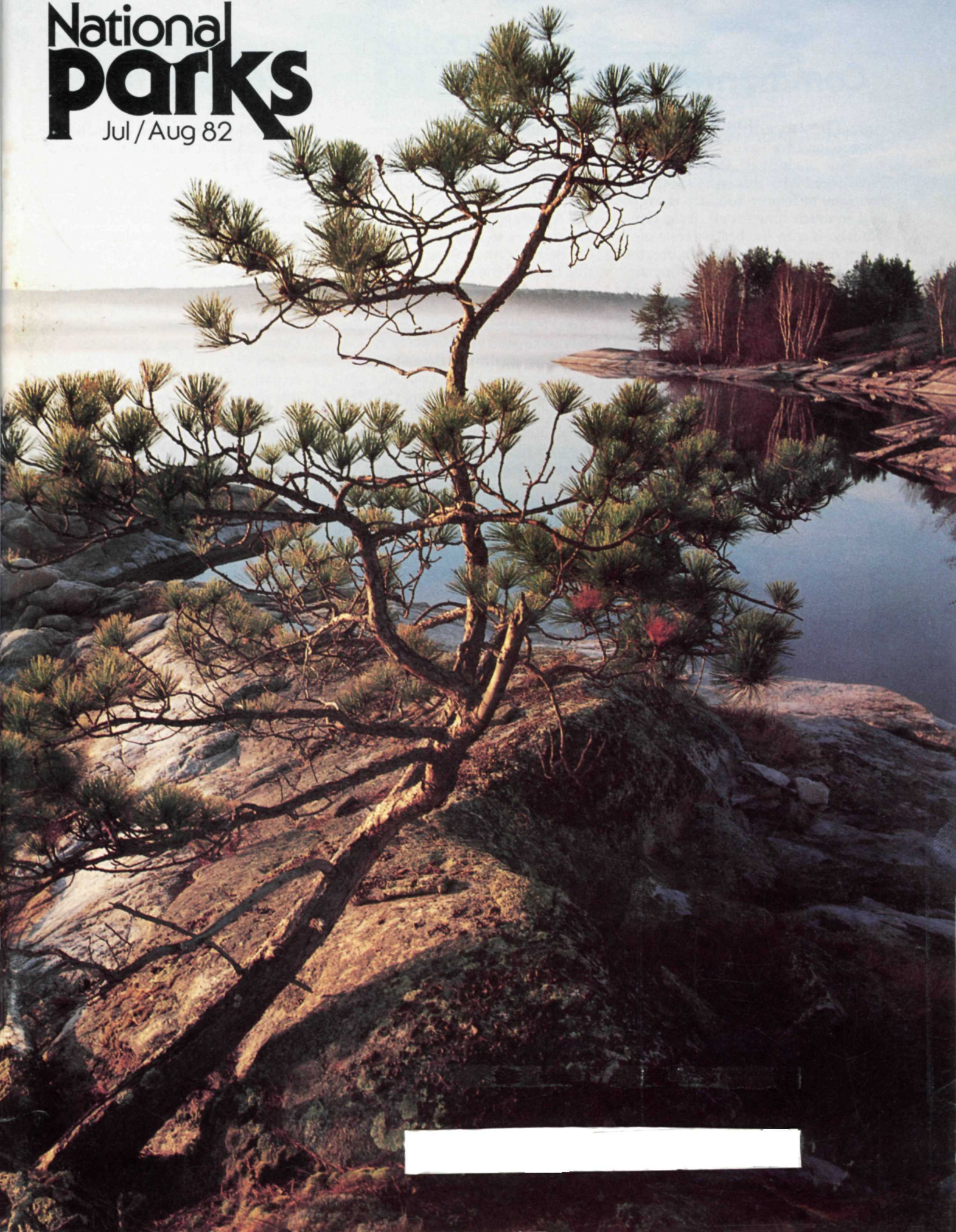


National parks

Jul / Aug 82



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Commentary

The Invisible Threat

For too long we have had to address the issue of clean air. Repeatedly, we have asked why this issue should continue to require so much energy and so much time for all of us. Obviously, it is in the best interest of every American to be able to breathe clean air. The cost of controlling air pollution has repeatedly been shown to be minimal and the benefits to be extraordinary. Those who have claimed that the Clean Air Act has cost jobs have been proven wrong. In fact, statistics show that the Clean Air Act has provided an economic benefit creating more jobs than may have been eliminated because of the impacts of pollution controls on industry.

Yet, every day we see the "dirty air bill" before the Congress promoted by those who would eliminate the strides that have been made to protect the clean air of all Americans. One of the most alarming developments of this debate has been the potential elimination of clean air protection for the National Park System. Fortunately, we have seen the true statesmanship of Senator Robert Stafford of Vermont, Congressman Henry Waxman of California, and others who have made the case that clean air is a right and we should all be able to enjoy it.

An ironic twist in this debate is that Congressman John Dingell, the sponsor of many great conservation programs—especially for the fish and wildlife of our nation—has introduced H.R. 5252, a bill that many have called the "dirty air bill." His bill seriously weakens protection of our Class I national parks and wilderness areas, fails to upgrade protection for park and wilderness areas designated since 1977, and allows air in 90 percent of the nation's counties that currently benefit from clean air to deteriorate to a level equivalent to the minimum health standards.

Congressman Ron Wyden of Oregon offered an amendment to H.R. 5252 to restore air quality protection to our nation's treasured lands. His proposal allows states to decide

whether to continue to protect other clean air areas at the levels of air quality they presently enjoy.

Air quality and other environmental issues have never been partisan issues. What is troubling, however, is the fact that some leaders in our nation remain unconvinced that the American people do in fact want and deserve to have clean air.

The acid rain problem discussed in this issue of the magazine is an important aspect of the clean air legislation. It is a facet of the "invisible threat" that makes this clean air debate so urgent.

The air quality of the national parks has been singled out as a critical issue for review during the Clean Air Act reauthorization. There can be no doubt about it. In many cases the parks have been the deciding factor in people's understanding of the impact of clean air on our lives. For what happens in the parks as a result of acid rain serves as an indicator of what can happen all around the world.

Someone recently said that the responsibility of our generation is not to maintain and protect what we have inherited from our forebears, but rather to hold in trust that which will be passed on to future generations. Whichever way we look at it, polluted air and acid rain threaten our great conservation resources as much as any other challenge they face today. We hope that in 1982 Congress will listen to the will of the people and enact a Clean Air Act that holds a *real* promise for cleaner air in the future.

—Paul C. Pritchard
President

Editor's Note

We dislike bearing bad news, but the fact is that much of the news about the National Park System these days is grim. Part of NPCA's mission is to alert our members and other American citizens to these problems and to enlist their help in correcting them. In this connection, be sure to order your copy of NPCA's new book, *National Parks in Crisis* (\$14 to members), from Information Dynamics, 111 Claybrook Drive, Silver Spring, MD 20902.

One serious problem, as Representative Phillip Burton discusses in this issue, is that even our most remote, pristine parks are not safe from pollution; acid rain affects them as well as our most congested cities. Acid rain knows no bounds; the problem is worldwide, for the elements of destruction are borne on the wind. It is ironic, to say the least, that just as scientists are learning more and more about the origin and destructive effects of acid rain, the Reagan administration is proposing to relax restrictions on air pollution.

Voyageurs National Park, one of those pristine parks seriously affected by acid rain, is beset also by myriad other difficulties, as Dennis Johnson describes in this issue.

For a more upbeat story, our colleague Marge Corbett describes innovative efforts being made to protect lands that do not qualify for the National Park System but are worthy of protection.

Finally, for your pleasure, you may accompany William Murphy on an exploration of the ancient past in Nebraska at Agate Fossil Beds, visit the Roosevelt summer retreat on the Bay of Fundy in this centennial year of FDR's birth, or peek at the pinnacles of Channel Islands National Park off the coast of California.

Meanwhile, we are working on the next issue, where we will tell you the good and the bad news about the magnificent slickrock parks in southern Utah.—EHC



National Parks

Vol. 56, No. 7-8, July/August 1982

The magazine of the National Parks & Conservation Association

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Commentary

- 2 THE INVISIBLE THREAT, by Paul C. Pritchard
EDITOR'S NOTE

Features

- 4 A HOME OF HER OWN
A summer home on Campobello Island in Canada was Eleanor Roosevelt's special retreat, by Elizabeth B. Goodman
- 9 ACID RAIN: THE WATER THAT KILLS
New research shows that acid rain affects parks in the West as well as eastern parks, by Phillip Burton
- 15 AGATE FOSSIL BEDS: A PAGE FROM THE PAST
A lesser-known park along the Niobrara River in Nebraska reveals one of the greatest sources of prehistoric mammal remains ever discovered, by William D. Murphy
- 18 THE VOYAGEURS JIGSAW
Early North Woods conservationists worked to establish Voyageurs; almost a century later, the park's boundaries are still in question, by Dennis Johnson
- 24 CHANNEL ISLANDS PORTFOLIO
- 28 GREENLINE PARKS
NPCA has produced a study showing ways to preserve special land areas, by Marjorie Corbett

Departments

- 34 NPCA REPORT
- 43 FEEDBACK
- 42 BOOKSHELF
- 45 THE LATEST WORD

FRONT COVER Vista at Sand Point Lake, by J. Arnold Bolz

BACK COVER Nesting loon, by Leonard Lee Rue III

Daylight emerges at Voyageurs National Park with a palpable stillness, broken occasionally only by the wild cry of a loon. Ungainly on land, the common loon builds its nest right on the shoreline, amid cattails or rushes. Wary of civilization, loons need wilderness sanctuaries like Voyageurs to survive. (See page 18.)

National Parks & Conservation Association—established in 1919 by Robert Sterling Yard with the support of Stephen Mather, the first Director of the National Park Service—is an independent, private, nonprofit, public service organization, educational and scientific in character. Its responsibilities relate primarily to protecting, promoting, and enlarging the National Park System, in which it endeavors to cooperate with the National Park Service while functioning as a constructive critic. Life memberships are \$1000. Annual membership dues, which include a \$7 subscription to *National Parks*, are \$150 Sustaining, \$75 Supporting, \$30 Contributing, \$22 Cooperating, and \$15 Associate. Student memberships are \$10. Single copies are \$3. Contributions and bequests are needed to carry on our work. Dues in excess of \$7 and contributions are deductible from federal taxable incomes, and gifts and bequests are deductible for federal gift and estate tax purposes. Mail member-

ship dues, correspondence concerning subscription or changes of address, and postmaster notices or undeliverable copies to National Parks & Conservation Association, 1701 Eighteenth Street, NW, Washington, D.C. 20009. When changing address, please allow six weeks' advance notice and send the address label from your latest issue along with new address. *National Parks* is published bimonthly. Contributed manuscripts and photographs are welcome on speculation. They should be addressed to the Editor at Association headquarters and should be accompanied by a stamped, self-addressed envelope. No responsibility can be assumed for unsolicited material. Articles are published for educational purposes and do not necessarily reflect the views of this Association. Title registered U.S. Patent Office. Copyright © 1982 by National Parks & Conservation Association. Printed in the United States. Second-class postage paid at Washington, D.C., and at other offices.

A HOME OF HER OWN



National Park Service

Roosevelt-Campobello International Park, off the coasts of New Brunswick and Maine, features the summer home of Franklin and Eleanor Roosevelt, which flies the flags of both countries and welcomes visitors from all over the world.

The summer house on Campobello Island in Canada was Eleanor Roosevelt's special retreat—a source of joy and strength

Elizabeth B. Goodman

The most charming watering place in the world," wrote a reporter in the Saint John, New Brunswick, *Daily Sun* in July of 1882. The article extolled Campobello Island in Canada, then owned by a Boston syndicate that operated three large Victorian hotels. This was the era of leisurely vacations. Wealthy Easterners flocked to spend long summers on this tiny, spruce-clad island on the Bay of Fundy, with its bracing sea breezes, clinging fogs, rugged cliffs, and unspoiled beaches.

The hotels are long gone, and few visitors these days can afford the time for a stay of several months. Today most come to tour "The Cottage" that Eleanor Roosevelt and her illustrious husband once looked on as home, now preserved in Roosevelt-Campobello International Park. Roosevelt-Campobello is the only international park in the world lying totally within the boundaries of one country but administered by a joint commission representing two governments—Canada and the United States.

Franklin Roosevelt's first exposure to Campobello was at the tender age of one. His parents, James and Sara Roosevelt, had brought him to one of the island's grand hotels on a vacation in the summer of 1883. The couple was so taken with the island that they purchased land on Friar's Bay for their own summer home. After their fifteen-room house was completed in 1885, young Franklin spent almost every summer on his "beloved island." His son James writes, "Campobello was next to Hyde Park in father's affections. It was his second home."

The Roosevelts' nearest neighbor was wealthy Mrs. Hartman Kuhn of Boston, who lived in a three-story, thirty-four-room "cottage," also overlooking Friar's Bay. Mrs. Kuhn became very fond of young Franklin Roosevelt. Franklin apparently did not have friends his own age on the island, but he turned to the local fishermen for companionship. Given his mother's over-protectiveness, it is astonishing that she permitted Franklin to spend much time on the water with these old salts. In their company, the boy gained a sound grounding in the art of handling boats in the treacherous waters of Passamaquoddy Bay and the Bay of Fundy. When Franklin was ten years old, one of the ship captains said to him, "You'll do now. You're a full-fledged seaman, sardine-sized."

Eleanor Roosevelt first saw Campobello in the summer of 1904, never dreaming when she arrived that she would come to love it even more deeply than Franklin did. She had come to get acquainted with her future mother-in-law, by then a widow. In 1905 she returned as Franklin's bride, and each summer through 1909 they stayed with Sara Roosevelt in her cottage. The rest of the year the couple lived at Hyde Park where Franklin's mother also ruled the roost.

The neighbor, Mrs. Kuhn, became as fond of the shy and insecure Eleanor as she was of Franklin. When she died in 1908, her will specified that Sara Roosevelt might purchase her cottage for \$5,000 providing she made a gift of it to Franklin and Eleanor. Eleanor wrote, "My moth-



The Roosevelt family lines up for an informal portrait on the steps at Campobello. Shown here, left to right: Anna, James, FDR, Eleanor, and Elliott, 1912.

Historical photos courtesy of Franklin D. Roosevelt Library in Hyde Park, New York

Franklin naps at Eleanor's side in this 1910 snapshot from cousin Laura Delano's scrapbook (right). Below, FDR and friends sail the "Vireo" in calm waters. FDR spent his early summers learning how to sail from the old salts who lived on the island year round. Years later, on these same waters, he taught his children to sail.



The icy waters of the Bay of Fundy refresh summer waders.



er-in-law bought it and gave it to us, and the house became a great source of joy to me." For the first time in her married life Eleanor had a home she could call her own. The story is told that the first thing Eleanor did when she moved to the cottage in 1910 was to rearrange all the furniture to suit herself.

With her mother-in-law in such close proximity, it seems likely that Eleanor was still dominated by her. Friend to the Roosevelt family and author of several books on them, Joseph Lash writes that Sara Roosevelt "managed not only the household but everything else with great firmness" and remarks that Franklin, an expert sailor, was allowed to give orders on the family yacht, the *Half Moon*, only when he had guests. The rest of the time the captain did what Sara told him to do. Nevertheless, at her new cottage Eleanor must have felt free of many of the strains and stresses that develop when living in someone else's home.

During their summers at Campobello, Franklin taught his children to handle boats and took them hiking along the cliffs and canoeing on the large freshwater pond, Lake Glensevern. They swam, played baseball and croquet, spent long hours at hare-and-hound and in paper chases. Several times each summer FDR and the older children went on short cruises, first on the small schooner, the *Half Moon*, and later on the *Vireo*.

Eleanor took little part in these activities. She did not go along on the short cruises but did conquer her fear of water sufficiently for an oc-

casional sail. She was a dismal failure at athletics of any sort and was content to fish, picnic, and accompany the children on hayrides.

Eleanor had plenty of demands on her time—guests to entertain, small children that needed attention. The cottage was a large home to organize and run, even with household help. Huge megaphones scattered throughout the house were used to summon family and friends typically scattered about the grounds. In the early days at Campobello there was no telephone, the house was heated by the kitchen range and seven fireplaces, and was lit up at night by candles and kerosene lamps. Electricity did not come to the island until 1948.

Despite her busy household, Eleanor remained an insatiable reader; the bookcases at the cottage are still crammed with volumes. Legend has it that the Campobello Debating Society turned down FDR when he asked to join; they felt his wife was a far more eloquent speaker than her husband!

Franklin Roosevelt's activities on August 10, 1921, the last time he ever walked unaided, were typical of his days at Campobello. He and the older children went for a sail on *Vireo* in the morning and spent two hours fighting a forest fire they spotted on one of the small islands. Hot and sweaty, they returned to Campobello and jogged two miles to Lake Glensevern.

They finished off the day's romp with a paddle in the mild waters of the pond and a brisk dip into the icy sea off Herring Cove. The family



usually spent the after-dinner hours playing some lively game, but this evening Franklin was so chilled and exhausted that he went to bed without eating. These were the first signs of the severe attack of polio that would leave him paralyzed from the chest down. Two weeks passed before a correct diagnosis was finally made.

On September 13, 1921, the island fishermen carried Franklin Roosevelt on an improvised stretcher to a boat that took him to Eastport, Maine, and a train bound for New York. This was the beginning of FDR's long and often painful struggle to regain his strength and remain politically active—a struggle that was eventually rewarded with almost four terms as president of the United States.

During the remainder of his active life, he was to see his beloved Campobello only three times. War in Europe canceled a trip planned for August 1941. Eleanor and the children continued to summer at the cottage even after FDR's death. In 1962, three months before her own death, Eleanor stayed for ten days at the cottage and wrote, "I . . . attribute the renewal of my strength to the peace and quiet I found there."

Campobello has changed little since the Roosevelts' days. The island's 1,200 residents, most of whom fish for a living, belong to ten families, several predating 1770, when a Welshman, William Owen, settled here as the Principal Proprietary under a royal grant from King George III.

Mist often blots out the island,

drifting eerily through the fir and spruce woods, accompanied by the hollow boom of a fog horn. Liberty Point, lying within the 2,600 acres of the international park, supports a fog forest where the tree limbs are draped with the grey-green lichen that flourishes in the perpetual damp. On clear days the brisk breeze off the water is heady as wine, adding an exhilarating verve and sparkle to the atmosphere.

Along the eastern shore, coves and small beaches make fine spots for gathering multicolored pebbles and driftwood and for swimming and scuba diving. The western shore, where the Roosevelt home is located, is for the most part heavily wooded, with high bluffs that make it difficult to reach the sands. A tang of salt in the air mingles with the scent of sun-drenched spruce. In nearby villages the air is pungent with the smell of fish, and the shrill cries of circling gulls make a noisy accompaniment to the activity on the weathered old piers. Neither hunting nor fishing is allowed at Lake Glensevern; this area has become a refuge for birds and animals, a paradise for nature lovers.

A park reception center marks the entrance to the Roosevelt-Campobello International Park. President John F. Kennedy proposed the park's establishment in 1962 shortly after the opening of the Franklin Delano Roosevelt Memorial Bridge connecting Lubec, Maine, to the Canadian island. Kennedy envisioned such a park as a symbol of the bonds of friendship between Canada and the United States.

On January 22, 1964, President

Top left, Franklin shares an intimate moment with young son Elliott on the lawn of their summer home, 1912. Above, a rare glimpse of Eleanor (top row, second from left) sailing with Franklin and friends. Eleanor was usually content with quieter pursuits and did not often accompany Franklin and the children in their outdoor adventures.

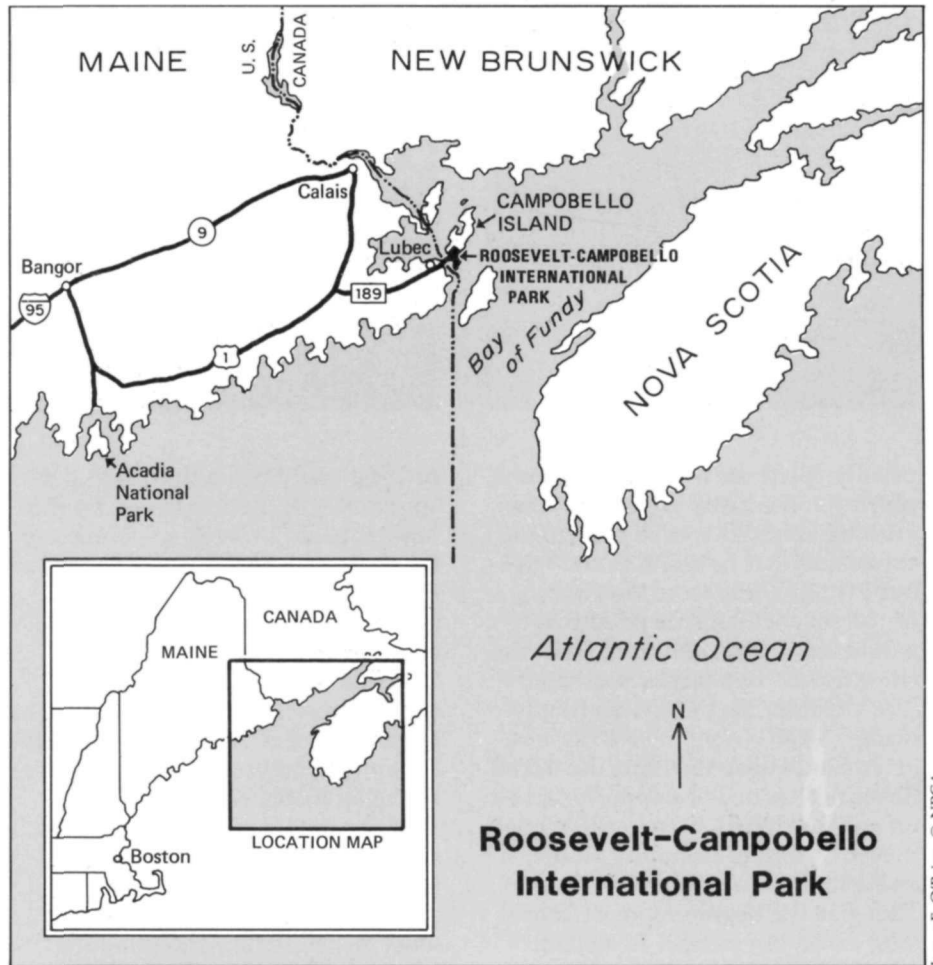


Small boys explore the verdant lawns and gardens of the Roosevelt summer home. Known as "The Cottage," the structure's three stories and thirty-four rooms were Eleanor's retreat after her husband's death.

Lyndon B. Johnson and Canadian Prime Minister Lester B. Pearson signed a formal agreement establishing the park. The two men laid the cornerstone of the reception center on August 21, 1966. On July 13, 1967, the Queen Mother, unveiling a memorial plaque there, said, "It is most fitting that the memory of so gallant and illustrious an American should be honored on the Canadian island which he loved."

The park's major attraction for visitors is the Roosevelt cottage. The three-story, red shingle building with green trim and sloping roof is set in the midst of manicured lawns, its back to the water. In autumn the flower beds edging the circular drive at the front of the house burst with tight-packed dahlias, snapdragons, marigolds, and salvia. In the rear, the lawn stretches to a steep hillside above the water where blueberry bushes, mountain ash, and spruce cling to the precipitous bank. In either direction loom dark stands of spruce and fir edged with patches of wild strawberries. As you look across to Eastport, Maine, you may spot a seal or porpoise in the bone-chilling water.

Visitors are free to wander through the rooms of the cottage on the first and second floors. The house is so simply furnished with light wicker pieces that it has a spartan look about it. FDR's hat, fishing pole, and cane are laid out in the first floor bedroom he occupied after being stricken with polio. The large, sunlit living room looks out over the water and leads into a spacious dining room decorated with the original hydrangea-patterned wallpaper. A huge country kitchen features a copper boiler and a wood range. Eleanor



Roosevelt's old treadle sewing machine stands in a sitting room, and her L. C. Smith typewriter, on which she turned out many "My Day" essays, sits on a table in her writing room.

Back in the days when Eleanor Roosevelt shepherded her young children from New York to Campobello Island, the family traveled by train, taking the better part of two days and nights to reach their destination. The last leg of the journey was by boat. Tedious as the trip must have been, Eleanor Roosevelt could look forward to a long summer on beautiful Campobello, relaxing in a home truly her own.

Elizabeth Goodman is a freelance writer specializing in travel and historical pieces. A Home of Her Own is the result of a summer spent in the maritime provinces of Canada, during which time she explored Campobello Island.

WHEN YOU GO...

A small island nine miles long and three miles wide, Campobello offers a network of hiking trails, with two roads leading to the small fishing villages on the eastern shore, Welshpool and Wilson's Beach. Two motels, an inn, and several rental cabins provide comfortable accommodations, and camping sites are available at Herring Cove, one of Canada's fine provincial parks.

Today, visitors from the United States can drive up scenic Maine Route 1 to Whiting, turning east on Route 189 to Lubec. Here you cross over the Franklin Delano Roosevelt Memorial Bridge onto the island. The Roosevelt cottage is open to the public from the Saturday before Memorial Day in May for twenty weeks, into mid-October, seven days a week from 9:00 a.m. to 5:00 p.m., Eastern Standard Time. There is no admission fee.

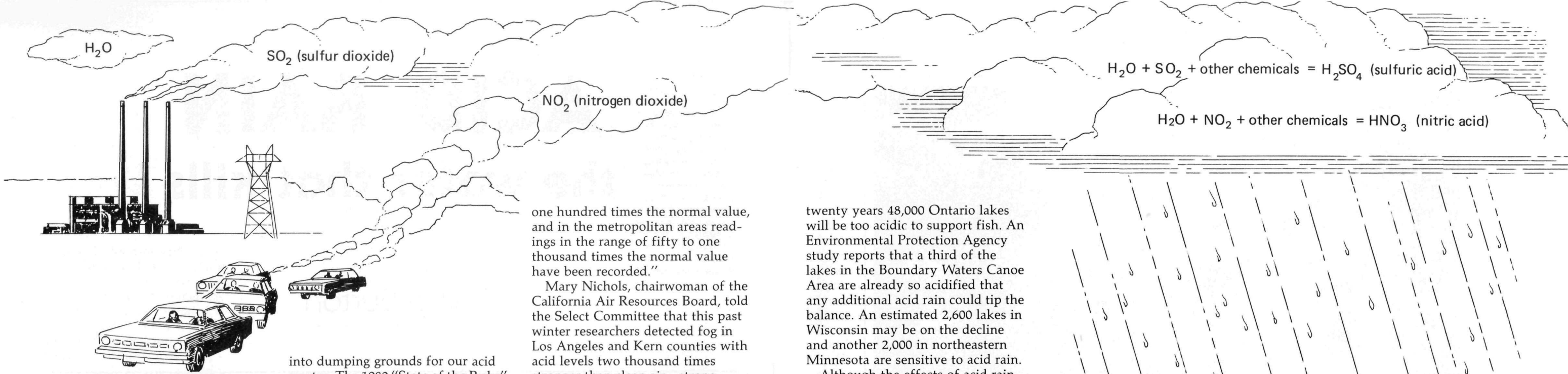
ACID RAIN

the water that kills

Phillip Burton



Ed Cooper



Often the most hard-won battles must be fought more than once. During the Ninety-fifth Congress we passed legislation to create a Boundary Waters Canoe Area Wilderness that would be safe from mining and logging, to expand Sequoia National Park so that Mineral King Valley would be safe from resort development, and to expand Redwood National Park so that the tall trees would be insulated from the effects of logging. During the Ninety-seventh Congress we find ourselves trying to defend these and other parks from another major threat—acid rain that is killing lakes and streams in many areas at an extraordinary rate.

In fact, the acid rain issue and the Clean Air Act fight may provide the acid test for Secretary of the Interior James Watt's stated goal of "good stewardship" for our national parks. The secretary talks of rehabilitating park facilities, but he has paid little attention to threats to the natural resources that draw visitors to the parks in the first place.

Quite frankly, in 1982 stewardship means support for a strong Clean Air Act. Instead, the administration backs legislation that would gut the Clean Air Act; if Congress enacts that legislation, our U.S. national parks could become "national sacrifice areas" and Canada's parks and tourist lakes could be turned

into dumping grounds for our acid wastes. The 1980 "State of the Parks" report, prepared by the National Park Service at the request of former Representative Keith Sebelius and myself, revealed that air quality is endangered in more than 45 percent of the national parks; eighty-three parks specifically mentioned acid rain as a culprit.

The acid rain falling in our great natural parks can originate from a nearby coal-fired power plant, from auto emissions, or from factories many miles away. This corrosive precipitation results when sulfur dioxide (spewed out by coal-fired and oil-fired plants and by smelters) and nitrogen oxides (emitted by vehicles and power plants) react with water in the atmosphere to form various acids.

The average rainfall in the eastern United States contains approximately fifteen to forty times more acid than normal, and storms in some areas can measure one thousand times more acid. (A pH of 5.6 is considered normal, rainfall with pH 4.6 is ten times more acid, and rainfall with pH 3.6 is one hundred times more acid.) We Californians once thought the stories about rainfall as sour as lemon juice or vinegar related only to the industrial East. No such luck.

Lawrence Kapiloff, chairman of the California Assembly Select Committee on Acid Rain, recently reported that "we were surprised to learn that acid levels over a large portion of the state average ten to

one hundred times the normal value, and in the metropolitan areas readings in the range of fifty to one thousand times the normal value have been recorded."

Mary Nichols, chairwoman of the California Air Resources Board, told the Select Committee that this past winter researchers detected fog in Los Angeles and Kern counties with acid levels two thousand times stronger than clean air—strong enough to sting the eyes, nose, and throat; strong enough to corrode metals. Nichols said a Reagan Administration-backed bill (introduced as H.R. 5252) could aggravate the problem.

Many of the nation's prime national parks, wildernesses, and tourist attractions—including Yosemite, Sequoia, and Redwood national parks in our state—are particularly sensitive to acid rain. Some of these areas feature geological characteristics similar to acid-damaged areas in Scandinavia, where thousands of lakes are devoid of fish and many commercial fisheries have been ruined. In North America acid rain already has been linked to the deaths of more than half the high-altitude lakes in the Adirondack Mountains and 140 lakes in Ontario. In these lakes acid rain has operated like the quiet killer in sci-fi screenplay: It has wiped out populations of fish and other aquatic life without leaving a visible trace. The victimized lakes can look clean and clear—so clean and clear that they are lifeless. And acid rain threatens to kill thousands of other lakes in North America.

In fact, much of the lake country in Minnesota, Wisconsin, Michigan, and Ontario already receives acid loadings similar to those that triggered severe acidification in Scandinavia. Ontario's Minister of the Environment predicts that within

twenty years 48,000 Ontario lakes will be too acidic to support fish. An Environmental Protection Agency study reports that a third of the lakes in the Boundary Waters Canoe Area are already so acidified that any additional acid rain could tip the balance. An estimated 2,600 lakes in Wisconsin may be on the decline and another 2,000 in northeastern Minnesota are sensitive to acid rain.

Although the effects of acid rain on watersheds have been documented best in the Adirondacks and Ontario, many other regions are geologically vulnerable. Areas sensitive to acid rain are characterized by hard, granite bedrock and softwater lakes that have little capacity to buffer the acid. Mountainous areas are more likely to have exposed bedrock, shallow soils, and more frequent rainfall. Such areas cannot assimilate or neutralize the acid in water draining into lakes and streams.

Some of our finest national parks and wildernesses are situated in these susceptible regions; for example, Adirondack State Park in New York; the Quetico-Superior international wilderness (including the Boundary Waters Canoe Area, Voyageurs National Park in Minnesota, and Quetico Provincial Park in Ontario); Redwood, Sequoia, and Yosemite national parks in California; Great Smoky Mountains National Park in North Carolina and Tennessee; Isle Royale National Park in Michigan; Acadia National Park in Maine; Shenandoah National Park in Virginia; Olympic and Mount Rainier national parks in Washington; and Rocky Mountain National Park in Colorado, among others.

It is not surprising that acid rain is emerging as a major ecological issue among scientists and resource managers in the National Park Ser-

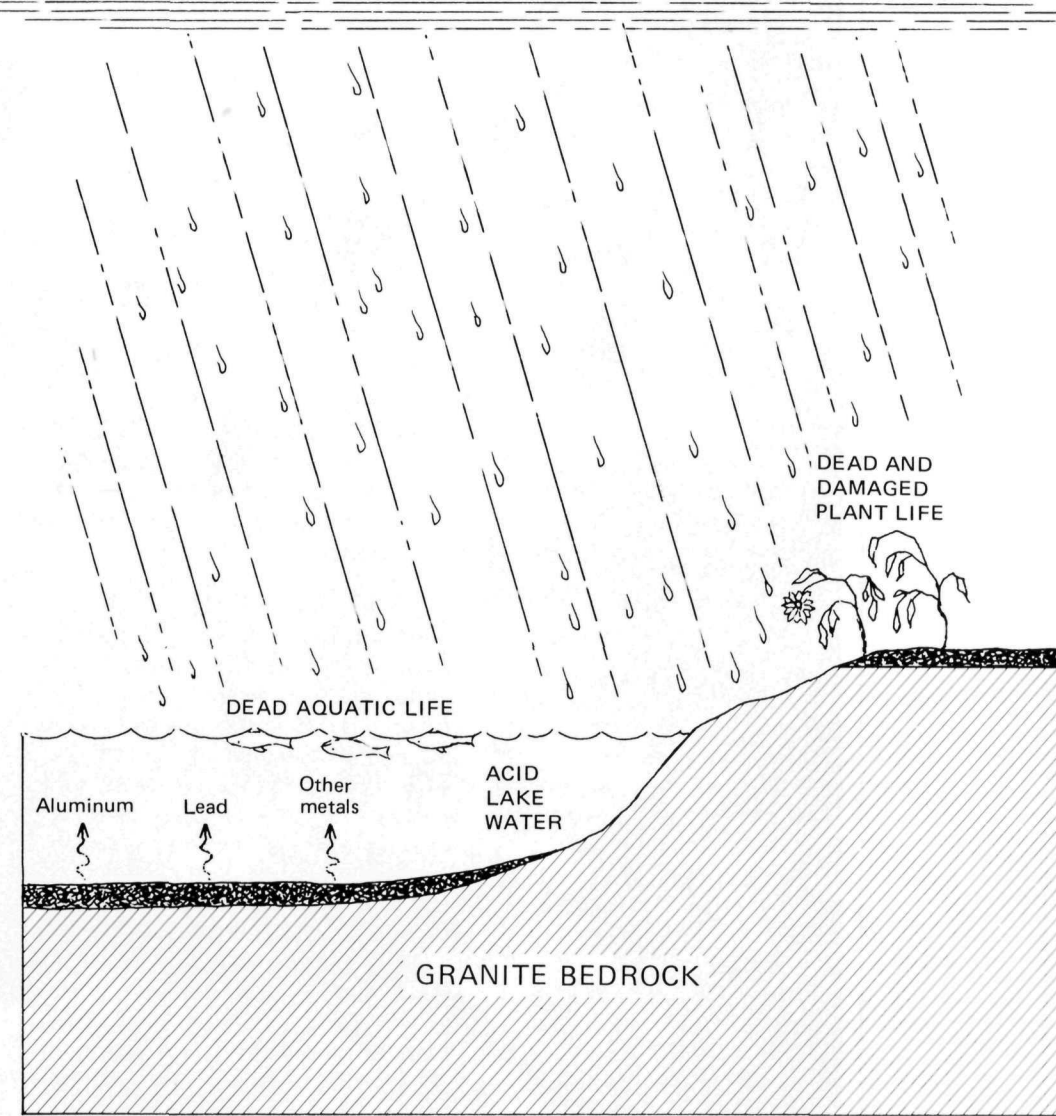
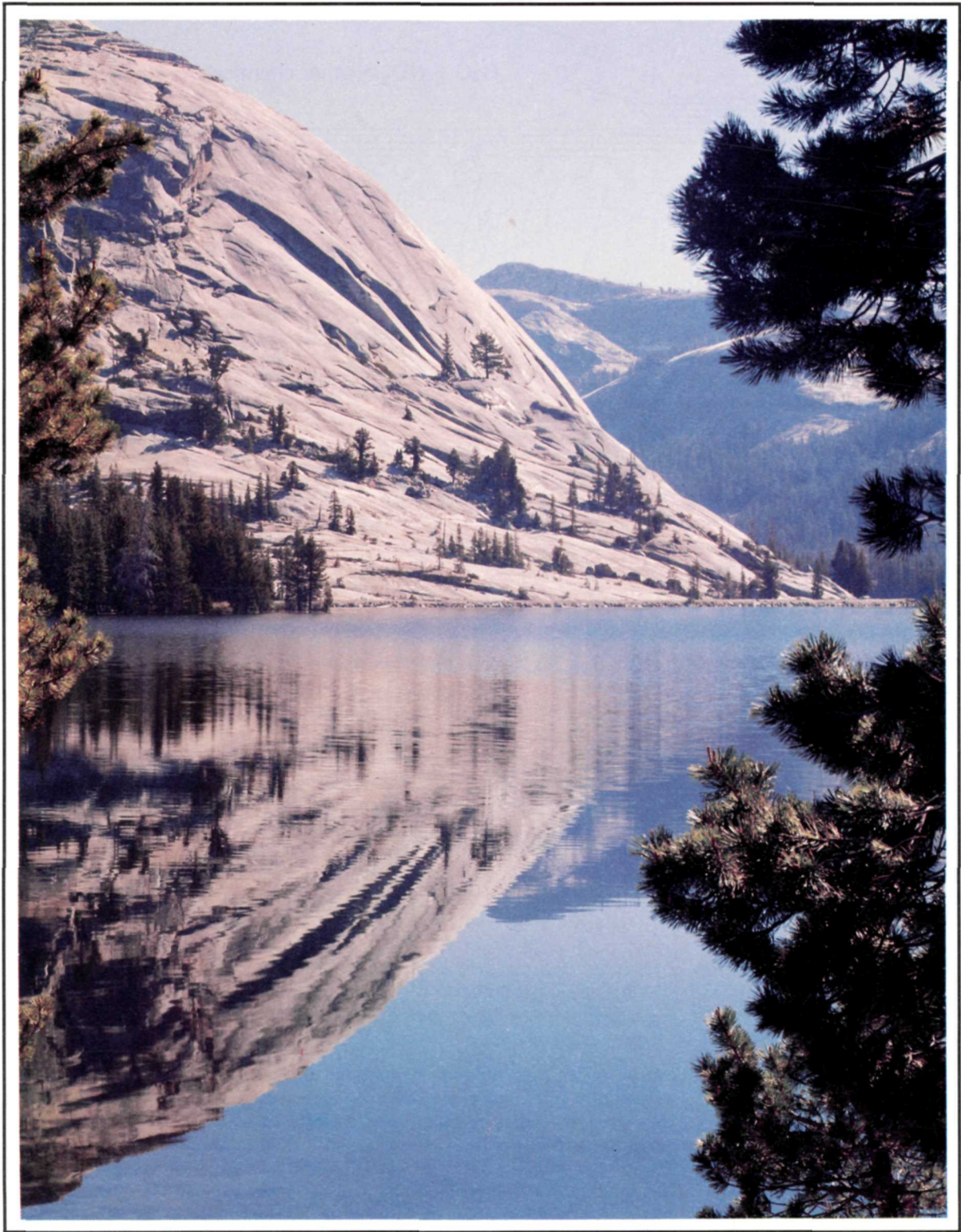


Illustration by James F. O'Brien, © NPCA

Sulfur oxides from industrial emissions and nitrogen oxides from industrial and automobile emissions combine in the atmosphere with water vapor and other chemicals in a series of complicated chemical reactions that are not fully understood to produce the final products—sulfuric acid and nitric acid, respectively. These acids directly damage vegetation and buildings. In addition, in areas underlain by granite—rather than more alkaline types of rock—acid is not neutralized and can build up to high concentrations. As the concentration of acid rises, certain living organisms die and metals in the watershed soils and lake sediments are leached out into the water, increasing its toxicity.



Tenaya Lake, Yosemite National Park, by Ed Cooper

Scientists at Lawrence Berkeley Laboratory have shown that acid rain could leach out high concentrations of toxic metals from the sediments of lakes such as Tenaya Lake in Yosemite National Park.

vice. At Great Smoky Mountains scientists have been studying acid rain since 1975. Rainfall there can be forty to fifty times more acidic than normal, and preliminary data indicate measurable changes in stream acidity and possible stress on native brook trout and salamanders. At Shenandoah, University of Virginia scientists are investigating stream acidification and chemical changes in the park's vegetation. West Virginia officials fear that trout in half the state's economically vital trout streams are threatened with extinction.

Evidence of acid precipitation has turned up in studies of watersheds in wilderness areas of the Colorado Rockies. University of Washington researchers checked sixty-eight lakes in the Cascades and Olympic mountain ranges and found that 40 percent had acid levels dangerous to fish production.

At Sequoia National Park winter storms are relatively clean, but summer thunderstorms are ten to one hundred times more acid than normal.

This year the National Park Service (NPS) will begin to ascertain what effects this acid onslaught may be having on the lakes and vegetation of Sequoia, Rocky Mountain, and Isle Royale national parks. (Unfortunately, the NPS share of funds from the Interagency Task Force on Acid Precipitation is inadequate to conduct a full-scale study of the ecosystem at Sequoia or to conduct research at as many parks as originally planned.)

In the Adirondacks, studies have demonstrated that acid lake water impedes fish propagation either by affecting reproduction or by killing the fry. Moreover, research there shows that the acid water leaches out metals from lake sediments and soils; and the increased concentration of aluminum and other metals

can poison aquatic life. Mercury levels in the fish taken from lakes in Ontario and Minnesota have posed a public health hazard. More recently, scientists from Lawrence Berkeley Lab have shown that high concentrations of metals could occur in Lake Tenaya in Yosemite National Park and in two other lakes in the Sierra.

In addition, soil chemists indicate that marginal soils in the Sierra foothills, which are of immense value to the forest products industry, may lose productivity if acid rain continues to leach mineral nutrients from the thin layers of soil. The quiet killer could disrupt food chains as well because, by eliminating fish and amphibians, acid rain endangers the food supplies of birds and mammals.

California's problems are unique in several respects. First, the makeup of California's acid rain differs from the brew on the East Coast because nitrogen oxides from cars and heavy industry are more responsible for acid rain in our state than the sulfur oxides commonly associated with acid rain in the East. Second, much of our acid rain apparently is produced within our own borders, unlike other areas where transboundary pollution causes major conflicts between states and even between the United States and Canada.

I am proud to say, however, that California is attempting to clean up its acid rain problems. Our state has a model program for controlling auto emissions, which includes stricter standards and enforcement than the federal program. But these efforts are threatened by the Reagan Administration's support for Clean Air Act amendments (H.R. 5252) that would double the national standards for emissions of nitrogen oxides and carbon monoxide by new cars.

The Administration also has backed provisions (introduced in H.R. 5252) that would increase in-

dustrial emissions of sulfur and nitrogen oxides. By contrast, the vast majority of scientists studying acid rain warn that we must go beyond the research stage and immediately curb these pollutants. In September 1981, the National Academy of Sciences warned that the evidence for the role of power plant emissions in the production of acid rain is "overwhelming." The Academy also said that *current* rates of sulfur and nitrogen oxide emissions will probably double the number of acidified lakes by 1990 and pose a risk to human health and the biosphere.

The Administration also has backed provisions that would weaken the Prevention of Significant Deterioration section of the Clean Air Act. This section protects national parks and other areas in which air quality is already relatively clean.

Appearing before the House Subcommittee on Health and Environment, scientist after scientist expressed alarm about rising acid levels in our lakes and streams. Representative Henry Waxman (D-Calif.), chairman of the subcommittee, is leading the fight to protect the Clean Air Act from mutilation by the Administration and others. His amendments to the Clean Air Act are moderate and constructive, and would preserve the high standards of the present act. They address the particular problem of acid rain by incorporating provisions of Representative Toby Moffett's (D-Conn.) bill—H.R. 4829. Based on National Academy of Science recommendations, this ten-year program would reduce emissions of sulfur dioxide in the eastern United States by *ten million tons*.

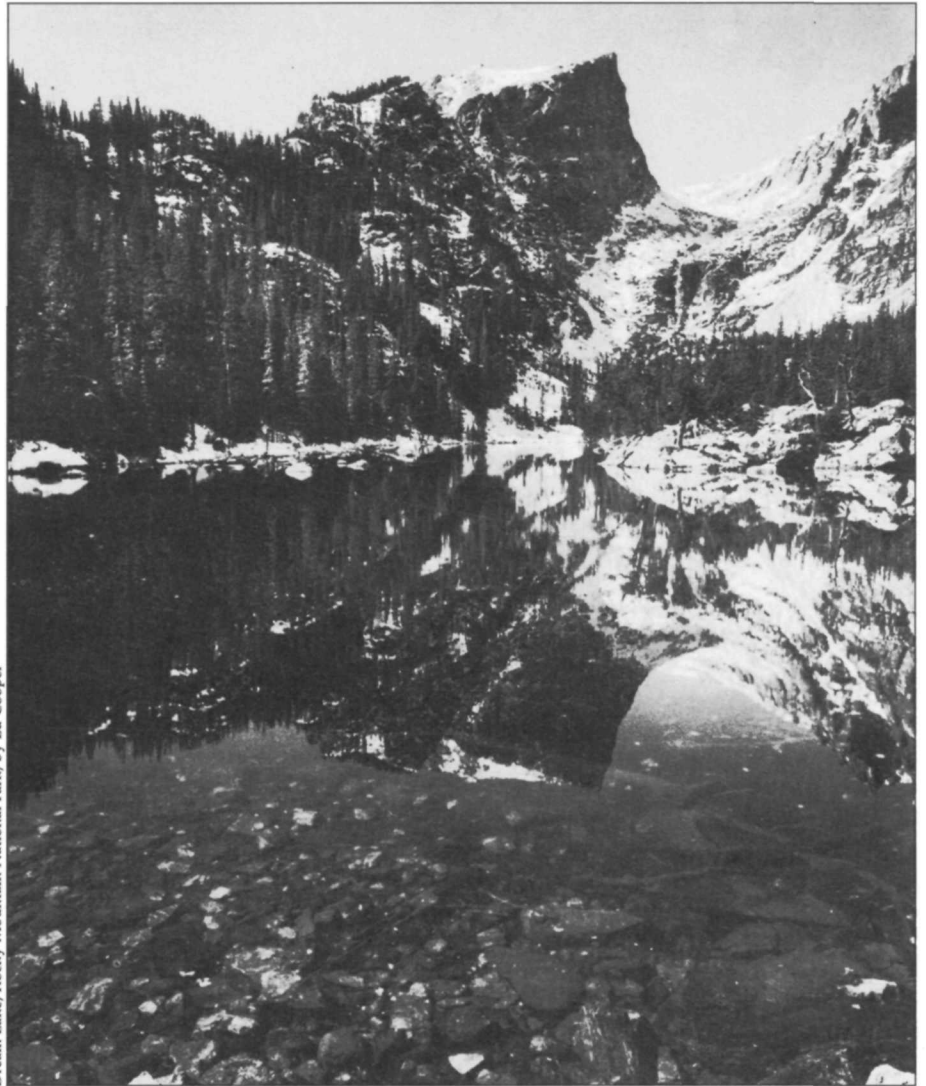
In order to address the problems caused by acid rain in the West, Lawrence Kapiloff has introduced a resolution into the California Assembly calling on President Reagan and the Congress to provide for a

detailed evaluation of these problems as part of the National Acid Precipitation Assessment Plan. In addition, he has proposed a five-year state program, which would receive funds from the Motor Vehicle Account and from fees levied on the largest industrial sources of acid gas emissions.

If we are serious about protecting the prime natural areas of the United States and Canada, we must ensure that the Clean Air Act remains strong. The act must provide for significant control of sulfur and nitrogen oxides as well as strong Prevention of Significant Deterioration and visibility programs for our nation's national parks and other pristine areas. Considering that our national parks serve as barometers of environmental change, in the long run these controls will assure us of broad protection for public health and the environment.

Scientists say that the fish populations dying in our lakes are a warning, just as a canary dying in a coal mine warns miners of toxic gases. If acidity in rural areas is endangering life in our lakes, what are the higher acid concentrations in urban areas doing to our lungs? The same fine acid sulfate particles found in acid rain have been linked to thousands of respiratory illnesses and deaths per year by studies conducted at Brookhaven National Laboratory in New York. Although other scientists debate these mortality rates, few of them would feel comfortable eating mercury-laden fish from acidic lakes or drinking water from the Adirondacks that has passed through metal pipes.

The irony of the debate over the Clean Air Act is that there is no need to weaken the act. Energy development can take place under the act, and automakers can already



Dream Lake, Rocky Mountain National Park, by Ed Cooper

Many mountain lakes in the United States are threatened by acid rain.

meet the auto standards in question. Moreover, there is an economic need for a strong act because the damages inflicted by various kinds of pollution are high. The National Academy of Sciences estimates that acid rain alone causes at least \$5 billion in damages annually.

Our national parks comprise only 1 percent of the land in the Lower 48 states. (Another 1 percent in the Lower 48 has been set aside as national forest wilderness.) As Representative Waxman comments, "Why is it necessary to despoil this land? This makes as much sense as burning the Rembrandts in the National Gallery for heat when an ample supply of fuel is readily available."

Representative Phillip Burton has long been a champion of the national parks. He is responsible for establishing parks and wildernesses around the nation, including Golden Gate National Recreation Area in his own city of San Francisco, as well as for expanding Redwood and Sequoia national parks. Representative Burton, the ranking Democrat on the Interior Committee, is also author of pending legislation to protect wilderness areas. He wishes to thank his assistant, Joan Moody, for her research and help with this article.

AGATE FOSSIL BEDS

a page from the past

William D. Murphy

One of the greatest archeological finds in the country distinguishes this Nebraska park

Tucked away in the Niobrara River Valley of western Nebraska, surrounded by working cattle ranches, lies a unique national monument that contains one of the richest deposits of Miocene fossils ever discovered. Agate Fossil Beds National Monument is a classic fossil site of the Miocene Epoch, which covered the period from approximately 25 million to 13 million years ago. This epoch, part of the Tertiary Age, was characterized by the relatively sudden spread of grasses on the plains and prairies and a concomitant development in mammal life. Although the monument is not particularly well-known to the general public, its reputation among paleontologists is widespread and of the highest stature.

Agate Fossil Beds was established as a national monument in June 1965. But it had been the scene of scientific activity and quarrying since around the turn of this century. Apparently the first white man to become aware of the fossils in this area was Captain James H. Cook.

Although Cook is believed to be

the great-grandson of James Cook, the famous English explorer and navigator, he was a true son of the Old West. As a young man he herded longhorns from Texas to Wyoming and Montana. Later, he became a successful hunter and guide in the Rocky Mountains, a ranch manager in New Mexico, and he served as a scout with the Eighth U.S. Cavalry in the Southwest during the Geronimo campaign of 1885–86. Cook first saw fossil remains at Agate while courting his future wife on her father's ranch. Following their wedding, he purchased the ranch from his father-in-law.

Cook later called the attention of scientists to his discovery. Before long, some of the greatest paleontologists in America were flocking to the fossil site and using Cook's ranch as headquarters. Henry Fairfield Osborn of the American Museum of Natural History is reputed to have described the Agate fossil site as the most remarkable deposit of mammalian remains of the Tertiary Age that had ever been found in any part of the world.

Over the years, scientists from the Smithsonian Institution, Carnegie Institute, Chicago Natural History Museum, Yale, Princeton, the universities of Nebraska, Michigan, and Kansas, and other institutions have conducted field studies and excavations at Agate. Fossils removed from Agate are on display throughout the world. Yet, despite the intense activity of the past and the removal of large numbers of specimens, it is estimated that approximately 75 percent of the fossil-bearing parts of the monument have not been quarried. The most recent excavation was made in 1950.

There is not complete agreement among paleontologists concerning the origin of the fossil beds, but a commonly accepted theory is related to a time beginning 60 million years ago when the Rocky Mountains were going through the processes of being formed—eroding into a gentle, rolling terrain, then being reelevated in a gigantic warping. The area to the east of the Rockies was also being transformed during this time—a great inland sea became a warm,



James O. Milmoe for National Park Service

Above, University Hill and Carnegie Hill have revealed major finds of Miocene fossils to paleontologists. The hills were named by teams of researchers from the University of Nebraska and the Carnegie Institute in the late nineteenth century. Opposite, a mural by Jay H. Matternes reconstructs mammal life of some 21 million years ago. Although the animals shown would not have assembled in such a grouping, they shared a similar environment. Among others, the painting depicts *Moropus* (paw raised, far left); *Stenomylus* (group of five, center); *Menocerus* (under tree); and *Dinohyus* (large boar-like creature, far right).

moist deciduous forest, then a grassland environment. The development of grasses had a profound impact on the evolution of mammals. The grassland environment of the Agate area saw the development of large numbers and species of mammals.

As millions of years passed, the Rocky Mountain range experienced significant weathering and erosion that left sedimentary deposits upon the area to the east. Vast flooding occurred, which probably trapped and killed many animals, carried the bodies downstream, and left them in areas where the waters had subsided. The bodies were subsequently covered by river sediment. This process apparently repeated itself over and over until several layers of bones were buried beneath the surface of the earth. The bones eventually fossilized, and the fossils remained under the surface of the earth for approximately 20 million years until the eroding effects of the present-day Niobrara River and the elements exposed them.

The Agate fossil site represents an important stage in the evolution of

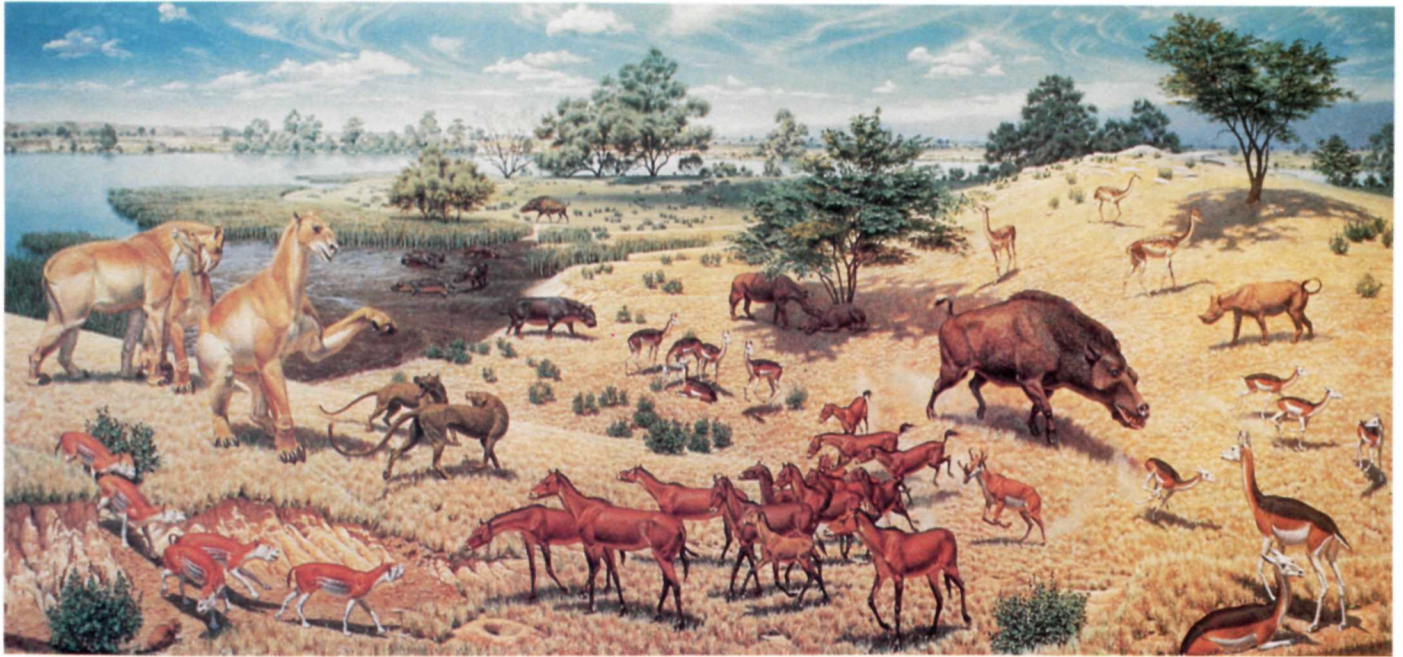
mammals in North America. The most common mammal in the Agate area was the *Menocerus*, a two-horned rhinoceros about the size of a Shetland pony. It is thought to have been as numerous as the bison that blackened the western plains in the eighteenth and nineteenth centuries. The *Dinohyus*—or “Terrible Pig”—was also abundant. The *Dinohyus* was a creature about seven feet tall and ten feet long with a large head and big tusks, mean-tempered and aggressive. Many specimens with broken bones have been uncovered. The *Moropus* also roamed the Agate area. This animal was related to the horse and rhinoceros families and probably was doomed by the region’s transition to a grassland environment.

A short distance southeast of the major quarries lies an area known as the *Stenomylus* Quarry. The *Stenomylus* was a camel about two feet tall, characterized by delicate features.

Daimonelices—or “Devil’s Corkscrews”—are also found at Agate Fossil Beds. *Daimonelices* are casts

of spiral burrows made by beaver-like animals that lived in colonies similar to prairie dog towns. The burrows are composed of a combination of earth materials and fossilized vegetation. Some of the burrows contain the fossilized remains of the small prehistoric beavers that made them.

Agate Fossil Beds National Monument comprises approximately 2,700 acres. A small portion of the land within the monument is privately owned. The major fossil beds are located in two conical hills near the east end of the monument’s boundary. These are University Hill and Carnegie Hill, named for the University of Nebraska and Carnegie Institute, respectively. A self-guiding, grassy foot trail leads visitors to the two hills where exposed fossils are on display. Here visitors can see the remains of strange animals that have been buried for 20 million years. Signs caution visitors not to remove or take with them anything from the site. Visitors should be on the alert for rattlesnakes, which are quite common in the area.



© Jay H. Matternes, courtesy of Smithsonian Institution

Very little development has taken place at Agate since it was established as a national monument. The visitor center, restroom facilities, maintenance and support structures are all temporary, mobile home-type structures, but they are not obtrusive. The National Park Service's development plans for Agate Fossil Beds call for permanent buildings at the headquarters site in order to improve its interpretive efforts. Interpretive structures will also be located at important points in the fossil beds. Plans include the removal of some layers of sediment and the relieving of certain fossil deposits *in situ*. Visitors will be afforded the opportunity to watch scientists as they expose the fossils and reconstruct some of the skeletons. However, as in many units of the National Park System, there is a great deal of uncertainty about the availability of funds to accomplish the needed development.

The fossil beds are the heart of the national monument, but other parts of the physical environment comprise its soul. The Niobrara River

flows quietly on its journey to the Missouri. The river is a small, meandering waterway lined by clumps of willows, a few cottonwood trees, and lush, green grass. Away from the river, the terrain slopes gradually upward to the valley's edge. Little bluestem, grama, buffalo, and other grasses cover the land. In the spring and summer patches of color announce the presence of wild flowers, including prairie turnip, lupine, penstemon, and others. A species of yucca, known popularly as soapweed, dots the landscape. In late May and throughout June when the yucca are in bloom, their creamy white flowers add particular beauty to the surroundings.

Nothing in the landscape looms over the human visitor—no man-made structures, no massive mountains, no towering trees. The river valley is relatively flat and open, making the sky the dominant feature. Immense and, at the same time, seeming very close, the sky's shifting character fascinates. Sometimes it is a dazzling blue without a hint of a cloud. Sometimes fluffy white

clouds, huge thunderheads, violent thunderstorms, or gigantic rainbows overwhelm the blue. As is typical in High Plains country, the sky can show all these sides within a short time span, sometimes in the course of a single afternoon.

In this sparsely populated plain, dominated by sky and strewn with prehistoric fossils, there is a sense of the vast scale of time. Visitors can touch the past, and, at the same time, see the present.

William D. Murphy is an assistant professor at the University of Nebraska at Lincoln.

More detailed information on Agate is available in the NPS publication Agate Fossil Beds, available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Stock number 024-005-00785-7, cost: \$6.00. The book features the paintings of Jay H. Matternes, whose work is also on display at the park and at the National Museum of Natural History in Washington, D.C., as part of their exhibits.

The Voyageurs Jigsaw: Putting The Pieces Together

Early North Woods conservationists worked to establish Voyageurs; almost a century later, the park's boundaries are still in question

Dennis A. Johnson

In 1962 a distinguished group of conservationists made an excursion to the lake country near International Falls, Minnesota, to consider a proposal. Elmer L. Andersen, then governor of Minnesota, had invited National Park Service Director Conrad Wirth, the late wilderness author Sigurd Olson, and others to visit the maze of islands, lakes, and waterways that forms the border between the United States and Canada. The area was being considered for a national park.

From Kabetogama Peninsula to Kettle Falls and Rainy Lake, the men traveled by motor launch across the waters that envelop the densely forested peninsula. They were awed by the silent stands of pine and fir and by the chain of lakes that glaciers

had chiseled through northern muskeg millenia ago.

This particular June outing would prove to be provident in the course of events that led to creation of the country's thirty-sixth national park—Voyageurs.

A score of years has passed since the Andersen entourage cruised along the shores of Rainy Lake and hiked into Kettle Falls. Yet, their dream for a national park preserving the heritage of the adventurous voyageurs and flamboyant fur traders is still unfolding.

Although Voyageurs National Park was authorized in 1971 and an initial \$26 million was appropriated for land acquisition, a number of significant issues went unresolved. Political rivalry between regional

and state groups during the early 1970s, spiraling land prices, protracted land acquisition, lack of appropriated funds, National Park Service (NPS) budget cutbacks, and congressional delays all contributed to the problems park officials face today. At present the issues that entangle park policy at Voyageurs range from constructing a visitor center and acquiring critical land tracts to designating portions of the park as wilderness and resolving proposed boundary changes.

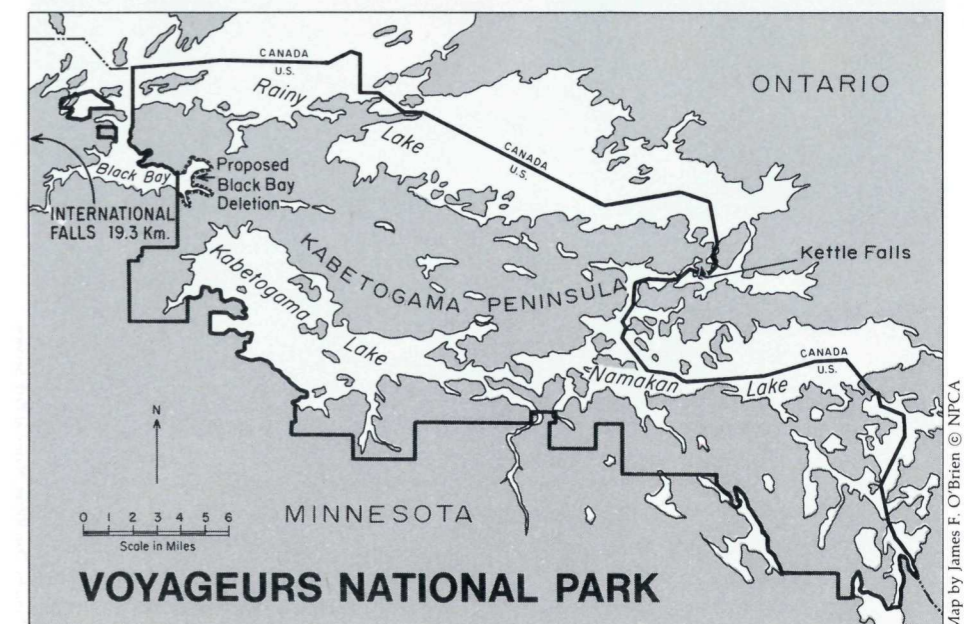
Two important issues are construction of a visitor center at Black Bay Narrows and purchase of 5,400 acres of park inholdings from approximately 150 owners. Without a visitor center, the park lacks a focal point where visitors can learn about

the voyageurs—or *hivernants* (winterers)—who plied their bark craft laden with pelts between Indians and British merchants who purchased the furs for the Hudson Bay Company, the North West Company Fur Post, and others. In the late eighteenth and early nineteenth centuries the voyageurs, in bands of eight to ten men, paddled their twenty-five-foot *canots du nord* (canoes of the north) from Lake Superior to Lake Winnipeg and Hudson Bay. They opened up the North Woods territory, creating the legacy of Voyageurs National Park.

Besides providing interpretive history, the visitor center would also help orient visitors to the park's many lakes (more than one-third of the park is water), trails and historic



Photo by J. Arnold Bolz



sites, such as the Kettle Falls Hotel, which first opened in 1913 and is now listed in the National Register of Historic Places.

Showy Lady's Slippers (*Cypripedium reginae*), perennials found in pine forests and open bogs, abound in Voyageurs (below). An aerial view of the park shows a landscape dotted by numerous lakes; in fact, one third of the park is water. This maze of waterways was used extensively by the voyageurs in the fur trading days. Glaciers have gouged out the terrain at least four times in the past million years, exposing some of the oldest visible rock formations in the world (right).



Photo by Dan Ritter, National Park Service

Private property within the park borders has created a crossfire of management directives among local, park, and state officials. In 1980, Minnesota Commissioner of Natural Resources Joseph Alexander rescinded an order that banned hunting on national park inholdings. The decision has exacerbated attempts by park officials to enforce the no-hunting restriction on park land, points out National Parks & Conservation Association (NPCA) Federal Activities Director T. Destry Jarvis.

During the past two years, adverse weather and a lesser number of hunters have minimized the amount of illegally killed game, points out chief ranger Joe Cayou. "Although there hasn't been a significant impact on local game populations, there could be in the future," Cayou adds. To ward off such a threat, NPCA is seeking to protect park wildlife by securing a ban on sport hunting on the inholdings.

Private property within the park has created an even greater problem: incongruous development. Outfitter and developer Vic Davis, a self-styled entrepreneur, has rankled park officials with his much-publicized ploys to thwart NPS land management and acquisition plans. In 1980 Davis acquired Little Cranberry Island, vowing to turn the four acres on Rainy Lake into "one of the biggest tourist attractions the area has seen" by erecting a twenty-five-foot fiberglass statue of himself as a tribute to the voyageurs. He also sectioned a portion of the island into one-square-foot pieces (sold for \$19.95 each), which he thought would force the NPS to negotiate with hundreds of landowners when purchasing the island.

Davis did not stop with Little Cranberry, however. Last winter he filed a plan to subdivide thirty-seven acres on Dryweed Island, also on Rainy Lake and within the park boundaries, into twenty-six lots for a new development—"Voyageurs

Acres." His plan was approved by the Koochiching County Planning Commission, which left Davis and the National Park Service, whose policy on land acquisition prohibits any construction on undeveloped land, to resolve these differences between themselves. Little Cranberry was acquired by the National Park Service through a declaration of taking and park officials report that condemnation proceedings for acquisition of Dryweed Island are being considered.

Land purchases, in general, have been drawn out for a number of reasons. In the past, money from the Land and Water Conservation Fund (LWCF) was used for acquiring Voyageurs land. Secretary of the Interior James G. Watt did not recommend appropriating any of this fund in 1982 because he wants to use LWCF money for park rehabilitation and maintenance, not land purchases.

Martin Kellogg, chairman of the Voyageurs National Park Association (VNPA), suggests that rapidly rising land prices and poorly coordinated efforts by NPS officials are causing other acquisition problems. "For one thing," explains Kellogg, "the system was not designed to cope with inflation." On occasion the National Park Service has negotiated for the purchase of a parcel with an appraisal one or two years out of date.

Park officials admit land speculation and subdivision of property has resulted in inflated land prices. In some cases, the Park Service bought critical parcels—through condemnation—at exorbitant prices, and was later criticized by the General Accounting Office. A report, issued by the comptroller general in 1979, cited several examples including the \$500,000 out-of-court settlement of one resort originally appraised at \$185,000.

In an effort to help speed land purchases for Voyageurs, Kellogg and others from Voyageurs National Park Association are seeking private grants. Purchase of land through grant money eventually could affect more than 600 acres of inholdings.



Photo by Jack E. Boucher, National Park Service

Beyond the more immediate problems of land acquisition and constructing a visitor center are the questions of management and long-term development in the park. Voyageurs—a southern boreal forest—is unique to the National Park System in the contiguous United States. Red and white pine stand guard over the younger, second-growth forest of balsam fir, tamarack, white and black spruce, jack pine, and cedar.

The park protects a biologic and geologic system that goes far beyond its own boundaries. "The park represents something much, much bigger—the whole North Woods," says former Voyageurs National Park Superintendent J. Thomas Ritter. "This is not what you would call a tour bus park," he continued, explaining that the highlights of Voyageurs are not oddities of nature. In fact, the park is best seen from the voyageurs' point of view—in a canoe.

"Here, the main attraction is the whole park. There is a deep, intense interest in this land," Ritter emphasizes.

How far the National Park Service should go in protecting the park and

restricting motorized travel has been a source of disagreement among citizen groups and federal agencies. The issues have focused on two documents: a park management plan released in 1980 and a wilderness designation study now being completed and reviewed.

According to the wilderness study, which was released in August 1980, some 92,000 acres or 45 percent of the 205,000-acre park are suitable for protected status under the 1964 Wilderness Act. The report recommends the use of snowmobiles on Shoepack, Cruiser, Oslo, Brown, Beast, and Mukooda lakes (all interior lakes) as well as on major lakes and on portages. It also recommends the use of motorboats on those same lakes and also would allow float and ski planes except on Brown Lake.

NPCA, VNPA, National Audubon Society, Sierra Club, and others object to the use of float and ski planes on the smaller lakes of the peninsula; their use would create an east-west motorized recreation corridor on the Kabetogama Peninsula. These groups believe that such mechanical intrusion will destroy the tranquility and harmony of the park's interior.



Photo by Leonard Lee Rue III

Voyageurs National Park is at the center of the only region in the continental United States where the eastern timber wolf survives. Extremely shy, the wolf is rarely seen by park visitors. Traveling alone or in packs, wolves have a range of 50 to 120 square miles and feed on deer, moose, and small mammals.

It could be years before the wilderness recommendations are adopted, if they are ever adopted, says Ritter. Consequently, management decisions will have a far greater impact on the immediate future of Voyageurs.

What is in store for the future? Voyageurs is not an isolated place; it is part of the much larger Canadian Shield, which stretches across Manitoba, Ontario, and northeastern Minnesota. This vast geologic structure is composed of some of the oldest rock formations in the world. Scientists believe younger sedimentary layers were

scraped away by successive glaciers, which also hollowed out the lake beds and waterways that give the North Woods its character.

The siren call of this northland has stirred many who realize the need to protect and preserve this country for future generations. One such man was Ernest Oberholtzer, a landscape architect, who envisioned an international park that would extend from Grand Portage on Lake Superior to the Northwest Angle, another hundred miles west of the Voyageurs park boundary. But it was obvious to Oberholtzer that he and others like him would have to fight development. As early as the 1920s plans were advanced to build hydroelectric dams along the Minnesota-Canada border rivers.

Some park officials say that the real issues are building along the international border. Logging operations, roads, and other development are underway along the Loon River, a stone's throw from the park's eastern boundary.

Little has been accomplished to-

ward the larger goal of protecting both sides of the border, except for establishment of Quetico Provincial Park in Ontario. Still, the impact made by U.S. and Canadian developers will be evident throughout this country, and will be felt by Voyageurs park visitors. "We're looking at a resource that's going to be here for generations," says newly appointed Voyageurs superintendent Russell Berry, "it's worth preserving."

The story of Voyageurs—a story that started in 1891 when President Benjamin Harrison received a petition for a national park in Minnesota—is still a long way from being finished. In many respects, the real work of securing a park true to the dreams of Ernest Oberholtzer, Sigurd Olson, and others has just begun.

Dennis Johnson specializes in writing about environmental and conservation issues and is the editor of Minnesota Out-of-Doors. He lives in Minneapolis, Minnesota.

Chances Diminishing for Keeping Black Bay in Voyageurs National Park

Discussions over Voyageurs National Park have been lengthy and voluminous. The latest debate centers on a proposed boundary change that would delete the eastern tip of Black Bay from the park and open the area to waterfowl hunting.

Obtaining critical park land and whether to allow duck hunting in the park are long-standing problems at Voyageurs; two bills (S. 625 and H.R. 846) have been heralded as the solution to these problems. The proposed compromise has drawn criticism from the National Parks & Conservation Association (NPCA) and Voyageurs National Park Association (VNPA), who fear such a move will be to the detriment of the park.

"The net effect of the legislation [deleting Black Bay] is negative as far as resource protection in the park is concerned," said T. Destry Jarvis, director of federal activities for NPCA. Jarvis pointed out such a

boundary change is unnecessary—and would be harmful. "There is no justification for it. There are plenty of other areas to hunt ducks," he added.

According to the proposed legislation, developed initially by the Department of the Interior and the Minnesota Department of Natural Resources, 782 acres of land in addition to 1,000 acres from Black Bay would be dropped from the park. In return, 318 acres for public access (mostly in the form of easements along roads), a visitor center at Black Bay Narrows, and other development would be added. The legislation would also increase the spending limit for Voyageurs land acquisition to \$12.3 million.

On May 13 the Senate Energy and Natural Resources Committee, chaired by Senator James A. McClure (R-Idaho), voted 18 to 0 to pass the Voyageurs bill, adding an amendment—supported by NPCA—

to require that the Black Bay area revert to the NPS if it is ever used for anything other than a wildlife management area. Then S. 625 has only to pass a vote of the full Senate.

As of this writing, the House Subcommittee on Public Lands and National Parks has not held hearings on H.R. 846, although the subcommittee is expected to take action sometime in the near future now that the Senate committee has voted on the companion bill. Representative John F. Seiberling (D-Ohio), chairman of the House subcommittee, is also expected to visit the park, and possibly will hold a public hearing in Minnesota to gain a better understanding of the issues.

Due, in part, to political considerations, Minnesota senators Rudy Boschwitz and David Durenberger have announced their support of the proposed boundary changes. In the House, Minnesota representatives James L. Oberstar and Bruce Vento, cosponsors of the House bill, favor deletion of Black Bay as a speedy remedy to outstanding issues affecting the park.

While construction of a park visitor center will be delayed until these bills are approved by Congress and until funds are specifically appropriated for it, other matters looming overhead are not addressed in the legislation: hunting on private inholdings and wilderness designation of Kabetogama Peninsula.

Minnesota Commissioner of Natural Resources Joseph Alexander rescinded an earlier ban on hunting on park inholdings still not acquired by the National Park Service. NPCA is now working to obtain appropriations for acquiring the remaining designated park land—approximately 6,000 acres.

Deleting Black Bay from Voyageurs gives more strength to the idea of obtaining wilderness status for the park's Kabetogama Peninsula. The National Park Service is still working on the final environmental studies, which recommend 92,000 acres of the park as suitable for wilderness classification.

—Dennis A. Johnson

Even if Black Bay is deleted—making duck hunters happy—the area would revert to the NPS if Minnesota inadequately protects the bay's wildlife.



Rainy Lake Chronicle

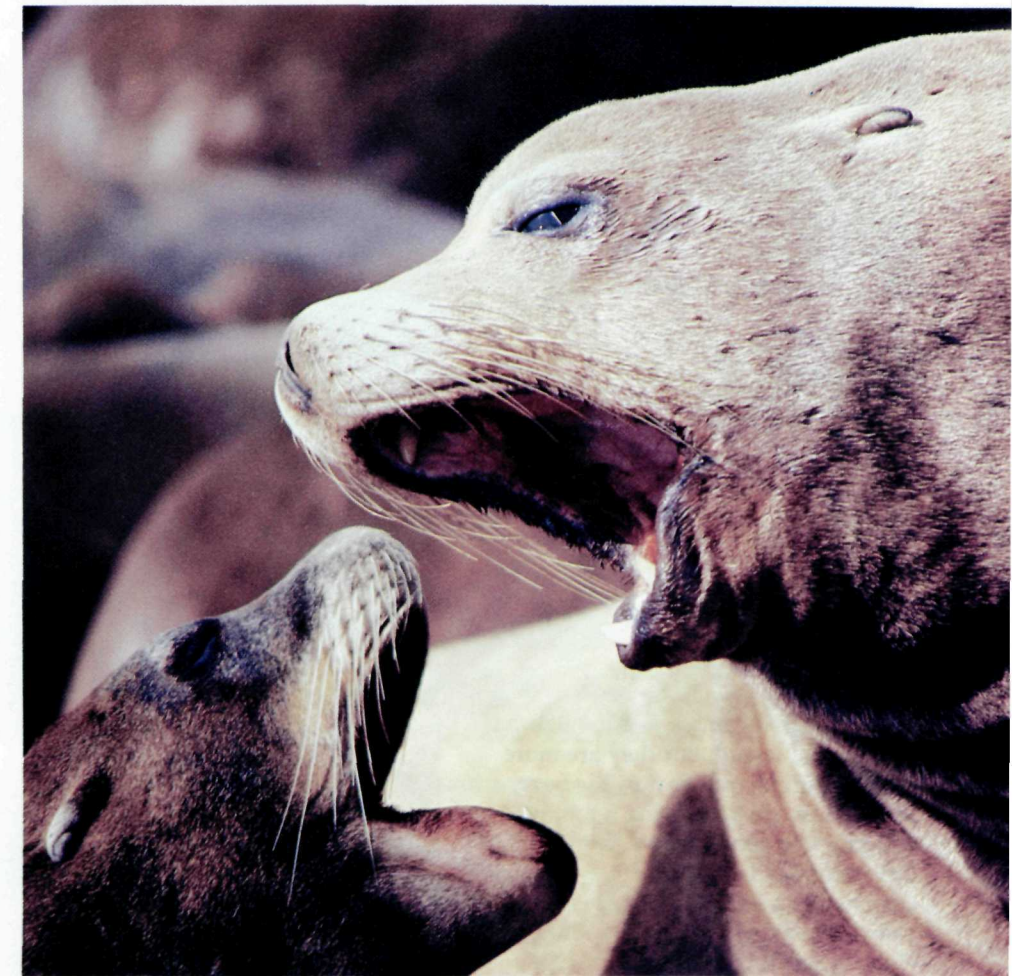
Channel Islands Portfolio

The islands and waters of Channel Islands National Park off the California coast offer refuge to a rich variety of species of animals—from tidepool organisms, fish, shellfish, and birds to land and sea mammals. Six subspecies of the delicate Island Kit Fox live on six different islands. Much more obvious are the seals and sea lions that throng the shores during the spring and summer, when thousands of these animals arrive to breed and rear their young. Six species of pinniped (“fin-foot”) are found within the park—harbor seal, northern fur seal, Guadalupe fur seal (rare), northern elephant seal, Steller sea lion, and California sea lion. After having been nearly annihilated by fur traders, these engaging animals are now making a comeback on the protected beaches of Channel Islands National Park. But if oil leases are sold in underwater areas off the California coast, oil spills will threaten their sanctuary.

Photos by
Frans Lanting



With a face only another elephant seal could love, an eighteen-foot-long male elephant seal dozes in the sun.



California sea lions are common in the Channel Islands, especially on San Miguel, where they arrive by the thousands to breed and rear their young during the spring and summer. Shouting matches occur frequently in these crowded rookeries. External ears, among other features, distinguish sea lions from true seals.





A few Steller sea lions—twice as big as their California cousins—are found on San Miguel Island, but they are more common much farther north. Above, a bull guards his harem and a mother and pup nap contentedly. At right, California sea lions frolic in a secluded cove, while a harbor seal pup, below, samples the surf. Opposite, although elephant seals cuddle in warm, cozy masses when they are young, adult males feel obliged to engage in ritualized mock fights throughout the summer. These contests take a serious turn during winter breeding season, with the prize being a harem of females.





*Big Sur, Columbia Gorge,
Jackson Hole—how will these
and other American land-
scape treasures be preserved?
Greenlining may prove
a solution.*



Paul Schaefer

The granddaddy of the greenline parks, the Adirondacks (above) in New York state have been protected since 1894. Using land management plans enforced by a regional commission, the state has been able to retain the great forests and clean waterways that made the Adirondacks famous. Right, the Big Sur coastline features rugged cliffs and rolling pastures. Proposed federal protection has failed, but local citizens and conservationists continue to work toward preserving the area.



David Muench

GREENLINE PARKS

Protecting America's Great Working Landscapes

Marjorie Corbett

A wave builds and crashes against the rugged Big Sur coastline, flinging chilly spray half-way up the cliffside. Cattle graze, unconcerned, in the fields above.

An elk's clarion call rings out of the rising mist along the winding Snake River. The Grand Tetons provide a backdrop for the ancient migration route of the herd through the rolling, sage-covered hills of Jackson Hole.

A single skipjack, peeling paint, noses along a rocky shoal. Its captain seeks the oyster bounty concealed under the shimmering surface of the Chesapeake Bay.

These places, and many others, though widely recognized by Americans as having great scenic, historic, ecological, and recreational value, are not likely to be protected as national parks. Some of these places are too developed, too changed by the hand of man to be national parks. Others will not be established as parks for political reasons. But all show the stamp of man's presence in some way. Dotted with farms and villages, these are places where people live and work in patterns deeply rooted in traditional uses of the land, like ranching, fishing, and forestry. Often public and private lands intermingle in the scenery.

These places are *not yet* overwhelmed by the crazy quilt pattern typical of unplanned development. You won't find the landscape dominated by fast food restaurants crowding scenic highways, high-rise

developments sprouting in pastures, and other features sadly representative of many growing rural communities. You *may* find, however, the raw beginnings of haphazard growth, which, if left uncontrolled, could destroy the scenic and historic appeal of the area *and* its way of life.

Many such places merit protection of some sort. Many are championed by local residents concerned with preserving what they value about their scenic surroundings. But many face the threat of destructive, new development. These special places hang in limbo, awaiting solutions from concerned citizens. One answer that has emerged, with growing support, is protection through designation as "greenline parks."

The late Senator Clifford Case of New Jersey once described greenline areas as "too large, too complex, too valuable, too interwoven with the fabric of existing communities to be protected by the federal government alone or by any existing system of parks, recreation areas or preserves."

"Greenlining" is a way of protecting deserving areas by a combination of federal, state, and local means under a coordinated regional plan. Specific means of protection may include combinations of zoning, easements, land trusts, tax incentives, and public lands management. Greenline parks can be administered by intergovernmental commissions.

These agencies hold the key to lasting protection and consist of representatives from all levels of government as well as local citizenry. A successful commission provides leadership, expertise, and a forum for negotiating differences for the better management of local growth. Growth and change are inherent to greenline parks and must be carefully planned for the good of the local economy as well as for the preservation of the local landscape.

The seed of the greenline movement was planted, germinated, and took root first in the state of New York in 1894. That year, state legislators drew a blue line on a map around a 6-million-acre chunk of the state known as the Adirondacks. (From this evolved the term *greenline*.) The people of New York wanted to protect the Adirondacks for economic as well as conservation reasons. Mountains, wild forests, and pristine, freshwater lakes made the area one of New York's natural treasures. Logging abuses were threatening to spoil the area's valuable watershed. The state legislature voted to keep the area "forever wild." In the years since, millions have flocked to this checkerboard of public forests and private resorts to camp, hike, and canoe.

By the early 1970s, conservationists were again moved to act to protect the Adirondacks. They realized that "growing population, advancing

technology, and an expanding economy are focusing ever-increasing pressures on these priceless resources" (Section 801, Adirondack Park Agency Act).

In an innovative move, New York set up an agency that would develop and implement a land use plan, coordinating public forest uses with private land development for the good of all. The agency's members include state commissioners for environment and commerce and a number of local residents. The group reviews proposals for new construction and commercial development. Townships develop and submit plans for orderly growth. The state provides funds to assist localities in developing these plans.

"The agency took on the task of coordinating more than one hundred local government units that had not, for the most part, previously attempted to coordinate zoning," comments NPCA New England representative Tom Cobb. A member of the Adirondack Council, a watchdog conservation group that now monitors the agency, Cobb attributes the success of this greenline park to "a long history of appreciation of the area and great dedication to its preservation in the state." Such broad-based support and local enthusiasm for a region's preservation are key features of greenline success elsewhere, too.

Over the years, the National Parks & Conservation Association has performed important groundwork in the greenline movement. During the 1970s a number of nationwide studies identified hundreds of areas outside the National Park System that need protection. When proposals for federal legislation to set up a system of greenline parks failed, new legislation was proposed to protect just one of the areas—the New Jersey Pinelands. NPCA was instrumental in the passage of this bill, the first federal legislation to establish an American greenline park.

The New Jersey Pinelands Nation-



David Muench

al Reserve has all the ingredients for success: local support, a land use plan, and an intergovernmental commission to carry out the plan. Authorized by Congress in 1978 and by the state in 1979, the Pinelands Commission is entrusted with preserving a core area and controlling development in a surrounding buffer area. These areas together comprise some one million acres of open countryside in one of the most intensively developed states in the union.

The preserve overlies a huge aquifer that provides some of the purest drinking water in the nation. Vast acreages in cranberry and blueberry cultivation, recreational waterways, and a sprinkling of historic towns complete the picture. Historical and natural features alike were threatened by unplanned, scattershot development before the management plan for the area went into effect. Conservationists continue to monitor the actions of the commission, using the controls written into the law to limit further deterioration. Already, development interests in

New Jersey are suing to dismantle the management plan.

In December 1981, NPCA and the American Land Forum sponsored a conference in Washington, D.C., to explore the future of "greenlining." During discussion, several conference participants pointed out that citizens in potential greenline areas may see federal involvement as a threat. Local apprehension of "big government stepping in" can be a major stumbling block in protecting an area. But the federal role in greenline parks is actually quite limited. It consists mostly of providing funds and technical support. Don Humphrey, a National Park Service planner, commented, "the priorities must not be set by someone in Washington."

Local leadership is essential, but federal input is also required to help coordinate management of the federal lands that are often part of a greenline area. Also, federal involvement in a greenline park does not necessarily have to come from the

National Park Service. It can come from the Forest Service, the Bureau of Land Management, or whatever agency is most familiar with the area.

The conference concluded that greenline parks will be a major feature of conservation efforts in coming years. Urban communities will welcome the recreational opportunities afforded by preservation of nearby fields, forests, and waterways. In some instances, national parks can use greenline buffer zones to ward off increasing encroachment.

The aspect of greenlining you will hear about most, however, is its cost. It's relatively cheap. Because greenline parks rely on coordinated land management to a great extent, usually only small amounts of land need be purchased for special protection. Coordinating local ordinances for building requires the hard work of local planners, local businesses, and conservationists, but it doesn't require a major outlay of funds. This factor makes greenlining an invaluable tool at a time when federal land acquisition funding has been slashed to the bone, and federal support of state projects through the Land and Water Conservation Fund has been completely eliminated for 1982.

In response to the need to further explore the nation's possibilities for future greenline parks, NPCA has produced a report, "Greenline Parks: Potential New Areas" (December 1981). The report names twenty-seven areas that could qualify for such protective measures. The authors warn, "This is not a concept to replace the way we now protect and manage our [national] parks. Rather, the greenline concept can complement, augment, and enhance the traditional approach."

NPCA spokesperson Bill Lienesch comments, "Land acquisition remains an essential tool for protecting National Park Service lands and many other special areas. But greenline parks can help fill in the gaps in areas outside the National Park Sys-

tem—especially those that are on the verge of overdevelopment."

Studies performed by the Heritage Conservation and Recreation Service and other state and federal agencies during the 1970s offered a wealth of data on potential greenline areas. A dizzying array of historic regions, natural waterways, and threatened ecosystems came to the attention of conservationists. NPCA honed its own list down to those areas with the greatest potential for success as greenline parks.

The NPCA report outlines certain criteria that must be met for successful federal involvement in greenline parks. First, an area must pass the test for national significance. It must be recognized both locally and nationally for its cultural, historic, or natural importance. One area that passes this test with flying colors is Big Sur in California.

For years Californians have prized this spectacular section of coastline along the twisting, narrow Route 1. The area's reputation has spread, and now Big Sur attracts millions of tourists each year. Some of California's first hardy settlers discovered this land, fell in love with it, and never left. Grazing lands and the Los Padres National Forest predominate east of the road; sheer cliffs drop to the sea on the west side; and clusters of redwoods flourish on either side. Low-slung, natural wood structures typical of the area house an occasional crafts center or restaurant beside the highway. With increased pressures to serve the masses of visitors, careful planning will be necessary to prevent overdevelopment.

NPCA's report also suggests that an area must have definable boundaries. For example, because the proposed Jackson Hole scenic area is bordered on all sides by federal land, its boundaries are easy to define. In the Pinelands of New Jersey, a definable ecosystem provides a general boundary for the Reserve. And along the Hudson River, a distinct, twenty-mile section defines the boundaries of an area of special historical and architectural significance suitable for greenline protection.

Local apprehension of "big government stepping in" may be a stumbling block to protection. But the federal role can be quite limited.



John Scrivani

Above, naturally eroded limestone deposits in Dade County, Florida, comprise one of the most dramatic geological features of this fragile wetland. Protective zoning now excludes development from the area. Opposite, weathered ranch buildings are as much a part of scenic Jackson Hole as the backdrop of the Grand Tetons.

In addition, federal protection must provide a clear benefit to the public—economic, recreational or in terms of choice of lifestyle. In some areas, for example, ranchers are finding property values have risen to such an extent that they are sorely tempted to sell off chunks of their land to residential developers or mining interests in order to pay higher taxes. If they do so, however, their remaining lands automatically increase in value, upping taxes again. This spiral may eventually rule out ranching as an economically viable pursuit for many.

In areas like the spectacular Jackson Hole, Wyoming, land values have been forced up by recreational development. Greenline protection could ease the strain on ranchers there by purchase of easements or by tax incentives, or both. Jean Hocker, of the Jackson Hole Land Trust, reports that during local hearings last year she saw “almost unanimous support for land protection of some sort—and a lot of support for tax incentives.”

Meanwhile, ranchland there continues to be sold for subdivisions, and federal protection looks unlikely for now. The Jackson Hole Chamber of Commerce came out strongly in favor of the use of scenic easements and other alternatives to land acquisition at the local hearings. Such a broad base of support for conservation will improve the region’s chances for preserving both an ecosystem and a way of life.

Many outstanding landscapes in this country have retained their beauty largely because residents and local governments have fought to maintain the natural flavor of their communities. NPCA’s report notes that these communities have a good chance of overcoming whatever differences may divide them.

In Dade County, Florida, county officials have worked closely with the Environmental Protection Agency and nearby Everglades National Park to control residential and commercial development of fragile wetlands. These wetlands feed essential fresh water into the park. Also,



David Muench

farming techniques north of park boundaries threatened to block the water flow. Local studies now show that special cultivation techniques can work with the natural sheet flow of water rather than against it.

According to Sam Poole, director of the East Everglades Resources Planning Project, a major threat to the area continued in the form of subdivision. He explains, “small parcels were being sold to unsuspecting buyers on land where building or useful development was impossible.” In order to prevent such subdivision, concerned citizens rallied to the defense of this crucial section of the Everglades ecosystem. In October 1981 the county responded with new zoning ordinances that would limit new building to one structure per forty acres—sufficient for local farmers, but not for more intensive development.

The Columbia River Gorge is a premier example of a potential greenline park, with its eleven thousand years of Indian habitation and

its history of early American settlement following the Lewis and Clark expedition. Waterfalls cascade from the tops of sheer cliffs that enclose an incredibly diverse ecosystem along the border between Washington and Oregon. Fifty-eight rare or endangered species of plants have been documented in the Gorge, a traditional study ground for botanists from all over the world. The rugged character and dramatic beauty of the gorge remains intact despite its proximity to expanding urban areas like Portland. Typical of many potential greenline parks, the Columbia Gorge is dotted with national forest lands and state parks.

The topographic borders of this area enclose lands of many counties in both Washington and Oregon. Although conservationists in both states have shown great interest in protecting the gorge, the threat of subdivision, especially in Skamania County, Washington, has raised the battle to a new pitch.

It became clear that any attempt to protect the gorge as a single unit would entail cooperation among lo-

cal, state, and federal forces. On March 31, 1982, two bills designed to do just that, with varying degrees of protection, were introduced in Congress. With careful coordination under a single management plan, the patchwork of public, private, and state lands and townships could emerge as a discrete entity—a greenline park.

Many of the potential greenline areas mentioned in NPCA's report will probably not be protected by federal legislation any time soon. But conservationists continue to struggle to coordinate management of these places.

The Chesapeake Bay, for instance, has excited an extraordinary amount of interest from agencies at all levels of government. Describing the region, Will Baker of the Chesapeake Bay Foundation says, "It's mind-boggling. There's more biological productivity in the Chesapeake Bay than in any other estuary in the world." In addition to being a living resource for watermen, the bay area is the site of a great array of significant events in American history—from early settlement to the end of the American Revolution at Yorktown.

Various proposals by local congressmen for federal protection have failed, but an interest in protection continues. Will Baker, speaking for the Foundation, comments, "We believe there should be more involvement on state and federal levels—the bay could be named a national treasure." For now, protective provisions from a variety of agencies help monitor threats from pollution and unplanned development.

Many communities can use greenline protection techniques to forestall destruction of habitats, scenery, and historic buildings. Some communities might require strong local representation on planning commissions; some would prefer strong leadership from a federal agency or state commission.

Some areas could be protected through buying easements; some through private land trusts. Used with care, greenlining can be flexible, economical, lasting protection for America's "wide open spaces."

Land planners predict that as America's rural areas become more developed, local residents will turn to protective techniques like greenlining. Joel Kuperberg of the Trust for Public Land remarks, "What I've seen working around the country is that when population pressures reach a certain point, people tend to recognize that the natural features they have enjoyed are threatened, and there is a scramble to protect."

Even with the establishment of a greenline park and approval of a plan to protect the area, however, major threats often persist. Development pressures that were major reasons for setting up greenline protections do not go away. And with the inevitable changes in local, state, and federal government, support for a greenline park can change dramatically. The only way a greenline park can remain successful is by the continued vigilance of local citizens, supported by state and national conservation organizations.

NPCA has taken some first steps toward wider public awareness of useful greenline techniques. Its report identifies a set of high priority areas for protection. With further study, more such areas will likely be added to the list. Bill Lienesch concludes, "We need not be shortsighted about the number of areas we can protect through greenlining, or the number of ways we can protect them." NPCA will continue to work toward protecting America's great working landscapes as greenline parks. With the active support of citizens all over the country, we can preserve the natural and historical character of those special landscapes that remain before it is too late.

Marjorie Corbett, Assistant Editor of National Parks, has a special interest in farmland preservation.

Once established, the only way a greenline park can remain successful is by the continued vigilance of local citizens supported by state and national conservation organizations.



William C. Baker

Above, Thomas Point Lighthouse is the oldest staffed lighthouse in the Chesapeake Bay. The bay is now partially protected by a wide range of federal, state, and local agencies. Opposite, the sheer cliffs of the Columbia Gorge rise high above the banks of the river. Bills to designate the Gorge as a scenic area now await congressional approval.

NPCA Report

Cultural Threats Come to Light

At the end of April, the National Park Service (NPS) released its long-awaited "Threats to Cultural Resources" report. From the report's candor to the detailed examples of threats to buildings, artifacts, art objects, and the like, it is obvious that the NPS is aware of the extent of its problems and seems ready to begin implementing remedies.

As the report says, "To read a report on the threats to the parks of the National Park System can leave one with a feeling of depression." So it can.

The report does point the way out, though. In order to preserve the millions of objects and artifacts in its collection, the report says, the NPS must find solutions to two major problems: (1) the lack of accountability, and (2) the lack of environmental control. Also, the NPS "needs to add approximately seventy curators and conservators to its staff over the next five to seven years."

NPCA lauds these proposed steps as vital and long overdue. An interesting point in the report and one the authors make plain: The parks with the most well-trained curatorial personnel (in the Mid-Atlantic region) were more aware of what they possess and the kinds and causes of deterioration; therefore, these parks reported the most problems.

Some of the problem areas mentioned in the report include

- **Vandalism.** Park officials say vandalism at the parks is on the rise; broken windows, damaged artifacts, graffiti-splattered walls are the result. At Cuyahoga Valley and Delaware Water Gap national recreation areas several historic structures have been destroyed by arson.

- **Encroaching urbanization.** The NPS says our historical parks are becoming "islands of green in a sea of development." Casual recreation that can result in serious overcrowding, the use of park roads as traffic

corridors, and the visual intrusion of such structures as shopping centers and communications towers all degrade historical parks.

- **Curatorial Problems.** The cultural resources at parks are inadequately documented; in fact, only 20 percent have up-to-date catalogs. Add to that fact the NPS admission that "control of the environment is nonexistent." Lack of environmental controls causes walls to warp, mil-

dew to form, paintings and furniture to crack and flake. Fluctuations in humidity are damaging collections at 29 percent of the national parks; and 24 percent cite temperature changes as a problem.

Among other factors listed in the report are the effects of weather and air pollution, destruction of resources by plants and animals, and storage and security problems.

A disconcerting figure to note is

Heavy ORV Traffic at Cape Cod Shows Need for Tighter Restrictions

Numerous studies show that off-road vehicles (ORVs) cause rampant damage to public lands. Yet, most national seashores and many national parks of the western United States are still threatened by unwarranted use of ORVs.

The conflict between people who prefer high-impact vehicular recreation and those who enjoy more environmentally compatible pursuits is exemplified at Cape Cod National Seashore where ORV traffic is inadequately restricted. Officials at Cape Cod yield to such heavy ORV use that the Massachusetts Audubon Society, Sierra Club, and the Conservation Law Foundation of New England have filed a lawsuit against the National Park Service (NPS). NPCA is involved in the suit and is providing testimony to limit ORV use.

When the Cape (established in 1961) officially opened its beaches to ORV traffic in 1964, nearly one thousand permits were issued. Since that time the number of permits has increased sixfold.

The small army of vehiclists dispatched by this unrestricted allowance has access to thirty-three miles of beach trails—a majority of the coastal roads on the cape. ORV damage to beaches is so extensive that vehicle tracks on beach dunes can be seen even after eight years of protection, and one pass of a vehicle across a salt marsh creates ruts that may last for decades.

In addition to mobile use, visitors are permitted to park vehicles in three designated sites on the beach flats—for up to three weeks at a

time. These sites are expected to accommodate 100 vehicles and up to 125 on peak holiday weekends in the summer.

Although a study done for the National Park Service shows that Cape Cod cannot support unrestricted ORV use without damage to the environment and to the cape's esthetic qualities, the NPS imposes no limits on the number of permits issued, nor does it limit the number of vehicles that may travel the beach trails at the same time. Several smaller national seashores issue a certain number of ORV permits annually, and some limit the number of vehicles that may be on the beach at any one time.

Seemingly, if these smaller seashores perceive a need for such restrictions, Cape Cod should see the need for similar regulation. Management officials have applied ORV restrictions at Cape Cod; but because the rules they have implemented are flimsy and inconsistent, the conservationists filed suit.

The litigation contends that Cape Cod was authorized as a national seashore primarily for preservation, rather than recreation. In addition, former presidents Nixon and Carter issued executive orders stating that ORVs shall not be permitted in parks when the natural, cultural, or esthetic values of the park are threatened by the vehicles.

If NPCA and the others involved in the suit are successful, vehicular traffic on the cape could be limited to a credible number—or restricted altogether.

—Cathy Chase, NPCA intern

the number of professional historians and archeologists employed in cultural resource management. Of the more than 300 park units, approximately 60 percent were specifically established for their historic or prehistoric cultural features (and most of the remaining 40 percent have important historic structures). Yet, the NPS employs only ninety-two historians and archeologists; or one for every three parks. The report admits this lack is a stumbling block to adequate resource protection.

In order to mitigate the on-going deterioration, the NPS sees the need to develop a more comprehensive training program for cultural resource managers. Also, they would put together a complete inventory, ascertain causes and then determine remedies for the deterioration of their vast collection.

Pictures at an Exhibition

During the month of August, NPCA is cosponsoring the first conservation art show to be held in the nation's capital. NPCA and Trout Unlimited, a national conservation organization dedicated to the protection of clean waters and fishery resources, will present the exhibit at the Art Barn in Rock Creek Park. The show will feature art in all media, from painting to wood sculpture, as long as the theme of each work centers on the environment; and prominent Washington, D.C., area artists will judge the show. The art will be available for purchase.

Conservation Youth Corps a Hit

Like the phoenix, a new conservation corps is rising from the ashes of the old—and nobody seems to be arguing. On the contrary, in April 1982 a proposal to create an American Conservation Corps was approved unanimously by the forty-two members of the House Committee on Interior and Insular Affairs. Less than a month later, the bill (H.R. 4861) was okayed by the House Labor and Education Committee.

The American Conservation Corps is modeled after the Civilian Conservation Corps (CCC) of the 1930s and would replace the Youth Conservation Corps (YCC) and the Young Adult Conservation Corps (YACC) of the 1970s. With youth unemployment at 21.9 percent overall and 46 percent for black youths, the benefits of a conservation corps outweigh the costs in the minds of many legislators. More than 100 representatives and senators are cosponsoring the House bill and the companion Senate bill (S. 2061) that would establish the American Conservation Corps.

Administered by the Department of the Interior, the program would provide jobs and training at the minimum wage for youths between the ages of 16 and 25 (15 to 21 years old for summer workers). Special consideration would be given to disadvantaged youths and those from areas of high unemployment.

The proposed legislation authorizes \$50 million for the corps in fiscal 1983 and \$250 million in 1984; through 1989 the authorized ceiling would increase to account for inflation. Federal revenues generated by leasing activities such as oil and gas exploration and logging would provide funding for the corps. The money would be apportioned so that the states would receive 35 percent of the money, but they would be required to provide 15 percent in matching funds.

Senator Daniel Patrick Moynihan (D-N.Y.), who introduced the Senate bill with Senator Charles Mathias (R-Md.), said that "the YACC and the YCC were undeserving victims of this year's budget cuts, this despite the fact that both programs returned well over \$1 worth of appraised conservation work for every \$1 expended."

Supporters of the new corps say

Conservation corps members have groomed trails, rehabilitated campgrounds, provided all sorts of invaluable assistance at national parks across the country. The youth at right, one of approximately two dozen volunteers at Yosemite last year, repairs a campground marker.

the payback in social benefits can be even more substantial: Decreases in youth unemployment, crime, and drug abuse are among the benefits mentioned.

From the viewpoint of conservation, the benefits of a conservation corps are manifold. Because of inadequate staff in the National Park Service, the work of the conservation corps is especially important now.

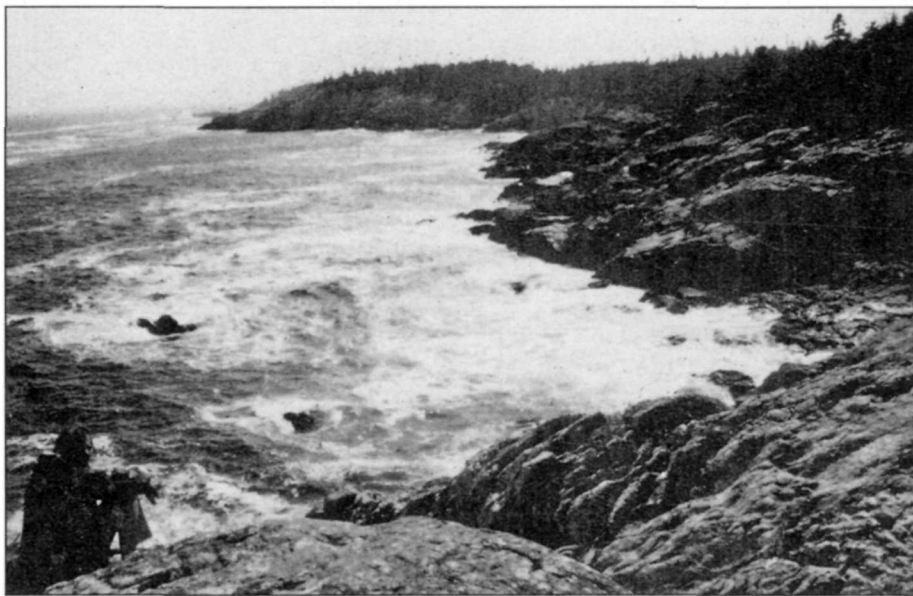
The care and maintenance of campgrounds in Yosemite's Tuolumne Meadows area will be severely reduced without the assistance of a youth conservation corps. Park officials also depend on a corps to groom trails and remove flammable undergrowth at Mariposa Grove, one of the few remaining stands of giant sequoia trees.

At Rocky Mountain National Park the YCC provided the labor to restore the national park's Bear Lake area and to construct a "five senses" trail for the handicapped at Sprague Lake.

With all the public support for the proposed American Conservation Corps, as of this writing it seems likely that the bill will be approved by the full House before its August recess.



National Park Service



T. Destry Jarvis

In his testimony at Senate hearings on the Acadia National Park boundaries at Isle au Haut, NPCA's T. Destry Jarvis stated the island "compares in its magnificence to anything else in the [National Park] System."

Good Borders Make Good Neighbors at Isle au Haut

A happy conclusion is in sight for those who want stable, protective boundaries for Isle au Haut. The island, a remote section of Acadia National Park in Maine, has been the subject of controversy for a number of years.

Bill S. 1777, introduced by Maine senators George Mitchell (D) and William Cohen (R), would allow the National Park Service (NPS) to acquire and exchange parcels of land at Isle au Haut, thus securing boundaries for prime natural areas. At present, the NPS may accept land only through donations.

As NPCA's Director of Federal Activities T. Destry Jarvis notes, "With only minor clarification, S. 1777 will achieve what we have all sought during these past few years."

A 1977 NPS assessment identified twelve significant natural areas on Isle au Haut, and the proposed legislation would put eleven of those areas under the protection of either the Park Service or the town of Isle au Haut. (Part of the twelfth area, Long Pond, will remain under private ownership.)

The solution of boundary problems on Isle au Haut did not always

look so promising. For a long time local groups and Maine legislators disagreed with conservationists over the future of Isle au Haut.

Now, conservationists praise the spirit of cooperation between the NPS and local government. Isle au Haut, which was named by Samuel de Champlain as he viewed the island from his ship in 1604, will retain its rugged wilderness areas with passage of the Senate bill.

Getting Gas from Garbage

Garbage seems an unlikely subject for a bill. But, as Senator Alfonse D'Amato (D-N.Y.) said in remarks on his proposed legislation, critics may accuse politicians of talking rubbish, and "today, I freely admit that I come before the subcommittee to talk about garbage."

The garbage D'Amato refers to is the 8,000 tons dumped per day at the Fountain Avenue landfill in Brooklyn. The Fountain Avenue site is part of Gateway National Recreation Area. In April D'Amato proposed before the Senate Subcommittee on Public Lands and Reserved Water a

bill (S. 2218) that would allow methane gas from the landfill to be extracted and sold to consumers.

It is estimated that the methane gas—generated naturally by all that garbage—could produce the equivalent of 400,000 to 600,000 barrels of oil annually. Now, the methane gas escapes into the atmosphere, causing a fire hazard and a waste of approximately ten million cubic feet of methane per day.

Even though New York City deeded the 30-acre landfill to the federal government—along with other Gateway acreage—the city retained the right to operate the landfill through December 31, 1985. Although the gas technically belongs to the National Park Service, the bill would give New York City the right to contract out methane recovery operations. Then the city would sell the gas and give Gateway a 12 percent royalty on the net revenues it receives.

NPCA finds D'Amato's bill sensible and ecologically sound. The federal government usually receives 12.5 percent of the value of any gas produced from federal property, however. NPCA recommends that this standard should hold for methane gas produced at Gateway as well (instead of the government receiving 12 percent of the *net* revenues). Or split the profits fifty-fifty.

Gas recovery on National Park System land is unusual and NPCA's William Lienesch testified that "the report accompanying this legislation should specifically note that [it] does not act as a precedent for allowing oil and gas drilling or recovery in units of the National Park System where such activity is currently prohibited." Lienesch also stressed that after the recovery operation is over, the contracted company must clean up the site.

Because the Gateway landfill is a special case, the revenues would be plowed back into the recreation area rather than be subsumed by the general treasury, which is what usually happens to park-produced monies. According to Hooper Brooks, Gateway Citizens Committee director and National Park Action Project representative, Gateway could use

these profits in a number of beneficial ways: to recover the Fort Wadsworth military facility and its adjoining beaches, to rebuild the road and narrow neck of sand that was washed away at Sandy Hook, to acquire the Breezy Point beach—among other projects that require attention.

Wolf Trap— the Show Goes On

The 1982 performing arts season at Wolf Trap Farm, Virginia, is in full swing. But last April 4 it looked as if the whole summer program would have to be canceled. That was the day the Filene Center, Wolf Trap's open-sided theatre and concert hall burned to the ground.

Immediately, though, calls began pouring in to the National Park Service, which administers Wolf Trap as one of the two national parks for the performing arts, to Catherine Filene Shouse, founder of the park, and to the Wolf Trap Foundation. Concerned citizens and businesses offered sympathy and donations of time, services, and money.

The National Park Service estimates that it will cost \$17.5 million to rebuild the theatre. The money will come from the federal government, foundations, businesses, and individuals. Mobil Oil has pledged \$100,000; Washington, D.C., television and radio stations have broadcast fund-raising appeals; local stores have contributed donations; and the Wrecking Corporation of America has cleaned out the burnt rubble *and paid* \$1001 to do it.

Among the performers doing benefit concerts for Wolf Trap are cellist/conductor Mstislav Rostropovich, pianist Rudolph Serkin, and the New Orleans Preservation Hall Jazz Band.

Until the Filene Center is rebuilt, performances will take place in a soaring tentlike structure (transported to the U.S. by the government of Saudi Arabia) on Wolf Trap Meadow. This summer's schedule includes concerts by Ella Fitzgerald and Oscar Peterson, the National Symphony Orchestra, Theodore Bikel, and many others.

Changing the River at Glen Canyon Dam

The concept of managed water is facing a test at Glen Canyon Dam on the Colorado River. Work continues on rewinding and uprating the generators at the dam to provide peak electrical power. If not blocked here, peaking power could become an even more attractive idea for other river systems or other dams on the Colorado. The Glen Canyon precedent is what many fear.

Uprating is the bane of river run-

ners and conservationists, who say that planned fluctuations in Colorado River flow already erode Grand Canyon beaches and disrupt wildlife habitat.

Besides threatening the natural systems of the canyon, the changes in river flow can endanger river runners. Horn Creek Rapids, usually a moderate challenge, can become a maze of snags and shelves during the peak of the boating season because of planned low-water flows. In the spring of 1981 the National Park Service made four helicopter rescues

EXTINCTION. IT'S FOREVER.

One quarter of all species of animals and plants on Earth may disappear in the next 30 years because of man's destruction of their habitat. The rate of extinctions is increasing enormously as forests are destroyed and other wild areas are lost. Organisms that evolved over hundreds of millions of years will be gone forever. The complex interdependence of all creatures, from the largest mammals to the smallest plants, is being shattered. It is a crisis with profound implications for the survival of all life. Unfortunately, little is being done to save our planet's natural heritage. Here are some warnings by leading scientists:

"The worst thing that can happen—will happen—in the 1980's is not energy depletion, economic collapse, limited nuclear war, or conquest by a totalitarian government. As terrible as these catastrophes would be for us, they can be repaired within a few generations. The one process ongoing in the 1980's that will take millions of years to correct is the loss of genetic and species diversity by the destruction of natural habitats. This is the folly our descendants are least likely to forgive us."

DR. EDWARD O. WILSON
Baird Professor of Science • Harvard University

"Few problems are less recognized but more important than the accelerating disappearance of Earth's biological resources. In pushing other species to extinction, humanity is busily sawing off the limb on which it is perched."

DR. PAUL EHRLICH
Bing Professor of Population Studies • Stanford University

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of people injured in Horn Creek Rapids. Wider swings in flow would only magnify these problems.

Technically, rewinding the uprating generators makes them work more efficiently, requiring less water to create the same amount of electricity produced before the uprating. The Bureau of Reclamation (BuRec), the agency in charge of the project, is uprating not merely for efficiency, but to vastly increase the capacity of the generators.

What peaking power means is an even greater turn-around in the natural flow of the Colorado River. Its natural cycle consists of high flows in the spring and early summer, dropping off in the late summer and winter. But the river has not flowed naturally for many years. Dams allow water to be managed at will; and with the uprating, peak power will be available whenever it is most needed. Water can be released for power during the hottest part of a summer's day or during the coldest months of the winter; the river is managed on both a daily and a yearly basis.

As a member of Friends of the River and a National Park Action Project representative, Robert Lippman is working to halt this sort of peaking power escalation. The BuRec began work on the Glen Canyon Dam uprating before giving an account of the environmental impact, and Lippman sees a contradiction. The Grand Canyon is a protected World Heritage Site, yet Lippman says there is "no control over any

activities outside of the park. This is what Representative Seiberling's bill [National Parks Protection Act—H.R. 5552] seeks to control."

Hot Water

In a related issue, uranium development continues on Bureau of Land Management acreage north of the Grand Canyon near drainages that feed directly into the Colorado River. One mining operation owned by Energy Fuels Nuclear has received permission from the Environmental Protection Agency to discharge their waste water into the Kanab Creek drainage. A second uranium mine—owned by the same company—is waiting for permission to do the same. If this potential "hot" water entered Kanab Creek it would surely enter the Colorado.

Cutting Out Cattle at Capitol Reef

Capitol Reef's is a stripped down beauty. Like the other national parks in southern Utah, wind, water, and a dry desert climate have laid bare the essential geology of the place. The centerpiece of Capitol Reef—Waterpocket Fold—is a great monocline of folded slickrock fringed by the mesas and side canyons that make up the rest of the long, narrow park.

Because of the delicate soil crust at Capitol Reef, the 1971 legislation that established the park recognized that it is not a place to run cattle. The gradual phase-out of cattle grazing at Capitol Reef begins this year and should be completed by 1992.

But Utah's senators Garn and Hatch want to extend that deadline well into the next century, and they have proposed a bill (S. 1872) to that effect. From NPCA's point of view, an extension won't greatly alter the effects of the phase-out on cattle ranchers; but an extension could irreparably damage the park, its plants, wildlife, and visitors.

Many park visitors come to hike through Capitol Reef's Waterpocket Fold and its environs. When the day ends or when bad weather comes up, campers and hikers look for sheltered places. All too often the park's sheltered spots—shallow caves,

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overhangs, shady areas beneath cottonwood trees—are carpeted with cow manure.

The manure is unattractive, inconvenient, not part of the park's natural features. The problem is exacerbated when a hot, thirsty hiker, in real need of water, finds that the closest waterhole has been polluted by cow feces. If this poses a health problem for the visitor, the situation is that much worse for the park's native wildlife.

Russ Butcher, NPCA's Southwest representative, testified at Senate hearings on the need to phase out cattle grazing at Capitol Reef National Park according to schedule. Besides the health problems caused by polluted water, Butcher pointed out that herds of cattle trample and destroy the natural soil crust, which is an especially vital hedge against erosion in an arid climate. Herds of livestock also destroy the park's natural vegetation (gamma grasses, certain endangered cacti, and others) and prepare the way for usurpation by non-native plants.

Mid-Atlantic Meeting Covers Highs and Lows of Region

The Mid-Atlantic Regional Council had much to discuss at their May 21 meeting. The problem of off-road vehicles (ORVs) was an obvious topic, inasmuch as the meeting was held on Assateague Island. The use of ORVs was sanctioned in the Assateague General Management Plan even though the vehicles could cause permanent damage to mud flats and beaches. Among other subjects the council considered for future action were controversies at both Valley Forge National Historical Park and Delaware Water Gap National Recreation Area.

The crucial problem at Valley Forge is the consumption of alcoholic beverages within the park. Drinking is prohibited in all Pennsylvania state parks, but alcohol is generally permitted in national parks. Young adults take advantage of this situation and use the Valley Forge parking lot as a meeting place for drinking. Often these drinkers harass other park visitors. Chief Ranger

Jack Fewlass says that these people "create an atmosphere inappropriate to a historical park." Valley Forge officials want drinking prohibited, but so far any regulation has been held up by bureaucratic snafus at federal agencies.

Delaware Water Gap was designated a recreation area (that is, multi-use) because of all the various activities that had gone on there before the park was established in 1965. The sticky issue at Delaware Water Gap is a problem with seasonal residents. Often effluence from riverside summer cabins pours directly into the Delaware, even though it is a wild and scenic river (this particular designation includes only the river, not its banks). Park officials complain that the river environment is also marred by unsightly refuse, such as old, rusting buses.

According to the legislation, seasonal residents were to have moved all their belongings off park property by April 15, 1982. The residents

filed a preliminary injunction, the judge denied their request, and the National Park Service (NPS) then became free to remove the belongings of the seasonal residents.

Another issue the council discussed is the upcoming Upper Delaware Scenic and Recreational River management plan. Authorized in 1978, the Upper Delaware system includes seventy-five miles of river

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The state of New Mexico has recognized NPCA's efforts on behalf of Bandelier National Monument with the presentation of a special award. The ceremony took place on April 17 in Santa Fe at the annual conference and banquet of the Historical Society of New Mexico, where Patrick H. Beckett, chairman of the Cultural Properties Review Committee, presented the award on behalf of Governor Bruce King.

Russell and Pamela Butcher, NPCA's Southwest representatives, were singled out for recognition because of the work they put into raising funds to repair the visitor center complex at Bandelier: More than \$60,000 has been donated by 1,700 individuals and businesses. NPCA expects restoration to begin this autumn. Above, left to right: Albert H. Schroeder (Historical Society of New Mexico), Russ Butcher, and Patrick Beckett.

corridor; and yet the federal government owns only 3.18 acres of land. Local governments and residents wanted to try cooperative management—with strict zoning and subdivision rules—rather than be forced off their land. So the land is owned by others and managed by the NPS. The council found this venture to be a new, positive direction in land and river management.

Lassen's Geothermal Base at Stake

NPCA together with the Sierra Club and the California Wilderness Coalition have filed an appeal against geothermal leasing at Lassen National Forest in northern California. The controversy over geothermal leasing in the vicinity of Lassen Volcanic National Park has been simmering for more than four years: ever since national forest officials began preparing an environmental assessment as a prelude to granting leases for

geothermal exploration and development.

In March of this year the Forest Service determined that leasing could proceed. The difficulty that NPCA sees is that by tapping the roots of one geothermal area, developers may disrupt another.

The Forest Service's determination could prove critical to Lassen Volcanic because approximately 75 percent of the park is designated wilderness, and the park was originally established (in 1916) to protect its singular geologic features. Without assurances to protect them, drilling could disrupt park areas with such steamy appellations as Sulphur Works, Terminal Geyser, Bumpass Hell, and Boiling Springs Lake, the largest hot lake in the world.

Geothermal exploration could also disturb the Eagle Lake basin, which is the second-largest natural freshwater lake in California and particularly vulnerable to pollution because it is a closed hydrologic basin. Pollu-

tion that enters, stays. (Eagle Lake basin includes eleven plants listed as rare and endangered by the California Native Plant Society and supports one of the country's largest known breeding colonies of osprey.)

NPCA believes that the Forest Service has not met its environmental responsibilities in the Lassen area. The final environmental assessments produced findings of "no significant impact" for all the sites proposed as available for leasing (a sweeping and potentially inaccurate assessment), but the Forest Service failed to consider the impact of development on the geothermal substructure of Lassen Volcanic National Park.

Study Begins on Overuse of Parks

The phrase "loving it to death" is often used to describe what is happening at national parks such as Yellowstone, Rocky Mountain, and Yosemite, where the annual number of visitors soars into the millions. The whole National Park System of 334 units receives more than 330 million visits annually.

Before the situation becomes unmanageable, NPCA believes a consistent system-wide approach to establishing carrying capacity is necessary. (Carrying capacity is the amount of use individual parks can bear.) An amendment to the 1978 National Park Service General Authorities Act mandates the establishment of carrying capacities; but the National Park Service has neither the money, the staff, nor the will to begin a complex analysis right now.

NPCA has taken on the task of studying carrying capacities in the national parks. NPCA recently selected a team of experienced researchers from the University of Maryland—professors Fred Kuss, Jerry Vaske, and Alan Graefe—to develop a method for evaluating the concept of carrying capacity, and then applying the concept to the parks.

The three major effects of visitor use they will consider are environmental (visitor impacts on wildlife),

physical (trail and streambank erosion), and social (crowding the backcountry and the like). A panel of approximately twenty-five people (including National Park Service employees, scientists, and conservationists) will review the team's work as it progresses. The project begins this summer.

Redwoods Bypass, Twenty Years of Waiting

Nearly two decades ago, the Save-the-Redwoods League launched a nationwide publicity campaign to oppose construction of a four-lane freeway through the heart of magnificent, dedicated memorial groves of virgin-growth coast redwoods (*Sequoia sempervirens*) within Prairie Creek Redwoods State Park. The outpouring of opposition by individuals and the press throughout the country ultimately encouraged the then Governor Edmund G. Brown and the California Highway Commission to favor a park-bypass alternative for the twelve-mile segment of freeway.

In 1968, the Redwood National Park was established—its boundary including Prairie Creek Redwoods State Park. In 1978, in conjunction with the Redwood National Park Expansion Act, Congress authorized \$50 million for construction of the Prairie Creek Redwoods bypass-freeway to help mitigate job losses resulting from establishment of the national park. Conservationists thought they had finally succeeded in ending the long threat of freeway destruction of the state park and in bringing an end to commercial traffic on the existing two-lane park road. But more years slipped by.

In early 1981, a "Draft Environmental Impact Statement" was issued jointly by the Federal Highway Administration, the National Park Service, and the California Department of Transportation. This document set forth a wide range of freeway routing alternatives, including "the preferred alternative" that was essentially the same route that had been agreed upon by the state of California in the early 1960s.

In December 1981, Representative

Don Clausen, in whose district the redwood parks are located, succeeded in convincing his colleagues in Congress to increase the 1978 authorization for freeway construction from \$50 million to \$105 million—the increase resulting from inflation due to the delay.

With this latest funding authorization approved by the Reagan Administration, conservationists were relieved that *at last* the bypass-freeway would be started. But yet another delay has arisen! According to a letter in March from the National Park Service to the Save-the-Redwoods League, "The fiscal year 1983 budget request does not include funding for *acquisition of the right-of-way*" [emphasis added]. In spite of Congress' special authorization of this high-priority project, it now seemed the administration (1) had approved spending the \$105 million for construction, but (2) was blocking a budget request (of approximately \$10 million) for purchase of the mostly private lands it was to be built upon. How could this be?

Representative Clausen was fortunately once again on his toes. Calling this "a must" project, he quickly called a meeting with Interior Department officials and got from them a *verbal* commitment that the administration will request funding for the park-bypass-freeway right-of-way for fiscal 1984.

Then an April 19 letter from the Interior Department to the Save-the-Redwoods League stated, "The *earliest possible year* for which funding can be considered is fiscal year 1984" [emphasis added]. That budget process begins January 1983.

And so the lengthy saga of the Prairie Creek freeway goes on—and on. Will the threat that has hung over one of the finest redwood parks for so long ever end? We wonder.

—Russ Butcher

NPCA Report continued on page 44

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Reader Interest Survey

We want to know how interesting readers found each item in this month's issue of the magazine. Please circle the number in the column to the right of each title that best describes your reaction. You may enclose comments or suggestions if you wish. Please mail the form to **Editor, National Parks, 1701 18th Street, NW, Washington, DC 20009.**

	Very Interesting	Somewhat Interesting	Not Interesting	
COMMENTARY (inside front)	1	2	3	
EDITOR'S NOTE (inside front)	1	2	3	
CAMPOBELLO (p. 4)	1	2	3	
ACID RAIN (p. 9)	1	2	3	
FOSSILS (p. 15)	1	2	3	
VOYAGEURS NP (p. 18)	1	2	3	
PORTFOLIO (p. 24)	1	2	3	
GREENLINE PARKS (p. 28)	1	2	3	
NPCA REPORT (pp. 34-44)	1	2	3	
Culture Reports	1	2	3	
ORVs	1	2	3	
Art Show	1	2	3	
Youth Corps	1	2	3	
Isle au Haut	1	2	3	
Gateway Gas	1	2	3	
Wolf Trap	1	2	3	
Peaking Power	1	2	3	
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Lassen NP	1	2	3	
Carrying Capacity	1	2	3	
Redwoods Bypass	1	2	3	
Saratoga NHP	1	2	3	
BOOKSHELF (p. 42)	1	2	3	
FEEDBACK (p. 43)	1	2	3	
THE LATEST WORD (p. 45)	1	2	3	
	Excellent	Good	Fair	Poor
How would you rate the cover?	1	2	3	4
Additional comments	_____			

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Bookshelf

Mammals of the National Parks, by Richard G. Van Gelder (Baltimore: The Johns Hopkins University Press, 1982), 336 pages, \$24.50 hardcover, \$8.95 paperback. On your next trip to the national parks, take along Richard Van Gelder's *Mammals of the National Parks* and do some wildlife watching. Nowadays our national parks and monuments are among the last places where we can see mammals in their natural environment. This handy guide, which covers sixty species of mammals commonly seen in forty-eight United States national parks and monuments, offers a wealth of useful information on where and when to spot animals in the parks. One section is devoted to describing the size, color, habits, distribution, and behavior of the animals. The book, written with a non-technical approach, is well illustrated with maps of the parks and photos of the mammals.

John Muir and His Legacy: The American Conservation Movement, by Stephen Fox (Boston: Little, Brown & Company, 1981), 436 pages, \$17.50 hardcover. Stephen Fox's latest book on the American conservation movement encompasses three books. The first is a biography of John Muir, the nineteenth century, Scottish-born naturalist and founder of the Sierra Club; the second, a chronologic history of the conservation movement from 1890 with the establishment of Yosemite National Park to 1975 with the problems of acid rain and other toxic substances; and the third, an analytic look at the conservation movement that includes a study of the evolution of conservationists from a group of zealous amateurs to full-fledged professionals. Mr. Fox's biography of John Muir is of particular interest as he is the first to make unrestricted use of Muir's personal papers, which were recently made available for scholarly research. The book is well written and well researched, full of interesting data and insight.

Channel Islands: The Story Behind the Scenery, by Peter C. Horworth (Las Vegas: KC Publications, 1982), 48 pages, \$3.75 softcover. Channel Islands National Park consists of a group of five islands off the Southern California coast that are accessible only by boat. The islands, edged by steep cliffs, teem with plant life and wildlife, such as harbor seals, elephant seals, sea otters, cormorants, and brown pelicans. Peter Horworth also recounts the human history of the islands from the arrival of the first explorers in the mid-sixteenth century to settlement of the islands in the eighteenth century. Superb color photos illustrate every aspect of the islands.

Voyageurs Country: A Park in the Wilderness, by Robert Treuer (Minneapolis: University of Minnesota Press, 1979), 170 pages, \$10.95 hardcover. Minnesotan Robert Treuer's book on Voyageurs National Park covers the rich natural and cultural history of the area from its fascinating geologic past to the vividly described lives of the voyageurs. He also examines the park's political history from the time the area was first proposed as a park to its establishment in 1975; and he studies the ongoing conflict between conservationists and those who want the park open to mechanized travel, hunting, and logging.

America the Poisoned, by Lewis Regenstein (Washington: Acropolis Books Ltd., 1982), 414 pages, \$16.95 hardcover. "Mother's milk has become so contaminated with banned chemicals that it would be illegal to sell it in supermarkets," says Lewis Regenstein in his latest book, *America the Poisoned*. This well-documented and shocking expose on how toxic chemicals are killing our environment and causing irreparable damage to Americans' health picks up where Rachel Carson's 1962 classic *Silent Spring*, left off. Mr. Regenstein documents numerous cases of chemical poisoning to show how toxic chemicals have pervaded every aspect of our lives to become the major environmental and health crisis of our times. He offers solutions and alternatives to every problem of toxic poisoning discussed.

Feedback

Toeing the Line—II

Excellent article by Owen Hoffman—"Toeing the Line" [March/April 1982]. His comments, while depressing, hit the nail on the head. My degree in environmental management and my interpretive experience hold no weight against an applicant who can sing and shoot a grasshopper twixt the eyes at 100 yards. I hate to think that my career in the National Park Service is over before it began!

Jeff Cate
Waltham, Massachusetts

I am simply outraged at the mistreatment of conservation-oriented Park Service personnel described in the article ["Toeing the Line"]. I believe that NPCA should respond by forming a committee to investigate and answer this problem. I suggest the following actions for such a committee:

- (1) determine the exact Civil Service status of employees in sensitive NPS jobs;
- (2) determine the applicable Civil Service regulations and available appeals procedures for such employees;
- (3) contact government employees unions to support NPS employees; unions such as the National Association of Government Employees (NAGE) or American Federation of Government Employees (AFGE) are very successful defenders of wronged civil servants;
- (4) in specific appeals hearings, provide public evidence of the NPS employee's competence.

These suggestions may have limited applicability, but they are worth investigating.

Peggy M. Robinson
El Paso, Texas

Bird Watching

In the March/April 1982 issue of *National Parks* you printed an article, "Everglades Portfolio," written by the Titlows. There are pictures and descriptions that seem to be in error.

The bird on page 31, called a great

blue heron, is a Louisiana heron. Spoonbills obtain food by standing in shallow water and sweeping their bills from side to side in the water, scooping up whatever they encounter, shrimp or fish. It is black skimmers that skim across the water with very thin lower mandibles in the water to catch minnows.

White ibis eat crayfish. Cattle egrets associate with cattle and eat insects stirred up by the cattle moving about in fields. Please refer to the *Audubon Society Field Guide to North American Birds (Eastern Region)*.

Joseph W. Bradbury
Ella R. Bradbury
Stratford, Connecticut

Budd Titlow replies: The bird is, indeed, a Louisiana heron and not a great blue heron. I regret any confusion this case of mistaken identity may have caused the readers of *National Parks*.

The Audubon Society Field Guide to North American Birds (Eastern Region) states that roseate spoonbills "... obtain food by sweeping their bills from side-to-side and scooping up whatever they encounter." Are there studies proving that spoonbills can't scoop food while flying? The ones in the flock I observed appeared to be doing just that.

I can find no definitive statement, in any field guide, that the white ibis eats *only* crayfish. In fact, the *Audubon* guide describes the glossy ibis, a close relative of the white ibis, as feeding on crayfish, fiddler crabs, snakes, and *insects*. The white ibis I observed was probing through insect-laden shoreline grasses.

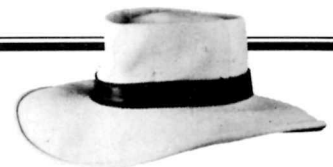
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Saratoga National Historical Park, which was created in 1938, com-

memorates that battle. Now, in 1982, a bill (S. 1540) has been proposed that would protect the park from encroaching urbanization. Saratoga was authorized for 5,500 acres, but the National Park Service has acquired only half of that acreage so far. Because of rising land prices and the Department of Interior's reluctance to purchase more parkland—even if previously authorized—it is unlikely that all 5,500 acres will be added to Saratoga.

The proposed legislation offers a reasonable alternative: Through scenic easement, donation, and acquisi-

tion of fee title, the government would gain another 800 to 900 acres (bringing total park acreage to approximately 3,500). But these are crucial acres.

Saratoga County is growing fast; and, unless some sort of protection is provided, the site of the 1777 American battle headquarters could be sold and subdivided. Park officials fear that archeological remains have already been destroyed.

As NPCA's Laura Beaty noted in her testimony, "It is time to make some final decisions on the future of Saratoga National Historical Park."

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

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Travel, Adventure, and Exploration books. The usual and the unusual. Free catalog from The Armchair Explorer, Dept. NP, 333 Bellam Blvd., San Rafael, CA 94901.

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Personals

"SUCCESS" NOT ENOUGH—Communications pro. 41, tired of life in fast lane, seeks independence, security in natural setting. Adv., PR., film, Audiovisual background. Avid flycaster. Resume. Box 266, Hingham, MA 02043.

The Latest Word

MONO LAKE THE SUBJECT OF FOUR NEW BILLS

As the waters of
Mono Lake con-
tinued to recede,

the House Subcommittee on Public Lands and National Parks held a hearing (May 18) to discuss four pieces of legislation that could affect Mono Lake's future. Two bills favor the establishment of a national monument at Mono Lake: H.R. 4057 would include both Mono Lake and the Mono Craters; H.R. 5424 would include only the lake. Another bill would repeal an act granting Los Angeles purchasing rights--at \$1.25 per acre--to lands surrounding Mono Lake. A fourth, conflicting bill would secure L.A.'s water rights to tributaries of the lake.

Mono Lake, located in California about ten miles east of Yosemite National Park, is internationally known for its volcanic islands, tufa formations, glaciated canyons, sweeping shorelines, and a majestic Sierra backdrop.

In addition, Mono Lake supports massive numbers of brine flies and shrimp that thrive in the extremely saline water. California gulls, eared grebes, and Wilson's phalaropes are but a few of the species of birds that find conditions at Mono Lake ideal.

The water demand of L.A. is threatening the very existence of the lake, however. Most of Mono's tributaries have been diverted to meet these demands. Since 1941, the lake's volume has dropped 50 percent and the salt concentration has doubled. The increasing salinity could eventually cause the annihilation of the brine shrimp and fly populations. If that happened, the lake's food chain would collapse. Already the drop in water level has made a peninsula of Negit Island, and birds have abandoned their rookeries because of coyote predation.

At the hearing, several California congressmen, the Mono Lake Committee, and national environmental organizations--including NPCA--emphasized the need for a Mono Lake National Monument and declared that the lake could be saved through water conservation efforts.

Representatives from Los Angeles opposed

this argument. According to L.A. Councilwoman Joan M. Flores, the city recognizes the threats to Mono Lake but does not see "imminent environmental collapse."

Two separate issues are at stake here: national monument status and water rights. If Mono Lake is declared a national monument, water will not immediately stop flowing to L.A. The future of water rights is now tied up in litigation with no immediate resolution in sight.

This should not, however, detract from the need to establish Mono Lake National Monument. With national monument status, resource protection would be upgraded by being transferred from the Bureau of Land Management to the National Park Service.

Ideally, Mono Lake should be incorporated into Yosemite National Park; but H.R. 4057, which designates the larger area for monument status, would be a workable alternative and the first, vital step in preserving this national treasure.

--Jean McKendry, NPCA intern

TERRI MARTIN: NPCA'S NEWEST FIELD REP

Terri Martin, one
of the National

Park Action Project representatives for the Southwest, is now part of the NPCA staff. Martin joins the Association as our Utah representative and, considering the number of threats to the Utah national parks, her contributions will be much appreciated.

NPS MOVES AGAINST ILLEGAL TRAPPING IN PARKS

The National
Park Service
(NPS) came

out with a spate of new regulations and one of the proposed changes is causing an uproar. The NPS is getting flak for its plan to strictly enforce rules that would prohibit trapping in most parks.

Only ten National Park System units in the contiguous states specifically require trapping to be allowed. (These units include national recreation areas and other multiuse parks such as Lake Mead, Gateway, Big Thicket, and the Barataria Marsh Unit of Jean Lafitte National Historical Park.) Yet, trapping has been allowed to go on in many more parks, especially in those where hunting is specifically allowed.

Now, through the new regulations, the NPS wants to do something about keeping the trappers out of parks such as Assateague

and Sleeping Bear Dunes. Because trapping is strictly a commercial activity and incompatible with the raison d'être of almost all the parks, NPCA applauds this goal. Unfortunately, trapping interests (including sportsmen's groups and states that believe their authority will be eroded by the new regulations) have convinced some of Secretary James Watt's staff in the Interior Department that it makes sense to allow trapping in all the parks where hunting is allowed. Wrong, says NPCA.

Of the other proposed regulation changes, the move to tailor management plans for individual parks is sound, as are regulations that would better protect park resources from non-native species and the like.

On the down side, the changes would:

- remove length restrictions for boats, opening the way for large vessels, such as houseboats, on our park waters.

- continue to allow snowmobiles in parks even though the vehicles disturb land, wildlife, and humans; and the NPS has neither the funds nor the staff to manage their use.

- sanction access corridors through parklands for hunters and trappers--practically an invitation to poach in parks.

The public comment period ends July 19.

Support the NPS proposals on trapping.

Write: Associate Director, Management and Operations, NPS, Dept. of the Interior, 18th and C Sts. NW, Washington, D.C. 20240.

NPCA SUES TO HALT
LASSEN SKI EXPANSION

The expansion of the ski area at Lassen Volcanic

National Park has been stopped temporarily. Because of a lawsuit filed by NPCA against the Interior Department, the judge in the case halted all planned activity until July 19 (ten days after the preliminary injunction hearing). The expansion plan includes downing 130 trees at the proposed site, constructing a 2,000-foot triple chairlift with supporting towers and aerial cables, and adding a new lodge and improved parking facilities. All this in a national park. NPCA believes the National Park Service and the concessioner have not paid enough attention to the en-

vironmental costs, which include threats to peregrine falcons and archeological remains.

SOUND CLEAN AIR
BILLS GAINING GROUND

In a dramatic turnabout, the House Energy and

Commerce Committee accepted a reasonable amendment to the Clean Air Act offered by Congressman Ron Wyden (D-Ore.). Wyden's proposal maintains a high standard of air quality protection for our parks, wilderness areas, national wildlife refuges, and other pristine lands.

The amendment also gives states the authority to maintain the air quality in other clean air areas or to allow greater levels of pollution. Although this process makes Wyden's amendment weaker than the existing law, his bill provides far greater protection than H.R. 5252, Congressman John Dingell's (D-Mich.) "dirty-air" bill. Chairman Dingell, outraged that a sound revision of the law might be reported from his committee, has cancelled further meetings until some "swing" votes can be turned around.

As of this writing, negotiations have been going on behind closed doors for several weeks--with pressure from the White House and industry groups mounting daily. It is not clear whether the "dirty-air" forces can convince enough committee members to change their votes. A Strong Clean Air Act needs all the support it can get in anticipation of a tough fight on the House floor.

On the Senate side, the Environment and Public Works Committee unanimously passed Senator Robert Stafford's (R-Vt.) proposal to keep sensible deadlines on attaining clean air standards in nonattainment (urban) areas. The committee must still decide upon 1) an acid-rain control program, 2) a provision that reduces 90 percent of sulfur-dioxide emissions from new power plants (the so-called "percentage reduction rule"), and 3) how to handle pollution emitted by old copper smelters. Thus far, the Senate Environment Committee has carefully constructed a consensus bill that is acceptable to all committee members.

The bill will face major challenges on the Senate floor, however, from less de-

sirable proposals that may be put forward by Senator Robert Byrd (D-W.Va.) and Senator Jake Garn (R-Utah).

Clean air in the Parks, NPCA's color, video-taped production, reviews the Clean Air issues. The program addresses acid rain, visibility, and PSD problems, and presents a round-table discussion by corporate representatives, scientists, and conservationists. To obtain Clean Air in the Parks, write NPCA, Dept. MH, 1701 18th St. NW, Washington, D.C. 20009.

CANYONLANDS EXPANSION WOULD BLOCK NUKE DUMP At hearings held in Salt Lake City, Utah, in late April, Russ Butcher, NPCA's Southwest representative, responded to Department of Energy plans to locate a nuclear waste dump next to Canyonlands National Park. In addition to deploring the plan, he proposed expanding the park to include the entire ecosystem of the Canyonlands Basin. In the next issue of National Parks Butcher reveals the full range of problems faced by Utah's national parks.

HIGH ROSS DAM POSTPONED BY JOINT COMMISSION The International Joint Commission (IJC) has postponed a decision to raise the height of Ross Dam in Washington state. A high dam would raise the level of Ross Lake (a national recreation area) to the extent that wild areas--such as Big Beaver Valley--and ten miles of Canada's Skagit Valley would be flooded.

Conservationists on both sides of the border oppose Seattle City Light's push to gain more electrical power by raising Ross Dam--and thus the water level--by approximately 130 feet. Although the postponement is not exactly a clear victory for opponents of the utility company's plan, it does raise enough doubts about the project to make alternatives seem more attractive. One suggestion proposes that British Columbia offer the city of Seattle a percentage of the amount of power that would be lost if the high dam proposal is denied.

Pat Goldsworthy, director of the North Cascades Conservation Council and National

Park Action Project representative, has been working to block the high dam and says, "Each time they put it off, it's one more indication that they will find another solution. The city didn't used to say that they were willing to accept alternative power rather than raise the water level."

The Joint Commission is appointing a special board to make recommendations and coordinate an agreement between Seattle and British Columbia. Composed of eight members (two co-chairpersons from the IJC, two nongovernmental experts, and one member each to represent the United States, Canada, British Columbia, and Seattle), the board should come up with a workable plan by spring of 1983. Because this is an international dispute, the State Department is also becoming involved.

If the final solution does not include a high dam, conservationists can begin action to include Big Beaver Valley in North Cascades National Park. The valley, rich in flora and fauna, is now part of the less-protected Ross Lake NRA pending the dam decision.

Seattle Light's plan to create an electrical empire goes back to World War II, when the national war effort (including power generation) overrode other considerations. As the price of a high dam has become more costly--in terms of dollars and environmental damage--the likelihood of its being constructed seems less and less certain. But the Ross Dam project "is a matter of pride and honor to the Seattle Light people," says Goldsworthy. "They've always wanted to do this and don't want to back down."

NPS PUBLIC AFFAIRS CUT TO SKELETON STAFF What at first looked like a bloodletting at the National Park Service (NPS) Office of Public Affairs has turned out to be less than that. Because of cost-cutting measures, the audiovisual department will no longer make visual records of the national parks, but will merely preserve the photographs and film on file. The public inquiries department--the people who answer millions of questions about the national parks every year--will remain at full force.

