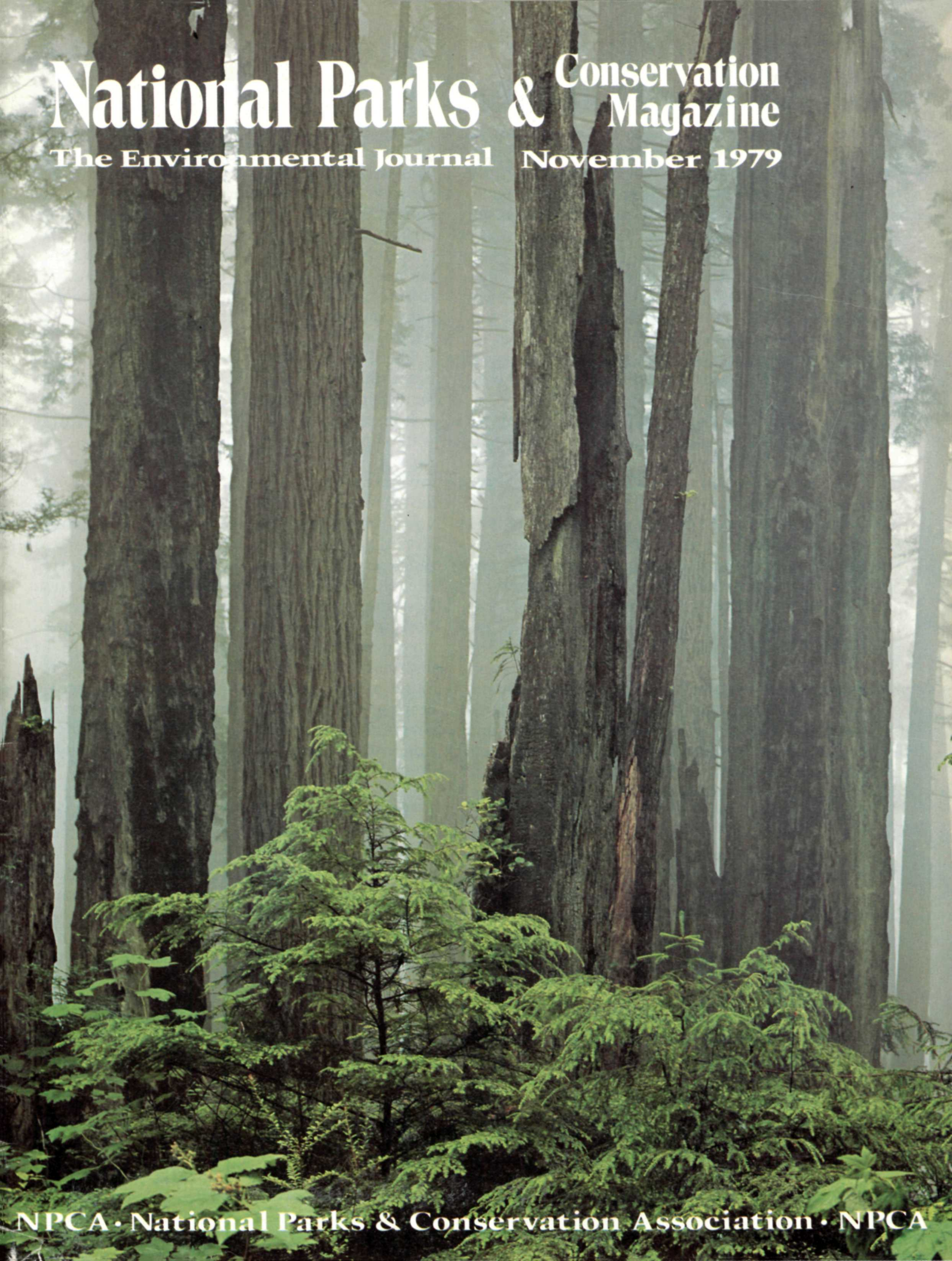
National Parks & Conservation Magazine

The Environmental Journal

November 1979



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Potomac Victory

AT LONG LAST, after a determined campaign by NPCA for more than 20 years, the Army Engineers have conceded defeat for their program to build 16 large reservoirs on the Potomac for the dilution of pollution.

The concession came in a study released in August recommending, among other things, against the construction of the Verona Dam at Staunton, Virginia, the last hold-out.

Almost simultaneously, the Department of Interior announced that the fresh water estuary of the Potomac at Washington was safe for swimming.

Earlier this year the Army Engineers completed construction of an emergency intake for pumping water out of the estuary to the filtration plants and water mains of the Washington Metropolitan Area.

The Engineers have recommended interconnections among the present sources of water for the Area and a small dam on one tributary near Washington, the latter probably unnecessary in view of the intake.

THE ORIGINAL 16-dam proposal, advanced by the Engineers in 1962, would have inundated tens of thousands of acres of good farmland throughout the Basin. It would have driven large numbers of people from their farms, homes, and communities. It would have destroyed vast tracts of wildlife habitat and woodlands. The social and economic upheavals would have been intolerable.

When fully drawn down for their intended purposes, including the flushing or dilution of pollution, or in readiness for flood storage, or in dry seasons, the reservoirs would have exposed huge and ugly mud banks or mud flats, ruinous for residential, recreational, and scenic purposes.

TO COMBAT the project, the NPCA organized the largest coalition of conservation, farm, and labor organizations in American history. The alliance included practically all of the conservation organizations, the major farm organizations on the eastern seaboard, with their state and local affiliates, and the United Mine Workers, the United Automobile Workers, and the United Steelworkers. It was incorporated eventually as the Citizens Permanent Conference on the Potomac River Basin.

The coalition was built from the grass roots up, beginning with county farm organizations, working up to the state and national farm organizations. The success of the effort proved the fundamental compatibility of the purposes of the conservation and farm organizations in the United States. It brought leading farm and labor organizations together in an unprecedented alliance. It brought hunters and non-hunters together for the protection of wildlife habitat. And it turned the tide against big dams as the predominant method of river basin management in America.

The Potomac Basin campaign of the NPCA upset the value systems governing river basin management everywhere. It broke the big-dam system as a means of flood control, substituting watershed management and flood plain protection. It challenged the promotion of hydropower for construction purposes where unsuitable and destructive. It refuted the pretext that big reservoirs are needed for recreation when natural stream valleys are available. It killed the use of reservoirs for the dilution of pollution, starting a revolution based on the elimination of pollution at source. And it demonstrated the suitability of fresh-water estuaries and coastal rivers for water-supply purposes, as contrasted with storage in reservoirs. This transformation reflects a profound reorganization of the interest-structure bearing on river basin management in American government. It represents a fundamental conversion in the outlook of the American people upon their rivers.

CENTRAL TO the approach of the NPCA and the Conference to the water supply problem of the Washington Metropolitan Area was the concept that the fresh water estuary at Washington should be used for supplemental and emergency water supply purposes in the Area.

For a long time it was impossible to convince the agencies and the public that the estuary was indeed fresh water, not salt nor brackish. It has a slight tide, and is thus deceptive.

But there the fresh water was all the time, 120 billion gallons of it, with the sun shining on it, and with the responsible engineering agencies turning their backs upon it.

The estuary was said to be polluted, and so it was at the beginning, but legislation to stop the pollution was already in process, and clean-up at source would become national policy.

Continued on page 31

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COVERS Redwoods, by M. Woodbridge Williams, NPS
Even though Redwood National Park is being expanded by 48,000 acres, people concerned about preserving the redwoods should remain involved in the park's planning process. (See page 4.)

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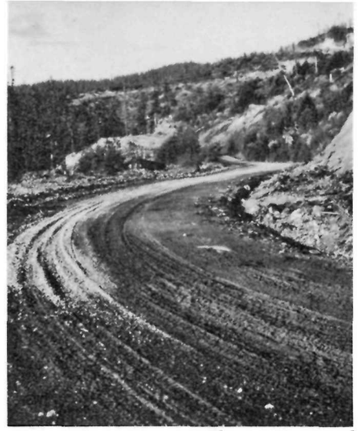
National Parks & Conservation Association, established in 1919 by Stephen Mather, the first Director of the National Park Service, is an independent, private, nonprofit, public service organization, educational and scientific in character. Its responsibilities relate primarily to protecting, promoting, and enlarging the National Park System, in which it endeavors to cooperate with the National Park Service while functioning as a constructive critic. In addition, the Association engages in domestic and international programs involving parks, forests, wildlife, wilderness, recreation, open space, rivers, oceans, pollution, pesticides, ecology, environment, population, transportation, historic and archeological preservation, natural resources, and related or comparable matters. Life memberships are $750. Annual membership dues, which include a $7 subscription to National Parks & Conservation Magazine, are $150 Sustaining, $75 Supporting, $30 Contributing, $22 Cooperating, and $15 Associate. Student memberships are $10. Single copies are $2. Contributions and bequests are needed to carry on our work. Dues in excess of $7 and contributions are deductible from federal taxable income, and gifts and bequests are deductible for federal gift and estate tax purposes. Mail membership dues, correspondence concerning subscriptions 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, allow six weeks' advance notice and send address label from latest issue along with new address. Advertising rates are available on request from headquarters in Washington.

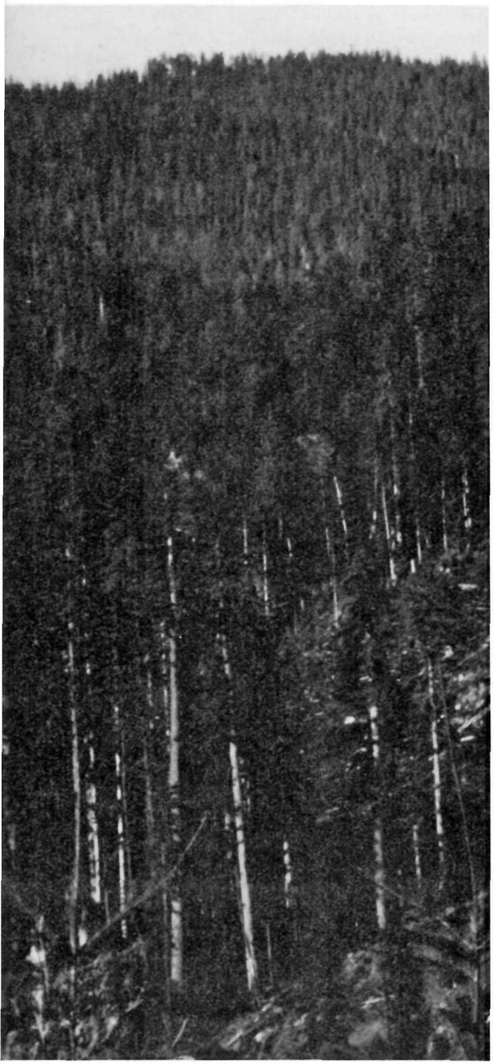


The C-Line road

Your participation is needed at this critical period
in planning for the expansion of Redwood National Park

article & photos by RANDY WALTRIP

The redwoods still need you



IT'S THE FIRST barricade on the right," the ranger had said. "When you see it, pull over and park, and start walking. But look, don't expect paradise down that road!"

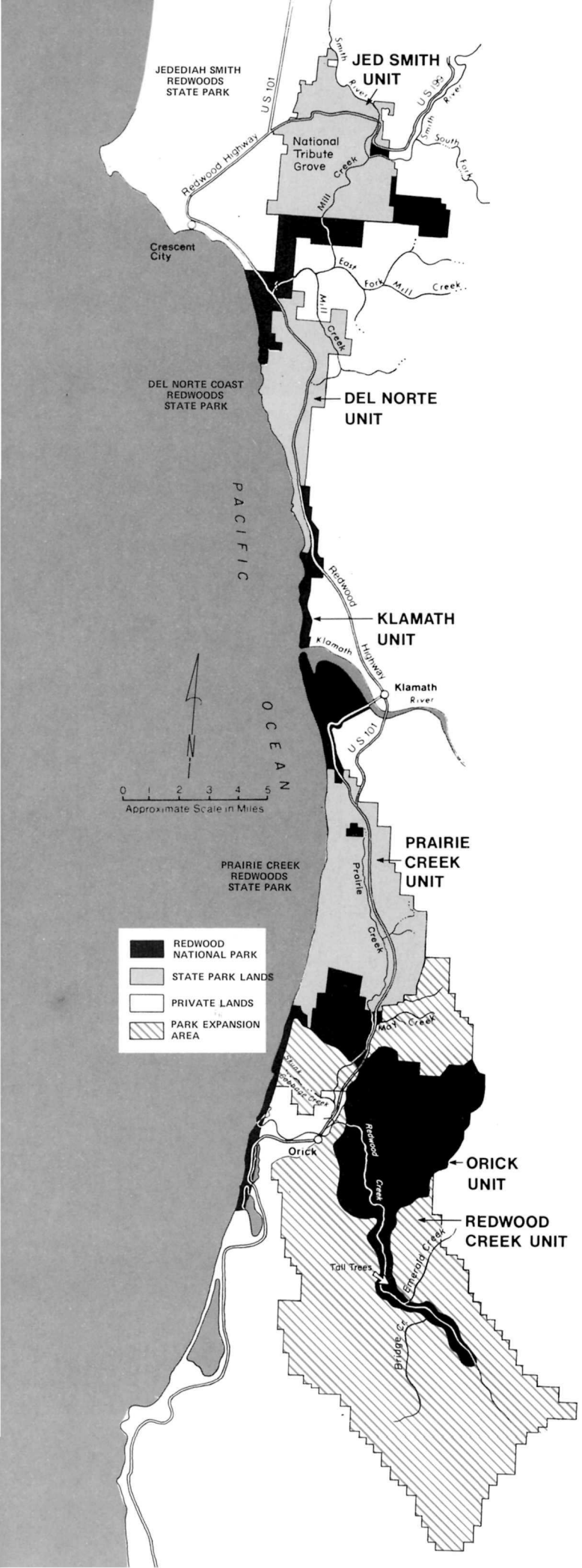
I had asked Redwood National Park Headquarters for directions to the famous Tall Trees Grove, site of the world's tallest trees and center of so much controversy this past decade. I knew there was an eight-mile trail into the grove along Redwood Creek, but I *didn't* know that the bridges spanning this rambunctious creek are removed during the off-season. Reluctantly, the woman behind the information desk told me of another route, a logging road called "C-Line" that had become park property with passage of the expansion bill in 1978. It began on a ridge high above the smoky-green waters of Redwood Creek.

Following her instructions, I drove up Bald Hills Road, located the barricade, and parked my car. Then I began to walk. For six long miles the C-Line skidded down a mountainside, past a mausoleum of tragic stumps and ravaged earth. Then, at the border of that swath of virgin redwood forest conservationists have nicknamed "the worm" (the resemblance was at one time strictly political), two outhouses and a small wooden stairway announced the beginning of the final, one-mile march to Redwood Park's Tall Trees.

I was standing there now. I had already seen the Tall Trees, had walked beneath their incomparable spires, and had lunched beside their sprawling shadows on the banks of the creek. Now I was standing there at the top of the little stairway thinking of the long, dreary trudge back to my car and remembering, a bit wistfully, something else the ranger had said to me. "If you wait till summer," she had called as I was leaving, "you can take the bus."

CRESCENT CITY, California, may seem like an odd place to build a national park headquarters. Visitors accustomed to finding their visitor centers buried in the splendor of a Yosemite or Yellowstone will wonder at the wisdom of erecting such a hallowed structure between a Safeway supermarket and a Ben Franklin department store. But there is method to this madness. Locating park facilities outside the boundary helps protect the resources of the park. Besides, putting Redwood National Park Headquarters smack in the middle of this fish-and-timber town is perfectly symbolic of the park's brief and troubled history.

When President Carter signed legislation in 1978 expanding Redwood National Park from 58,000 to 106,000 acres (at an estimated cost of $500 million), included in the new law was a directive requiring that the Park Service submit to Congress a general management plan (GMP) for Redwood by January 1980. The park has existed, officially, since 1968; but any practical attempt at planning was considered impossible until the issue of expansion had been settled.



After all, a GMP written for half a park is a very poor GMP. Consequently, Redwood has developed a reputation for being, simultaneously, our most expensive and most invisible national park.

For instance, tourists traveling California's Highway 101, which bisects the park, commonly drive right through Redwood without realizing where they have been. (There is no entrance station and very few signs.) Local merchants claim the most frequent question they hear from travelers regarding Redwood National Park is "Where is it?" And unlike the majority of our national parks, Redwood has no well-developed trails system. What trails there are—excepting the seasonal Redwood Creek Trail and a four-mile Coastal Trail near the mouth of the Klamath River—are within the adjacent state parks.

All of which adds up to something considerably less than the thriving, one-million-visitor-days-a-year park proponents had originally forecast back in 1968. (The actual figure is closer to 495,000 people.)

Wheels are turning in Crescent City these days, though, and winds of change are blowing. Acting on its congressional mandate, the Park Service held a series of public workshops throughout California and southern Oregon during the summer of 1978, and in December 1978 released a document, called "Springboard," that outlines three separate developmental alternatives for Redwood, culled in part from the mélange of ideas expressed at the workshops.

Grant Werschkull, Redwood park planner, says public response to proposed alternative plans has endorsed no single alternative, but combinations of the three.

The differences between the three alternatives, labeled A, B, and C, are significant. Alternative A would do little more than upgrade the signs and improve interpretation in the park, while alternative B would involve major development. Included in this proposal are new trails, new roads, new campgrounds, and new buildings. Alternative C is, essentially, a scaled-down version of B, with the addition of a shuttlebus system in various portions of the park.

Once public reaction to these three proposals was evaluated, a draft general management plan (including a draft environmental statement) was written and made public late in September 1979. Additional public review on the draft plan occurred in mid-October. The general management plan itself is due to follow sometime before the first of the year.

Not every idea, however, will have to wait for implementation. A complex program of watershed rehabilitation on some of Redwood's heavily logged slopes began soon after the expansion bill was signed, and an interim-use plan designed to mitigate immediate pressures on the park was utilized this past summer. This plan included two new picnic areas and (you guessed it) a shuttlebus on the C-Line Road.

THE PEOPLE who devised the three alternatives in the "Springboard" document—and who will ultimately write a general management plan for Redwood National Park—are called park planners. They work on the second floor of the Crescent City headquarters.

Talking with the planners, one quickly understands that the years of bitterness between Redwood National Park and the local communities have not been forgotten. Mike Donnelly, captain of the planning team who previously assisted in planning operations for Yosemite, Canyonlands, and Cuyahoga Valley, explained, "We are keenly aware of the adverse economic effects this park has had on the local towns. We'd like to do what we can do to offset these effects. That means looking at the local communities as if they were a concession, and letting them handle as much of the services demand as possible. We don't want to infringe, for instance, on the profits of the private campgrounds by building a gigantic, in-park campground."

To help them assess the effect their proposals might have on the various communities in the area, the planners have hired a team of consulting economists from nearby Humboldt State University.

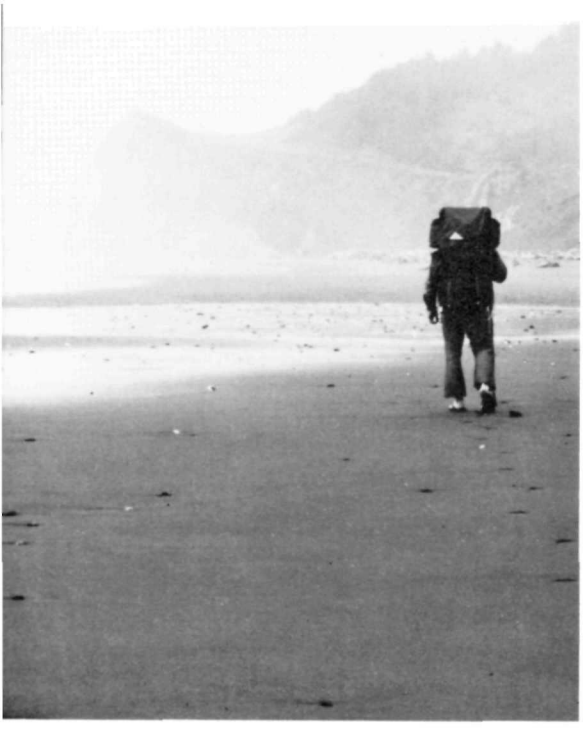
Being a park planner, Mike will tell you, is "the most frustrating job in the world. You rarely see anything you've worked on actually implemented. So I've become more cautious. And I think caution is especially important when working with Redwood, because the inflated claims of the past have always been held over our heads."

I asked about the public's reaction to the three proposals already published and was shown to the desk of Grant Werschkull, a young, red-bearded man who is charged with analyzing and cataloging the mailed responses. He pulled out a black binder he had compiled containing all the letters thus received, and began flipping the pages. "Most of the people who've written us," he explained, "haven't really come out for one of the alternatives in particular. Instead, they've endorsed a concept here or a concept there, which is fine, since the three plans were just broad ways we developed of organizing the material. Here's a letter, for instance," he pointed to one of the pages in the notebook, "from a person who likes the idea of rerouting Highway 101 around the park, which is in plan B, and also likes the idea of developing a shuttlebus system, which is in plan C. But he *doesn't* think kindly of building a road and campground in the Rodgers Peak area, which is on the ridge opposite the Tall Trees Grove.

"That should give you an idea of the 'typical' response," he smiled. "We're extremely pleased with the thoroughness of the public's review."

IN WHAT planners call the Klamath District, there is a gentle, four-mile trail that begins on a grassy bluff above the Klamath River and ends at a sickle-shaped beach called False Klamath Cove, passing along the way imposing groves of sitka spruce and red alder and treating the hiker to breath-stealing vistas of the Pacific Ocean. This is called the Coastal Trail, and

One particularly good proposal in the Redwood plans is to extend a Pacific Coast Trail the entire forty-mile length of Redwood park's rugged coastline.



Redwood park headquarters were built outside the park boundaries.

more than anything else it epitomizes the promise of Redwood National Park—not because of what it is, but because of what it may one day become.

Included in the planning proposals are various recommendations dealing with the trails system in the park, some among these being the addition of hostels, of new backcountry campsites, and of an all-season trail to the Tall Trees. Unquestionably the most exciting of the proposals would transform this pleasant little trail into a momentous forty-mile Pacific Coast Trail extending the entire length of Redwood Park, giving hikers an unparalleled view of some of California's most rugged coastline.

I asked Grant Werschkull about the prospects for this trail, and he shook his head. "I hope it comes to pass, but I don't know if it will. People haven't talked too much about the trails system, and that's a real shame. Redwood could have a really first-rate trails system."

He sat quietly a minute, looking out a window. "You know," he said, "it would be a real shame if the people who fought so long and hard for this park never take the time to participate in its planning. It could be a great park." ■

Free-lance writer Randy Waltrip has hiked extensively in Redwood National Park and has closely followed its political history for several years.

Message to Members

HELP PLAN REDWOOD

The provisions contained in the assessment of alternatives for development of external visitor facilities and a public transportation system reflect the regional planning concepts for park development proposed by NPCA a decade ago. Such provisions are basic to NPCA's philosophy for wise management of our national parklands.

It's not too late for you to become involved in planning efforts for Redwood National Park. Write to the park superintendent to request a copy of the draft general management plan and other pertinent documents and press releases about plans for Redwood. Send the superintendent your written comments on planning proposals.

Superintendent
Redwood National Park
Drawer N
Crescent City, CA 95531

In addition, write NPCA for a copy of "How to Help Plan Parks" (free) and *Citizen's Action Guide to the National Park System* (please enclose check or money order for $1.50 payable to NPCA).

FAO PHOTO BY A. DEFEVER

TROPICAL RAIN FORESTS: Whose hand is on the axe ?

Unless quick action is taken, much of the world's tropical moist forests will be destroyed by the end of this century

by NORMAN MYERS

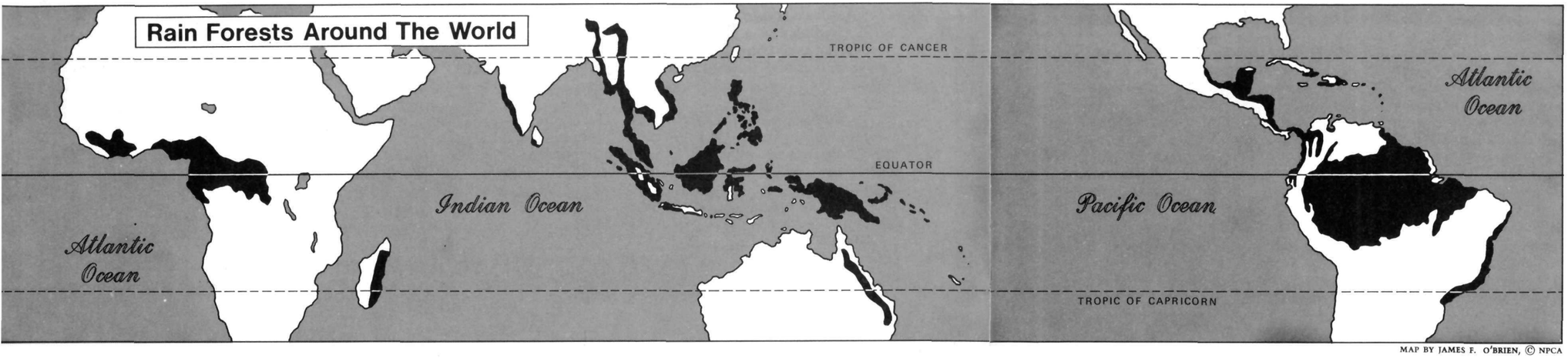
TROPICAL MOIST FORESTS are by far the richest ecological zone on earth. Although they cover only one-twentieth of the earth's land surface, they could well harbor as many as 40 to 50 percent of the earth's 5 to 10 million species. At the same time, the biome has been less explored by scientists than any other. We now know more about certain patches of the moon's surface than we do about many tracts of tropical forests. In 1972 a Stone Age tribe was discovered in the Philippines, separated from the outside world by a mere 15 miles of forest but apparently isolated for millennia.

At the same time, tropical moist forests are being overexploited and generally degraded more than is the case for any other biome. Many authoritative scientists believe that, by the end of the century, much of the biome will have been reduced to impoverished remnants, if not destroyed altogether. The present rate of destruction is put, roughly speaking, at somewhere between 110,000 and 200,000 square kilometers per year.

This "average rate," amounting to 20 to 40 hectares a minute, tells us what is happening to the biome overall; but it does not say much in terms of what is actually happening in individual countries. In some areas the situation is more critical than in others. The lowland forests of the Philippines may be gone by 1985, and something the same could apply to Malaysia and to several countries of West Africa and Central America. By the end of the century the bulk of Indonesia's forests could well be overlogged by multinational timber corporations and overrun by shifting cultivators. Much the same dismal prognosis holds good for parts of Colombia and Peru, and for extensive parts of eastern Amazonia in Brazil. By contrast, a good half of the Zaire Basin, featuring sparse human populations and endowed with appreciable mineral deposits to finance development programs, may survive little changed by the end of the century.

TO THE OUTSIDE observer, the most active agents in degradation and destruction of tropical moist forests often seem to be local settlers, farmers, and logsmen. Much of it, however, is the result of large-scale commercial forestry, including that carried out by multinational timber corporations based in North America, Japan, and Europe. These corporations supply the capital, skills, and technology without which Indonesia, Philippines, Ivory Coast, Liberia, and other countries would not be able to exploit their forest resources at such headlong rates.

The timber cutters are acting in response to marketplace pressures on the part of affluent nations. In



MAP BY JAMES F. O'BRIEN, © NPCA

A slash-and-burn field in the Dominican Republic that had been cleared of trees and planted to corn begins to erode. Native cultivators move on to clear new fields when old fields lose fertility after a few years. This agricultural technique has been practiced for centuries. With modern population growth, though, tropical forests are under increasing pressure worldwide by such cultivators, by land-clearing for grazing, and by commercial logging operations.

recent years, there has been a booming demand for the kinds of timber that make up more than 90 percent of tropical moist forests, *viz.* hardwoods. These specialty woods—some of them uniquely tropical—are favored for housing construction, fine furniture, plywood, veneer, and particleboard. Hardwood forests of temperate zones have been steadily depleted, or are being protected from logging to meet environmental interests. As a result, exploitation pressure is increasingly directed toward tropical forests. In 1950 developed nations imported 4.2 million cubic meters of tropical hardwoods, and in 1973, 53.3 million cubic meters. They are projected to take 95 million cubic meters by the year 2000. Of course, tropical regions use a lot of hardwood timber themselves. But the amount has only doubled since 1950, whereas developed-world imports have increased fourteen times. The total surpasses consumption by all tropical countries combined.

A second prominent factor in this scene of misuse and overuse of tropical forests is the cattle rancher, especially in Latin America. In order to meet growing demand in affluent countries for "cheap"—i.e. noninflationary—beef, rain forests in many parts of Central America and in eastern Amazonia are being cleared for grazing lands. Fast-food chains in the United States now find it more economic to obtain hamburger beef from areas of Central America that often were virgin forests but are now cattle-raising pasturelands, than to purchase their meat from domestic sources in the United States. During the 1960s Central America's beef production increased by almost 100 percent. The additional beef did not go into local stomachs, however; almost all of it was exported to the United States. A similar pattern applies in Brazilian Amazonia, where an increasing number of ranching enterprises there are foreign owned; for example, the King Ranch of Texas, Mitsui from Japan, Liquigas from Italy, and Volkswagen from West Germany—all producing beef primarily to meet export markets.

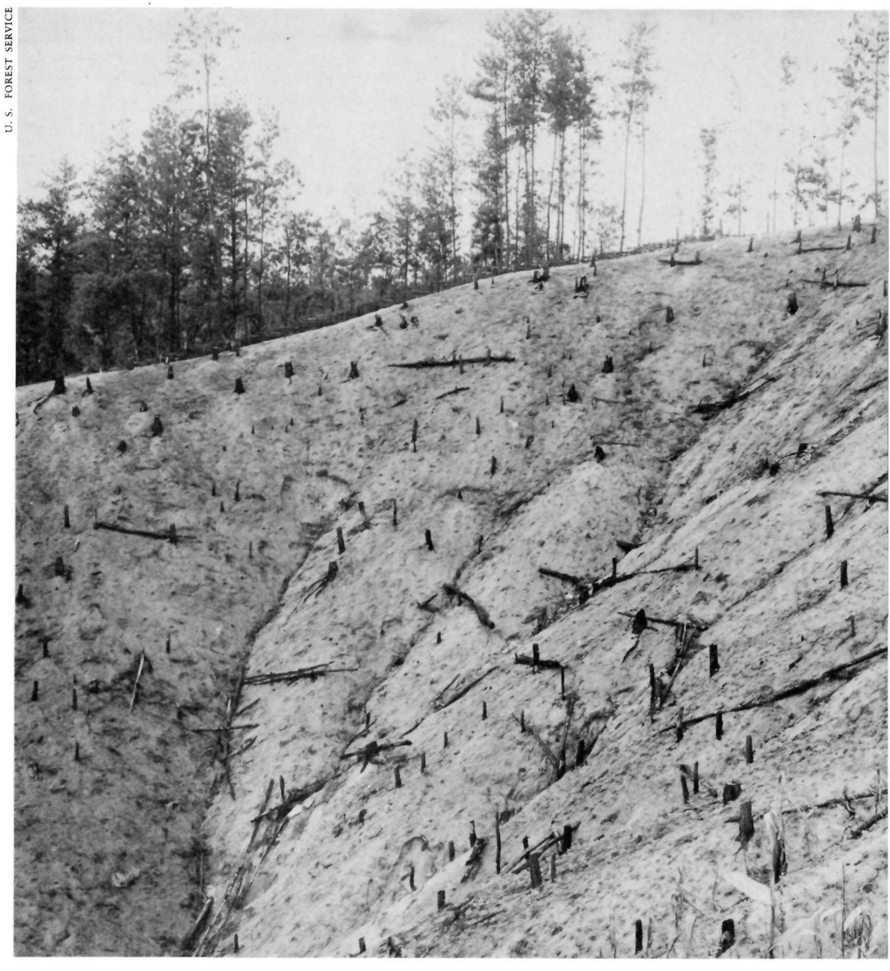
A third major agent in forest destruction is the slash-and-burn cultivator. (*See* "Slash & Burn in the Tropical Forests," by Jay G. Hutchinson, *National Parks & Conservation Magazine,* March 1973.) As long as their numbers were sparse, these farmers could operate as shifting cultivators, with a style of agriculture that enabled them to make sustainable use of the forest environment. But their numbers have now increased to a point where cultivator communities find themselves with insufficient space to move around in, whereupon they tend to make intensive as well as extensive demands on forests, until local ecosystems can no longer recover. To stem the growing trend of slash-and-burn destruction, it is necessary to step up the sustainable productivity of the cultivator's croplands, so that he senses less incentive to move into fresh tracts of forest every few years. Improved agriculture, however, requires fertilizer if a patch of cropland is to stay productive year after year. With fertilizer prices high due to rising oil prices—and kept high because of excessive fertilizer demand on the part of rich countries (Americans and Europeans use as much fertilizer on their gardens, golf courses, and cemeteries as all slash-and-burn cultivators put together)—the forest farmer sees little opportunity to alter his style of agriculture.

These, then, are some of the "resource relationships" that operate among the global community—and hence the "economic-ecologic linkages" between people chopping down forests in the tropics and people living thousands of miles away. Whose hand is really on the axe?

IF TROPICAL moist forests are substantially eliminated, or grossly degraded, the consequences will be many and varied. For starters, the tropical countries in question will lose a source of potentially renewable foreign-exchange earnings through their hardwood exports. By the same token, rich-world countries, by fostering unsustainable exploitation of tropical forests, will lose the prospect of supplies of specialty woods in the future.

More significant, however, are "ecological repercussions" for the global community. Apart from environmental impoverishment on a local scale (reduced rainfall, increased runoff, erosion, etc.), the adverse consequences could be felt much further afield. For example, it is believed possible that there could be disruption of climatic patterns in temperate zones, to the extent that there would be reduced rainfall in the grain belts of North America—with all that implies for America's capacity to feed itself and others in an ever more hungry world.

IN JUNE 1978 the U.S. State Department and the Agency for International Development (AID) called a conference to assess the problem and to recommend an appropriate U.S. policy and strategy on tropical forests. The meeting concluded that it would be in the United States interest, as well as that of other countries, for tropical moist forests to be better conserved. To point up a specific instance, Dr. Frank Wadsworth, head of the U.S. Tropical Forest Research Center in Puerto Rico, ob-



U.S. FOREST SERVICE

served that, at present rates of siltation, the Panama Canal will be unable to handle large-size ships by the time the new U.S.-Panama Treaty comes into effect. (The United States and Panama have now launched a multimillion dollar project to reforest the watershed surrounding the Canal.)

As a result of this conference the United States is now pursuing a series of initiatives to conserve tropical moist forests. In general terms, the United States will try, through "consciousness raising" activities, to spread the message concerning the challenge of tropical rain forests, and to get the topic on the political agenda of the community of nations. In more specific terms, the United States will support a major "policy push" on the part of the World Bank and other agencies in favor of forestry projects that support environmental values such as watershed health. Tropical countries will be urged to set aside many more parks and reserves. Ecologists propose, as a best-guess estimate, that between 10 and 20 percent of the tropical rain forest biome should be set aside under protected status, compared with the approximate 2 percent that is presently set aside. (In an inspired action, the newly elected President of Brazil, Sr. Joao Baptista Figueiredo, has just declared the National Park of Pico da Neblina in Amazonia, covering 8,500 square miles—an area about the size of New Hampshire.) In more specific terms still, the U.S. government is to direct much greater attention, plus skilled personnel and finance, to tackle the overall problem; for example, there will be expanded support, through AID, for fuelwood plantations throughout the tropics, in order to relieve exploitation pressures on virgin forests (an expensive proposition, possibly as much as $2 billion).

In direct response to a Conference recommendation, the U.S. government established a federal Inter-Agency Task Force on Tropical Forests, which includes the departments of State, Agriculture, and Interior; AID; and other agencies concerned. This initiative has been balanced by a similar setup on the part of nongovernmental organizations. The two groups will work together—but the government will be active only to the extent that it feels it is not going too far beyond what U.S. citizenry desires.

So, citizens, your government needs your support and encouragement on this issue. Write your senators, congressmen, and President Carter and tell them that you are concerned about tropical deforestation, and urge greater leadership on the part of the United States to address the situation. Above all, make it plain that you want something done soon! ■

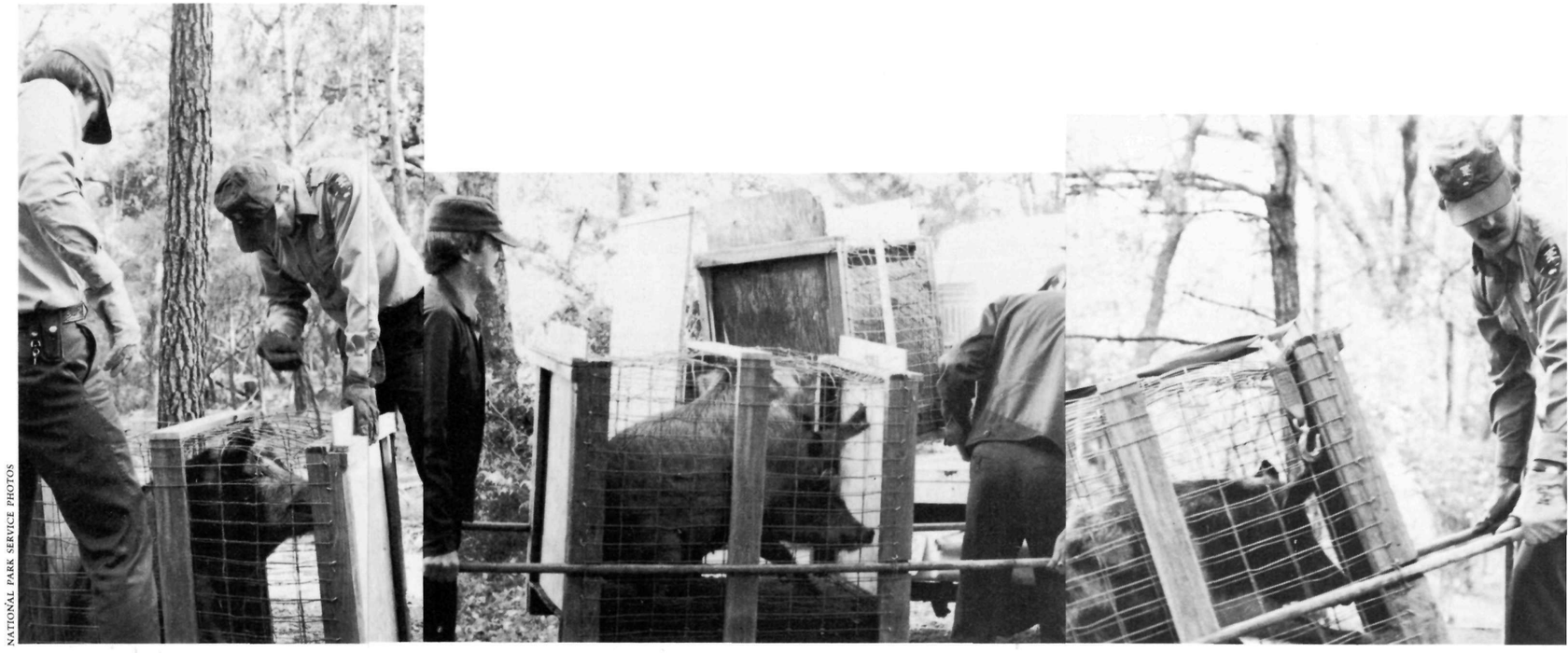
Dr. Norman Myers, wildlife ecologist and citizen of Kenya, writes, photographs, and makes films on wildlife topics. In July 1979 he published a book, *The Sinking Ark*, dealing with the general problem of disappearing tropical forests and threatened species (Pergamon Press, $8.95).

Workmen clear the way for logging operations in Ceylon.

FAO PHOTO BY E. SCHWAB

To protect loggerhead sea turtle nests
and preserve habitat
the Park Service
is removing feral hogs
from Cumberland Island National Seashore

by NANCY R. DAY



NATIONAL PARK SERVICE PHOTOS

Cumberland's little piggies are going...

ON A MOONLIT summer night at Cumberland Island National Seashore, Georgia, a visitor may be lucky enough to spot an Atlantic loggerhead sea turtle lumbering up the beach to dig her nest in the dunes.

One of a threatened species whose nesting sites along the Atlantic coast are being eliminated by beach developments, the loggerhead still returns to this largest and southernmost of Georgia's barrier islands to lay her eggs. After burying a hundred or more eggs in a hole she scrapes in the sand, this now rare creature returns to the ocean, to be followed several months later by her tiny hatchlings.

As recently as four years ago, few of these baby sea turtles ever reached the sea. Feral hogs sniffed out the nests and scattered and devoured the eggs before they could hatch. When nesting studies indicated that the hogs were destroying about 80 percent of Cumberland's loggerhead nests, however, the National Park Service acted to save the sea turtles. By means of an intensive live-trapping program, they set out to remove all the feral hogs from Cumberland Island.

FERAL HOGS—that is, once-domesticated hogs gone wild—had roamed Cumberland Island for more than four centuries by the time the Park Service hog removal program was launched in 1975. Not native to North America, the first swine were introduced here in the sixteenth century by Spanish explorers. Thus, Cumberland's feral hogs are the descendants of a herd that once fed the island's Spanish mission of San Pedro.

Set loose by the Indians who eventually destroyed the mission, the hogs adapted well to life in Cumberland's woods, which afforded them freshwater ponds and marshes for drinking and wallowing; a palmetto understory for protection; pine needles for bedding; and plentiful forage.

Because the island's nineteenth century plantation owners allowed their domestic swine to range free to root in the forest, Cumberland's feral hogs today are a mixed breed, combining strains of feral European swine with domestic Hampshire swine. Though not as large, wily, and dangerous as wild boars, they are hardier, more bristly, and flatter-headed than their domestic counterparts. Many are dark in color, but they range through every conceivable color and combination of colors, including the spots common to domestic pigs. Although some feral hogs may weigh as much as 300 pounds, they average from 100 to 200 pounds. As hogs adapt to a free-ranging life, their size decreases with each generation in the wild.

RAZORBACKS, as the feral hogs are called locally, are sexually mature at six to eight months and then start breeding at an alarming rate. Indeed, they have been called the most prolific large mammal in the United States. When food is sufficient, a feral sow can produce two litters a year, sometimes containing as many as ten piglets apiece. Because of Cumberland's mild winters and the fact that feral hogs have no predators except humans, their chances of survival are high. In fact, says the national seashore's superintendent Paul McCrary, if left unchecked, a decimated feral hog population can build back to its original level in three years.

The hogs are voracious, undiscriminating, and highly efficient eaters. Their snouts are perfect for plowing up earth to uncover nuts, roots, worms, and grubs; and their sense of smell is keen. These qualities make them formidable competitors for food. Acorns—produced in abundance by Cumberland's many live oak trees—are their favorite fare, and an adult hog can consume more than seven pounds of them a day.

The hogs supplement their diet of acorns with hickory nuts, palmetto berries, and muscadine grapes in season, along with a variety of roots and tubers and, in spring, the succulent new shoots of grasses, herbs, and foliage. Their fondness for pine cones and pine seedlings has earned them the nickname "piney woods rooter." They also feed on snakes, lizards, frogs, turtles, insects, birds, and mice.

Although a study of the possible impact on island vegetation of all Cumberland's feral animals—cattle, horses, and hogs—is now under way, the exact effects the feral hogs have had on other animal populations, forest ecology, and soil erosion have not yet been determined. Their rooting does destroy forest floor vegetation; it may be found to be disturbing burrowing rodents and ground-nesting birds as well. Wallowing could be disturbing waterfowl habitat.

Whatever the results of the study, however, there is no doubt that—unless controlled—Cumberland's feral hogs pose a serious threat to the nesting loggerhead sea turtles and contribute to dune erosion by destroying stabilizing plants.

MORE THAN A THOUSAND feral hogs have been removed from Cumberland Island to date as a result of the Park Service's live-trapping program. Because feral hogs are neither as wary nor as aggressive and powerful as, for example, the wild boars that inhabit Great Smoky Mountains National Park, they are both easier and cheaper to trap. Thus, the cost of Cumberland's hog removal has

NATIONAL PARK SERVICE PHOTO

... to market

averaged only $30 per hog as opposed to as much as $200 or more for the removal of a single wild boar elsewhere.

Peak trapping time coincides with the hogs' peak feeding time—from about 8:30 p.m. to 2 a.m. The wood and wire traps are baited with corn and placed where hog rooting activity is heaviest. Trapped hogs are transferred to a central holding pen until forty or fifty have been accumulated.

They are then claimed by Lucy Ferguson, one of Cumberland Island's three major private landowners. A life-long island resident, this feisty octogenarian inherited land purchased before the turn of the century by her grandfather, Thomas Carnegie, steel baron, and brother of philanthropist Andrew Carnegie.

"Miss Lucy" now operates her family home, Greyfield, as a guesthouse and supplements her income by raising cattle, hogs, and quail. Uncertain of how Park Service ownership would affect the island her family had been so instrumental in preserving, Miss Lucy at first opposed the plan to remove the feral hogs. To her way of thinking, the hogs served to control the snake population, clear the forest floor, and thin out the baby oaks.

Now, however, she has reached a cooperative agreement with the Park Service whereby she arranges to remove the trapped hogs from the island in return for the proceeds from their sale to farms and slaughterhouses on the mainland.

AT PRESENT, there are probably between three hundred and four hundred feral hogs remaining on Cumberland Island. According to Superintendent McCrary, the Park Service hopes to continue the trapping operation until all the hogs have been removed from the island. Although Cumberland's dense foliage and swampy terrain may make it impossible to achieve this goal, the hog removal program has already greatly reduced the amount of damage being done to the seashore by this nonnative species.

In the past two years, no loggerhead turtle nests within a five-mile-long study area have been destroyed by hogs, and the island's loggerhead nesting population has held its own. Superintendent McCrary also reports that dune damage has greatly decreased and that the dune system is returning to normal.

Clearly, the Park Service's hog removal program has proved to be a necessary and effective step toward preserving the special qualities of Cumberland's wild and beautiful island habitat. ■

A free-lance writer from San Francisco, Nancy Day was captivated by Cumberland Island during two recent visits.

NPCA at work

OFFROAD VEHICLES

Park Service tightens controls on snowmobiles in new nationwide policy

The Park Service recently issued a final new nationwide management policy controlling the use of snowmobiles in national parks outside Alaska that NPCA called a "reasonable and justifiable" step toward limiting the proliferation of these machines in some of the nation's greatest wild parks.

Although NPCA does not believe that there is a need for snowmobile use *anywhere* in the national parks, this Association welcomed the recent announcement as containing great improvements over a draft policy issued several months previously.

The Park Service's final wording follows closely along the lines of some key NPCA recommendations.

The policy calls for restricting use of snowmobiles to unplowed roads and frozen lakes used by motorized vehicles at other times of the year and requires that even these uses be approved as part of the general management planning process for each park unit. These limitations would seem sufficiently stringent at least to check the spread of snowmobiling in parks and thus alleviate stress to wildlife populations and other park resources. (Snowmobile use in Alaskan NPS areas will be managed under special regulations being developed.)

The real test of the new policy's effectiveness, however, will be how it is

Continued on page 24

LASSEN

New scars on geothermal site intensify controversy

Despite protests over destructive geothermal exploration within Lassen Volcanic National Park during 1978, Phillips Petroleum unexpectedly came right back again this September.

Phillips cavalierly had a trench cut 200 feet long, 20 feet wide, and 8 feet deep—without giving the NPS any advance notice. In September 1978 the company had leveled an area the size of a football field, drilled down to 4,000 feet, and then moved out.

All this activity is taking place on a private park inholding owned by thirty individuals and corporations including something called the Andrus Trust and leased to Phillips. An Interior Department representative verified that "neither Interior Secretary Andrus nor any member of his family" is involved in the Trust.

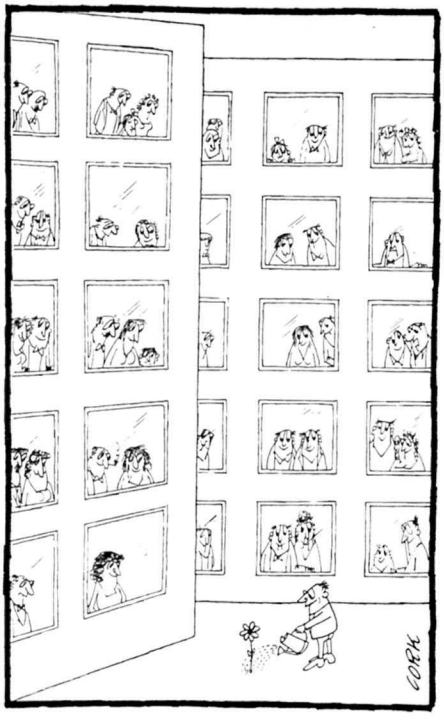
The inholding is less than fifty yards from Terminal Geyser in the park, one of the unusual volcanic and geothermal features that exploration and development on the inholding could dry up. (See October 1979 issue.)

Continued on page 26

GATEWAY

Sandy Hook conference

On September 21, 1979, NPCA and the Association's Monmouth County Conservation Education Committee sponsored a conference of several hundred citizens to discuss the future of Gateway National Recreation Area's Sandy Hook unit. The meeting brought together fourteen local organizations to explore questions on transportation to the beaches and preservation of Fort Hancock, the historic harbor Army post and lighthouse at the north end of Sandy Hook. Watch for a full report in December.



CANAVERAL

Moon rockets and mud hens revisited

When the blast of rockets subsides at Cape Canaveral and the cameras have ushered all the Apollo moonshots and the Skylab launches and the Gemini flights safely off into space, tens of thousands of ducks, majestic wading herons, pelicans, and other wildlife go back to business as usual in the ponds and marshes around quiet launch pads.

In fact, Canaveral National Seashore, an NPS unit that coexists with NASA's space program, protects a critical waterfowl wintering area in Florida and twelve endangered species including loggerhead turtles, manatees, American alligators, and southern bald eagles. Use of the area has always been rich and varied. Indians, explorers, soldiers, citrus growers, canal builders, and astronauts all have left their mark on the Canaveral area; but nevertheless it remains one of the least disturbed coastal segments remaining along the nation's subtropical shoreline and one of the very last sections of undeveloped beachfront in Florida.

Establishment of the Canaveral National Seashore in 1975 placed about 60,000 acres of barrier beach, wetlands, and submerged lagoon within the National Park System, but the seashore poses special management problems for the National Park Service because of its complicated ownership pattern.

Although NASA was instrumental in obtaining protection for natural areas in the region [see "Moon Rockets and Mud Hens," January 1975], the problems stem from the fact that NASA retains principal authority for 40,000 acres within the seashore. (Some of that acreage within seashore boundaries is to be managed for fish

Continued on page 23

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NPCA 15 YEARS AGO

A Redwoods National Park

"In 1917," wrote a former executive secretary of the National Parks Association, "three men who were exploring in northwestern California the most extraordinary forest that the world, perhaps, has ever produced . . . visioned a Redwoods National Park . . . to consist of the noblest forest of them all; and tributary to it, lead-up from north and south, a procession of lesser Redwood parks, State, county and perhaps private."

The executive secretary was Robert Sterling Yard, speaking in an early 1926 issue of *National Parks Bulletin,* as the Association's official publication was known then; and the men of whom he spoke were three naturalists and conservationists of the time: Henry Fairfield Osborn, president of the American Museum of Natural History; Madison Grant, president of the New York Zoological Society, and John C. Merriam, president of the Carnegie Institution of Washington and founder of California's Save-the-Redwoods League. The "noblest forest" they were exploring was that of the California Coast redwoods, which paralleled the Pacific shore for nearly five hundred miles in a lacy green canopy perhaps twenty miles wide: a botanically unique and scenically wondrous canopy which rose here and there into such proportions as to provoke a scientist of the day into saying that nowhere since the beginning of time had there existed a more majestic forest. Robert Sterling Yard thought that the Coast redwoods were a national possession no matter who held title to the lands they occupied. They were American redwoods, he said, and not Californian. He might well have gone farther, and declared the huge botanical relict trees to be the esthetic and scientific property of the whole world. . . .

But the old dream of a great redwoods national park never materialized, although the state and other preservations did. Of the original Coast redwood habitat, estimated at somewhere between one and a half and two million acres, there is under national preservation about 485 acres—perhaps five one-thousandths of 1 percent of the whole—in the Muir Woods National Monument just north of San Francisco; and that the donation of a generous congressman nearly sixty years ago. Outside the bounds of this and the state parks, and a few small county, city, and private preservations, the chain saw and the tractor work busily at the remaining stands of virgin redwoods. . . .

And so conservationists have been deeply gratified over the outcome of a recent White House conference attended by high government officials and representatives of national conservation organizations, including this Association. At the meeting, the President expressed his concern over the remaining redwood forests and directed the Interior Department to make a full-scale study of a possible redwoods national park. A preliminary National Park Service study, financed by the National Geographic Society, has centered on an area in the very heartland of *Sequoia sempervirens*—a tract of magnificent virgin forest just inland from the Pacific in northern California's Humboldt County, on Redwood Creek. Here would be an opportunity—and probably one of the three remaining opportunities—to establish a redwoods national park, of perhaps 30,000 acres or more, adequately protected in its watershed both above and below. Here, in a Brobdingnagian setting of primeval Coast redwoods which includes the world's tallest known trees, could be fashioned a national park fully worthy of the name.

Now the President has requested the Interior Department to make a report of its full study by the first of the coming year; conservationists are under no illusions as to the magnitude of the job; but the challenge to fulfill the old dream will soon be at hand once again—conceivably for the last time.

—Paul Mason Tilden
National Parks Magazine
August 1964

The late Paul Mason Tilden served as the editor of* National Parks Magazine *from 1959 to 1969. After taking a brief sabbatical, he returned in 1971 as associate editor until his death in September 1973. Not only did he have a clear insight into the major conservation issues of his day, but he was also a gifted photographer and brought to NPCA a vast knowledge of geology, botany, and wildlife.

NPCA BENEFACTORS

Leaving a Legacy to the Parks

A love of nature can be explained by as many different reasons as there are people who love the woods, the fields, the mountains, and the seashore. For whatever reason, nature lovers inevitably gravitate to our great national parks.

In the case of the late NPCA member **Mary Lohr,** a friend recalls that Miss Lohr "had a great love for the mountains and at every opportunity spent time at Mount Rainier or any one of the other mountains in the Northwest. Her interest in nature, I believe, stemmed from her sincere and deep devotion to the creator. Mary Lohr was a deeply devoted, strong Christian woman."

Born in Churdan, Iowa, Miss Lohr graduated from Des Moines University and the Baptist Missionary Training School. She served as Director of Christian Education at several American Baptist churches throughout the United States and came to live in the Seattle area when she assumed that position at the Seattle First Baptist Church. Miss Lohr, who died on April 15, 1979, made a permanent legacy of her love of the parks through a generous bequest to NPCA.

The late Dr. **Annette F. Braun,** another NPCA member who chose to symbolize her concern for conservation through a generous gift to the Association, was a famed zoologist. Her particular love was a little known group of tiny butterflies, microlepidopter, on which she was a world authority.

In 1911 Dr. Braun became the first woman to receive a doctor of philosophy degree from the University of Cincinnati. Several years later, her sister, the late Lucy Braun, received her doctorate at the university and went on to become a noted botanist. The two sisters traveled together on trips covering an estimated 65,000 miles in the forests of the Appalachians from the Green Mountains to Cumberland Gap.

Annette Braun recently died at the age of 94. Her bequest to this Association was just one sign of a lifelong contribution to science and conservation that will long endure. ■

NPCA Adjacent Lands Update: No Park Is an Island

A 1978 National Parks and Conservation Association (NPCA) survey of park superintendents revealed that many National Park System units are being threatened by pollution and development occurring on lands near park boundaries. (See *National Parks & Conservation Magazine*, March and April 1979.) Nearly two-thirds of the respondents reported that their parks are threatened by a wide variety of adverse adjacent land uses ranging from mining to residential development. In addition to this alarming response, the survey showed that almost 50 percent of the superintendents believe that they do not have sufficient authority or appropriate policy directives to respond to problems emanating from lands outside the boundaries of their units.

During the months since the survey additional problems have surfaced. The following list documents some of the threats to our park system that were not discussed in the NPCA survey and updates others.

EASTERN PARKS

Acadia National Park (Maine). The Central Maine Power Plant Company has proposed the construction of a coal-fired power plant on Sears Island within sight of Acadia National Park. The State Public Utilities Commission held hearings throughout the summer of 1979 regarding the issuance of the plant's initial license. According to the Acadia park superintendent, if obtained, this initial license will authorize the Central Maine Power Plant Company to pursue the attainment of the many other permits that will be needed before construction can begin. The National Park Service (NPS) Air Quality Staff will be collecting baseline data this autumn to measure impairment of visibility in the park.

Valley Forge National Historical Park (Pennsylvania). In spring 1979 cyanide leaked from the underground storage tanks of an industry located three miles upstream from the park's Valley Creek. The poison eventually contaminated the creek in the park, killing most of its large fish. According to the park superintendent, the company responsible for the leak has restocked the stream and tested to determine that the stream is no longer polluted with cyanide. The company has also agreed to install monitoring devices so that future leaks may be detected immediately.

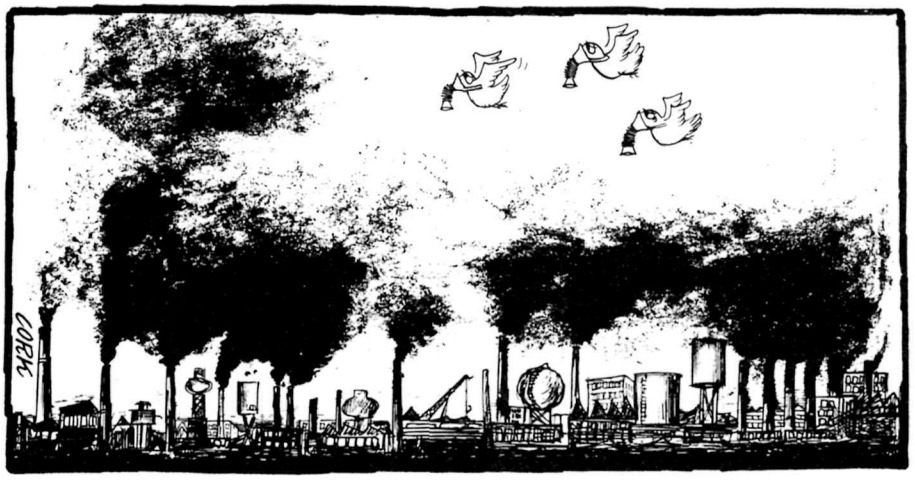
Shenandoah National Park (Virginia). The Adolph Coors Company proposes to locate a brewery and industrial complex on the banks of the Shenandoah River within one mile of this park's southwest boundary. This massive facility would include factories for making products needed to manufacture and distribute the beer. The plant would create 6,000 jobs over the next fifteen years. The facility could lead to uncontrolled commercial, industrial, and residential growth and could seriously affect Shenandoah National Park. Urban development would affect the quality of the region's air and water and could seriously affect the park's wildlife. Shenandoah's park superintendent is especially concerned about the factory's boiler plant which would be used to drive the electric steam turbines for the cooking process, because the plant is currently envisioned as coal-fired. A coal-fired power plant would produce sulfur dioxide emissions and could seriously degrade the air quality within the park. Shenandoah National Park is a designated Class I area. A Class I designation is the highest possible under the Clean Air Act and allows virtually no degradation of air quality. The park superintendent stated that the Coors Company will have to be "extremely innovative" in order to meet Class I emission standards.

SOUTHERN PARKS

Everglades National Park (Florida). Early this year the Florida Power and Light Company (FPL) petitioned the Florida Department of Environmental Regulations for a two-year relaxation of sulfur dioxide emission standards. In April a four-month temporary relaxation in standards (a "variance") was granted to the company, allowing all of FPL's seventeen oil-fired power plant units to burn high-sulfur oil. On August 10, President Carter approved a further one-year variance for the same FPL units. Two of these units are located at the Turkey Point Power Plant only 15 miles from Everglades National Park, a Class I area. Preliminary technical analysis indicates that the use of high-sulfur oil will violate the Class I sulfur increment at the Everglades.

In addition to the air pollution, the NPS has noted that residential and commercial development and related drainage continue to affect the park's critical freshwater supply, destroying fish populations and threatening to significantly alter the composition of plants in the park.

Biscayne National Monument (Florida). The use of high-sulfur oil at Turkey Point Power Plant would also pollute the air at this area. Biscayne's freshwater system is also threatened by adjacent land uses. The flow of freshwater from the marshlands adjoining Biscayne Bay has been intercepted by



a power plant cooling system, drainage canals, flood control dikes, and other shoreline developments. Agricultural developments and flood control projects have lowered the water table, permitting saltwater intrusion into coastal groundwater supplies. Historic artesian freshwater springs that were once common in the bay have disappeared as a result of this intrusion.

ROCKY MOUNTAIN PARKS

Yellowstone National Park (Wyoming). Geothermal leasing has been proposed in the Island Park area of the Targhee National Forest in Idaho, Montana, and Wyoming adjacent to Yellowstone National Park. Leasing in this area could have devastating effects on the park by draining the heat that fuels its geyser basins and hot springs, and by causing severe environmental degradation in the vicinity and within park boundaries. Two known geothermal resource areas (KGRA's) occur in the area. According to a U.S. Geological Survey expert on geothermal resources, however, the Island Park KGRA is based on "pitifully little information. Present available surface evidence in Island Park says there is nothing there." At a recent congressional hearing on the leasing, a USGS representative observed that they could not guarantee that even one exploratory temperature gradient test well drilled in Island Park would not adversely affect Old Faithful and other geothermal resources of the park.

Theodore Roosevelt National Park (North Dakota). Oil exploration and development, primarily on national forest lands, literally encircle the three units of Theodore Roosevelt National Park. During the past year more than fifteen oil wells have gone into production within three miles of the park's southern unit. According to NPS personnel, the drilling operations are visible from a number of locations within the park. Gas flares from the drilling rigs can be observed at night. In addition to the degradation of the park's scenic vistas, the drilling operations at times release hydrogen sulfide, causing noxious odors at certain locations within the park. Although the Clean Air Act does not identify odor as a pollutant, the State of North Dakota does. North Dakota now has monitoring stations in the park collecting samples of sulfides in order to establish baseline data on the odors emitted by those compounds.

In addition to the drilling operations, the construction of a number of electrical generating plants has been proposed for the area. One is within thirty miles of the park and could seriously degrade the air quality in Roosevelt National Park, which is a Class I area. The Air Quality Staff is currently studying the power plant's emission impacts on the park and is also conducting visibility monitoring within park boundaries.

NORTHWEST PARKS

Olympic National Park (Washington). The proposed Northern Tier Pipeline Project in Washington, if approved, will offload 1.2 million barrels of crude oil daily within three miles of Olympic National Park. The facilities required for such a project would seriously degrade the quality of the air and water; dramatically increase noise levels; and lead to industrial, commercial, and residential development. Sulfur dioxide levels in Olympic park could double as a result.

SOUTHWEST PARKS

William Whalen, director of the National Park Service, recently described the Southwest as "a park-rich and power-rich area." Eight coal-fired power plants in this region already degrade visibility in eleven National Park System units: Arches, Bryce Canyon, Canyonlands, Capitol Reef, Chaco Canyon, Glen Canyon, Grand Canyon, Mesa Verde, Natural Bridges, Navajo, and Petrified Forest. In addition, active proposals for twenty-five 800-megawatt power plants are in the advanced planning or regulatory processes, and another seven plants are depicted on long-range planning maps of various companies. Several of the parks in this region that would be especially affected follow.

Bryce Canyon National Park (Utah). NPS specialists are currently reviewing the visual impacts of mining in the Alton Coal lease area as viewed from Yovimpa Point overlook in Bryce Canyon National Park. Portions of the 8,300-acre strip mine would be in full view of the 400,000 annual visitors to this overlook. Only four miles from Yovimpa Point, the strip mining operation would seriously impair the scenic vista and would also degrade the quality of the air in the region.

Mesa Verde National Park (Colorado). This park's air quality is seriously degraded and visibility from its overlooks impaired by the massive Four Corners Power Plant, which pours 75,000 to 80,000 tons of SO_2 into the region's atmosphere every year. Of the plant's five units, three are scrubbed for particulates. The two remaining units are equipped with electrostatic precipitators. According to the NPS, however, the plant has no equipment specifically designed to control sulfur dioxide emissions. Less than 10 percent of the sulfur dioxide is removed plantwide, even though technology is available to remove more than 90 percent of these emissions. According to the National Park Service, the plant lacks "even the minimal air pollution control technology now routinely installed on new power plants."

Capitol Reef National Park (Utah). The Navajo Power Plant in northern Arizona affects the quality of the air and visibility at Capitol Reef. This 2,300-megawatt plant has no scrubbers at all and pours 50,000 tons of SO_2 into the atmosphere every year. Capitol Reef would also be affected by the proposed 800-megawatt expansion of the Emery Power Plant located nearby.

Death Valley National Monument (California). Early in August a final environmental impact statement was released by the Army for a proposed National Training Center at Fort Irwin, California. The northernmost boundary of Fort Irwin is only 1.5 miles south of Death Valley National Monument. The training center would be used for maneuvering grounds, training areas, and artillery impact areas. According to Death Valley's superintendent, "the environmental impacts which could result from this proposal are staggeringly large . . . environmental damage will be largely irreversible."

These examples reconfirm the findings of the 1978 NPCA Survey. The units of our National Park System continue to be threatened by incompatible uses on adjacent lands. During the past year rare instances of cooperation have occurred between park superintendents and adjacent land developers to lessen the impacts of development on the parks. To preserve or recreate the pristine environments that should exist in our national parks, however, these cooperative efforts will need encouragement through additional funding and additional regulations.

Write for a free copy of NPCA's survey, "No Park is an Island." ■

Canaveral—from page 17

and wildlife conservation as part of the Merritt Island National Wildlife Refuge.) Moreover, more than 17,000 acres of submerged lands within the seashore are state-owned and still must be transferred to the Park Service.

After the legislation creating the NPS unit was passed, NASA and the Interior Department made an operating agreement for the area setting up a variety of planning constraints on the Park Service. Most notably, study for lands to determine their suitability for wilderness requires consultation with NASA.

When the Park Service recently released its first detailed action plan for the new national seashore—a draft general management plan and wilderness study report—it became apparent that these constraints may keep the agency from aggressively pursuing protection of the seashore's resources.

In particular, even though the act creating the NPS unit called for a wilderness study, the document NPS recently released recommends *no* wilderness acreage within the seashore at this time on the grounds that NPS could not guarantee management of lands under NASA control as wilderness. The Park Service says that even acreage outside NASA jurisdiction was rejected for wilderness recommendation because of the need for motorboat access to commercial fisheries, the existence of stipulations requiring mosquito control measures, and a contention that the area in question—5,000 acres north of the NASA line—is too small for wilderness designation.

NPCA President A. W. Smith recently suggested to NPS Director William Whalen that the Park Service attempt to renegotiate its cooperative agreement with NASA in order to provide NPS with more of the control that Congress intended when the seashore was established. NASA has illegally mandated mosquito control in areas under Park Service jurisdiction, Smith contended.

In addition, Smith said the stated reasons for rejecting wilderness were unnecessary. For instance, a special provision of the Wilderness Act would permit minimal insect control measures (short of aerial spraying) and motorboat access at present levels or less. The statement that the acreage is too small for wilderness designation is notable in terms of its applications in other areas of the nation. The area of 5,000 acres is sufficient to meet the criteria of wilderness stated in the Act, NPCA noted.

At recent hearings in New Smyrna Beach, Florida, NPCA Representative Walter Boardman emphasized the need to provide protection to areas whose role in the marine food chain is worth many millions to fisheries and the Florida economy. "In hard economic terms," Boardman said, "an area that is contributing between a quarter and half a billion dollars to the Florida economy rates an investment in its protection of at least 3 percent of that amount. We spend far more on tourist promotion." ■

Snowmobiles—from page 17
enforced in the field, NPCA President A. W. Smith told NPS Director William Whalen.

It will be essential to assure that parks that experience increased winter usage are adequately staffed with sufficient full-time permanent and/or seasonal personnel to fully enforce the new snowmobile policy. There are seldom barriers to prevent a snowmobiler from leaving the road at will for a crosscountry ramble. Only thorough dissemination of policy information coupled with quick and certain enforcement will deter widespread violation of the new policy.

Now that the systemwide policy is finalized, Smith urged Whalen to move swiftly to implement his stated position that snowmobiling in Grand Teton National Park be brought into compliance with this policy by closing the Potholes area to crosscountry snowmobile use before the winter season of 1979–1980 arrives.

Moreover, the continued use of certain carriage roads in Acadia should be reviewed, with snowmobile activity restricted to the park loop road and other paved surfaces.

In addition to striving to fulfill our unique mandate as the citizen watchdog for systemwide NPS policies, NPCA continually monitors NPS park planning for decisions on snowmobile regulations in individual park units.

Earlier in the year, NPCA's T. Destry Jarvis was invited to talk before the convention of the International Snowmobile Industry Association, the lobby group for snowmobile manufacturers, to present the conservationists' viewpoint on park policy. Jarvis laid NPCA policy on the line for the audience: "Two points must be made at the outset. First, neither I personally nor NPCA as an organization are opposed to snowmobiling *per se* or are in conflict in any way with the snowmobiling industry as a group, or individual snowmobilers operating legally. Of all segments of the offroad vehicle industry and user community, the evidence is clear that the snowmobile interests have moved conscientiously in the direction of lessening environmental impacts of their activities. Second, however, I must state unequivocably and irrevocably that NPCA is opposed to the use of snowmobiles within the national parks. . . . Granting permission for use of snowmobiles within national parks constitutes a considerable downgrading of these great primeval nature reserves."

NPS has recently banned snowmobiles in Yosemite, Lassen, Sequoia–Kings Canyon, and Glacier to protect those parks from damage and to stop interference with other visitor activities such as crosscountry skiing. ■

VOYAGEURS

NPS master plan leaves hot snowmobile issue in limbo

The Park Service has issued a final Voyageurs National Park master plan—a document that is supposed to guide future management of the park—that postpones decisions on the most controversial issues there—notably on-land snowmobile use.

Under the master plan snowmobiles and aircraft will be allowed on the four major lakes in the park and on land portages between lakes. This policy is compatible with general nationwide policy on snowmobiles (see page 17). The plan, however, violates the national policy by ignoring the current incursion of these vehicles onto the park's Kabetogama Peninsula.

Snowmobile interests—backed by a controversial, partisan, state-funded Citizens' Committee on Voyageurs National Park and Rep. Jim Oberstar (D-Minn.)—are pushing for a trail down the center of the peninsula.

The Park Service has postponed deciding on snowmobiles until a wilderness study for the park is completed. "As has been the case since 1973, Park Service personnel will neither encour-

Continued on page 26

reader comment

Sound Article on Grizzlies

Congratulations on a very sound and thoughtful article on Glacier Park's grizzlies.

I have just completed a multi-park inspection and will compare notes when I am in Washington this fall.

Nathaniel P. Reed
Hobe Sound,
Florida

In your August 1979 *National Parks & Conservation Magazine* you had an article on the recent increases in grizzly bear attacks on visitors at Glacier National Park. The biggest increases occurred among backpackers and campers while hiking. I personally was shocked at the statistics. I just didn't realize that bears attacked without a motive—that is, until now. The first thought which ran through my mind while reading the article was "no Glacier park trip for me; it's too dangerous." But continuing on, I felt a bit of relief to know that park personnel were right on their toes with solutions to the problem. I [also] would like to take this opportunity to compliment the park management personnel . . . for implementing the re-education of the public through their new brochures and other safeguard techniques. I think that our national park personnel is the best in the world, especially so at Glacier. . . . Incidentally, I have reconsidered that visit to Glacier park. Hope to see the park soon!

Antonio J. Gonzalez
Lakewood, California

Great Basin

We have just read Eileen Lambert's Great Basin article. [September 1979] Very well done. She, of course, is correct about the Snake Range being *the* prime park prospect in the Great Basin region. It's one of our most favorite places in the entire U.S.

It is true that the National Park Service would provide overall greater protection of the total environment from commercial exploitation. For example, shooting of wildlife and commercial logging would not be allowed in a park. This may indeed be the compelling argument for a Great Basin Range National Park in the Snake Range. For many years, though, we have had some nagging doubts about proposals to shift this area of eastern Nevada from the U.S. Forest Service to the National Park Service.

For one thing, since 1959 much of the most outstanding high-country scenery, including an ancient bristlecone pine forest and some nifty alpine lakes, has been protected as the 28,000-acre Wheeler Peak Scenic Area. For another, the Forest Service's camping facilities, notably the 10,000-foot-high Wheeler Peak Campground, are attractive and sensitively laid out. In general, we have been favorably impressed with the Forest Service's role at Wheeler Peak; nor is there any hint in Mrs. Lambert's piece that she is unhappy with the agency.

Perhaps more important is the fact that designating the Snake Range as a national park would, in itself, attract vastly larger numbers of visitors, which in turn would lead to increased demand for more facilities and increased wear and tear on the fragile ecology.

One of the special qualities of Wheeler Peak is its feeling of remoteness, far removed from major tourist attractions. Would it not be more fitting to seek congressional approval of a Snake Range Wilderness encompassing a substantially larger area than the present scenic area?

Russ and Pam Butcher
Seal Harbor, Maine

Author Lambert says:
I'm glad the Snake Range is one of Pam and Russ Butcher's most favorite places in the entire United States. That area needs all the friends it can get. I wish it could be simply left wild and beautiful for those of us who appreciate and need wild places. Unfortunately every one doesn't feel that way.

I advocate a national park there precisely because it would provide greater protection of the total environment. The Wheeler Scenic Area was simply designated administratively by the Forest Service and could be abolished the same way. Under the Forest Service multiple use system, prospecting and development of mineral claims are encouraged. I've seen awful scars on Mt. Washington where bulldozers doing assessment work on mining claims have torn up the earth and trees.

I was appalled when we learned the Forest Service crew had chain-sawed the oldest living tree ever discovered on earth in the Wheeler Scenic Area in 1964. (I don't mean to harp on this tragic incident. I think they try to protect the ancient bristlecone pines now.) Wildflowers and other plants take a beating when livestock trample and browse. Deer are killed.

I don't object to the multiple use concept. My family has enjoyed national forests all over the nation for many years. I agree the high campground on Wheeler Peak is delightful and sensitively laid out. But I firmly believe there should be one outstanding national park in the Great Basin—preferably the most scenic and representative area of the region, namely the Snake Range—where bulldozers, grazing, hunting and timber cutting are not permitted.

A national park would attract more visitors, and facilities could be provided for them around the perimeter of the park by private enterprise. Trails and other facilities are usually well planned by NPS. I could be pleased if a substantially larger area than the present Wheeler Scenic Area could be put into the wilderness system.

However, I believe that with the present attitude of many Nevadans it would be politically more nearly impossible to create a great wilderness area than to establish a national park. They might consider they would lose many of their privileges without the compensation that a national park and increased tourism would bring.

Eileen Lambert
Luray, Virginia

Eye opener to nature

We are truly enjoying the report, *Wilderness Parklands in Alaska*, on all the proposed Alaskan national parks. It brings back memories of our trip but also makes us realize that there is still an immense part of that country that we didn't see. . . . (See page 29.)

Mrs. Robert D. Jackson
South Salem, New York

Lassen—from page 17

A Phillips representative says, "Don't worry, dear, we won't rape the park. We aren't going to do any more work [including drilling and bulldozing] on the [inholding] because it would create such an uproar." He said the company "plans to do a lot of things" on national forest land up for leasing outside park boundaries.

As early as January 1978—before any of this destruction had taken place—the Park Service could have condemned the land but failed to do so for unknown reasons. Neither the Park Service nor its parent Department of Interior have offered any reasonable explanation for why this inholding has been left open to damage for almost two years. NPCA is investigating this bureaucratic bungling.

House Subcommittee on National Parks and Insular Affairs Chairman Phillip Burton and Ranking Minority Member Keith Sebelius have urged Interior Secretary Andrus to immediately implement proceedings to stop the destruction and acquire title to the land and have requested a written chronology of government action. NPS reportedly was considering condemning the land at press time. ■

Voyageurs—from page 24

age snowmobiling on the peninsula by marking and maintaining trails nor prohibit snowmobile use," NPS Director Whalen announced. "Essentially the status quo will be preserved on the peninsula until the wilderness study is completed by the National Park Service and considered by the Congress."

Although public hearings on wilderness were held in Minnesota this fall, it will be at least a year before wilderness recommendations go to Congress. NPCA objected to postponing the decision on snowmobiling not only because it violates national policy but also because the park should be protected from the harmful effects of snowmobiling regardless of whether the area is designated as wilderness or not. ■

MORE NOTES

P.S. on parks

An historical cairn where the men of the Lewis and Clark Expedition boiled salt out of seawater recently was made part of the Fort Clatsop National Memorial, a restored fort in Oregon that is one of the Pacific Coast's leading tourist attractions. The cairn was transferred from the Oregon Historical Society to the National Park Service. The Lewis and Clark Expedition spent two months at the cairn keeping fires going twenty-four hours a day under kettles of seawater in order to provide salt for the journey to St. Louis. Both explorers noted the site in their diaries, one remarking that "the saltmakers had made a neat close camp convenient to wood, salt water and the fresh water of the Clatsop [Necanium] River, which at this place was within 100 paces of the ocean."

Native flora in Hawaii Volcanoes National Park are greener this year than in any year in memory thanks to a program to control the feral goats that were destroying the plants. One of the species of flora that has received a new lease on life is a bean plant critical to the survival of the endangered Hawaiian goose, the nene.

"Friends of Pictured Rocks" has announced its formation as a new group to advocate preservation of the interior shoreline and backcountry of Pictured Rocks National Lakeshore, Michigan, in its primitive, natural state. The group, which can be reached at P.O. Box 10144, Lansing, Michigan 48901, says it will be compiling a list of individuals and groups who would be willing to take action as necessary.

Voyageurs National Park will obtain the oral histories of five Chippewa Indians from the Lake States National Park Association, which received a grant from the General Mills Foundation to record the Indians' life stories. NPS historian Mary Lou Pearson, who will conduct the interviews, says these first-hand accounts will describe Indian life in the Minnesota lake country at the turn of the century.

Have an idea for P.S. on Parks? Send it to P.S.—Editorial Dept., NPCA, 1701-18th St., N.W., Washington, D.C. 20009. ■

conservation docket

Administration proposes landmark National Heritage bill . . .

On September 10, 1979, Interior Secretary Cecil Andrus forwarded to Congress a legislative proposal to create a National Heritage Program "to identify and protect the nation's most important natural areas and historic places."

The Administration's proposed National Heritage Policy Act of 1979 would create a National Register of Natural Areas similar to the existing National Register of Historic Places, set up a consistent and comprehensive national data collection and classification system for inventorying and identifying such resources, and mandate alert procedures to protect significant sites from damage such as that caused by energy development. The proposed Act would accelerate current historic programs and enable protection of new types of cultural resources such as Walden Pond or Baltimore's "Little Italy" on the historic register.

Although various existing federal, state, and local programs aim to conserve particular aspects of our heritage, needless destruction of resources could be prevented by standardizing data and creating a single national program providing support for state heritage programs, coordinating efforts of various federal conservation agencies and programs, and eliciting the active support of the private sector.

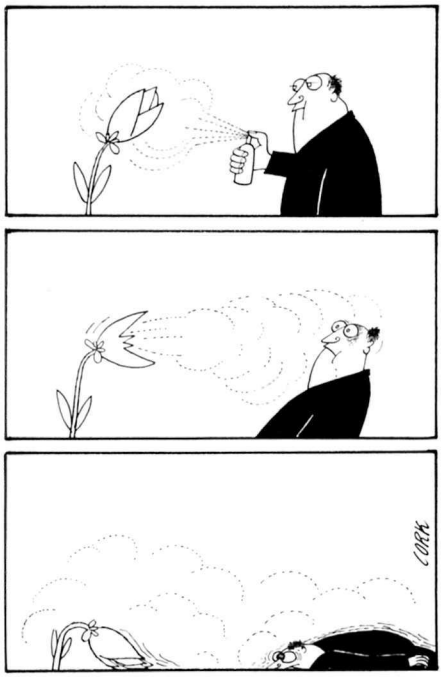
The new National Register of Natural Areas would list areas identified through the inventories at the state level as containing geologic features or plant and animal communities most

Continued on page 29

. . . While Carter energy program trades off the environment

This summer and fall it became apparent that the crash energy program that emerged from President Carter's Camp David summit and media campaign in July could make a mockery of the major environmental achievements of the past several decades—even sacrificing the integrity of our parks and wildernesses to energy development.

To implement the program, at press time Congress was rushing to put together a package of proposals that will decide how much damage will be done.



In his July 15 speech, Carter vowed to reduce oil imports by 50 percent by 1990 through a $142 billion program to be financed through a "windfall" profits tax on the oil industry. A quasigovernmental "Energy Security Corporation" would pump more than half the money—$88 billion—into development of synthetic fuels. "Synfuels" are synthetic oil and gas produced from oil shale or from coal liquefaction and gasification—at enormous environmental risks. The Administration's plan to build 80 or 90 plants to produce 2 billion gallons of these synfuels a day threaten to expose citizens to cancer-causing chemicals released in production and use of the synfuels; accelerate coal mining and its environmental destruction to fuel the plants, destroying 8,000 square miles of land; fill canyons out West with wastes and degrade air quality there, ruining visibility in many national parks; and divert scarce water from agriculture.

The other key element of the program, the Energy Mobilization Board, could be granted sweeping powers that could do even more damage to parks. Composed of three to six members appointed by the President, the board would be able to "cut red tape" to

UNEP PHOTO BY DENNIS THORPE

railroad through any nonnuclear energy projects it deemed "critical" to meeting the oil import goal.

Depending on the nature of the "fast-track" legislation that emerges from the fray, this might involve establishing project decision schedules and mandating timetables; bypassing or compressing in time due process procedures such as public hearings and environmental impact statements; waiving federal, state, and local laws such as clean air and water standards; circumventing the constitutional role of Congress; or restricting the role of the courts to review decisions.

At press time a major battle over whether waivers would cover just procedures or substantive laws was underway in Congress. Of the various "fast-track" proposals, environmentalists favor a bill passed by the House Interior Committee because it would not waive laws but would empower the Energy Mobilization Board to waive only time requirements; in addition, it would limit the number of "priority" energy projects that would be eligible for waivers. However, the House Commerce Committee passed a competing bill that would permit waivers of some health and environment standards. At the stroke of a pen, the board could do away with the requirements of the National Park Organic Act, the National Environmental Policy Act, the Federal Water Pollution Control Act, the Clean Air Act (except for primary ambient standards), the Surface Mining Control Act, and others. The fact that proponents of the waivers wanted a no-holds-barred approach was clarified when they defeated in subcommittee an amendment to exempt from the waiver the wilderness and park organic acts.

Thus, the protections for our parks and wilderness could be cast aside in favor of power plants on park borders, dams, projects like geothermal leasing next to Yellowstone, or oil drilling in Alaska wildlife areas.

At press time it was expected that these two House bills would be merged and sent to the floor, where the merits of their provisions would be battled out in mid-October or thereafter.

Meanwhile, the Senate approved S

1308 by Sen. Jackson on October 4, rejecting full waivers of law but accepting provisions allowing the board to pre-empt federal, state, and local permit or licensing decisions if an agency failed to meet a fast-track deadline and to waive the application of most environmental laws adopted after construction of a project has commenced.

Then the Senate energy committee approved a synfuel plan starting with a "small first bite"—$20 billion—instead of $88 billion. It was unclear whether Congress would finance the plan from the windfall profits tax.

In contrast to the "hard energy" path being promoted by Carter, Senators Edward Kennedy and John Durkin were expected to promote an "energy productivity" program that they estimate could not only save more oil—4.4 million gallons a day—through financial incentives for conservation—but also cost less ($11 a barrel versus $30–$40 a barrel or more for synfuels).

While the Carter Administration moved onward in its steadfast support for new parks and wild areas in Alaska, its proposals for an Energy Mobilization Board and unchecked synfuels development threatened to evolve into legislation that could subject these new areas as well as our other parks to energy threats. ■

Heritage—from page 27

representative of and valuable to America's natural heritage.

Then the act would protect listed natural areas or those eligible for listing by requiring federal agencies to make assessments of the impact of proposed actions on these areas to avoid or reduce potential damage. A second layer of protection would be provided for areas determined to be nationally significant—"National Natural Landmarks" and "National Historic Landmarks"—by requiring federal agencies to consider all other alternatives before taking actions that would have adverse effects.

Andrus emphasized that "the National Heritage Program is *not* a federal land acquisition or takeover program, but a *resource information* program. Not only will it identify major areas

worth preserving, but it will provide this information early in the planning process to developers of energy facilities and other major projects . . . so that potential damages to significant natural areas and historic places can be avoided."

President Carter first proposed the concept of a National Heritage Program in his 1977 Environmental Message, and gave the secretary the responsibility for overseeing its development. Secretary Andrus appointed a task force representing all levels of government and the private sector (including NPCA); their recommendations led to the development of the proposed legislation. Conservationists support the general policy and intent of the bill but will be proposing changes—particularly to ensure separate but equal natural and historic programs. Upon enactment by Congress, the National Heritage Policy Act also would:

- Encourage states to voluntarily participate in a nationwide system of state natural heritage programs by making available technical assistance and limited financial assistance from the Interior Department's Heritage Conservation and Recreation Service. Seventeen states already have natural heritage programs started with financial assistance and technical assistance on inventory procedures from the Nature Conservancy, a private land conservation organization.
- Add three new categories to the National Register of Historic Places: (1) cultural landscapes (e.g., Walden Pond or Harpers Ferry); (2) neighborhoods (e.g., Barrio del Analco in Santa Fe or Little Italy in Baltimore); and (3) networks (e.g., California missions or the Oregon Trail). The Register currently includes buildings, structures, districts, sites, and objects.
- Extend the Historic Preservation Fund through 1983. This fund provides matching grants through state governments for the acquisition and rehabilitation of historic properties and for related planning.
- Establish a Council on Heritage Conservation to review proposals by federal agencies that might adversely affect natural areas and historic places listed or eligible for listing in either register. The council also would advise the President and congress, and would incorporate the existing Advisory Council on Historic Preservation. ■

classifieds

Continued from page 2

THE EFFLUENTS from the treatment plant at Blue Plains, downstream from Washington, were a problem. Containing nitrates and phosphates, they stimulated algae blooms on sunny days; on cloudy days the algae died, the dissolved oxygen in the water was consumed, the fish died, and the river gave off the stench of decay. But the stench was not from sewage, and as better treatment methods reduced the amount of nutrients, the ecosystems of the river began to return to normal. A congressionally mandated study will soon be completed to determine whether, as seems probable, the water at the outfalls may be suitable for use in the water mains.

But no one has ever proposed that water be recycled directly in to the water mains from the outfalls. The emergency intake completed a year ago will draw water from the upper reaches of the estuary, many miles above the treatment plants, and above the location where swimming has now been found to be safe. To the high measure of purification accorded at the treatment plant, if a reverse flow ever occurs, will be added the natural purification of a long trip up the estuary. Meanwhile, apparently, the fiction that surface run-off prevents purification for purposes of swimming, (and hence for use in the water mains) has been laid to rest.

ACTUALLY, the story begins with the effort to protect the C&O Canal, now part of the National Park System as the C&O Canal National Historical Park. My efforts in 1953 to oppose the construction of a highway along the Canal might well have been fruitless without the intervention of Justice William O. Douglas and his famous hike with the editors of the Washington Post in 1954, followed by annual reunions and hikes and the establishment of the C&O Canal Association.

During these annual marches we learned of the big-dam plans of the Army Engineers. A huge structure at River Bend, just above the city, was one of the projects; when fully drawn down the reservoir would have exposed mud flats two-thirds the size of the District of Columbia. The C&O Canal would have been buried under water for many miles upstream to Harpers Ferry. One of the reasons why we could not get the Canal protected by law was that the Engineers wanted to make sure they could build River Bend Dam. We got it pushed upstream to Seneca, to begin with, and knocked it out later.

And so, the defense of the Potomac River Basin by NPCA was founded on the central concern of the NPCA for the National Park System; but we saw then, as on many other occasions, that the National Parks cannot be protected except within the context of the complete natural and political setting.

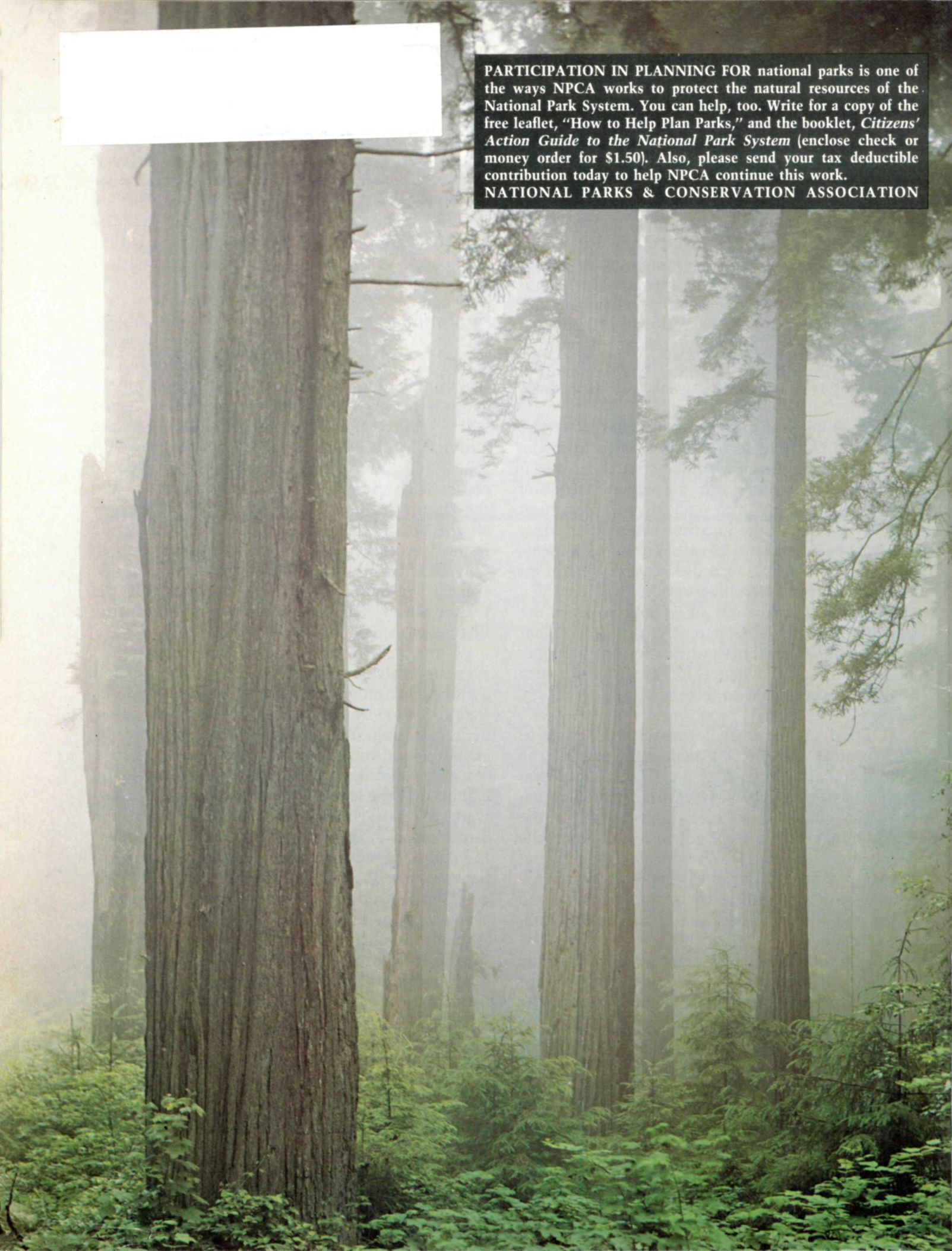
THE PROCEDURES followed are worth noting. Local meetings were held in practically all of the affected watersheds. The issues were carried from the local to the state and national offices of the farm organizations; the conservation and labor organizations were brought together at the national level. Delegations of representatives of the participants in the Coalition were taken to confer with the governors of the four states and the District of Columbia and with the heads of all the affected federal agencies. Eventually the issues were taken to President Johnson through Stewart Udall, then Secretary of the Interior, and Hubert Humphrey, the Vice President of the United States. The President instructed the Army Engineers to develop a new program.

We rejected the first compromise program for six dams which emerged as the new project. Later a three-dam program appeared, and we opposed that also. One by one, we fought the others down, demonstrating step by step that they were destructive and unnecessary.

Conservationists got the interest rates used in calculating the cost of construction revised upward, the better to reflect reality; the other construction costs and the price of land rose rapidly; the dams proved to be uneconomic. We took our opposition to President Nixon through the Attorney General and the outgoing Deputy Director of the Bureau of the Budget and kept it on course through the change of administrations. President Carter took a strong stand against destructive water projects, and the Engineers seem to be yielding to modern attitudes.

AND SO the Potomac will be largely a free-flowing river. Its green margins can be protected with consideration for the landowners who fought for it. The intake can be enlarged if necessary. This is indeed a famous victory.

—Anthony Wayne Smith



PARTICIPATION IN PLANNING FOR national parks is one of the ways NPCA works to protect the natural resources of the National Park System. You can help, too. Write for a copy of the free leaflet, "How to Help Plan Parks," and the booklet, *Citizens' Action Guide to the National Park System* (enclose check or money order for $1.50). Also, please send your tax deductible contribution today to help NPCA continue this work.

NATIONAL PARKS & CONSERVATION ASSOCIATION

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