

National Parks

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The Magazine of
The National Parks
and Conservation
Association

NOVEMBER/DECEMBER 1997

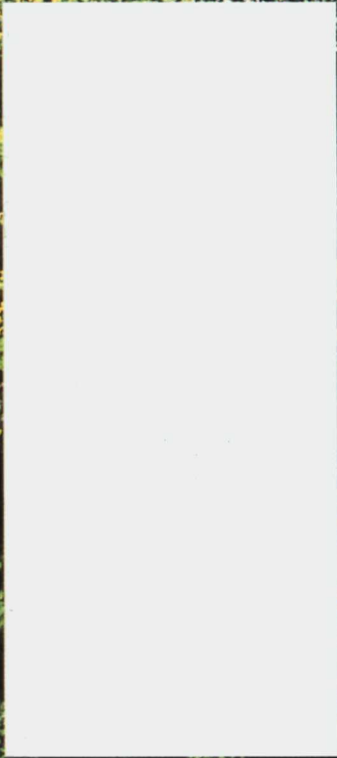
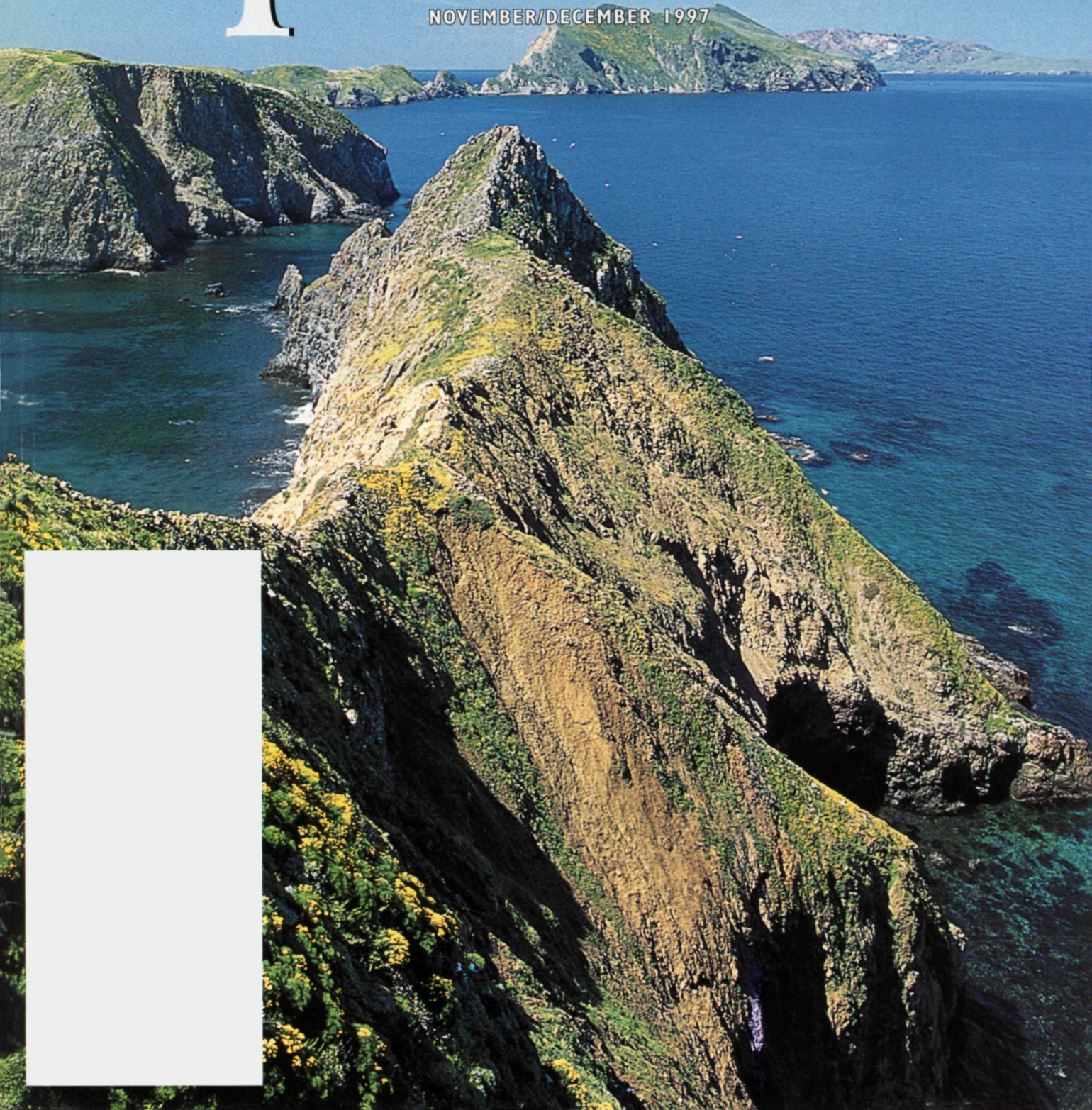
Channel Islands

Bad Air Days

Yellowstone Bison

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The New NPS Director



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National parks

Vol. 71, No. 11-12
November/December 1997

The Magazine of the National Parks
and Conservation Association

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By Michael Tennesen

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A plan to combat disease threatens America's most famous wild and free-ranging bison herd.
By Todd Wilkinson



COVER: Channel Islands National Park has been called the American Galapagos for the richness of its flora and fauna—resources that are under siege. Photograph by Tim Hauf.



LARRY ULRICH

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My eyes widen, my jaw drops, my hands clutch at the rail.

(A perfectly natural reaction, the park ranger tells me.)



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Bison Belong

A thoughtful response to the crisis at Yellowstone: engaging businesses to find a solution

LAST WINTER'S slaughter of 1,084 bison that wandered outside Yellowstone National Park caused a public uproar, as national news reports brought gory coverage to homes across America. The resulting war of words was nearly as bloody as the bison kill



VICKI PARIS

itself. Lawsuits were filed. Bison entrails were thrown at Montana's governor. Boycotts against Montana were threatened. Reason gave way to rhetoric.

By the end of the spring snow melt, Yellowstone, the state, and the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) were no closer to resolving the bison management crisis than they were before the slaughter began (see page 30). Clearly, an attempt to find common ground was needed to avert a similar bison kill this winter.

NPCA decided that something had to be done to generate some positive, thoughtful attention to the bison management issue. Something that involved Montana citizens; brought people with differing opinions together rather than driving them farther apart; countered the negative publicity surrounding the bison issue; and highlighted the important role of Yellowstone's bison to the park and to Montana's tourist economy.

Out of this thinking came "Bison Belong," a field campaign that brought me and other staff from NPCA's communications department and Rocky Mountain regional office to Yellow-

stone's gateway communities last summer. From Big Sky to West Yellowstone, from Livingston to Red Lodge, from Silver Gate to Three Forks, NPCA asked tourist-dependent business owners to agree to five simple principles:

► the wild bison is a symbol of the American West

that must be protected;

► a healthy and wild Yellowstone herd contributes to the quality of experience of visiting the park; and therefore, is crucial to the vitality of the Montana business community;

► they oppose the unnecessary killing of wild bison and want an answer to the problem as soon as possible;

► the state and federal governments must agree on suitable winter range for bison in Montana, so that the wild herd centered in Yellowstone can roam safely into Montana during the winter; and

► the governor of Montana and federal officials must find a solution to this season's dispute now.

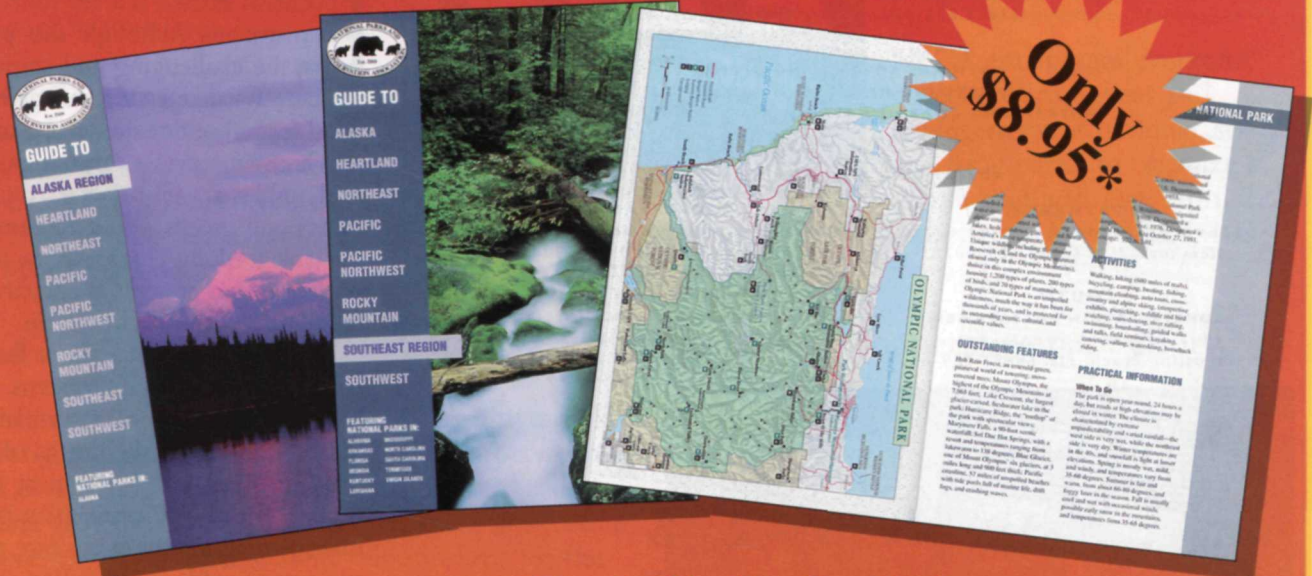
As a result of our efforts, more than 230 business owners joined the campaign (see page 34). They do not all agree on a solution. But they do agree a solution must be found. As Yellowstone prepares to issue a draft environmental impact statement, we hope that the common ground NPCA found through Bison Belong will lead to a more positive debate—and ultimately to a solution that protects Yellowstone's bison.

Kathryn E. Westra
Director of Communications

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Yellowstone and 30 additional parks. Colorado, Nevada, Utah, Wyoming.
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Founded in 1919, the National Parks and Conservation Association (NPCA) is America's only private non-profit citizen organization dedicated solely to protecting, preserving, and enhancing the U.S. National Park System.



EDITOR'S NOTE

Soup's On!

EDUCATING READERS is a key function of a magazine. Although the process may be challenging and something we perceive, like eating our greens, as good for us but not always pleasant, we also know it serves a valuable purpose. And unlike a well-balanced dinner, a diet of only greens would not keep us at the table for long. That's why each issue of *National Parks* presents as attractive and interesting a "meal" as possible.

In this issue, the staples, or features, cover some significant problems. At Yellowstone, a bison management plan has brought about the deaths of more than 1,000 of the West's most recognizable animal; at Channel Islands, mismanagement is destroying rare plants; and system-wide, air pollution is damaging trees and marring views.

Even though these stories may not strike a warm glow in our hearts, they do achieve an admirable end. They educate—a crucial aspect to spurring action. In these instances, what you don't know will hurt you, and hurt the treasures that have been set aside for ours and future generations. The sweet-toothed among us may opt to dive right into dessert, preferring to read about a warm fuzzy creature or a story that allows us, at least for a moment, to believe our actions are not all bad.

Dessert lovers should look in the news section for a story about the Kemp's ridley sea turtle, which has returned to nest at Padre Island thanks to a two-decade-long research project.

You can also learn more about the new Park Service director and find some great spots to go rafting. We know the parks are beautiful places to be enjoyed. But we also understand that for anyone after us to do that, we must take care of them. The first step is knowledge. Read, learn, and enjoy!

Linda M. Rancourt
Acting Editor-in-Chief

National Parks

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ABOUT NPCA

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

WHAT WE DO: NPCA protects national parks by identifying problems and generating support necessary to resolve them. Through its efforts, NPCA has developed a base of grassroots support that has increased effectiveness at local and national levels.

WHAT WE STAND FOR: NPCA's mission is to protect and improve the quality of our National Park System and to promote an understanding of, appreciation for, and sense of personal commitment to parklands.

HOW TO JOIN: NPCA depends almost entirely on contributions from our members for the resources essential for an effective program. You can become a member by calling our Member Services Department. The bimonthly *National Parks* magazine is among the benefits you will receive. Of the \$25 membership dues, \$3 covers a one-year subscription to the magazine.

EDITORIAL MISSION: The magazine is the only national publication focusing solely on national parks. The most important communication vehicle with our members, the magazine creates an awareness of the need to protect and properly manage the resources found within and adjacent to the national parks. The magazine underscores the uniqueness of the national parks and encourages an appreciation for the scenery

and the natural and historic treasures found in them, informing and inspiring individuals who have concerns about the parks and want to know how they can help bring about improvements to these irreplaceable resources.

MAKE A DIFFERENCE: A critical component in NPCA's park protection programs are members who take the lead in defense of America's natural and cultural heritage. Park activists alert Congress and the administration to park threats; comment on park planning and adjacent land-use decisions;

assist NPCA in developing partnerships; and educate the public and the media about park issues. The Park Activist Network is composed of three groups: Park Watchers, park activists, and park support groups. For more information on the activist network,

contact our Grassroots Department, extension 221. NPCA's success also depends on the financial support of our members. For more information on special giving opportunities, such as Partners for the Parks (a monthly giving program), Trustees for the Parks (\$1,000 and above), bequests, planned gifts, and matching gifts, call our Development Department, extension 146.

HOW TO REACH US: By mail: National Parks and Conservation Association, 1776 Massachusetts Avenue, N.W., Washington, DC 20036; by phone: (800) NAT-PARK; by e-mail: natparks@aol.com or npca@npca.org; and <http://www.npca.org/> on the World Wide Web.



START EARLY

1998 March for Parks!

When you return this registration, NPCA will provide, *free of charge*, everything you need to organize a march or service project for a park in your area.

NPCA's March for Parks is the largest annual walk for America's parks and largest Earth Day event. More than 1,000 events are organized each year to celebrate Earth Day. If



funds are raised, 100% stay in the local community. Any park, trail,

historical/cultural site, monument, or public open space is eligible, as are events promoting environmental education programs.

NPCA encourages everyone, especially employees and management at national, state, and local parks, to organize a march on Earth Day, April 22, or between April 18-25, 1998.

Lowell National Historical Park plans continued cooperative park effort

March Partner Mike Caldwell, interpretive park ranger, expects continued cooperation between Lowell NHP and state and local parks as seen in last year's successful march. "This was not just an event; it forged permanent relationships for the park. We are still reaping the rewards."

"Parks of every size report lasting benefits, such as the creation of permanent 'friends' groups, dramatic year-round increases in volunteerism, and sustained community interest in specific park issues."

—Carol Aten, NPCA Executive Vice President



To volunteer for Lowell's 1998 March for Parks, call Ranger Jack Herlihy at 978-970-5024.

You need not be an NPCA member to receive free materials to organize your own march. Simply fax this form to: 202-659-0650, or mail to NPCA, 1776 Massachusetts Ave., N.W., Washington, DC 20036. For more information, call 1-800-NAT-PARK, ext. 236; e-mail: mrchparks@aol.com; web: <http://www.npca.org>

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Please provide the following information (if known), or call us:

Name of park: _____ Type (nat'l, state, city) \$Goal _____ # Participants goal _____

Funds/project will be used to _____

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Wed., April 22 Thurs., April 23 Fri., April 24 Sat., April 25

I agree to hold a March for Parks to celebrate Earth Day, using the official logo and all national sponsor logos (to be provided) on all printed materials. I will accept local sponsorship only from companies that do not compete/conflict with national sponsors. If I change my event, I will notify NPCA. If I cancel my event, I will notify NPCA immediately and return my free materials. My event will be organized in an environmentally sensitive manner. If I choose to raise funds at my event, I will donate all net proceeds to the public park of my choice. I will send results, news clippings, and other information to NPCA after my event.



Personal Watercraft: For and Against

In Favor of PWCs

Loud, dirty, and dangerous cars and trucks are invading our freeways! Thousands of people are being killed and maimed yearly. Wouldn't our freeways and streets be cleaner, safer, and more enjoyable if they were used by walkers and bicyclists only?

Now the above paragraph is almost as absurd as the many paragraphs in "Making Waves" [July/August]. Yes, some PWC owners are irresponsible. We should all act responsibly, especially when our actions affect others.

We should never take the rights away from everyone just because of a few. Banning all PWCs from parks is the easy way out. It is the same as punishing the whole class because one student made a lewd comment. Understand that I am older than 60 and do not own a PWC. I do not want to

own one. I do not even care if I ever ride on one. But that is not the point. My likes and dislikes should not affect those around me.

Maureen Macdonald
Petaluma, CA

Against PWCs

Your article on PWCs was appreciated and timely. If any business or factory generated the accidents or pollutants to the extent that these pleasure vehicles do they would be immediately fined and closed. How do we allow this nonsense to continue?

The bucolic picture of a scenic waterway is totally smashed when racing boats and PWCs speed by at more than 70 mph, shooting 100-foot rooster tails and emitting noise levels approaching 100 decibels. All this within a few hundred feet of homes

and businesses that are not permitted to do any work near the water without permits, variances, inspections, and approvals.

Rob Castagna
Milford, NJ

Temporarily Offline

At presstime, NPCA was experiencing difficulties with its America Online site. The association apologizes for any inconvenience this may have caused. For the time being, please look for NPCA on-line at <http://www.npca.org>.

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RICK MCINTYRE

Park News

BY KATURAH MACKAY

W I L D L I F E

Turtles Take the Plunge in Texas

Kemp's ridley turtles return to national seashore.

CORPUS CHRISTI, TEX.—The most endangered sea turtles in the world are returning to Padre Island National Seashore in Texas. A record number of Kemp's ridley sea turtle nests have been found this year as a result of a multi-agency, two-decade-long restoration effort.

In 1997, nine confirmed nests containing a total of 968 eggs were discovered by park employees, volunteers, and visitors. The nine nestings included the first-ever group nesting, called an *arribada*, documented outside of Mexico and the only confirmed nestings by this species in the United States this year.

Donna Shaver, program coordinator for sea turtle projects at Padre Island, says that the hatching success for the eggs found this year reached 92.6 percent, and 893 Kemp's ridleys were released into the ocean from this year's summer hatching.

The greatest challenge facing park personnel is collecting, guarding, and incubating the turtle eggs. Shaver reported one instance of coyotes watching a nest on North Padre Island: when the female had finished laying the eggs and was on her way back to the ocean, the coyotes approached the nest and began to dig. Passing visitors chased the predators away, but only after ten eggs had been broken.

After hatching, turtles face the gruel-



JEFFREY HARTMAN

A cluster of young Kemp's ridley sea turtles prepares to head for the ocean.

ing task of making their way to the surf. Young turtles, because of their small size and inability to dive far from the surface, are vulnerable to predators such as fish, gulls, and terns.

In 1947, an estimated 40,000 Kemp's ridley turtles nested in one day at the primary nesting beach in Rancho Nuevo, Mexico. However, the destruction of nests and the slaughter of females greatly reduced Kemp's ridley numbers. In the 1980s, adult females numbered only in the hundreds.

Efforts to protect nesting females and eggs at Rancho Nuevo began in 1966. In 1978, the United States undertook projects to aid with the conservation of Kemp's ridley turtles, including an experimental attempt to establish a secondary nesting colony of this species at Padre Island National Seashore. Although fewer than 3,000 adult Kemp's

ridleys exist today, their numbers have been slowly increasing during the last decade. More than half the total number of nests documented on Padre Island beaches in the last 50 years have been found in only the last three. In 1996, two Kemp's ridleys from the experimental project returned to nest on Padre Island, the first to do so since the project began in 1978.

The restoration project is one of the longest and most successful attempted by the National Park Service. "We must maintain our vigilance here," says Shaver, who was formerly with the National Park Service and now works with the U.S. Geological Survey's Biological Resources Division. "The Kemp's ridley is still by far the most endangered sea turtle, and protection of turtles in marine environments and on nesting beaches must continue."

PRESERVATION

Native Lands Saved, For Now

Highway construction thwarted by significant cultural property.

MACON, GA.—Relics of ancient American Indian occupation have been protected in the state of Georgia in a recent decision issued by the National Register of Historic Places.

The decision has temporarily halted construction of a four-lane highway proposed by the Georgia Department of Transportation (DOT) that would have cut through ancient American Indian burial grounds and dwelling sites to connect the cities of Augusta, Macon, and Columbus.

Ocmulgee Old Fields, in central Georgia, encompasses Ocmulgee National Monument and is the original home of the Muscogee people, who first occupied the area 12,000 years ago. It includes nine Indian mounds dating to about 1000 A.D. as well as undeveloped floodplains along the Ocmulgee River. The land has been designated a "traditional cultural property" (TCP), the first such classification by the National Register of Historic Places for American Indian lands east of the Mississippi River.

Traditional cultural properties garner many of the same protection measures as national parks, monuments, and historic sites. In fact, the federal Transportation Act extends protection to these sites by stating that no roads may be built through such properties unless no other prudent and feasible alternative can be found. Georgia DOT wanted a pre-existing corridor included in the TCP so the state could later construct a proposed freeway to connect the pre-existing one with Interstate 16. Because such plans would significantly affect the region, the Georgia DOT was allowed to formally submit boundary suggestions for the property.

Problems arose when the agency's draft designation outlined northern

boundaries for the property that, according to Don Barger, NPCA's Southeast regional director, appeared "to have been delineated for purposes other than historic preservation." The area to the north of the monument is heavily developed. "The only practical reason for including the pre-existing corridor in the TCP," Barger says, "would be to eliminate it as a prudent alternative to avoiding the area."

The Muscogee people twice passed resolutions that the northern boundaries of their cultural property should stop at the existing northern boundary of Ocmulgee National Monument. Georgia DOT would not agree with these resolutions, according to Barger, because they did not serve the agency's development needs. The National Register's ruling, however, halts construction until Georgia DOT completes an environmental impact statement and revises its plans for a final decision by the Federal Highway Administration (FHA), a process that could take up to three years.

"This is the cradle of the Muscogee people," says Wilbur Gouge, spokesman for the National Council of the Muscogee Nation. "Building a road disregards our culture and heritage." The

Muscogee people were forcibly moved from their homeland to Oklahoma territory in the 1830s by the U.S. Army.

Jack Sammons, with the Georgia Center for Law in the Public Interest, believes that "an enormous burden" will be placed on Georgia DOT to convince the FHA to install a highway through the first TCP east of the Mississippi River.

The Archaeological Conservancy, a nonprofit cultural conservation organization, has obtained approximately 200 acres of land between the Lamar mounds to the south and the main park unit. "This is a significant wetland area and rich in archaeological resources," said Mark Michel, president of The Archaeological Conservancy. "It is our goal to acquire and protect all of the land between the Lamar area and the main part of the park."

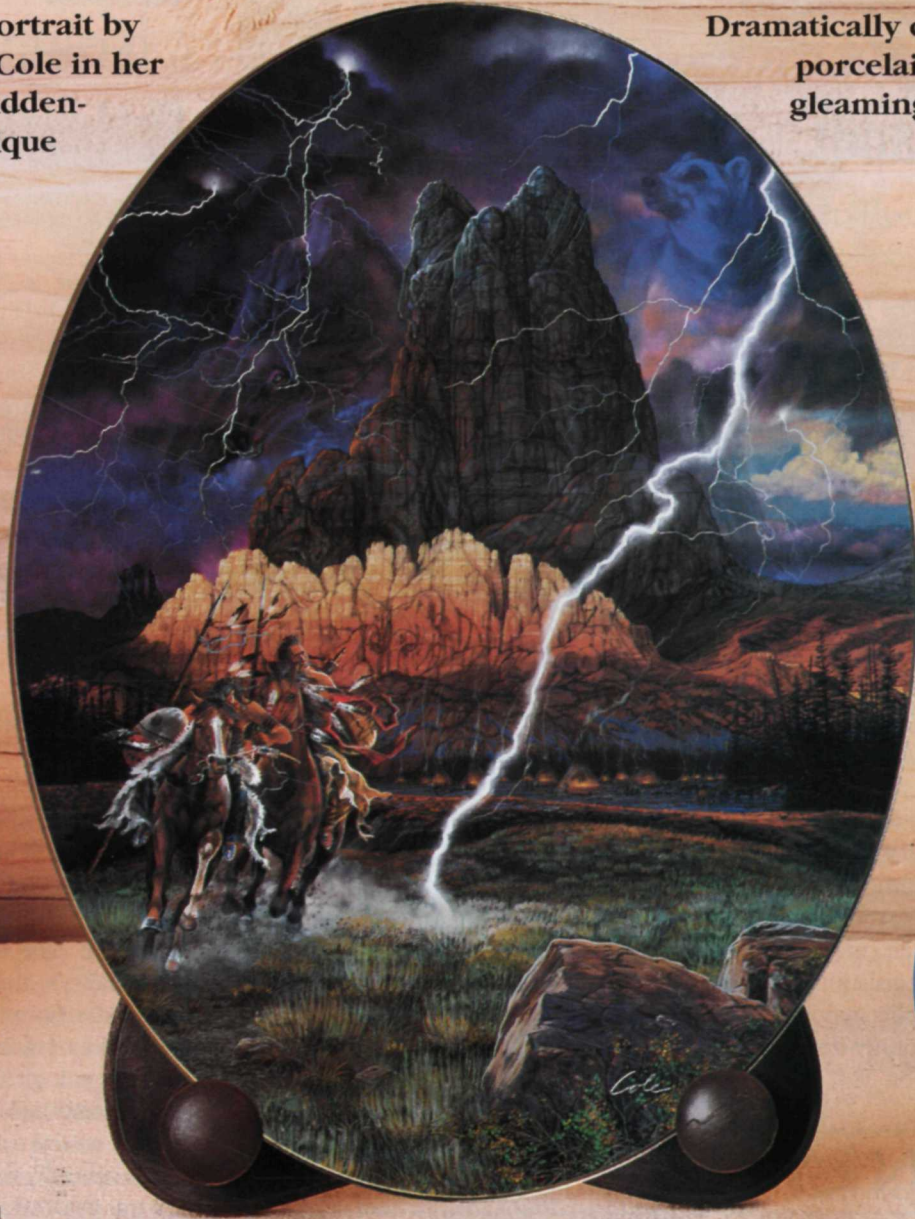
TAKE ACTION: To support an alternative route that does not affect the Muscogee traditional cultural property, write to: Rep. Saxby Chambliss (R-Ga.), U.S. House of Representatives, Washington, DC 20510, e-mail: saxby@hr.house.gov; and Sen. Paul Coverdell (R-Ga.), U.S. Senate, Washington, DC 20510, e-mail: senator_coverdell@coverdell.senate.gov.



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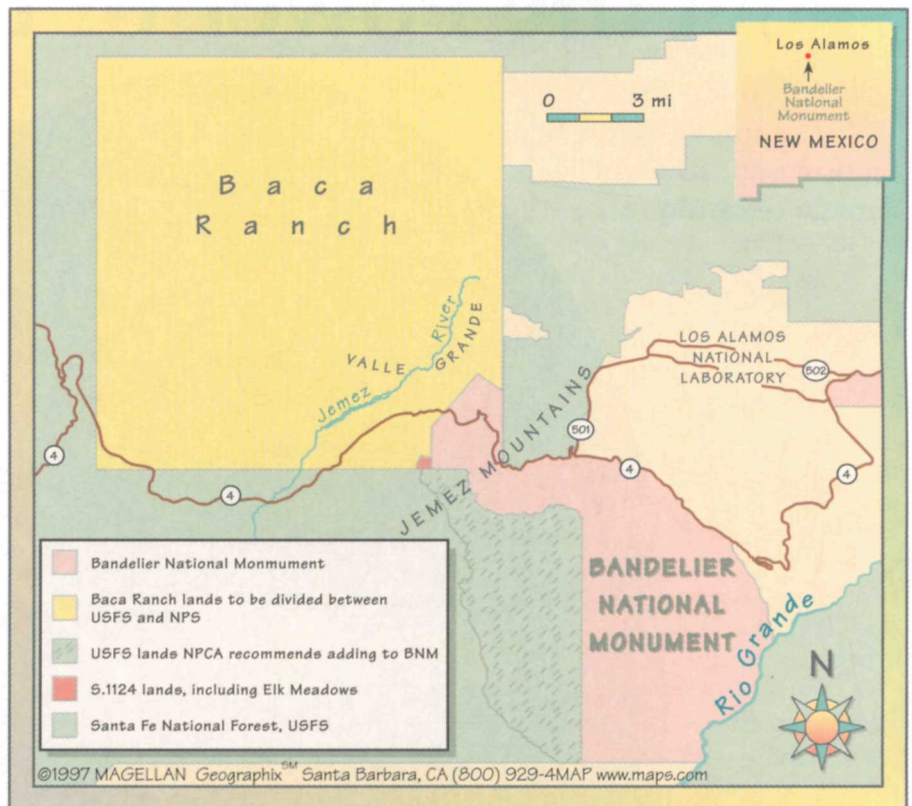
Bills Protect New Mexico Lands

Senate legislation could create New Mexico's "greater Yellowstone."

LOS ALAMOS, N. MEX.—Nearly 100,000 acres of impressive Southwestern forest land, including the world's largest extinct volcano, could wind up in public hands under two new bills introduced by Sen. Jeff Bingaman (D-N.Mex.).

If enacted, the bills would implement long-standing NPCA recommendations, doubling Bandelier National Monument and increasing its protection. The monument currently encompasses roughly 33,000 acres, including forested mesas and canyons densely packed with archaeological sites and prehistoric cliff dwellings.

One bill (S. 1124) would add approximately 1,075 acres to Bandelier, protecting the remaining undeveloped lands in the upper watershed of the Alamo Canyon, which cuts through the monument. The legislation was the result of strong public opposition, led by NPCA, to the county-approved Elk Meadows subdivision that threatened



water and wilderness resources of Bandelier. The land includes 90 acres of Elk Meadows and nearly 1,000 acres of property belonging to the Baca Land and Cattle Company. Elk Meadows developer Larry Knecht agreed to sell to the nonprofit Trust for Public Land (TPL), which will then sell the land to the federal government.

In late September, Bingaman intro-

duced a second bill (S. 1210) that would authorize purchase of the entire Baca Land and Cattle Company ranch, a range of 95,000 acres in the heart of the Jemez Mountains and adjacent to Bandelier. The ranch encompasses seven valleys, including the six-mile-wide Valle Grande, the largest caldera and extinct volcano in the world. The superb geologic, geothermal, cultural, and recreational resources have been studied several times as a national park. NPCA officially recommended the tract as a top priority acquisition in its 1988 *National Park System Plan*.

NPCA led the opposition to the Elk Meadows development, brought TPL and Knecht together, and worked with Congress, U.S. Forest Service, and the Park Service on a plan to both acquire the Baca location and add key lands to Bandelier. "Now it is critical for Congress to pass the legislation and provide the funds to seize this golden opportunity," says Dave Simon, NPCA's Southwestern regional director.

TAKE ACTION: Urge your senators to support the bills and to provide money for the land purchase. Address: U.S. Senate, Washington, DC 20510.

NEWS ALERT

► **SUPPORT PWC BAN:** NPS has delayed imposing a system-wide ban on personal watercraft (PWC). The PWC industry may try to derail the ban by encouraging letters of opposition. **TAKE ACTION:** NPS needs many letters of support for the moratorium. Write to: Director Robert G. Stanton, National Park Service, Department of the Interior, P.O. Box 37127, Washington, DC 20013-7127.

► **SAVE THE ANTIQUITIES ACT:** The House approved Rep. Jim Hansen's (R-Utah) bill, H.R. 1127, severely weakening presidential power man-

ifested in the Antiquities Act, to save significant lands from development. The 90-year-old law has established 105 monuments, including Grand Canyon and the Statue of Liberty. Hansen's bill would allow monuments up to 50,000 acres to be proclaimed for only two years unless Congress approves their permanency. At press time, the future of the legislation in the Senate, bill S. 477, was unclear, but if it passes Congress, a presidential veto has been promised. **TAKE ACTION:** Urge your senators to oppose S. 477. Address: U.S. Senate, Washington, DC 20510.

WWII Memorial Could Bisect Mall

Site choice triggers mixed emotions and threatens sacred vista.

WASHINGTON, D.C.—A new World War II memorial now under consideration would permanently change the landscape of the National Mall in Washington, D.C.

Proposed to be located at the Rainbow Reflecting Pool, the memorial would take up 7.4 acres of open space between the Lincoln Memorial and the Washington Monument, one of the country's most revered public areas.

Congress authorized legislation for the memorial's proposed placement on the Mall, but the design has been left to the discretion of the Commission of Fine Arts (CFA) and the National Capital Planning Commission (NCPC). These independent federal agencies have approval authority for monuments in Washington, D.C. The memorial's initial design, which included a semicircle of 40-foot-high columns, a subterranean museum with 50-foot-high earth berms, a sunken plaza, and a waterfall, was rejected by the CFA and the NCPC; it has been returned to architect Friedrich St. Florian for re-design. NCPC requested an alternative memorial plan that, reduced in size, would use the existing shape and trees of the reflecting pool and better accommodate itself to the historic park-like setting of the Mall. All of the agencies required to review the location, including the Interior Department, approved the site.

While strongly supporting the need to honor World War II veterans with a memorial, NPCA opposes the reflecting pool location. "The proposed memorial intrudes upon the Mall's unique expansive vista between the Lincoln Memorial and the Washington Monument, diminishing the visual quality of all three monuments," says Al Eisenberg, NPCA's deputy director for

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The proposed World War II memorial could significantly alter this revered view.

conservation policy. Eisenberg noted that this spacial interruption would undermine the basic park system standard of preserving and enhancing the national parks' historic and cultural resources, which the Lincoln Memorial and the Washington Monument symbolically represent.

Sen. Robert Kerrey (D-Nebr.) has led opposition to the memorial's site. In a letter to the NCPC, Kerrey points out that the area, where Dr. Martin Luther King, Jr., delivered his "I Have a Dream" speech, is a living memorial to America's civil rights movement.

"Constructing a large and popular destination at this site will permanently and irrevocably change the entire nature of this space," Kerrey wrote. A spokesman for Kerrey says it was precisely NCPC that deemed the Mall a complete work of art in its Grand Monumental Core Plan for the city.

Hayden Williams, chairman of the World War II Site and Design Committee and a veteran of the war, says the memorial will represent the 20th century in a confluence of monuments to 18th- and 19th-century national historic sacrifice.

"There will be more changes," says Williams, "but in the end, this memorial must be worthy of this preeminent location and of those it honors."

Williams acknowledged that the Rainbow Pool site was not among the initial six options, but because of its prominence and reputation as a gathering place, the deciding parties agreed no other location could better commemorate World War II.

Construction would require cutting down a number of the Mall's trees, some of which are more than 100 years old. According to a Park Service official, the extensive root systems of the old trees along the Mall are vulnerable to soil disturbance by heavy construction equipment and changes in the water table.

Irony surrounds the chosen site for the World War II memorial. Due to safety concerns, the memorial would have to be closed for five days surrounding July 4th because of the debris shower of Washington's renowned fireworks display, an issue that Williams says is "deserving of further study." The proposed site also serves as a helicopter landing area for visiting foreign dignitaries, who are then ushered to the White House and welcomed by the president. And the trees that would be toppled to accommodate the size of the proposed memorial were themselves planted as a lasting commemorative to soldiers who have fought for our country.

Arches Expansion in the Works

Proposed acreage protects delicate redrock canyon area.

MOAB, UTAH—Rep. Chris Cannon (R-Utah) has introduced a bill that would add 3,140 acres to Arches National Park in Utah. The proposed area encompasses the Lost Spring Canyon region along the northeast boundary of the park and includes ten free-standing arches, narrow canyons more than 300 feet deep, and unusual redrock formations.

NPCA officially recommended that the Lost Spring Canyon area be included in Arches National Park in its 1988 National Park System Plan. The current boundary was arbitrarily drawn in 1929 when much less was known about the region's geology and ecology.

The legislation corrects this oversight by redrawing the park boundary along easily managed topographical lines at the rim of the canyon, setting an important precedent for similar action in other national parks that are compromised by straight-line boundaries.

The Bureau of Land Management oversees the land, which sustains one grazing permit. If Congress adopts the bill, the Grand Canyon Trust would buy the grazing permit and donate it to the Park Service for permanent retirement.

NPCA supports Cannon's legislation

despite critics' fears that it would increase visitation. "Arches National Park in particular has led the Park Service in effective visitor management," NPCA wrote in a letter of encouragement to Cannon, "and is well-equipped to manage the inevitable increase in visitation this area will receive in a way that provides for maximum resource protection."

The landscape is not the most hospitable to inexperienced hikers. Temperatures climb well over 100 degrees in summer, and shade is a rarity in "this glare of brilliant emptiness, in this arid intensity of pure heat, in the heart of a weird solitude, great silence, and grand desolation," as author Edward Abbey wrote of his experience as a park ranger there in the 1960s.

Most visitors view the park from the comfort of air conditioned automobiles and a smoothly paved road, but the backcountry nature of the Lost Spring Canyon area offers a special bonus to visitors with more rugged sightseeing intentions.

"The new area adds opportunities for a different [visitor] experience at Arches," says Mark Peterson, NPCA's Rocky Mountain regional director. "Visitors could spend five days in the depths of those canyons and feel a world

away from the nearest road."

Lost Spring Canyon is also being studied for wilderness designation. If Cannon's bill is adopted, the land would continue to be managed as a wilderness, which would prohibit the construction of roads or any other development until a final decision on status is made by Congress.



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REGIONAL REPORT

News Briefs from NPCA's Regional Offices

ALASKA Chip Dennerlein, Regional Director

► The Senate version of the Interior Appropriations bill includes language that prevents the relocation of Brooks Lodge in Katmai National Park. The lodge is adjacent to Brooks River—a popular feeding ground for Alaskan brown bears and one of the world's premier bear-viewing sites. The bill also prevents establishing limits on day use visitors in the brown bear concentration zone along the river. NPCA strongly opposes these provisions because they ignore the advice of bear biologists and disregard a newly completed park plan developed with local and national input. Increased visitation also poses a threat to significant archaeological remains of the Katmai native people.

HEARTLAND Lori Nelson, Regional Director

► The U.S. 8th Circuit Court of Appeals has ruled that the Park Service can close parts of Voyageurs National Park to snowmobiles to protect the park's gray wolf population. The decision reverses last year's ruling by a U.S. district judge that lifted the ban on snowmobiling in parts of the 218,000-acre park. NPCA intervened to support the Park Service, whose biological data showed that wolves consistently avoided snowmobiles, thereby disrupting their own hunting activities. The ruling is a major victory for upholding Park Service policies that regulate visitor activities for the protection of park resources.

NORTHEAST Eileen Woodford, Regional Director

► A recent federal appellate court ruling allows the National Park Service to remove T-shirt booths from sidewalks along the Mall. "This decision has restored dignity on the Mall," says NPCA's Woodford. Vendors may continue their demonstrations on the Mall and near the Vietnam Veteran's Memorial, but they must limit their sales to books, newspapers, buttons, and bumper stickers. T-shirt vendors claimed their First Amendment rights were compromised by the prohibition of T-shirt sales, but the court found the limitations reasonable.

PACIFIC Brian Huse, Regional Director

► The U.S. Army plans to leave behind most of the toxic waste generated by its activities at the Presidio in San Francisco. According to Huse, the Army is calling for either a limited response or "no action" for the removal of former landfills and hazardous waste sites over the next 30 years. As a result, NPS will be restricted from removing non-native plant species and restoring many historic sites because disturbing the soil will expose toxic material. "The Army is legally required to fully clean up and remediate the contamination," says Huse. "In effect, they are amending the Presidio's general management plan by preventing park restoration efforts."

continued

ADJACENT LANDS

Dump Approved Near Park

World's largest landfill to accept 20,000 tons of garbage per day.

RIVERSIDE COUNTY, CALIF.—The county board of supervisors has approved the Eagle Mountain Landfill in Riverside County, California, to be located next to Joshua Tree National Park. The board voted four-to-one in favor of the dump, which would be surrounded on three sides by desert and would envelop roughly the area of 1,500 football fields.

"With the exception of Chairman Robert Buster, these public servants have voted to make Riverside County the dumping ground for all of Southern California," says Brian Huse, NPCA's Pacific regional director. "The landfill will destroy thousands of acres of congressionally designated wilderness and irreversibly damage the pristine desert ecosystem."

A newsletter published by the Eagle Mountain Landfill and Recycling Center boasts that "over 1,300 jobs will be created here," and that the project will boost the local economy by "\$3.3 billion." NPCA maintains that the company in charge of the project, the Mine Reclamation Corporation (MRC), has actually had to cut its financial projections in half in the last few years because of the dwindling need for landfill space.

An economic analysis done by NPCA shows that visitors to Joshua Tree National Park pump more than \$21 million into Riverside County yearly. The National Park Service projects that Joshua Tree's visitation will climb to nearly 4 million in 20 years.

Los Angeles and Orange County garbage will potentially bring organisms foreign to the desert and provide food sources that draw pests and predators. Critics and the park's superintendent have voiced concerns about the danger of the dump attracting

ravens and kit foxes that will prey on the endangered desert tortoise. The park is one of the last unaltered ecosystems on the planet.

The landfill issue has been festering for nearly six years. In 1994, NPCA brought a lawsuit against Kaiser Ventures, Inc., and MRC that appeared before a California superior court. A decision was made that the county's 1992 approval of the project had ignored serious environmental threats to both the park and the region. The court ruled that the landfill also failed to comply with environmental regulations, which sent MRC and Riverside County officials scrambling to revise the dump's environmental report to accommodate the court's concerns.

Despite the county's most recent approval, the superior court retains jurisdiction over the project and must decide sometime this fall whether the Eagle Mountain landfill now complies with its initial ruling.

PLANNING

Towers Loom on the Horizon

Telecommunications legislation could add eyesores to park vistas.

WASHINGTON, D. C. —Telecommunications companies are eyeing national parks as perfect sites for their colossal communications towers because of the various unobstructed vistas, high altitudes, and proximity to population centers.

Last year, President Clinton signed the Telecommunications Act of 1996, which requires federal agencies, such as the National Park Service (NPS), to facilitate access to all federal property for the siting of wireless telecommunications towers. These towers, while providing more efficient service to thousands of phone, television, and radio users everyday, would be unsightly additions to national parks.

NPCA contends that the towers and

antennae, some 120 feet high, will interfere with park views and their blinking signal lights will intrude upon natural darkness. The towers also require access roads and maintenance buildings. Don Barger, NPCA's Southeast regional director, asserts that the cellular industry's implementation process conflicts with park resource protection regulations.

The federal government has issued a draft policy statement, which requires telecommunications industries to for-

mally apply to a park for the placement of towers within its boundaries. The plan would allow superintendents and other park officials to comment on and possibly refuse tower installation if it is inconsistent with the mission of the park. Barger stresses that each park unit is different in its legislation and its need to protect visual resources, but the Cellular Telecommunications Industry Association (CTIA) wants a uniform procedure for all parks.

As the number of cellular users



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— Theodore Roosevelt

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REGIONAL REPORT *continued***PACIFIC NORTHWEST** Phil Pearl, Regional Director

► The National Park Service (NPS) plans to issue an emergency rule late this year concerning personal watercraft (PWC) use on waterways in national parks. The rule requires superintendents to make positive determinations that PWCs will not be detrimental to a park or the visitor's experience before their use is allowed. PWC problems in Glacier and Olympic national parks were main factors in gaining NPS support for a potential system-wide moratorium on the noisy watercraft. "PWCs have little, if anything, to do with the appreciation of natural or cultural resources," says Pearl. "We would never allow people to play soccer on the Gettysburg battlefield or handball against the Vietnam Veteran's Memorial." **TAKE ACTION:** See News Alert, page 14.

ROCKY MOUNTAIN Mark Peterson, Regional Director

► Diversa Corp., a San Diego-based biotechnology firm, has signed a contract with federal officials that will allow the company to collect and study microorganisms found in the thermal pools of Yellowstone National Park. Royalty payments to the Park Service could be substantial if microbe use succeeds in the scientific arena. One microbe discovered in Yellowstone has been found to benefit DNA fingerprinting, such as the methods used in the O.J. Simpson case. NPCA's attorneys are evaluating the contract to determine any harmful impacts to park resources. "This contract could serve as a model for patenting life forms in other parks," says Peterson.

SOUTHEAST Don Barger, Regional Director

► Last spring, the state of Tennessee signed a procedural air quality agreement with the Department of the Interior to replace the one rescinded a year before by Tennessee. The rescission of the original agreement, which had been negotiated by NPCA, the Park Service, and the state, created a firestorm of public support for air quality protection for Great Smoky Mountains National Park. The most recent show of support is a letter to North Carolina Gov. Jim Hunt from the Great Smoky Mountains Alliance of Communities, an organization of 26 county and municipal governments surrounding the park, asking that North Carolina sign on to the agreement.

SOUTHWEST Dave Simon, Regional Director

► At press time, Sen. Pete Domenici (R-N. Mex) had scheduled a hearing for late October to promote his bill (S. 633) that would authorize a highway across Petroglyph National Monument. The six-lane highway, an extension of Paseo del Norte, would destroy the integrity of the monument, desecrate ground considered sacred to American Indians, and set a potentially devastating precedent for the National Park System. **TAKE ACTION:** Call your senators at (202) 224-3121, or write to: U.S. Senate, Washington, DC 20510.

exponentially increases, the number of towers in a given area must also increase to meet that capacity. Although cellular industry representatives cannot predict how many towers will be needed, CTIA says that "new subscribers are signing up at a rate of 28,025 per day." Once a tower is constructed, it stands permanently, according to Randy Coleman, CTIA vice president for regulatory policy and law.

The Blue Ridge Parkway is particularly susceptible to cellular towers because of its mountainous terrain and open viewshed. Even though the parkway is 470 miles long, it is only a few hundred feet wide in most places. Any installation of towers could interfere with the rural viewshed. NPS has no regulatory powers on towers placed outside park boundaries, but officials at the Blue Ridge Parkway have been working with adjacent state and county governments to gain consideration for the viewsheds along its route.

At press time, the National Park Service was devising final regulations on tower implementation.

PLANNING

**Pioneering Effort
in Gettysburg**

Multi-group workshops spawn improved management plan.

GETTYSBURG, PA.—The National Park Service (NPS), various constituents of Gettysburg National Military Park (NMP), and the public have teamed together to draft a revised general management plan for one of the most notorious battlegrounds in American history.

NPS is using geographic information system (GIS) technology to map out historic fence lines, fields, woodlots, lanes, roads, and topographic features in an effort to determine the degree to which the battlefield should be rehabilitated to its 1863 condition. This first-time use of baseline historical data

combined with public suggestions has led the Park Service to sift out the top priorities in restructuring how Gettysburg's past is protected and interpreted to visitors.

Unusual and particularly effective in Gettysburg's revision process is the continual dialogue between the Park Service, supporters of the park, and the general public through planning workshops. "This structure allows everyone to discuss in a constructive fashion all the variables that go into making a comprehensive policy document that provides flexibility without compromising Park Service standards," says Eileen Woodford, NPCA's Northeast regional director. The majority of people who come to Gettysburg NMP are first-time visitors and Civil War activists, but a broad array of interpretive possibilities exists to attract a more diverse group. Herein lies the importance of extensive public participation in the planning process, which ultimately will gather information from groups interested in experiencing Gettysburg in the future.

NPCA supports the concepts of rehabilitation that provide more opportunities for pedestrians to experience the battlefield and the establishment of management practices that will protect areas now being damaged by over-visitation. Change will be beneficial, Woodford asserts in a letter sent to Gettysburg Superintendent John Latschar, "so long as the associated infrastructure doesn't damage the park's significant resources."

Many Americans see Gettysburg as the primary example of both the suffering and valor endured in the Civil War. In the serene Pennsylvania fields surrounding Gettysburg, more men fell than in any other battle fought in North America before or since—more than 50,000 casualties. NPCA hopes that the icon nature of Gettysburg NMP combined with the planning alternatives, baseline data, and public participation will serve as an example for other parks' management planning in the future.

"We want our membership to influence this process and reinforce NPS goals," says Woodford.

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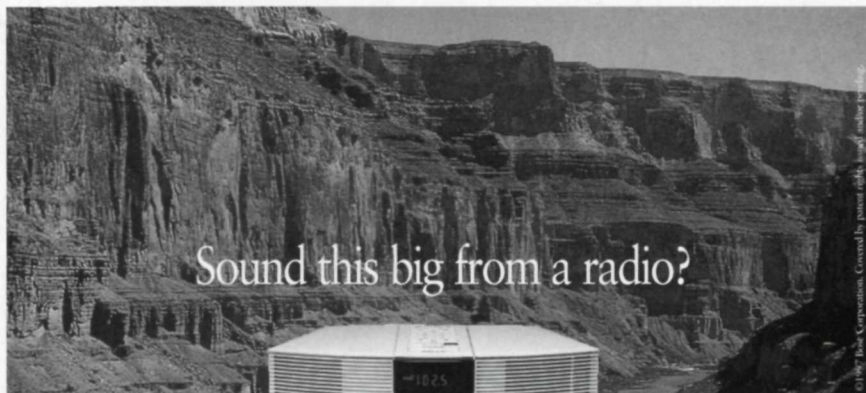
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An aerial photograph of a rugged, rocky coastline. The rocks are dark and jagged, with some lighter patches. The water is a deep, dark blue. The title 'GONE ASTRAY' is written in a large, white, serif font on the left side of the image.

GONE ASTRAY

At Channel Islands National Park—one of the most biologically rich lands in the country—the Park Service is under fire for allowing the degradation of resources.

BY GEORGE WUERTHNER

SOMETIMES CALLED America's Galapagos, the Channel Islands may be among the most biologically rich lands on a per acre basis in the country. Located off the coast of California southwest of Santa Barbara, the eight island archipelago is home to more than 800 species of plants and animals.

The islands are a natural laboratory for the study of evolution. Like the Galapagos Islands, isolation from the mainland has led to the evolution of many biologically distinct island plants and animals, with 54 endemic species recorded from the four northern islands alone. Other island inhabitants, such as the small, cat-like foxes that inhabit some of the islands—while not isolated long enough to evolve into separate species—are still genetically distinct from mainland populations.

Channel Island waters are also critically important migration, breeding, and foraging habitat for many sea mammals and birds, including California gray whales, sea lions, elephant seals, and sea otters. The islands support the only breeding colony of northern fur seal south of Alaska, along with the largest known breeding population of Xantus' murrelet, a small black and white sea bird.

The national significance of these island gems was recognized in 1938 when the two smallest islands—Anacapa and Santa Barbara—were protected as a national monument. In the 1960s, momentum grew to designate the entire northern chain of five islands as a national park, and in 1980 Channel Islands National Park was established by Congress. In the same year, the waters for six nautical miles surrounding the islands were declared a National Marine Sanctuary. International recognition of the biological richness of the archipelago led to the park's designation by the United Nations as a Biosphere Reserve in 1976.

Yet, these internationally significant islands are in jeopardy as a result of human-induced changes. Introduced

pigs, goats, cattle, sheep, elk, deer, and other large herbivores are devastating island vegetation, and in some cases destroying archaeological sites that are thousands of years old. Invasion by exotic plants, in many cases abetted by disturbance from the introduced herbivores, threatens many of the islands' native plants.

The decline of native plants is nowhere more evident than on 54,000-acre Santa Rosa Island, the second largest of the northern Channel Islands. A growing dispute over how, and whether, commercial livestock operations should continue on the island, and just what the effect on native plants



Channel Islands, off the coast of California, is made up of an eight-island archipelago. The park is home to a variety of species, including fox.

and animals may be, has pitted environmentalists, including NPCA, against the National Park Service (NPS) and the former owners of Santa Rosa Island, the Vail and Vickers Company. Vail and Vickers, a livestock and land corporation, sold the property to the Park Service in 1986, but continue to run a commercial livestock and trophy hunting business on the island under a Special Use Permit.

In 1996, NPCA filed a 13-count lawsuit contending, among other things, that the Park Service's issuance of the permit to Vail and Vickers violated the Organic, Clean Water, Endangered Species, National Historic Preservation, and Coastal Management acts and the federal agency's own regulations.

Scientists agree that Santa Rosa's native species are in trouble. On July 31 of this year, 13 Channel Island species,

eight of them on Santa Rosa Island, were listed under the Endangered Species Act. Hundreds of others, including 74 on Santa Rosa Island, are listed as species of concern, meaning they are declining in numbers.

Connie Rutherford, a botanist with the U.S. Fish and Wildlife Service (USFWS) in Ventura, explains that before the introduction of exotics such as cows and deer, the largest herbivore on Santa Rosa island was a mouse. The absence of grazing animals and distance from the mainland permitted the evolution of plants that lost many defensive mechanisms such as spines, thorns, and noxious chemicals.

Given the evolutionary history of the islands, it is not surprising that USFWS, which, along with the National Marine Fisheries Service, administers the Endangered Species Act, specifically notes that introduced grazing and browsing animals are the primary source of habitat degradation that is driving many Channel Island species toward extinction. Soil loss is the single greatest threat to most species, and the cause of that loss, says USFWS, is "historic grazing." Recent studies on Santa Rosa Island have verified that rates of sedimentation have increased more than six times when compared with pre-livestock conditions.

The agency reports, too, that riparian habitats on Santa Rosa Island are "heavily modified, physically and structurally, and in some areas they have been completely eliminated."

Grazing affects the delicate soil crusts that are crucial soil fertility and erosion prevention. In addition, livestock have trampled nests of the endangered western snowy plover and destroyed archaeological sites.

Despite these documented grazing problems, Vail and Vickers, along with the company's supporters, claim it has been a good steward of the land. Grazing, they point out, has been occurring on the island for 150 years, and native plants still persist.

The fact that some species persist, however, does not mean they are thriving. Dr. Beth Painter, a botanist and

ISLANDS Continued

rangeland ecologist from Santa Barbara who has studied the island's flora, says some native plant populations have declined significantly since the last major survey in the 1930s. And, she says, at least a few formerly widespread plant species are now restricted to marginal habitat such as cliff faces and promontories that are inaccessible to livestock. Most of the island, she points out, is populated with exotic species that favor disturbance induced by livestock.

WATER QUALITY is another issue. Howard Kolb, an environmental specialist for the Central Coast Regional Water Quality Control Board, says that livestock, along with the roads that serve the ranch and hunting operations, are the source of nonpoint pollution on Santa Rosa Island. Livestock also foul inland streams with manure and urine. On May 17, 1995, his agency issued a Cleanup or Abatement order to NPS as owner of the island and ultimately responsible for management of Vail and Vickers' operations. The agency is awaiting compliance.

The seeds for today's dispute were planted in 1986 when Vail and Vickers sold the island to the Park Service. At

the time of the final sale negotiations, Vail and Vickers was given a choice between selling the island outright for the appraised value of roughly \$29.5 million or retaining a 25-year reservation of use and occupancy with a consequent price reduction of \$3.5 million. Vail and Vickers decided to give up ownership and chose to enter into a business relationship with the Park Service to use the island, says Brian Huse, NPCA's Pacific regional director.

Vail and Vickers retained use and occupancy of an eight-acre home site and continued commercial operations on the island through issuance of a revocable five-year Special Use Permit. Current commercial use includes cattle grazing and guided deer and elk hunts. The Channel Islands National Park Act, however, specifically says that Vail and Vickers' operations could be terminated if the use and occupancy were "incompatible with administration of the park or preservation of [Santa Rosa Island's] resources."

A further source of conflict has centered on public access to the island. Many people feel that the livestock operation interferes with public use of the island. For instance, until recently the public was excluded from much of the island unless visitors had permission from Vail and Vickers.

Finally, questions have been raised about the expenditure of tax dollars for

company operations. The Park Service has built fencing, new livestock loading dock facilities, and paid for other expenses directly related to the ongoing commercial use of the island. In addition, Vail and Vickers pays only a \$1.00 an AUM (Animal Unit Month—a standardized measurement of forage available for livestock consumption per month) for grazing privileges on the island, a rate that is one-fifth to one-tenth the market value of leases on nearby private lands.

Despite these obvious economic costs to the American public, the real concern for most environmentalists centers on the ongoing biological impoverishment of the island. This is made all the more egregious because many suggest the Park Service, which manages the island, has done precious little to halt the ongoing degradation.

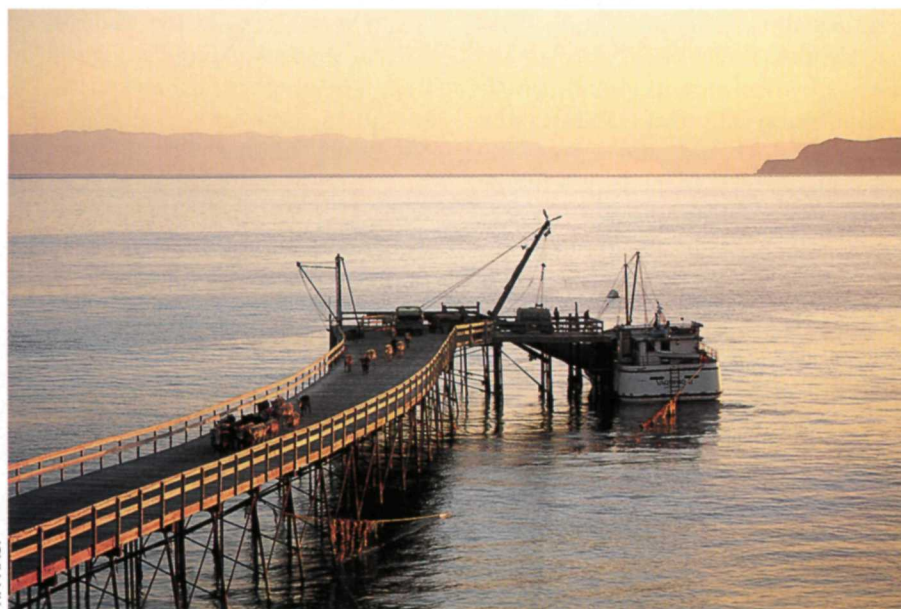
After two years of negotiations concerning problems on Santa Rosa Island, Huse says that NPCA decided to take legal action to force the Park Service to comply with federal laws and to uphold its responsibility to protect park resources.

Legal challenges were filed after NPS put together a draft Resource Management Plan (RMP) and a preferred alternative—released in 1996—which did little to address environmental concerns. The Regional Water Quality Control Board determined that the plan was deficient.

In response to the suit, the Park Service moved forward with a revised management plan. The revised plan proposed closing some parts of the island to grazing and phasing out deer and elk hunting. Huse acknowledges the new plan is an improvement over the previous alternative but still allows too much resource damage.

Vail and Vickers claimed the revised plan would put the commercial operation out of business, and the company filed a countersuit to halt implementation. According to the company's attorney, Bill Thomas, Vail and Vickers alleges a breach of contract, asserting that the Park Service is not honoring the original deal worked out by Congress when the island was sold in 1986.

Vail and Vickers insists it had a "verbal" contract with park officials and



TIM HAUF

A commercial livestock operation retains use of an eight-acre site on Santa Rosa and continues operating its business through a special use permit.



Erosion is a serious problem on the islands, where the largest plant-eater before the arrival of livestock was a mouse.

others involved in the park establishment, guaranteeing no disruptions in historic use until 2011. Without such assurances, the company says it would not have agreed to sell the island. Thomas says his client has signed affidavits from several park officials involved in the negotiations, as well as the congressional representative from the area at the time, that support Vail and Vickers' contention.

Vail and Vickers garnered support in Congress from Rep. George Radanovich (R), whose district lies 200 miles from the area. Radanovich has introduced legislation to exempt Vail and Vickers' operations from all environmental laws and to guarantee commercial privileges until 2011. Tom Pile, an aide to Radanovich, says the representative introduced the legislation because he feels the Park Service is not living up to its original agreement. He believes that Vail and Vickers should be allowed to continue the commercial operation without undue restrictions until the end of the 25-year agreement.

Rep. Walter Capps (D), whose district encompasses Channel Islands National Park, opposes Radanovich's legislation. Blake Selzer, an aide to Capps, says that

any agreement, verbal or otherwise, would not exempt Vail and Vickers' operation from environmental laws. When it comes to protection of public resources, Selzer says, "the public interest must always prevail over commercial interests."

Bill Thomas maintains that Vail and Vickers is willing to modify its operations to correct many of the environmental problems, and he asserts that his clients have worked diligently with USFWS, NPS, and the water board to draft proposals that respond "fully" to water quality and plant protection issues. The company also offered to reduce deer and elk populations. The dispute, according to Thomas, "is over how much and how quickly changes should occur."

Brian Huse says NPCA's goal is "to improve management to prevent further resource degradation." NPCA wants protection for all rare, threatened, and endangered plants and animals, improvement in water quality, adequate visitor access, and the preservation of archaeological resources. For this to occur, Huse says, "NPS needs to implement management actions that acknowledge, and are responsive to im-

pacts caused by these nonnative herbivores. Certainly, the number of animals will need to be reduced to a level that will stop the degradation, as required by the Endangered Species and Clean Water acts."

In addition, Huse says, "the Park Service must establish adequate standards and guidelines which, with proper monitoring, will indicate whether the new management is succeeding in protecting resources. Should the level of impact exceed the standards, further actions will need to be taken to safeguard public resources," says Huse.

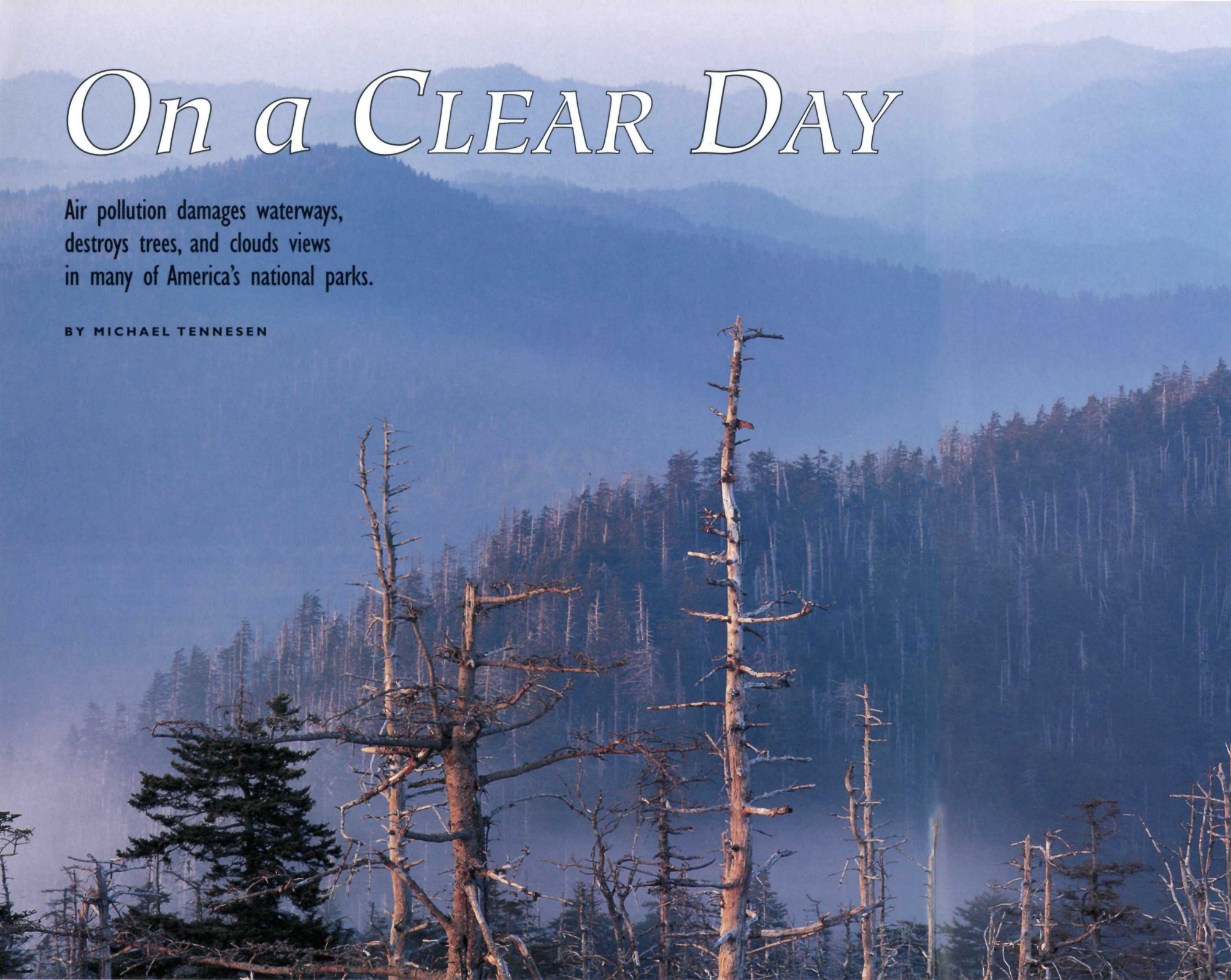
The rare and distinctive flora and fauna of Santa Rosa Island has persisted and survived thousands of years of storms, drought, fire, and changing climate. As caretakers of an International Biosphere Reserve, the United States has a global responsibility to protect the island's unusual species and landscapes. NPCA's goal is to ensure that the Park Service lives up to this expectation.

GEORGE WUERTHNER is a wildlife biologist, freelance writer, and photographer based in Montana. He last wrote for National Parks about invasion of alien species.

On a CLEAR DAY

Air pollution damages waterways, destroys trees, and clouds views in many of America's national parks.

BY MICHAEL TENNESEN



LAURENCE PARENT

IT IS MIDNIGHT in downtown Knoxville, Tennessee, and a transformation is taking place. Warm air rises off the sun-baked asphalt and pavement, as cooler air from the atmosphere above descends to take its place. Though this inversion is a relief to the people of Knoxville, the change will have grave effects at high altitudes in Great Smoky Mountains

National Park some 30 miles away. For that warm air is laden with ground-level ozone created from a sunlit mixture of inner-city pollutants. And as the skies turn dark, ozone levels will descend in Knoxville as well as other urban areas, but remain constant in the Smoky Mountains.

There, streams, plants, and trees will know no nighttime relief. Under starlit

skies, the pollution created by automobiles visiting one of the nation's most popular parks and elsewhere will be replaced by emissions drifting in from urban areas including Knoxville, placing the mountaintops under a 24-hour pollution assault.

The damage the mountains sustain will come primarily from acid rain and ozone created from sulfur and nitrogen

emissions. Clouds over the Smokies can be a thousand times more acidic than natural rainfall—and more than 30 species of trees and plants in the park show injury from ozone, including black cherry, yellow poplar, blackberry, and milkweed.

On a summer day not long ago, visibility in the park was down to one mile. "And that's not from fog or

Natural haze gave Great Smoky Mountains its name, but today that "smoke" is likely to be filled with ozone and other pollutants.

clouds," says Jim Renfro, the park's air resource specialist, "that's from pollution. On an average, ozone levels over the park are twice as high as those over Atlanta or Nashville."

From the Great Smoky Mountains to the Grand Canyon, air pollution, often transported over hundreds of miles, is seriously affecting our national parks. Though the problem is worse in the East—affecting plant life as well as visibility—air pollution is a factor in virtually every park in the country.

At Grand Canyon National Park in Arizona, pollution diminishes the views on 90 percent of the days. On some days, visitors to the South Rim can see only half as far as those who toured the park when it was dedicated in 1919. "Instead of those huge erosional forms and brilliant colors," says Carl Bowman, air quality scientist at the park, "you often see only vague blue masses."

Yet national parks, under 1977 amendments to the Clean Air Act, are considered Class I areas, meaning any existing or future pollution sources negatively affecting these areas should be regulated and remedied. Yet, new regional haze regulations proposed by the Environmental Protection Agency (EPA) may not have an easy time going through the regulatory process.

Pollution generally comes from many and varied places, making it difficult to determine which sources are causing which problems. And the National Park Service (NPS) has limited jurisdiction over pollution originating outside park boundaries. That responsibility ultimately rests with EPA, which, according to Charley Garlow, an acting branch chief of the Air Enforcement Division of EPA, more often focuses on "target rich environments like Los Angeles where you have a lot of pollution sources and a lot of polluters."

Gathering the evidence on major polluters or "point sources" involves scientific detective work. At Great Smoky Mountains, pollution can originate from power plants in the Tennessee or the Ohio River valleys, or it

can drift in at high altitudes all the way from Atlanta or New York.

A recent study in the Grand Canyon showed that pollution came from industry in Arizona, cars in California, and smoke stacks in New Mexico, Nevada, and Utah and unregulated pollution sources from as far away as Mexico.

Damage caused by pollutants can be devastating. Ozone affects the leaves of a number of plants, producing purple to dark brown stippling that can hinder plant photosynthesis, physiology, and growth. Acid rain enters the soil and leaches away calcium, potassium, and magnesium, essential nutrients for plants. It can also loosen metals, releasing them from the soil into surface and groundwater where they can affect plant growth and aquatic life.

Harvard Ayers, who serves as chair of the Sierra Club's Southern Appalachian Eco Region Task Force and is a professor at Appalachian State University, says, "Pollutants [weaken] a tree by starving it, poisoning it, and burning its leaves. Then the next cold winter or pest that comes along finishes it off."

Ayers says that the devastation caused by the balsam woolly adelgid to balsam fir trees at the highest elevations in the Smokies is due in part to a weakening of the trees by pollution.

But the firs are not the only trees that are suffering in the Smokies. Different types of trees grow in the Appalachians at different elevations. Ayers conducted flights over the Smokies through the auspices of the Sierra Club and witnessed die-offs of up to 50 percent in the maple-beech forests that grow at elevations just below the troubled firs.

IN AN ATTEMPT to stem some of the pollution harming Great Smoky Mountains, the Park Service since the 1980s has objected to more than 20 construction permits requested by nearby utilities and industry. Yet, the state of Tennessee issued all of these permits without modification—basically ignoring the Park Service's objections. So when the Tennessee Luttrell Co. proposed the construction of two lime kilns near the Smokies, the Department of Interior and NPCA filed an appeal. According to Don Barger, NPCA's Southeast regional

director, the point was not to stop the Tennessee Luttrell Co., but to get the state to pay attention to the Park Service's concerns.

In fact, Luttrell was allowed to build its kilns. But the Department of Interior pressured the state of Tennessee to issue a joint memorandum of understanding that declared that if the state chose to ignore the Park Service's recommendations in the future, it at least had to do so in writing.

Even the joint memorandum did not sit well with the business community, and after six months of lobbying by the Tennessee Association of Business, the state rescinded it unilaterally. Then a firestorm broke out. According to Bargier, "The public never grasped all the details, but they understood two things: number one, the state and federal government had an agreement to protect the Smokies; and number two, the state just walked away from it. The public attention the matter got over the next several months was incredible. The pressure on the state of Tennessee was intense and immediate." Under a different agreement, the governor reinstated the provisions of the memorandum.

Pollution problems are not the sole province of the Smokies. Fifty years ago, a visitor could gaze eastward on a sunny day from Shenandoah National Park in Virginia and catch a glimpse of the Washington Monument, 70 miles away. But pollution is so bad on some days, a visitor can stand at the Hogwallow Flats Outlook and not see the Shenandoah River in the valley below.

Besides obscuring the views from this scenic byway that runs along the crest of the Blue Ridge Mountains in Virginia, acid rain can poison streams and has created spikes in the acidity of Shenandoah's riverways that are strong enough to kill small brook trout. Says Shane Spitzer, the air-quality monitoring specialist at Shenandoah, "In one test we had 100 percent mortality on trout fingerlings. If a severe acid event came through, it could wipe out whole-year classes of fish."

Acid rain also is ruining park monuments at Gettysburg National Military Park. It eats away calcium-based material in marble and sandstone, leaving a rough crystalline structure that holds contaminants and further erodes the sharp edges on statues and the lettering on inscriptions. "Most of the recent monuments have been in granite, which is not as affected by the acid rain," says Vic Gaven, head of the Monument Preservation Team, "but the early monuments in sandstone and marble have taken a real hammering."

SCIENTISTS HAVE enlisted unusual techniques to identify sources of pollution. Researchers placed radioactive isotopes in emissions from the Navajo Generating Station at Page, Arizona, a mammoth coal-fired power plant 80 miles from the center of Grand Canyon, to prove that the facility was directly affecting the park. That plant was pumping 76,000 tons of sulfur dioxide (SO²) annually into the atmosphere. The facility has now agreed to install scrubbers that should reduce sulfur emissions by 90 percent over the next two years.

Still, Dave Simon, NPCA Southwest regional director, claims a half dozen

plants around the Colorado Plateau have no scrubbers or less than 50 percent sulfur dioxide controls. "In this day and age, for a power plant to have no scrubbers should be an outrage to every American. These plants must either be cleaned up or shut down."

Shutting down power plants is not always an option, since some of them are in foreign countries. At Big Bend National Park in Texas, a clear day can bring visibility in excess of 150 miles. But recently, the average visibility in summer is about 50 miles, and clear days are rare. Winds from the southeast bring sulfates from Carbon I and II, coal-fired electric generating power plants near Piedras Negras in the state of Coahuila, Mexico. At 100 percent capacity, Carbon I and II emit an estimated 250,000 tons of SO² per year.

Although SO² emissions from the plants probably meet Mexican standards, Mexico does not have a visibility program such as the one in the United States. And Texans cannot claim to be guilt free. Texas power plants ranked number one in the nation in 1994 for emissions of nitrogen oxides and volatile organic compounds, the two key ingredients for ozone.

Carbon I and II were discussed during ratification of the North American Free Trade Agreement (NAFTA), but the agreement failed to address the problem. It set up a Border Environmental Cooperation Commission, but the focus of that commission was mainly on water quality issues. NAFTA did, however, set up processes for further communication and negotiation on environmental issues. Says Dave Simon, "It didn't resolve the problem, but it did lay the groundwork for a great deal more cooperation. And that by itself is positive."

Simon says that the issue must be kept in the forefront of relations between the United States and Mexico. "Mexico must realize that a positive relationship with the United States depends on resolving this."

Pollution from Mexico, Los Angeles, power plants in the West, and smoke generated by controlled burns on public lands are among the sources of haze that the Grand



CHRIS E. HEISEY

Acid rain has damaged monuments at Gettysburg National Military Park. This statue of a Union general has been restored.



At Grand Canyon National Park, pollution mars the views of remarkable landforms 90 percent of the days. INSET: Some of the pollution affecting the park comes from the Navajo Generating Station at Page, Arizona.

Canyon Visibility Transport Commission—now defunct—identified.

The commission included four Indian tribes, five federal agencies, and the states of California, Arizona, Colorado, Nevada, New Mexico, Oregon, Utah, and Wyoming, as well as environmental and other groups. Air pollution affects many Western parks besides Grand Canyon—including Arches, Bryce Canyon, Canyonlands, Capitol Reef, Mesa Verde, Petrified Forest, and Zion.

Though the group tried to identify point sources such as the Southern California Edison plant in Laughlin, Nevada, Carl Bowman, the air quality scientist at Grand Canyon National Park, admits the search for large point sources of pollution is growing leaner. “What we are finding more and more is that we’ve got myriad tail pipes and chimneys that each contribute a very tiny part of the problem, but whose impact

in aggregate is tremendous.”

To get at some of these myriad contributors, EPA has recently proposed regional haze regulations to improve visibility in Class I areas throughout the nation. The Clean Air Act contains a national visibility goal of “no man-made visibility impairment” in Class I areas. The proposed rules define reasonable progress toward the national goal as about 10 percent improvement every ten to 15 years. This mild proposal, along with EPA’s recent effort to lower the allowable standards for particulate matter and ozone, has, according to Simon, produced “screams of anguish” from industry, utilities, and some members of Congress.

But the new standards are necessary to ensure the environmental quality of the national parks. Says Jim Renfro, at Great Smoky Mountains, “If we reduce pollution, the trees, the plants, the

streams, and the soils will recover. They are not too far gone [for us] to make changes and see the benefits.”

And those standards are vital to maintaining—and even restoring—dramatic, expansive, unpolluted views to our Western national parks as well. “If we allow those vistas to be lost,” says Dave Simon, “I think future generations will not forgive us.”

MICHAEL TENNESEN is a freelance writer living in Lomita, California. He writes for a variety of environmental magazines.

TAKE ACTION: The Environmental Protection Agency has requested written comments on its proposed regulations to address regional haze in national parks. It is imperative that the agency receive a significant number of letters in support of its proposal. Please call NPCA at 800-628-7275 to receive a draft letter to the EPA.

Yellowstone's BISON WAR



WILLIAM CAMPBELL

NPS officials corral bison to ship them to slaughter. INSET: One of last winter's casualties.

How could such a scenario continue to play out? For a fleeting moment last spring, Finley took comfort in believing the various government entities responsible for the slaughter—APHIS, the Park Service, and the state of Montana—would prevent it from happening again. Yet, as another winter approaches, the failure to reach consensus on a long-term bison-management plan suggests the months and years ahead could hold a repeat of 1997.

"You might assume that reasonable people could sit down around a table and reach a reasonable alternative to the killing," suggests Yellowstone wildlife management specialist Wayne Brewster. "What observers from the outside forget is that this is war. It's an engagement of opposing sides and ideologies whose opinions differ sharply on the real threat of brucellosis."

Across the span of Yellowstone's first 125 years, the fate of bison and the sense of wildness encapsulated by the park have evolved in tandem. At the end of the 19th century, Yellowstone afforded sanctuary to a score of bison in the remote pockets of Pelican Valley, the last free-ranging animals that only 100 years earlier had numbered 60 million. The surviving population, augmented by captive bison protected on private ranches and ironically infected with brucellosis from cattle, formed the genesis of what has become the most famous herd of native bovines in North America. Only about 130,000 bison remain in North America, 95 percent of them on ranches or in confined areas. Yellowstone's bison constitute the only

A plan to combat disease threatens America's most famous wild and free-ranging bison herd.

BY TODD WILKINSON

IF HISTORY CAN BE recounted through numbers, then the bison at Yellowstone National Park present a grim lesson. Last winter, nearly 1,100 animals, or roughly a third of the park's free-ranging herd, were either shot just beyond the park's border in Montana or shipped to slaughterhouses.

Preventing domestic cattle from coming in contact with a disease called brucellosis has been the justification for a death toll that has risen steadily since 1985 to nearly 3,500 casualties. To those who keep count, the tally represents the largest ongoing persecution

of wild bison in the 20th century.

But for Yellowstone Superintendent Mike Finley, one of several bureaucrats portrayed in the media as having blood on his hands, numbers are not what remains poignant. Vivid to him is the helplessness and shame he felt as the doorstep to America's first national park turned into a killing field.

"When people describe what happened here as 'a national tragedy,' I don't disagree with them," Finley says, poring over a stack of mail from disgruntled park visitors. "A lot of people around the country are rightfully questioning why we were—and are—

doing anything that is completely unpalatable to the American people, and it's something we are not convinced that science justifies."

Finley's observation follows a fusillade of rhetoric that has forced reluctant ranchers to support the killing because of threats of economic sanction levied by a branch of the U.S. Department of Agriculture known as the Animal and Plant Health Inspection Service (APHIS).

The Yellowstone Bison War, as it is now known, has also included a barrage of lawsuits filed by environmentalists, prayer vigils led by American In-

dians, and a beef boycott organized by animal rights groups.

"The border of Yellowstone National Park is now being rendered meaningless by policy incursions made by the livestock industry," says D.J. Schubert, a biologist working for the natural resource law firm of Meyer & Glitzenstein in Washington, D.C. "As a consequence of what figures to become official policy... Yellowstone will turn into a glorified zoo with boundaries defined not by steel bars but by lead bullets."

Montana rancher Sandy Pew disagrees with Schubert's assessment of the livestock industry. "I definitely think, without a doubt, that this is a resolvable, negotiable issue," says Pew. "The majority of ranchers in Montana are moderate, sensible, and long-term ranchers who have been at this for generations and are very willing to work to solve this problem."

wild, free-roaming herd remaining.

Unfortunately, when the park's boundaries were established in 1872, they did not include adequate winter range. Bison, like other ungulates, migrate to lower elevations in winter—much of which lies outside the park.

Rancher Pew agrees. "The present boundaries of Yellowstone were never meant by nature to be a winter home to ungulates," he says. "The bison need to get out of there in the winter. We need to find somewhere outside the park for them to go that doesn't affect the health of our cattle or our ability to market them. But we understandably are going to be concerned if APHIS continues to penalize ranchers because of the presence of bison on their grazing land."

APHIS' intransigence, says Mark Peterson, NPCA's Rocky Mountain regional director, is what has set Yellowstone on a collision course with the Western cattle industry. Over the last 60 years, APHIS has spent an estimated \$3 billion trying to eradicate various forms of brucellosis from the American landscape. The brucellosis bacterium—*Brucella abortus*—can cause pregnant cattle to miscarry their fetuses. Farmers recognize the disease by another name, undulant fever, which when contracted by humans—typically by drinking unpasteurized milk—can cause severe joint pain.

The U.S. Centers for Disease Control and Prevention no longer considers undulant fever a major health risk. Nonetheless, APHIS has used the threat of brucellosis transmission in its campaign to target the Greater Yellowstone region.

Not long ago, APHIS officials announced that they planned to eradicate brucellosis within ten years. During the 1980s, the agency notified states adjacent to Yellowstone that unless they lethally controlled potentially infected bison leaving the park, those states could lose their coveted "brucellosis-free status." The classification allows for easy shipment of cattle to markets across state lines. The warning touched off panic in the livestock industry, particularly as the number of bison swelled and many animals began leaving the park during the winter months.

BISON Continued

In response, the state of Montana implemented a policy to shoot or send to slaughterhouses any bison crossing the park's western or northern boundary.

Even environmentalists and the livestock industry, which remain at odds, agree that it is theoretically possible for bison to transmit brucellosis if cattle were to come into contact with an aborted bison fetus. But no transmission has been documented in the wild, and immunologists are increasingly skeptical that brucellosis represents a tangible risk.

Although *Brucella abortus* can survive in snow and ice, it quickly perishes in sunlight and dry, warm weather—the conditions that greet cattle on the open range in summer. Bison give birth in the spring, and cattle are herded onto the range shortly after. For a cow to become infected with *Brucella abortus*, the bacteria would have to linger on a clump of grass, and the cow would have to ingest a portion of that particular clump with the bacterium in sufficient quantities to cause infection.

When pressed recently to describe the odds of infection, Clarence Siroky, Montana's former chief livestock veterinarian, likened the risk to getting struck by lightning. But he added that even though the likelihood of infection is remote, any risk is unacceptable be-

cause subsequent quarantines would be economically disastrous for Montana cattle producers.

Counters Superintendent Finley: "If we managed for the risk of AIDS transmission with the same methods we have been forced to use for brucellosis, we would shoot every person we suspect of carrying HIV."

Montana demands that all bison that test positive for disease be destroyed. Experts say, however, that those tests record antibodies and that bison may indeed be exposed to the bacteria without being infectious. For instance, humans inoculated with a tuberculosis vaccine would test positive for the disease based on the presence of antibodies, but they may not suffer from TB.

Immunologists maintain that seropositive bison showing no symptoms may be precisely the animals that should be spared because they have developed immunity. While sero-negative animals pose no threat, livestock officials now admit that in 1997 the majority of bison killed were sero-negative bison bulls, non-pregnant bison cows, and young calves, and that the nearest cattle outside the park's western boundary were more than 40 miles away. APHIS' zero-tolerance policy toward brucellosis encouraged a shoot first, ask questions later approach.

"There is no doubt in my mind that the agenda behind the bison policy is

not eradication of brucellosis but to use Yellowstone as a means of expressing anger at the federal government," says John Varley, Yellowstone's scientific research director.

WHETHER Yellowstone bison are confined to a postage stamp outline of the park or allowed to migrate to lower elevations during the winter months, the outcome has far-reaching implications. Varley says it is a political struggle between traditional land users who see public lands as the domain of livestock and those who recognize that the ecological health of wildlife populations depends on adequate habitat outside park borders.

Since the winter of 1988-89, the Park Service, APHIS, and the state of Montana have promised to deliver a long-term management plan through the completion of an environmental impact statement (EIS). With the draft EIS continually beset by delays, Montana won a lawsuit in 1995 filed against NPS based on assertions that Yellowstone needed to prevent diseased bison from leaving the park. This set the stage for last winter's disastrous interim bison-management plan.

The agreement, endorsed by the Interior Department over the objections of Yellowstone managers, resulted in rangers assisting with the shooting and shipment of bison to slaughter. This fall, NPS was scheduled to release a draft EIS. At press time, the document appeared to offer little improvement, and in the years ahead could mean the death knell for Yellowstone's free-roaming bison.

Components of the EIS' preferred alternative, written largely with the approval of APHIS in mind, included:

▲ Creating three sites for capturing and testing wandering bison on the western and northern ends of the park. Those testing negative for brucellosis antibodies would be released with cattle-like ear tags or placed in quarantine, while those testing positive would be shipped to slaughter.

▲ Seeking approval from the Montana legislature to reauthorize another sport hunt of bison on Forest Service land



JEFF AND ALEXA HENRY

Hard-packed surfaces used by snowmobiles allow bison to wander more easily through the park in search of food.



Yellowstone's bison herd is one of the last wild, free-roaming herds in North America. Bison once numbered more than 60 million. Today, about 130,000 animals remain, most of them on ranches or in confined spaces.

surrounding the park. States still carry hunting authority over wild animals on public lands, and some groups support a hunt. They believe it would treat bison like any other wildlife species, and it would build a constituency of support for bison as it has for elk.

▲ Managing the Yellowstone bison herd at artificially low numbers, with no more than 2,500 animals and no fewer than 1,700. (After the human-caused slaughter and the death of another 400 bison that succumbed to the hard winter, the latest aerial census of Yellowstone bison showed nearly 2,000 adult animals.)

“Once again, the Animal and Plant Health Inspection Service, through its threats on the livestock industry, is in the driver’s seat,” says NPCA’s Peterson. “Where is the myth of brucellosis transmission coming from? APHIS and the livestock veterinarians in the surrounding states continue to perpetuate the belief that unless bison are shot, disease will spread like the plague, which isn’t true.”

Another main thrust of APHIS is to eventually vaccinate the entire free-ranging bison herds in both Yellowstone and Grand Teton national parks, although the long-term effectiveness is dubious. Brucellosis occurs in many species, and without intensively managing for disease in elk, which carries it in greater numbers than bison, experts say eradication will never work.

Biologist Mary Meagher, a bison researcher with 38 years of field experi-

ence in Yellowstone National Park, argues that brucellosis cannot be eliminated without eradicating the wildlife that carry it—an action that would be catastrophic for predators, such as wolves and grizzly bears.

Statistically, elk are believed to carry the bacterium in greater numbers than bison—many more of which share the open range with cattle—but elk have been tolerated because hunting the animals is an important source of revenue for Montana’s tourism economy. A recent analysis showed that the northern elk herd, which migrates out of the park, is the most valuable for hunters and outfitters of any in Montana. Varley says APHIS has ignored elk, knowing that any proposal to depopulate the park’s herds would create a political firestorm.

CRITICS SAY that APHIS and the state of Montana are also overlooking possible solutions to the brucellosis crisis that lie nearby. South of Yellowstone National Park in Jackson Hole, Wyoming, where ranchers vaccinate their herds and remain flexible about when they drive their animals onto the open range, not one case of brucellosis transmission from bison to cattle has been recorded.

Aside from the fact that the draft EIS affords bison little leeway to leave the park during harsh winters, NPCA and other groups are concerned over what happens if bison again vacate Yellow-

stone in a mass exodus and the number of animals drops below 1,700.

During the 1960s, federal officials maintained an arbitrarily low bison herd size through shooting and slaughtering animals inside the park, which led to the enactment of a controversial policy where the natural elements determined the size of the population. Meagher says that principle was “thrown out of whack” by the advent of winter tourism in Yellowstone, specifically snowmobiling.

The hard-packed surfaces used by snowmobiles allow bison to wander more easily through the park and conserve energy, which results in better survival of cows and their calves in the spring. Montana officials are opposed to any proposal to limit snowmobiling in the park because it is the economic lifeblood of the gateway town of West Yellowstone.

“Resolution of the bison issue at Yellowstone is complex and requires the participation and cooperation of everyone,” says Peterson. “The cattlemen are worried about their viability as are the snowmobiling interests. But the result of a bad EIS could damage the park’s wildlife. The outcome will determine whether Yellowstone is managed as a ranch or a free-functioning wild ecosystem. And as Yellowstone goes, so goes the park system.”

TODD WILKINSON lives in Bozeman, Montana, and is a regular contributor to National Parks.

BISON BELONG



BISON BELONG SALUTES THESE 232 MONTANA BUSINESSES

This summer, NPCA visited businesses in the Yellowstone region to forge a better understanding of the Yellowstone bison issue. Together we helped establish common ground among Montanans concerned about last year's slaughter. With 232 business owners supporting the five basic principles, Montana's response has been tremendous. Now it's *your* turn to get involved. Please save this list and give these establishments your thanks and support when you travel to Montana.

WE RECOGNIZE THE WILD BISON AS A SYMBOL OF THE AMERICAN WEST THAT MUST BE PROTECTED.

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WE RECOGNIZE THAT A HEALTHY AND WILD YELLOWSTONE BISON HERD CONTRIBUTES TO THE QUALITY OF EXPERIENCE OF VISITING THE PARK AND IS THEREFORE CRUCIAL TO THE VITALITY OF THE MONTANA BUSINESS COMMUNITY.

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WE ARE FIRMLY OPPOSED TO THE UNNECESSARY KILLING OF WILD BISON, AND WE WANT AN ANSWER TO THE PROBLEM AS SOON AS POSSIBLE.

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Rivers of Fun

From a quiet float in Colorado to a challenging ride in West Virginia, the national parks offer a variety of places to go rafting.

BY FLORENCE WILLIAMS

FLOATING DOWN western Colorado's Yampa River is an exercise in opposing forces: stillness and motion. As our raft bobs through gentle currents, our guide draws in her oars, letting the river take us where it will. Newly alert, her head lifts and ours follow; a peregrine falcon soars high above the canyon wall. Later, continuing this quiet way, we spot a mother bighorn sheep with her yearling scrambling up a crumbling rock bank. Beneath the raft, we hear the gurgle of water and watch concentric rings left by surfacing fish.

Although we are floating through the center of popular Dinosaur National Monument, we see few other people. Most of the crowds travel the asphalt, unaware that there is another, wetter byway into the park. As a mode of transport, river running is unsurpassed. It offers access and removal simultaneously; it offers both tranquillity and excitement.

If the nation's park units represent the heart of our natural and cultural legacy, the rivers flowing through them are the central arteries, the lifeblood

offering nourishment, habitat, shelter, and, of course, geological beginnings. Best yet for us visitors, they offer fun. As Water Rat says famously to Mole in Kenneth Grahame's *The Wind in the Willows*: "Believe me, my young friend,

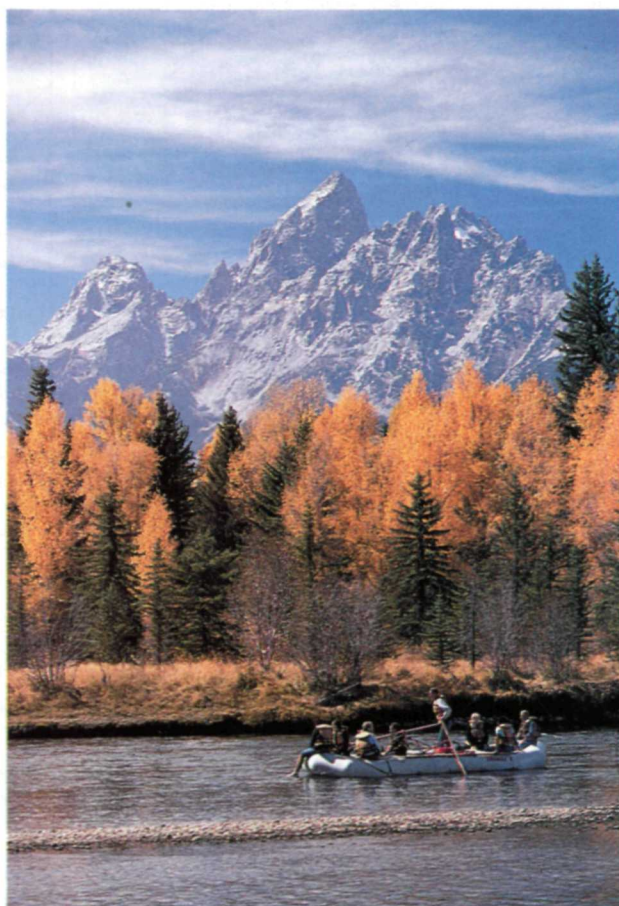
there is nothing—absolutely nothing—half so much worth doing as simply messing about in boats."

A word on safety: even "easy" river trips can turn unpredictable, as Rat and Mole found out. Only people with extensive outdoor experience, including wilderness first aid certification, swift-water rescue training, and whitewater skills, should attempt "private," self-guided trips. All of the following destinations are served by professional guides, and the parks can provide specific information depending on the different types of river trips available.

For more information about trips on the Yampa River, usually run as a five-day wilderness tour, contact the Dinosaur River Office 970-374-2468. River permits for private trips are issued by lottery several months in advance of the spring and summer season. For nearby accommodations and guide services, contact the Utah Dinosaur-land office 800-477-5558.

Snake River

Perhaps the most photographed mountains in the world, the snow-capped Tetons offer a spectacular companion



LARRY ULRICH

Rafters float through Grand Teton on the Snake.

FLORENCE WILLIAMS is a writer living in western Colorado.



Rafters relax as their guide leads them along the Alsek River toward Walker Glacier at Glacier National Park, Alaska. The Alsek is protected from source to mouth.

accommodations. For more information, contact the Chamber of Commerce.

Alsek River

Alaska is a land of expanses: big mountains, big rivers, and big national parks. The Alsek River embodies all three as it flows from the heart of the St. Elias Mountains, where it drains the largest nonpolar icecap in the world, to its delta at Glacier Bay National Park in southeast Alaska.

Most people begin their journey on the moderately genteel Tatshenshini River in the Yukon territory, then join up with the Alsek at a breathtaking mountainous confluence just east of the U.S./Canada border. The total 140-mile trip is best taken over ten or more days, leaving plenty of time to hike the alpine benches above the braided river channel, explore the fresh glacial valleys, and study numerous wolf, grizzly, and moose tracks.

Together, the Tatshenshini and Alsek flow through the largest protected area on Earth: 23 million acres in Canadian provincial parks, wildlife refuges, and U.S. national parks. The Alsek is North America's only river protected from source to mouth, according to Tim Palmer, author of *America by Rivers*. So overwhelming is the

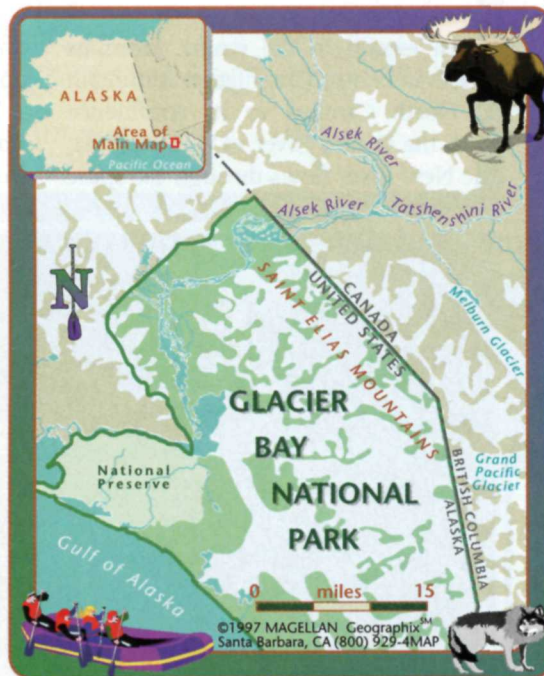
scenery that explorer Edward Glave wrote in his 1890 journal: "There is such an incessant display of scenic grandeur that it becomes tiresome...." The river is still so remote that it requires chartering a plane at the end in Dry Bay to return to civilization (there are no roads).

A tightly regulated wilderness along the Alsek has created a waiting list for private permits that runs approximately two years and costs \$100. They must be obtained from Glacier Bay National

to the gentle Snake River as it flows 26 miles through Grand Teton National Park. Considered an easy float trip, the river below Jackson Lake Dam is famed for scenery rather than whitewater. Wildlife abounds in this heart of the greater Yellowstone ecosystem; an all-day or half-day trip will likely reveal moose grazing in riverside willows, bald eagles perched on cottonwood branches, and great blue herons soaring above gravel bars. Bears and bison also inhabit these reaches.

Several sections are suitable for rafting, the most popular being a ten-mile stretch above the small town of Moose. Ideal for families and novices, the water is nevertheless swift and very cold. In the spring when snow is melting, the river can be swollen, silty, and filled with logjams. Later in the summer, afternoon thunderstorms and strong winds are not uncommon, so private boaters must be experienced and prepared for variable conditions.

More than 70,000 people per season run the river from mid-May to late September. Private boaters will need to obtain a boat permit, which costs \$5 and is good for seven days, from one of several ranger stations. Camping and fires are prohibited along the river. For



more information, contact Grand Teton National Park, P.O. Drawer 170, Moose, WY 83012; 307-739-3300.

Several rafting companies such as Barker-Ewing Float Trips (800-365-1800) and Heart Six Ranch Float Trips (307-543-2477) offer morning and late evening wildlife trips. O.A.R.S. (Outdoor River Adventure Specialists) offers two-day scenic trips with wilderness camping, hiking, and fishing (800-346-6277). Nearby Jackson Hole offers a wide range of restaurants and



Park (907-784-3370). Be prepared for rain and cold temperatures throughout the season, which runs from late June through September. Numerous companies offer full-service guided trips, often with no waiting list. For a complete list of outfitters, call the park.

New River

Although the American West provides more than its share of wilderness river experiences, deep in the hills of central Appalachia a big, clear river tries its hardest to offer stiff competition. "In the 50-mile radius of where I'm settin,'" draws West Virginia guide Tommy Canady, "there's more whitewater than any enthusiast could ever imagine. It's all I need, that's for sure." The New River Gorge National River is administered by the Park Service for 53 miles, enough to offer a wide variety of terrain and river-running options to nearly 200,000 people per year.

Do not let its name fool you; the New River wends through some of the



ED KING

Sandstone Falls, New River Gorge National River, West Virginia.

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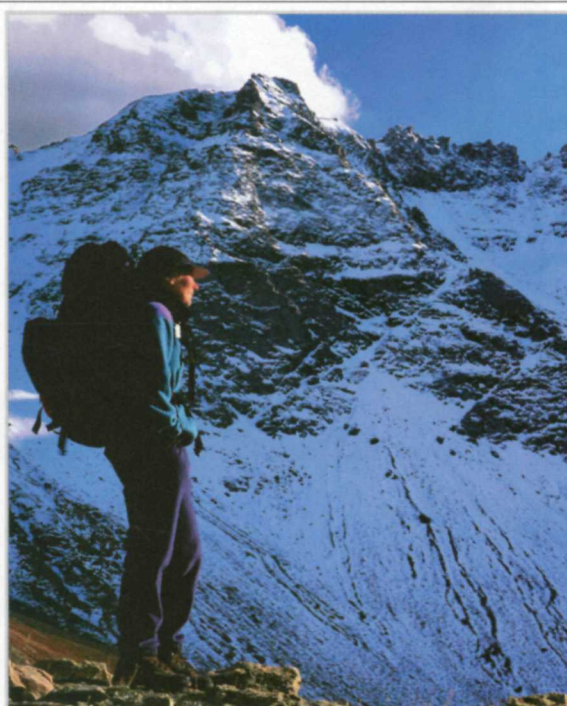
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- To wash yourself or your dishes, carry water 200 feet away from streams or lakes and use small amounts of biodegradable soap. Scatter strained dish water.
- Inspect your campsite before your stay. Pack out all trash: yours and others.*

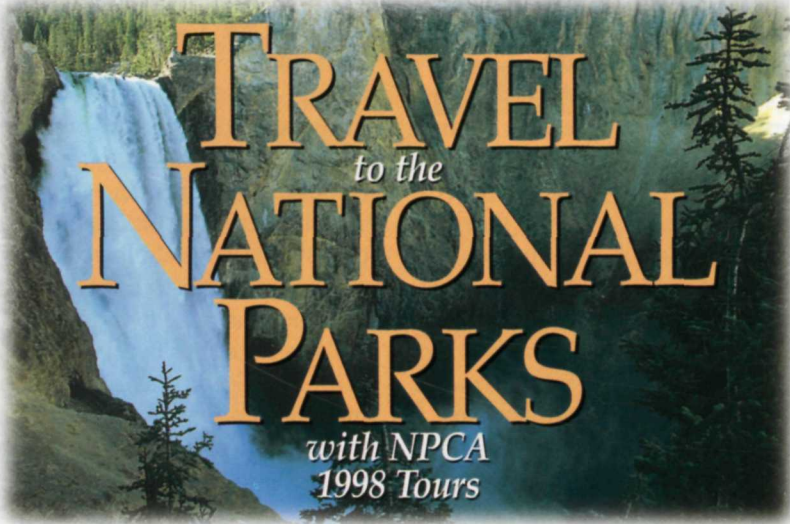
Look for Leave No Trace principle #5 in the next issue of National Parks.



Travel Planner



NPCA PARKSCAPES



Yellowstone National Park, courtesy of National Park Service

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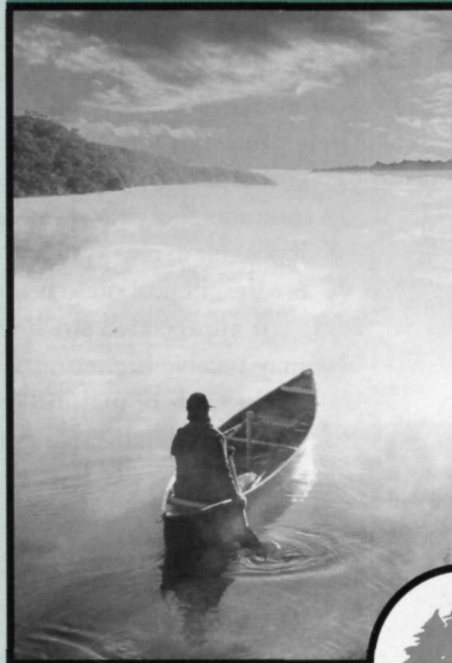
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roiling river in 1,200-foot sandstone canyon walls. One of the most exciting whitewater stretches in the country, the gorge is usually rafted in one day. The run ends with a crescendo of rambunctious rapids, including the famous Double Z just upstream of the New River Gorge Bridge.

For those visitors interested in a less blood-thumping ride, the upper New River offers several dozen miles of scenic floating through sun-drenched fields and steep-walled hardwood forests. Here the river can accommodate anything from a one-day canoe or raft trip to a multi-day camping adventure. Several rafting companies, such as New & Gauley River Adventures (800-SKY-RAFT), will cater creative trips to meet a family's needs. To obtain a complete list of outfitters as well as primitive camping sites, contact the New River Gorge National River at 304-465-0508. For a list of nearby motels and full-service campgrounds, contact the Beckley Chamber of Commerce. The

rafting season runs from early April through October.

Rio Grande

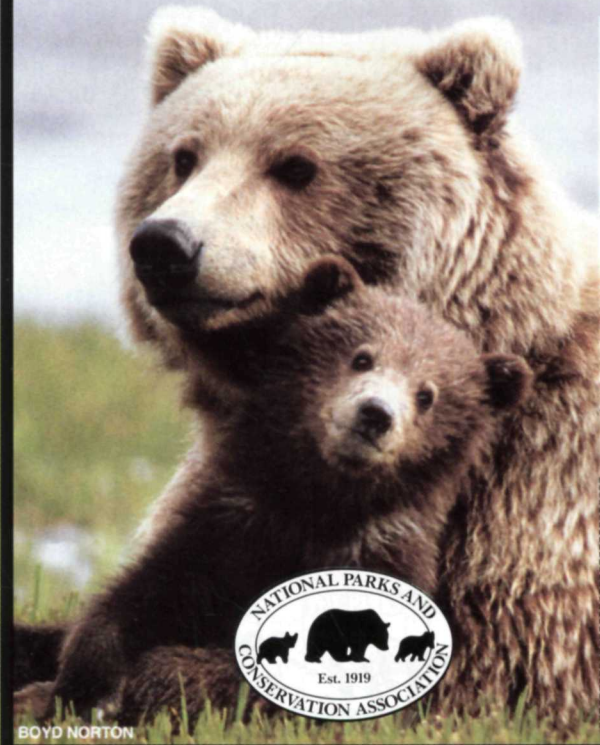
If the Alsek is the great wilderness river trip of the north, the Rio Grande through Big Bend National Park is its desert counterpart. Another international river, the Rio Grande slices the enormous cultural chasm between Texas and Mexico. The boat's eye view, however, is one of unity: rising from both sides of the river are dramatic buff canyon walls, delicate spindly cactus, and the lonely soaring of the raven.

As it flows around the western dip of Texas, the remote stretch of river borders Big Bend for 118 miles. In this distance, the river has carved three deep canyons into the Chihuahuan desert: Santa Elena, Boquills, and Mariscal. Many people run all three as a popular week-long wilderness trip, or choose just one or two canyons as a shorter trip. Just downstream, the "lower canyons," another week's trip, are so

beautiful they are also federally protected under the Wild and Scenic Rivers Act of 1978. In total, the Park Service administers 245 miles of the Rio Grande, all of which is raftable. Both the upper and lower canyons offer easy to moderate whitewater, extraordinary (though rugged) hiking opportunities in many side canyons, and, in spring, colorful desert wildflowers. The river can be run year-round, although the most popular time is spring.

For private trips in the park or on the Wild and Scenic River, a free permit must be obtained at any of the ranger stations. No advance reservations are required. For more information and for a list of accommodations and services outside the park, contact Big Bend National Park, P.O. Box 129, Big Bend, TX 79834; 915-477-2251. Three local companies rent gear, run shuttles, and guide full-service trips: Texas River Expeditions, 800-839-7238, Far Flung Adventures, 800-359-4138, and Big Bend River Tours, 800-545-4240. 

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Giving Direction

Meet Robert G. Stanton, a 31-year career employee, who has become the 15th director of the Park Service.

FOR THE FIRST time in nearly two decades, a career National Park Service (NPS) employee is serving as head of the agency. Robert G. Stanton was confirmed July 31 as the 15th director of the agency, making him the first African American to head NPS. Shortly after Stanton moved into offices at the Department of the Interior, *National Parks* sat down with him to garner his thoughts and views. What follows is an excerpt of the interview.

Q: What do you see as the primary role of the Park Service director?

A: Decisive leadership, and being the representative of the National Park Service with other policymakers, both in the administration as well as in Congress, defending the needs of the National Park Service with respect to its budget, its legislative priorities, and its responsibilities to work cooperatively with other agencies within the federal, state, and local governments.

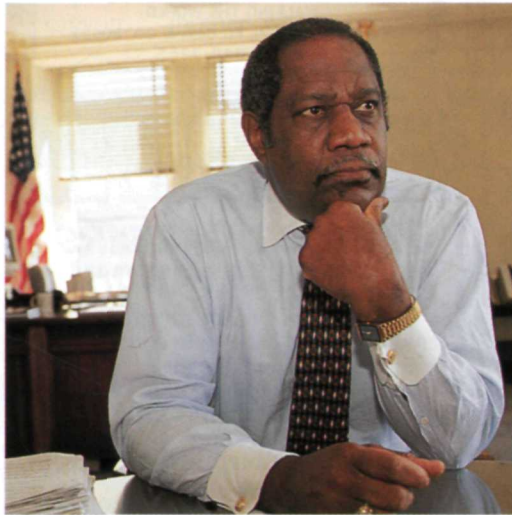
Q: How will your approach be different from that of your predecessor or will it be different?

A. I am privileged to serve as the 15th director. And, as such, it's my hope to contribute in some small measure to the foundation that has been built by my 14 predecessors.

And I believe very strongly that each of the directors contributed immeasurably to the success of the programs of the National Park Service. And each perhaps contributed in a different way.

It would be my hope again that I would provide decisive leadership working with the administration, Congress, and our partners to ultimately put all of the parks on sound financial footing, that the resources are protected, that our services are available to the broadest spectrum of the American public, including citizens with disabilities.

And one area that I should have



SCOTT SUCHMAN

mentioned at the outset was my unbending commitment to the involvement of youth in the programs of the National Park Service. So I hope that whatever contribution I make will be in those principal areas.

Q: Do you think the Park Service should be more aggressive in its resource protection decisions?

A: I think we are aggressive. I think there may be some problems in trying

to develop alternative ways of mitigating an adverse impact on a resource or making a decision because of the absence of [staffing or financial support] to follow through on the decision.

But I believe that there is an increasing sensitivity, an awareness, an appreciation, on the part of [all] our employees about the importance of the Park Service achieving its responsibility to protect the resources. And, admittedly, there are areas in which we have not been able to resolve some of these pressing resource management issues that are confronting us. But the commitment is there and my priorities are to provide increased protection, inventorying, and monitoring of park resources.

Q: If you were to accomplish one thing in your tenure as Park Service director, what would it be?

A: It is my hope that in the not-too-distant future that every unit of the National Park Service would be on a sound financial footing with respect to the fiscal resources, material, supplies, and staff available to them that would, in fact, demonstrate that as a nation, we are giving the kind of care to our heritage resources that they so deserve.

I feel strongly that the American people as a whole expect that of their parks. They expect that of their National Park Service. And I want to deliver on that expectation.

Q: What are your top priorities?

A: The first one is to ensure that the organization is efficient, that we're making use of technology, and that we are developing and providing good supervision to our employees. I feel very strongly about that. So that's key.

Another is the upgrading of the resources available to us to protect the [parks], to provide for visitor use, and increase the involvement of youth. I want to make sure, working again with Congress, with the administration, with the private sector, and allied organizations, to get the resources available to do that.

The third would be the ongoing obligation to provide access to park facilities to those with disabilities and to ensure that we are managing our parks, to the extent possible, in a hazard-free way for the safety of our visitors, and the safety of our employees.

A fourth one is to strengthen our interagency relationships across federal lines and certainly working with the states and their political subdivisions as a national coalition, if you will, to protect the nation's resources, whether they're in the care of the Park Service or whether they're in the care of a state or a county.

Q: Given the multibillion-dollar needs of the park system, what's the best way to increase funding?

A: I think it's four-pronged. One is, first of all, to ensure that the National Park Service organizationally and with the mix of personnel is an efficiently administered organization.

The other funding sources that make up the other three parts of the four-pronged approach are that we will continue to rely upon congressional appropriations to meet the basic needs of the National Park Service. But we recognize that there will be needs that will far exceed the normal appropriation.

And, consequently, we are very pleased that Congress has authorized the National Park Service to demonstrate how successfully it might meet some of its needs through the fee program and how we could meet some of

our needs, particularly in maintenance and in resource preservation.

And the fourth is increasingly working with the private sector, directly or through the National Park Foundation and other organizations, to benefit from their services and financial support in carrying out our programs.

Q: Do you feel there is enough science and research in the parks?

A: There is a need for more research, more science, to make the best decision that we can in managing the resources. We are continuing to work with other agencies, particularly the U.S. Geological Survey, which now provides research services to the Park Service.

I have not had an opportunity to review in detail what our relative priorities are and how those priorities are being met through services provided. But research and science and the availability of research data, the availability of science to our managers, who ultimately make the decisions, is critically important. It's an integral part of our decision-making process.

Q: Do you think the public sees the parks as more of a recreational venue or places where natural and cultural treasures are being preserved?

A: I think the public sees them in both lights, and I think those are appropriate ways for the public to view the parks.

Q: What should take precedence? The public's enjoyment of the parks or resource protection?

A: Resource protection. It is a management decision to discern what level of visitor use can be accommodated without harming in an irreparable way the resources. We have to make some hard decisions, and regulate use; regulate ways in which you mitigate the adverse impact. It's an easy thing to describe; it's a difficult thing to accomplish.

Q: What role do you see for NPCA, or other advocacy groups?

A: The National Parks and Conservation Association plays a critical role in broadening the public's awareness. The educational effort helps us in our responsibilities greatly.

Obviously in those instances in which the National Parks and Conservation Association creates a greater sense of pride in ownership on the part of the American people about how they might contribute to the upgrade of the parks, it is very helpful. An activity which I personally experienced is March for Parks, which has resulted in direct and indirect support to the parks.


And the third role for NPCA is to keep the Park Service on the straight and narrow. We always retain the right to differ in our opinions, but we always make a move towards the common good. So I respect that role and always accept it as constructive guidance or constructive criticism.

Q: There's some documentation that suggests that the Park Service doesn't reflect a diversity of America. Is it a problem? Is there anything you would do to rectify it?

A: It's a need that requires a great deal of attention and action on the part of the management of the National Park Service and employees in general.

We are very fortunate in this nation to have the opportunity to interact and hopefully to respect the differences of the citizenry of this country with regards to religious, racial, ethnic, and economic backgrounds.

And to that extent, the Park Service has made substantial gains in years past with respect to having a workforce that is reflective of the rich diversity of the nation, as I described earlier. But there are locations and there are programs in which that diversity does not exist.

I have shared with the leadership team of the National Park Service emphatically that we will improve, we shall improve that kind of a representation with respect to women, with respect to racial/ethnic groups, as well as employees who have disabilities. We need to do that. 



On the Edge

Florida panthers, which once roamed the Southeastern states, have been reduced to one population.

BY YVETTE LA PIERRE

FLORIDA PANTHERS have no natural enemies except for other panthers and humans. But that, combined with habitat loss and industrial poisons that seep into the water, have been enough to land the animal on the endangered species list. Florida panthers, which historically numbered in the thousands and roamed the Southeastern states, have been reduced to one population of 30 to 50 adults. Most live in or near Big Cypress National Preserve and Everglades National Park in Florida.

Despite its name, the large feline is not related to the panthers of Asia and Africa. It is a cougar, or mountain lion, the most widely distributed mammal in the Western Hemisphere. Of 30 subspecies, the Florida panther is distinguished by its dark coat, long legs, small feet, and light weight. Most individuals also have a cowlick in the middle of the back and a kink in the tail.

Like so many endangered species, the Florida panther suffers from a reputation it does not deserve. Its decline began as early as the 1500s, when European settlers tried to exterminate the cats, fearing for their livestock and themselves.

In 1967 the federal government listed the Florida panther as endangered, but threats to its survival continue. Panthers travel widely, often crossing



VICTORIA HURST/TOM STACK ASSOC.

A Florida panther reclines in the undergrowth.

highways in search of food and new territory. Also, pesticides and waste products from industry contaminate the water that drains into panther territory; scientists have found high levels of mercury in some dead panthers.

But most biologists believe that inbreeding is the cause of a number of survival-threatening medical problems, including infertility, heart abnormalities, and infectious diseases. The panther's range and population have become so isolated and inbreeding so common that most Florida panthers are born with one or more abnormalities. Even the panther's trademarks—the cowlick and tail kink—are probably the result of inbreeding.


In 1995, the U.S. Fish and Wildlife Service (USFWS) revised the Florida Panther Recovery Plan to include ge-

netic restoration. The recovery team decided to introduce genetic material from the closest remaining cougar population that historically overlapped the range of the Florida panther—the Texas cougar. That spring, NPCA helped finance the capture, quarantine, and transport of eight female cougars from Texas to Florida. Within a year, two of the cougar females had given birth. To date, seven of the eight cougars survive (one was killed by a car), and nine kittens have been documented. The effort has been a success so far, says Dennis Jordan, the USFWS Florida Panther recovery coordinator.

"The next step is for the kittens to become breeders, so it will take a generation or two before we know if it is really successful," he says.

The recovery plan is due for revision again, though this time the recovery team plans to involve outside scientists as well as American Indians, landowners, and conservation groups, including NPCA, along with representatives of hunting, agriculture, timber, and developmental interests.

"By the time the revision is complete, we'll have had input and participation of all entities that feel they need to be a part of the process," Jordan says.

The revision should be complete by late spring or early summer. In the meantime, the recovery team will continue to pursue its goal of achieving three self-sustaining populations in the panther's historic range. 

YVETTE LA PIERRE is a writer living in Madison, Wisconsin.



Cliff Hanger

Rugged canyons, windswept mesas, and ancient dwellings signify this Southwestern national monument.



LAURENCE PARENT

SEVENTY PERCENT of this national monument is part of America's wilderness system, offering hikers and backpackers a variety of trails that venture past ancient American Indian pueblos and cliff dwellings. Named for a man whose work laid the foundation for Southwestern archaeology in the early 20th century, the monument is under scrutiny today because of interest in adding to its acreage. NPCA recommended expanding the park's boundaries in its nine-volume 1988 *National Park System Plan*. Have you visited this park? Can you name it? [ANSWER ON PAGE 10.]



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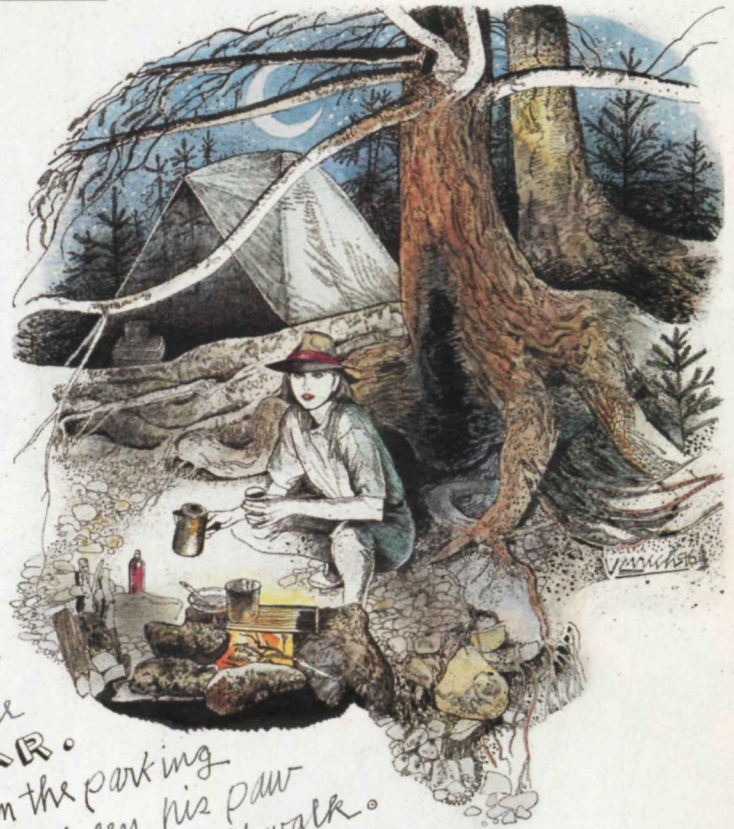
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