

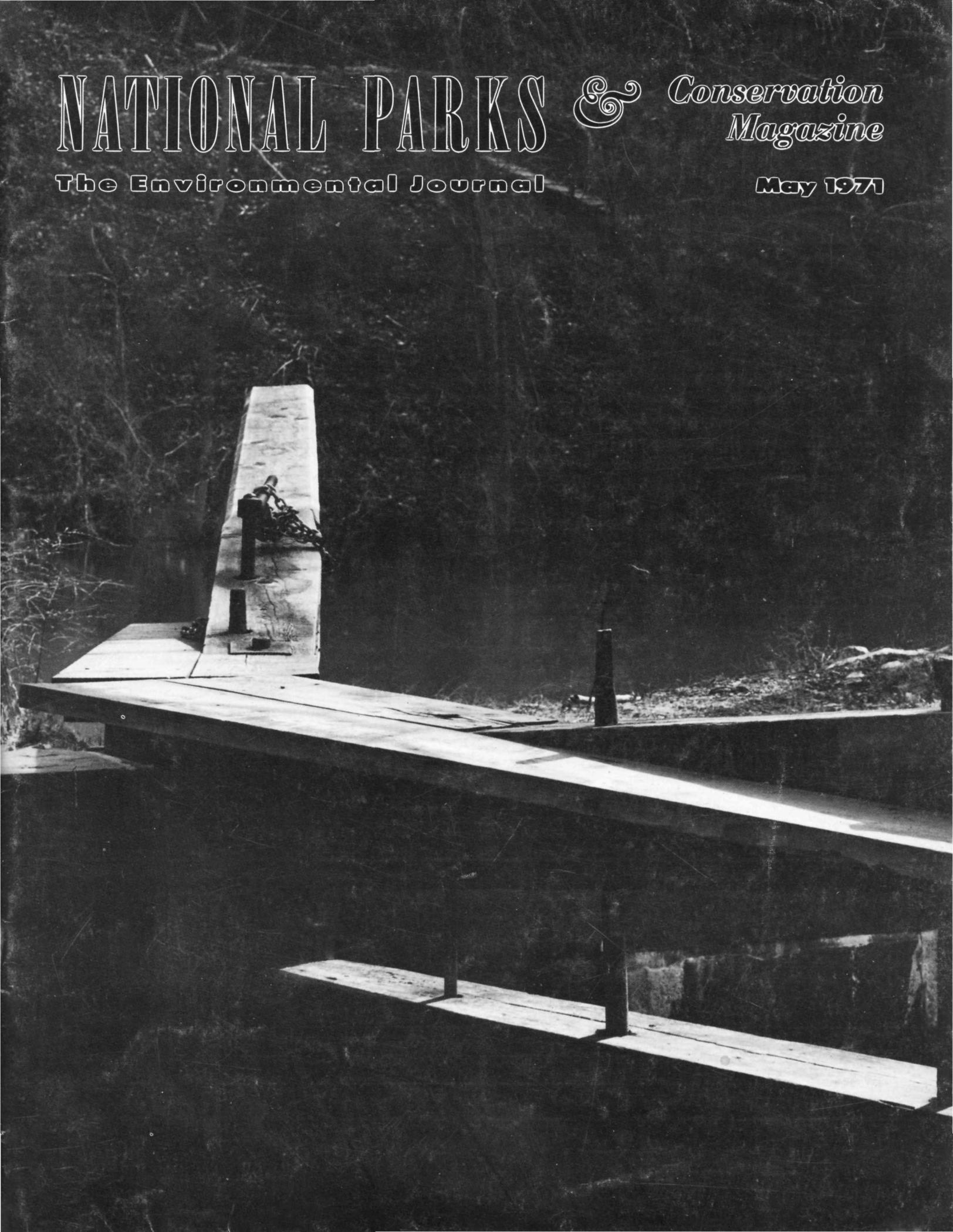
NATIONAL PARKS



*Conservation
Magazine*

The Environmental Journal

May 1971



PARKS

The significance of the national parks is multifaceted; but central, perhaps, is their function as image and symbol of the future.

The great primeval national parks and monuments, and the wilderness areas of the national forests and wildlife refuges as well, are examples of the natural environment which was widespread and dominant throughout North America when the white settlers arrived, and which could be restored as the setting of a high civilization.

The parks are not mere islands of survival in a harsh industrial economy, in a spreading urban desert, nor mere refuges or museums for endangered species, although they certainly fulfill these functions; they should be thought of instead as bases from which new enterprises in the restoration of a rewarding life-environment can be launched, today and tomorrow.

This Association has played its part in the history of the national parks of America. Founded in 1919 as The National Parks Association at the behest of Stephen Tyng Mather, first Director of the National Park Service, it has endeavored to assist the Service in its vital responsibilities, and yet at the same time to function as a constructive critic.

While the Association has concerned itself in the public interest with many aspects of national park management, from roads, facilities, and inholdings, to master-planning and wilderness protection, it has been more and more deeply involved in recent years with protecting the parks, in the interest of the people who visit them, against the overwhelmingly destructive impact of automobile traffic.

We approach this problem with a grand strategy, not short-run expedients. It is always possible to devise a road relocation, or indeed to build another road, or a bigger parking lot, to reduce immediate congestion. But such short-range solutions merely compound the long-range problem.

In contrast, we have recommended the development of additional recreation areas outside the national parks, and an organized effort to deflect visitation to the alternative sites. Most of the great national parks are surrounded by large national forests; beyond the forests, quite often, are other public lands;

and outside the public lands are private lands where private recreational facilities could be developed by private enterprise.

External concessions could be granted to consortiums of local recreation businesses to operate comfortable public transportation into the parks, permitting a reduction in private automobile traffic. The concessions could be contingent on good recreational area zoning and planning. Such a program would have to be implemented on an interdepartmental basis; little attention has been given to these proposals in the past; no doubt a Presidential Order is what is needed.

The Association has devoted much time and effort to explanations of this approach. Some 25 studies have been prepared and published during the last six or seven years showing how specific parks could be protected against traffic, and how large primitive or wilderness areas could be set aside in the parks, with visitation dispersed into a broader recreational region. They are now being printed this year in a single volume, *Preserving Wilderness in Our National Parks*, for distribution to our members, conservationists generally, and concerned public officials.

Also in an effort to be of assistance, we consult with National Park Service officials in advance of the development of master plans and wilderness proposals. We participate wherever possible in the informal meetings held before the official master plan meetings. We have representatives take part in public master plan meetings, recommending the protective and regional approaches. In the same way, we seek to be represented at all public hearings on proposed wilderness plans, addressing ourselves to the responsibilities of wilderness protection by the Executive Branch.

On official invitation thereafter, if legislation is presented, we offer our view in what we hope is an objective manner on the desirability and methods of protecting wilderness in the national park system and on the assistance which could be given by the regional planning approach. On all these occasions we try to notify our members when the subject is placed on an official docket, so that they may use their own judgment as to whether and how they may wish to participate.

The year 1972 will mark the one-hundredth anniversary of the establishment of Yellowstone National Park. It will be celebrated by a series of ceremonies and meetings in Yellowstone Park itself. No doubt

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COVER *Wooden lock gates on the C&O Canal, by Robin Moyer.*

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 the national parks and monuments of America, in which it endeavors to cooperate with the National Park Service while functioning as a constructive critic, and to protecting and restoring the whole environment. Life memberships are \$500. Annual membership dues, including subscription to National Parks & Conservation Magazine, are: \$100 sustaining, \$50 supporting, \$15 contributing, and \$10 associate. Student memberships are \$8. Single copies are \$1. Contributions and bequests are needed to carry on our work. Dues in excess of \$10 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 Association headquarters in Washington. When changing address, please allow six weeks' advance notice and include old address (send address label from latest issue) along with new address. Advertising rates and circulation data are available on request from the Advertising Manager in Washington.



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Canal at Harper's Ferry

THE CHESAPEAKE & OHIO CANAL NATIONAL HISTORICAL PARK was created in the last days of the 1970 Congress, culminating 16 years of effort. The moral of the story behind the creation of this park relates not to politics, not to action by a federal agency, not to court orders, not to the mass media, not to public relations counsel, but to civic action.

In 1954 the fate of the canal properties seemed sealed. The old canal had been acquired by the B&O Railroad and lay dormant as we entered the Thirties. The B&O was heavily indebted to the Reconstruction Finance Corporation. Dan Willard, the railroad's president, suggested to President Roosevelt that the railroad transfer the 185-mile stretch of land along the Potomac to the United States for a credit on its debt. The details were worked out, a valuation made, and the transfer effected. The National Park Service became the custodian of the winding piece of property.

Maryland, aligned with the Bureau of Public Roads, was assured of funds to convert the canal property into a water-level highway. Congress agreed. The property was a thin ribbon of land, never more than 300 feet wide and not a true wilderness, so it did not satisfy the image of the conventional national park. NPS finally acquiesced in the freeway plan, and the highway lobby chalked up another great victory.

The Washington Post gave its blessing in an editorial that prompted me on January 15, 1954, to write a letter to the editor:

"The discussion concerning the construction of a parkway along the Chesapeake & Ohio Canal arouses many people. Fishermen, hunters, hikers, campers, ornithologists, and others who like to get acquainted with nature first-hand and on their own are opposed to making a highway out of this sanctuary.

"The stretch of 185 miles of country from Washington, D.C., to Cumberland, Maryland, is one of the most fascinating and picturesque in the nation. The river and its islands are part of the charm. The cliffs, the streams, the draws, the benches and beaches, the swamps are another part. The birds and game, the blaze of color in the spring and fall, the cattails in the swamp, the blush of buds in later winter—these are also some of the glory of the place.

"In the early twenties, Mr. Justice Brandeis traveled the canal and river by canoe to Cumberland. It was for him exciting adventure and recreation. Hundreds of us still use this sanctuary for hiking and camping. It is a refuge, a place of retreat, a long stretch of quiet and peace at the Capital's back door—a wilderness area where man can be alone with his thoughts, a sanctuary where he can commune with God and with nature, a place not yet marred by the roar of wheels and the sound of horns. It is a place for boys and girls, men and women. One can hike 15 or 20 miles on a Sunday afternoon, or sleep on high, dry ground in

The C&O Canal Becomes a Park

William O. Douglas



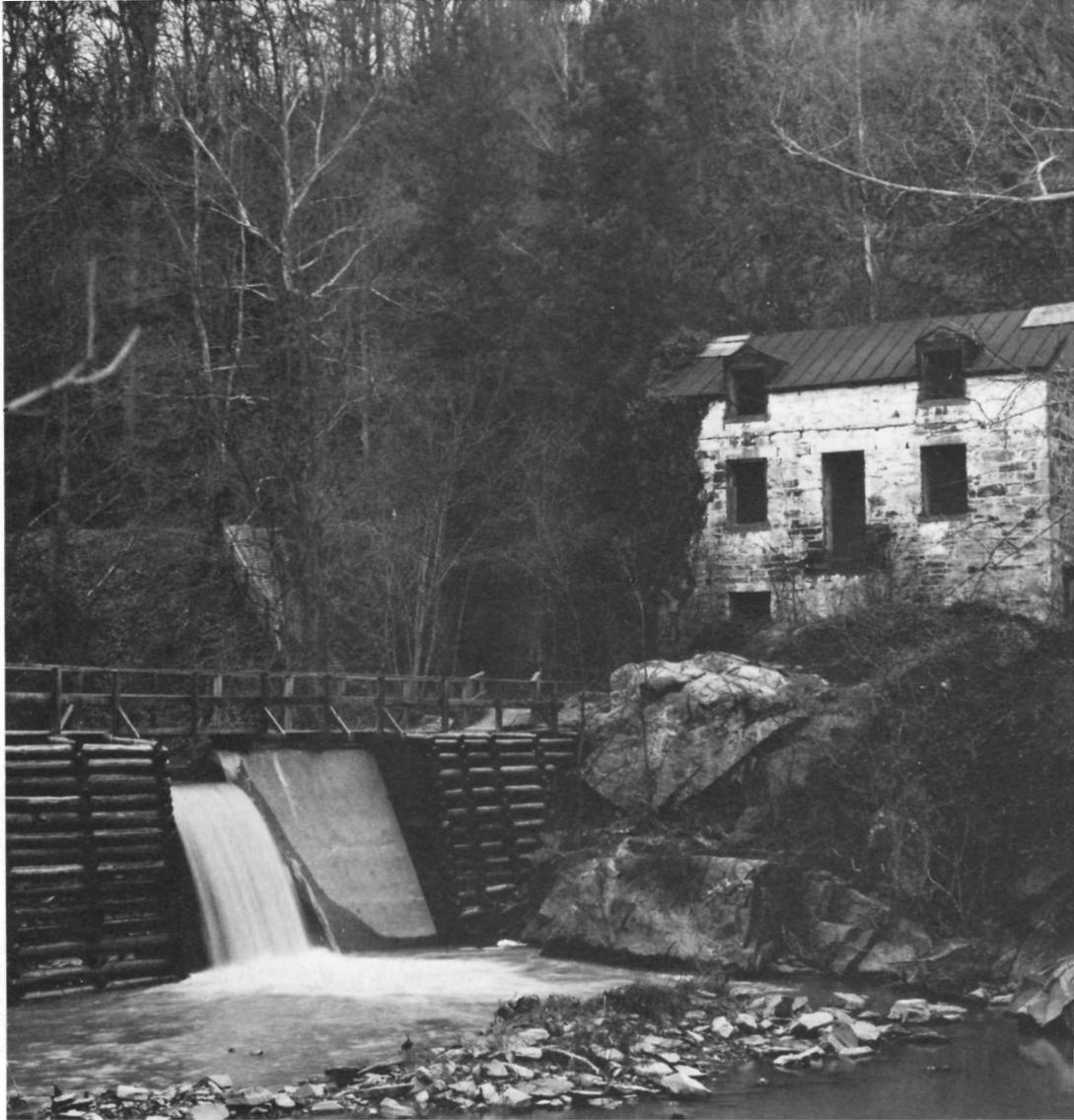
the quiet of a forest, or just go and sit with no sound except water lapping one's feet. It is a sanctuary for everyone who loves woods—a sanctuary that would be utterly destroyed by a fine two-lane highway.

“I wish the man who wrote your editorial of January 3, 1954, approving the parkway would take time off and come with me. We would go with packs on our backs and walk the 185 miles to Cumberland. I feel that if your editor did, he would return a new man and use the power of your great editorial page to help keep this sanctuary untouched.

“One who walked the canal its full length could plead that cause with the eloquence of a John Muir. He would get to know muskrats, badgers, and fox; he would hear the roar of the wind in thickets; he would see strange islands and promontories through the fantasy of fog; he would discover the glory there is in the first flower of spring, the glory there is even in a blade of grass; the whistling wings of ducks would make silence have new values for him. Certain it is that he could never acquire that understanding going 60, or even 25, miles an hour.”

Merlo Pusey and Bob Estabrook, who had authored the editorial, agreed to my proposal, and the three of us planned to back-pack along the towpath. When the news of it became public, letters—hundreds of them—came in from all over the nation, most of the writers wanting to join us.

Opposite, the Monocacy Aqueduct is the longest of eleven aqueducts on the canal. Built in 1833 of white quartzite, the structure is 438 feet long. The Park Service's barge, which during the summer carries visitors on trips along the lower portion of the canal, is the last such craft on the waterway. In the canal's heyday some 540 barges worked regularly between Washington and Cumberland. Right, lockhouse at Lock 20 below Great Falls. Several of the lockhouses have been restored by the Park Service in the Georgetown Division. They were built soon after the canal was begun in 1828. Use of the lockhouses and garden plots near them on canal company land was part of the lock tenders' compensation. The old Great Falls Tavern was built in 1830 as a rest stop for travelers along the canal. Now it houses exhibits relating both to the canal and to the natural features of the area. The C&O Canal was completed in divisions: to Seneca in 1831, to Harper's Ferry in 1833, to Hancock in 1839, and to Cumberland in 1850.



ROBIN MOYER

So we decided to invite those who had some legitimate interest in conservation or environmental problems. The final group numbered 37, including Harvey Broome, Olaus Murie, Sigurd Olson of the Wilderness Society, Tony Smith of the National Parks Association, Irston Barnes of the Audubon Society, and others. We took a train to Cumberland on March 18, 1954, and starting the next day walked east to Washington, arriving on the eighth day. Only nine made it the whole way, but each of the 37 walked at least a portion of the way each day.

The cool March weather was ideal for hiking; and because we made camp every day by three or four o'clock, the hike itself was easy. "What's rough," said Harvey Broome, "is the night life." The hike excited all the communities along the river. Dozens of people joined us, walking a few miles; at times we had several hundred trailing us, making us look like Coxe's Army. All the local newspapers sent reporters to be with us the day we entered their respective territories. The local radio and TV stations got interviews as we stopped for lunch. CBS, NBC, and ABC television had a man with us every day.

Schools closed and classes came down to greet us as we passed. Some wrote and sang songs in our honor.

Adult groups picketed us, proclaiming their desire for a freeway.



Ladies' Aid groups, men's clubs, and chambers of commerce set up stands where we were offered coffee, doughnuts, apples, and hot chocolate.

Radio and TV men roamed our camps in midafternoon, taking pictures and getting interviews.

Local groups set up receptions and dinners in nearby towns. They were what Harvey Broome referred to as "the night life." We always accepted and always went in our hiking clothes. We stood in line, attended cocktail parties, and ate chicken dinners, followed by speeches, all for TV and radio. We were lucky to be back "in the sack" by 11 o'clock. But we were always up at 5 o'clock and on our way by 7, only to repeat that night the routine of the previous one.

The good people along the Potomac greeted us to honor us not as individuals but for what we stood. We hiked—and in 1954 the automobile had so possessed us that hiking was news. Behind the hiking were the conservation principles for which we stood—elbow room for people who wanted to camp, pure river swimming pools, hiking and cycling trails, and an inland canoeway 185 miles long.

This was what we talked about. We never said a word against the freeway; we only emphasized the *plus*. The canal is in many respects the heartland of a huge metropolitan area. With campgrounds in charge of knowledgeable leaders there is no reason why any ghetto child in the area should not be introduced during the hot summer months to birds, to fish, to fox, raccoon, muskrats, and deer, to the mysteries of the woods, and to the joys of swimming and canoeing.

People responded to this plea to save the good Earth for the common needs of the people. The word of our generous reception up and down the valley preceded us to Washington; and when we reached Georgetown there were at least 50,000 people out to greet us.

Secretary Douglas Mackay of Interior was there on horseback, and it was he who told the National Park Service to restudy the canal problem, which it did. A year later it opted for a park rather than a freeway; and the drive to persuade Congress to enact the necessary legislation passed to other hands, primarily to Spencer Smith of the Citizens Committee on Natural Resources.

The last night of our hike we formed the C&O Canal Association to promote the creation of a national park and to preserve and protect the canal properties. We had a committee called the Level Walkers who divided up the canal into short sections of 5 or 10 miles, assigning each section to a member who became its watchdog and guardian.

We had countless encounters with the Army Corps of Engineers, who wanted to dam the Potomac to get a head of water sufficient to flush the river of sewage. The Association hired its own experts and opted instead for sewage disposal plants. The Corps countered by saying dams were needed to store water against the ever-present threat of drought. We hired our own engineer and discovered that in the 20-mile stretch of the Potomac estuary below Little Falls, there were over a billion gallons of potable water that

when treated would carry the metropolitan area through any drought. And in 1970 conservation groups finally got a pumping station authorized below Little Falls.

Every April we had a reunion hike of 15 to 20 miles. Everyone was invited—to camp out on Friday night and to hike on Saturday. There was a dinner in the nearest town on Saturday night and it was a conservation rally, promoting the canal as a park and singing its virtues. Those reunion hikes grew and grew in size, the last one in 1970 drawing about 1,000 hikers—many under 7 years old and many over 70.

It was the Republican Interior Secretary Mackay of Oregon who reversed NPS policy in 1954 and Republican Secretary Walter Hickel of Alaska who in 1970 backed anew the park proposal. Park legislation already had passed the Senate several times but always failed to get out of committee in the House. Hickel gave it the needed impetus there. Democrat Wayne Aspinall of Colorado and Republicans John Saylor of Pennsylvania and Gilbert Gude of Maryland saw it through in the House. Democrat Henry Jackson of Washington and Republican Charles Mathias of Maryland got the Senate to approve the House version of the bill in record time near the end of the session in December 1970.

Those of us who made the 1954 hike were only the catalysts. The real work was done by hundreds of others up and down the valley who formed committees, petitioned Congress, encouraged their Congressional representatives to back the park bill, got editorials in their local papers, and molded the opinion of people away from the cruel invasion of a freeway to a policy protective of the land and waters of this historic valley.

It took 16 years to achieve the result. But this civic action project at long last succeeded. It is a technique available without cost to all who love the Earth and all its wonders and want to save it from environmental disaster.

The ability of civic action to carry the day is a good measure of our freedom. Once, in 1961, I was in Baghdad giving lectures on our Bill of Rights when I was visited by a group of Arabs. They wanted me to lead a protest hike against the use of bulldozers to deface a lovely palm tree woodland on the outskirts of the city. I did not do it for several reasons, including lack of time. But what came out when I questioned them was interesting.

"We picket the site?" the Arab leader said. "Why, we would be arrested!"

And so they would have been, for there are few enclaves the world around where freedom of expression flourishes in the great tradition that it enjoys here. ■

William O. Douglas, associate justice of the United States Supreme Court since 1939, is in the forefront of the conservation movement. His 27 published books and numerous magazine articles include many on wilderness preservation.



THE BLACK- FOOTED FERRET

By
Faith
McNulty



THE BLACK-FOOTED FERRET is a small, beautiful creature about the size and shape of a mink that until recently was of no importance whatever. It lived a modest and secluded life on the Great Plains, seldom seen and scarcely noted even by scientists. As the great poison blitzes that have characterized our war on wildlife on the plains swept over its habitat, the numbers of black-footed ferrets melted as quietly as snowflakes. In fact, the species might easily have slipped into extinction without anyone knowing it had gone. But somehow, in remote areas, some ferrets survived; and thanks to the deep interest of a few people, a small population of them was found in 1964 in South Dakota.

Suddenly, with their rediscovery, the black-footed ferrets were not so unimportant after all. They became the focus of bitter feelings and conflicting aims involving wildlife officials in both South Dakota and Washington. As "rare and endangered" animals, the ferrets were the responsibility

of the Bureau of Sport Fisheries and Wildlife, the federal agency through which the Secretary of the Interior exercises his jurisdiction over wildlife. What made this responsibility embarrassing was that the Bureau's own policy of poisoning unwanted wildlife had brought the ferret near extinction. Furthermore, the Bureau was committed to a continuing program of poisoning prairie dogs in southern South Dakota. The heart of the ferret's remaining range seemed to be directly in the poisoners' path.

The lives of prairie dogs and black-footed ferrets are firmly entwined, a biological accident that has caused the Bureau of Sport Fisheries and Wildlife considerable distress inasmuch as it causes the Bureau's conflicting roles to collide head-on. The black-footed ferret lives almost exclusively among prairie dogs, depending on them for food and shelter. Prairie dogs are squirrellike rodents that dig burrows on the plains. They are communal animals, and their

holes are grouped together to form "towns" that may spread out to cover several hundred acres. The prairie dogs feed entirely on grasses; and ever since cattlemen came to the plains, the rodents have been regarded as competitors of cows and as pests that must be eliminated. The dog towns that once covered thousands of square miles have been poisoned so that today only small pockets of prairie dogs survive.

The Bureau of Sport Fisheries and Wildlife poisons prairie dogs with oats soaked in a poison known as 1080. Ferrets, of course, are carnivores and will not eat the oats. Whether ferrets are poisoned by the carcasses of poisoned prairie dogs is unknown. However, because the only known home of the black-footed ferret is in holes dug by prairie dogs and because prairie dogs are their staple food, it seems clear that poisoning prairie dogs will sooner or later eliminate black-footed ferrets.

This unusual relationship of an animal that the Bureau of Sport Fisheries and Wildlife is duty bound to preserve with an animal that it is bent on destroying points up the ambivalence—it might be called schizophrenia—that afflicts our policies toward wildlife. These conflicting policies have a long history. The first federal agency to deal with wildlife, around the turn of the century, was the Biological Survey within the Department of Agriculture. It provided a research and advisory service to assist farmers and ranchers. In those days almost all wild animals were considered a nuisance and a hazard to crops and livestock. Western settlers waged war on everything from the lordly wolf and cougar to the humble prairie dog. In 1915 Congress appropriated funds for the Biological Survey to kill wolves; thus, suddenly, it found itself in the killing business. Year by year thereafter the appropriations grew and so did the scope of federal killing, which ceased to be confined to wolves, but extended to all predators and rodents throughout the West.

In 1940 the Biological Survey became the Fish and Wildlife Service within the Department of the Interior. This in turn was divided into the Bureau of Commercial Fisheries and Wildlife. The Bureau of Sport Fisheries and Wildlife was given responsibility for safeguarding the nation's wildlife resources and in addition the "management" duties of the Biological Survey's predator and rodent control division. Thus the Bureau, in addition to such benevolent work as fostering waterfowl and game fish, includes a large and lavishly funded division with the deceptively attractive title of Wildlife Services, 90 percent of whose work is killing wild animals wherever farmers or stockmen consider them an economic liability. This predator and rodent "control" now has an annual budget of \$7 million and employs almost a thousand men.

For years this killing program has been under bitter attack from conservationists who charge that it has become a self-perpetuating bureaucracy that kills animals as much to justify its payroll as to serve any rational purpose. At best, critics charge, its purpose is to enhance profits for a few land-users at the expense of the total public interest in wild animals. Particularly abhorrent to some conservationists is the Bureau's use of the poison 1080, which is capable

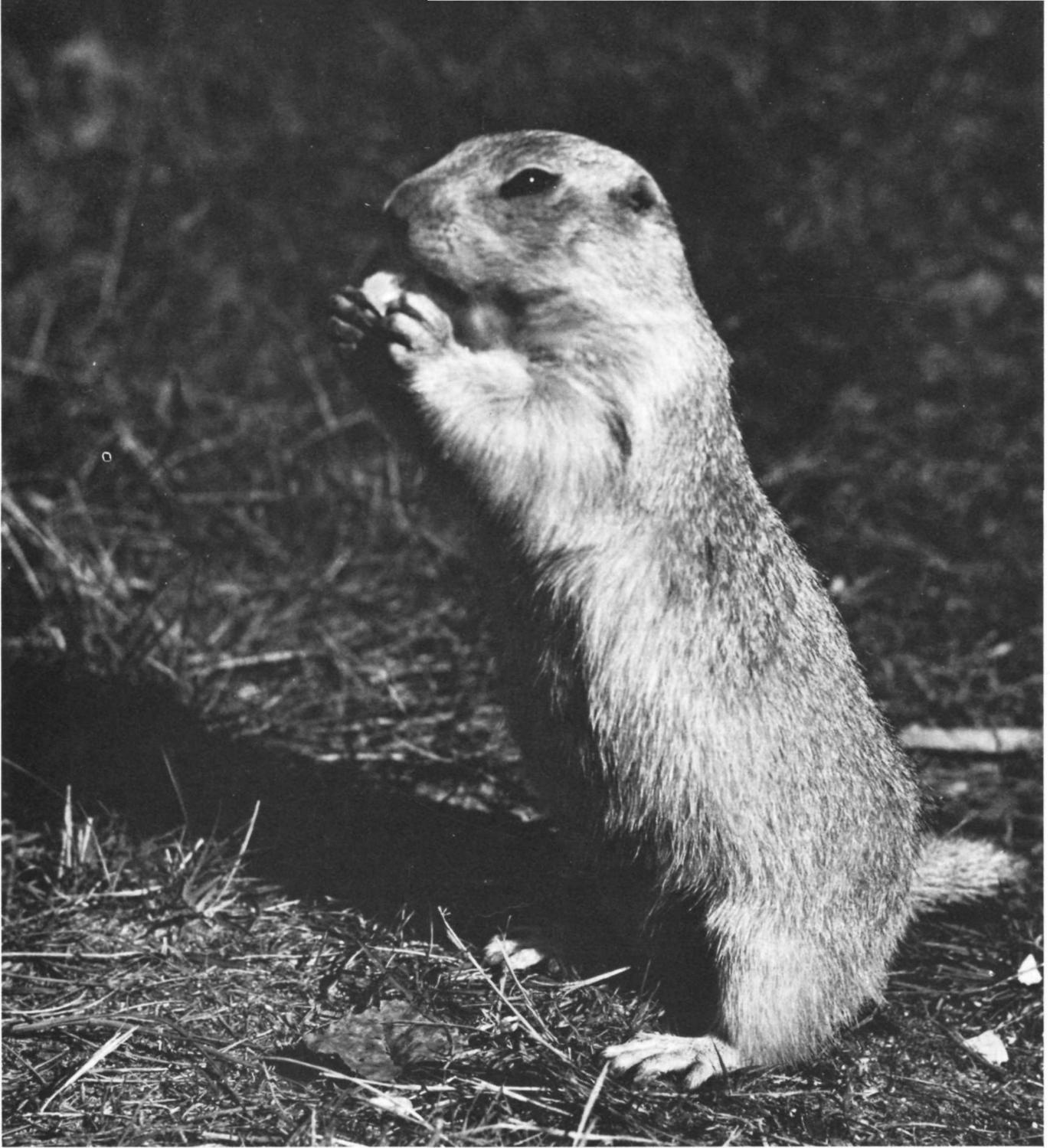
of killing numbers of animals by chain reaction because the corpse of each victim may be a lethal bait for the next animal that feeds on it.

On the other hand, predator control is regarded as an absolutely essential subsidy by sheepmen who claim that without it their losses to coyotes would be financially overwhelming. Cattlemen, who lease vast areas of public land, likewise demand that the range be denuded of prairie dogs and other rodents that compete with their cattle. These two groups—sheepmen and cattlemen—have formed a lobby that so far has managed to fend off all the efforts of the conservationists to end the system of federal predator and rodent control.

The idea that animals don't "deserve" to live unless they are worth money or are "good for something" is hallowed by tradition. On the other hand, a minority belief that all forms of life are of value, both of themselves and because of intricate ecological relationships, has been gaining within the last few years. Thus it happened that in 1964, the year that black-footed ferrets turned up in South Dakota, an act to protect rare and endangered species was in the congressional works. It became law on October 15, 1966. Meanwhile, the Bureau of Sport Fisheries and Wildlife already had been struggling with the thorny problem of the prairie dog versus the black-footed ferret.

The ferret that started all the furor was spotted by a man named Bill Pullins on a ranch near White River, South Dakota, on August 7, 1964. Pullins is one of the Bureau's force of field men whose job is to destroy unwanted wildlife; consequently, he spends a great deal of time in the outdoors. Though he had seen black-footed ferrets only a few times in his life, he knew what they looked like; and he knew that a National Park Service biologist named Walter H. Kittams had been looking vainly for ferrets for some years in order to establish them in safe territory within parks. Pullins notified Kittams of the location of the ferret, and Kittams called two other biologists who were highly interested. They were F. Robert Henderson, then of the South Dakota Department of Game, Fish, and Parks, and Dr. Paul F. Springer, a biologist employed by the Bureau of Sport Fisheries and Wildlife who was then leader of the South Dakota Cooperative Wildlife Research Unit, a laboratory supported by funds from several sources. Henderson and Springer felt that because of the great rarity of black-footed ferrets and the fact that science was almost totally ignorant of their biological characteristics, it was important this animal be studied in the wild rather than captured. With the help of the rancher's son, a young man named Dick Adrian, and funds from the Unit, the Bureau, and a private foundation, a study was begun.

To study the ferret, Henderson and Adrian watched the prairie dog town continuously, by day with binoculars and at night with a powerful spotlight. Prairie dogs sleep at night, but ferrets are active. The watchers found it possible to locate the ferret at night by its eyeshine, and, luckily, the spotlight did not disturb it. The study lasted a year and made it clear why so little had been recorded about ferrets. They are among the most elusive of animals and the most difficult to observe. During the day they stay



mostly below ground in prairie dog holes, though occasionally they bask or play in the sunshine. At night the ferret emerges and glides from burrow to burrow hunting the sleeping prairie dogs. The watchers were delighted to find this ferret to be a mother with a litter of three and were fascinated to see her drag dead prairie dogs to a burrow to feed her young. Later the young ferrets ventured out of their hole, at first timidly, and followed their mother about so that with their long bodies and short legs they looked like a toy train. In fact, the animals were so beguiling with their graceful bodies, buff brown fur marked with black socks, and a black mask, that they reminded the observers of the prettiest of stuffed toys.

In addition to watching the ferrets on the ranch, Henderson made a tremendous effort to find other ferrets and to chart the area over which they had been reported in recent years. A little more than 10 years before, a biologist, Victor H. Cahalane, had studied the range of the ferret and had collected reports of ferrets in 10 states, from northern Montana to New Mexico and Texas. Most of these reports, however, were isolated instances. The only cluster of reports had come from South Dakota, where prairie dog poisoning had been least intense. Cahalane concluded that this must be the heart of the ferrets' remaining range. Walter Kittams had gone on with the list of reports, and Henderson added to it. The total was not heartening. In

1960 nine ferrets were reported, four of them dead. In the succeeding years Henderson collected reports of two, of five, and of eight live and four dead ferrets. All of them were in South Dakota.

An area of crucial interest in Henderson's study was the Pine Ridge Indian Reservation, a tract of grazing land 90 miles long and 50 miles wide, west of the town of White River where the ferret study was under way. The reservation had not been poisoned in some years and supported a thriving prairie dog population. Bordering it was a second tract, 40 miles long and 12 miles wide that the War Department had taken from the Indians for use as a bombing range but now leased to cattlemen.

As Henderson collected clues to the remaining population of ferrets, he decided that the reservation and the adjoining bombing range were the places in South Dakota most likely to harbor ferrets. It was, therefore, with some consternation that he learned that the Bureau of Indian Affairs, which manages the land for the Oglala Sioux, had made an agreement with the Bureau of Sport Fisheries and Wildlife to poison the prairie dog towns on both the reservation and the bombing range.

It was at this point that the clear interests of a rare and endangered animal of which the Bureau was supposed to be guardian collided head-on with the commercial grazing interests that the Bureau also serves. The struggle that ensued is, if nothing else, an interesting illustration of how decisions concerning wildlife may be made.

When they heard about the poisoning plans, Dr. Springer and Robert Henderson protested to the men who had arranged it—Duane Moxon, range manager for the Bureau of Indian Affairs (BIA), and Jim Lee, district agent for the Bureau of Sport Fisheries and Wildlife. Both were notably unsympathetic to the cause of the ferret. Dr. Springer also appealed to Washington. Officials there expressed concern for the ferret but retreated behind the argument that inasmuch as no one had ever seen a ferret die as a result of prairie dog poisoning, there was no proof that poisoning was detrimental to ferrets.

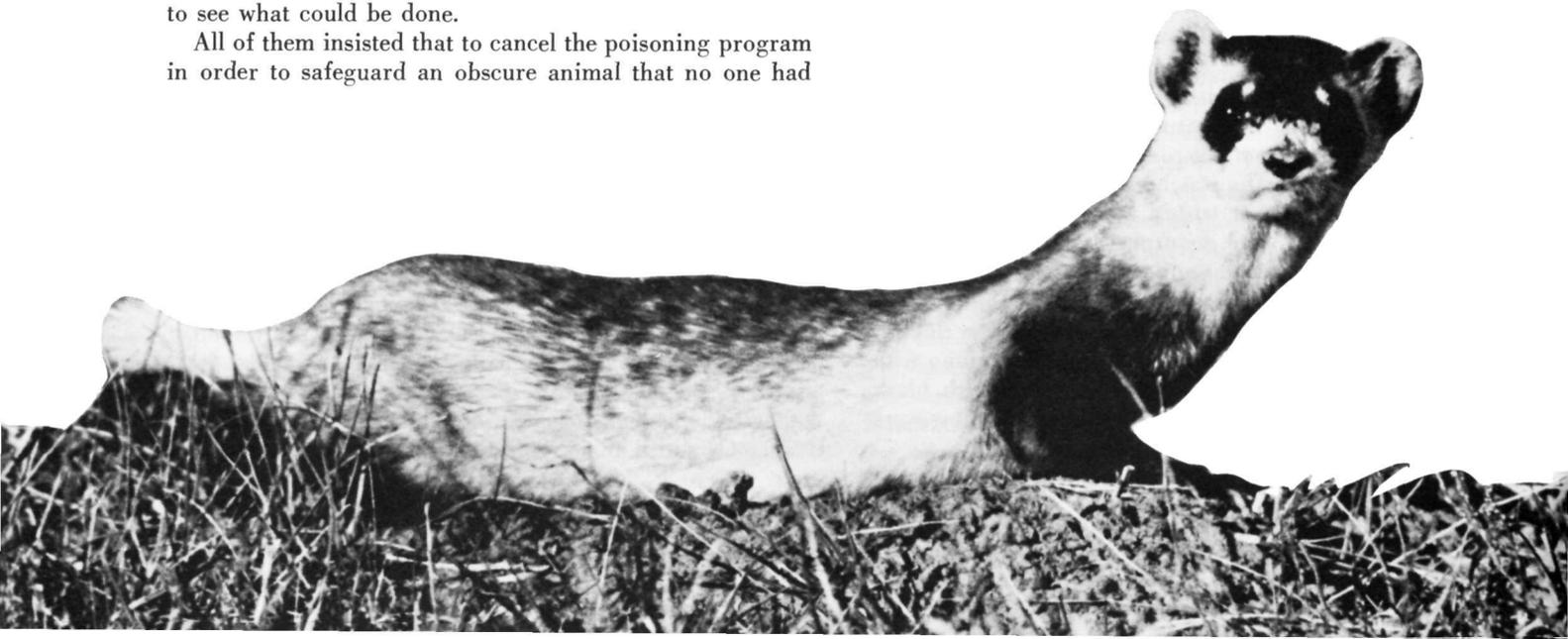
Matters might have stood thus had not the Assistant Secretary of the Interior for Fish and Wildlife and Parks, Dr. Stanley Cain, got wind of the fact that the Bureau, over which he had jurisdiction, was about to administer what might well be the coup de grace to a rare species. He called a conference of the Bureau of Indian Affairs and the officials of the Bureau of Sport Fisheries and Wildlife to see what could be done.

All of them insisted that to cancel the poisoning program in order to safeguard an obscure animal that no one had

proved to be present on the land in question, and that no one had *proved* would be harmed by poisoning prairie dogs, was out of the question. Implicit in the situation was the fact that if the Bureau called off poisoning prairie dogs, there could be strong reprisals both from the Bureau of Indian Affairs, which had small interest in preserving ferrets, and from the cattlemen who leased much of the reservation from the Indians and whose lobby had the ear of powerful western legislators. On the other hand, if the Bureau killed off the last of the black-footed ferrets, the outcry from conservationists would likewise be damaging. In a word, the Bureau of Sport Fisheries and Wildlife was in a tough spot.

At last the impasse was broken by a compromise that seemed to satisfy all interests. The reservation and the bomb range would be poisoned as planned, but first each dog town would be examined to determine whether a ferret was present. If a ferret were found, that particular dog town would be spared. Pleased with their work, the conferees shook hands and departed. The Bureau issued a publicity statement congratulating itself on its benevolence toward the black-footed ferret.

Unfortunately, several things made the solution unworkable. One was the attitude of the men in the field who were supposed to implement it. Neither Duane Moxon nor Jim Lee was at all pleased with the orders from Washington. These orders included supervision of the search for ferrets by Dr. Springer with the help of Robert Henderson. Shortly before the poisoning was to begin Henderson went to a meeting with Moxon and Lee and several of their assistants, including two elderly trappers who had been hired by Lee to make the ferret surveys. Soon it was clear to Henderson that no one intended to make more than the most cursory gesture toward safeguarding ferrets and that Henderson's concern was regarded as a pain in the neck. When Henderson pleaded earnestly for saving the ferret, the rest of the group burst into hearty laughter. Then Moxon of the BIA told Henderson that in any case it had been decided that no outsiders would be allowed on the reservation and therefore it would be impossible for him or Dr. Springer to supervise the ferret surveys. Henderson was powerless to insist. Washington officials of the Bureau of Sport Fisheries and Wildlife bowed to Moxon's decision, presumably be-



cause they wanted no further trouble with the Bureau of Indian Affairs. Thus Dr. Springer and Robert Henderson, the two men in the world with the best firsthand knowledge of ferrets, were excluded from the program to save them.

There was a second and even graver flaw in the ferret survey plan. Black-footed ferrets are so elusive and appear above ground so briefly that they can be found only by the most exhaustive and patient search. Robert Henderson's experiences had shown that even when a ferret is known to be living in a certain dog town, it may take several days and nights of watching to catch a glimpse of it. Black-footed ferrets leave no tracks, except in snow, and droppings are deposited underground. In fact, the only clue to a ferret's presence is a short trench that it sometimes makes in the loose dirt when it excavates a prairie dog hole. These trenches do not always occur and may be destroyed by the subsequent digging of the ever-industrious prairie dogs. Under these circumstances it would have taken perhaps a dozen men a month of dedicated work to make a real survey of the 10,000 acres the Bureau planned to poison. Instead, the Bureau proposed to cover the ground with four men moving rapidly just ahead of the poison crews.

In mid-August 1965 the poisoning of the Pine Ridge Indian Reservation began. The searchers found no ferrets, so no dog towns were spared. That same summer dog towns on private land in ferret territory were also poisoned. The Bureau field men who did the poisoning were instructed to look for ferrets first, but none found any.

Each year since then the poison program has proceeded, relentlessly narrowing down the number of prairie dog towns available to ferrets as habitat. Whether ferrets are directly poisoned by eating poisoned prairie dogs ultimately will make no difference when there are not a sufficient number of prairie dog towns to support a viable population of black-footed ferrets. Because no one knows what the critical number is, the Bureau cannot be accused of knowingly reducing the ferret habitat below the necessary minimum.

There is room for debate on the subject of the wholesale poisoning of prairie dogs. Most range managers and cattlemen consider it axiomatic that getting rid of prairie dogs is necessary and beneficial to the maximum yield of cattle. On the other hand, there are scientists who have looked into the complexities of the prairie dogs' total effect on range ecology and are far from convinced that they are

detrimental in the long run. Be that as it may, a demonstrable absurdity in the Pine Ridge operation was the poisoning of the bombing range, which provided marginal grazing at best, was the property of the U.S. government, and was best suited for wildlife, hunting, and recreation. Why a few stockmen, holding leases at low rent, should be able to demand to have this large, wild, and beautiful area ecologically devastated at the expense of the U.S. taxpayer is hard to rationalize.

Nevertheless, the Bureau of Indian Affairs wished to oblige the leaseholders, and the Bureau of Sport Fisheries and Wildlife wished to oblige the Bureau of Indian Affairs, so it happened. Now the bombing range has been divided by Congress; one portion has been given back to the Sioux tribe, and an equal portion has become part of the Badlands National Monument. A tract of 42,000 acres has been kept by the Defense Department, and here at least the black-footed ferret may find sanctuary. This area has not been poisoned and contains quite a few prairie dogs. It is hoped that ferrets live there also. The Bureau of Sport Fisheries and Wildlife in its role of protector of wildlife has negotiated an agreement with the Defense Department that will keep the area unpoisoned.

All during the time that the Bureau was destroying ferret habitat and possibly ferrets it also was trying to devise means to save the species. It has taken several helpful steps. In early 1966 it assigned a biologist, Donald Fortenbery, to study black-footed ferrets. He has been working since then to gather basic biological information on the species and to answer such questions as its original and present range, habitat requirements, reproductive habits, and so on. He has worked particularly hard trying to devise some way to locate ferrets without hours of patient vigil, but so far he has not succeeded. Nevertheless, his work was greatly needed to fill scientific gaps in knowledge about the ferret.

In another effort to save the species the Bureau has decided to capture ferrets with the hope of breeding them in captivity and then placing their offspring in protected areas. Dr. Ray C. Erickson, the Bureau's assistant director for Endangered Wildlife Research, has been making preparations and breeding European ferrets as a pilot project. Unfortunately, capture was delayed for several seasons by a dispute between the Bureau and the director of the South Dakota Department of Game, Fish, and Parks, who refused permission to capture a "resident" animal. In 1969 a truce was signed, and now all that remains is to locate several litters of ferrets and capture them. One family of ferrets has been under observation on a private ranch for several years, and the Bureau is paying the owner a subsidy to refrain from poisoning the prairie dogs.

Thus the Bureau of Sport Fisheries and Wildlife continues on its schizophrenic course—its left hand struggling to preserve the ferrets while its right hand goes on destroying their habitat. If the black-footed ferret becomes extinct in the wild, it will not be remarkable that its cause failed. The ferrets' right to live and its claim to the land have frail support compared to the power of the economic forces on the other side. What is remarkable is that a struggle took place. A few years ago it would have been unlikely that the ferrets would have had even half a chance. So there may be in the story of the ferrets some grounds for hope after all. ■

Faith McNulty was reared in the country and always has been interested in animals. For 20 years she lived in New York City, where she worked as an editor on *Life*, *Colliers*, and *Cosmopolitan* and finally joined the staff of *The New Yorker*. She has written on a variety of subjects, but several years ago she decided to concentrate on what interests her most—animals, particularly the struggle of many species to survive in the modern world. In 1966 she published a book, *The Whooping Crane*. She spent 2 years researching and writing her forthcoming book, *Must They Die? The Strange Case of the Prairie Dog and the Black-footed Ferret*, which will be published in May 1971 by Doubleday & Company. During that 2 years she visited black-footed ferrets and Washington bureaucrats, their critics and their partisans. This article is based on the results of that investigation.

ONE DAMMED THING AFTER ANOTHER

a primer by Gene Marine

Dams are artificial objects whose purpose is to block or impede the flow of moving water. They are built by beavers, small children, and engineers. Beavers have intelligent reasons for building theirs. Small children have fun and rarely do any harm.

Beavers and small children aside, there are several reasons for building dams. Sometimes they're validly applied, sometimes they're not.

Individuals sometimes build dams to make lakes or pools for recreation. When someone acquires a vacation cabin that fronts on a creek and wants a place for the kids to swim, he may build a small dam. This kind does little damage. Usually it remains intact only until the first unusually heavy runoff, and other tenants along the creek can see that fish life, if there is any, is not too heavily disrupted.

Occasionally, however, someone is able to acquire enough land and influence over water rights to build a dam that creates a larger pool or lake to be part of a "new town," commercial resort, or "second-home community." Compared to one-family dams, these constructions disrupt a somewhat larger ecosystem for private profit, result in heavy pollution, and after a time defeat themselves through the process of siltation. Luckily the opportunities for such private development rapidly are being used up or blocked.

In California, where many such promotions have appeared in the foothills of the Sierra Nevada mountains, local governments and the state have begun to frown on them. Not only do the dams ruin the environment, but the ultimate consumer winds up with far less than he thought he was getting: he has a city-sized lot on a "lake," inadequate access, poor insurance coverage, no public services to speak of, and the certainty of deteriorating surroundings in his

future. The developer who sired the project is long since gone, having left only his dam behind him.

Another reason for making a dam is to use it as a reservoir. This purpose is reasonable, sometimes, but in the long run temporary—as a great many growing communities have learned.

All dams make lakes or pools, and all may function as recreation areas or reservoirs. Usually, though, these are not the principal reasons for building dams.

In the West particularly, and to a lesser degree in the South, most dams are built to generate electric power. The hydroelectric dam is an outgrowth of the simple idea of sticking a paddle wheel into flowing water to tap the energy of its flow. By regulating the flow with a dam which can block or release water on order, we can vary the amount of power generated so that it will meet human needs somewhere on the other end of a series of transmission lines.

This method is a good way to generate electric power if that's what you want to do (this article is being written on an electric typewriter powered ultimately by the flow of a river 100 miles away). Hydroelectric power stations do not contribute heavily to air pollution, as do the coal-burning plants of other parts of the country. They do not create serious thermal pollution nor run other risks, some of them as yet unassessed, that are associated with nuclear energy (no matter what power companies and the Atomic Energy Commission try to tell you). They do not seriously pollute the water.

Some dams are built to restrict the flow of the water with the purpose of regulating its rate or changing its direction. The most common reason for doing this is called "flood control." Inasmuch as we persist in building settlements and

sometimes major cities (Detroit, for instance) on flood plains, some flood control dams are a good idea or, at least, necessary under present circumstances.

A variation on ordinary flow restriction uses can be found in California, where several dams are designed primarily to move water to an artificial destination—in this case from northern California to the lands of some large corporate landowners in the southern San Joaquin Valley. A tiny proportion of this water eventually will reach Los Angeles and other southern cities.

An additional reason for constructing dams is to regulate the flow so that some of the area downstream, normally under water or at least very swampy, will permanently be beyond the banks of the river and thus available for agriculture or recreation or settlement. In other cases the flow is regulated so that water always will be available for diversion into nearby irrigation ditches. In both cases this is called, for peculiar and decidedly political reasons, "reclamation."

If we ignore the creek and the swimming hole, dams are built either by private corporations—almost always power companies—or by you and me, usually through the Departments of Defense and Interior, specifically the United States Army Corps of Engineers and the Bureau of Reclamation. We must not conclude, however, that power companies build hydroelectric dams, the Corps of Engineers builds flood control dams and the Bureau of Reclamation builds reclamation dams. That would make sense, and *nothing* about the building of dams in America makes sense.

To a lot of us—particularly those who are older than, say, 40 or 45—dams are Good Things. In the 1930s dams meant, first of all, jobs; but beyond that they meant Development, and Development was Good.

With dams we "harnessed" rivers. We brought cheap power to the Tennessee Valley and "developed" the Colorado and the Columbia to bring a better life to the masses of the Southwest and Northwest. Woody Guthrie sang fine proletarian songs about Grand Coulee Dam. We engaged in bitter political fights over whether dams should be built by or for power companies ("private power") or by and for the people ("public power"). As recently as the 1950s the dispute over Hell's Canyon on the Snake River echoed this disagreement (with liberals favoring a massive high dam as opposed to three relatively low ones power companies wanted to build). Utility company advertising still stresses an anti-socialist theme.

And in other parts of the world, regardless of political conviction, we praised the same sort of "development," the same triumphant "harnessing"—Tsimlyansk and Kakhovka in the USSR, Aswan in the UAR, Pahlevi in Iran, Volta in Ghana, Bhakra in India. We measured the heights and volumes, the acre-feet of water retained and the megawatts of power to be generated, and we were sure that it was Progress.

Gene Marine, formerly senior editor of *Ramparts*, is the author of several books including *America the Raped* and, with Judith Van Allen, the forthcoming *Food Pollution*.



NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Aerial photograph shows silt deposits and sediment-laden water on a finger of Lake Mead. Silt in upper right was deposited when the level of the lake was higher. The muddy stream drains the remaining water from the mud flat. The murky water in the middle of the photo carries suspended sediment into the lake, where, because the current is less swift, the sediment settles toward the bottom. The dark areas on the right of the silty water indicate sediment build-up.

Some of us find it hard to adjust to the idea that maybe we shouldn't have built them, maybe we shouldn't build any more, maybe we should even tear some of them down. But let us look for a moment at the Santa Yñez River in California.

Santa Yñez is a pretty river in the coastal hills that enters the sea near Vandenberg Air Force Base. Nothing is unusual, much less ecologically unique, about its upper reaches; the hills it drains are more or less barren and almost untenanted. No rare life forms depend on it for survival. If you have to build a dam, the Santa Yñez will do to build it on.

The city of Santa Barbara, growing as California cities tend to do, did just that in order to provide itself with a water supply. Alas, the dam quickly silted up, and to Santa Barbara's surprise its reservoir is rapidly becoming an alluvial plain, over which the river will flow down a waterfall that once was a dam. Quickly, farther upstream, they built another dam.

That dam, too, traps silt. What is more, by trapping the silt out of the water it leaves the water with more ability to scour the banks and bottom in the region between the two dams, so that now silt builds up on the first dam more rapidly. A third dam is under construction.

Soon—not in this generation, certainly, because all three reservoirs are still usable, but soon—Santa Barbara will have to get its water somewhere else. And what was once the bed of the Santa Yñez will be a series of flat alluvial plains terminated by waterfalls—interesting to some arche-

ologist or geologist of the distant future, perhaps, but to our eyes not nearly so pretty as the original Santa Yñez.

More than 2,000 dams in the United States are already completely silted—useful to nobody. Several thousand more will silt over during the lifetimes of most of us. This is the reality about dams that we never, never faced during those golden days of harnessing and developing: dams are temporary structures.

“Temporary” is a relative word, of course. After the Bureau of Reclamation fought a long and successful battle against the forces of sanity, they built Glen Canyon Dam on the Colorado, creating Lake Powell behind it. They completed their work in 1964. Glen Canyon Dam, compared to most other dams, is big. We will all be dead, and all our children too—even barring catastrophe—when Glen Canyon Dam is completely silted up and that once lovely canyon has become an alluvial plain. But this eventuality will occur within 200 years, and even in human history that is a very short time. Lake Mead, behind Hoover Dam farther downstream, will already have disappeared in silt by then.

When Woody Guthrie sang “Roll On, Columbia” in 1941, he knew that one of the wonders of the “people’s dam” at Grand Coulee was its hydroelectric capacity: 5,574 megawatts. I wonder whether he would have sung so loudly had he known that 30 years later its *operating* capacity would still be less than 2,000 megawatts, with no apparent need for an increase. This is the second reality about dams: they do not usually do what they were intended to do.

We did indeed get cheap power in the Tennessee Valley. We also got a TVA that meets its demands by buying coal from the strip mines that are destroying eastern Kentucky and starving the proud people who live there (whose music Woody Guthrie also loved to sing). Social processes, too, are ecological.

Older and more cynical, we can see now that the reasons usually given for building dams are not the real reasons at all. Dams are built, alas, so that some few can profit at the expense of many, or so that bureaucracies can be perpetuated, or both.

Under the law, the Corps of Engineers is empowered to build dams only for the purposes of improving flood control or improving navigation. The Bureau of Reclamation is empowered to build dams only for the purpose of reclamation.

Yet—to take just two examples as they occur to me—the Corps proposes not one dam but a series of dams on a waterway called Pescadero Creek in California, which is not navigable. It does “flood” occasionally, but in a very small way, and no one lives or farms on its flood plain.

And the Bureau of Reclamation built Glen Canyon Dam—and continues to propose two more dams in the Grand Canyon—despite the fact that there is nothing whatever to reclaim, nothing has been reclaimed, nothing will be reclaimed.

Bureaucracies are often useful. They tend to exert a conservatizing force which at times we need, and they accomplish a lot of the dirty work of administration that the rest of us would rather not bother our heads about. But they tend to have two irrational characteristics. They almost never eliminate a procedure. And they never, never eliminate themselves.

Both the Corps and the Bureau are bureaucracies. Neither, in its present form, has any further need to exist as far as the rest of us are concerned; if they had a function, they have served it already. It is ridiculous for flood control, even in those few places where it is needed, to be the concern of the United States Army or of any bureaucracy that exists for no purpose other than dam-building and which is not part of an overall, ecologically oriented planning agency.

Even if that were what the Bureau does, “reclaiming” land is an equally ridiculous pursuit—when we can’t figure out what to do with the surpluses we already grow and when we pay people *not* to grow things (of course we should find a way to use our resources to feed the hungry of the world—and of our own country—but that is a problem beyond the scope of this primer and one to which the Bureau of Reclamation makes no contribution).

The point is that both the Corps and the Bureau *have* to build dams, whether the dams are needed or not, because only by building dams can they continue to exist. Both agencies have met this difficulty by using the same mechanism: a cozy relationship with Congress. Every Congressman wants to bring a major construction job (with its attendant payrolls) to his district; every Congressman is willing to enter into a you-vote-for-mine-and-I’ll-vote-for-yours agreement with other Congressmen; and the Corps and the Bureau dutifully plan projects, regardless of need, for as many Congressional districts as possible. Only the land, the water, and eventually the people suffer.

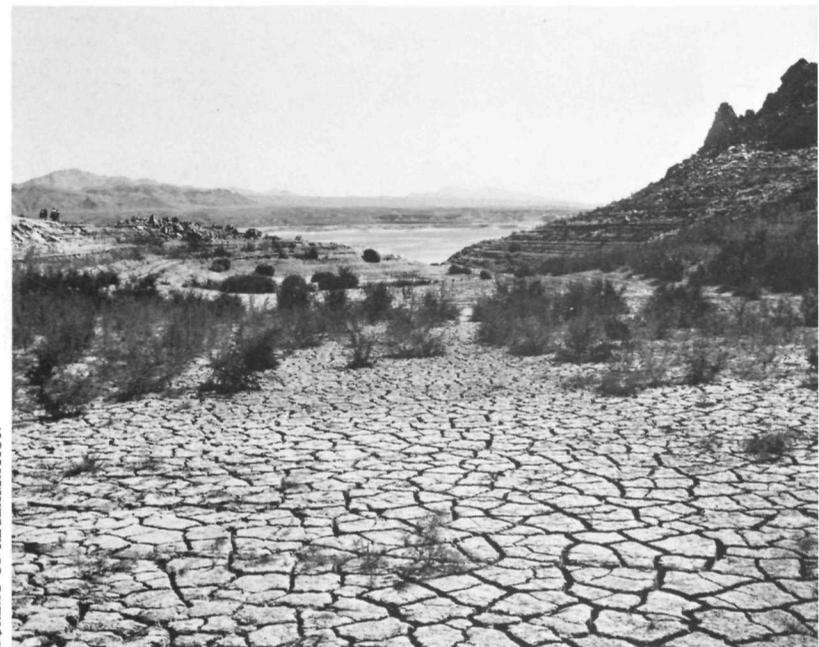
Congress, of course, is also interested in economy. They want dams, but they don’t want the cost. So both the Corps and the Bureau have had to figure out a somewhat more sophisticated ploy. While one pretends that the “real” purpose of its dam is flood control and the other pretends that its “real” purpose is irrigation, both in fact propose multipurpose dams that generate electric power. The power can be sold, and this, Congress is assured, finances the dam.

Private power companies like this arrangement because they usually wind up buying the power (cheap) and selling it again (less cheap) without incurring the cost of building the dam. When the utilities people are not given the electric power, they call the dam “socialism.” The real reason they are critical is that they are afraid the real costs of electric power will become evident to consumers in the area.

This bureaucratic determination to build multipurpose dams has a byproduct: the dams have to be higher for maximum hydroelectric efficiency. Because all the good sites on relatively small rivers or high mountain tributaries are pretty well used up, the Corps and the Bureau increasingly must find reasons to dam main rivers or even entire systems of rivers. At the other end of the extreme they also must find reasons to dam tiny and insignificant trickles.

Reasons can always be found, although they are not always the ones that appear on the surface. Pescadero Creek, mentioned earlier, empties into the Pacific Ocean along a stretch of beautiful and almost uninhabited coastline south of San Francisco. Concerned Californians who want to preserve what’s left of the state’s coastline are in a race with real estate developers who would like to build a suburban community there. They need an assured water supply (like a reservoir behind a dam) and enough flood control so that they can put houses on the flood plain. The same thing will happen to their reservoirs that happened to Santa Barbara’s, but the starry-eyed suburbanites won’t know that

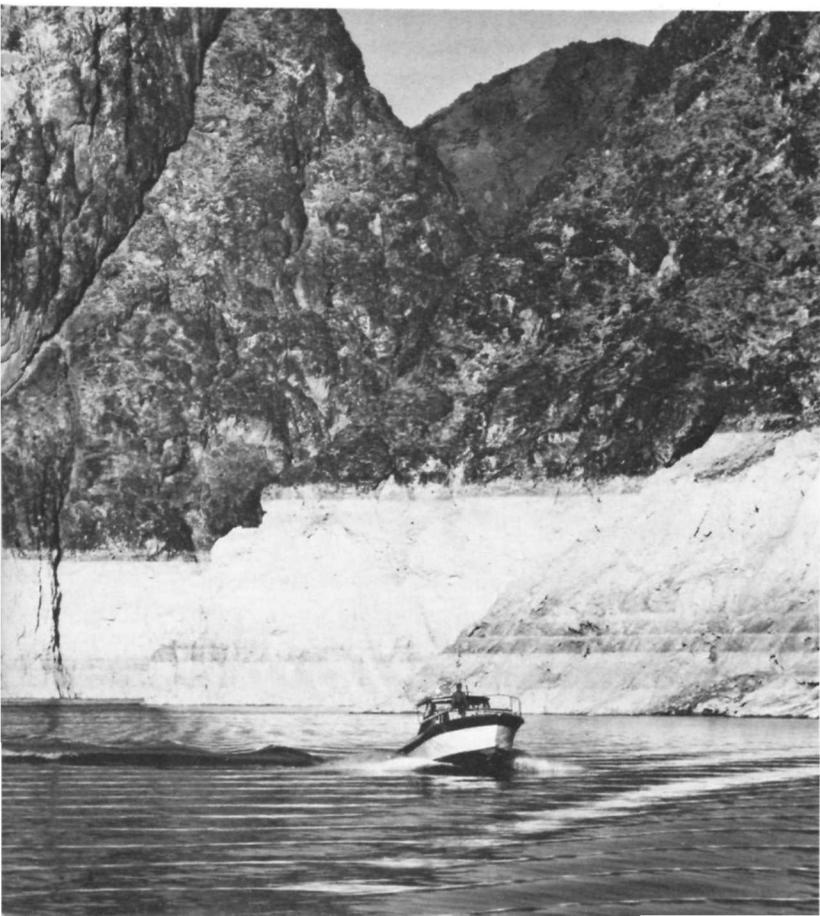
Silt deposited in a cove on the upper end of Lake Mead dries into a field laced with cracks during a period of low water.





BUREAU OF RECLAMATION

Largest man-made reservoir in the western hemisphere, Lake Mead stretches 110 miles behind Hoover Dam on the Colorado River. The white band indicates the high-water mark, which is more than 65 feet above the current average level of the lake.



BUREAU OF RECLAMATION

until the developers and the Corps of Engineers have long gone. And then the Corps, perhaps, will propose another project to “save” the community.

In fact, behind a surprising number of Corps and Bureau dam proposals is either a power company or a real estate developer or both. Of course, one other possible explanation remains for the presence of all these dams, offered a few years ago by that shrewd and acerbic economist, Kenneth Boulding:

The only way you could explain the water policy in this country was the religious explanation that we worship the water goddess, and hence had to build all these pyramids—all these dams and temples. There is no other conceivable rational explanation.

If it were not for the very real environmental damage that dams do, it would be possible to view with some amusement the ultimate absurdity of all this: hydroelectric dams do not, in fact, pay for themselves at all, and the whole farce is not only unnecessary but a drain on the taxpayer as well. You can’t find that out, of course, by studying the Bureau’s or the Corps’ figures; they have their own ways of computing things like cost-benefit ratios. But there are two independent studies that state the facts quite clearly.

One is British—or, more accurately, Scottish. It was reported in America a few years ago by E. M. Nicholson, who headed the International Biological Programme and who does a lot of government consulting in London. He was a member of a committee that worked out a set of objective economic criteria for measuring hydroelectric projects in Scotland—criteria that were formulated from scratch instead of being dreamed up by the people who wanted to build the dams.

“When the new criteria were set up,” he told a meeting of ecologists in America, “they found that there wasn’t a single hydroelectric project that could be put forward which would match these perfectly objective criteria. Yet the schemes had been going forward as if they were an addition to the natural wealth.”

The other study was done by Robert Haveman, an economist then at Duke, and is described at length in my book, *America the Raped*. Briefly, Haveman studied every Corps of Engineers project in 10 states over a period of 16 years and applied, not the Corps’ own accounting methods, but five separate methods each of which is generally accepted in the economics field. Sixty-three of the 147 projects could not pass *any* of the five tests for showing whether costs outweighed benefits. Almost none passed all the tests.

Haveman goes into considerable detail about how both flood-control and reclamation dams ruin more land than they protect. He does not discuss things like the effect of dams on anadromous fish life, streamside ecology, soil fertility, or any of the other things we all know about by now. His sole concern is whether dams do in fact contribute to the national income—which some of us now think is not, after all, the most important question—and he finds that they don’t even do that!

The purpose of the two proposed Bureau of Reclamation dams in the Grand Canyon (they were defeated in Congress, but they are still “proposed” and by no means dead), when the verbiage is boiled down, is to generate power, which will be sold to raise money, which will be used for

BUREAU OF RECLAMATION

land “reclamation” in the Central Arizona Project. There is no connection between the dams and the Project except the money—but by semantic magic these become “reclamation dams.”

In fact, rather than build more dams in the Grand Canyon, the *sane* thing to do would be to knock down the one at Glen Canyon. It does nobody any good, and no need for power exists in that region. Tearing down the dam would provide, for a time, as many jobs as dambuilding; but you can probably guess how far that proposal is going to get.

In California, where I live, we have something called the California Water Plan. A part of it is authorized and is being built, but (as few Californians realize) there is a lot more to the California Water Plan than that. Already the official policy of the state government, the remaining portion of the California Water Plan provides for the construction of *600 more dams* in northern California, leaving no waterway in its natural state except for an insignificant creek or two.

The purpose of this massive ecological rape? Well, it *will* control some floods in areas where handfuls of people insist on living on the banks of rivers that flood every couple of years or so. But that’s not the purpose. The purpose is to move the water southward, which in turn will do two things.

First and most important, it will hugely enrich some already rich corporations that own vast areas of arid land. Second—and less important, though it is of course the reason everybody talks about—it will, in the scornful words of one prominent San Franciscan, “make more Los Angeles.” Not even the people in Los Angeles want more Los Angeles.

In the 1930s we could argue that no harm would come from the dams we got so excited about (some people worried about fish, but we thought those fish ladders answered all the questions). Woody Guthrie was poet, singer, writer, composer, and philosopher; we couldn’t expect him to be an ecologist as well. But today we have no such excuse.

We know now that the increasing salinization of the Nile Delta in this century is related to the construction of a dam at Aswan in 1902, and that the high dam recently constructed there may turn out to be the final destruction of agriculture in Egypt (and thus of Egypt). We know now that the claims made for the recreational benefits of artificial lakes are wild exaggerations; Lake Mead is empty as often as it is full, and its shores are repellently ugly during drawdown periods. We know now that the cheap and abundant power is not all that cheap and didn’t turn out to eliminate poverty after all. We know now of the irreparable, irreversible damage we have done to the water and the land. We know now that nature’s inexorable cycles are crucially tied to our very existence as a species.

Slowly, perhaps, we are coming to know that most of our dams (like most of our eight-lane interstate highways, our sprawling airports, our hastily hewed canals and eagerly ripped-out strip mines) not only do more harm than good but are unnecessary to begin with. Slowly we are coming to understand the interdependence of every aggregation of every element.

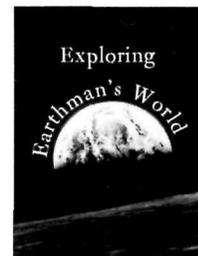
We still must learn that it may already be time, or past time, not merely to stop our frantic building but to begin a stately and measured tearing down. There are a number of dams, Glen Canyon among them, that would provide excellent places to start. ■

Glen Canyon Dam and part of its 186-mile-long Lake Powell. Completed in 1964, the dam sits on the Colorado 370 miles upstream from Hoover Dam.



COMMUNIVERSITY

Edward W. Weidner



a series of essays
examining
man's relationship
to nature

In Green Bay, Wisconsin, home of the legendary Packers, a new kind of university is taking shape, a university conceived as a response to the ecological crisis that threatens man and his world.

This new institution is The University of Wisconsin—Green Bay. After 3 years of planning, we occupied our new main campus and launched our new academic plan in the fall of 1969. Superficially, it may seem that UWGB is like any other university. We train chemists, biologists, physicists, and mathematicians. We train business administration specialists, elementary and secondary school teachers, artists, musicians, and actors. A student may select a foreign language, English, philosophy, or history. And courses in all the social sciences are offered as well. There is much that is familiar at UWGB.

But there is a crucial difference at UWGB, a difference well described recently by John Fischer in the February 1971 *Harper's Magazine*. In *Harper's* in 1969 Fischer had proposed what he then considered a wholly imaginary Survival U, "where all work would be focused on a single unifying idea, the study of human ecology and the building of an environment in which our species might be able to survive."

This description, Mr. Fischer later discovered, is an almost perfect summary of the actual academic plan at UWGB, a plan that he characterizes as "the most exciting and promising education experiment that I have found anywhere."

Our focus at UWGB is man and his environment. Whether in teaching, research, or community outreach, our primary objective is to help student, professor, and community member understand and feel the problems of the environment and do something effective about them. Fundamental to our program at UWGB is the conviction that our mission can be accomplished only in cooperation with the people of our region as they act through their business and industrial enterprises, professional organizations, and governmental and voluntary agencies. To dramatize this relationship, we term ourselves a "communiversity," a socially respon-

sible university relating to a socially responsible community.

What are some of the practical results to date of this new concept of the university and its role?

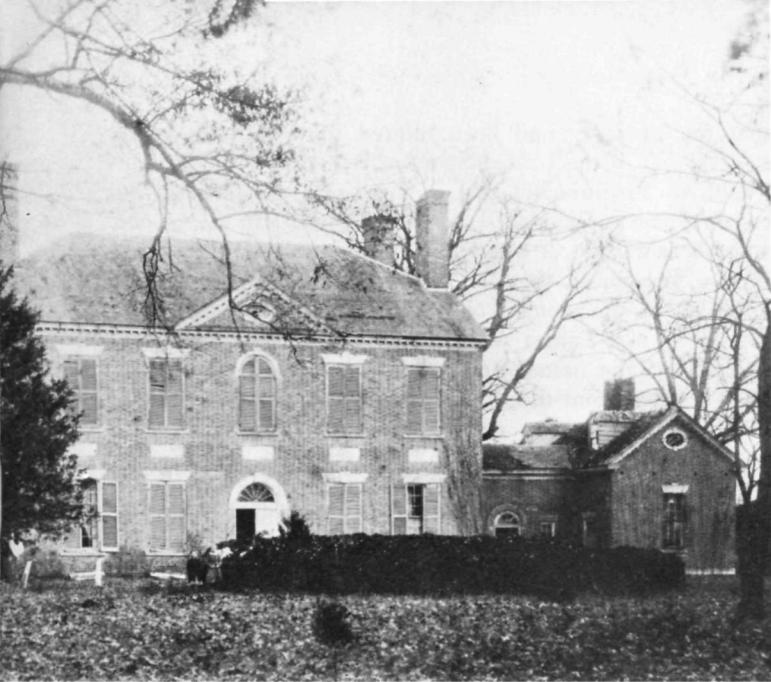
- The traditional academic department, wholly concerned with a single subject, or discipline, has been discarded. Instead, our faculty members organize themselves around the environmental problem areas in which they are particularly interested, no matter what their disciplinary backgrounds. We call these problem areas "concentrations." Within each concentration, scholars from a variety of fields learn to pool their knowledge for the study and solution of problems of the physical, social, and cultural environments.
- Students discover that their academic work can be relevant to the concerns of the practical world. They learn that most human activity in an industrial society, including their own, results in pollution. They see the community as an extension of the classroom, and cooperation as a more useful tactic than confrontation.
- Faculty-student-community teams are beginning to work together to improve environmental quality. An example is the current multidisciplinary investigation of the problems of an important recreational lake in Marinette County.
- Theory leads to action. Students have eliminated the use of nonreturnable beverage containers in campus clubs and cafeterias. They have organized bottle and paper collections. They have begun cleaning up a creek bed that borders the campus. They have incorporated environmental themes in some of their dramatic and musical productions. They have successfully petitioned the governor to proclaim an Environmental Month.
- The UWGB idea has attracted increasing national attention. Visitors have come from all parts of the United States and from France, Sweden, and Canada. Articles about UWGB have appeared in numerous American and foreign publications.

We cite these accomplishments only as modest examples of the things that become possible within the context of a university that focuses on man and his environment. Although we believe UWGB has made good progress in its beginning phase, we are a long way from achieving our most important goal—the development and widespread acceptance of an environmental ethic.

The ecological crisis, we believe, has not been brought on primarily by lack of scientific and technological knowledge. The crisis is rooted in attitudes that have allowed all of us, in our business, industrial, domestic, and recreational activities, to do things that are producing a cumulative, massive degrading effect on our environment. The great need is for a new set of attitudes that will motivate peoples around the world to apply to the improvement of the environment the scientific and technological knowledge already available to us. This is what we mean by the development of an environmental ethic.

Conceivably, this new way of viewing our common situation could lead us to solutions of some of our oldest problems, such as war and poverty. The ecological view emphasizes the inescapable relatedness of all of us with each other and of man and his works as a whole with the biophysical environment that produces and sustains life. Thus UWGB is proceeding on the assumption that the old truths formulated by the religious leaders and philosophers of the past apply to the realities of our environmental situation today and may quite literally be the key to our survival. ■

Edward W. Weidner has been Chancellor of The University of Wisconsin—Green Bay since February 1967. Under his leadership, UWGB has progressed from an idea to a functioning institution, currently with about 4,000 students at four campuses. Weidner is a political scientist with a doctorate from the University of Minnesota and a 25-year academic career.



Woodlawn Plantation, near Mt. Vernon in Virginia, before and after restoration.

A NEW ERA IN PRESERVATION

helen b. byrd

IT WAS A MILD AUTUMN EVENING. The city streets had been blocked off from automobile traffic as we strolled from one candlelit house to the next, knocked and entered. The warm hospitality of another era embraced us as we passed from room to room gazing at the polished antique furniture, gleaming silver, carved mantels, family portraits, and fanlight doorways. The fragrance of ginger plants in bloom lured us into the night again, to enter the small enclosed gardens hidden behind wrought iron gates and fences.

The atmosphere of a day gone by, one that moved at a more leisurely pace, caught us up into a nostalgic web. It was a moment for reflection, a time to think back. Who had lived in these homes? What had brought them to the New World? How had they prospered? The history of a city was all around us, and its story was vividly illustrated as we wended our way down the old brick walks that evening.

We were attending the 24th annual meeting of the National Trust for Historic Preservation in Charleston, South Carolina, during the celebration of its 300th anniversary. What a tribute to that city, and to its people, that many of its original houses are still there, carefully restored, loved and lived in! The anniversary could have been a story

without illustration if a group of concerned citizens had not realized in time the value of saving an historic district in the heart of a modern city. Happily, Charleston is only one example of a city that is preserving its past for the instruction and enjoyment of today's Americans and those of the future.

Years ago, before this country was generally alert to a rapidly deteriorating environment, conservationists were working without fanfare to protect our national resources; but steps that were being taken by workers in the related field of historic preservation were even less known. Actually, this earlier conservation and preservation work overlapped in many respects. The National Park Service, for example, took a broad view of its responsibility in conservation, one that encompassed not only natural resources and scenic wonders but also the history of man in this country. Early Americans trod softly, changing little, adapting their mode of living to their environment; nonetheless, they left evidences of their occupation that may be seen even today. Under the stewardship of the Park Service many of our historic land areas have been preserved and designated as "historic parks" or "historic sites." The invasion of America by the white man, his struggle for sur-

vival, his drive West, and his eventual conquest of a great land mass are milestones well marked along a national park route that bring to mind the early struggle for the continent. The story of hard-won independence, read in battlefields with names like Lexington, Concord, Saratoga, Yorktown, is history brought into focus by the interpretive programs of the park system.

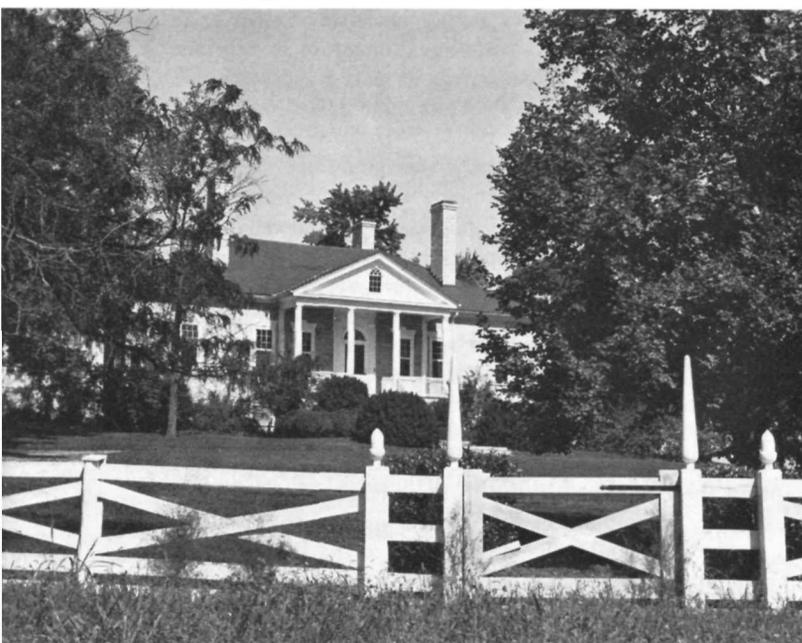
The era of a nation pushing West is recorded in places like Cumberland Gap, Fort Laramie, Fort Union, and other frontier forts and trading posts that evoke the sound of hoof and wagon wheel. The sounds of rifle shots and bugle calls—lest we forget that a great war was fought to keep the nation united—are recalled in historical parks like Gettysburg, Manassas, Antietam, Shiloh, and Harpers Ferry.

America moved on, creating new technology, harnessing power, bursting with inventions, utilizing natural resources. We were on our way to becoming a great world power and the story is recorded in the birthplaces of our leaders and Presidents—in over 200 historic sites, including the White House, all administered by the National Park Service.

During the time our country was developing its physical assets, it was also developing a national conscience; and private individuals, small groups, and historical societies were setting out to save other historical landmarks. The great thrust for historic preservation has come from the private sector—truly, a grass-roots effort.

The most far-reaching effort, in later influence, was the purchase in 1858 of Mount Vernon, George Washington's estate in Virginia, by a determined group of women for the sum of \$200,000, raised by public subscription. The movement was started and directed by Miss Ann Pamela Cunningham of South Carolina. Miss Cunningham learned

Belle Grove, situated in Virginia's Shenandoah Valley, is the oldest Trust property. It was built in 1794 by Major Isaac Hite, Jr., a planter and an officer in the Revolutionary War. Thomas Jefferson assisted in the design.



that the property had been offered in turn both to the government of the United States and then to the Commonwealth of Virginia but that it had been turned down because of the price placed on the property by the owner, John Washington, a great-grandnephew of George Washington. Convinced that the home ought to be saved, she appealed to the women of the country and founded the Mount Vernon Ladies Association. The famous home was saved, and the association holds the property under an 1858 charter from the Commonwealth of Virginia. It was the first success story of a nationwide effort in historic preservation. Others picked up the torch, and, following in the wake of Mount Vernon, many other historic homes and buildings were saved from destruction. If that early movement lacked professional guidance, it made up for the deficiency in its enthusiastic dedication.

As the years went by, historic preservationists found that they had many common problems as well as common purposes. With the growth of cities and their surrounding communities, linked by highways and then superhighways, the once "taken for granted" look of America was rapidly changing. The national identity was being recklessly destroyed by the bulldozer and the wrecker's ball. A familiar landmark suddenly was no longer there, and in its place was an asphalt parking lot. An architectural "gem" gave way to a high-rise modern office building. A lovely residential street was destroyed by a freeway. Whose voice could be heard above the roar of big machinery driven by commercialism and government agencies? Small but dedicated private groups clung tenaciously to their duty in efforts to preserve such disappearing landmarks; but all too often hope died in frustration and defeat. The concerned public needed a voice, a powerful right arm that could help them in the battle for preservation; and to answer the need, the National Trust for Historic Preservation came into being.

The National Trust was chartered in 1949 by Act of Congress. It is not a government agency, and it is financed primarily by the dues and voluntary contributions of members and member organizations. Under its charter the Trust is vested with the general power necessary to carry out its functions and is authorized "to receive donations of sites, buildings, and objects significant in American history and culture, to preserve and administer them for public benefit, to accept, hold and administer gifts of money, securities, or other property of whatsoever character for the purpose of carrying out the preservation program."

Today, the National Trust is a dynamic force in awakening the public to the need to retain its identity in this country, through preservation of historic landmarks that present tangible evidence of our evolution and growth as a nation. These landmarks, historic houses, archeological sites, industrial structures, architecturally significant buildings, historic districts, gardens, and open spaces are our "roots." In a society where one family in five moves every year, we must save the historic character of our environment so that future generations will not feel rootless. We need these landmarks to know who we are, where we are, and how we arrived there.

To this end, the Trust carries on a broad program of educational activities to coordinate public interest in the

Continued on page 27

*Report of the President and General Counsel, Anthony Wayne Smith,
to the General Membership of the*

NATIONAL PARKS AND CONSERVATION ASSOCIATION

on the Occasion of the Annual Meeting of the Corporation and Trustees, May 20, 1971.

IT IS A PLEASURE to be able to report to the General Membership of the Association on what has been in many respects a very successful year. The number of our members has continued its steady and rapid upward climb. Voluntary financial contributions by our members over and above regular dues have nearly doubled. More and more members are participating as volunteers in the capacity of correspondents or local representatives taking part in local protective movements or in public hearings on our behalf. A prudent enlargement of staff, based on growing financial resources, makes it possible for us to grapple more effectively with the park and conservation issues which directly concern us.

ONE OF THE MOST SPECTACULAR VICTORIES of conservationists during the year has been stopping the formerly proposed giant jetport in Big Cypress Swamp in Florida, which would have ruined Everglades National Park. This effort, in which NPCA played a leading part, was basic to our park protection responsibilities and to our environmental concerns as well. As our members know, I have been serving, in my official capacity as President and General Counsel of NPCA, as Co-Chairman of the Everglades Coalition, in the establishment of which the NPCA was largely instrumental.

The Everglades Coalition focused the resources of a powerful group of labor and conservation organizations on shifting the site of the proposed airport and the one training strip which had already been established to a different location, hopefully satisfactory from an ecological viewpoint. The agreement between the federal, state and local agencies looking toward this shift is being adhered to at this writing, and a permanent and satisfactory solution can be hoped for.

I had the privilege of testifying on invitation in behalf of the Everglades Coalition and NPCA last year in favor of statutory requirements that water being provided from Lake Okeechobee should be earmarked in specified quantities for the permanent protection of Everglades National Park. The essential clauses in the developmental legislation were in fact enacted, solving at least for the present a fundamental problem of park protection in Florida which has troubled us for at least a decade.

The danger of the drainage and development of Big Cypress Swamp remains. A large part of the flow of life-sustaining water into Everglades Park takes place through the Swamp. The NPCA joined in litigation to prevent the establishment of a drainage district in Gum Slough during the year; the litiga-

tion was successful, but Conservationists are convinced that the only ultimate solution lies in bringing a large part of the Big Cypress into public ownership promptly.

The protection of Big Cypress Swamp and Everglades National Park will be greatly aided by the establishment of the Environmental Coalition for North America, of which more later. I am privileged to serve as Chairman of the Environmental Coalition in my personal capacity. In support of the efforts of the Everglades Coalition to protect Everglades Park, the Environmental Coalition has announced its endorsement of the acquisition of a major portion of the Big Cypress by the federal government for inclusion in the national park system or the national forest system as a recreation area. This brings a broad combination of environmental and economic organizations into the effort.

THE FUNDAMENTAL RESPONSIBILITY of NPCA will always be the protection of the national park system. As our members know, the Association was founded for that purpose at the instance of Stephen T. Mather, first Director of the National Park Service, in 1919.

We continue to support the enlargement of the System with a view to preserving localities of outstanding scenic value or importance for botanical and zoological scientific purposes. On invitation, we testify on legislation establishing new parks; the purport of the testimony is that, while additions to the System are needed to accommodate increasing visitation, the term *National Park* should be reserved for localities of significant value, and that the organic legislation should require strict protection against logging, mining, hunting, and overdevelopment.

Our technical studies of park wilderness protection and recreational regional planning continue. Abridged versions of some 25 such studies prepared during the past six years will be available in book form under the title of *Preserving Wilderness in our National Parks* by the time the present report reaches our membership.

Our members are familiar with the approach taken here: the parks are capable of absorbing great numbers of people, but not unlimited numbers of private automobiles. Roads, parking lots, and comparable facilities in the parks should be frozen at present levels. Campground facilities should be provided outside the parks, in the National Forests, the public domain, and so forth; major vacation facilities should be developed by consortiums of private business on private land

near communities outside the public lands; these consortiums should be given concessions to bring people into the national parks by comfortable motorcoach accommodations.

While public officials have been slow in accepting this strategy for the protection of the parks, it seems to be gaining recognition, and the administrative difficulties of handling present traffic pressures on the parks may hasten the day of a rational solution.

Representatives of NPCA participate actively in conference work in advance of the development of master plans for the management of the parks, in public meetings on master plans, and in public hearings on the establishment of wilderness areas in the national parks, regarding these procedures as directed toward administrative decisions within the Executive Branch of the government.

On official invitation thereafter, where legislation is proposed for the establishment of Wilderness Areas, we participate in public hearings, normally recommending the creation of large Wilderness Areas, and the dispersal of crowds into broader regions by the interdepartmental coordinating procedures we have urged for years.

THE NPCA HAS INVOLVED ITSELF during the year very deeply in the effort to prevent the construction of the proposed Trans-Alaska Pipeline, at least until the American public can be assured of complete environmental protection.

The Environmental Coalition for North America was established for that purpose among others; I serve as Chairman of the Coalition in my personal capacity. The Coalition's first act was to address a letter to President Nixon last May on the pipeline question, urging public hearings by the Council on Environmental Quality; later in the year it renewed the recommendation, and urged an extension of the freeze on the selection of lands along the pipeline right-of-way by the State of Alaska, an extension which was granted; thereafter it reiterated the recommendation of hearings by the CEQ, and public hearings by the Department of the Interior were announced.

I took part in those hearings, both as President and General Counsel of NPCA and as Chairman of the Environmental Coalition; by editorial and announcement in *National Parks and Conservation Magazine*, we urged our members to help by submitting statements; there was an overwhelming response. Interior Secretary Rogers C. B. Morton stated thereafter that there would be no hasty issuance of any permit for the construction of the Pipeline. There will now undoubtedly be a very thorough investigation of a number of basic policy problems before any such permit is issued: the problem of the ecological effects of the pipeline; the question of available alternatives; and the matter of comprehensive petroleum and energy policies for the nation; not to speak of the national defense aspects of the whole controversy.

ANOTHER MAJOR VICTORY can be chalked up for the environmental movement in the Potomac River Basin. The Citizens Permanent Conference on the Potomac, which is another of the broad coalitions of farm, labor, and conservation leaders which has emerged in recent years, was successful in blocking the authorization of two major Army-type dams on tributaries of the Potomac. NPCA testified, on invitation, against these structures.

There has been a blind momentum pushing toward the construction of some 18 Army-type dams on the Potomac for 12 or 15 years. The purpose has been storage for the dilution of pollution; whereas the modern approach is prevention of pollution at source. The reservoirs drive people from their

farms, homes, businesses, and communities, and do enormous ecological damage.

The NPCA many years ago was first to recommend the construction of a supplemental water supply intake in the freshwater estuary of the Potomac at Washington to provide for the emergency water supply needs of the Washington metropolitan area. It was joined at that time by a broad combination of farm, labor, and conservation organizations. Since that time, prominent conservationists associated with such organizations have established themselves as the Citizens Permanent Conference, of which I serve in my personal capacity as General Counsel.

The current budget for the District of Columbia now contains an item for the construction of a permanent estuarial intake, inadequate in size, but nonetheless demonstrating the availability of the estuary, and refuting the contention that Army-type dams upstream are needed.

The year has brought an occasion for great celebration in the enactment of legislation establishing the C & O Canal National Historic Park. The NPCA testified on invitation in the public hearings which led eventually to the establishment of the Park. The C & O Canal Association, the Citizens Committee on Natural Resources, and a wide combination of conservation and recreation enthusiasts joined in the effort.

The problem now will be to prevent the overdevelopment of the area in terms of parking lots and motor boat arenas by the National Park Service. There will also be a problem of curbing the unwise and ruthless exercise of the power of eminent domain to acquire properties which could better be preserved by the acquisition of covenants running with the land in perpetuity, permitting present occupants to continue present compatible use.

IF THE PARK WILDERNESS PROTECTION which NPCA advocates and the dispersion of traffic into broader areas, which is basic to such protection, is to be embodied in realistic plans and carried out, the commercial cutting areas of the national forests must be used for recreational purposes as well as for the harvesting of timber. There is no basic incompatibility between these objectives, if ecological harvesting methods are employed.

Without being dogmatic or pedantic in the matter, the essential distinction is between methods like selective cutting, shelterwood, or small-patch cutting, which protect the soil, waters, wildlife, vegetation, and even the forest canopy, as contrasted with large-block clear-cutting which results in serious ecological disturbances and damage.

Ecological harvesting methods normally require a well planned system of access roads, because cuttings need to be relatively frequent. The recreational use of the forests, in terms of moderate-sized campgrounds and camper access likewise requires such roads. Needless to say, the wilderness areas are in a different category, and must be protected against roads and reserved for pedestrian and equestrian access.

The prevailing trend for several decades in forestry has been toward large-block clear-cutting. These methods lend themselves to the use of big machinery, usually require the widespread use of herbicides and rodenticides, and have short-range value in reducing harvesting costs. But the general public is now becoming more and more aware of the destructive environmental effects of the big-machinery, big-pesticide operations. The time has come for a change, and a return to ecological harvesting methods becomes imperative.

The NPCA has been a staunch advocate of socio-ecological forestry for many years. It now seems to be winning a larger

number of allies to its cause. Initial funds having been provided by foundation grant, pilot studies of model operations will be undertaken during the next few months.

Because of the basic importance of ecological harvesting to any restoration of the Coast Redwood Forest as a recreational asset, additional resources will be allocated from the Sequoia Fund of the Association for parallel studies. We may be witnessing the beginning of a basic transformation in approach to the management of commercial timber lands on a national scale.

IT HAS OFTEN BEEN NOTED that the national parks of America are among the finest wildlife refuges. As defenders of the national park system, we are necessarily defenders of wildlife. And yet the defense of wildlife, its restoration and protection, stands on its own feet as a basic part of the program of NPCA.

The expanded *National Parks and Conservation Magazine*, the *Environmental Journal*, now carries every month a special article on one or another of the endangered species. The vast overcrowding of the planet which has resulted unhappily from the blessing of reduced death rates everywhere, unfortunately without a comparable fall in birth rates, has placed enormous pressures on great numbers of plant and animal species all over the world.

The plants and animals which are thus endangered are of basic interest and importance to human beings. Not only are they of scientific significance, and of ecological importance, but their beauty is part of the beauty of the world we inhabit, and they are living creatures like ourselves, which merit our respect; moreover, most people love them, and that should be enough.

The NPCA has participated during the year in halting the sale of the hides of endangered species in the domestic market. It monitors the work of public agencies in developing international agreements and holding international conferences on traffic in endangered animals and their products on an international scale. As a participating member of the International Union for the Conservation of Nature, we take part in and support the constructive efforts of that organization, and cooperate constructively with the World Wildlife Fund.

It was our privilege to play host to a seminar at NPCA headquarters in March on the many endangered species of cats, great and small. Leading experts from around the world had gathered in California to confer, and reconvened at Washington under NPCA auspices for consultation with a select gathering of representatives of national environmental organizations.

Being concerned with such issues, we would necessarily have involved ourselves in efforts to combat the abuse of pesticides, the widespread poisoning of predators and rodents, and the planetary pollution of waters and atmosphere. Great numbers of people have realized during the year that unless they take action they may be poisoned or suffocated in great numbers. The NPCA has committed itself to work against the irresponsible dissemination of noxious substances throughout the environment, to use the Magazine in remedial educational efforts, and to employ its expertise in governmental operations to reverse these destructive trends.

THAT THE POPULATION EXPLOSION underlies most of our environmental problems, few people would now deny. A handful of dedicated individuals and organizations has accomplished a magnificent work of education during the last 20 years on the population question. The appalling results of overcrowding, now obvious to everyone, have underscored

their conclusions. But the question remains as to what to do about it.

In a long series of statements in the Magazine, beginning in July, 1964, when the issue was more difficult to discuss, the NPCA has taken the position that there must be a wide dissemination of an ethic of a maximum of two children to a family. In recent years, this approach has come to be generally accepted by many individuals and organizations concerned with the stabilization of population.

We have testified along these lines during the year on invitation and have participated in conferences where great numbers of concerned citizens wrestled with the issues. The emergence of public agencies and recommendations bringing the population issue into the bright light of public discussion on a governmental level does credit to the initiatives taken by President Nixon early last year.

At this writing, the NPCA is making a further analysis in depth of its policies with respect to the various aspects of population stabilization and reduction, and methods of implementation by ethical and educational appeal and governmental action.

One thing is certain: unless the population of this nation and the world can be stabilized rapidly, and a slow reduction initiated by the reduction of birth rates, most of the environmental and conservation problems with which we are grappling at present can not be solved.

IT HAS BEEN APPARENT for some time that if the environmental troubles of the nation are to be brought under any measure of control in the near future a reorganization of governmental structure on the one hand and an integration of the environmental movement on the other would be essential.

The NPCA has recommended the establishment of an environmental agency with national authority at the Presidential level, with responsibility for the coordination of the policies of the various resources management agencies. After various transformations of offices established by successive Executive Orders, the Council on Environmental Quality was created by legislative enactment. This is not the place to review in detail the excellent work which the CEQ has done in many matters during less than a year of life; nor to discuss the inadequacies of the organic law and its interpretations by the CEQ itself which appear to us to hamper its effectiveness. But among the great accomplishments of the environmental movement during the year has been the integration of public authority which creation of CEQ implies. The President in our judgment should now strengthen the CEQ by Executive Order with authority to issue interim stop orders halting destructive projects pending exhaustive review by the CEQ and final decision by the President himself.

The establishment of the Environmental Protection Agency and the National Oceanic and Atmospheric Administration by Executive Order during the year has also contributed a measure of integration to governmental and environmental efforts. There were differences of opinion as to whether this step should have been taken, but the need now is to strengthen the effectiveness of these agencies against air and water pollution, atmospheric contamination, and the impairment of planetary ecosystems. The passage of the National Environmental Policy Act also introduces a new and constructive element into the equation. Its enforcement has been watched with critical zeal by the NPCA during the year, and the vigilance will be continued.

Complementing the integration of public authority in the CEQ, we have witnessed the development of significant coali-

tions of private conservationists and organizations in the environmental field. The Citizens Permanent Conference on the Potomac was one of the first; the Everglades Coalition applied the coalition principle again; thereafter the NPCA brought together the Assateague Coalition for the protection of Assateague National Seashore against overdevelopment. And now the Environmental Coalition for North America, organized around the issue of the Trans-Alaska Pipeline, has lent its aid against the destructive Army-type dams on the Potomac and has joined forces with the Everglades Coalition to defend Big Cypress Swamp and Everglades National Park.

Persons associated with major national labor organizations, including the United Automobile Workers and the United Steelworkers, and associated with major farm organizations, including the American Farm Bureau Federation and the National Grange, as well as practically all of the environmental and conservation organizations of the United States, at one time or another, have taken part in these combinations. We are happy to have played a part in NPCA in many of these efforts, and with the support of our membership we hope to continue to do so.

THE ENVIRONMENT AND CONSERVATION are not merely national questions; they are international, worldwide in importance. The NPCA has been one of the leading conservation organizations which has recognized this fact for a number of years.

As earnest of this concern, we published editorials last summer on a proposed environmental and population organization in the United Nations, and later in support of President Nixon's proposed Seabeds Resources Treaty. We called attention to the significance of the scheduled United Nations Conference on the Human Environment.

Preparatory commissions are at work on plans for the Environmental Conference in 1972 and for a United Nations Conference on the Law of the Seabed in 1973. These proposals are of great significance in the development of international law, not only environmental law, but international law generally, with implications for arms control, population stabilization, the reduction and eventual abolition of hunger and poverty, and the emergence of a peaceful, constructive, and democratic world order.

The recommendations we have advanced on a national scale for integration of environmental management agencies into a Council on Environmental Quality, and the amalgamation of the private environmental movement into effective coalitions are applicable worldwide.

DURING THE PAST TWO DECADES the NPCA has grown from a membership of about 3,000 to about 55,000 at present; during the last dozen years from about 11,000 to present levels, 500%. The Magazine has been converted from a small quarterly to a large monthly journal. The scope of the program with which the NPCA is concerned has broadened from a limited attention to the National Parks System in the United States to a general conservation and environmental commitment, worldwide, but preserving the central attention to the national parks.

We make use of all the tools available to our environmental protection efforts. The Magazine serves as our primary educational vehicle. Our technical studies, such as those on engineering aspects of river basin management, and on park wilderness protection and regional planning, comprise a separate activity. We engage constantly in operating negotiations with agencies of the Executive Branch on park, forest, wildlife, and other environmental matters. On receipt of

official invitations, we testify on important matters in congressional hearings.

We take part, utilizing volunteer assistance by our members, or by staff participation, in planning meetings and hearings on such matters as master plans and wilderness plans in the National Park System. We participate in litigation to halt environmentally destructive projects. We operate an educational World Travel Program intended to help our members visit and enjoy the national parks of other countries and learn from firsthand experience about the environmental problems of the world.

Our growing environmental library at national headquarters is open at all times to all of our members and to a concerned general public in Washington. Our Conservation Education Center, established more than a decade ago, presents significant public lectures, slide shows, and motion pictures, for a Washington audience composed mainly of primary and secondary school teachers and other active conservationists in the Washington Metropolitan Area. The great pipe organ in the NPCA library, one of the finest in Washington, built in 1905, is available for use by lovers of organ music, who avail themselves increasingly of the opportunity. The library itself, serving as a meeting place for the Executive Committee and the Board of Trustees, has also become a gathering place for leaders of national conservation organizations and local conservationists, and the Association is delighted to play host.

All of the members of the National Parks and Conservation Association are welcome at all times to visit the national headquarters buildings, to utilize the library, to enjoy the pipe organ on suitable occasions, and to meet and talk with the staff and officers of the Association. We hope that more and more of our members will join with the growing group of correspondents across the nation and around the world who help keep us in touch with the problems and opportunities which comprise the field of our responsibility.

THE NPCA ENJOYS AN OUTSTANDING POSITION in the conservation movement, in that it is financed almost entirely by the dues and contributions of its members. It receives no contributions from industrial interests, and thus preserves a high measure of independence. It has not sought any substantial measure of support from large foundations; smaller grants from smaller granting institutions have been accepted from time to time where no objectionable conditions were attached.

Most of the capital resources of the Association are the fruit of substantial bequests by members who have been impressed during their lives by the work of the Association. A continuous flow of small bequests and substantial contributions during each year makes it possible for us to supplement income from dues and maintain our work at a more and more adequate level. And yet the calls for help which we receive and the demands which are made by the environmental crisis on our resources are so great that increasing membership, funds, and facilities are inadequate to keep up with the pressures.

Finding that we can work effectively by our established procedures, we maintain our tax-deductible status, so that all dues above the basic Associate Membership dues of \$10, and all gifts and bequests are deductible for federal tax purposes. To our appeals each year for financial assistance, our members respond with great generosity. It is only because of this very significant financial assistance by thousands of members all over America and the world that we are able to fulfill our unique function effectively and independently.

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preservation of American landmarks. Individual members are invited to take advantage of the Trust's advisory services on preservation problems and to attend the annual preservation conferences and seminars. Films, slides, and exhibits are available to schools, churches, museums, civic groups, and other organizations.

The Trust's monthly newspaper, *Preservation News*, contains pertinent information on current activities in the preservation field, focusing attention on those landmarks that lie in the path of bulldozer "progress" as well as on the success stories of many that have been saved. It alerts Americans to the sometimes needless and wanton destruction of significant buildings in their own communities.

The Trust now owns and operates ten properties, as widely divergent as the two located outside Washington, D.C., near Mount Vernon, Virginia: Woodlawn, a gift of George Washington to his ward Nellie Custis and his nephew Lawrence Lewis after their marriage in 1799; and the Pope-Leighey house, designed by Frank Lloyd Wright in 1940. The Trust's most recent acquisition is Chesterwood in Stockbridge, Massachusetts, the studio of noted sculptor Daniel Chester French, best known for his "Seated Lincoln" in the Lincoln Memorial at Washington.

The Trust properties serve to show how community activities can revolve around such centers, breathing life in many adaptive ways into historic or architecturally significant buildings. For example, Belle Grove, built in 1794 in the Shenandoah Valley of Virginia, opened an exhibit last summer of nineteenth century farming, with early tools on display. A program of lectures, seminars, and field trips was coordinated with the exhibit, culminating in Farm Craft Day with demonstrations of early farming methods and crafts. These included carding wool, spinning and weaving, candle making, butter churning, and many other old-time husbandries.

Oatlands, a Georgian mansion built in 1803, overlooks formal gardens and the rolling fox-hunt country of Loudoun County, Virginia. It annually sponsors a point-to-point steeplechase for thoroughbreds. The house was well known in the community for its fine stables, and the race meet brings back its former glory to horse lovers of the present generation. Lyndhurst, a Gothic Revival residence overlooking the Hudson River in Tarrytown, New York, was the setting for a ball to raise money for a revolving fund that will be used by the National Trust to help private preservation groups save and restore historically significant sites in their own cities and towns. An annual sugar cane festival is held at another Trust property, Shadows-on-the-Teche, in New Iberia, Louisiana. The house was built in 1831 by a wealthy Louisiana planter, whose holdings included many large sugar plantations in the area. These are but a few examples of how Trust properties are used for the benefit of the public. All are open as house museums.

In spite of the active role the National Trust has played in the field of preservation, urban development and an expanded highway program that plows through all in its path have made it clear that, to be effective, the cooperation of governments on all levels—federal, state, and local—is needed. With a President and an Administration sympathetic to this need, the Historic Preservation Act became



Shadows-on-the-Teche, built in 1831 in New Iberia, Louisiana, represents the eclectic Louisiana style of architecture. Its furnishings and mementoes record the story of one family during peace and war, affluence and poverty.

law on October 15, 1966. The act opened a new era in preservation. It says:

- that the spirit and direction of the nation are founded upon and reflected in its historic past;
- that the historical cultural foundations of the nation should be preserved, as a living part of our community life and development, in order to give a sense of orientation to the American people;
- that, in the face of ever-increasing extensions of urban centers, highways, and residential, commercial,



Visitors to Woodlawn Plantation may try a variety of crafts and activities common in past eras.



ALLEN STROSS

Late in 1969 the Grand Rapids City Hall, a national historic landmark, was razed to be replaced by a parking lot. An affiliate of the National Trust for Historic Preservation, the Kent County Council for Historic Preservation, filed a last-minute injunction to stop demolition. The parking lot was part of an urban renewal project which received funds from the Department of Housing and Urban Development, and the National Historic Preservation Act of 1966 requires consideration of historic value as a part of all federally funded projects. Because the sale of the building to its developers was initiated in 1961, before the Council intervened, the court ruled that the federal law did not apply and that the Council did not have legal standing to bring suit.

COLORAMA



and industrial developments, the present governmental and non-governmental historic preservation programs and activities are inadequate to insure future generations a genuine opportunity to appreciate and enjoy the rich heritage of our nation; and

- that, although the major burdens of historic preservation have been borne, and major efforts initiated by private agencies and individuals, and both should continue to play a vital role, it is nevertheless necessary and appropriate for the federal government to accelerate its historic preservation programs and activities, to give maximum encouragement to agencies and individuals undertaking preservation by private means and to assist state and local governments and the National Trust for Historic Preservation in the United States to expand and accelerate their historic preservation programs and activities.

To meet new demands imposed by the act, the Office of Archeology and Historic Preservation and the expanded National Register of Historic Places were created in the National Park Service. The Register is being enlarged by surveys conducted by state-appointed liaison officers, supported by matching fund grants to the states. Under the act adverse actions against these properties cannot be taken by federal or federally assisted projects without certain safeguards designed to protect historical values. (The first published edition of the National Register is now available.)

Title II of the Preservation Act established the Advisory Council. Originally composed of 17 (now 20) members, it includes the Secretaries of Interior, Housing and Urban Development, Transportation, Commerce, Agriculture, and Treasury; the Attorney General; the Administrator of the General Services Administration; and the chairman of the National Trust. The council is empowered to advise the President and Congress on federal projects that affect properties listed in the National Register of Historic Places.

The case of the Vieux Carré Historic District in New Orleans is a good illustration of the council's concerns. A river-front expressway that threatened this historic area was denied federal aid funds by Secretary of Transportation John A. Volpe after the council had persuaded the federal government to restudy the route of the expressway. Controversy over a highway through the New Orleans French Quarter has raged for decades. Schemes for locating an expressway at street level and elevated and underground had been proposed to the City Council. The local citizens were divided in their views; but because the Vieux Carré had been designated a National Historic Landmark, the matter was brought before the Advisory Council for review. An on-the-spot study of the proposed plans culminated in the council urging the Department of Transportation to relocate the expressway to preserve the distinctive character of the Vieux Carré. The subsequent victory at the federal level gave preservationists some much-needed encouragement, and since then other battles have been won.

The prestige of the National Trust has been used to influence public opinion and government councils in favor of the preservation of our historic heritage. An example of such influence was the appearance of Mr. James Biddle,



Built in 1940, Frank Lloyd Wright's Pope-Leighey House is the Trust's most recently constructed property. The house was moved from its original location to a nearby site on the grounds of Woodlawn Plantation because it stood in the path of Interstate 66.

president of the Trust, at the public hearing sponsored by the Honolulu City Council on the controversial issue of the future of Hawaii's famed Diamond Head. Mr. Biddle, at the request of Mrs. Alice Spalding Bowen, who spearheaded the movement to save Diamond Head, expressed the hope that the Department of Interior would designate Diamond Head a National Natural Monument. This was accomplished on September 28, 1968, and the practical effect of the measure was to help insure no development on the exterior of the crater or on the state-owned strip extending down to the sea, which otherwise might have been covered with high-rise hotels and apartment houses.

We have come a long way in preservation since the beginning of the twentieth century, but the tides of change keep rolling in; and with each new wave some significant footprint is washed away—forever. Can we hold the tide back long enough to protect those items that rightfully belong in the nation's storehouse of memories? After all, we are the only custodians of these national treasures. If we stand by silently as they disappear, future generations may look back in anger at the trust that we held in our hands but betrayed. An informed and concerned public will constitute the best assurance that this will not happen. Americans will ever be searching for their identity; so let us be sure the trail is kept well marked, that those to come will not lose their way even as they reach for the planets. ■

Mrs. Richard E. Byrd, Special Assistant to President James Biddle of the National Trust for Historic Preservation, also is national chairman for historic preservation of the Garden Club of America Conservation Committee and serves on the board of trustees of the National Parks and Conservation Association. She is sister-in-law of Virginia Senator Harry F. Byrd, Jr.



OLYMPIC ADVENTURE

Winter seemed about to reclaim the land, or at least that part of it lying against the sky in Olympic National Park, as we set out on a late August morning in search of the elusive antelope that most of us know as a goat—the mountain goat.

We were four: my husband Mel, the party's photographer; our 16-year-old daughter Alison; our son Curtis, 8 years old; and myself. Each of us was laden with the necessities for three days' life in the mountains. We had begun our day at sea level and moved upward through the transitional life zone. Now we entered the Hudsonian. Before the day was finished we would be in the arctic-alpine zone, an equivalent of journeying 1,500 miles to the north between dawn and dark. But would we, after all our efforts, find mountain goats, so shy and unapproachable?

Meadows awash with lupine, paint brush, owl's clover, cotton flower seemed vulnerable against the scowling sky. Copper-red mule deer grazed in hollows, sheltered from the icy wind, and two golden marmots sparred like boxers before a burrow. As we gained altitude, we could see downpours in one forested valley after another. Capricious shafts of sun pierced the clouds, emphasizing how vast was the darkness, how vast the land. Out of this immensity Alison chose the white speck that was the first goat. A tiny point, but important because it had taken good spotting.

The second sighting came as we climbed into the first heather. He was important because he was beautiful. He lay on a rocky ledge above open meadow. The details of him, cream white with slim black horns and alert dark eyes, lost no impact through binoculars. We watched him and

Ridge of the Wild Goats

BARBARA HORTON

photographed him, having climbed a trifle above so that the rug of Hudsonian forest and meadow far below him formed a backdrop. Further on we noted three more goats, specks against the raw red-black peak of Mt. Angeles. We went on fulfilled, expecting no larger bounty.

As we toiled, ever gaining more on the ascents than we lost on the downgrades, the sun came out for a more extended stay. Its heat lay like a heavy hand on our packs. The sun played a final crescendo on a thistle patch, turning the multiheaded pink flowers into fireworks. Then it vanished behind a cloud. We left the flowers behind and headed into rocky steepness and patches of lonely trees.

Alison was first to reach our night's destination. On this high ridge (or so it was relayed to me) was a whole flock of goats! My shambling feet somehow increased their pace

so that the truth be not revealed: in that moment I was too tired to care about goats, singly or in flocks.

Yet the crest was worth the effort! We found a widened ridge topping the world, thinly green and blooming with tiny short-stemmed flowers. The land dipped and curved in hollows, dotted with rocky outcrops and small alpine firs. Upon a big snow patch a dozen goats and kids took their ease while eight or ten others grazed their way gradually over a distant rise!

Suddenly we were released. Released from effort, from packs, from other human intrusion, we were free in the land of the mountain goats—by any name the essence of the snowy, craggy, misted world of mountains.

The flock was headed by a matriarch of notable presence who seemed in no hurry to lead them from the snowpatch



The Rocky Mountain Goat (Oreamnos americanus) of North America is the only ruminant to keep a white coat all the year round. It weighs 150 to 300 pounds and has a shaggy coat, and both sexes have short, black horns about 9 inches long.



and over the rise. The group's constant rearrangement created subtle pictures against the snow, white on white, until at last with deep regret we saw the flock over the hill.

However, there was urgent work to distract us. First the choosing of our house, a shallow bowl ringed with rock and firs with openings to the east and north. To the north lay the Strait of Juan de Fuca that separates our country from Canada. Between us and the Strait a multitude of misty ridges appeared and disappeared in the luminous clouds of late afternoon.

The urgency of the race with whatever rain and wind night might bring was over. We had found the least rocky and slanting spot for sleeping bags, gathered dry wood, built a fire, and set the chili pot bubbling. Looking beyond the roped plastic tubes that formed our tents, I saw through the eastward break in the firs an amazing sight. The matriarch was making her way back across the snowpatch, leading the group of 12 straight in our direction. Our breath caught as the kids welcomed the snow on their feet with caprioles and what, I believe, bronc riders call sun-fishing. To our wonder they came on and on. In excitement and awareness of our privilege we watched their progress across grass and flowers, the golden sun of evening playing over them when it pierced the cloud rack.

Veering from our eastward doorway, the goats circled to the opening to the north. Then, as we stood motionless, the leader gravely entered our circle, pausing perhaps 6 or 7 feet beyond our fire where Curtis stood transfixed, spoon in hand, by the chili pot. While she stood contemplating us, the band spread out. Some fell to grazing. One or two entered the rocky definitions of our compound. A young one sought the stony point beyond our fire and mounted as though it were his watchtower crag.

The first careful movements that we made were taken by our visitors with good grace. Later, as a new contingent of ten arrived and attempted to use the east entrance, we moved quickly to resecure the tent roping high enough that horns would not become entangled. Our visitors spooked at too sudden movement, but then they spooked from each other in exactly the same way.

Soon all of us, goats and people, were going about our business. One or two goats were scratching out old hair in a narrow passage of firs. Another younger buck repeatedly tried a skirting operation in the direction of our stacked backpacks.

A spot beyond our living area had been chosen for urination because it was bare and no plant life would be harmed. The goats discovered this, apparently regarding it as a treasure trove of salt. The old leader created a spirited scene, warning with her lunges those who attempted to share the find. Under the insistent assault of their eagerness she finally permitted a few to join her. To lessen the contention we put our slim salt supply out on rocks at a little distance and other goats grouped enthusiastically here as it was discovered.

The goats moved about a good deal, the kids uttering a

mewing sort of bleat. Twin kids seemed particularly dependent on each other and upon their mother, a large female carrying a wound on her chest. Save for this and an aged female without young whose old hair was less shed out than the rest, all seemed in perfect condition.

I remember thinking guiltily on reappearance of the flock that perhaps we had taken the spot in which they always spent the night, but second consideration refuted this. Though some firs showed tufts of goat hair, the ground on our arrival had been undisturbed and there were few droppings. Now, after an hour or so of traffic, the turf was well marked with hoof prints.

As the fire cooled and we made ready to sleep, our white companions loomed large in the dusk. Bits of charcoal at the edge of the fire attracted them as sweets do children. Their general curiosity drew them in so closely that at last we decided to toss small pebbles at them that they might know what small area we required for ourselves. This aggressiveness gave them small offense but more or less put the idea across. I remember thinking as I drifted to sleep that if anyone had suggested to me that morning that before sleep I should be shooping mountain goats off my sleeping bag, I should have thought them mad.

I started awake once more while there was still a hint of light. There was the sound of deep inhalations and snorting exhalations inches from my head. The old matriarch, I think it was. In the blurred image provided by the plastic tube she looked like a huge polar bear. I said "shoo" several times and tapped the tubing. She spooked a few feet and almost at once I was deep asleep.

I awakened once or twice in the night and saw or heard nothing of our company, but the bleats of the babies a little

PHOTOGRAPHS BY MELVIN HORTON



before light returned told us they were back. It was cold, of course, and hard to leave our sleeping bags, but the goats seemed eager for us to be on our feet again. One leaped the brush barricade at our eastern gate despite Alison's warning hand swooshes. Lest our visitors land in the middle of us, it seemed advisable to be up and removing our gear.

We wandered about freely, gathering wood and snow to melt for hot water, photographing, counting the goats around us. There were 26 goats with us in camp that morning. We saw more than 50 at one time including those on distant ridges. I could not help feeling that we had been accepted into the company of the goats—as if our presence there among the chill winds, swirling mists, the awesome crags and valleys spreading from the Strait to Mt. Olympus, somehow made us brothers to those whose home was always there. By stepping to the extreme south edge of our ridge we could see the busy track of motor cars, but few who swarmed there would venture to this vantage point. The sooty grouse and other birds visited. Now and then the cougar came, but at these heights his stay would be as brief as it was dreaded.

How much has man spoiled these animals by his occasional presence? To test I tossed out a piece of bread and was relieved that this elicited no special response. Animals as unafraid of man as these easily can become dependent beggars if overexposed to humans.

Alison sat down on a rock on the north slope, one elbow braced on her knee, her hand extended slightly. She sat on as the goats grazed and ambled about her. One in passing extended his neck and administered a quick lick to her hand before spooking away. A buck paused some feet distant. Chewing his cud he contemplated her. Now and then he paused in his chewing; after a brief wait a small burp would rise on the morning air. Again he would chew, stop, burp. Perhaps 10 minutes passed before he came to his decision. He moved directly forward, touched her hand with his nose, backed off down the hill and continued to consider her. Mel had his camera on the scene when the buck came forward once more. Of this final visit, Alison said, "I had a feeling that the last time he did it just for me."

We tacitly agreed to break camp as slowly as possible, to delay with whatever pretext we could our parting moment. The sunlight made no more assaults upon the clouds as it had at sunrise; wind was there and drops of rain fell from low-hanging clouds that now and then engulfed us. It promised to be a cold, damp descent. We shouldered our packs and moved out, looking back again and again. We had gone perhaps 200 feet when we saw the matriarch detach herself from the flock. She walked alone down the trail after us, coming a hundred yards as we walked on. We turned again before dropping over the rise on the far side of the snow bank. She had paused, head high, proud, seeming to toss a question across the intervening space before turning her attention to the flowers at her feet. Later the trail swung about, offering a final view of the ridge. The matriarch had turned, apparently as we disappeared, and was now joining her own.

This shy animal has not roamed the Olympic Peninsula since the ice age and may never have ranged there, as the

peninsula's mountains are isolated from the main chain of the Rockies, and mountain goats are loath to descend for any length of time into the lowlands. No one knows why these goats have executed such an about-face in usual behavior since their introduction by the National Park Service some 40 years ago. Not many miles distant, goats live in Mount Rainier National Park, a naturally occurring population. Here they are as shy and unapproachable as man expects them to be.



Standing across the fire from the matriarch and meeting the dark, intent, piercing eyes, looking so pressingly back, we knew why fairy tales were devised about the incarceration of princes in animal bodies through the working of some spell. It would be easy to imagine such a tale about the matriarch. We are too sophisticated for such fancies perhaps, but it is evident that some individual difference here exists—some bridge of curiosity greater than fear (encouraged though it may be by the discovery that certain dietary deficiencies can be remedied where man is present).

Whatever the reasons, whatever other animal experiences have been ours from the plains of Africa to the prairies of Texas, nothing shall, I think, be more beautiful in our memories than the sense of rapport we knew on that ridge—with the mountain goats and with each other. ■

a new forestry program

ANTHONY WAYNE SMITH

In early April 1971 NPCA President A. W. Smith testified on invitation before the Subcommittee on Public Lands of the Committee on Interior and Insular Affairs of the Senate of the United States. Following is the expanded statement submitted to the Subcommittee.

MY NAME IS ANTHONY WAYNE SMITH, 1701 18th Street, N.W., Washington, D.C. 20009. I am President and General Counsel of the National Parks and Conservation Association. I appreciate the official invitation of the Committee to testify in these hearings.

I am an attorney admitted to practice in New York, the District of Columbia, and all appellate courts. I am a professional student of government operations and natural resources management, details attached hereto.

The National Parks and Conservation Association is the leading national conservation organization concerned primarily with the protection of the National Park System, but also with other major environmental and conservation subjects such as wildlife and forestry.

The NPCA is an independent private non-profit membership institution, educational and scientific in character, with nearly 55,000 members throughout the United States and abroad, all of whom receive the monthly *National Parks and Conservation Magazine*, the *Environmental Journal*.

I was Assistant General Counsel or Staff Attorney to the Congress of Industrial Organizations, the old CIO, before the merger with the AFL, for 18 years. During most of that period I was also Executive Secretary of the CIO Committee on Regional Development and Conservation. In the latter capacity I orga-

nized and directed a forestry program; my principal consultant was Gifford Pinchot.

The Chief Foresters and most of the Assistant Foresters of the U.S. Forest Service for 25 years have been my friends and teachers. I have traveled through most of the National Forests of America with professional consultants, with an eye to practical problems of silviculture, harvest, utilization, and employment conditions in the woods and mills. While I am first of all a lawyer, I have had extensive professional experience with the silvicultural, economic, and legal aspects of forest management; I am not an amateur in forestry.

As this Subcommittee knows, several attempts have been made during the last two years to enact legislation to speed up the cutting of timber in the national forests. After the defeat of these measures, an Executive Order was issued with a view to accomplishing the same results. The argument is that the nation needs more lumber for housing as to which, more later, and that heavy cutting can be offset by larger outlays for replanting, etc. These contentions are unsound; the controversy goes to show that something needs to be done about forestry in America.

The truth is that the nation needs a new forestry program. It should be just the opposite of the recent programs which were defeated. It should be a program of forest restoration and harvesting by ecological methods, directed toward genuine multiple use and long-range sustained yield. Its major elements should be as follows:

1. The use of ecological methods of management and harvest should be required on all federal timberlands by Executive Order or legislation.

By ecological forestry we mean timber

harvesting and management methods which protect and conserve the soil, water, wildlife, vegetation, ecosystems, recreational opportunities, scenery, and the timber itself.

We mean genuine multiple-use to satisfy the needs of production and environmental protection alike; and long-term sustained yield.

The approach implies the use of selective cutting, shelterwood, small patch cutting, or comparable methods, instead of large-block clear-cutting.

It will mean an ultimate increase in the productivity of the forests.

We are not pedantic or doctrinaire in this matter. We recognize all of the practical difficulties, the special conditions, variations, exceptions, contrasts in types of forests, distinctions among regions, etc.

We are well acquainted with the economics of the problem; with the contention that ecological forestry is uneconomic, which really means unprofitable; whereas in truth large-block clear-cutting is socially uneconomic, however profitable it may be for the operator.

There is a basic distinction here: between forest management directed at maximum short-term production, a system which used to be called cut-out and get-out; and on the other hand, forest management which aims at sustained long-term productivity coupled with preservation of the ecosystem of the forest.

The federal public forests have a value to the people of America which is much greater than their value for the narrow purposes of producing lumber or pulpwood for whatever meritorious ends, housing included. They have value for the stabilization of water supplies, the production of atmospheric oxygen, the stabilization of atmospheric moisture, the protection of botanical and zoological resources, the protection of soils, the pres-

ervation of outdoor recreation, and the preservation of the scenic background.

The production of wood and wood products should and must be carried on within the perspective of respect for these other purposes which the forests serve for the American people. To do so is to practice ecological forestry: we are proposing a program for the establishment of ecological forestry throughout America.

A program of ecological forestry will be in sharp contrast to the dominant trends of the last few decades. The dominant trends have been based on large-block clear-cutting with heavy machinery, replanting often after inexcusable delay, to regionally exotic species and for monoculture, practices highly disturbing to the original ecosystems, and on the widespread use of herbicides, rodenticides, and other dangerous chemicals which are more and more intolerable to the majority of the American people.

New varieties of trees are being produced and introduced which may have merit in terms of the quantity of production, but may also have seriously adverse effects on environmental values.

The whole business represents an exaggerated emphasis on the quantity of production of lumber and pulpwood, an emphasis which flouts the public interest in respect to the other essential values and uses of the forests.

The trademark of the dominant trends of the last few decades has been the dollar sign. Everything goes if it yields enough profit for the operators: lip service is often rendered to good forestry in name only.

The dominant trend of the future is going to be something else. It is going to be a redirection of policies in forestry toward respect for the ecosystems on which productivity, communities, and civilization itself are based.

2. Ecological forestry practices should be established on large privately owned holdings of 1,000 acres or more, defined as being affected by a federal public interest, by federal legislation and regulation. Lands affected by a federal public interest would be defined as including at least all lands situated on the watersheds of navigable streams and all lands from which wood or wood products are shipped in interstate commerce.

It is entirely possible that a careful analysis of the scope of the federal legislative authority may show that it extends to the timberlands; if the construction of good housing for all is a proper federal purpose, then the sustained-yield production of all timberlands may justify the

exercise of federal authority. Water and oxygen supplies may also be federal concerns.

This feature of the program will put a floor under good forestry practices for everyone, on an equal footing, and should be acceptable to private businesses which desire to employ such practices but are inhibited by fear of cut-out and get-out competition.

The limitation to holdings of 1,000 acres or more is a reasonable classification based on practical administrative considerations. Large holdings imply an organized business management structure which can enforce proper methods and which can be held responsible for doing so. Smaller holdings can be managed better by other methods.

3. For smaller private timber holdings, farm and non-farm alike, covenants running with the land in perpetuity, supported by minimal easements, should be used to establish ecological forestry practices. The covenants would be enforceable by injunction or actions for treble damages.

Covenants would be purchased in the open market without condemnation. Federal financial assistance would be provided for the rehabilitation of such woodlands on the basis of the long-term assurances accorded by the covenants.

Small woodlot owners would receive payments, first of all, for executing the covenants. This would in many cases afford them the immediate financial assistance necessary to enable them to keep their land in timber. Thereafter they would receive such annual assistance as might be determined upon. The regrowth of cut-over woodlots is a long-term process; timber does not grow as rapidly as compound interest; loans might also be helpful, but conservation payments, in addition to the original compensation for the covenant, may well be deemed essential.

Help of this kind has been needed for a long time by farm and other small woodlot owners. A very large portion of the nation's timberlands are in such ownership. Because the program would be entirely voluntary, we would assume that it would have powerful support from the major farm organizations.

4. Federal financial aid would be offered to the states for the establishment of ecological forestry practices on state-owned timberlands not affected with a federal interest.

The covenant system would be extended by the federal government to small timberlands without regard to whether they lay within the watersheds of

navigable rivers and without regard to whether their products were shipped in interstate commerce; that is, without regard to affectation with a federal public interest, as above defined. Federal authority would be based on the federal power to acquire interests in land for federal public purposes. But it may well be that the limitations on federal regulating power are not significant.

5. American corporations operating overseas in the underdeveloped countries should be required by law to follow ecological forestry practices abroad. In order to protect American corporations from unfair competition, multilateral agreements would be negotiated with the other developed countries, looking toward general acceptance of similar principles. As possible, the system should be integrated into the controls and institutions of the United Nations.

6. A vigorous reforestation program should be inaugurated on public and private land by the use of the above machinery. On public lands this is largely a question of appropriations, but also one of ecological harvesting so that a public investment in reforestation becomes worthwhile. Once a permanent protective system has been established, various forms of aid to private operators can easily be developed.

7. Ecological timber harvesting implies integrated wood utilization. The stabilization of harvesting methods on large private holdings will help the large corporations to construct and operate integrated utilization plants. But one can visualize a federal program, or a federal-state program, whereby aid would be given to consortiums of smaller operators to establish plants of the necessary capacity.

8. The improvement of the forests and stabilization of production by the above methods will stabilize working conditions in the woods and benefit the communities based on timber; the program will expand the recreational base; hence it will benefit both labor and local business.

It will be vastly superior to the recently proposed programs for over-cutting, because the latter will result in cutting out large areas in a few years, with the necessity of waiting a long time indeed before regeneration can take place. Out of such bad practices come ghost towns, unemployment, the deterioration of the resources, and the customary ruin which has been visited upon so many of our forests all over the continent.

What is needed is stability, and a variety of employment opportunities as well, including work in the woods, a wide variety of jobs in the mills, and

employment and business opportunities related to recreation. Only a long-term ecological forestry program can provide such support to forest-based communities.

9. The proposed forestry program would not be applied, of course, within state or national parks or wilderness areas, where the forests must be maintained in their natural condition.

10. It has been contended that heavier cutting of timber is needed at present for housing purposes. It is very important to build enough housing for all the people of America; but this can and must be done without injuring the forests and impairing them for the many purposes which are of importance to all Americans.

If there is really a genuine long-term shortage of lumber for construction, encouragement should be given to the use of other materials: brick, stone, glass, steel, and aluminum.

If the prices of wood and wood products are too high, and a subsidy is needed, it should be accorded frankly and openly, and not in an indirect form by the impairment of the forests of America.

11. The present minimum stumpage pricing system is basically unsound. Your committee could do a great service to the country by looking into it with considerable severity. In some situations, at least, the system appears to operate as follows: an estimate is made of the market value of the finished product at the mill; estimates are made of the operator's cost in terms of harvest, transportation, and processing, and 14% is added for profit and risk; this cost-plus figure is deducted from the estimated market value; the difference is established for bid purposes as the minimum price below which the stumpage will not be sold.

This system does not take into account the actual value of the forest to the people of the region or the nation. It assumes that a decision has been made to sell, and that the sale must be at a price which will yield a profit. And yet the forest may have much greater value to the public as a recreational resource, as protection for watersheds, as a source of atmospheric oxygen, or as the matrix for the protection of invaluable ecosystems. It may constitute an irreplaceable scenic backdrop for the region, and one with considerable economic, and not merely intangible value.

A forestry program of the kind we propose has been needed, in our judgment, for a long time. We believe that strong support could be developed for it among the major farm, labor, and conservation organizations of the United States. ■

coalition defends Big Cypress Swamp

March 30, 1971

Honorable Rogers C. B. Morton
Secretary of the Interior
Department of the Interior
Washington, D.C. 20240

Dear Mr. Secretary:

President Nixon made a very wise decision last year against the formerly proposed giant jetport in Big Cypress Swamp in the Everglades Country of Florida. The agreement sponsored by the Administration at that time, signed by the Secretaries of Interior and Transportation and by the State of Florida and the Dade County (Miami) Port Authority, looking toward the selection of an alternative site and the removal of the existing runway, was a milestone in environmental policy.

As you know, this epochal decision was supported by one of the most powerful combinations of conservation and labor organizations ever brought together in the United States, the Everglades Coalition. It is our understanding that the Everglades Coalition intends to continue its efforts in support of Administration policy with a view to the complete relocation of the airport site, including the runway, and the permanent protection of Everglades National Park and Big Cypress Swamp.

The present Environmental Coalition for North America, organized since the successful efforts against the jetport, proposes to join forces with the defenders of the Park and the Swamp. We would identify ourselves to you as one of the major groups opposing the issuance of a permit for the construction of the proposed Trans-Alaska Pipeline on the basis of the very unsatisfactory draft environmental impact statement issued dur-

ing the tenure of your immediate predecessor. You have received copies of the summary and extended statements submitted by our Environmental Coalition at the Departmental hearings on the Pipeline last month, concurred in by 28 persons associated with major farm, labor, and conservation organizations. Our Coalition wishes at this time to add its weight to the defense of Everglades National Park and Big Cypress Swamp.

We commend the Administration on standing firm on its decision to relocate the proposed airport at an ecologically acceptable site, and to transfer the existing temporary runway to that site. We are happy also that the federal government has urged the State of Florida and the Dade County Port Authority to present acceptable alternative sites, so that the decision on relocation can be made promptly.

But the removal of the airport will not necessarily save Everglades National Park and Big Cypress Swamp. The Big Cypress will be lost to unwise and unplanned drainage and development by real estate speculators, and the Park will be deprived of a substantial portion of its necessary water supplies, unless a significant portion of the Swamp can be brought into federal public ownership promptly.

Realistically, there is only one way by which this can be done: that is, by the public acquisition of at least 400,000 acres of the Big Cypress Swamp. The necessary money has been available in the Land and Water Conservation Fund; if recent rebudgeting presents any problem, suitable budgetary arrangements should be made to permit the acquisition of the necessary portion of the Swamp, because otherwise the entire effort at protecting the Park and the Swamp by

the relocation of the jetport site will come to nothing.

We know you are also aware of the problem of bringing adequate water supplies down to Everglades National Park from Lake Okeechobee through channels recently improved by the Army Engineers. The legislation adopted by Congress last year, which requires the delivery of specified amounts of water through these

channels to Everglades National Park, is of basic importance. We would recommend that no changes be made in this legislation at this time, and that the inter-governmental agreements arrived at for the implementation of the legislation be adhered to and enforced with vigor.

This letter is written with a view to supporting and re-enforcing the efforts of the Everglades Coalition. The persons

who sign this letter do so as individuals, and organizations and titles are listed for personal identification only. We hold ourselves in readiness at all times to support the efforts of the Administration for the protection of Everglades National Park and Big Cypress Swamp in the public interest.

With all good wishes and much appreciation for the fine work you are doing.

Cordially yours,

ANTHONY WAYNE SMITH
Chairman, Environmental Coalition
President
National Parks & Conservation
Association

LLOYD TUPLING
Vice-Chairman, Environmental Coalition
Washington Representative
Sierra Club

JOHN H. ADAMS
Executive Director and Counsel
Natural Resources Defense Council

DR. WALTER S. BOARDMAN
Conservation Consultant
Defenders of Wildlife
NPCA

LARRY BOGART
Executive Director
Anti-Pollution League

WALTER J. BURKE
International Secretary-Treasurer
United Steelworkers of America

RODERICK A. CAMERON
Executive Director
Environmental Defense Fund

WILLIAM G. CONWAY
Director
New York Zoological Society

DR. CLARENCE COTTAM
Director
Welder Wildlife Foundation

FRED G. EVENDEN
Executive Director
The Wildlife Society

MARK GANOPOLE
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Alaska Wilderness Council

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Environment

ELIZABETH K. GREELEY
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The Garden Club of America

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EDMUND H. HARVEY
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Delaware Wild Lands, Inc.

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President
Humane Society of the United States

JAMES N. LAYNE
President
American Society of Mammalogists

SAM LOVE
Editor
Environmental Action

OLGA M. MADAR
Vice-President
United Automobile Workers of America

MRS. HAL MACARGLE
Vice President, Conservation
Audubon Naturalist Society of the Central
Atlantic States, Inc.

RICHARD G. MILLER
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Foresta Institute for Ocean and Mountain
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New York Aquarium

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Executive Officer
National Recreation and Parks
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HAL SCOTT
Executive Director
Florida Audubon Society

NED C. SMITH
Executive Director
Open Space Institute

GARY A. SOUCIE
Executive Director
Friends of the Earth

MRS. THOMAS M. WALLER
Chairman
National Affairs Committee
The Garden Club of America

npca at work

THE WHITE HOUSE

WASHINGTON

February 16, 1971

Dear Mr. Smith:

Your support for my decision to halt further construction on the Cross Florida Barge Canal is deeply appreciated, and I want to thank you for your recent telegram. I hope the Administration's efforts to protect our natural heritage will merit your continued approval in the months and years ahead.

With best wishes,

Sincerely,



Mr. Anthony Wayne Smith
President
National Parks and Conservation
Association
1701 18th Street, NW.
Washington, D.C.

PRESIDENT RESPONDS TO CANAL TELEGRAM

President Nixon's executive order halting construction of the Cross Florida Barge Canal was greeted by an outpouring of congratulatory telegrams from leaders of the conservation movement. The ill-considered Army Corps of Engineers' project would have destroyed the Oklawaha River, done enormous damage to the wild Ocala National Forest ecosystem, and threatened the purity of the Floridan Aquifer, a major source of fresh water for northern Florida. Considerable damage already has been done during construction of the completed parts of the canal system.

NPCA President A. W. Smith sent a telegram to the President following announcement of the executive order:

"Congratulations on your decision halting construction of the Cross Florida Barge Canal. You can be sure of acclaim and support from conservationists and environmentalists everywhere on this momentous and commendable action."

The President's reply to the telegram is reproduced above.

INTERNATIONAL MEETING TO SAVE WILD CATS

Eminent scientists from around the world gathered in California in March 1971 at the International Symposium on Ecology, Behavior, and Conservation of the World's Cats, sponsored by Lion Country Safari, National Parks and Conservation Association, and the World Wildlife Fund. Half a dozen of the scientists met the following week at NPCA headquarters to discuss

the need for research and the role of national parks, natural areas, zoos, and legislative bodies and law in preserving endangered cats. Participants in both meetings agreed that not only was the exchange of technical information about the various species being studied valuable, but the personal contacts established among the researchers also are valuable.

All agreed that, due to cats' elusive and nocturnal habits, the animals are difficult to study but that more research is needed in order to determine their habits, how many there are, and other data, and to be able to recommend measures to protect them. Wild cats—as all predators—are essential to the balance of their ecosystems by controlling the numbers of prey animals. Man's encroachment on their habitat constitutes the most serious threat to their existence. The scientists stressed the need for establishment of large preserves representing complete ecosystems to provide habitat for the world's wild cats. Participants at the International Symposium unanimously adopted a resolution "that the federal government should back up the efforts of state governments in banning the importation and sale of skins and products made from the wild cats of any country of the world."

BBC FILMS C&O CANAL

The British Broadcasting Corporation has prepared a documentary for BBC television on the C&O Canal and the conservation drive that culminated in the creation by the 91st Congress of the C&O Canal National Historical Park.

NPCA President A. W. Smith and others involved in the C&O Canal movement were interviewed by a BBC film crew, which also set up its equipment on the canal's towpath and interviewed hikers. The documentary will be part of the BBC's Open University program. NPCA has testified on invitation in favor of a C&O park. However, most of Mr. Smith's involvement over the years has been on an individual basis.

MARBLE VALLEY SPRINGS A LEAK

Not much noticed amid the welter of national conservation issues—trans-Alaska oil line, pollution of sea and air, and many others—has been a notable success for conservationists in a remote mountain valley some miles west of Lexington, Virginia.

The Virginia Electric & Power Company (VEPCO), with little advance notice, announced in 1968 that it would build a large pumped-storage generating facility in the beautiful Marble Valley of the Calfpasture River, a mountain stream flowing into the James River. The facility



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was to have a capacity of some 1,500,000 kilowatts, with a lower dam 2,400 feet long backing up a 7-mile-long reservoir (advertised as having great recreational capabilities). An upper dam would have created a 2-mile-long reservoir covering, among other lands, about 350 acres of the George Washington National Forest.

The fact that the scenic Calypso had been viewed as a unit in a proposed Virginia wild rivers system seemed not to have impressed VEPCO any more than did the outcries of Marble Valley landowners, or the protests of local conservationists and other friends of the environment. Application was made to the Federal Power Commission for a license to construct. For a while it seemed that the power company would have its way without serious challenge, and that an important scenic and recreational river would be destroyed.

But Virginians in and around the affected area asked for and received assistance from national conservation organizations. This magazine published an article on the Marble Valley controversy in November 1969, and several conservation and environmental organizations filed petitions with the FPC to intervene in the case.

In mid-February VEPCO announced that it was abandoning the project. Company geologists, VEPCO said, had discovered sinkholes and layers of sand in the proposed upper reservoir. The company moved to withdraw its application with the FPC, saying that "it is a good deal like finding a number of cracks in a bathtub." Most conservationists no doubt will feel that it is better to discover things like cracks and sand at a late hour than to have them wholly overlooked. As for the company, it assured the public that conservationists' opposition had nothing to do with the decision to abandon the project. Be that as it may, the favorable outcome might encourage conservationists to intervene in other ill-considered ventures.

MARK TRAIL WORKING FOR NPCA

Ed Dodd and Tom Hill have prepared a special "Mark Trail" drawing that will be used on a test brochure this spring as part of NPCA's efforts to increase its membership. Both artists are members of NPCA.

"Mark Trail" is known to some 20 million Americans who follow his adventures in more than 125 major newspapers. Ed Dodd, the strip's creator, is a native Georgian who lives on a large estate called "Lost Forest" near Atlanta.

A dedicated naturalist, animal lover, and conservationist, Dodd is the country's most honored outdoors cartoonist. He has

been cited by the National Association of Conservation Education and Publicity, the National Forest Association, and the National Wildlife Federation for his contribution and service to conservation; and he has appeared in several films and television shows, including an hour-long NBC documentary, "Our Endangered Wildlife."

Dodd is the author of several books, including: *Mark Trail's Book of North American Mammals*, *Chipper, A Beaver Story*, *Flapfoot, A Canada Goose Story*, and *Careers For The '70s—Conservation*, soon to be released.

He studied animal drawing and illustration under the legendary Dan Beard, then set out on a storybook life. Dodd has been an instructor in a boys' camp, ran a dude ranch, directed the largest of all horse pack trains in Yellowstone Park, worked at a Norwegian sailing camp, and traveled widely. An ardent outdoorsman, he enjoys fishing, outdoor cooking, and horse training. He has set up camp in wilderness areas throughout the United States and Canada.

Dodd's associate, Tom Hill, is one of the country's outstanding wildlife artists and has worked with Dodd for more than 10 years.

conservation news

SWAN HUNT PROPOSAL KNOCKED DOWN

Late in March, the Maryland Fish and Wildlife Administration announced in a press release that it would not seek federal approval "for any type of whistling swan hunting season." The announcement followed a storm of indignation over an official's suggestion for such a season, and conservationists involved believe that the outcry was the cause of the reversal.

The whistling swans winter in and near Chesapeake Bay. The birds have been protected for 50 years by federal law. It was suggested that the state obtain from the Fish and Wildlife Service 500 free tags to be distributed on a first-come-first-served basis for a season running from October 1 to January 30. Similar regulations have been approved for Utah, Nevada, and Montana.

As the swans are not generally regarded as edible birds, they would have been used only for targets and taxidermy under the state's proposal. The 50,000 Maryland swans comprise about 70 percent of the national population. They are not an endangered species because of the years of federal protection, which protection also

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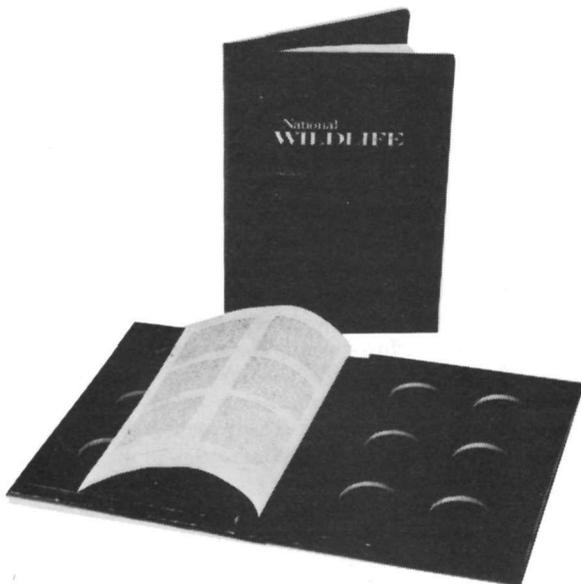
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has made them fairly tame, easy to approach for viewing (and shooting!) along the bay's estuaries.

The state proposal, following on the heels of the western examples, if put into effect would have helped to establish a dangerous precedent for lifting protection from species the minute they show any signs of recovery to significant levels. Though not endangered, the swans number hardly more than 70,000 and are concentrated in a few areas. Environmentalists feared that poachers would account for far more than the proposed 10 percent slaughter and that any large white bird, including the rare trumpeter swan, would be considered fair game by the ignorant.

Concerned conservationists are reminded that the Bureau of Sport Fisheries and Wildlife of the Department of the Interior receives state applications each spring for such special seasons on federally protected species. Now is the time to be alert.

INNER-CITY CHILDREN IN C&O CANAL PARK

The new C&O Canal Park was host during the current school year to inner-city fifth and sixth graders from Adams School. The busload of some 50 youngsters regularly explored the park from Washington to Harper's Ferry. Money came from a government grant plus private funding.

Under the direction of Malcolm Leith and James Contee, both of the Morgan Community Nature and Education Center, the kids hiked, skipped stones, learned the texture of trees, moss, flowers, and leaves, watched wildlife, and relaxed away from the concrete jungle. There were no canned or prepared talks, only judicious guidance and answers to hundreds of questions. Many saw a waterfall for the first time. Bicycling and an overnight camping trip in the snow were included for older youngsters.

The children's hunger for the new enrichment of being out-of-doors, out of the ghetto, was dramatized by two little boys. They never came to school except on "C&O" bus days.

CAMELS FOR KENYA

Poachers in northern Kenya operate at a distinct advantage over game guards. The guards must cover vast "beats" on foot in their efforts to stop the poachers' destruction of leopards, cheetahs, and other African animals now being pushed fast toward extinction. The poachers have the advantage, as they can choose the time and place for their crimes. They can kill and be gone while the guard is at the other end of his beat, secure in the knowledge that they can run away as fast as he can come after them.

Consequently the government of Kenya is trying to mount the guards on camels.



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So mounted they could cover their beats more rapidly, reducing the opportunity for poaching, and could chase down poachers who did manage to kill. Three camel corps of 20 camels each are needed at Samburu, Isiolo, and Maralel. The camels cost \$60 apiece. An organization called Friends of Africa in America, based at 330 South Broadway, Tarrytown, New York, is attempting to help the Kenya government to obtain the money for the camels. The organization is trying to raise the money in small amounts from many people to demonstrate the broad base of American interest in Kenya's wildlife. It suggests the collection of a fund of \$60 at schools, clubs, and churches. The group collecting the money may name the camel it buys and will be presented a camel bell by the government of Kenya in acknowledgment of its efforts.

HUMANE SOCIETY ADDS WILDLIFE REPRESENTATIVE

The Humane Society of the United States has appointed Hal Perry as its wildlife representative. Mr. Perry is the first to hold such a post in the Humane Society, which recently broadened its aims to prevent cruelty to wildlife; to preserve threatened species; and to help restore ecosystems with which man has tampered.

Mr. Perry is known for his efforts to prevent animal poisoning by the Bureau of Sport Fisheries and Wildlife. His photographs of animals poisoned by 1080 accompanied "War on Wildlife" in the March issue of this magazine. He was incorrectly identified at that time as a member of the Arizona Varmint Callers Association, a group with which he has no present connection.



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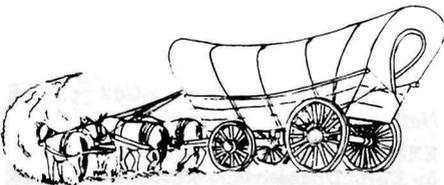
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conservation docket

Every Congress considers thousands of bills related to environmental problems. We cannot list them all; therefore, below is a selection of those so far introduced in this Congress, together with their House of Representatives (HR) or Senate (S) numbers and the committee(s) to which each has been referred. Members, as citizens, are free to write to these committees to request that they be put on a list for notification when bills come up for public hearing. When notified of hearings, they can ask to testify or they can submit statements for the record. To obtain copies of bills, write to the House Documents Room, U.S. Capitol, Washington, D.C. 20515, or to the Senate Documents Room, U.S. Capitol, Washington, D.C. 20510. When requesting bills, enclose a self-addressed label.

A hearing on national land use policy legislation will be held May 18 by the Senate Interior & Insular Affairs Committee. Testimony will be heard on Senator Henry Jackson's bill (S 632) to broaden authority of the Water Resources Council and river basin commissions, and to provide financing for statewide land use planning; and on the Administration's bill (S 992) to authorize the Secretary of the Interior to make grants to encourage and assist states to prepare and implement land use programs.

Two bills on Alaska pipeline operations (HR 6898 and 6717), to provide for a select committee to investigate the matter, have been referred to the House Interior & Insular Affairs Committee.

New national parks proposed and referred to the House Interior & Insular Affairs Committee are as follows: Big Thicket National Park, Texas (HR 6556); Las Trampas Ridge National Park, California (HR 5490); Five Civilized Tribes National Park, Oklahoma (HR 5201); and Toyon National Urban Park, California (HR 6510). Also before the committee is a proposal (HR 6596) to enlarge Sequoia National Park. A bill (S 1291) amending previous acts to facilitate protection of Piscataway National Park, Maryland, is before the Senate Interior Committee.

Wilderness areas proposed and referred to the House Interior Committee are: Eagle Cap Wilderness Area, Oregon (HR 446); Montana National Forests (HR 6398); West Virginia National Forests (HR 397); Lava Beds National Monument, California (HR 5838); Indian Peaks Area, Colorado (to review its suitability as wilderness) (HR 6523).

Fish and wildlife matters before the House Merchant Marine & Fisheries Committee are as follows: Two bills to protect ocean mammals (HR 6554 & 6558); a bill to protect hawks and owls (HR 5821); a bill to protect Atlantic salmon (HR 3304); and a bill to provide for marine sanctuaries (HR 6380).

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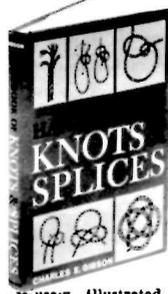
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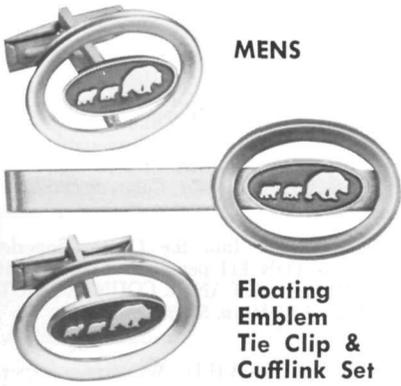
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books

Bernard Rudofsky, **STREETS FOR PEOPLE: A PRIMER FOR AMERICANS.** Doubleday & Company, Inc., Garden City, New York. 1969. 351 pp., profusely illustrated, B&W and color. \$14.95.

Sidewalk cafes, awnings, canopies, umbrellas, gallerias, porticos, arcades, promenades, public urinals, benches, stairs, bridges, overpasses, elevated pedestrian walkways; plantings, sculpture, gates, decorated pavements; open-air markets, processions, parades, street concerts, street theatre—European streets, where people have been coping with urban problems much longer than we, are far richer than the sterile streets of America. Rudofsky shows us what we have missed: a pleasant urban environment for *people*—not cars. Is it too late to learn?

Eliot Porter, **APPALACHIAN WILDERNESS**, including "Natural and Human History" by Edward Abbey and "Epilogue" by Harry M. Caudill. E. P. Dutton & Co., Inc., New York. 1970. 123 pp., 45 color photographs. \$30.00.

Large-format portfolio of exquisite photographs accompanied by Abbey's evocative description of natural and human history of the Great Smoky Mountains. Harry Caudill's epilogue describes the sinister prospect for Appalachia.

Ray Atkeson and David Muench, **CALIFORNIA.** Charles H. Belding, Portland, Oregon. 1970. 187 pp., 184 color photographs. \$25.00.

In this large-format book stunning color photographs and text by David W. Toll portray the diversity of this fascinating state.

Patricia Caulfield, **EVERGLADES.** Sierra Club, San Francisco, California. 1970. 143 pp., 66 color photographs. \$27.50.

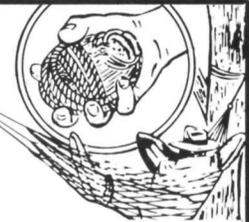
Another beautiful large-format book by the Sierra Club to savor and treasure. Selections from the writings of Peter Matthiessen accompany Miss Caulfield's breathtaking photographs.

Daniel Jack Chasan, **KLONDIKE '70.** Praeger Publishers, New York. 1971. 184 pp. \$6.95.

A well-documented presentation of the conservationists' battle against the federal government and the private oil interests, whose pursuit of the trans-Alaska pipeline is endangering the Alaskan wilderness, its native peoples, and the Arctic ecosystem. The adoption of environmental safeguards is not enough, argues Chasan; it is the whole development process that must be stopped.

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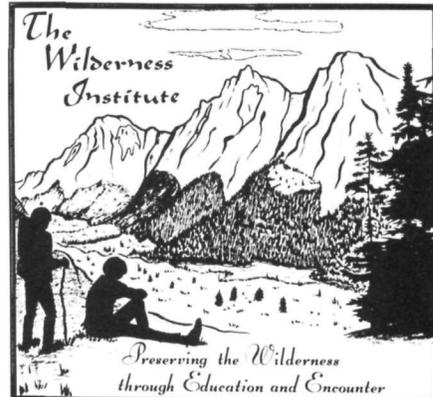
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Continued from page 2

the famous campfire scene, when the original park explorers decided to urge the establishment of a national park there, will be reenacted. The Association hopes to lend its aid in making these celebrations a great success.

The year 1972 will also bring the Second World Conference on National Parks. The National Park System of the United States, as it was established, stimulated the development of similar systems throughout the world. The national parks in other countries and other continents have been a bastion of defense for the scenic, wildlife, and botanical treasures of much of the world.

This Association played a significant role in the First World Conference on National Parks which took place in Seattle in 1962. In consultation with the National Park Service, the International Union for Conservation of Nature, and the World Wildlife Fund, we would hope to lend our aid again in making the Second World Conference a significant occasion.

The emergence of a powerful concern with the environment and the living resources of the planet in recent years within the United Nations System is a hopeful augury for the future. The United Nations Conference on the Human Environment, to be held in Stockholm in 1972, cannot fail to concern itself with those models of the ideal environment, the national parks of the various nations of the world. And the United Nations Conference on the Law of the Sea, which will be held in 1973, will concern itself among other things with the establishment of undersea parks and similar preserves.

The insistent concern which the general public has shown in recent months with environmental and ecological matters is well founded and realistic; great numbers of people have awakened to the possibility of being poisoned or smothered by pollution; but they have come to realize also, as never before, that life is a seamless web, and that to endanger the ecological system of the earth is to endanger mankind itself. It is within the parks, monuments, and recreational areas of the national park system, as also within the national forest system and the wildlife refuge system, that the interdependence of life, plants, animals, and men is best displayed; the parks are indispensable teaching tools in ecology.

If the recreational facilities of the nation are to be broadened, as this Association has so often advocated, to include a more intensive use of the national forests and other public lands for outdoor camping,

then the forests themselves must be managed in harvesting timber in such a way as to preserve them for scenic and recreational purposes. For these reasons and because good forestry is desirable in itself, the Association espouses an ecological forestry program, upon which it undertakes to elaborate in the Magazine and in special studies.

The close relationship between park protection and wildlife protection and restoration is obvious. Among the purposes of Yellowstone at the beginning was the protection of wildlife. This has been true of all the great national parks which have been established since that time. Inevitably, therefore, the Association involves itself in wildlife protection, including the elimination of the abuse of pesticides, and the halting of indiscriminate wildlife poisoning.

Nor is the Association concerned only with natural conditions in the great open spaces. People who cannot travel long distances across the continent should have ample opportunity to enjoy nature at its best in their own localities, and indeed within the cities. Green and open spaces in the cities are primary value for enhancement of the lives of city dwellers; such a function would be sufficient in itself. Yet also the development of better systems of city, county, and state parks could relieve the pressures of overcrowding on the national park system.

One of the main threats to green space in the cities is the private automobile traffic, bringing with it as it does, ill-planned freeways and enormous parking lots; likewise curbside parking which burdens existing street facilities. The Association undertakes to attack this problem by urging peripheral parking, the development of pedestrian areas, and the removal of parking from downtown streets, and also by support for well-planned urban mass transportation systems.

All this represents a very broad program. We take our stand firmly as the major conservation organization concerned primarily with the protection of the national park system. But we know that every problem experienced in the administration of the park system is related to environmental issues outside the parks.

The national parks are a symbol of the determination of significant segments of modern life to deal resolutely with the environmental and ecological crises; they must be preserved because they are worth preserving in themselves, but also because of what they stand for in the long perspective of an emerging civilization.

—Anthony Wayne Smith

The work of the NPCA is basic to the survival of mankind and perpetuating all life on earth

As an NPCA member you have an important share in this work.

For, thanks to you, the NPCA is a completely independent organization, free to state its views on any question. The NPCA receives no large operating grants from foundations. It depends almost entirely for its financial support on the annual dues of its members and whatever extra contributions they make.

This is why an increasing membership is a necessity if the NPCA is to continue to grow in strength and effectiveness.

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