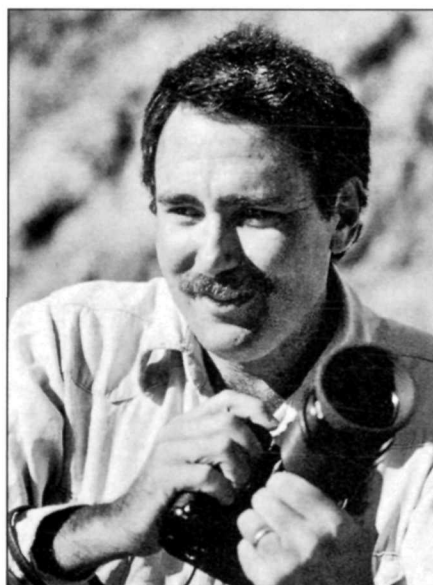
*John Blaustein is an accomplished photographer and river guide with seven years' experience leading trips in the Grand Canyon and a number of books to his credit.*

The most commonly asked question about taking pictures on a river trip is "How do you keep the camera dry?" Probably the most frequently used container for cameras and lenses is the Army surplus ammunition can, a metal box with a hinged lid that is sealed with a hard rubber gasket. It is virtually indestructible and comes in at least three different sizes, the most useful being a little larger than a shoe box. It is usually available at surplus stores.

Ammo cans must be lined with something soft to absorb shock and protect the surface of the camera. The best material I've found is called Ethafoam, a hard, unicellular foam. The half-inch thickness seems to be sufficient for the sides and bottom of the case, and the quarter-inch works well to separate the items within the case. A number of soft pouches are also available, all of which will do the job most of the time. But, if a boat tips over and the case is knocked around under water for a few minutes, then the seal must be perfect, and the protection from shock must also be very good. For the best protection, I recommend the ammo can.

Now, of course, comes the question of what to put into the case. One simply cannot take along everything one might like to have available. If the equipment is too cumbersome to get at easily, it actually begins to get in the way of taking good pictures. I use a Nikon FE with a motor drive. The lenses I'd recommend are 24 mm, 55 mm micro, 105 mm, and 200 mm.

One would think that the best lens for shooting scenic views of a canyon and river would be wide-angle. My experience is that the best pictures are often taken using a medium telephoto (85-135 mm). When the sky is cropped out of the frame,



John Blaustein

the canyon walls seem to go on forever, and the sense of depth is accentuated. An 81B (slight warming) filter is useful in the shade or on an overcast day. This outfit will easily fit in one ammo can, with room for plenty of film for a day's shooting.

Photographing boats going through rapids is never easy. When shooting from the shore it's not always possible to predict where and when the best action will occur, and you often find yourself standing in the wrong place to get the best shot, or using the wrong lens. Only experience will solve these problems; even experienced photographers end up with hundreds of out-takes and very few good photographs.

Taking pictures from inside a boat while going through a rapid requires holding the camera steady and holding onto the boat at the same time—a real trick. If you do want to try it, use a pouch-type case that will protect your camera from the water, a wide-angle lens, and a motor drive, if possible. The Nikonos waterproof camera works well for shooting from inside the boat, but winding film without a motor is slow, and you'll be able to shoot only a few frames before you're through the rapid. This kind of shooting relies a great deal on luck for good results!

Kodachrome 64 is the only film I take on river trips. There are times when there isn't sufficient light to hand-hold Kodachrome, but the loss of quality with high-speed film is too great to warrant its use. When shooting on shore in low light or in a shaded side canyon, a small tripod solves the speed problem. You can take advantage of low light when photographing boats in rapids by deliberately using a long exposure and panning the camera with the boat. The effect will be to freeze the boat amidst a wonderful blur of background colors and moving water.

Exposure can be a confusing problem on a river in a canyon. The light and shadow are often exaggerated, so one must decide whether to compromise shadow or highlight detail. With transparency film (Kodachrome), it's best to expose for the highlights and let the shadows go. When photographing whitewater, you must *overexpose* about one-half to two-thirds of an f-stop from the reflected light-meter reading.

The success of river and canyon photography depends greatly on the quality of the light. In the early morning or late afternoon the light is richest, and the shaded river will reflect the colors of the canyon walls.

Overall, the best approach is to be patient and wait for the best light. Ultimately, a few good pictures with beautiful light will best capture the feeling of a wilderness river trip.

## Statement of Ownership, Management, and Bimonthly Circulation of

### NATIONAL PARKS

OWNER AND PUBLISHER: National Parks & Conservation Association  
EDITOR AND MANAGING EDITOR: Eugenia Horstman Connally  
HEADQUARTERS OF PUBLISHER AND PUBLICATION: 1701 18th Street, N.W., Washington, D.C. 20009

STOCKHOLDERS, BONDHOLDERS, MORTGAGE, OTHER SECURITY HOLDERS: None

	Average no. of copies each issue during preceding 12 mos.	Nov/Dec '82- Sep/Oct '83	Single issue nearest filing date Sep/Oct '83
A. TOTAL COPIES PRINTED (Net Press Run)	40,858	40,000	
B. PAID CIRCULATION			
1. Single Copy Sales	0	0	
2. Mail Subscriptions	37,199	37,425	
C. TOTAL PAID CIRCULATION	37,199	37,425	
D. FREE DISTRIBUTION (incl. samples) BY MAIL or OTHER MEANS (No News Agents)	172	176	
E. TOTAL DISTRIBUTION (Sum of C & D)	37,371	37,601	
F. OFFICE USE, LEFT-OVER, ETC.	3,587	2,399	
G. TOTAL (Sum of E & F)	40,858	40,000	

---

# BOATWOMAN

---

## ON THE COLORADO

---

Navigating Lava Falls and cooking up gourmet meals  
are all in a day's work,

by Mitzi Chandler

**I**t was September and I was preparing to hop aboard a raft at Phantom Ranch on the Colorado River. My plan was to spend ten days running the river with the Grand Canyon National Park River Patrol. I looked around for my guide, expecting a lean, muscled boat captain.

I wasn't wrong, exactly. Walking toward me was my guide, lean, red-headed Cindy Burns. Within minutes of boarding the seventeen-foot raft at Phantom Ranch we were in the throes of our first major rapid. I lost my sunglasses and hat to the churning water as well as my preconceived notion that running a river is a man's job. This quiet, self-assured woman is a first-class boat captain.

*September 20—Recent rains have washed mud down from the side canyons, filling the river with silt. In Spanish, colorado means red-colored. The river seems to ripple through Cindy's long, wavy hair turning it clay-red. In sunlight it takes on a golden cast. It is as though she absorbs the environment through her hair.*

Cindy came to the Canyon in 1977 to work for the Fred Harvey Lodge at Phantom Ranch, located at the bottom of the canyon. She began as

a maid and waitress and soon became assistant manager. In June 1978 she heard the National Park Service was hiring a cook for the River Unit. Because she had previous experience as a cook at State Bridge Lodge (State Bridge was the first bridge to span the Colorado River) and was used to working in isolated areas, she decided to apply.

A call came from the personnel officer. "Next time you're on the rim, stop by for an interview."

Thirty minutes later, with the aid of a helicopter that was delivering supplies to Phantom Ranch, Cindy stood in his office and said, "You wanted to see me?" Two weeks later she left on her first patrol—eighteen days on the river cooking for the rangers and a twelve-party archeological survey.

The River Unit is responsible for patrolling the 277 miles of river that wind through the Grand Canyon. Cindy's job is twofold. As patrol cook, she is responsible for menu planning, purchasing provisions, and preparing meals for a crew numbering up to twelve people. In addition, she is captain of the boat that carries the food and cooking gear.

Her rafting skills were learned on the job. She began by trying her hand on the gentle riffles. As she gained confidence, the crew encouraged her to shoot bigger and trickier rapids. She discovered that shooting rapids is as much a matter of finesse as it is brawn. Her doubts turned to an "I can do it" attitude; do it she does, with the best of them.

**D**uties of the rangers assigned to the River Unit include visitor safety, providing information to private and commercial river runners, checking for permits, seeing that camping procedures are followed, and occasionally issuing citations when someone violates park regulations. Fortunately, most river users are very willing to obey the rules of the park. In the isolation of the canyon, health and safety are of primary importance, and rangers are always ready to provide emergency medical help or retrieve capsized people and equipment from the river.

The crew also evaluates the human impact on the fragile riverine environment, which includes the river banks and the side canyon

---

Cindy Burns, of the NPS Colorado River Unit, deftly steers passenger and raft into the mainstream of the river (photo by Tom Bean).







trails. During some trips they record and monitor research plots, which are used to measure the effects of recreational use. On every trip they comb campsites and trails to pick up even the smallest bit of litter left behind by careless visitors. The work day is usually about twelve hours long and requires hours of rowing through still water as well as shooting the roaring rapids.

On our trip, after a full day's work, Cindy changed hats and became *chef extraordinaire*. Breakfast and dinner were leisurely and somewhat of an event. Lunch—a brown bag affair affectionately called a “feeding frenzy”—was a quick stop on the beach for sandwiches, celery, carrots, and fruit. An occasional bag of M&Ms was passed around among the three boats on slow stretches of the river.

**G**ood food and unexpected treats go a long way toward keeping the crew healthy and cooperative. In the seclusion of the canyon, group unity is essential. I knew the working day was over when the crew started asking, “What’s for dinner?”

Watching Cindy prepare meals was a study in time-motion efficiency. With a few kettles and skillets, propane stove, and makeshift dutch oven, she whipped up chili rellenos, lasagna, quiches, pies, blue cornmeal pancakes, potatoes à la Cindy, and many other original dishes. One evening we were treated to a complete turkey dinner by candlelight.

After dinner and chores, we settled in for the night. On occasion, somewhere out of the deep pouches of a raft, Cindy’s mandolin and a banjo appeared, miraculously dry. Around the glow of the charcoals we

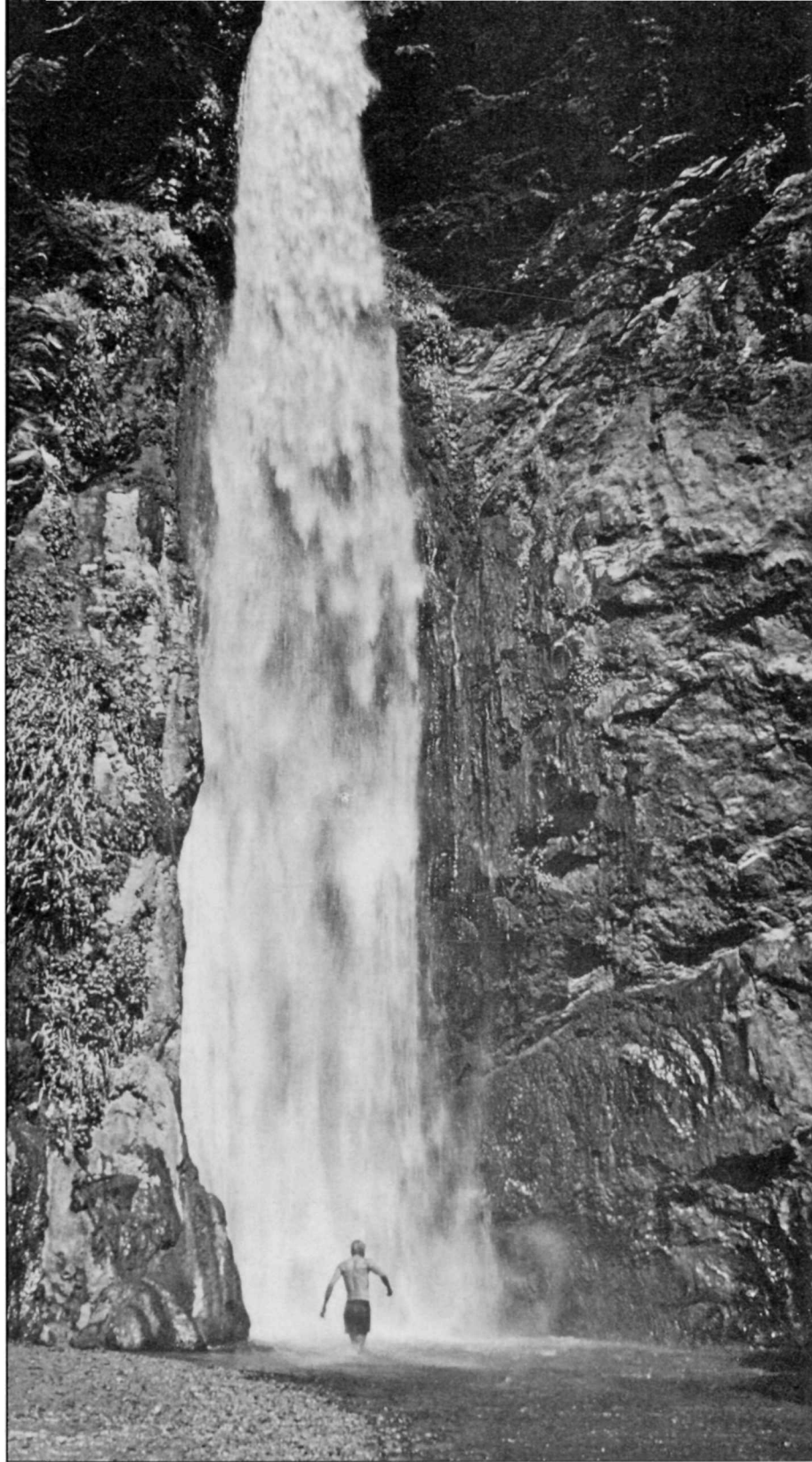


Photo by D. C. Ochsner

**Waterfalls tucked into verdant side canyons are part of the magic of the Colorado. For those who work on the river, they are a daily treat.**



joined in singing half-remembered songs in not-so-perfect harmony.

*September 23—If someone were looking down from a butte tonight, they would see us gathered in a circle of light, drawn together by its warmth, sharing in music and laughter much like the Indians who wintered here thousands of years ago. The stars move across the ink-black sky and disappear beyond the encircling walls.*

*The Big Dipper stays in view as it turns in the sky. It is like seeing the universe from the bottom of a well. The river roars in the distance; but here, up close, it creaks and groans like the old traveler it is.*

I was impressed with Cindy's lack of sensationalism about the hazards that are inherent in a wilderness of such magnitude. Flash floods, poisonous scorpions, freezing water, sheer rock faces, 120-degree temperatures, and wild water are all part of the canyon. She has learned to live in harmony with an environment that can be harsh, even dangerous for those who are inexperienced or reckless. She claims that her biggest disaster occurred when she served pancakes with corn oil rather than syrup to a group of dignitaries. I liked that. I liked hearing about ordinary things in such an extraordinary place.

*September 27—This evening we bedded down under a ledge because of high winds and a thunderstorm. After it blew over, we watched and listened as the storm runoff worked its way down the levels of the canyon. The gathering water built momentum and volume as it roared above us like an approaching train. Suddenly, a salmon-colored waterfall arched out over our heads like a liquid rainbow and came to a crashing*

*end in the river. We witnessed the birth and death of a waterfall. It was breathtaking.*

Lava Falls is also breathtaking, but for a different reason. Rapids are judged on a scale from one to ten. Many people judge this one to be a ten-plus. Wise river runners approach these falls with respect and trepidation.

Along with a dozen or so private and commercial boaters, we scrambled up the rocks to look at this spectacle. As we watched, two rafts missed their mark and capsized. One of our rafts pushed off to rescue people and supplies from the water below the boiling falls.

I felt a little skeptical about riding this rapid. I asked Cindy how she felt. She explained that she builds up a healthy fear before a rapid, which gives her a rush of adrenaline. The adrenaline, coupled with a trained eye and know-how, catapults you through—upright, wet, and exhilarated.

Life jackets buckled tight, we pushed off. Cindy turned the raft to face the rapid. She stood to find the V-shaped chute—a smooth flow of water called the “tongue.” There were two; she chose the left and readied the oars. We were silent as the current pulled us toward the pulsating boom of the falls. I held on white-knuckle tight. Above the din I heard Cindy yell, “Hold on, here we go!” And indeed we did.

Up, down, and around, skirting holes large enough to swallow the raft, dodging submerged rocks, going over and under heaving, hissing, frenzied water. I screamed a continuous scream, partly from fright, partly from the thrill of the ride. It was over—a perfect run. The boats congregated below the falls. It was a

time of assessment and celebration—and a time for bailing!

From below Lava Falls to Diamond Creek, where we pulled out, the river gradually slows down. Here, in the easy flow of water, the silence and solitude enfold you. Here the bighorn sheep and golden eagle live. Here Cindy and other river runners oar their way through miles of calm water. And here the Canyon becomes a state of mind.

Near the end of the journey Cindy begins mental preparations for the return to the canyon's rim. In her words, “When I can, I like to hike out of the Canyon. It is a timeless, awesome place and it jars my senses to return to civilization without time to adjust.”

Cindy is not only a seasoned boatwoman, she is a gracious hostess. She showed me through her Canyon floor home and revealed the quiet, subdued parts as well as the dazzle that is the Grand Canyon.

*October 1—Being a romantic, I tend to see things larger than life. But here on this sanguine river winding back through time two billion years, towered over by pinnacles and golden temples, there is no other way to feel. The Indians called the river “big water deep down in earth.” If I were an Anasazi, I would call Cindy “maiden with hair spun from sunlight and woven with colorado.”*

---

*In addition to writing for magazines, freelancer Mitzi Chandler has written and produced children's plays. Drawing on her background as a nurse, Chandler also wrote a weekly health column. She lives in the state of Washington where her husband is superintendent of Olympic National Park.*

---

# THE YAMPA

## White Water & Ancient Rock

---

In the wake of rough rapids, find the heart of a wild river,  
by Joseph Sternberg



Photo by Joseph Sternberg

**In Dinosaur National Monument, raft crew and passengers scramble over a rocky outwash, trying to scout out safe passage through the Yampa's swollen Warm Springs Rapids. Whitewater rafting is an increasingly popular sport all over the country, on both national park rivers and designated wild and scenic rivers.**

I shivered as our boatman, like a wary animal, lifted his head to acknowledge the sound. After floating several days down the Yampa River in northwestern Colorado, a river not yet dammed or channeled and protected within the boundaries of Dinosaur National Monument, we were hearing the first distant rumblings of Warm Springs Rapids. The word had been passed along upriver that Warm Springs was mean this May because the melting snowpack was deep and the recent runoff heavy.

At Warm Springs, an overhanging ledge had crashed into the Yampa years before, and a flash flood down the Warm Springs drainage had dumped tons of house-sized boulders in the river, too. The outwash of rocks and debris had reduced the river's width by half, channeling twice as much water into half as much space. In spring, a river runner can hear Warm Springs three miles away. There is ample time to develop the jitters.

At Deerlodge Park, near Maybell, Colorado, we had put in on the Yampa in three pontoons, each twelve feet long, five feet wide, and several feet deep. The Quarry Visitors Center near Vernal, Utah, was our goal. Freeze-dried food, plenty of fresh water, and dry clothes for our four-day adventure were stowed in waterproof bags or under waterproof tarps lashed fore and aft. In the center rose a wooden platform from which the boatmen manipulated two heavy ten-foot oars.

Because we were running the river early, our party was small; a couple from St. Louis and a friend and I were the only passengers. Three experienced and three novice boatmen were our crew.

Near the mouth of the channel we beached our pontoons and climbed the boulder-strewn outwash to an overlook to scout a way through Warm Springs and to gauge the depth of the "holes"—dangerous, deep troughs on the downriver side of submerged boulders. This spring, the boulders were deeply buried under the water, and the only signs of their existence were holes—

four-, five-, and six-foot-deep holes.

The quarter-mile-long channel resembled a sea serpent, writhing, foaming, twisting upon itself. A fine, soft spray drifted off Warm Springs and settled gently on our faces.

We speculated about our course. Although shallow holes were scattered throughout the channel, three big holes about twenty yards apart paralleled the near-bank side of the center course. We knew that we had to avoid slipping into one of these holes because each could bend our pontoons with a violence that could result in the loss of gear and passengers alike. But the course along the far side of the river was also dangerous; it ran swiftly past the sheer rock face of the three-hundred-foot canyon wall punctuated with hollows and outcroppings where powerful eddies swirled and spray shot into the river as if from a fire hose.

For nearly an hour, the boatmen, trying to choose a passage, alternately scrambled over the boulder field along the channel or huddled, conferring. The river thundered. To speak, we stood close and shouted. Beneath us the boulders vibrated. Finally, we agreed upon a plan. We would divide our party into three groups. One would try the channel, a second would watch from the boulder field and, in case of a spill, signal to a third group positioned downstream and prepared to wade into the river to retrieve provisions and passengers. We would shift positions until all three pontoons were safely past Warm Springs—an arduous plan but the safest, we believed.

I watched from the overlook as the first pontoon, manned by one experienced boatman and his apprentice, pushed into the river and was drawn into the current. Their plan was to run the canyon wall, but so swift was the river that after stroking once toward the far shore, they quickly abandoned their course and struggled together on one oar to set the bow forward. They were taken suddenly, the pontoon out of control. The river muscled them into and out of several shallow holes and capriciously tossed them, applauding and waving, into the calm at the end of the chute. Though relieved at their good fortune, we saw more clearly than ever the strength and whimsy of the Yampa.

Not encouraged by this lucky run, the second crew—another boatman and his apprentice—decided to try for the canyon wall, too, because all other routes seemed clogged with boulders and troughs. Instead of launching directly into the river, however, they painstakingly dragged their pontoon one hundred yards upstream in order to gain enough distance and time to row across the river to the far wall before descending the rapids.

We watched as the current caught them, and held our breath as they safely passed the dangerous center channel and scudded along the half-submerged canyon face. For a moment we watched the pure artistry of the boatmen's skills as they neatly maneuvered their bulky pontoon around outcroppings and swirling eddies, as if they were piloting a sleek kayak. As we watched, one especially strong centrifugal swirl turned the pontoon broadside to the current, swung it around in a half circle, and slammed it against the canyon wall. The river side of the pontoon was being drawn under by the current. The crew struggled to push off the wall with one oar. But the river was in control; it turned the pontoon broadside again, drew it relentlessly along the rock face to an



overhang that knocked the boatmen into the water, squeezed the pontoon as if it were a rubber ball, then jettisoned it into the center current.

Gym-shoed to avoid rock cuts, buoyant in their life preservers, and well-practiced at pointing their legs downriver, knees slightly bent, the crewmen were retrieved by the downstream party. But not until much later that afternoon would we catch up to the pontoon beached on a gravel bed a mile beyond Warm Springs Rapids.

Our turn was imminent, and I wished I were home watching a National Geographic special rather than here about to live one. Not a practiced river runner, I had come to the Yampa for a mild adventure and challenge; but now I realized the real peril as we climbed into our pontoon and pushed off.

My friend and I sat forward, each of us having been instructed to wrap around his hand a rope that had been secured to our seat. The analogy that we were aboard a Brahma bull about to be let loose was not lost on us. The boatman and his apprentice claimed the raised middle platform, and two other passengers sat in back. We were to try the center channel, skirting the three large boulders and their accompanying holes lined up parallel to the shore. We hoped to slide just to the outside of the first hole, gain speed from the slide, and pass each subsequent hole more easily. Sounded good to me.

I remember as a child riding a contraption at the now-defunct Riverview Amusement Park in Chicago called "Shoot the Chute." A boat was lifted one hundred feet to the top of a chute slippery with streaming water and released down the slide into a large, deep pool. The slide, quick and thrilling, always

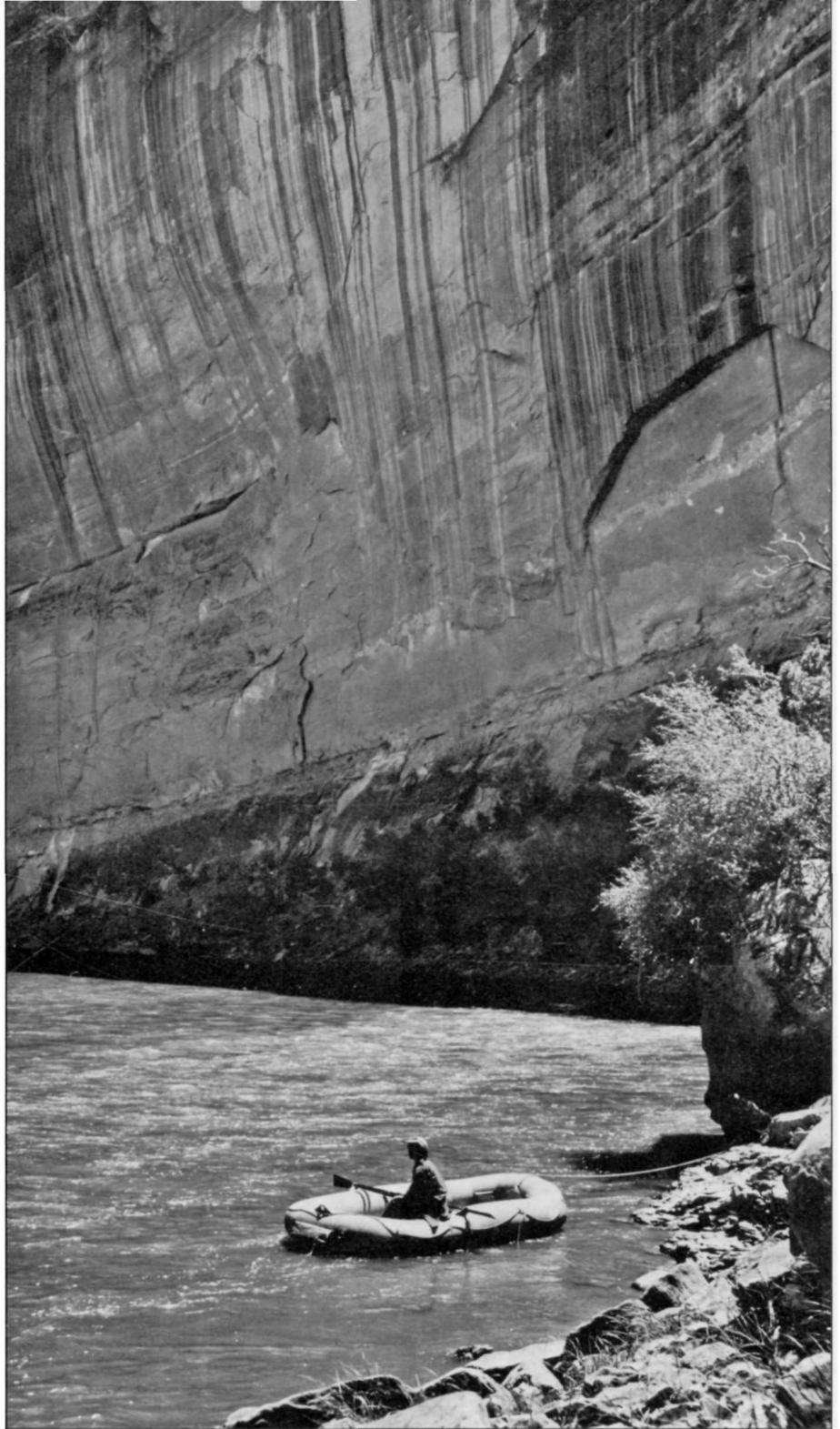


Photo by Martin Litton

Above, the high cliffs along the Yampa between Bull Park and Castle Park dwarf a lone rafter. Opposite: A mile east of the Yampa's confluence with the Green, its waters are cushioned by wide, sandy beaches and its surface is placid, reflecting the slow passage of time in layers of sedimentary rock.

filled me with two opposing desires: to stop the descent at once and get out, and to speed up toward our explosive collision with the pool. I felt the same terror and exhilaration as we descended into Warm Springs Rapids.

Like the other boats, ours was immediately controlled by the river; the current was too strong. The boatmen knew this now. We raced down the chute, but instead of sliding past the first boulder, we were sucked onto it.

The lip of our pontoon hung over a vortex of roiling river water while our back end slowly described an arc, like the swing of a compass foot, until we slipped off the rock and landed with a stomach-wrenching thud at the bottom of the hole. But the back end continued its slow circle and was drawn mysteriously up and out of the hole. We floundered downstream into hole number two, six feet deep and six yards across, bow first, and so suddenly did we dip that the pontoon inclined to fold onto itself like a hinge.

I looked behind and above me: the crew and passengers were clinging to the safety ropes to avoid tumbling onto us. Then I looked in front and above me to the rim of the hole. Dizzy, unsteady, and moving again, we needed to prepare for hole three, but then we were in it. Although this hole was more shallow and broad than we had guessed, it was complicated by a second hidden boulder that slowed the rush of water.

Lead heavy, we sank into the hole. We stalled and took water. I was thigh deep in water. The river poured into the hole from all sides. Yet the boatman hollered instructions to stay with the pontoon. He saw what I could not—that we were creeping upward out of the hole, but

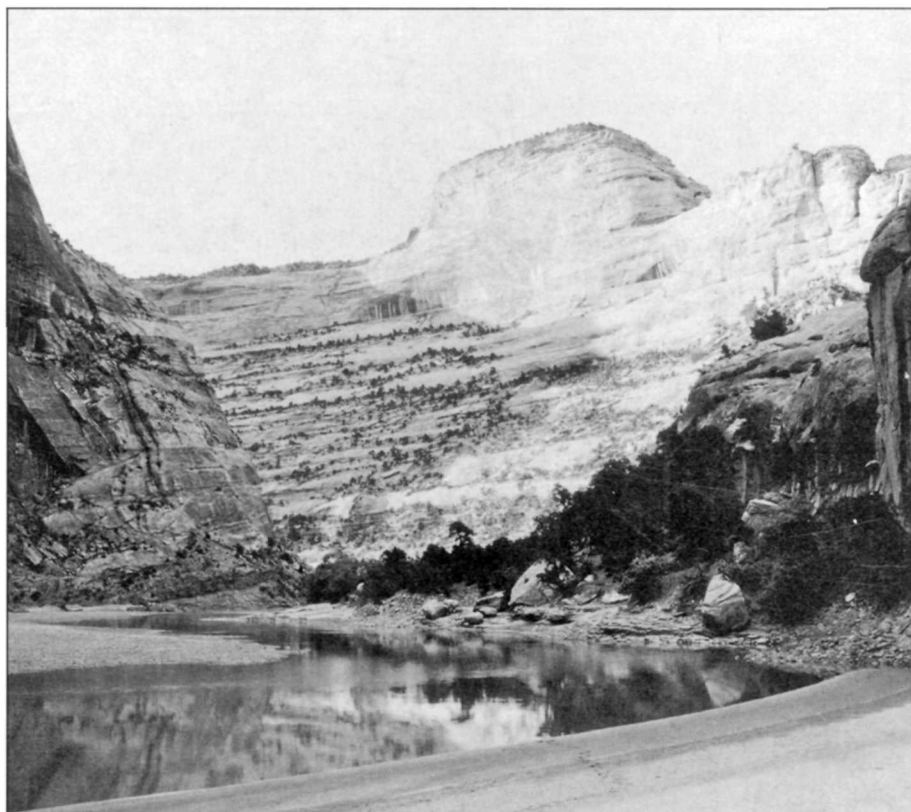


Photo by George A. Grant, NPS

at the same agonizing pace at which one flees pursuing monsters in childhood nightmares.

Then, as if awakened by a kindly presence, I felt the roaring diminish and the river become calm. Silent, we floated gracefully from the chute and out of the shadow of the canyon wall toward the shallow gravel beds beyond. Around the bend we saw our party on shore, waving their hats and dancing a mock-Indian celebration—for us. “Yahoo!” we screamed into the river wilderness.

Later that afternoon, dry and pleasantly tired, I climbed alone to a small rock ledge above the Yampa. Geometric canyon shadows lengthened; one hawk rode a dwindling thermal. I had come to this river with a sympathy for things natural born more from reading about the wilderness than experiencing it. My previous river running had consisted of a motorboat ride down the north branch of the Chicago River as a teenager, past back-

yard piers and floating tires, behind factories, and into downtown Chicago. That river is docile and subservient. Men dye it green on St. Patrick’s Day; and, on every other day, by means of locks and channels, men make it flow backward away from Lake Michigan. Now from my high station, the Yampa, too, seemed docile; it seemed motionless, suspended between still canyon walls. But I knew otherwise. The river was alive, its wild power shaped by the depth of winter snows—or the serendipitous drift of a lone mountain thunderstorm—and the labyrinthine canyon channel. Of this I needed to assure those who would follow.

*Freelancer Joseph Sternberg teaches English at Harper College in Palatine, Illinois. He lives with his wife and two boys in St. Charles, and says that as soon as the boys are old enough, they will all be heading back to the Yampa.*

*Turn the page for more on Dinosaur.*

# Uncovering Dinosaur's Deep Mysteries

This is the story to which every flash flood and every landslide contributes, each according to clear natural law. And this is what we hear and see when we stand at the edge of Hell's Half Mile or Moonshine Rapid and look and listen as the buckskin water of the spring runoff pounds and flashes past. We are watching the canyons deepened; we are hearing the earth remade.

—Eliot Blackwelder, from *This Is Dinosaur*,  
© 1955, Alfred A. Knopf, Inc.

Over the past twenty years its canyon-carving rivers, the Green and the Yampa, have become a mecca for whitewater rafters; but Dinosaur National Monument was established with an entirely different focus, as its name implies. These days, visitors can experience the whole range of the park's many attributes, from whitewater rapids to hiking trails, from ancient fossils to Fremont petroglyphs.

In 1909, Carnegie museum explorer Earl Douglass discovered and began to excavate a rich concentration of dinosaur fossils at the far western edge of the current park boundary. Six years later President Woodrow Wilson proclaimed the excavation site and eighty surrounding acres as Dinosaur National Monument. Douglass had discovered what would become the world's richest, most concentrated source of fossilized skeletons from the Jurassic era.

Now exhibited *in situ*, in a visitor center built around the exposed cliff walls, the fossils continue to be the subject of study, excavation, and speculation. Park visitors can watch the ongoing excavation at the same site where Douglass first spotted the pattern of *Brontosaurus* vertebrae in relief on a rock wall in the wilderness near Split Mountain Canyon.

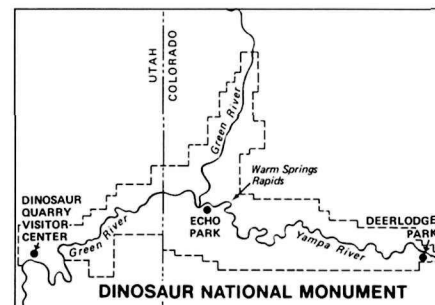
Millions of years ago, before water carved the canyons of the Yampa and the Green, ancient seas and floods in this region deposited layers of silt and sea fossils. These layers, too, are visible to the observant eye in the rugged canyon walls along the rivers; each layer is like a page in a book documenting millions of years of geologic time.

The layer where the Age of the Dinosaur can be read in rock was the result of recurring prehistoric floods that washed scores of dinosaur, turtle, and reptile bones onto a sandbar, where layers of sediment covered and fossilized them in a rock layer called the Morrison formation. Later uplift and erosion exposed the formation to Douglass' trained eye.

A full range of specimens was preserved in this "sandbar cemetery," frozen into rock in a tangled, jumbled mass that archeologists must carefully unravel. Found here are fossils of the tiny (by dinosaur standards) *Dryosaurus*, weighing in at forty pounds, the thirty-five-ton *Brontosaurus*, and the familiar, double-ridgebacked *Stegosaurus*, among others.

In 1938 the river canyons were added to the park, whose acreage now totals more than 211,000, spanning the border between Utah and Colorado. The park is considered by some to be one of the most ecologically complete, its boundaries following natural topographical lines for the most part and encompassing the habitats of bighorn sheep, mule deer, elk, peregrine falcons, and mountain lions. The ancient Fremont culture left murals in remote canyons depicting sandhill cranes and bison—but only the cranes are glimpsed by modern man. The bison are long gone, as is the Fremont culture.

Perhaps the most effective way to absorb the meaning of the landscape at Dinosaur is to run the river canyons, watching for clues to the history of the earth, its lifeforms, and man himself in the colorful canyon strata as you pass. Be aware, as your



James F. O'Brien, © NPCA

craft swirls in a racing current or stalls in a momentary eddy, that you are surrounded by ancient testimony to the history of the earth, and the beginnings of life on this planet.

—M.C.

If you go to Dinosaur National Monument, here are a few things you should know:

- The park is most easily accessible by car from U.S. 40 to the south, which passes through Jensen for access to the Dinosaur Quarry Visitor Center via Utah state route 149. U.S. 40 also passes through the town of Dinosaur near the Monument headquarters, from which a scenic drive goes north to overlooks in the river and canyon country.

- The Dinosaur Quarry Visitor Center is the only place in the park where visitors can see dinosaur bones on exhibit; the visitor center is open year-round with shuttle buses in summer from the main parking area.

- Recreational vehicles can be accommodated at Split Mountain and Green River Campgrounds; small primitive campgrounds are at Echo Park, Gates of Lodore, Deerlodge, and Rainbow Park.

- Trails are rugged and few; check with rangers for back-country permits.

- Gasoline, lodging, and supplies are not available in the park; try Jensen and Dinosaur for these services.

- A major bus line serves Vernal and Dinosaur, and a scheduled airline serves Vernal.

- For more information about visiting the park write Superintendent, Dinosaur National Monument, P.O. Box 210, Dinosaur, CO 81610.



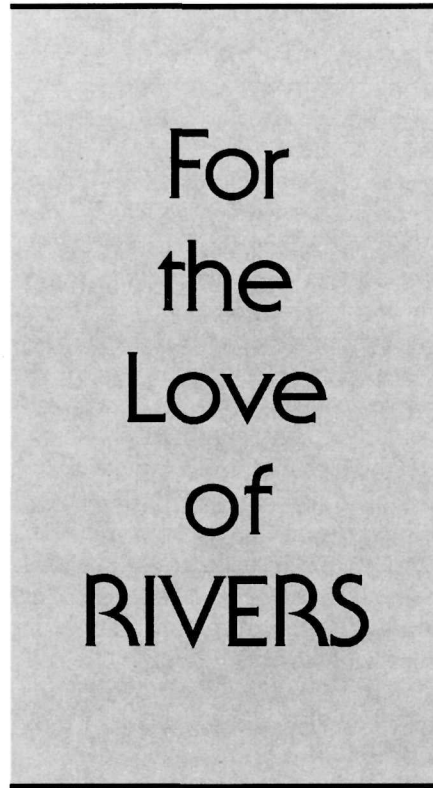
Zane Grey was an enthusiast of rivers in the wild. He went to the rivers to pursue fishing, his favorite sport, and to find settings for adventure novels, like *Rogue River Feud*. Of them all, he was most attached to a relatively tame Eastern stream, the Delaware, on the shores of which he began his literary career and to which he returned for his final rest, when his days were done.

Grey lived and wrote (and fished, of course) at the hamlet of Lackawaxen, Pennsylvania, where the Lackawaxen River—named by the Indians for its “Swift Waters”—joins the Delaware. Once, after he had become famous and left for California, he wrote a friend:

Just to get your letter made me see the old familiar places as vividly as if I had been there. I could see the October colors of the hills and the old Delaware winding down from the mountains and the purple asters blooming along the trails, the smoky Indian summer colors and the smell of the pine.

Little wonder Grey felt so fond of the Delaware. As early as 1609, when Henry Hudson arrived on the scene, the intrepid explorer described the Delaware as “one of the finest, best and pleasantest rivers in the world.”

If you ask me, the description is still apt. The river has changed with history, to be sure. The heavy industries of Trenton, Philadelphia, Camden, Chester, and Wilmington have treated the downstream Delaware like a sump, destroying the sources of striped bass, sturgeon, shad, and oysters that early settlers knew.



Above the estuary, however, the river is one of the liveliest, loveliest, and cleanest in the East. The main stem extends more than three hundred miles from headwaters in the Catskills of New York to its outlet at Delaware Bay below Wilmington. Although there are dams and reservoirs on headwater branches, not a single dam blocks the course of the main river.

The Delaware plays a singular role in our time, affording pleasure and inspiration for people of all kinds: fishermen, canoeists, kayakers, bicyclists riding the towpaths of old ca-

nals, botanists, birders, artists, students of history and archeology—all these and more besides. It is a river for caring people, who care enough to defend the rights of nature, as well as their own. Without them, the Delaware would have been long gone.

I know this river from personal encounters. For the year between the summers of 1981 and 1982 I lived in Milford, Pennsylvania, ideally situated for exploring the river, its valley, and the mountains rising above it through the seasons. I became acquainted with the Upper Delaware National Recreation Area, designated by Congress in 1978 to protect scenic and historic values in a seventy-five-mile section above Port Jervis, New York, and with the Delaware Water Gap National Recreation Area, covering forty miles of the Middle Delaware, northward from the mile-wide Gap, a distinct notch carved in the mountains by the river. The Gap was regarded during the nineteenth century as a great landmark, almost on a par with Niagara Falls.

The combined acreage of these two NRAs is insignificant compared with that of Yellowstone or Yosemite, yet their celebration of nature, culture, and human history in the heart of the urbanized East gives them significance in their own right. The river winds and bends between natural terraces and rolling hills, forming the boundary between New York and Pennsylvania, then between Pennsylvania and New Jersey.

---

*Inspiration and hope . . . come from going to a river  
and learning to appreciate it.*

---

---

The mountains may not be very high, as mountains go, but their unbroken forests provide a backdrop to conjure the image of the Lenape Indians—the original Americans of these parts—hunting, fishing, gathering edible plants, living in harmony with the land.

I traveled down the river, observing the New Jersey side to be as different from Newark and Atlantic City as Abraham Lincoln would be from Ronald Reagan. On both sides, farmlands and villages fill much of the shoreline flatlands. Old byroads lead to lakes and waterfalls in state parks and forests. Historical sites include vestiges of Indian and Dutch settlements, old canals, and two Washington Crossing State Parks—one each in New Jersey and Pennsylvania—to remind us of patriotism and heroism during the darkest days of the American Revolution.

All the patriots and heroes are not of the past. So I found myself thinking one day in March 1982 while driving south along the river to a Delaware River Watershed Conference at Point Pleasant, a few miles outside New Hope, the celebrated historic and arts community in Bucks County, Pennsylvania. The conference had been summoned by Del-AWARE, a citizen group, in opposition to a massive construction project advanced by the Bucks County Board of Commissioners.

Simply stated, the project was designed to pump from the river as much as 96 million gallons of water

per day in order to serve two purposes: (1) to provide for real estate development in Central Bucks and adjacent Montgomery counties and (2) to cool the Limerick nuclear plant under construction by the Philadelphia Electric Company. The pumping plant would be located at Point Pleasant, disfiguring and causing irreparable damage to one of the most enchanting fragments of the Delaware shoreline, once an Indian fishing and trading site, later an English settlement, and then a major stopping place along the Pennsylvania Canal.

Rivers and their environs, or ecosystems, deserve appreciation for what they are, not only for what we extract from them. In our time, it's the measure of civilization to exercise restraint and respect, following the centuries of sheer exploitation of river systems.

Americans have the capability and desire to protect and preserve—that's what national parks are about—and to undo wrongs even when the odds are against them. That's what the Delaware River is about. While driving to Point Pleasant I thought of precedents in which imminent defeat had been turned into victory. I reflected on George Washington's desperation crossing in the dead of winter and then on the public's finest hour, in our time, at Tocks Island.

The Tocks Island Dam was to be a massive project a few miles upstream from the Delaware Water Gap. The dam was authorized by

Congress in 1962, followed in 1965 by the Delaware Water Gap National Recreation Area Act. The purpose was to benefit downstream industry, at public expense. The dam and reservoir behind it would disrupt the river ecosystem and destroy choice scenery, yet it was rationalized on the basis of motorized boating recreation for hundreds of thousands, if not millions, of visitors.

Power companies planned (and actually had started) to convert Sunfish Pond, a glacial lake high in Worthington State Forest on the New Jersey side, into a pumped storage hydroelectric site, or sump hole. It would require blasting rocks and gravel out of the mountain for huge dikes, defacing the ridgetop, making it look more like the Great Wall of China than a forested Appalachian crest.

It didn't make much sense, considering that much of this Kittatiny Ridge had remained unchanged down through the times of the Indians, who came into the valley ten thousand years ago, and of the Dutch, who began settling this region before William Penn founded Philadelphia.

Happily, a lot of local people and supporters elsewhere rose up to say that man and the river valley would serve each other best in simple scale, free of mechanization and super-civilization. The ground breaking for Tocks Island was scheduled for May 1971, but it never came off. Russell Train, chairman of the Council on Environmental Quality, rejected the environmental impact statement of the Army Corps of Engineers for its manifest "shortcomings which need to be remedied"; but it was the will of the people, exercising their democratic rights, that turned things around.

Could history at Tocks Island repeat itself at Point Pleasant, I won-

---

*Rivers and their environs . . . deserve appreciation for what they are, not only for what we extract from them.*

---



---

dered? Despite heroic efforts, the outlook at first seemed gloomy, then worsened. In January 1983, almost a year after the Point Pleasant Conference, bulldozers and chain saws began clearing the construction site of trees and boulders. Citizens protested, waving American flags and chanting, "Save the River. . . We want a vote. . . Dump the pump." More than 180 were arrested after blocking construction vehicles.

It was time for the weak to cave in and call it quits, but Del-AWARE held fast and grew stronger. When it presented a petition demanding a referendum on the pumping plant signed by 36,000 Bucks County residents, the Board of Commissioners yielded and agreed to place the issue on the ballot of the May 17 primary.

More people registered to vote in that primary than for any other election in the county's history. The proponents of the project—principally the Philadelphia Electric Company and Neshaminy Water Resources Authority—mobilized a massive propaganda campaign and organized a front organization of old guard labor unions, industry, and land developers. It was a coalition of money and power.

On the other side, a lot of little people dug deep into their pockets. They raised money at flea markets and river concerts. The *Citizens Voice* ("Dedicated to the Land of the Delaware: America's River") carried advertisements of support from art galleries, natural food shops, potters, canoe outfitters, and Sisters of the Gray Nuns of the Sacred Heart—and also from thoughtful builders and contractors concerned about the quality of life.

Del-AWARE alerted the voters, warning that Bucks County would get 10 percent of the water, while paying 100 percent of the cost; that the rural character of the area would

---

*Americans have the capability and desire to protect and preserve . . . and to undo wrong even when the odds are against them.*

---

be lost, with urban sprawl replacing quality growth, and that the county's greatest asset, the Delaware River, would be reduced to a ditch. "One thing we don't need," declared Representative Peter Kostmayer (who regained his congressional seat in the 1982 environmental upsurge), "is to waste tens of millions of dollars on the misbegotten pumping station. We should invest our resources for the future, not squander them on boondoggle projects."

On May 17, 1983, the voters cast a decisive ballot to stop Bucks County's participation in construction of the Point Pleasant Water Diversion Project. The subsequent halt of construction signaled a victory not only for Bucks County, but for the democratic process, and for the rights of rivers everywhere. The victory, alas, proved only temporary. The Bucks County Commissioners acceded to the will of the people and withdrew their support. The Neshaminy Water Resources Authority, independent and arrogant, did not. Construction has resumed, despite protests and lawsuits, furnishing new evidence of the damage done to our nation's rivers by public power agencies ranging from giants like Bonneville Power and TVA to seemingly small ones like the Neshaminy.

The final outcome at Point Pleasant is still in doubt. Over the years I've seen rivers lost that we thought were saved, like the Little Tennessee, the lovely "Little T" that sheltered the snail darter, and rivers

saved that appeared lost, like the Oklawaha in Florida, and the Snake where it flows through Hell's Canyon between Oregon and Idaho. Local people, with national support, turned defeat into victory. The good people who stand in defense of the Delaware at Point Pleasant deserve that support.

A river like the Delaware embodies more than flowing water. It grieves me that I haven't been able to write here about the country inns and the seasons and the rafters of pre-canal days; and about the birds, bears, fish and fishing, and luxuriant flora; and about the Zane Grey house, and all the other elements of time and space that make this river system a treasure of American history and culture.

Those topics will have to wait. I thought it best to evoke, as well as I am able, the inspiration and hope that come from going to a river and learning to appreciate it. Future critics may have difficulty in fathoming or forgiving many actions of our generation, but I think that river-love as manifest through efforts to save the Delaware will vindicate us, at least partially, by reflecting the unselfish and caring aspects of Americans in our time.

---

*Michael Frome, a perceptive and outspoken commentator on natural resources management, is a member of the board of the American Rivers Conservation Council.*

---

---

# RIDING THE CURRENT

---

## Our Wild & Scenic Rivers System

After a stormy fifteen years, the System is at a crossroads,  
by Verne Huser

We glide silently along the Skagit River's pellucid green waters, the red of vine maple and the pale gray-green of old-man's-beard vivid against the dark forest tapestry of cedar, hemlock, and fir. Beneath the raft, multicolored rocks swirl past in optical illusion; but it is we who are sweeping past them, suspended in the fluid element created by melting ice and snow in Washington's North Cascades.

Pink salmon, running heavily in their odd-year migration, are everywhere: moving upriver to tributary spawning streams; splashing in the shallows as they fight their way against the current; creating redds by fanning silt out of the Skagit's gravelly bottom; swimming guard over egg-occupied nests; and some, already spawned out and exhausted, drifting listlessly along with the current, food for bald eagles in coming weeks.

Roger Drayna, with whom I ranged in Rocky Mountain National Park two decades ago, is with me for this trip in my neck of the woods. Three years ago I joined him in Wisconsin for a canoe trip in his backyard: we paddled down the Namekagon to the St. Croix where it serves Wisconsin and Minnesota as common boundary. The Namekagon-St. Croix was a major route of the voyageurs. That run was made in

autumn, too, when the northern hardwoods were a riot of color and waterfowl were heading south in their annual migration.

Roger and I migrate too—toward rivers—getting together every few years to renew our friendship. We plan to try the upper Missouri in Montana next time, following the route of Lewis and Clark, seeing the same white sandstone cliffs “woarn [sic] into a thousand grotesque figures” that Captain Clark first described 178 years ago. And we will camp at the same spots used by his Corps of Discovery.

The Skagit is a big river, as swift and cold as it is broad and deep, offering long vistas of towering peaks in North Cascades National Park. The St. Croix is a big river too, but its waters are warmer and more turbid, supporting different fish and lacking the mountain backdrop. Its tributary Namekagon, by contrast, is a small, intimate river flowing swiftly through a canopied corridor of new growth, its waters stained by natural tannin and minerals. The mountain-fed Missouri flows through wilderness; the St. Croix, through a rural setting; the Skagit, alongside a road and under powerlines from upstream dams.

One thing that these rivers have in common—besides the fact that Roger and I rendezvous on them from time to time—is that all of them are protected as part of the National Wild and Scenic Rivers System. All of them, incidentally, also have dams upstream. Two of them have dams downstream, but the segments we float are free-flowing, set aside by Congress in 1968 as a new national policy to provide a balance to development:

The Congress declares that the established national policy of dam and other construction at appropriate sections of rivers . . . needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

To qualify for the System, a river need not be totally wild or undeveloped. There are three levels of qualification, just as there are three levels of protective designation. Essentially, the rivers are administered to preserve their status quo. *Wild* rivers are inaccessible, except by boat, on foot, or on horseback, with undeveloped shorelines for the most part. *Scenic* rivers are accessible here and there with moderate development. *Recreational* rivers are readily acces-

---

Autumn colors Red Creek Rapid in the Snake River Canyon. Part of the Snake is protected inside Grand Teton National Park and part has been under study for inclusion in the Wild and Scenic Rivers System. Photo by Verne Huser.



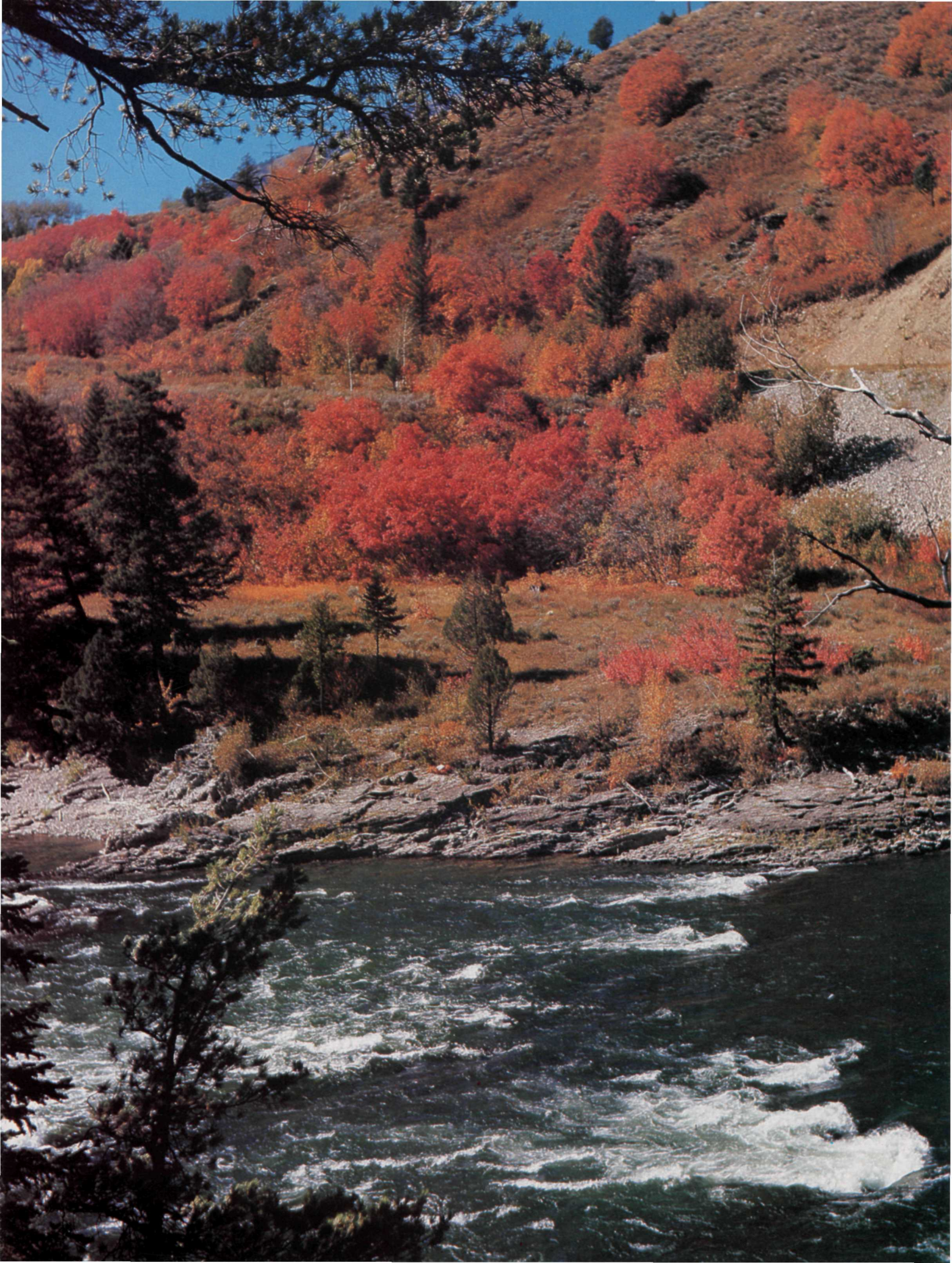






Photo by Verne Huser

sible, often well developed, frequently heavily used.

Rivers in all categories exhibit qualities that are preserved by management plans developed for each specific segment and designed to deal with its unique character. All rivers in the System are free-flowing, even if many of them flow primarily with reservoir release.

Rivers and river segments are selected for their "outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural and other similar values." Few are in national parks because these very qualities are already protected on rivers that flow through parks. The System was not established to compete with parks or to build a fiefdom. In fact, no one agency is clearly in charge of the System. Many segments are administered by the Department of the Interior through one of its sub-agencies (National Park Service, Bureau of Land Management, Fish and Wildlife Service); but many others are administered by the U.S. Forest Service (under the Department of Agriculture), one by the U.S. Army Corps of Engineers (under the Department of Defense), and a number of them by state agencies. A few are jointly administered by state *and* federal agencies.

Initially, the System included only eight river segments in seven states totaling less than 800 miles: the

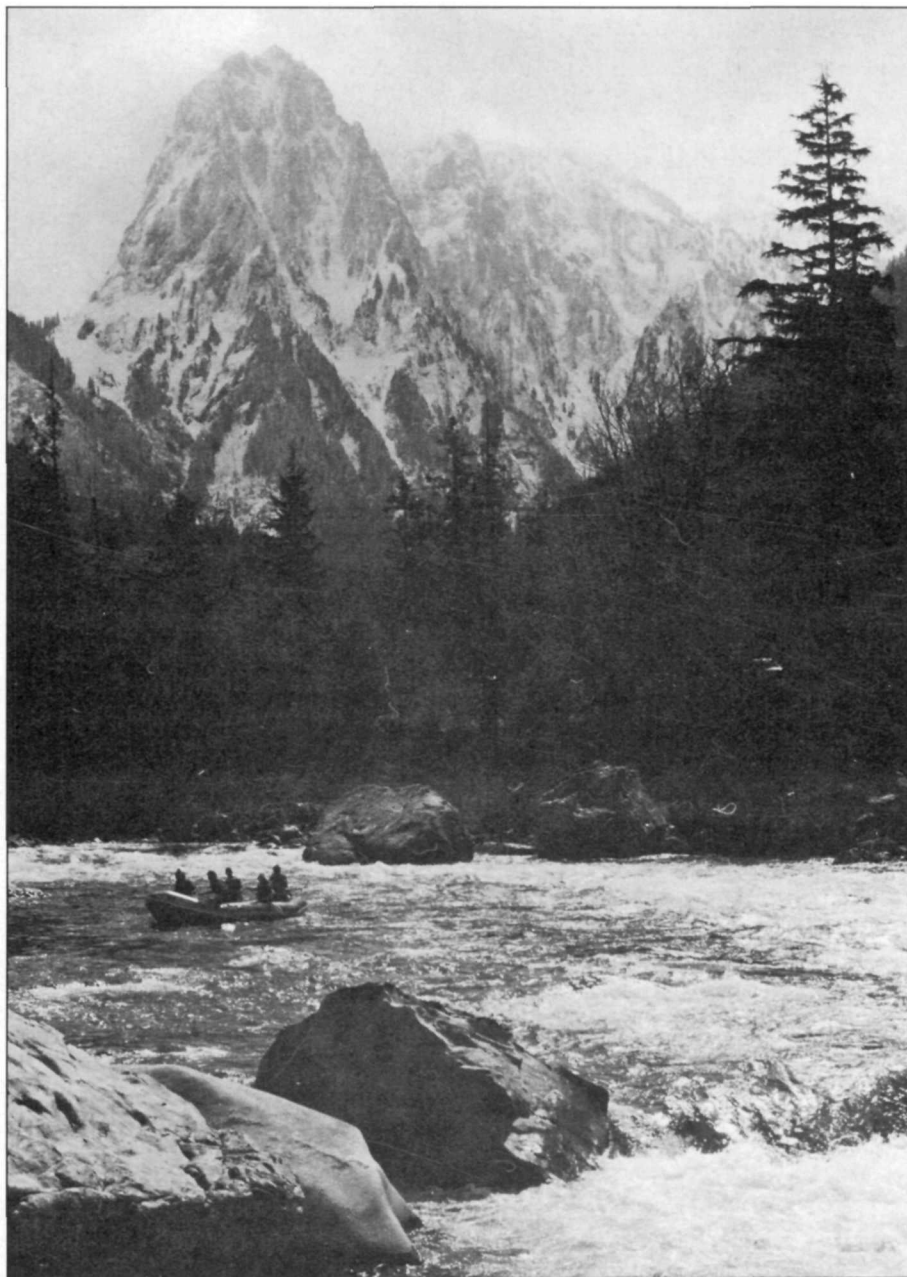
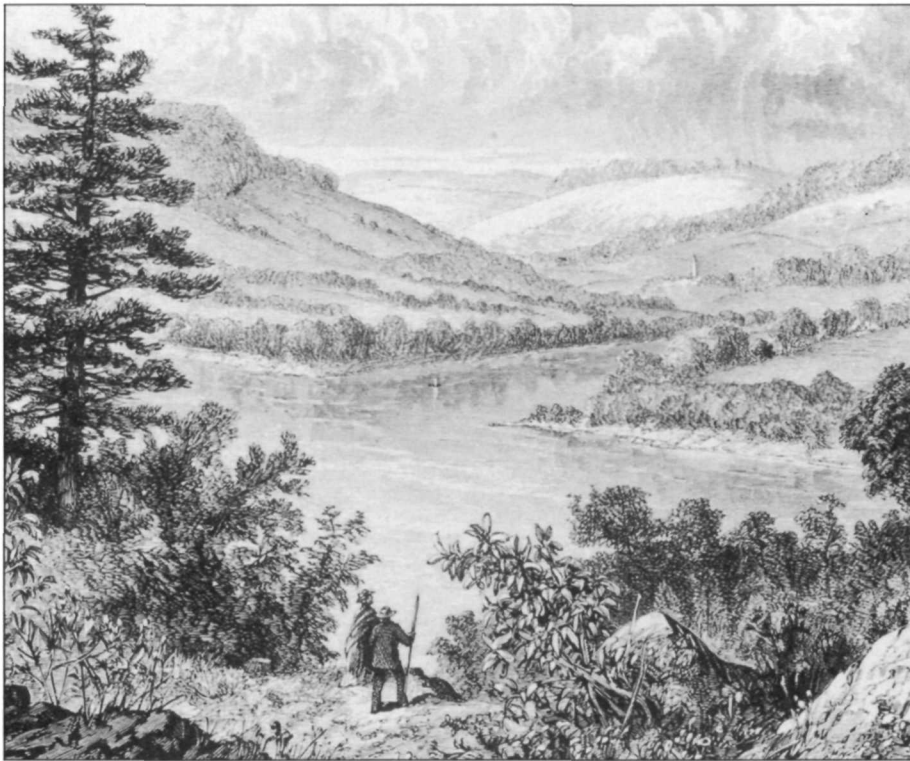


Photo by Verne Huser

Mt. Index looms above the Skykomish River, the lone component of Washington State's scenic rivers system. State river systems throughout the country can act as supplements to or potential additions to the National Wild and Scenic Rivers System. Top left, a couple paddles quietly through the early morning mist on the St. Croix River. Bordering both Minnesota and Wisconsin, this segment of the St. Croix was one of the first rivers protected in 1968.



Delaware Water Gap, looking south from Shawnee, 1874

Selway-Clearwater and Salmon in Idaho, the Eleven Point in Missouri, the Feather in California, the Rio Grande in New Mexico, the Rogue in Oregon, the Wolf in Wisconsin, and the Namekagon-St. Croix in Wisconsin and Minnesota. Today the System has grown to 61 river segments in 23 states and a total of 6,943 miles. (These figures include five northern California rivers that total 1,235 miles whose status is now in doubt because of legal action.)

Nearly half of that mileage (3,237) lies in Alaska, where twenty-six rivers were added to the System through the Alaska National Interest Lands Conservation Act of 1980. In the lower forty-eight states, sixteen lie in the Pacific watershed; fourteen lie east of the Mississippi; and five others lie in the vast area between the Continental Divide and the Mississippi. They are not at all evenly distributed, and many rivers outside the System may yet qualify for it.

**T**he System was designed to grow. Two mechanisms were written into the law to provide for addi-

tional components designated by Congress or by states with the concurrence of the Secretary of the Interior. A list of twenty-seven rivers, that over the years has grown to eighty-eight, were to be studied to determine their qualifications for entering the System. Only four have been declared unqualified; but five others, found eligible, were not recommended as additions. Eighteen that have been recommended for inclusion have not been acted upon by Congress; and fourteen others, recommended for local or state protection, also languish for lack of legislative action. Fourteen have been added to the System, but thirty-three studies have yet to be completed.

Of the fifty-three rivers added to the System, only fourteen have been added through the study route—not a very impressive record, less than one a year; but thirty-nine rivers have been added by other means. What's the problem?

There are several: lack of funding compounded by budget cuts (while river-protection budgets have been

**The Delaware National Scenic River became part of the System in 1978, when it was given special protections within an already-established NPS unit, Delaware Water Gap National Recreation Area.**

cut, river-damming budgets for the Corps of Engineers and Bureau of Reclamation have increased), the bureaucratic pace of executing the studies, lack of local support coupled with local and special-interest opposition, and an antifederal sentiment that prevails in many areas and has grown in recent years. The study mechanism has proved slow and costly, abrasive in some cases, and less than efficient.

The lack of efficiency has come, to some extent, from the changes in administrative viewpoint, not only from one President to another (Johnson, Nixon, Ford, Carter, Reagan) but from one agency to another. The System was originally administered by the Bureau of Outdoor Recreation (headed in its early days by James Watt), which later was incorporated into the Heritage Conservation and Recreation Service. Neither organization survived the experience.

**T**oday the System's foster parent is the National Park Service; this agency will steer the adolescent System through these difficult years. For the National Wild and Scenic Rivers System has grown to adolescence: it is fifteen years old and is suffering growing pains. It has been poorly parented at times, neglected, even abused. Conflicts have developed; and some of the conflicts will be settled only by the courts.

Just before President Jimmy Car-





A Grand Canyon Dory on the Colorado River, by John Blaustein

ter left office, California's Governor Jerry Brown asked then-Secretary of the Interior Cecil Andrus to add five California rivers—Eel, Trinity, Lower American, Klamath, and Smith—to the National System. His request was granted on January 19, 1981, just hours before the change-over in administrations. Some interests felt the designations were given inappropriately, so they filed suit. It may be years before the final decision is made, but an initial court ruling invalidated the Wild and Scenic status of those five northcoast rivers, which represent 15 percent of the total mileage in the System. An appeal decision in April 1983 reversed the initial ruling, but the case was not ended.

In June the Department of Justice filed a motion to dismiss the appeal, claiming that environmental groups had no grounds for the case. In late July, to the astonishment of environmentalists disgruntled by its earlier moves, the Justice Department flip-flopped completely and filed its own appeal on behalf of the five rivers. The story is not yet over, and

the fate of the entire Wild and Scenic Rivers System hangs in precarious balance if this case is any indication. Should the initial decision be upheld, it would be the first time a river has been removed from the System.

But there's more. A Reagan Administration bill introduced by Idaho Senator James McClure would allow state legislatures, by a simple resolution, to remove rivers designated under Section 2(a)(ii) of the Act from the National Wild and Scenic Rivers System. The McClure package, written by the Administration, would add eight rivers to the System, but other aspects of the bill could allow the removal of eleven others.

All of the rivers proposed as additions to the System by this bill are Forest Service rivers. Secretary Watt passed the word that Interior would nominate none, according to the American Rivers Conservation Council, a Washington, DC-based lobbying organization that supports river protection and opposes river-damaging projects and activities.

ARCC suggests that the Reagan Administration is actively neglecting the System by not having entered the California northcoast rivers litigation on the side of wild and scenic rivers in the first place, by its proposed damaging amendments to the Act, by holding up river studies and changing recommendations on study rivers from positive to negative, and by killing the rivers program through budget reductions.

None of the twenty-four Wild and Scenic Rivers studies scheduled from the National Park Service has been released since Watt took office; and a number of them, known to have received positive recommendations under the Carter Administration, have been delayed and are expected to be released with a negative recommendation.

In other words, the System has become a political football. The Au Sable in Michigan was studied by the Forest Service; and of the 165 miles examined, 91 were found to be eligible for the System. But the political situation led the Forest Service

to recommend only 74 miles. Later, even that was cut to a mere 23 miles in the Administration bill introduced this spring by McClure.

A look at the Administration's bill may be revealing: it recommends 21.5 miles of Wyoming's Clarks Fork of the Yellowstone (of 39 studied), 29 miles of Colorado's Elk River (of 29 studied), 36.8 miles of Colorado's Conejo (of 52 studied); 54 miles of Colorado's Los Pinos (of 54 studied), 39.5 miles of Arizona's Verde (of 130 studied), 23 miles of Michigan's Au Sable (of 165 studied), 13 of Wyoming's upper Snake (of 50 studied), and 28.4 miles of Colorado's Piedra (of 53 studied). The bill would add less than 250 miles to the System and put in jeopardy nearly 2,000 miles, subject to state removal.

So all is not well with the adolescent Wild and Scenic Rivers System. It is functioning but not well fed; it is in place but not going anywhere; it is primed for growth but may actually be dwindling. What will happen as we move into 1984?



Expert canoeists shoot Chattooga River rapid, by Ciro Pena, NOC

Exciting rapids can be found in rivers from Arizona to North Carolina.

That will depend upon the people of the nation. If the Wild and Scenic Rivers System is a low priority for the Reagan Administration, that may be understandable, given the state of the economy during much of the past three years. If it is a low priority with Congress, that too may be understandable; they have had more important things to deal with. But is the Wild and Scenic Rivers System that low a priority for the American people?

There is a suggestion from the grassroots that preserving rivers is, in fact, a high priority. But leaving the job solely in the hands of federal agencies may not necessarily be the answer.

Local efforts to preserve rivers have emerged as a powerful force during the late 1970s and early 1980s. This movement is evident in Maine's efforts to "prioritize" its rivers, selecting some of them for protection but designating others for development. It is evident in the upper Mississippi Basin where the Mississippi Headwaters Board has emerged in a grassroots effort to manage the longest stretch of protected river in the United States, a 400-mile stretch of the upper Mississippi in Minnesota. (The longest river segment in the System is Alaska's Fortymile River, at 396.)

The National Wild and Scenic Rivers System has the flexibility to include locally and state-managed rivers. The Mississippi Headwaters

Board (MHB) features a recreation plan, comprehensive land use ordinances, cooperative agreements among governmental agencies, and innovative land acquisition plans.

Local initiatives may well be the wave of the future. As exciting as these initiatives may be, we must remember that only federal protections can guard freeflowing rivers against ill-conceived hydroelectric projects and dams promoted on the federal level against the local interests. These dam projects have been and continue to be the greatest single threat to river conservation in the country.

As the adolescent System approaches maturity, however, we have some reason to feel optimistic. The System's administrators are learning from their mistakes, gaining new insights, and making the system work. There may be budget cuts and misdirected priorities, political pressures and frustrated river users; but there is hope and a willingness to work together where it means the most—at the grassroots level.

*A professional river guide for twenty-six years, Verne Huser has written on various topics for National Parks magazine since 1967. He has written four books on rivers and is working on a fifth—an anthology of river writing to be published in the spring by East Woods Press.*

Turn the page for more on rivers.



# HOW TO SELECT A RIVER OUTFITTER



Grand Canyon Dory, by John Blaustein

More than a dozen river outfitters offer scenic float trips on the Snake River in Grand Teton National Park. More than twenty are available—and permitted—to take paying passengers through the roaring rapids of the Colorado River in Grand Canyon National Park. At one time there were forty commercial operators offering a wide variety of river trips on Oregon's Rogue River.

With so many legitimate river outfitters from which to choose, how do you know whom to select for your trip? Which one will offer you the trip you want at the best price?

Just as in buying an automobile, you need to shop around, read the literature and consumer's reports and talk to people, checking out the various options. For there *are* options. At first glance, outfitters may all seem to be very much the same for a given river, but there are numerous and subtle differences in kind and quality.

Most writers about river trips play to the specific outfitter that took the writer down the river, often on a free trip. Most people who run a river trip cannot evaluate for you the range of outfitters available, because they know only the outfitter that took them along—unless they have run a number of trips with different outfitters. Word of mouth is valuable, but only if it offers some comparison.

Each outfitter licensed to operate

on any river, under the jurisdiction of a federal or state agency, will be listed by that agency. Write for a list, then write the specific outfitters for their brochures, and study them carefully, reading between the lines for the subtle nuances suggested by the advertising. What is the outfitter trying to sell? Is it what you want? Is it what you can afford? At one time you could run a Grand Canyon trip for anywhere between \$350 and \$1,200, but the length of the trip, the quality of the food, and the services offered varied greatly.

You can write or call the outfitter to learn what kind of equipment is used, the background and qualifications of the guides, who has taken the trip before—perhaps someone in your own neighborhood. You can also write to outfitter organizations like the Western River Guides Association (994 Denver Street, Salt Lake City, UT 84111) or the Eastern Professional River Outfitters Association (Box 722, Oak Hill, WV 25901). Try the American Rivers Conservation Council (323 Pennsylvania Ave., SE, Washington, DC 20003) for outfitters that have a record of supporting river conservation. *Sunset* magazine's annual April issue covers an area of the West, outlining river trips and listing outfitters that offer trips in that area. Their 1983 April issue covers the entire Colorado River system.

Once you have gathered the in-

formation, you need to examine it critically to determine which trip offers you what you want. Some outfitters are willing to design trips specifically to cater to your needs, or to those of your own group. Be sure that all the details are spelled out for any trip you take so you won't be stuck with extra costs that you thought were included in the package—and, conversely, don't pay for services you don't need or want.

To get the right outfitter for you, you first need to know what *you* want. If you want to eat well or catch big fish or see Indian ruins or hike the side canyons, you need to find an outfitter who will offer you those services. River outfitting is a competitive business, and the innovative survive. Some of the oldtimers provide quality trips, but length of time in operation is not the only criterion to seek in a river outfitter: some of the early outfitters have been bypassed by the innovative.

There is a river trip for you. River outfitters are legion. You can find the right one for you and your family, whether it be a three-hour scenic paddle for less than \$20 or an Alaskan expedition for \$2,000, a three-week dory trip through Grand Canyon or a weekend fishing trip on your own local stream. It just takes a little effort on your part to make the right decision—and knowing what you want in a river trip.

—Verne Huser

# CLEAN RIVER CAMPING

Camping in fragile riverine environments  
requires special care,

by Steven Shephard

**O**ut of sight—out of mind. River camping makes it easy. Dropped some food on the beach? Kick sand over it. Made too much salad? Throw it out in the bushes, the animals will eat it. Want to wash your hair? Do it in the river, the soap says biodegradable. It may seem harmless enough at the time, but, as you've been told since childhood, "What if everybody does it?" or even half the people, or only those who camped there before you? On many popular rivers, the same campsites are reused almost daily for four months. That can mean 3,000 people using the same confined beach in one summer.

Even when campers realize their impact, they often remain unaware of the basic camping practices that can help preserve fragile riverbanks. Certain rivers are supervised by state or federal agencies who advise boaters of specific regulations. For those of you who want to help, here are some basic clean river camping techniques.

## REFUSE

### Cigarette butts

Carry out the butts in a garbage container. Do not try to burn them; filters usually fall to the edge or through the fire and remain unburned. During the day and while on the water individual plastic film

cans are handy disposal containers. Adding a teaspoon of baking soda to the can will help reduce odor.

### Cans & Bottles

Carry them out. Crush cans for compactness. Emptied food containers can be used for storing leftovers or messy liquid garbage. Try to avoid using glass containers.

### Wet garbage: Fruit & Vegetables

Carry it all out. Pick up all food dropped on beach. Wild animals do not patrol the campsites cleaning up garbage you've left behind. What wet garbage *does* attract is yellow jackets and flies, which sting and annoy the next campers who use that beach. This kind of garbage eventually creates a stench as well.

### Liquid: Coffee, Soup, Dishwater, etc.

Carry a strainer to filter out solid waste for the garbage container. In a mountain environment, dig a hole and drain liquids into soil, not sand, far away from the campsite. In desert ecosystems, drain liquids into the river's mainstream, which is more capable of dispersing these wastes than are the fragile desert beaches.

### Grease

Grease is insoluble and should be burned or carried out. Carry along a grease can or store in emptied containers.

## Nonburnables

Do not poison the air (or yourself) by burning plastic or styrofoam products that emit toxic gases. Carry them out, too.

## FIRES

All fires, including charcoal fires, must be contained in an adequate fire pan. For short trips a garbage can lid will work. The ashes from just one fire built in the sand can ruin the natural beauty of a clean beach for everyone. Even an established firepit spreads throughout the summer into a filthy charcoal arena. An ash can for carrying the residue out takes up very little room. Carry a gas stove (propane, white gas, etc.) if possible. When you leave the camp, spread leftover firewood around. Let the next occupants select their own kitchen area and avoid overuse of one spot.

## BATHING

### Mountain Environments

Get yourself wet in the river. Take a bailer or bucket and fill with water for rinsing. Move away from the river, above the high water line, when possible, before soaping your body. Rinse off all soap with the aid of bailer/bucket before returning to the river. This same method applies to brushing teeth, shaving, etc. Preserve side creeks and hot springs by



A heavy metal fire pan can make a big difference in keeping a campsite clean on a sandy riverbank. As riverbanks become more popular as campsites, special techniques are required to help keep them clean.

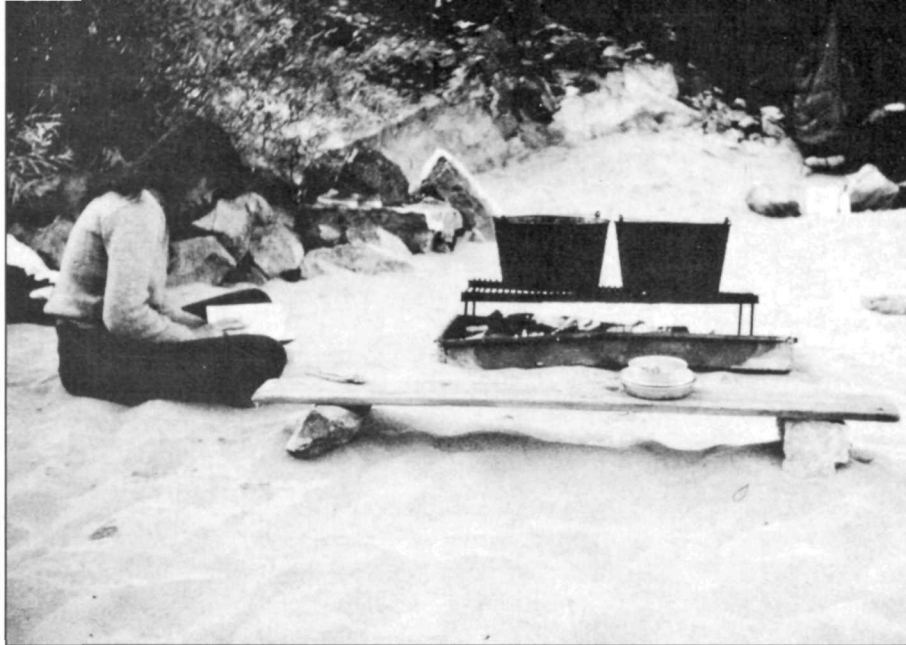


Photo by Steven Shephard, Salmon River Outfitters

following the same procedure. Use only biodegradable soaps such as Ivory or castile products. They should be clearly labeled as such. Deodorant soaps should not be used, as they contain nonorganic additives.

### **Desert Environments**

Bathe directly in the river, which is more efficient at handling soap wastes than are the arid beaches.

### **Biodegradable Products**

This label means that your soap is organic and to a high degree pure. The degrading process will not work in cold water. Microorganisms required to break down these components must have warm conditions to do their work. There are over 10,000 times more microorganisms in soil than in sand or water. With the above procedures, soap products can break down within a month.

### **TOILET METHOD**

Carry a portable toilet, if possible; use outhouses when available. If digging a pit toilet, bury your human waste preferably in soil, not sand. The microorganisms required for the decomposition process prefer warm, moist, humus soil where human waste can decay within a month. Return all toilet paper to your fire or garbage container. Do not leave it to be dug up or blown around the area. Urinate away from

camping area. In a desert environment with high volume flow, urinate in the river or the wet sand of the river's edge. This method is recommended by the National Park Service for the Grand Canyon, where they found that heavy use of campsites can create an odor problem. Urine is a sterile product when it leaves the body and does not contaminate the river.

### **Portable Toilets**

The cheapest and, so far, most effective means of transporting solid wastes is by the use of air-tight ammo boxes and plastic bags. The items necessary are:

1. Ammo can (large enough for size and length of trip)
2. Toilet seat (stand optional, may fit on box)
3. Large, heavy-duty plastic bags
4. Deodorant chemical: Aqua Chem, chlorine bleach, Pine Sol, or formaldehyde
5. Toilet paper

The system is set up as follows: The ammo can serves as the actual toilet container. Line the box with two plastic bags, attaching the inside bag to the stand or folding it over the lip of the can. Pour deodorant into the open bag and place toilet seat on top of box or attach to stand. Used toilet paper and feminine hygiene articles can be placed directly into toilet. When camp is to be moved, it takes

only a few minutes to dismantle the toilet and store the waste (in the same can if space permits). After squeezing the air out of the bag and tying it off, pull up the outside bag and tie securely (a third bag may be used for security). Store plastic bags in an upright position to prevent leakage. Use a new set of bags daily. A portable screen may be convenient for exposed beaches. To prevent the spread of communicable diseases (such as gastro-intestinal), after using the toilet, wash hands with soap and water before handling and preparing food.

When you're ready to depart in the morning, take a few minutes to inspect the campsite. Pick up anything that would detract from the next boater's wilderness experience. Driftwood beaches and frontier rivers have become extremely popular places; at the same time they are extremely fragile. Let's keep what we have in good shape by practicing conservation, and make the next party's trip more enjoyable.

---

*Freelance writer Steven Shephard is owner/guide of Salmon River Outfitters, McCall, Idaho, conducting rafting and kayaking trips on Idaho's Salmon River. Information on his trips is available from P. O. Box 307, Columbia, CA 95310.*

# NPCA Report

## Florida Panther Population On Edge of Extinction

The Florida panther is distinguished from other subspecies by a crook in its last tail vertebra, a whorl of hair on its back, and by a precarious population of about twenty animals.

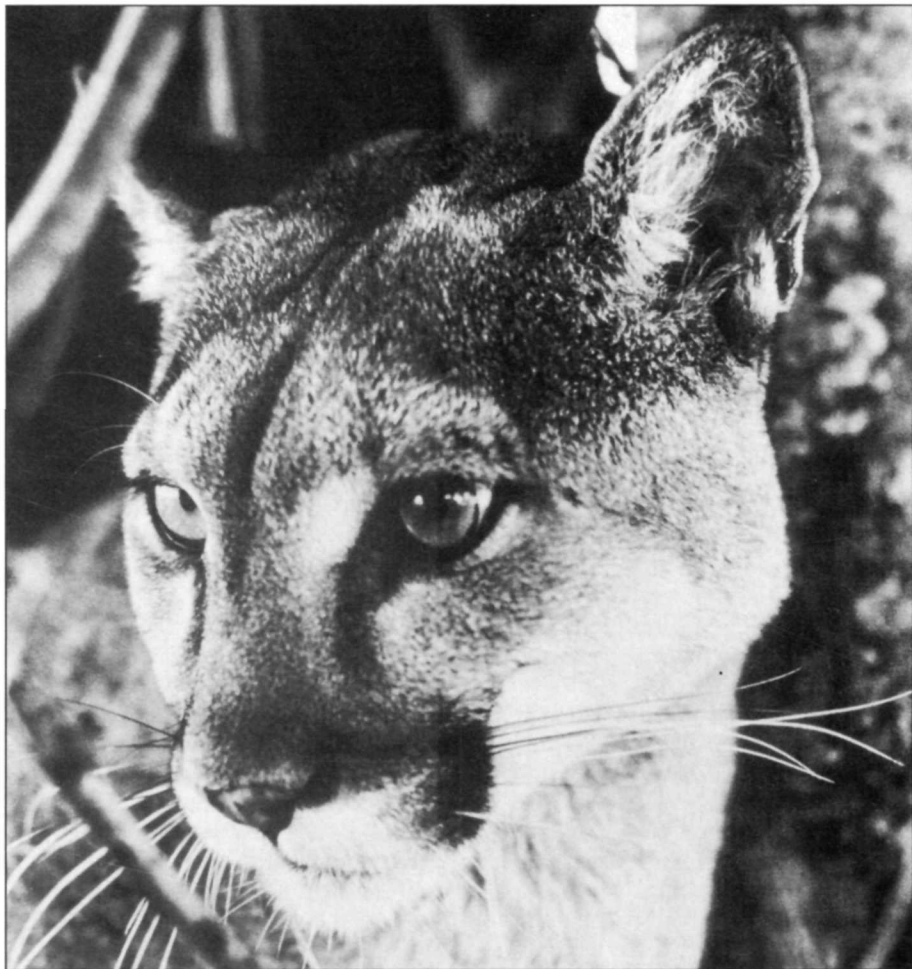
The panther, whose range has been reduced to three areas in southern Florida, is hemmed in on all sides by accelerating development. Increased interest in oil and gas recovery, the reaching fingers of Miami's urban environment, highways crossing the Everglades and Big Cypress National Preserve, hunters traveling in half-tracks and other off-road vehicles (ORVs)—all have narrowed the limits of existence for the solitary Florida panther.

Now the panther, whose territorial requirements range between 40 and 150 square miles per male, can be found only in the most wild areas of southern Florida: the "hole in the doughnut" section of Everglades National Park, the Raccoon Point and Bear Island sections of Big Cypress National Preserve, and the Fakahatchee Strand, which is a state preserve.

Recently, Florida Governor Bob Graham, the six Florida cabinet members, and conservationists met with Robert Brantley, director of the Florida Game and Fresh Water Fish Commission, whose department has responsibility for protecting the endangered panther. The panther protection policy statement they discussed covers three areas: a continuing panther research program, an information program to alert Floridians and visitors to the panther's plight, and the feasibility of reintroducing the panther to parts of its former range.

The Florida legislature also passed a bill this year specifically to protect the panther. The act establishes a five-member scientific advisory board, which was chosen in mid-August, and allots \$150,000 for panther research.

Dr. Allen Egbert, assistant director



U.S. Fish & Wildlife Service/Don Pfizer

With a population of about twenty, the Florida panther is now so rare that wildlife biologists fear the breeding pool is too small to keep the subspecies alive.

of the wildlife division at the Florida Fish and Game Commission, says the funds will be used to research the feasibility of a captive rearing program, the possibility of reintroducing panthers in the northern part of the state, the effects of hunters on deer and other prey populations, and a study on public use and ORVs at Big Cypress National Preserve.

When asked about the continued existence of such a small population, Dr. Egbert said, "You bet we have a chance to save the panther, but southern Florida can't continue to be turned into asphalt. If the future existence of the Florida panther depends on its existence in southern Florida, I'm a little less optimistic."

Susan Mashburn, a biologist with Florida Defenders of the Environment, says, "Our biologists feel the situation is absolutely critical and

aren't sure there are enough panthers in the population to continue. They may be genetically limited already. [The Game Commission] should err on the side of protection now."

Mashburn also said that biologists are considering the possibility of introducing a similar subspecies to widen the breeding pool, but Dr. Egbert said that would be "only a last resort."

Although encroaching civilization and the presence of hunters and their ORVs in the backcountry seriously constrain the panther population, road kills are the primary cause of death where humans are involved. At least two panthers were killed on state highways so far this year.

State Road 29, which bisects panther habitat between Fakahatchee

Strand and the Bear Island section of Big Cypress, is one of the most dangerous strips, according to Big Cypress Site Manager Fred Fagergren. He says that plans to construct Interstate 75, which would also cross panther territory in Big Cypress, are coalescing.

Fortunately, the Game Commission is recommending some protective measures: wide road shoulders

so that drivers and panthers will have better visibility, guard rails that would not inhibit panther crossings, a ban on highway access points in critical panther habitat, and intermittent highway overpasses.

Theoretically, auto overpasses would allow panthers to range without the danger of crossing an interstate. Auto overpasses would also allow natural sheet flow of water in

Big Cypress—a problem that is just being addressed in Everglades.

Adding to the disruption, oil and gas companies have recently built an access road into Raccoon Point in Big Cypress, which is one of the pockets where the panther lives. With increasing pressure from all sides, something has got to give. Unless fast action is taken, it may be the Florida panther.

## NPS Wins Shipwreck And Sunken Treasure

The ship has lain embedded in the sea bottom beneath the still waters of Biscayne National Park for more than two hundred years. Meanwhile, on land, controversy and a baroque set of events have swirled around the issue of who owns the wrecked eighteenth-century vessel.

On August 2, Judge C. Clyde Atkins, of the U.S. district court for southern Florida, settled the issue by declaring the U.S. government and the National Park Service (NPS) as owners of the vessel. The case will set a standard for the future, not only for submerged U.S. resources but also for submerged archeological resources belonging to any state.

NPS archeologists remove a cutlass from the site of the *Fowey*, an eighteenth-century shipwreck.



National Park Service

"This is the first big case that underwater archeologists have won," says George Fischer, research archeologist with the NPS Southeast Archeological Center. "The Justice Department pulled out the stops."

The legal tangle began when Gerald Klein, who found the vessel in 1978 while sport-diving in park waters, brought suit in 1979 to gain lawful possession of the ship. During these proceedings, the court discovered that Klein had removed artifacts—some pottery, glass, part of the ship's rigging—without obtaining a permit from the state or federal government.

In addition, Klein had not bothered to preserve the artifacts. To save them from further deterioration, the court transferred the custody of these objects to the United States until the case could be settled. Also, the NPS closed the area around the wreck in order to halt vandalism.

Then chaos set in. One judge died, another was indicted on a totally different matter, and the case languished, unassigned to any judge for a while. Last year attorney Rebecca Donnellan, who represented the Justice Department for the NPS and who eventually won the case, was in an auto accident. And on January 1, 1982, the plaintiff Gerald Klein was murdered by a thief in the Parine, Florida, restaurant he owned.

In the end, Joan Klein was substituted as plaintiff for her husband; but the court decided that "the wreck the plaintiff 'found' in the late summer of 1978 was neither lost nor abandoned at that time."

Because the ship clearly lies embedded within the confines of Biscayne National Park and within U.S. territorial waters, Judge Atkins had

no trouble declaring the defendant as owner. In addition, the NPS had known about the shipwreck as early as 1975.

The judge's ruling also pointed out that the United States has control of the property under the 1906 Antiquities Act and the Archeological Resources Protection Act. The decision gives added protection to the 45 other shipwrecks in the waters of Biscayne National Park and could extend to submerged cultural resources throughout the park system.

Originally, data indicated that the wreck was a Spanish sailing ship. George Fischer says, however, that months of painstaking research pointed the NPS archeological team to the *H.M.S. Fowey*, an English ship that sank off the eastern seaboard in 1748.

The arrow markings on the powder barrel, the Tudor rose on the cannon, and the pig iron that served as ballast are all typical of English military vessels of that time. In addition, the ship contained a large amount of distinctive French ceramic ware. One of the *Fowey's* last stops had been at a French Canadian port where the captain had purchased just such ceramic ware.

After electrolytic treatments and other preservation measures are accomplished, the artifacts taken from the *Fowey* will be housed in a museum at the park.

As for the ship—the NPS is encouraging the sea to cover up the exposed timbers.

Richard Childs, chief ranger at Biscayne, says, "We are attempting to get the sand to accrete over the site so as not to attract vandals or treasure salvors."



The NPS is planting synthetic sea grass to help start the process, plus manatee and turtle grasses to further anchor the sand so the wreck will be buried and protected.

"We are going to try to put it to bed," says Fischer. "And it will probably never be seen again in my lifetime. But after the year 2000, when they have new research techniques . . ."

### Houston Planners Eye Big Thicket Water Source

Houston is looking ahead to the future—when the city will be even bigger and water harder to find. The city and the Army Corps of Engineers are considering water that flows into Big Thicket National Preserve as a solution to their problem.

Specifically, the Corps and the Lower Neches Valley Authority are proposing to construct a dam just upriver from Big Thicket on the Upper Neches River. The Rockland Reservoir, as it is being called, has been a proposal on the books in Texas since 1945; but the environmental situation has changed.

In 1974 Big Thicket was authorized as part of the National Park System. The preserve was established to protect a singular conjunction of biological communities—most of which depend on the Neches River's seasonal overflow, which would be cut off by the dam.

Often called the "biological crossroads of America," Big Thicket includes ecological communities representing southeastern swamps, central plains, eastern forest, and southwestern desert along 86.6 miles of Neches floodplain. The portion of Big Thicket that straddles the Neches River would be left high and dry without the cyclical overflow.

"The result [of the dam] would be that fully one-quarter of the protected acreage within the Preserve will lose the values for which it was protected," said T. Destry Jarvis, NPCA's director of federal activities, in comments to the Texas Department of Water Resources.

Bill Hallmon, president of the Big Thicket Conservation Association

*Continued on page 32*

### Henry M. Jackson 1912–1983

America's National Park System, unique in all the world, has lost a great friend and champion—a man who, like the National Park System, was unique.

Henry Martin (Scoop) Jackson died on September 1 at his home in Everett, Washington, leaving behind a record of public service and achievements in the field of conservation and natural resource policy that may never be equaled.

Like so many of the causes that Senator Jackson championed, he was ahead of his time in his commitment to the protection of the environment. He was an "environmentalist" before most people had heard the word. For more than thirty years he played a pivotal role in shaping almost every piece of park and natural resource legislation considered by the Congress.

His list of legislative accomplishments in this field is staggering. The Wilderness Act, the Land and Water Conservation Act, the National Trails and Wild and Scenic Rivers System acts, the original act establishing Redwood National Park, the Federal Lands for Parks and Recreation Act, the National Environmental Policy Act, the Youth Conservation Corps and Young Adult Conservation Corps acts, the Eastern Wilderness Act, the Federal Land Policy and Management Act, the Surface Mining and Reclamation Act, the Endangered American Wilderness Act, the Outer Continental Shelf Lands Act Amendments, and the Alaska National Interest Lands Conservation Act of 1980—all these laws bear the mark of Senator Jackson's legislative skills.

At the time of his death, he was in the midst of completing work on a statewide wilderness bill for Washington and was helping to lead the fight against the Alaska hunting bill.

As impressive as his legislative achievements are, Senator Jackson's importance to the conservation movement cannot be measured only in terms of bills or public laws. No, those of us who had the privilege of working with him over the years on



conservation-related issues will always remember him first and foremost as absolutely dependable. Over and over again, whether it was his attendance at a crucial hearing or his presence on the Senate floor at a critical moment, he was there when it counted.

Conservationists did not always agree with Senator Jackson. But when the chips were down, they always seemed to turn to him.

The last time I saw Senator Jackson was just before the August recess. I had prepared a draft of a short floor statement for him in anticipation of the Senate's consideration of the Fiscal Year 1984 Interior Appropriations bill.

I dropped it by his office, not expecting to see him. But he was there, cheerful as ever, doing five things at once and somehow managing to keep everything straight.

He took the unsolicited statement from me, glanced at it, put his hand on my shoulder, and said, "Good work. I know I can always depend on you." I have wondered many times since his death if he had any idea how much all of us depended on him.

—Tom Williams

*Tom Williams worked for Senator Jackson since 1973 as a professional staff member on the Senate Committee on Energy and Natural Resources.*

*Continued from page 31*

(BTCA), an NPCA associated organization, points out that the Rockland Reservoir and dam would also flood timberland and would affect commercial fishing in the Sabine and Neches estuaries.

BTCA is working to deauthorize the proposed dam. Both NPCA and BTCA are urging the Texas Department of Water Resources to come up with a water conservation plan—such as employing block rates for billing, retrofitting equipment, and recycling water. Conservationists say that the lack of any water conservation plan in the proposal is mainly the result of long-held attitudes on the part of Houston planners and the Corps.

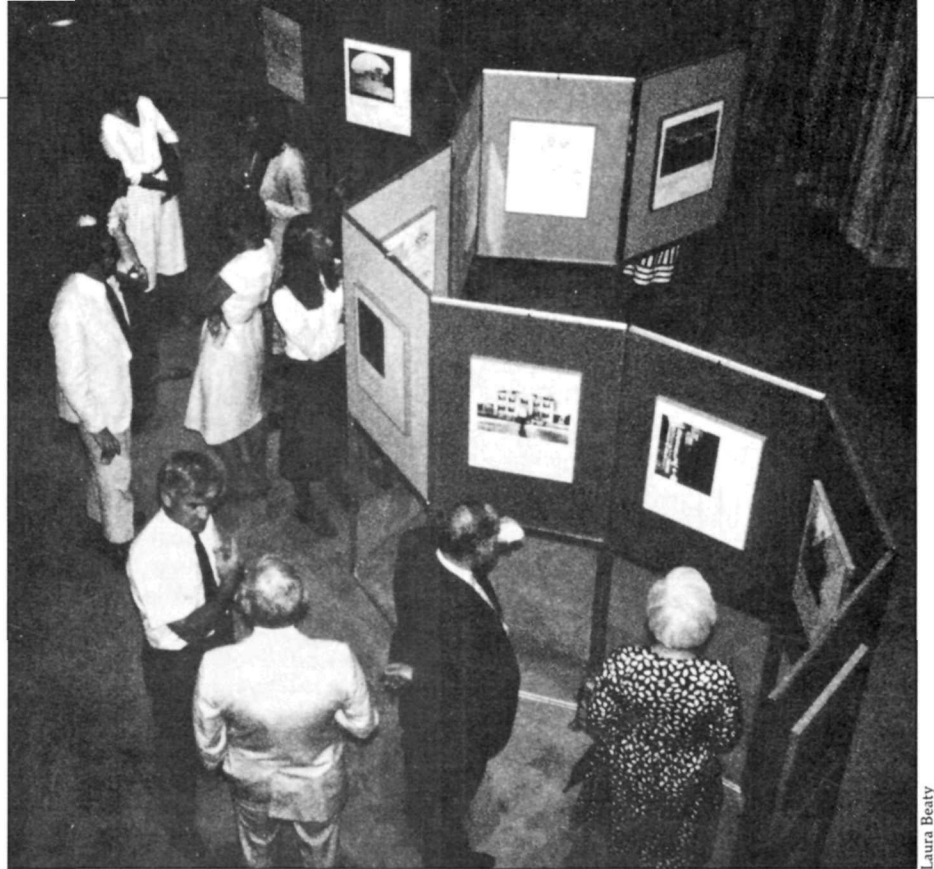
"Until now, whenever water's been needed, they put up another dam," says Hallmon. "It will be built if something isn't done about it."

### Rites of Passage: Images of Ellis Island

The immigrant experience is bound up with the Statue of Liberty and Ellis Island, which form a combined unit in the National Park System. On August 15 a sculpture and photography exhibit opened in the rotunda of the Cannon House Office Building in Washington, D.C., to help celebrate that rite of passage and to stimulate interest and funds for the restoration of both historic sites.

The Coordinating Committee for Ellis Island, which was founded by Eleanor Sreb and other individuals with the cooperation of NPCA and the National Park Service, has assembled a show consisting of 31 sculptures, charcoal drawings, and photographs depicting the immigrant experience. "Becoming Americans: Images of Ellis, the First Experience" displays the work of sculptor Phillip Ratner, contemporary photographs of Ellis Island by Ira Yellen and Stoney Duren, and the charcoal drawings of Rae Robinson.

The Coordinating Committee is looking forward to exhibiting "Becoming Americans" at national historical parks around the country.



Laura Beaty

NPCA's August exhibition, "Historic Architecture in the National Park System," displayed select photographs and drawings from the Historic American Buildings Survey (HABS) collection. The show depicted architecture from colonial times to the Alaska gold rush, and helped celebrate the fiftieth anniversary of HABS.

### New Mexico Caves Off Limits to Drilling

Environmentalists gained a victory on September 2 when M.J. Hassell, regional forester at New Mexico's Lincoln National Forest, recommended that Guadalupe Escarpment Wilderness Study Area (WSA) be put off bounds to energy leasing. Hassell included in his recommendation 10,560 acres of the Dark Canyon drainage, which is adjacent to Guadalupe Escarpment WSA.

NPCA has long supported protecting Guadalupe Escarpment for a number of reasons. The area lies between Guadalupe Mountains and Carlsbad Caverns national parks and forms an integral part of the geological uplift; any energy drilling would disrupt the view of Guadalupe Ridge from Guadalupe Mountains National Park; the area is worthy of protection on its own account, for both its surface and its subsurface features.

In his recommendation Hassell emphasizes that 79 major caverns

and the more than 30 minor caves in the area are the focus of the protection effort.

Cottonwood Cave, at the head of Dark Canyon, approaches Carlsbad Caverns in size and in miles of passageway. The WSA even contains a cave in which all the formations are black—the result of water seeping down from charred and burnt-out sections of a centuries-old forest fire.

Jim Overbay, deputy regional forester, says, "Poking drill holes in could damage the caves. And these are living caves. The formations continue to grow, and we felt we needed more information about them."

The Forest Service figures it will take one or two years to locate and determine the dimensions of all the caves in the area. At that time the Forest Service may decide that drilling may be acceptable in certain areas. Until the study is completed, however, the Guadalupe Escarpment seems safe.

## Church, NPS Divide Labor At San Antonio Missions

In connection with the opening of San Antonio Missions National Historical Park in Texas, the National Park Service (NPS) will present a permanent architectural exhibit of the four eighteenth-century missions in November.

Side by side the exhibit will display architectural drawings and photographs done in the 1930s and similar documentation completed only a few months ago. Visitors will be able to examine how the missions have changed during that fifty-year period and—at least as interesting—how the recording techniques of the Historical American Building Survey (HABS) have changed.

All of this activity—the official opening of the missions and the exhibit—came about because the NPS and the Catholic Church resolved a heated, five-year controversy earlier this year. Because the churches within the missions are part of active parishes, the issue concerned the separation of church and state.

The cooperative agreements, contemplated by the 1978 act establishing the historical park, carefully outline the roles of the Catholic archdiocese, the NPS, the Texas Parks and Wildlife Department, and

the San Antonio Conservation Society. Although the cooperative agreement with the archdiocese prohibits any NPS activity—such as restoration or maintenance—that directly affects a church or church-related building, the NPS can provide technical assistance for the restoration of those specific structures.

According to the agreement, the NPS will focus on interpreting the secular role of the four missions—Missions San Jose, San Juan Capistrano, Espada, and Concepcion. The NPS also will have exclusive authority to manage the grounds and the nonreligious facilities. These historic structures include aqueducts, mills, Indian living quarters, and work buildings.

Now that the division of roles is cleared up, the NPS can proceed with its mandate to restore and preserve mission structures. To accomplish this task, the NPS assigned an architectural survey team from HABS to document mission structures.

These photographs and drawings, which make up part of the exhibit, include the facade of Mission Concepcion, a postcolonial house on the grounds of Mission San Juan, site plans for each of the missions, and details of various doors and windows within Mission Concepcion.

Mission San Jose is one of four chapels at San Antonio Missions National Historical Park in Texas—part of a chain of missions built by the Spanish in the 1700s.



## NPS Scraps Traffic Plan For Rock Creek Park

An ambitious plan to open more of Rock Creek Park in Washington, D.C., to bicyclists, joggers, roller skaters, and pedestrians was publicly abandoned in early August by National Park Service (NPS) officials.

The plan to curtail commuter auto traffic on Beach Drive would have reduced congestion and air and water pollution and restored quietude to a heavily wooded stream valley in the heart of the city. Experimental weekend closings of the road had already proved popular with recreationists.

Caving in to pressure from automobile commuters and some city officials, Manus Fish, NPS director of the National Capital Region, announced that a three-year planning effort would be disregarded, and he offered a new bike path instead. Because construction of a paved path through the narrow valley would disrupt the site and—most important—would do nothing to alleviate traffic problems, NPCA is opposed to the plan.

Peter Harnik, National Park Action Project representative for the park and spokesman for the People's Alliance for Rock Creek, noted with dismay that "the Park Service would go through with such a lengthy and comprehensive decision-making process, carefully involving the public every step of the way, release a proposed plan which closely reflected what the involved citizens called for, and then throw the whole thing out without an explanation.

"If the Park Service has \$1 million to spend on a bike path that cyclists don't want, cyclists have dozens of recommendations where that money could be spent to improve the existing trail."

In comments to Manus Fish, T. Destry Jarvis, NPCA Director of Federal Activities, said, "If you attempt to construct a high-standard commuter bike 'trail' through Rock Creek, I believe the adverse environmental impact on the resources for which the park was established would be unjustifiable."



The original plan to restrict traffic called for three phases, tied in part to the completion of major repairs on a nearby city street. Another artery through the park would have served as an alternative auto route, adding only a few extra minutes to a commuter's travel time.

The first phase would have permitted one lane of rush-hour traffic on a two-mile stretch of Beach

Drive, leaving the other lane open to nonmotorized uses, including bicycling and jogging commuters. On weekends and holidays this stretch would have been closed entirely to autos.

The second phase called for weekend and holiday closings of two additional stretches of roadway. In the final phase, to begin upon completion of the nearby road repair

project, the NPS would have erected a barricade to auto traffic at Boulder Bridge, an historic structure located approximately halfway along the two-mile stretch. The barricade would have cut off any through traffic, but turnarounds on both sides of Boulder Bridge would have kept the road accessible to the elderly, handicapped, and others wishing to visit the park by car.

## National Battlefields Used As Urban Elbow Room

With green space at a minimum in many of our eastern cities, nearby national battlefield parks have been subjected to every sort of recreational use: as picnic grounds, ball fields, weekend promenades, and more.

In 1979, Professor Robert Meinhard, chairman of the National Battlefield Preservation for the Civil War Round Table Associates, reported on the status of these units of the National Park System for NPCA. Meinhard has completed an update on these national battlefields, and he is heartened by an increased commitment to the resource on the part of park managers.

"The recent management plans for Gettysburg, Manassas, Shiloh, and Wilson's Creek, to name some of them," he says, "are models of good planning that place preservation and interpretation first."

Superintendents at national bat-

tlefields said efforts are underway to develop new interpretive programs, restore historic structures, repair gun carriages, and move nonhistoric trees and bushes. Because such growth was recently cut down at Gettysburg National Military Park, Meinhard said, "I was able to view a setting much like that observed by General G. T. Warren as he stood on Little Round Top July 2, 1863."

Despite their renewed commitment, national battlefield managers are merely holding their own against an ever-growing problem of urban encroachment. A survey published this past summer shows that the vast majority of Georgia residents who live near Chattanooga-Chickamauga National Military Park favor widening the highway that cuts through the park.

The Civil War earthworks at Kennesaw Mountain National Battlefield Park in Georgia have been worn down by weekend picnickers and the like. In comments on Ken-

nesaw's recent draft general management plan, Laura Beaty, NPCA program coordinator for cultural resources, has urged the NPS to separate recreational and cultural uses of Kennesaw.

"Managing the earthworks as historic resources dictates that their integrity be maintained," said Beaty. "Interpretation of the historical events is tied directly to the scene."

Even though the boundaries of Manassas National Battlefield Park were enlarged by Congress in 1980, Manassas received no money from the Land and Water Conservation Fund until Congress appropriated \$3 million for Fiscal Year 1984. (At this writing, approval for the funds is expected.) Meanwhile, because urban development is growing in the area, Manassas land prices spiral ever upward.

Now that park managers have the will, Meinhard and others hope that National Park Service personnel will find the way.

## Arizona Strip Bill Finds Favor in House

The consensus reached on the Arizona Strip Wilderness by conservationists, Energy Fuels Nuclear, Inc., and grazing interests has a good chance of bearing fruit in Congress this session. During September 13 hearings held by the House Subcommittee on Public Lands and National Parks, Subcommittee Chairman John Seiberling (D-Ohio) said, "We've got a regular love-in here."

The Arizona Strip Wilderness Act (H.R. 3562) would add 394,000 acres of BLM and Forest Service lands along the Arizona-Utah border to the wilderness system. The act

would return the rest of the wilderness study areas (WSAs) in the strip to multiple-use management.

Energy Fuels Nuclear, which is recovering from the Arizona Strip the richest grade of uranium in the United States, wants to mine more of that acreage. The company determined it would be simpler to resolve the wilderness issue "through negotiation and compromise rather than through confrontation."

A slight snag in the hearings was the Forest Service's insistence that the WSAs released by the proposed act never again be considered for wilderness status. This "hard-release language" angered Representative

Seiberling, who intimated that such a precedent-setting provision had been initiated at the highest levels of the Administration.

All other principals were satisfied with the language, however; and these included the representatives from both Arizona and Utah, who all cosponsored the bill.

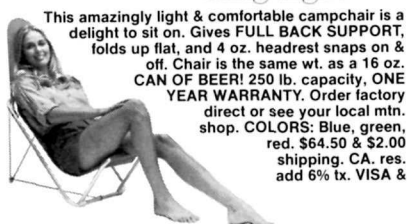
Russ Butcher, NPCA's Southwest representative and a recent appointee to the BLM's Arizona Strip District Advisory Council, testified, "For all of us who participated in the negotiating process, this has been an exciting adventure in the democratic process."

*NPCA Report continued on page 38*

# National parks

## HOLIDAY GIFT GUIDE

### Sling-Light



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

### The Best Choice

TOLL FREE  
800-233-2175  
(In PA) 800-222-1934

#### Lightweight Hiking Shoes

Nike Lava Dome (5-14,15)	\$45.95
Nike Approach (4-14,15)	\$56.95
Nike Magma (5-14,15)	\$65.95
New Balance Ranier (m & w)	\$68.95
New Balance Light Hiker	\$49.95
Merrell Gore-tex	\$79.95
Merrell Leather	\$125.95

#### Aerobic Shoes

New Balance Jamboree (AA,B)	\$28.95
New Balance Pulse (AA,B,D)	\$35.95
Reebok Freestyle	\$30.95
Etonic Aerobix	\$27.95

#### Childrens Hiking Shoes

Nike Volcano (Lo-top)	\$26.95
Nike Avalanche Hi-top	\$29.95
Add \$2.00 for shipping-write for catalog	
TBC, Box 13, Hershey, PA 17033	
VISA, MC, DC, AE, Choice	



## Rent Mother Nature

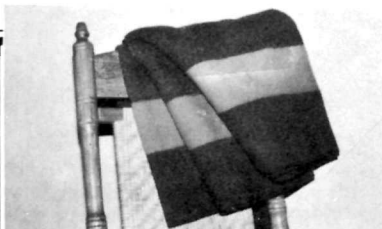
### Lease a Sugar Maple Tree or A Sap Bucket For One Year

A really different Christmas gift idea. First, we'll send each lucky friend, in time for Christmas, a Gift Announcement Card from you—and a copy of an authentic 1890 Treasury Dept. Lease, hand-personalized, and suitable for framing. Then, in Spring '84, when all the sap has been gathered and processed, each tree tenant will receive a big, decorated jug filled with at least 60 ounces of 100% pure Maple Syrup—30 ounce guarantee to bucket tenants—even more if Mother Nature yields an abundant supply! We do all the work—your friends get the delicious natural syrup—and you get all the raves!

Tree Lease \$25.00  
Bucket Lease \$15.00

Send check plus \$3.00 handling per gift:  
NORTH COUNTRY CORP. Dept. NC 118  
Box 193, 106 Appleton St., Cambridge, MA 02138.  
Include full name and address of gift recipient.

VISA & Mastercharge Accepted With Exp. Date  
To order by phone call (617) 739-7400.



## A Blanket That Will Last a Lifetime

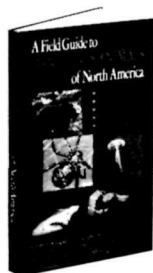
100% wool blanket, made in UTAH of finest long staple western wools. Permanently moth proof, flame resistant, pre-shrunk and washable. Perfect for camping or any home decor. Unconditionally guaranteed; complete satisfaction or your money back.

Soft, luxurious charcoal gray with a rich red stripe on each end. Weighs four pounds. 80" x 90" fits queen or full-size beds. \$45 each, postpaid.

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

**REAVES TRADING COMPANY**  
3954 EVANS RD.  
DORAVILLE, GA 30340

## BRING A LITTLE WILD LIFE HOME...



... and capture a few salient facts along the way, in

### A Field Guide to DANGEROUS ANIMALS OF NORTH AMERICA

by Charles Kingsley Levy, Ph.D.

For all the animals you love — and a few you do not — here is the first comprehensive guide to provide detailed information about them all in every category: creatures that envenomate and sting; that bite, maul and claw; that have venomous bites; and even those that are (or may be) poisonous to eat. For each you will find what symptoms to watch for and what first aid steps are to be taken. This handy field guide is handsomely illustrated with 114 original drawings, and there are 16 pages of color plates.

Paper, \$9.95

This educational **BIRD IDENTIFICATION CALENDAR 1984**, prepared under the auspices of the Mass. Audubon Society, contains some seventy precisely rendered original color portraits of birds common to North America, by watercolorist John Sill. For those who want to know more about the bird than its feathers, here is an introductory course in the sport of bird watching and bird identification: gender indications, specific markings, habitats, feeding and nesting habits and more. A handy, informative and pleasant way to track engagements and feathered friends.

12 1/4" x 11" \$6.95



Please send me \_\_\_\_\_ copies of DANGEROUS ANIMALS OF NORTH AMERICA @ \$9.95 ea.

\_\_\_\_\_ copies of The BIRD IDENTIFICATION CALENDAR 1984 @ \$6.95 ea.

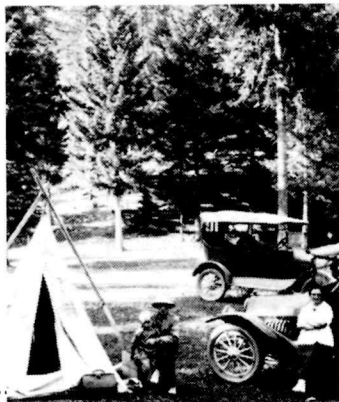
I enclose a total of \$\_\_\_\_\_ in check or money order. I understand you will send these books postage free with this coupon. Satisfaction guaranteed or my money cheerfully refunded.

Name \_\_\_\_\_  
Street/Box \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

SEND TO: **THE STEPHEN GREENE PRESS**  
Box 1000-NP  
Brattleboro, Vermont 05301

*Introducing a major new reference work.*

# The Encyclopedia of American Forest and Conservation History



From early life on the forest frontier to today's crucial land-use issues, here's a unique new information source. You'll get 415 original articles that provide detailed, authoritative, balanced coverage of:

- Environmental issues, conflicts, laws, organizations, leaders—past and present
- The forests of each state and national parks
- Forest products, resources, and ecology
- The forest industry
- Social life in forest communities

*Special features: 415 original articles • 196 rare photographs • Maps • Lists of key dates and laws • Index • 780 pages in two handsome volumes • Prepared under the auspices of the Forest History Society*

**MACMILLAN Publishing Company**

Yes! Send me \_\_\_\_\_ set(s) of **ENCYCLOPEDIA OF AMERICAN FOREST AND CONSERVATION HISTORY (#90753)** at \$150.00 plus \$3.00 postage and handling. If not satisfied, I may return it within 30 days for full refund.

☐ Check ☐ VISA ☐ MasterCard for \$\_\_\_\_\_

Acct# \_\_\_\_\_

Exp. Date \_\_\_\_\_ Bank # \_\_\_\_\_

Signature \_\_\_\_\_

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY/STATE/ZIP \_\_\_\_\_

☐ Please send me more information

Mail to: **MACMILLAN PUBLISHING COMPANY**

NP

866 THIRD AVENUE, N.Y., N.Y. 10022/P. KEAN

IC-133

## LEAVE NO FOOTPRINTS



### THE OTTER

The most enjoyable way to see one of America's wild and scenic rivers is by floating the river itself, and no craft is more affordable or more fun for the floater than the NRS OTTER. A lively, responsive paddle raft suitable for 2-6 people, the NRS OTTER is your best buy for a day's float trip or a weekend expedition, and the only footprints you'll leave will be wet ones on the riverbank, quickly washed away.

#### FREE CATALOG

The NRS OTTER is only one of over 800 items for safe, exciting river travel featured in the complete Northwest River Supplies catalog. NRS is the largest mail-order source of river-running gear in the country. If you'd like to get acquainted with us, call or send for our free catalog.

#### Northwest River Supplies

800-635-5202

P.O. Box 9186NP • Moscow, ID 83843



## Enjoy Your NATIONAL PARKS More!

Colorful, descriptive books on individual national parks, monuments, historic sites, and recreational areas written and illustrated by park naturalists, historians, archeologists, and landscape photographers. Here are the parks and their stories—geology, history, Indian lore, activities, wildlife, scenery. Most are 24-48 pages and more, in full color, large format, soft covers. \$3.95 each (\$3.50 each for 10 up).

\*Indicated titles also available in cloth covers @ \$7.95 each.

- |   |  |
|---|--|
| <input type="checkbox"/> Acadia*                | <input type="checkbox"/> Guadalupe Mountains     |
| <input type="checkbox"/> Badlands               | <input type="checkbox"/> Haleakala*              |
| <input type="checkbox"/> Big Bend               | <input type="checkbox"/> Hawaii Volcanoes*       |
| <input type="checkbox"/> Blue Ridge*            | <input type="checkbox"/> Lake Mead*              |
| <input type="checkbox"/> Bryce Canyon*          | <input type="checkbox"/> Lassen                  |
| <input type="checkbox"/> Cabrillo               | <input type="checkbox"/> Mammoth Cave            |
| <input type="checkbox"/> Canyon de Chelly*      | <input type="checkbox"/> Mesa Verde Rocky Mtn.   |
| <input type="checkbox"/> Cape Cod*              | <input type="checkbox"/> Mt. Rainier*            |
| <input type="checkbox"/> Capitol Reef*          | <input type="checkbox"/> Mt. Rushmore*           |
| <input type="checkbox"/> Carlsbad Caverns       | <input type="checkbox"/> North Cascades          |
| <input type="checkbox"/> Chaco Canyon           | <input type="checkbox"/> Olympic*                |
| <input type="checkbox"/> Channel Islands*       | <input type="checkbox"/> Petrified Forest        |
| <input type="checkbox"/> Crater Lake*           | <input type="checkbox"/> Pipestone               |
| <input type="checkbox"/> Custer Battlefield     | <input type="checkbox"/> Redwood                 |
| <input type="checkbox"/> Death Valley*          | <input type="checkbox"/> Saguaro                 |
| <input type="checkbox"/> Denali (Mt. McKinley)* | <input type="checkbox"/> Sequoia Kings Cnyn*     |
| <input type="checkbox"/> Devils Tower (2)       | <input type="checkbox"/> Shenandoah*             |
| <input type="checkbox"/> Dinosaur*              | <input type="checkbox"/> Statue of Liberty*      |
| <input type="checkbox"/> Everglades*            | <input type="checkbox"/> Theodore Roosevelt*     |
| <input type="checkbox"/> Gettysburg*            | <input type="checkbox"/> Virgin Islands/Buck Is* |
| <input type="checkbox"/> Glacier                | <input type="checkbox"/> Voyageurs               |
| <input type="checkbox"/> Glen Canyon-L. Powell* | <input type="checkbox"/> White Sands             |
| <input type="checkbox"/> Grand Canyon*          | <input type="checkbox"/> Wind Cave*              |
| <input type="checkbox"/> Grand Teton*           | <input type="checkbox"/> Yellowstone*            |
| <input type="checkbox"/> Great Sand Dunes       | <input type="checkbox"/> Yosemite*               |
| <input type="checkbox"/> Great Smoky Mtn.*      | <input type="checkbox"/> Zion*                   |

10-day money-back guarantee. Enclose check with order or VISA or MASTERCARD number, expiration date, signature. Include \$2 per order for shipping. Order From:

**NATIONAL PARK PUBLICATIONS**  
Box 15549/NP, Lakewood, CO 80215

# SHOW 'EM YOU'VE BEEN THERE!



Authentic topographic maps of the world's most popular backpacking and mountaineering locations are reproduced on highest quality T-shirts. When ordering, please specify:

**Design:** Yosemite      Death Valley  
Grand Canyon      Pike's Peak  
Mt. Rainier      Great Smokies  
Yellowstone      ...and others

**Size:** S, M, L or XL

**Color:** Cream, Navy, Blue or Burgundy

Send a check or money order for \$9.95 per shirt plus \$1.50 each for handling (California residents add 6.5% sales tax).

For catalog listing other maps available, send \$1.00 which is applied to your first order.

**TOPO WORKS INC**  
2121 Bryant Street  
San Francisco  
CA 94110  
Dept. 2-B

## Support Our Advertisers

### ALADDIN KEROSENE MANTLE LAMP



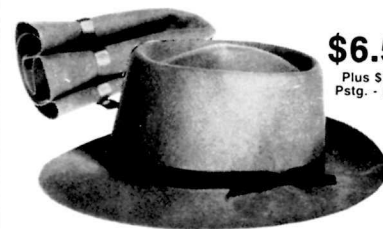
The original authentic Aladdin Lamp. Features patented kerosene burner, produces brilliant white light. Replacement parts for old and new lamps.

Cat. 75¢ Dept. 24

**CAMPBELL LAMPS**

1108 Pottstown Pike, West Chester, PA 19380

### CRUSHER FELT HAT



**\$6.50**

Plus \$1.00 Pstg. - Hdig.

This hat looks good and feels good, yet rolls up and fits in your pocket or pack when not in use. Has a 2 1/2" brim to protect your eyes and an absorbent sweatband. Weighs only 3 oz. Made of 100% wool felt; sylvester treated for water repellency. A favorite field hat for both men and women. (Children like them, too.) Sizes 6 1/2 thru 7 1/2. Available in Brown and Tan. Money-back guarantee.

Write for **FREE** catalog.

**P&S Sales** Dept. NP-113  
P.O. Box 1600, Chapel Hill, N.C. 27515



**3M**

# Window Insulator Kits

Patio Door-Picture Window

As Seen On T.V.

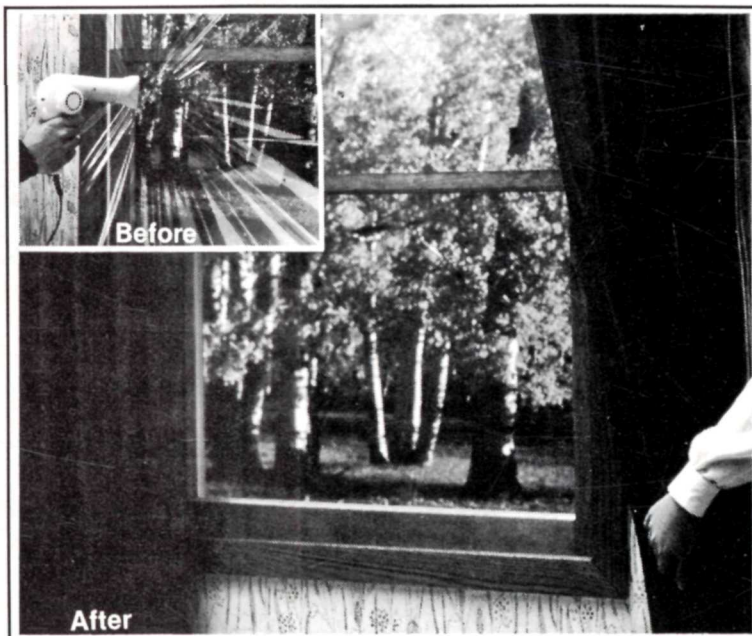
**\$2.98**  
First Quality  
Includes Shipping,  
Handling and Tax

**NEW!**  
Increases  
R-Value  
**90%**

## SAVES ENERGY\$

- Hair dryer shrinks plastic "Drum Tight". No ugly wrinkles.
- Stops icy drafts and helps prevent frosty windows.
- Clear as glass.
- Reduces cold air infiltration up to 97%.
- Installs in minutes using only scissors and hair dryer.
- Keeps warm air in, cold air out.
- Genuine 3M® quality, unlike discolored, flimsy, kitchen-wrap type brands.
- Not affected by harsh sunlight.
- Extra tough, reuseable up to 4 seasons.

**OVER 40% OFF STORE PRICE**



DON'T LET THE LOW PRICE FOOL YOU! . . . Top of the line . . . genuine 3M-Brand® energy saving products at money saving discount prices. Other brands are cloudy, time consuming to apply and easily damaged.

The high quality 3M-Brand® window kit takes just minutes to install, using only a hair dryer and scissors. Fastens to the inside window frame, molding or wall. Kit is strong, clear, long-lasting and easy-to-use.

Apply adhesive tape (included) to outside edge or face of window molding, peel off protective backing to expose adhesive,

(will not harm window molding when used as recommended). Lightly press clear plastic to tape, run your finger over taped surface. Shrink clear plastic with hair dryer, trim away excess, no ugly wrinkles or waves. Clear as glass.

The easy-to-install film shrinks "drum tight" for a tough weather seal. Double your insulation, use with storm windows. Cover air conditioners, ventilating fans and other openings. Different size kits available to fit almost anywhere on any size or shape window.

Shop and compare store prices of \$15.75 (Suggested by Manufacturer) + tax, shopping costs.

## Window, Patio Door-Picture Window Insulator Kits

SIZE	ENOUGH TO COVER	AMT.
42"x62"	(1) 3'x5' window	\$ 2.98
62"x210"	(5) 3'x5' windows	\$10.95
84"x110"	(1) Patio door - picture window	\$ 8.88

(We pay any sales tax.)

Price includes delivery to your door, no shopping hassle.

MINIMUM CHARGE CARD ORDER \$15.00  
VISA or MASTERCARD RUSH ORDERS  
CALL TOLL FREE 1-800-321-9892  
(Inside Ohio) 1-216-236-5021

SEND CHECK OR MONEY ORDER  
PAY BY CREDIT CARD OR MONEY ORDER  
AND WE SHIP WITHIN 3 WORKING DAYS.

Sorry, No C.O.D.'s

USE COUPON AND SAVE OVER 40%

\$5

**Sotz Inc.**

\$5

Early Bird Discount Coupon

**Deduct \$5.00**

From each and every total

**Order of \$30.00**

Friends, Neighbors and Relatives

Order All At Once and Save

Coupon (or a reasonable copy) must accompany original order.

Coupon good only for this ad. Offer may expire without notice.

Sotz Inc., 13706 N. Station Rd., Columbia Station, OH 44028

# Presenting a world of nature tours.



Travel with a purpose  
animals, birds and flowers.  
Search out plants and  
Explore rain forests, moun-  
tains 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.  
Write for your complimentary Directory today!

## Destinations for 1984 include:

### The Americas

Okefenokee • Alaska •  
Pacific Northwest • Canyon  
Lands • Canadian Rockies •  
Churchill • Newfoundland •  
Mexico • Panama & Costa  
Rica • Amazon • Galapagos •  
Peru • Argentina.

### Europe

Iceland • Ireland • Scot-  
land • Switzerland • Greece.

### Asia & Africa

Japan • Sri Lanka • Hima-  
layas • Kenya • Madagascar.

### Oceania & Australasia

Australia • New Zealand •  
Papua New Guinea •  
Hawaiian Islands.



## QUESTERS

Questers Tours & Travel, Inc.

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

## Bisti Badlands Considered for Wilderness

Wilderness protection for 35,000 acres of the Bisti Badlands region north of Chaco Canyon, New Mexico, was given a big boost in August. Both houses of Congress introduced bills that would add the Bisti, Denazin, and Ah-shi-sle-pah Bureau of Land Management wilderness study areas to the National Wilderness Preservation System.

Public opinion was overwhelmingly in favor of this proposal at congressional field hearings in Santa Fe last May. Russ Butcher, NPCA's Southwest representative, testified that the outstanding paleontological and scenic values of these badlands actually merit their addition to the National Park System.

Without wilderness or park protection these units face almost certain destruction by coal strip mining. NPCA is also concerned that coal mining may occur within the sight and sound of these badlands wilderness areas unless mineral interests are exchanged for leases on other, less sensitive lands.

## Top Interpreter Chosen For Freeman Tilden Award

Bruce Craig, chief of interpretation at Channel Islands National Park, California, was chosen to receive the 1983 Freeman Tilden Award for Outstanding Interpreter. The award was established in 1982 by NPCA in cooperation with the National Park Service (NPS) and is funded by KC Publications.

The decision to honor Craig as most outstanding among ten regional finalists was announced at the reception for NPCA's art exhibition on October 3. Craig will receive the award at NPCA's annual dinner and reception November 17 at the Shoreham Hotel in Washington, D.C.

NPS Director Russell Dickenson, NPS Advisory Board Chairman Alan Underberg, and NPCA President Paul Pritchard chose the outstanding interpreter. They had specific considerations in mind, and Pritchard explains:

## NEW MAP SERIES

Available unframed or PhotoFramed

# NATIONAL PARK MAPS

## IN RAISED RELIEF

Accurate  
miniature  
models of  
Park terrain

- Ideal Gifts
- Great Souvenirs

Perfect for pre-planning your Park visit—a way to re-live your trip, these maps show woodlands, rivers, streams, lakes, mountains, valleys, roads plus elevation contours of 10 national parks:

Mount Rainier	Glacier
Rocky Mountain	Olympic
Shenandoah	Kings Canyon/
Grand Teton	Sequoia
Yosemite	Yellowstone
Great Smoky Mountains	



Printed in 6 colors  
Formed in durable plastic



P.O. Box 104  
**HUBBARD** Northbrook, IL 60062

Send FREE description/ordering information

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

NP



"By recognizing our National Park Service's finest interpreters, we hope to encourage other park interpreters to reach for excellence. Our goal is to make the visitor experience educational as well as inspirational."

Craig, who represents the NPS Western Region, will receive \$2,500 and a small bust of Freeman Tilden—the "father of interpretation"—created by noted sculptor Phillip Ratner. In addition, his name will be added to the life-sized bust of Freeman Tilden that is permanently displayed in the Harpers Ferry Training Center.

Craig's accomplishments include building and coordinating a large and active volunteer program, organizing theme trips to the islands, expanding a publications program, and implementing an interpretive program for the Channel Islands National Marine Sanctuary.

One can also see the results of Craig's efforts in the exhibits at the visitor center: the California Native Plant Trail with large-print signs for the visually impaired; the hands-on "object garden," which depicts a typical Channel Islands ecosystem; and the photographic display that, when completed, will illustrate the various zones of an underwater environment.

The other nine regional finalists are Elena Miller (Southeast, Carl Sandburg Home National Historic Site); James Mack (Pacific Northwest, John Day Fossil Beds National Monument); David Forney (National Capital, C&O Canal National Historical Park); Robert Huggins (Southwest, Big Bend National Park); Dwight Storke (Mid-Atlantic, George Washington Birthplace National Monument); Dennis Davies (Rocky Mountain, Dinosaur National Monument); Robert Rothe (North Atlantic, Acadia National Park); Barbara Minard (Alaska, Sitka National Historical Park); and Larry Waldron (Midwest, Indiana Dunes National Lakeshore).

**Coming Up:  
Annual NPCA Raft Trip  
On New River  
Details Next Issue**

# National parks

## TRAVEL TOUR GUIDE



### IDAHO WHITEWATER FLOAT TRIPS

Middle Fork of Salmon River, Snake River Birds of Prey. For Information Write: Middle Fork Rapid Transit, P.O. Box 2368 Ketchum, Id. 83340-2368 (208) 726-5666

### 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

783L Cliffsides Dr.  
Akron, OH 44313

**swissair** 

### SEE ALASKA'S PARKLANDS

We specialize in small personalized trips. Scheduled and custom treks into scenic mountains, wild rivers and wildlife areas (Brooks, Alaska, Aleutian Ranges). Steve Hockett: certified outfitter and registered guide. AWGA Mbr. For more info and schedule write:

**ALASKA MOUNTAIN TREES**

ND • Suite 304, 200 W. 34th Ave.  
Anchorage, AK 99503-3969 • (907) 344-4301

### CANADA: WEST & ARCTIC

Queen Charlotte Islands sea kayaking  
Kluane Park hiking  
Yukon canoeing & rafting  
& More



For Full Brochure:  
ECOSUMMER CANADA EXPEDITIONS  
1516-NP Duranleau St., Vancouver, B.C. Canada  
V6H 3S5 (604) 699-7741



BOX 31  
OHIOPYLE, PENNSYLVANIA 15470  
PHONE 412/329-8850 or 329-5986

Guided raft trips on the Youghiogheny River—Ohiopyle, Pennsylvania, April-October and the Cheat River Canyon—Albright, West Virginia, April-June.

Trips include: rafts, paddles, life jackets, lunch, transportation.

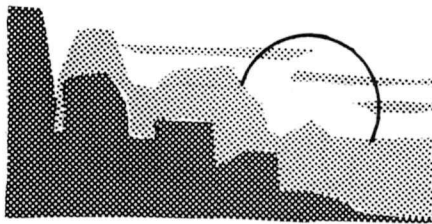
Reservations accepted January-October.

Make plans now for an exciting day of "shooting the rapids."

Camping also available at the "White Water Campground" 15 minutes from Ohiopyle, 30 minutes from Albright.



see the Parks from the river...



## MOKI MAC

River Expeditions Inc.

Your National Park Service  
Concessionaire for Grand  
Canyon and Canyonlands  
National Parks.

**MOKI MAC... specialists  
in memorable river and  
combination tours... from  
one day to two weeks.**

Call or write for free brochure.

## MOKI MAC

River Expeditions, Inc.

p.o. box 21242  
salt lake city, utah 84121  
(801) 943-6707



## WEST VIRGINIA WHITewater TRIPS

CLASS VI RIVER RUNNERS RUNS AN ASSORTED  
SCHEDULE OF KAYAKING, RAFTING, AND  
CANOEING TRIPS! PERFECT SUMMERTIME  
ADVENTURE LOCATED IN CENTRAL WEST  
VIRGINIA. DON'T TRAVEL CROSS COUNTRY  
FOR SOMETHING IN YOUR OWN BACKYARD.

WEEKDAY TRIPS ARE ESPECIALLY NICE WITH  
SPECIAL SAVINGS AND SERVICES.

**WE HIGHLY RECOMMEND OUR WEEKDAY  
TRIPS. CALL OR WRITE FOR RESER-  
VATIONS.**

**VI** class VI  
river  
runners

WRITE FOR  
FREE BROCHURE

P.O. BOX 78  
LANSING, WV 25862  
PHONE (304) 574-0704

# RUN A WILD RIVER



Choose from the  
West's best dozen  
whitewater rafting  
expeditions: Grand Canyon • Cataract  
Green River/Tavaputs Ranch • West-  
water • Main Salmon • Middle Fork  
Fraser River • Alaska and more.

TOLL FREE 1-800-453-7450

FREE 40-PAGE  
CATALOG

## WESTERN RIVER EXPEDITIONS

Western River Expd., 7258 Racquet Club Dr.,  
Salt Lake City, Utah 84121

Send a free color catalog NP

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_  
STATE ZIP \_\_\_\_\_

raft through the Grand Canyon...

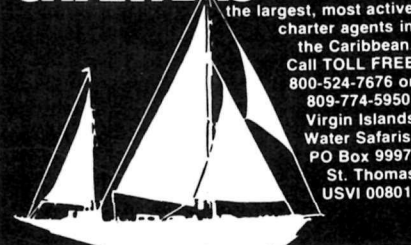
## Ride Nature's Magic Carpet

Wilderness World

P. O. Box 310

Flagstaff, AZ 86002 (602) 774-6468

## VIRGIN ISLANDS YACHT CHARTERS



Call toll free direct to our  
dockside office in the  
Virgin Islands. We know all  
of the yachts and  
crews, and we are  
the largest, most active  
charter agents in  
the Caribbean.  
Call TOLL FREE  
800-524-7676 or  
809-774-5950.  
Virgin Islands  
Water Safaris,  
P.O. Box 9997,  
St. Thomas  
USVI 00801.

## Float a Wild and Scenic River

4 to 6 Day Raft Trips

**Salmon River  
Middle Fork  
Snake River**



Contact:

## IDAHO ADVENTURES

P.O. Box 34-NP  
Salmon, ID 83467  
(208) 756-2986

Outfitting Since 1970

## TROPICAL TRIPS

HIKING • CAMPING

MOUNTAINEERING •

SNORKELING • "TOURISTING"



WE ORGANIZE & GUIDE  
INTERESTING EXPLORATION TRIPS.

OUR GROUPS PURSUE FUN  
ACTIVITIES TO APPRECIATE  
DIFFERENT GEOGRAPHIES,  
ECOLOGIES, & CULTURES.

AFFORDABLE YEAR-ROUND  
1-4 WEEK TRIPS TO: HAWAII  
MEXICO • CARIBBEAN • ECUADOR  
PERU • BOLIVIA • CHILE • SAMOA.

SOME COLLEGE CREDIT!

CALL:

(805) 254-2297

FOR BROCHURE



OR WRITE:  
P.O. BOX 55717  
DEPT. C  
SAUGUS, CA 91355

# Classifieds

50¢ per word—minimum \$7.50. Send copy with check to Classified Advertising Manager, National Parks, 10 Beech Street, Berea, OH 44017, or call 216/243-8250.

## Travel/Tours

**NEW ZEALAND/AUSTRALIA WALKABOUTS:** Escorted nature and hiking tours. New Zealand/featuring scenic National Parks, plus the Milford Track. Australia/hiking the Outback, plus island camping on the Great Barrier Reef. Pacific Exploration Company, Box 3042-W, Santa Barbara, California 93105.

**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.

## 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.

## Merchandise

**OLD STATE, RAILROAD, COUNTY, CIVIL WAR MAPS.** 70-120 years old. All States. Stamp for catalog. Northern Map Co., Dept. NP, Groveland, FL 32736.

**BOLTON FARMS RESERVE FOODS.** Hearty, healthy, convenient, economical family meals for long-term storage. (One person units: 35-days \$199. 6 months \$899; 1 year \$1699.) Catalog, \$1. Chuck Wagon Foods, 908 Howard Avenue, Billings, Montana 59102.

**KAYAKS** made with CAP™ are lightweight, strong, relatively inexpensive, and long lasting. noah, rt. 3, box 193-p. bryson city, nc 28713.

Delicious meals in 5 minutes—beef stew, chili, minicotti, etc. NO refrigeration! NO cooking! CONVENIENT. Send self-addressed stamped envelope, \$1.00 for brochure and 10% coupon to: M.A. & M. Distributors, Box 266, Atlantic Highlands, NJ 07716.

## Publications

**OUT OF PRINT BOOKS.** Send Wants or send stamps for catalog. 2035 NP—EVERDING, Eureka, California 95501.

**HUMMINGBIRDS** are WILD VISITORS, LEARN to ATTRACT them. "ATTRACTING & FEEDING HUMMINGBIRDS," 16 pg. PHOTO-ILLUSTRATED BKLT, \$1.00 ppd. WOODSWORLD, 218 BUE-NA VISTA AVE., SANTA CRUZ, CA 95062.

**FIGHT BACK!** Lower Utility Bills. Easy secrets the big companies hate to share. Rush \$2.95 + \$1.00 postage and handling to: FACTS, Box 3898, San Diego, CA 92103. Satisfaction and Savings Guaranteed!

## Conservation

**HISTORIC PRESERVATION** of Civil War sites is our main concern. If you're interested in the preservation of our Civil War heritage, join Civil War Round Table Associates—\$10 a year for monthly Digest, annual Congress of CWRT's. Box 7388N, Little Rock, AR 72217.

## Resorts/Ranches

**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.

**ASHEVILLE'S FLINT STREET INN**—Restored home, Historic District, welcoming guests, full breakfast. Brochure. Rick Vogel, 116 Flint Street, Asheville, NC 28801. 704/253-6723.

**MIDDLETON RANCH.** Small private guest ranch with horses and pool, bordering Coronado National Forest. Bed and Breakfast May–Aug, Full Service Sept.–April. Accommodations for 8; single, double and group rates. Write: Middleton Ranch, P.O. Box 504, Amado, ARIZONA 85640.

## Gift Suggestions

**CLASSIFIED AD—LAF & LEARN GAMES—NOV/DEC.** 1983 GO WILD! Exciting game about Yosemite Park. 133 playing cards are beautiful color photos of famous Yosemite scenes, animals, birds, trees, wildflowers, etc. Like cut-throat Gin Rummy. Earn 150 points, and Go Wild! Only \$4.95, postpaid. LAF & LEARN GAMES, P.O. Box 1305-C, Woodland Hills, CA 91364.

**EXCEPTIONAL MT. MCKINLEY POSTER**—23 x 35 inches, high quality reproduction of photograph. Mt. McKinley and Alaska Range in shades of pinks and blues with full detailed yellow moon—all reflected in a pond. Very rare photo image. \$9.50 Post pd. From photographer, Kenneth R. Kollodge, 433 Fairbanks Street, Fairbanks, Alaska 99701. Sorry, no credit cards.

**THE MELSON ROCKER™** As the Maker of the famous Brumby Rocker™, we are proud to introduce our new Melson Rocker™, with matching footstools, lap desks, and end tables. Handcrafted in solid aged Oak. Write or call for more information. We ship. **THE ROCKER SHOP OF MARIETTA,** GEORGIA USA, P.O. Box 12, Dept. NP, Marietta, GA 30061, (404) 427-2618.

**HORSELOVERS BOOK CLUB** offers readers aged 8–14 carefully selected horse stories. \$22/6 months. PO 1, Dept. A7, Red Springs, NC 28377.

**WILDLIFE DRAWINGS:** Five original note cards, \$1.80. Susan Pugsley, Box 1964, Carlsbad, California 92008. Free Print Catalog.

## Support Our Advertisers

**NEW EUROPEAN AD**  
**THE WORKS FOR HUNTERS,**  
**BIRDS, RIDERS & SWIMERS.**

**STOP BOOT PAIN!**  
 send \$2 for sample to:  
 soft spots  
 p.o. box 8040  
 state college, pa 16801  
 Please Allow Three Weeks For Delivery

## More Information National Parks Readers' Services

- |   |   |
|---|---|
| <input type="checkbox"/> Alaska Mountain Treks          | <input type="checkbox"/> Pacific Search Press           |
| <input type="checkbox"/> Alpine Adventure Trails Tours  | <input type="checkbox"/> Questers Tours & Travels, Inc. |
| <input type="checkbox"/> Campbell Lamps                 | <input type="checkbox"/> Reeves Trading Co.             |
| <input type="checkbox"/> Class VI River Runners         | <input type="checkbox"/> Snowlight                      |
| <input type="checkbox"/> Ecosummer Canada Expeditions   | <input type="checkbox"/> Soft Spots                     |
| <input type="checkbox"/> Free Press                     | <input type="checkbox"/> Sotz, Inc.                     |
| <input type="checkbox"/> Freeform R & D                 | <input type="checkbox"/> Stephen Greene Press           |
| <input type="checkbox"/> Hubbard Co.                    | <input type="checkbox"/> The Best Choice                |
| <input type="checkbox"/> Idaho Adventures               | <input type="checkbox"/> Topo Works, Inc.               |
| <input type="checkbox"/> MacMillan Publishing Co.       | <input type="checkbox"/> Tropical Trips                 |
| <input type="checkbox"/> Middle Fork Rapid Transit      | <input type="checkbox"/> University of New Mexico Press |
| <input type="checkbox"/> Moki Mac Expeditions           | <input type="checkbox"/> Virgin Island Water Safaris    |
| <input type="checkbox"/> Nomadic Tipis                  | <input type="checkbox"/> Vistabooks                     |
| <input type="checkbox"/> North Country Corp.            | <input type="checkbox"/> Western River Expeditions      |
| <input type="checkbox"/> Northwest River Supplies, Inc. | <input type="checkbox"/> White Water Adventurers, Inc.  |
| <input type="checkbox"/> P & S Sales                    | <input type="checkbox"/> Wilderness World               |

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Send to: National Parks, Advertising Office, Ten Beech Street, Berea, OH 44017  
 NOV/DEC 1983

---

# The Latest Word

---

---

## NPCA'S STEPHEN MATHER AWARD TO HONOR GOVERNMENT WORKER

In 1984  
NPCA will  
present the

first Stephen Mather Award to recognize outstanding personal commitment to protecting and promoting the environment.

Like Stephen Mather, who was the first director of the National Park Service, the recipient of this award is one who puts environmental principles before personal gain and does not hesitate to act in defense of those principles. The winner of the award will receive \$1,000 and a certificate of recognition at NPCA's May Board of Trustees meeting. Nominees can be any natural or cultural resource manager employed during the last year by either federal, state, or local government.

Please send nominations to NPCA Mather Award, 1701 18th St. NW, Washington, D.C. 20009.

---

## ORRRC BILL MOVES ON TO SECOND SUBCOMMITTEE

On September 23  
the Senate Sub-  
committee on

Public Lands and Reserved Water heard testimony on the bill to establish an outdoor recreation commission. The Senate Committee on Governmental Affairs had approved S. 1090 a few months earlier.

The Outdoor Recreation Resources Review Commission (ORRRC), as conceived by S. 1090, is a comprehensive way of meeting the challenge of Americans' ever-growing desire for outdoor recreation. Work from the original, 1962 ORRRC resulted in the establishment of national seashores and lakeshores, the National Trails Act, and the Land and Water Conservation Fund, among others.

Because of such programs, said NPCA's Bill Lienesch in his testimony to the subcommittee, "the United States has, for decades, served as a model to the world.... But, for several years our leadership in this area has been faltering. A new [ORRRC] can serve as the best catalyst to restore this position."

S. 1090, as amended by Governmental Affairs, would establish a commission composed of twenty-one members; seven each would be chosen by the executive

branch, by the House of Representatives, and by the Senate.

NPCA believes a new ORRRC should focus on the continued funding of existing ORRRC programs, federal tax incentives for private landowners to conserve resources, and an evaluation of carrying capacity on public lands.

---

## NPCA CONSERVATION AWARD GOES TO REP. SEIBERLING

NPCA has chosen  
Representative  
John F. Seiber-

ling (D-Ohio), chairman of the House Subcommittee on Public Lands and National Parks, as its Conservationist of the Year. He received the award because, "for more than ten years, the most consistently strong ... leadership in Congress in defense of the National Park System has come from John F. Seiberling."

Among his accomplishments are expansion of the Land and Water Conservation Fund; guidance of the American Conservation Corps Act; and, as chairman of the former Subcommittee on Alaska Lands, passage of the Alaska Lands Act, which has been called "the greatest conservation law of the twentieth century."

---

## NPCA ART SHOW PRESENTS THE NATURAL BEST

NPCA began its  
second annual  
art exhibition

with a flourish on October 3. At its opening reception, NPCA honored Congressman John F. Seiberling as its Conservationist of the Year. New Yorker artist Susan Davis was there signing copies of the poster she designed especially for the exhibition.

The fine art, chosen by H. H. Leonards Gallery of Washington, D.C., represented natural scenes and included the photographs of Eliot Porter and Allen Zee, as well as prints by Bisson, Hussey, and McNulty.

---

## PARK SERVICE DELAYS ACTION AGAINST ILLEGAL TRAPPING

The final  
regulations  
of the Na-

tional Park Service (NPS) were due to go into effect on October 3, but the NPS was ordered to delay until December by Assistant Secretary G. Ray Arnett, and interim regulations were issued instead. Arnett would like to see trapping made legal in certain park system units.



Trapping is specifically authorized for a few units but occurs illegally in twelve other areas. The final regulations prohibit such activity.

The interim regulations, however, will allow trapping to continue in those units until December 1984. In the meantime, the NPS is hoping that Congress can legislate a decision.

As of this writing, it is expected that Representative William Emerson (R-Mo.) will introduce legislation making it legal to trap in some or all of the twelve units. NPCA and other conservation organizations consider the trapping illegal and inappropriate, interim regulations or no.

Write Assistant Secretary G. Ray Arnett, Department of the Interior, Washington, D.C. 20240 to protest the delay in implementing the final regulations.

---

NPS IMPACT STUDY  
ON TAR SANDS AVAILABLE

Conservationists expect the Draft Environmental

Impact Statement (DEIS) for the Tar Sands Triangle to be made public the first week of November. The Tar Sands Triangle lies within Glen Canyon National Recreation Area in Utah, and any development of this potential fossil fuel would affect the resources of Glen Canyon NRA. NPCA expects that the comment period will be open through December and urges those who are interested to obtain a copy of the DEIS. Write Joel Pickelner, NPS tar sands coordinator, 125 S. State St., Room 3418, Salt Lake City, Utah 84138.

---

DAM OPTIONS A DISASTER  
FOR GRAND TETON NP

The Bureau of Reclamation (BuRec) has

backed off from its original intention to build a new dam in Grand Teton National Park. A recent Senate amendment to the Dam Safety Act squelches any fast dam building by requiring a congressional authorization for new dams within national parks.

The BuRec's solution to fortify Jackson Lake Dam, however, still depends on a totally structural solution--rather than nonstructural alternatives--that will damage park resources and affect visitors' appreciation of the park. The proposed \$82 million project includes four to eight years of construction; mining 600,000 or

more cubic yards of rock, gravel, and sand; and dynamite blasting on Signal Mountain --all within the park.

Most affected by this construction are the 3.5 million people who visit Grand Teton each year. "Yet," said NPCA Rocky Mountain Regional Representative Terri Martin, at field hearings, "in the BuRec's recent Public Values Assessment, only seventeen park visitors were surveyed."

NPCA urges both the National Park Service, which is now co-team leader on the dam project, and the BuRec to consider some of the nonstructural alternatives because the association opposes mining the park for construction materials.

---

CAPE HATTERAS LAND WANTED  
BY LOCAL FISHING INDUSTRY

Representative Walter Jones (D-N.C.),

who would like to transfer sections of Cape Hatteras National Seashore to the Army Corps of Engineers, attached that proposal to the wetlands acquisition bill (H.R. 3082). As of this writing, the House Interior Committee will probably hold hearings on the wetlands bill in late October or early November.

Representative Jones and North Carolina senators Jesse Helms and John East want to transfer portions of Cape Hatteras and Pea Island National Wildlife Refuge so the Corps can build jetties to help the local fishing industry.

The project would cost at least \$350 million and possibly \$600 million, yet the Corps cannot show that the project will pay for itself. Neither the Interior Department nor conservation groups see any justification for a move that would cause such environmental damage.

Ask your representative to oppose this possible transfer.

---

HOUSE VOTES DOWN REP. HANSEN,  
PASSES PARK PROTECTION BILL

On October 4 the full House

voted on the Park Protection bill and blocked an attack on the bill by Representative James Hansen (R-Utah). Hansen's amendment to eliminate the Secretary of the Interior's ability to protect national parks from threats on adjacent lands was defeated 245 to 160. The bill itself passed by a wide margin--321 to 82. The ball is now in the Senate's court.

# Index to National Parks

Vol. 57, 1983

## Abbreviations:

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

Month of issue, in boldface, is followed by the page citation.

## A

Abrams, Kathleen: interpretation: 5/6,14-15  
 Acadia NP (Maine): legislation needs President's signature: 1/2,43  
 acid rain  
   Canadian films labeled "propaganda": 5/6,41  
   NPS studies effects on parks: 7/8,42  
   reports confirm human-caused: 9/10,42  
 Adler, Richard, composes *Wilderness Suite*: 9/10,36  
 Alaska parklands, sport hunting in bill argued in Senate: 5/6,47  
   bills propose more in national parklands: 1/2,40  
   favored by reader: 3/4,5  
   "grand slam" photo portfolio: 7/8,26  
   letter from Canada: 11/12,5  
   Senate committee reports out bill: 9/10,47  
   senators push to downgrade parks: 7/8,25  
 Albright, Horace: National Park System Advisory Council threatened: 9/10,28-29  
 Allan, Melinda: hiking in Hawaii Volcanoes NP: 1/2,8-11  
 American Conservation Corps, Senate committee and House approve legislation: 7/8,47  
 Apollo launch tower  
   NASA plans to scrap: 5/6,39  
   saved from destruction: 7/8,45  
 Apostle Islands NL (Wisc.), original owners want land back: 3/4,45-46  
 Appalachian Trail, Nuclear Lake controversy a model of volunteerism: 5/6,39-40  
 Arizona Strip Wilderness  
   bipartisan legislation introduced: 9/10,47  
   House hearings show consensus: 11/12,34  
   NPCA initiates conservationist/corporate proposal: 5/6,39  
 Arnett, G. Ray, permits snowmobiles in Lassen Volcanic NP: 3/4,45

## B

Bali Conference  
   discussions and recommendations: 5/6,16-21  
   NPCA represented: 1/2,39  
 Bandelier NM (N.Mex.)  
   court allows burro removal: 3/4,47  
   NPCA donation to: 1/2,5  
 Barrier Islands bill, President Reagan signs: 1/2,46  
 Bean, Michael J.: Watt resists listing endangered species: 7/8,20-21  
 Beaty, Laura: Historic American Buildings Survey: 3/4,16-21  
 bed and breakfast: 5/6,34  
   letter to the editor: 9/10,6  
 Big Thicket NPRES (Tex.) threatened by dam proposal: 11/12,31-32  
 Biscayne NP (Fla.), court awards shipwreck to NPS: 11/12,30-31  
 Bisti Badlands (N.Mex.) wilderness legislation introduced: 11/12,38  
 Blaustein, John: photo tips for river trips: 11/12,7  
 boatwoman on Colorado: 11/12,8-11  
 Bock, Robert: outdoor recreation aids economy: 3/4,46  
 Bookshelf: 1/2,6; 3/4,6; 5/6,7; 7/8,7  
 Bratton, Susan: exotics in national parks: 1/2,24-29  
 Brezina, Dennis: bed and breakfast: 5/6,34  
 Brown, Mrs. W. L. Lyons, named NPCA Trustee Emeritus: 1/2,46  
 Buffone, Susan Martell: status of Clean Air Act: 1/2,35-37  
 Burlington Northern donates summit to Mount St. Helens NM: 7/8,46  
 Burns, Cindy, boatwoman on Colorado: 11/12,8-11  
 burros, helicopter roundups proposed: 5/6,47  
 Burton, Phillip, obituary: 7/8,35

## C

Canyonlands NP (Utah)  
   noise study proposed: 1/2,47  
   threatened by nuclear waste dump: 9/10,41-42

Cape Hatteras NS (N.C.), land transfer legislation revives Oregon Inlet stabilization scheme: 9/10,43-44; 11/12,43  
 Cape Krusenstern NM (Alaska) threatened by road: 9/10,34  
 Capitol Reef NP (Utah), Congress extends grazing in: 1/2,43  
 Carlsbad Caverns NP (N.Mex.)  
   cougars get reprieve: 3/4,41  
   state retracts request to pursue cougars in park: 7/8,47  
 Carroll, Mary C.: cultural parks: 3/4,2  
 carrying capacity  
   field tests under way: 9/10,46  
   NPCA project in testing stage: 5/6,47  
 Chaco Culture NHP (N.Mex.)  
   high-tech archeology: 3/4,22-28  
   land exchange would benefit: 7/8,36  
   letter to the editor: 7/8,5  
   NPCA opposes coal leases: 9/10,34-35  
   threatened by energy development: 3/4,28,38-39  
 Chandler, Mitzi: Cindy Burns, boatwoman: 11/12,8-11  
 Channel Islands NP (Calif.) land acquisition high priority: 9/10,35  
 Chattahoochee NRA (Ga.)  
   NPS recommends halving acreage: 1/2,46  
   protective legislation pending: 9/10,46  
   threatened by development, lack of money: 7/8,28-32  
 Clean Air Act  
   NPCA sues EPA: 3/4,42  
   status report: 1/2,35-37  
 Colorado NM, bison damage range in: 7/8,38-39  
 Compound 1080, EPA judge recommends reinstating: 1/2,46  
 Connally, Eugenia Horstman  
   editor's note: 1/2,2; 3/4,2; 5/6,2; 7/8,2; 9/10,2; 11/12,2  
   wildlife parks in Kenya: 5/6,28-32  
 Cooper Industries donates mining claim to Wrangell-St. Elias: 7/8,45  
 Corbett, Marjorie  
   fossils at Dinosaur NM: 11/12,16  
   German Conference: 9/10,31-33  
   New River Gorge: 3/4,35-36  
   volunteers in parks: 1/2,30-34



cougars at Carlsbad Caverns NP  
retrieved: 3/4,41  
state retracts request to pursue into  
park: 7/8,47  
Craig, Bruce, wins Park Interpreter  
Award: 11/12,38-39  
cultural parks  
significance of: 3/4,8-11  
status of: 3/4,2  
and wildlife: 3/4,29-30

## D

Death Valley NM (Calif.), helicopters  
proposed for burro roundup: 5/6,47  
Delaware River, attributes and protec-  
tion of: 11/12,17-19  
Denali NP (Alaska), NPCA lauds road  
plan: 7/8,39  
Dinosaur NM (Colo.-Utah)  
fossils: 11/12,16  
peregrines saved from pesticide  
spraying: 9/10,38  
raft trip: 11/12,12-15  
Doubilet, David: tips on underwater  
photography: 9/10,7

## E

Egypt creates national park system:  
9/10,47  
Ellis Island NM (N.Y.)  
restoration funds needed: 3/4,39  
sculpture and photography exhibit  
opens: 11/12,32  
energy leases threaten public lands:  
9/10,8-11,30  
Engle, Ken: Chattahoochee NRA:  
7/8,28-32  
Everglades NP (Fla.), Florida approves  
water management proposals:  
7/8,41-42  
exotics in national parks  
court allows burro removal at  
Bandelier: 3/4,47  
feral goats airlifted from Haleakala:  
1/2,39  
feral pigs at Pinnacles: 7/8,41  
impact of: 1/2,24-29  
letter to the editor: 3/4,6; 5/6,5  
status of: 7/8,9-10

## F

Frome, Michael  
Delaware River: 11/12,17-19  
world parks: 5/6,22-23

## G

Garry, Candace: status of wildlife in  
national parks: 7/8,8-11  
Gebhart, Fred  
eruptions in Hawaii Volcanoes NP:  
1/2,12-15  
Virgin Islands NP: 9/10,18-23

Georges, Denise, interpreter at Virgin  
Islands NP: 9/10,24-27  
Geothermal Steam Act of 1970  
NPCA proposes strengthening amend-  
ments: 7/8,46  
German Conference, report: 9/10,31-33  
Glacier Bay NP (Alaska)  
draft general management plan dis-  
appointing: 7/8,46-47  
study allows increase in ship traffic:  
9/10,45-46  
threatened by commercial fishing and  
cruise ships: 5/6,38  
Glacier NP (Mont.)  
one road plan dropped, one remains:  
9/10,38  
letter to the editor: 11/12,5  
threatened by roadbuilding: 1/2,41  
Glen Canyon dam, BuRec approves  
uprating turbines: 5/6,42  
Glen Canyon NRA (Utah)  
threatened by tar sands development:  
5/6,36-37  
tar sands EIS available: 11/12,43  
Goigel, Monica: exotics in national  
parks: 1/2,24-29  
Grand Teton NP (Wyo.)  
airport board wants jetport expanded:  
5/6,41  
BuRec proposes dam: 7/8,45-46  
NPCA testifies on dam threat:  
11/12,42  
threatened by dam proposal:  
9/10,38-41  
Grant, Gordon: Sagarmatha NP:  
5/6,24-27  
grassroots guardians of the parks:  
7/8,33-34  
Great Smoky Mountains NP (N.C.-  
Tenn.)  
NPS completes land purchase: 7/8,46  
grizzly bear  
labeled "hazardous" by NPS: 5/6,37  
study team strengthened: 7/8,45  
threatened in Glacier by roadbuilding:  
1/2,41  
losing ground to people in Yellow-  
stone: 1/2,38  
Gruel, Laurie: summer jobs in conser-  
vation: 1/2,41  
Guadalupe Escarpment Wilderness  
Study Area placed off bounds to  
energy leasing: 11/12,32

## H

Hampton NHS (Md.), marines destroy  
grounds: 3/4,38  
Hawaii Volcanoes NP  
geothermal development worries con-  
servationists: 1/2,42  
geothermal site split by volcanic  
eruption: 5/6,46  
hiking in: 1/2,8-11  
letter to the editor: 5/6,5  
predicting eruptions: 1/2,12-15  
Hawaiian Volcano Observatory predicts  
eruptions: 1/2,12-15  
Historic American Buildings Survey  
(HABS)  
accomplishments: 3/4,16-21  
NPCA displays photo collection:  
9/10,47; 11/12,32  
historic park buildings, new regulations  
aid maintenance: 3/4,47  
Huser, Verne  
selecting river outfitters: 11/12,26  
Wild and Scenic Rivers System, back-  
ground and status: 11/12,20-25

## I

interpretation, world view: 5/6,14-15  
interpreters, NPS  
award winner chosen: 11/12,38-39  
at Virgin Islands NP: 9/10,24-27  
Isle Royale NP (Mich.), wolf study  
needs funds: 7/8,37

## J

Jackson, Senator Henry  
letter to the editor: 7/8,5-6  
obituary: 11/12,31  
privatization in national parks:  
1/2,16-18  
Jarvis, T. Destry, debates threats to  
national parks on *Today* show:  
9/10,42  
jobs bill aids parks programs: 5/6,46  
jobs in conservation: 1/2,41  
Johnson, Dennis: marine sanctuaries:  
9/10,12-17  
Jones, Dewitt: how to carry your camera:  
5/6,35

## K

Kaufman, Debbie  
National Clean Air Colloquium:  
5/6,40-41  
NPS studies effects of acid rain: 7/8,42  
Kaufman, Steven C.: Alaskan wildlife  
photo portfolio: 7/8,26-27  
Kennesaw Mountain NB (Ga.)  
drugs and alcohol problems: 5/6,38  
letter to the editor: 5/6,6  
Kenya, wildlife parks in: 5/6,28-32

Kluane Game Sanctuary (Canada)  
threatened by Alaska sport-hunting  
bill (letter to the editor): 11/12,5  
Krimm, Hans: pesticide spraying  
canceled: 9/10,38

## L

land acquisition  
Congress increases NPS funding:  
3/4,40-41  
House subcommittee approves \$90  
million: 1/2,47  
Interior fails to spend funds: 7/8,36  
new NPS procedures suspect: 1/2,39  
Land and Water Conservation Fund  
(LWCF)  
Congress increases appropriations:  
3/4,40-41  
Congress increases Interior request:  
9/10,45  
Larmer, Paul: Yellowstone grizzlies  
losing ground: 1/2,38  
Lassen Volcanic NP (Calif.), Interior  
allows snowmobiles: 3/4,45  
Lucke, Thomas W.: wildlife at historic  
sites: 3/4,29-30

## M

Malaysia, national parks of: letter to the  
editor: 9/10,5  
marine sanctuaries  
commentary: 9/10,2  
protect underwater resources:  
9/10,12-17  
Maruca, Mary: Olmsted NHS: 3/4,31-34  
Mauna Loa, Hawaii, hiking on: 1/2,8-11  
Midwest: NPCA hosts conservation  
training conference: 3/4,47  
Mono Lake (Calif.)  
court ruling favors environment:  
5/6,42  
letter to the editor: 5/6,5-6  
NPCA supports national monument  
legislation: 7/8,47  
proposed as national monument:  
1/2,19-23  
protective legislation pending: 9/10,45  
water being diverted: 1/2,19-23  
Moody, Joan: tribute to Phillip Burton:  
7/8,35  
Moran, Brian P.: tar sands development  
threatens Southwest parks:  
5/6,36-37  
Mount St. Helens NM (Wash.), summit  
donated to monument: 7/8,46

## N

national battlefield managers struggle  
against urban encroachment:  
11/12,34

National Capital Region  
archeological research in: 3/4,12-15  
gets storage space for historical and  
archeological objects: 3/4,47  
National Clean Air Colloquium outlines  
Clean Air strategy: 5/6,40-41  
National Park Service  
Administration proposes low 1984  
budget: 3/4,46  
career personnel reshuffled: 5/6,36  
Congress approves 1983 budget:  
3/4,40-41  
independent agency status proposed:  
7/8,2  
issues new regulations: 9/10,46  
labels species "hazardous": 5/6,37  
letter to the editor about excellent  
personnel: 5/6,6  
letter to the editor about independent  
agency proposal: 11/12,5  
managers told to save money: 3/4,40  
revises planning guidelines: 7/8,34  
National Park System Advisory Board  
and Council, description and threat  
to: 9/10,28-29  
National Park Trust established by  
NPCA: 3/4,42  
national parks, foreign: 5/6,14-32  
in Kenya: 5/6,28-32  
in Nepal: 5/6,24-27  
National Parks & Conservation  
Association  
announces Stephen Mather award:  
11/12,42  
annual dinner and reception: 1/2,46  
annual report—1982: 5/6,8-13  
awards Conservationist of Year:  
11/12,42  
cosponsors German Conference:  
9/10,31-33  
cosponsors New England Environ-  
mental Conference: 3/4,45  
establishes National Park Trust: 3/4,42  
expands outreach: 1/2,2  
grassroots programs: 7/8,33-34  
hosts reception for Adler concert:  
3/4,45  
hosts training conference in Midwest:  
3/4,47  
increases dues: 1/2,46  
initiates petition project: 1/2,38  
member trips in 1983: 3/4,4; 5/6,4;  
7/8,4  
presents Park Interpreter Award:  
11/12,38-39  
rededication to national parks: 5/6,2  
represented at World National Parks  
Congress: 1/2,39  
second annual art exhibition:  
11/12,42  
sues EPA: 3/4,42  
testifies at ORRRC hearing: 9/10,35;  
11/12,42  
tests carrying capacity project: 5/6,47

National Trails System Act  
amendment adds new trails: 5/6,47  
Senate approves amendment: 3/4,45  
Nepal, national park in: 5/6,24-27  
New River Gorge NR (W.Va.), cultural  
resources in: 3/4,35-36  
*Northern Yellowstone Elk: Ecology and  
Management* (book review): 7/8,7  
letter to the editor: 11/12,6  
Nuclear Lake  
letter to the editor: 9/10,5  
sparks cooperative effort: 5/6,39  
Nuclear waste bill, House approves:  
1/2,47

## O

Olmsted, Frederick Law  
father of landscape architecture:  
3/4,31-34  
letter to the editor: 7/8,5; 11/12,5  
Olmsted NHS (Mass.), preservation:  
3/4,31-34  
Oregon Inlet  
land transfer legislation revives  
stabilization scheme: 9/10,43-44;  
11/12,43  
ORRRC  
NPCA favors establishment of:  
9/10,35; 11/12,42  
outdoor recreation, government commis-  
sion needed: 3/4,46  
Outdoor Recreation Resources Review  
Commission (ORRRC)  
NPCA favors establishment of:  
9/10,35; 11/12,42  
outfitters, river, how to select: 11/12,26

## P

panther, Florida  
in danger of extinction: 11/12,29-30  
Governor requests safeguards: 9/10,45  
park legislation reintroduced: 3/4,46  
Park Protection Act  
House passes 1982 bill; see vote  
breakdown: 1/2,43  
House passes 1983 bill: 11/12,43  
NPCA may push for House vote:  
7/8,46  
NPCA testifies in support of: 5/6,46  
peregrine falcons saved from pesticide  
spraying: 9/10,38  
petition project, NPCA initiates: 1/2,38  
photo tips  
how to carry your camera: 5/6,35  
photographing river trips: 11/12,7  
underwater photography: 9/10,7  
wildlife photography: 7/8,6  
Pierce, Robert, heads National Park  
Trust: 9/10,43  
Pinnacles NM (Calif.), feral pigs a  
nuisance: 7/8,41



poaching in Yellowstone: 5/6,37  
 letter to the editor: 9/10,6  
 Potter, Stephen R.: archeological  
 research in National Capital Region:  
 3/4,12-15  
 Pritchard, Paul  
 addresses Georgia Conservancy:  
 1/2,48  
 marine and estuarine resources: 9/10,2  
 proposes independent National Park  
 Service: 7/8,2  
 receives award: 5/6,46  
 rededication to national parks: 5/6,2  
 privatization and national parks:  
 1/2,16-18  
 letter to the editor: 7/8,5-6

## R

Raible, Karen: composer Richard Adler:  
 9/10,36  
 rivers: camping tips: 11/12,27-28  
 Roca, Michele: wilderness study areas  
 proposed for National Park System:  
 5/6,41-42  
 Rock Creek Park (D.C.), NPS scraps  
 traffic plan: 11/12,33-34  
 Ross Lake NRA (Wash.), High Ross  
 Dam proposal rejected: 9/10,42  
 Rue, Leonard Lee, III: tips on wildlife  
 photography: 7/8,6

## S

Sagarmatha NP (Nepal), description:  
 5/6,24-27  
 San Antonio Missions NHP (Tex.), roles  
 of NPS and Church clarified:  
 11/12,33  
 Savage, Harlin: Oregon Inlet stabiliza-  
 tion threatens Cape Hatteras NS:  
 9/10,43-44  
 Schullery, Paul  
 book review: 7/8,7  
 fish watching in Yellowstone:  
 7/8,22-24  
 response to letter to the editor: 11/12,6  
 Seiberling, John F., named  
 Conservationist of the Year:  
 11/12,42  
 Shanks, Bernard: energy leasing on pub-  
 lic lands: 9/10,8-11,30  
 Shelton, Napier: report on 1982 World  
 National Parks Congress: 5/6,16-21  
 Shephard, Steven: tips on river camping:  
 11/12,27-28  
 ski touring: letters to the editor: 3/4,6  
 Sleeping Bear Dunes NL (Mich.), Con-  
 gress approves legislation: 1/2,43  
 Statue of Liberty NM (N.Y.) to close for  
 repairs in 1984: 3/4,39

Sternberg, Joseph: raft trip in Dinosaur  
 NM: 11/12,12-15  
 Strutin, Michele  
 archeological research at Chaco Can-  
 yon: 3/4,22-28  
 senators propose to downgrade Alas-  
 kan parks: 7/8,25  
 Stucker, Gilbert F.  
 NPCA expands outreach: 1/2,2  
 parks are central: 11/12,2  
 Supernaugh, William R.: wildlife man-  
 agement in national parks:  
 7/8,12-16

## T

tar sands  
 development threatens Southwest  
 parks: 5/6,36-37  
 EIS available for comment: 11/12,42  
 Theodore Roosevelt NP (N.Dak.), state  
 permits air pollution in: 3/4,46  
 trapping in National Park System  
 new regulations clarify: 9/10,46-47  
 NPS delays implementing of regula-  
 tions: 11/12,42  
 travel tips: 5/6,33  
 bed and breakfast: 5/6,34; 9/10,6

## V

Valls, Lito, interpreter at Virgin Islands  
 NP: 9/10,25-27  
 Varley, John D.: fish watching in  
 Yellowstone: 7/8,22-24  
 Virgin Islands NP  
 description: 9/10,18-23  
 interpreters at: 9/10,24-27  
 volcanoes, predicting eruptions in  
 Hawaii: 1/2,12-15  
 volunteers in national parks: 1/2,30-34  
 Voyageurs NP (Minn.), Congress deletes  
 Black Bay acreage: 1/2,43  
 Vreeland, Susan: interpreters at Virgin  
 Islands NP: 9/10,24-27

## W

War in the Pacific NHP (Guam), NPCA  
 comments on draft management  
 plan: 1/2,42  
 Watt, James  
 continues purging NPS executives:  
 7/8,47  
 denies plan to delete parks: 1/2,47  
 drops wilderness study areas: 3/4,42  
 judges park managers on money man-  
 agement: 3/4,40  
 shuffles career personnel: 5/6,36  
 strangles endangered species program:  
 7/8,20-21  
 Wauer, Roland H.: wildlife management  
 in national parks: 7/8,12-16

Welsh, Jim: NPCA expands grassroots  
 network: 7/8,33  
 Wild and Scenic Rivers System, back-  
 ground and status: 11/12,20-25  
 wilderness study areas  
 Seiberling proposes transfer to  
 National Park System: 5/6,41-42  
 wildlife  
 can kill people (letter to the editor):  
 11/12,5  
 endangered and threatened species:  
 7/8,8-11  
 endangered species program strangled  
 by Watt: 7/8,20-21  
 insularization: 7/8,10-11  
 part of historic scene: 3/4,29-30  
 photo portfolio of success stories:  
 7/8,18-19  
 population management problems:  
 7/8,8-10  
 status in Alaska: 7/8,11  
 status in national parks: 7/8,8-11  
 wildlife management  
 evolution and needs: 7/8,12-16  
 lacks funding and staff: 7/8,11  
 NPS labels "hazardous species":  
 5/6,37  
 Williams, Tom: tribute to Senator Henry  
 Jackson: 11/12,31  
 Wiltsie, Meredith: Mono Lake, Calif.,  
 problems: 1/2,19-23  
 Winks, Robin W.: cultural resources in  
 National Park System: 3/4,8-11  
 wolf: Isle Royale study needs funds:  
 7/8,37  
 World Heritage Program: UNESCO  
 commends NPCA article (letter to  
 the editor): 3/4,5  
 World National Parks Congress—1982  
 discussions and recommendations:  
 5/6,16-21  
 NPCA represented: 1/2,39  
 Wrangell-St. Elias NP (Alaska), mining  
 claims donated to park: 7/8,45

## Y

Yampa River raft trip: 11/12,12-15  
 Yellowstone NP (Wyo.)  
 fish watching a growing pastime:  
 7/8,22-24  
 letter to the editor: 9/10,6  
 poaching threatens wildlife: 5/6,37;  
 9/10,6  
 Yosemite NP (Calif.), proposed dam  
 could affect park: 7/8,36-38



