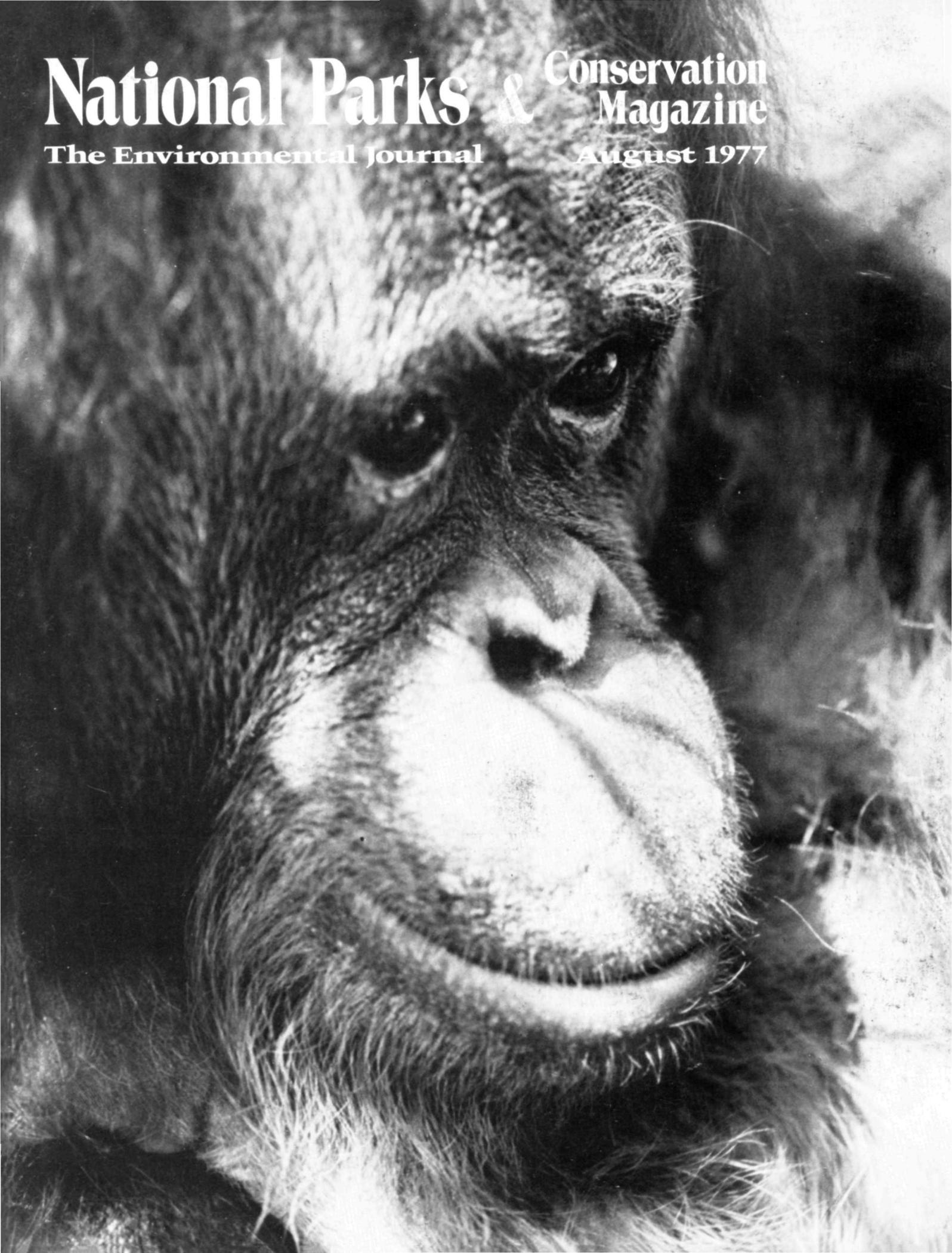


National Parks & Conservation Magazine

The Environmental Journal

August 1977



A BROAD PROGRAM

THE NATIONAL PARKS ASSOCIATION was organized in 1919 at the behest of Stephen Tyng Mather, the first Director of the National Park Service, who had in mind the need for public support from outside the government in the enlargement of the National Park System.

As Robert Sterling Yard, first Executive Secretary of the Association, applied himself to his work, he found a need to monitor the operations of the National Park Service itself to guard against overdevelopment and commercialization.

The System grew; the nation also, mightily. Affluence, leisure, and mobility, combined with a need to escape from the uninhabitable super-cities, led to the heavy overcrowding of the parks. The responsibilities of the Association multiplied.

From a tiny organization of about 3,000 devoted members, as late as 1952, the Association grew to more than 15 times that size. The Magazine expanded from a small-page quarterly to the largest monthly conservation periodical in the nation.

Some seven years ago, the name of the Magazine was changed by the official action of the Board of Trustees to include the word conservation, and a subtitle was added, *The Environmental Journal*. Shortly afterward, the name of the organization itself was changed by the Board to the National Parks and Conservation Association.

BACK IN 1952, a project was advanced for a highway along the bed and berm of the old Chesapeake and Ohio Canal along the Potomac River. In protest, Justice William O. Douglas led his famous hike, in which a number of us participated, in the spring of 1954, and the plan was defeated; the C & O Canal National Historical Park was established by law in 1971.

Meanwhile, the Army Engineers had brought forth a proposal to build 16 major dams on the Potomac and its tributaries. One of them would have flooded out the C & O Canal. We organized a broad coalition of conservation, farm, and labor organizations and eventually killed the plan.

The successful campaign for the Potomac was based mainly on the protection of farmland and farming communities, seemingly a far cry from park protection, but in this case inseparably related. Before that effort, the Executive Committee of the NPA would have had doubts about its ability to get a

timely appointment with the Director of the National Park Service. But working with a powerful coalition of many interests, we made our voices heard by the Secretaries of all the land management departments and by the President himself, who asked for a new program for the Basin.

THE NATIONAL PARKS have always been some of the finest wildlife refuges of America. Many of the animal species protected in the parks have natural ranges which extend far beyond the parks. Our work necessarily took us beyond the park boundaries. And the modern multiple-crisis of species preservation drew us into wildlife protective efforts completely independently of our concern for the parks.

Protecting the parks meant reducing the traffic. Internal facilities, particularly the commercial establishments, had to be cut back, or at least frozen. The overbuilding of roads had to stop. But there also had to be some place for all the people to go. Just outside most of the big parks are the National Forests, with magnificent scenery in many instances, and ample recreational space. But the forests were being managed for short term timber production, with clearcutting the predominant method. The recreational needs of the forests needed more attention. All this took us into forestry; we spoke for ecological forestry, the various methods of selective cutting, so that the production of timber and wood products would continue, but the recreational, scenic, and wildlife purposes might be served at the same time.

THE NATIONAL PARK MOVEMENT began in America but spread throughout the world. It has always been highly international. The International Union for the Conservation of Nature (IUCN) was the first institutional manifestation, with the NPA a founding member. Much later came the United Nations conference on the Human Environment at Stockholm, and out of it the United Nations Environment Programme (UNEP), with the NPCA an active participant. When the United Nations Conference on the Law of the Sea was convened, we were invited to participate as experts and have continued to serve in the U.S. Delegation. Involved is the great cause of world legal order, but also the immediate conservation issues of oceanic pollution, the marine mammals, and the oceanic fisheries.

The great burst of concern for the environment which was marked by Earth Day in 1970 focused to a very large extent on air and water pollution. Vast numbers of people, particularly young people,

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National Parks & Conservation Magazine

The Environmental Journal Vol. 51, No. 8, August 1977
NPCA · National Parks & Conservation Association · NPCA



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FRONT COVER Female orangutan, by Ronald Nadler

BACK COVER Prime bison bull, by Durward Allen

Indonesia must be encouraged in its recent conservation efforts on behalf of the orangutan, which is endangered by destruction of its jungle habitat and by poaching. (See page 10.) Creation of a Great Plains National Park would preserve a sample of an important grassland ecosystem not well represented in the National Park System. (See page 4.)

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KAREL HAYES

A Proposal: GREAT PLAINS NATIONAL PARK

A national park in the Great Plains would preserve a special feature of America's natural heritage

by DURWARD L. ALLEN

A WIDELY RECOGNIZED and traditional purpose of the National Park System is to preserve representative samples of North America's choice scenery and natural plant and animal types. Our great wilderness parks should be, to whatever degree possible, complete and self-maintaining ecosystems. Areas classified as national parks are by definition large, have several outstanding natural features, and are inviolate against exploitation.

Besides the lack of any major area dedicated to preserving our grasslands, we currently have no park that truly represents the Great Plains. I propose the creation of a Great Plains National Park to meet both needs.

Excellent examples of grassland vegetation and some appropriate animal species do exist in such areas as Wind Cave National Park (South Dakota), Theodore Roosevelt National Memorial Park (North Dakota), Badlands (South Dakota) and Devil's Tower (Wyoming) national monuments, the National Bison Range, and Wichita Mountains and Valentine national wildlife refuges. But the true beauty and productivity of grassland cannot be fully appreciated unless it is complete with its natural complement of grass, forbs, and animal life. Grassland animals include the

large and small, vegetarian and carnivorous, and they need sufficient space to use their range and pursue their seasonal behaviors in a natural manner. All the areas just mentioned fall short of being true grassland parks in size and the fauna they contain.

My proposal does not concern the tallgrass prairie that has been under consideration as a park in the Flint Hills of Kansas. That area is a particular type of grassland, essentially a phase of what has been designated the true prairie, which lay adjacent to the forested lands to the east.

FOR CONCEPTUAL PURPOSES I find it convenient to regard the true climatic grassland, if there is such a thing, as having its eastern boundary (at the mid-states latitude) west of the Mississippi River in eastern Nebraska, where the tallgrasses largely disappear and several kinds of midgrasses become dominant. Westward it includes certain shortgrasses; hence it is a "mixed prairie," the most extensive of our grassland types. Nearly all these types include a great array of largely perennial and deep-rooted forbs that made the open lands an ever-changing garden of flowers throughout the season. Few people today have any idea what the mag-

nificently attractive prairie flora was like.

The mixed prairie is underlain by a dry subsoil and a mineral hardpan or lime layer. In the East, where annual rainfall is about twenty-five inches, this layer usually begins at a depth of four or five feet. Farther west, in regions of lower rainfall, the lime layer rises to within a foot or so of the surface.

I regard the mixed prairie north of Nebraska as offering the best possibilities for establishing a Great Plains National Park. Historically the region has been highly productive in both the diversity and quantity of its animal life and offers striking seasonal change. It probably was the prime habitat for both buffalo and the Plains Indians a century and a half ago.

The dominant grasses of this region include needlegrasses, western wheatgrass, June grass, the dropseeds, little bluestem, and side-oats grama. Shortgrasses that occupy a lower level in the open stands are mainly blue grama and buffalo grass, the latter being replaced northward by several sedges. Progressively westward onto the high plains, the midgrasses give way to the shortgrasses. Several researchers have observed that shortgrasses gained

ground over the midgrasses as a result of heavy grazing. The same factor reduced the shortgrasses in turn and permitted such inferior forage as big sage, rabbit brush, and prickly pear to take over. Sagebrush ranges are now widespread in Wyoming and Montana.

I expressed some uncertainty as to whether a true grassland climax exists. This question hinges largely on whether one considers fire an intrinsic attribute of climate. In semiarid lands that can support vegetation thick enough to burn, fire is a universal occurrence. Fires caused by lightning are difficult to distinguish from man-caused fires, inasmuch as men have been setting fires for many thousands of years. I tend toward the view that practically every grassland would be invaded by woody vegetation in the absence of fire. On our northern prairies convincing evidence of such an invasion can be seen in the stands of chokecherry, buffalo berry, silverberry, sumac, and other woody plants that have escaped burning for a number of years. Favorably situated ravines, other rough topography, and upwind-facing waterfronts are taken over by coverts that show the effect of protection from fire in these places. Topography, soils, and bedrock formations have been

shown to have a role in preserving scarp woodlands in the grass country. It seems that certain species of woody plants can survive in practically all areas where grass does not produce enough thatch to burn effectively.

Our grasslands develop their most salient characteristics and greatest stability on large, relatively open spaces, where they have the earmarks of a climax. I am satisfied to regard them as such, with the understanding that fire and the normal complement of animal life were built-in maintenance mechanisms. The park I am proposing would need to incorporate these features, although including some rough lands as well would illustrate the diversity of the region. In order to further accentuate this diversity, the park should be far enough west to grade into the shortgrass and sagebrush habitats of the high plains.

ALTHOUGH FIELD SURVEYS have been carried out in all parts of the country by the National Park Service to determine where parks are needed, there is now no plan for a Great Plains National Park. I suspect that the area where South Dakota, Nebraska, and Wyoming meet should have major consideration. It would be necessary to avoid towns or pri-

mary highways. If the tri-state area proved unfeasible, the northwest region of South Dakota should be investigated. It seems to offer outstanding possibilities.

Let us visualize a million-acre national park, roughly twenty-six by sixty miles, with the long axis running east to west. A park this big would be needed in order to be representative and self-contained. The exact shape would depend on topography and other considerations. The park probably should center around a height of land as it would have to be surrounded by a barrier fence—a development that might cost as much as a county road. This fence must be proof against loss of bison and wolves, which would be a feature of the park. Outflowing drainageways, commonly dry, would require some engineering at the fenceline and might include waterholes designed to conform to the scene. The fence would be bordered by an interior service trail, but on the outside it should be as far as possible from any access road.

As a preliminary plan, let us assume that the park would have two entrances—east and west—connected by a network of strategically located blacktop roads. The traffic on these roads should be one-way only and have a maxi-



The Great Plains National Park as envisioned by Durward Allen would include a fence around the perimeter with all

accommodations outside the gate, and wildlife native to the Great Plains, including predators.



PHOTOGRAPHS BY DURWARD ALLEN



mum speed limit of thirty miles per hour. There should be many turnouts and rest stops but no other developments. All outside public accommodations except a visitor center and administrative headquarters should be privately owned. Concessioners should feature native crafts illustrating the rich culture of the Plains Indians.

The public could be given almost unlimited daytime access to the park in their automobiles. In addition, various kinds of public transportation could be available for visitors who want to leave their cars behind. They could witness the habits and interrelations of its animal life at leisure in open vistas permitting every observational advantage. Experience indicates that nearly all animals would become accustomed to slow-moving vehicles and would largely ignore the human presence. Such a park should be closed at night. The roads would serve a valuable function as firebreaks for the controlled burning that would be required to maintain a healthy grassland community. Under such a regime the vegetation would predictably recover its primitive aspects and composition, and exotic plants now widespread in the region would be reduced through competition with adapted native species.

The dominant animals of this grassland—and its outstanding attraction—would be the free-ranging, unmanaged plains bison and its only important native predator, the wolf. As a rough estimate, and depending greatly on location and range conditions, I would expect that a million-acre fenced range might support 8,000 buffalo (about 40 bands) and 200 wolves (15 to 20 packs). Numbers would fluctuate with trends in rainfall and other climatic factors. Pronghorn antelopes would supply a portion of the food of the wolves and elk and deer another portion if wooded ridges or stream bottoms were included.

The Great Plains National Park would be a primary refuge for scarce and endangered mammals and birds, including the black-footed ferret, swift fox, prairie falcon, and golden eagle. Inevitably, it would support an attractive and varied display of grassland birds. Jackrabbits, prairie dogs, and many kinds of ground squirrels and other rodents would provide food for aerial predators as well as for such carnivores as the coyote, bobcat, and badger.

A species can be endangered biologically even though it is not on the official list of endangered species. This fact applies particularly to the plains bison. In all the parks

where it occurs this subspecies is being managed like livestock, subject to annual handling, culling, dipping, and brucellosis vaccination. (Those in Yellowstone park are not the plains subspecies.) In a natural state these management functions are performed by the wolf, according to criteria we still largely do not understand.

The plains park would be the one place where the bison could live in the wild, recover its old wide-ranging habits, develop normal socially organized bands, and have its speciation directed by carnivore selection as it was in primitive times.

Finding a proper wolf for a grasslands park will be a major biological problem. The park would probably be at or near the presently recognized borderline (region of intergradation) between the habitat of the extinct great plains wolf (*Canis lupus nubilus*) and the northern Rocky Mountain wolf (*Canis lupus irremotus*). Both species preyed on the buffalo. Scattered remnants persist in the Wyoming-Montana-Idaho region, where Yellowstone and Glacier national parks are potential sanctuaries. Whether these wolves can be restored naturally to a population adequate for long-term survival is a tenuous possibility at present. Public attitudes may con-



A Great Plains National Park would provide safe refuge for many plains animals, including bison, prairie dogs, pronghorn antelope, and long-billed curlews. The breeding grounds of the latter are on the northern grasslands.



ceivably be changing to make this possible. If it happened, a source of breeders would be available for a plains park. If not, then another possibility is a stock of captive wolves that probably are Rocky Mountain wolves or even a cross-breed of the Rocky Mountain and great plains wolf. They have been propagated from animals originally trapped on the western plains.

The park I propose could not completely duplicate the primitive mixed prairie because of extinctions (great plains wolf and grizzly, Eskimo curlew) and the presence of exotic species. This situation should not deter us from trying to achieve what is possible. I must emphasize that the size of the park I have suggested is important for the natural functioning of the grassland community. A million-acre park (nearly half the size of Yellowstone) will be much more than the sum of its parts.

Since early in this century the need has been recognized for control areas where mature grassland communities can be studied. We need to study the natural production of the grasslands and their degree and mechanisms of stability. In addition, such communities would have a unique scientific value in the area of animal studies. Research on the behavior and interrelationships of animal popula-

tions is best done in undisturbed and unmanaged lands and waters, and a major value of wilderness is to provide areas for such research. The Great Plains National Park could be such an area.

THE NEED for recreational open space, scientific reserves, and wilderness preservation is being increasingly recognized as our wild country becomes progressively less wild. With the continuing growth of our population, every economic asset on land and water is under competitive demand. Organizations and individuals concerned for the problems and rights of future citizens are increasingly embattled to save anything in its original form. In many areas where parks are being established—especially urban areas—local interests must be bought out at prices that are possible only because the government can print dollars. A national park in valuable grazing land undoubtedly would be expensive, but it would not compare in price with some of the other ventures the U.S. Congress and the National Park Service have undertaken.

A Great Plains National Park would be like nothing else in the Park System. It would allow us to start in an undeveloped area and apply all we have learned concern-

ing the management of natural areas. On at least two occasions recommendations have been made to the Secretary of the Interior by the National Parks Advisory Board that the National Park Service conduct further surveys and develop plans for the great grassland park that is the most obvious lack in the nation's program of wildland preservation. Such preliminary plans, at least, would not be prohibitively expensive. If they were made, I have no doubt that many members of Congress would be interested in the proposal.

As short-handed as the National Park Service has been during the past decade, it is understandable that not every need relating to our parks is being met. However, the need to preserve our nation's grasslands is historic and will not go away. We should keep the creation of a Great Plains National Park before us as an objective to be implemented as soon as possible. ■

Dr. Durward L. Allen is Professor of Wildlife Ecology at Purdue University, West Lafayette, Indiana. This article is adapted from an address made at the first Conference on Scientific Research in the National Parks, in New Orleans, November 9–13, 1976. The conference was sponsored by the American Institute of Biological Science and the National Park Service.

Scientists hope that stricter laws,
captive breeding, and habitat preservation
will save the orangutan from extinction

by MAXINE A. ROCK

Orang—Endangered “Man of the Forest”

MY FRIEND, the jungle is dark and dangerous. Man cannot live there, and even animals are in peril. But the Mawas—well, he is half man, half beast. He fears no other jungle animal and can tear a crocodile to bits. Mawas is very strong. Be careful of him.”

A young researcher in North Borneo got that folk tale description of Mawas—the orangutan—from his porter. The researcher spent a winter studying the elusive red ape and said later that he almost believed the description was true. The orangutan, or orang (*Pongo pygmaeus*), is the least known and perhaps most endangered of the great apes. Only in the past few years have hearty scientists ventured into the jungle to dispel the old tales and find the facts that might save Mawas, which in Malay means “man of the forest.”

ORANGS once probably roamed all of southern China; fossil orang teeth have been found there dating back to the Pleistocene era. Anthropologists think that during the Ice Age the animals were forced into the tropical regions of what is now Indonesia. There, they lived in Borneo, Java, and Sumatra; and when climactic changes made these areas into islands, the orangs evolved into two subspecies—the dark red Borneo orangs and the orange-red Sumatran orangs.

When Stone Age Man—the Java Early Man—appeared, orangs on Java were hunted for food. They quickly disappeared. Now they remain only in remote parts of Borneo and Sumatra and in the mountainous Southeast Asia rain forests. Only about 4,500 orangs are still left in the wild. And, because of modern machinery that makes it easier for humans to invade the jungle, orang survival is in doubt. Dr. John MacKinnon, a Scottish anthropologist who has studied these shy, sensitive creatures in the wild, recently lamented that although enough orangs are still left for the species to survive, “Wherever man has penetrated, the orang has vanished—hunted for the pot, caught for pets, or simply because his habitat is destroyed.”

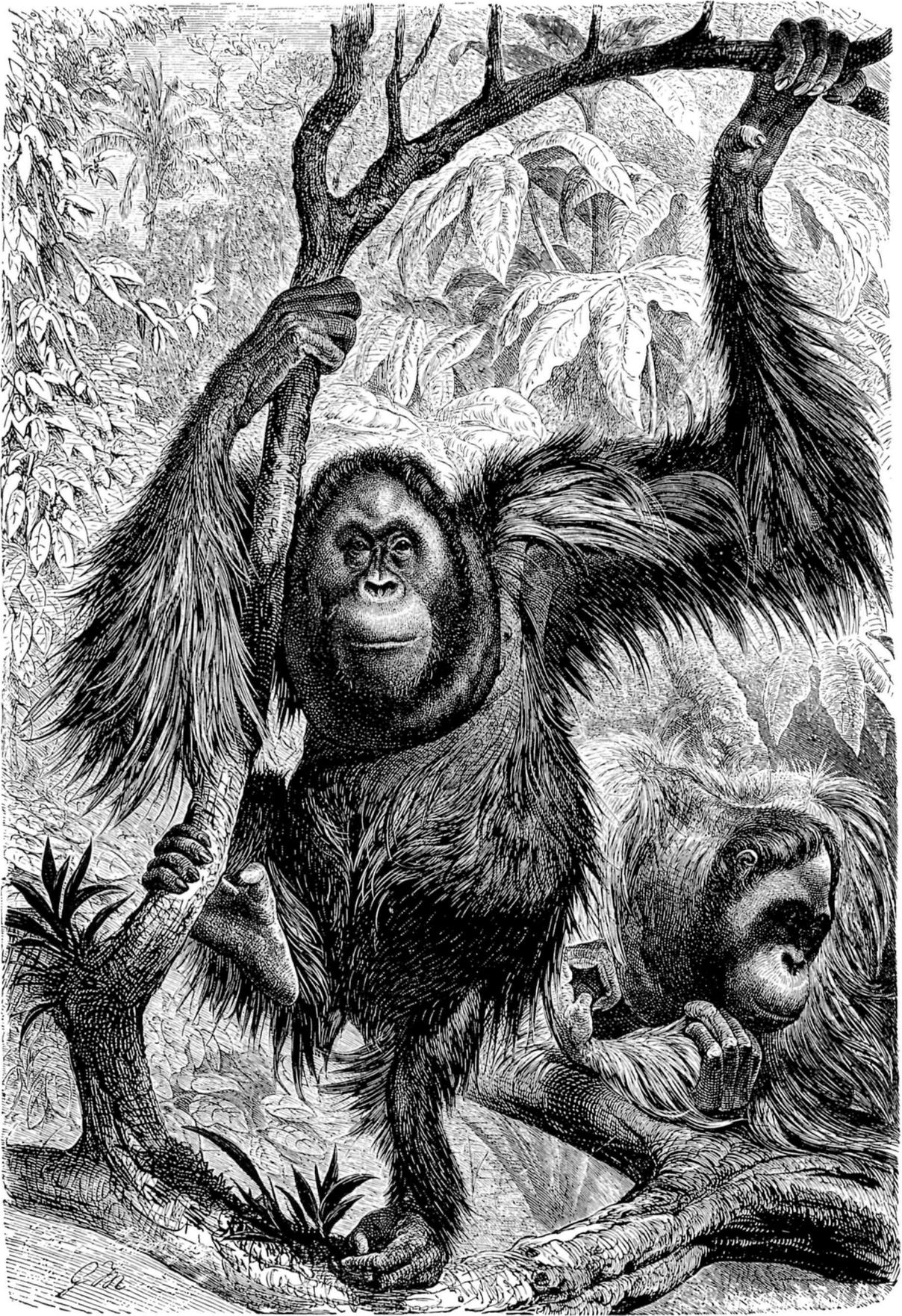
The orang’s forbidding habitat has saved the animal from extinction so far. But the difficulties their habitat visits on humans is also the major reason that we know so little about orangs today. The jungles of Borneo and Sumatra are thick and hot; human travelers who want to travel quietly, without disturbing animals, must shun machinery and chip their way through barbed palms and knifelike thorns. Slimy leeches suck at human skin, and biting flies are everywhere. Scorpions come out at night, as do giant bats. Elephants, rhinos, wild boars, tigers, panthers, and sharp-clawed honey bears all can crush or tear

a man in a minute. Crocodiles and pythons live beside the coffee-colored rivers, and hunting dogs prowl the hills.

Still, the tropical forests are incredibly beautiful. Orangs thrive there, moving slowly twenty to sixty feet above the ground in the lower jungle canopy. Like gorillas, they build nests in the trees at night and stay in them when it is dark or raining. Their lazy days consist of slow travel, frequent naps, and endless foraging for food.

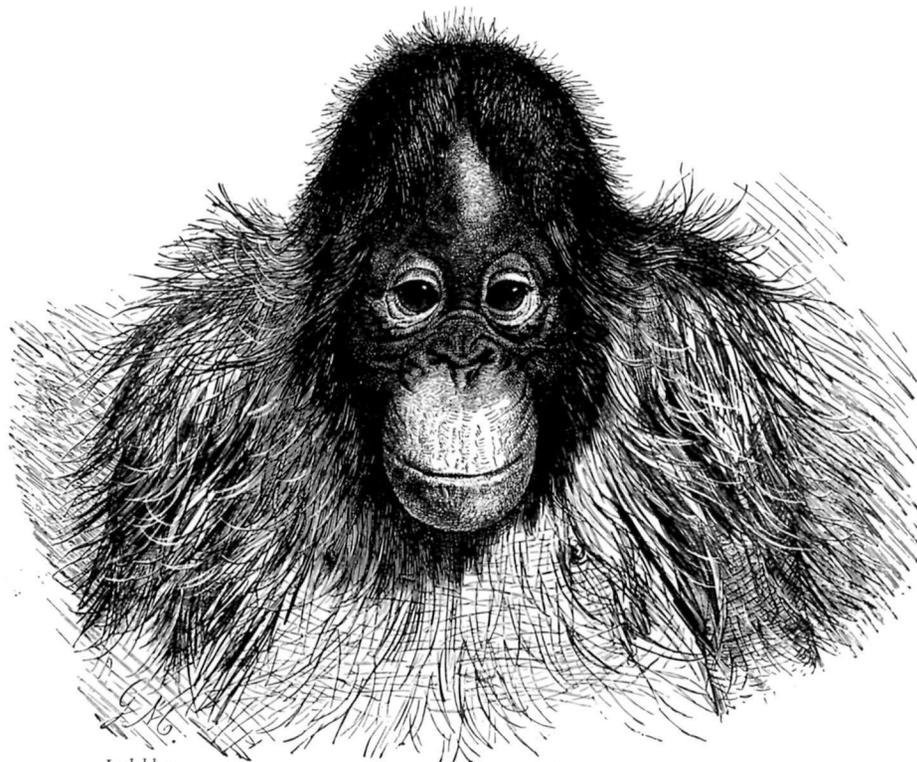
Between April and November the apes feast on *wadan*—tall, nutty-tasting bamboos. In June and July wild plums, lychees, figs, and other sweet fruits ripen; and the orangs grow fat and glossy. They need the extra pounds to sustain them during the winter, when only leaves, bark, and wood pith are available. Because of seasonal changes and the uneven distribution of the fruit harvest, orangs are frequently on the move. They go from place to place in search of their favorite foods; and, except for mothers and their clinging infants, they almost always travel alone. Orangs would soon exhaust the food supply if they traveled in groups, so they have developed what MacKinnon described as an “easy-going, tension-free hermit life.”

Unlike gorillas and chimpanzees, the other two great apes, wild orangs do not seem to need one



ORANGS IN THEIR NATIVE FOREST. LYDEKKER

Adult male orangutans are intimidating. They can grow as tall as five feet and weigh three hundred pounds; and their long, thick hair makes them seem twice their actual size. At maturity—between twelve and fifteen years old—they develop facial flanges that emphasize their fierce appearance. Female orangutans are about half the size of males. They are usually accompanied by their offspring. Destruction of Indonesian jungles by logging and slash-and-burn farming is jeopardizing the orangutan's continued existence.



Lydekker

another often for comfort or company. Now and then mating couples will travel together for a few days or weeks, and one or two stable wild families of mother, father, and infant have been observed. Generally, however, wild male orangs live a solitary life, allowing females and their young into their huge territories but vigorously chasing away other adult males. Females have only their babies for companions, although they do strike up short-lived friendships with wandering males and some other females.

Only when food becomes desperately scarce do orangs band together. Then, juveniles and females follow the booming voices of the big males, which have the greatest knowledge of the forest and are most likely to find food because of their more extensive travels in search of new territory in their youth and in defense of territory after maturity. MacKinnon did notice, however, that some of the males are surly and selfish about their finds. He once watched a two-hundred-pound male dubbed Redbeard dominate every orang who tried to eat a morsel from a

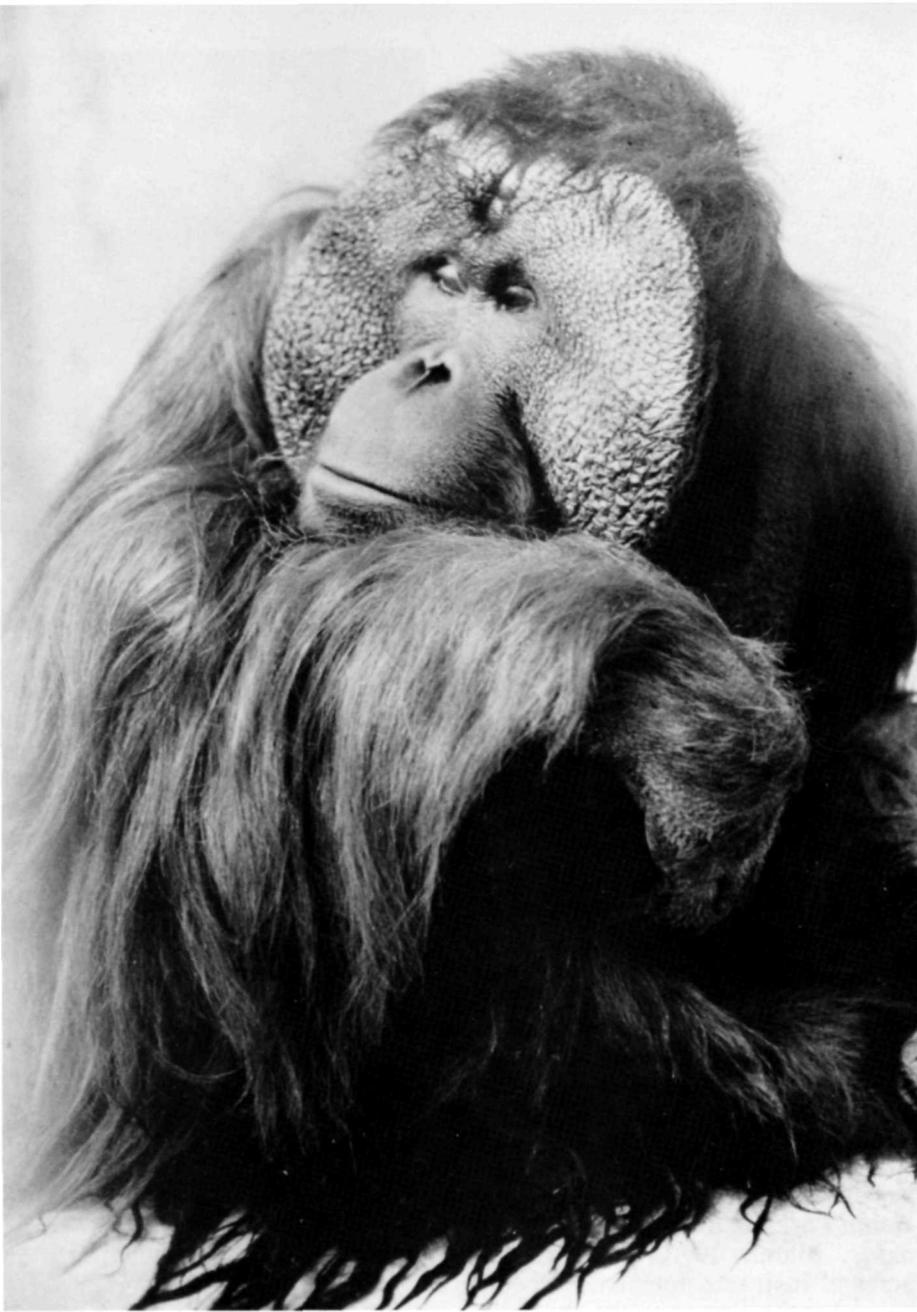
huge fig tree Redbeard had found. Redbeard built four nests in the tree and munched his way around the branches for a week. During that time he let a few favorite females and their young snatch a meal or two, but he bubbled a warning to any male who tried to eat. The famished males had to find food elsewhere, although there was plenty on Redbeard's tree.

This antisocial behavior is not present in orang babies, however. The infants are so clinging and cute, with their floppy red hair, huge brown eyes, and chubby round faces that they are often captured for sale as pets. Conservationists estimate that 625 orangs are now being held in zoos, laboratories, or private homes. It is illegal to trap or sell orangs, but poachers hunt them anyway. The poacher's method of capture is sickeningly similar to that used on young chimps and gorillas: the protesting mother is cornered and shot, and the baby is torn from her corpse.

Many babies cannot stand the shock or are so weakened by subsequent abuse, cold, or malnutrition that they cannot survive. Like most other primates, orangs are

also very susceptible to human diseases. The animals that do manage to survive despite these hazards are often sold to Indonesian officials, given as gifts, or kept in wealthy homes as what one Dutch researcher called "valuable playthings." The researcher lamented that although everyone knows this activity is illegal, the babies are still poached and purchased because they are rare and thus have become status symbols.

ALTHOUGH it has been illegal in Indonesia since 1931 to catch, trade, or keep orangs, until very recently the law has been weakly enforced. In 1970 the World Wildlife Fund, the Directorate-General of Forestry of Indonesia, and the Netherlands Genung Leuser Committee agreed to establish a special orang reserve and a research project aimed at saving the species. The Indonesian police were instructed to cooperate with conservation officials to round up captive orangs and take them to the Genung Leuser Reserve. The reserve covers about 30 percent of the total habitat of the species in North Sumatra. There,



MALE ORANGUTAN, BY DR. RONALD NADLER

sick orang babies are nursed back to health and slowly reacquainted to the wild. They learn to find their own food in the forest. Then, they are released.

The idea caught on, and recently several other reserves have been established. Ape specialist Barbara Harrisson was given the use of a reservation in the Bako National Park in Borneo; her animals are now in the ten-thousand-acre Sepilok Forest Reserve. The Lankat reserve was established in Sumatra. Another is now run by Birute and Rod Brindamour, a pair of young primatologists who set up shop in the Tanjung Puting Reserve in

Kumai, on the edge of Borneo.

The task of rehabilitating captured orangs provides workers with an excellent opportunity to study the animals at close range. The Brindamours found, for example, that orangs are mild and retiring. Even wild orangs will not attack humans except when provoked, and Birute described her first encounter with a huge male orang to prove the point:

"I was rounding a turn on a path. . . . He was just ambling along. . . . He stopped dead in his tracks less than twelve feet away from me. . . . We were on a collision course . . . but, strangely, I felt no fear.

I simply marveled at how magnificent he looked with his coat blazing orange in the full sunlight. Abruptly, he whirled around and was gone. There was nothing but the sound of his feet padding off along the path."

Birute's bravery is really the remarkable part of this story, for adult male orangs do look fearsome. They can stand up to five feet tall and weigh three hundred pounds. At maturity—between twelve and fifteen years old—the males develop wicked-looking facial flanges, or jowls. They also sport leathery throat sacs that probably act as resonators for their bellowing voices. Their long, thick hair makes them look twice their actual size.

Although male orangs rarely fight, they do threaten, scream, and drop branches on other males or intruders in their territory. And they are not gentle with females. They routinely assault and "rape" female orangs. The females almost always cry and try to escape, but they are half the size of a grown male and do not have much of a chance. These assaults take place even in captivity, but researchers think that such violent couplings rarely produce offspring. Instead, zoo observers report that when male and female orangs are given spacious quarters and privacy, they become fond couples. Then the females easily become pregnant.

IN THE WILD, orang mothers provide food, transportation, and companionship for their babies. During its first year the infant clings to its mother steadily—with its mouth never far from her nipples. By the time it is two years old the baby tastes some solid food, builds a few play nests, and toddles away from its mother for a few minutes at a time. At three the youngster may still suckle and ride

upon its mother, but a new baby is often born about this time. From then on the mother pays less and less attention to the toddler, and eventually the child wanders off into the forest. Female orangs may stay with their mothers longer than male offspring do; they are less adventuresome and must learn about baby care by handling their younger siblings. This task is critical, for female apes of other species who have had time to learn baby care from their own mothers almost always turn out to be good mothers themselves, even in captivity. In contrast, apes reared in cages with little or no social contact with their own kind are nervous, incompetent mothers, if they are able to mate and conceive at all. Their babies have to be taken away from them and raised by humans, thus perpetrating the ruinous cycle of human interference.

This cycle is important to orang survival because some observers insist that the species may not be able to survive in the wild much longer. Instead, researchers hope to breed orangs in captivity or in sheltered environments until more natural habitat is made secure by stronger Indonesian conservation laws. Indeed, no other species has so large a captive population except for Père David's deer, but orangs are poor breeders in captivity. So captive breeding must be considered a last-ditch attempt at present.

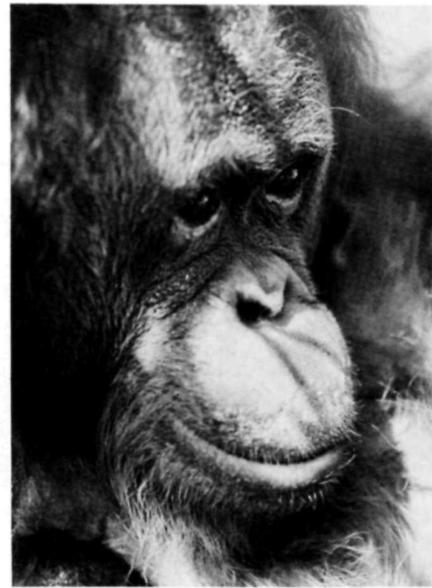
PERHAPS the world's largest captive population of orangs is at the Yerkes Regional Primate Research Center in Atlanta, Georgia. There, scientists are trying to learn more about orang breeding from the thirty-five males, females, and juveniles in residence in the Yerkes building and in open-air enclosures at the nearby Yerkes field station. One of these scien-

tists, Dr. Ronald Nadler, reports that although more than twenty-nine orang babies have been born at Yerkes since 1966, all the breeding animals were born wild. No orang born in captivity—at Yerkes or elsewhere, says Nadler—seems capable of bearing young. In desperation, Yerkes scientists are experimenting with artificial insemination; and the Atlanta Zoo, in cooperation with Yerkes, is keeping two "families" of the apes in spacious cages. The zoo hopes to stimulate more natural breeding this way.

Obviously, the best place for orangs—as with other wild animals—is in their natural habitat. But giant logging machines and the land-clearing tractors of farmers are wiping out that habitat at an alarming rate. Farming practices in Indonesia are particularly wasteful. Highland rural communities practice slash-and-burn cultivation, which exhausts the soil and eventually turns it into sterile, acid heath known as *blang*. (See *National Parks & Conservation Magazine*, March 1973.) Millions of acres of lush rain forest have been turned into *blang* in just the past few decades. No orangs can survive in these areas.

Logging has its own perils for the easily frightened orangs. Not only do they lose their main mode of transportation, food, and shelter—the trees—but they are terrified by the noise and human intrusion. Always, they flee.

MacKinnon has visited logged jungle habitat where orangs once lived and says, "Orangs are extremely sensitive to disturbance, and while some had returned briefly to nest in logged areas, none seem to have made this their permanent home. Instead, the red apes had fallen back farther into the forest, and I could judge what effect



FEMALE ORANGUTAN, BY DR. RONALD NADLER

Although Indonesian law prohibits catching, trading, or keeping orangutans, the law has been weakly enforced until recently, and poaching continues. Baby orangutans are so appealing that they are prized as pets, and their rarity has only increased their desirability as status symbols. To capture them, poachers shoot the mothers and tear the babies from their corpses. Orangutan captive breeding programs have been unsuccessful so far, as orangs born in captivity seem unable to bear young. Mothers of babies born in captivity were born wild. Now several reserves have been established in Indonesia, and police have been instructed to round up captive orangs for release in one of these reserves. Indonesia should be encouraged in this important conservation effort.

this would have on the reproductive activity of the population. . . . Orangs are slow breeders, and it would take many years for them to recover and recolonize their traditional haunts. Indeed, I doubted if they would be given sufficient time to do so before timber-felling operations cut farther into their range. The pace of commercial expansion is simply too fast, and the orangutan seems the inevitable loser."

WILL this timid species be able to survive at all? Habitat destruction is not decreasing, and scientists so far are unable to un-



POPI, 32-WEEK-OLD ORANGUTAN, BY DR. RONALD NADLER

lock the secret to captive breeding. But more people than ever before are interested in the red ape. And the Indonesian government, pushed along by the fervent support of international conservation organizations, may at last be taking strong steps to save orangs. So the fate of the orang now hangs in the balance. It is up to conservationists all over the world to see that Mawas does not fade away into the ghostly silence of ruined rain forests, but that it survives to move slowly in the dappled jungle sunlight—a living testimony to man's respect for creatures with which he shares this fragile planet. ■

National Parks & Conservation Association trustee Maxine A. Rock is a science writer specializing in conservation and ecology. Her articles on the great apes have appeared in national and local magazines and newspapers, including *National Parks & Conservation Magazine*, and she has reported on work at the Yerkes Center for more than seven years. A past staff member of NPCA, Ms. Rock helped form the Zoological Society of Atlanta shortly after moving there in 1969.

Message to Members

HELP SAVE THE ORANGUTAN

NPCA members who are concerned about the survival of the "old man of the woods" should write the Secretary-General of the UN to express strong support of orangutan preservation laws and the establishment of preserves.

Hon. Kurt Waldheim
Secretary-General
United Nations
New York, N.Y. 10017



NAGASAKI, AUGUST 1945

WHAT PRICE PLUTONIUM?

The risks and dangers of the proposed plutonium economy are unacceptable, threatening not only our way of life, but our survival

by RUSSELL W. PETERSON

PLUTONIUM, an element that has been known to man only since 1940, has come to be recognized as one of the greatest threats to world security and to the survival of life on earth.

Unlike uranium, plutonium is virtually nonexistent in nature; it is produced in nuclear power reactors as a byproduct of the nuclear fission process. Plutonium is a highly toxic, cancer-causing agent and can be used in small quantities to make an atomic weapon.

The fissionable properties of plutonium as an energy source and the fear of a shortage of uranium fuel for nuclear reactors have led to the development of two technologies to enable the use of plutonium as a nuclear fuel: first, a technology to reprocess used nuclear reactor fuel to extract plutonium, and, second, a technology to develop a new generation of nuclear reactors called plutonium breeder reactors.

These technologies, developed by the government and the nuclear industry in an atmosphere almost

devoid of public oversight and scrutiny, represent a serious threat to public health and safety.

The potential of plutonium as an instrument of terrorist activity is frightening. Less than twenty pounds of the material can be fabricated into a crude but potent nuclear weapon. And the technical know-how to build such a weapon is obtainable from school libraries and public government papers, as Princeton student John Phillips proved in 1976 by writing a research paper describing how to build a nuclear bomb.

If plutonium is to become a fixture in our energy economy, extensive surveillance would be necessary. Japanese films of the immediate effects of the bomb that was dropped on Hiroshima with 100,000 people disappearing instantly and an equal number dying within a few weeks as a result of that "baby" bomb are frightening enough. It is unthinkable to envision the devastation that would be caused by a modern bomb with its thousand-fold greater power.

The constant threat of terrorist use of atomic weapons would justify resorting to draconian security measures, utterly destructive of civil liberties. An analysis of this particular danger entitled, "Policing Plutonium: The Civil Liberties Fallout," published in *Harvard Civil Rights/Civil Liberties Law Review*, Spring 1975, concluded that once plutonium is missing, tactics ranging from breaking and entering to torture might seem justified in view of the hundreds of thousands of lives that would be at stake.

In addition, plutonium is highly toxic. Its half-life of 24,000 years means that it will remain radioactive for thousands of human generations—longer than the existence of any society or government. This almost eternal radioactivity poses great problems of handling, transportation, storage, and security.

One-millionth of a gram of plutonium has been shown capable of causing cancer in laboratory animals. Once in the body, plutonium seeks bone tissue and could there-

fore cause bone cancer. But plutonium is especially dangerous when it is inhaled. Plutonium particles are such virulent carcinogens that the concentration of plutonium allowed to be present in air at federal nuclear installations is about one part per million billion.

WHETHER to proceed with the reprocessing of plutonium and the development of the breeder reactor may be the most fateful decisions yet made by mankind.

The reprocessing of plutonium is a difficult, costly, and unproved process. Several countries—notably France, England, West Germany, and the Soviet Union—have reprocessing plants in various stages of development; but other than military plutonium production plants the United States has no active plutonium reprocessing plants. One being built at Barnwell, South Carolina, by a private consortium originally was estimated to cost \$100 million; but it has already cost several hundred mil-

lion dollars and is projected now to cost more than \$1 billion. Completion of the plant depends now upon the U.S. government's footing the remainder of the bill.

A General Electric reprocessing plant at Morris, Illinois, was constructed but never operated beyond the test stage. A Getty Oil reprocessing venture at West Valley, New York, has been abandoned, leaving 600,000 gallons of radioactive wastes on the site.

If the technology of reprocessing nuclear wastes to extract plutonium were commercially practical, it could be used with uranium as a fuel in light water nuclear reactors and would open the door to plutonium breeder reactors. Breeders—which are expected to "breed" more plutonium than they use during operation—have an economic and technological record as dismal as that of reprocessing.

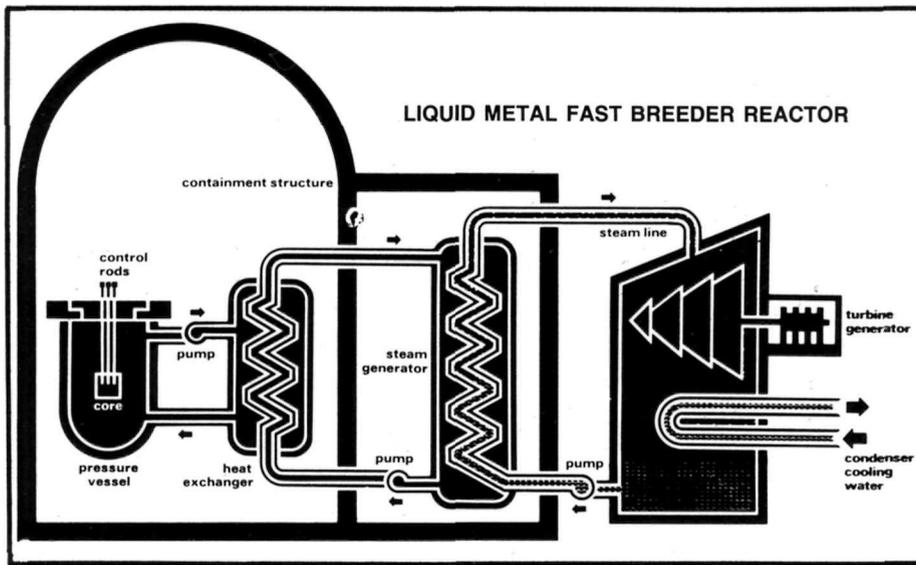
France, England, and the Soviet Union have demonstration breeder reactors; the United States has been planning to build one in Clinch River in Tennessee at a cost

of approximately \$2 billion. (President Carter pledged in April to delay this development in view of the extreme hazards involved; but Congress may not adopt Carter's recommended budget cuts.)

It is clear from estimates by the U.S. Energy Research and Development Administration that even if we continue to spend a disproportionate share of our federal research and development dollars on the plutonium breeder reactor, it will supply a maximum of only 2 percent of our energy needs by the year 2000—less than one-third of what they project our underfunded solar energy program can provide.

IN LIGHT of the overwhelming evidence against taking the plutonium road, what reasons could its supporters possibly give to justify the threats of enormous environmental damage, nuclear terrorism, and worldwide nuclear weapons proliferation?

Some proponents of nuclear power argue that the best way to handle radioactive waste is by re-



ATOMIC INDUSTRIAL FORUM

processing it. These wastes are produced in the fuel elements of a nuclear reactor, which after three years lose their effectiveness and most be removed and replaced with fresh fuel. The used elements contain a modern witch's brew of highly radioactive material containing plutonium. They are placed in a "swimming pool" on the power plant site while they cool off. Such wastes already crowd the storage capacity of many nuclear plants. Their permanent disposal, a problem that is essentially the same whether or not plutonium is extracted from them, remains a critical unanswered problem for the nuclear industry. Reprocessing does not offer any reduction in many hazardous radioactive components of the waste, but it markedly increases—at enormous expense and risk—the amount of transportation and handling of the waste and thus human exposure to it. Plutonium and other toxic radioactive substances would become articles of commerce, for in certain stages of the nuclear fuel cycle, nuclear materials containing plutonium will have to be transported to reprocessing plants, back to fuel-fabrication plants, and finally to nuclear reactors and breeders. Thus these deadly substances may be shipped around the nation and the world, over our highways, railways, and sea lanes,

and by air, and stored at hundreds of sites around the world.

Whether or not nuclear wastes are reprocessed, the wastes must still be isolated from the environment for tens of thousands of years. And the equipment used to reprocess the waste eventually becomes so radioactive that it, too, must be isolated.

Another argument advanced in favor of reprocessing is that it will save money. In an attempt to make expensive nuclear reactors more economical, the nuclear industry would like to reprocess waste fuel to extract the reusable plutonium. But private industry's unwillingness to continue without massive government subsidies demonstrates that plutonium reprocessing is not economically practical.

THE SWING AWAY from the plutonium route is gaining momentum. It was given a great shove by President Carter's recommendations in April to delay indefinitely plutonium reprocessing and to cancel construction of the Clinch River project. His recommendations track the conclusions of an independent study conducted by the Mitre Corporation under the sponsorship of the Ford Foundation released in March. The report recommended deferring plutonium reprocessing and canceling the

In the fast breeder reactor nuclear fuel fissioned in the core heats molten sodium, which passes in a loop through the core. The heat in the sodium is transferred to a second sodium loop in the heat exchanger, then is pumped to the steam generator. Steam is then pumped to the turbine generator, which creates electricity.

Every couple of years nuclear fuel loses its effectiveness and must be replaced. The highly radioactive spent fuel must be isolated from the environment for thousands of years. In a plutonium economy, however, the spent fuel, which contains moderate amounts of plutonium as a byproduct of the fission process, is shipped to a

breeder reactor program.

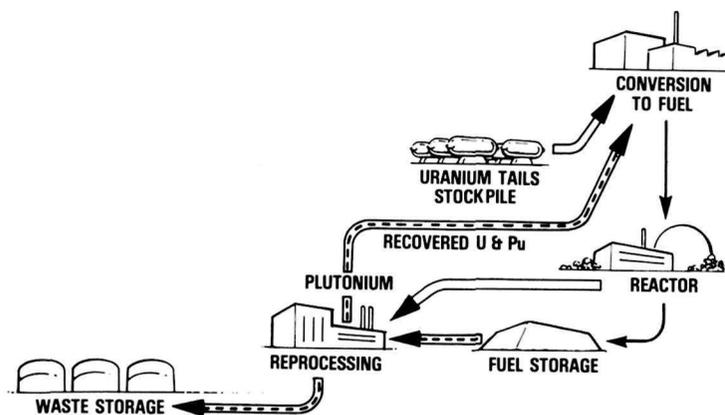
The President's leadership will increase the likelihood that other nations will also forego the use of plutonium and will have a major impact on the prevention of nuclear proliferation and nuclear terrorism throughout the world. Because the United States is a principal producer, consumer, waster, and innovator in the energy field and a major exporter of nuclear technology, its actions have a major global impact. It is important that U.S. energy policy be determined with due respect for its impact on all other U.S. policy and on the welfare of people everywhere.

Although the United States alone cannot control nuclear weapons proliferation, a policy based on the assumption that nuclear technologies are acceptable in the United States yet can be denied other nations will inevitably be perceived as a threat by other nations. By rejecting the plutonium economy in this country, however, we can signal to the rest of the world that we are serious about reducing the risks of proliferation. The recent decision by the West German government to cut back on its plutonium breeder program indicates that this policy has a real chance of success.

On March 21, 1977, Congress-

reprocessing plant to recover the plutonium. Waste is sent to storage, and the plutonium is shipped to a fuel fabricating and assembly plant where it is mixed with uranium oxide and made into fuel pellets. These pellets are placed in fuel rods, which are collected into fuel assemblies that are sent to the reactors, thus completing the cycle. Obviously, this recycling process increases the amount of handling and transportation of the plutonium—perhaps the most toxic substance known to man—thus increasing the possibilities of human exposure and of hijacking by terrorist groups.

THE PLUTONIUM BREEDER REACTOR NUCLEAR FUEL CYCLE



ENERGY RESEARCH & DEVELOPMENT ADMINISTRATION

man Jonathan Bingham of New York introduced the Plutonium Licensing Control Act (HR 5234). It would halt licensing for reprocessing nuclear fuels or for operating commercial nuclear reactors using plutonium fuel extracted from spent fuels. The bill seems consistent with President Carter's April proclamation, but the Administration has opposed Bingham's bill, claiming the President does not want to be bound by legislation.

REGARDLESS of what energy choice we make, it is essential that the United States stop wasting so much energy. Each unit saved is available to use elsewhere, thereby reducing the task of providing an adequate supply. The argument that conservation programs will impinge on our lifestyle, our standard of living, and our freedoms is belied by the facts. Countries such as Switzerland, West Germany, and Sweden have maintained comparable standards of living to that of the United States with only 60 percent as much energy consumption per capita. According to experts who met at Wolfcreek, Georgia, in October 1976, Americans waste more fossil fuel than is used by two-thirds of the world's population. This energy gluttony is hardly

conducive to world stability.

Denis Hayes, former head of the Illinois State Energy Office, has estimated that by conservation and improved efficiency programs, the United States could provide the same services obtained today with only one-half as much energy as is now used.

The Alliance to Save Energy, a private organization recently launched by Senator Charles Percy in collaboration with Senator Hubert Humphrey, has stated that about 35 quads of "conservation energy" per year—or the equivalent of six hundred 1,000-megawatt nuclear power plants—could be "produced" by an all-out effort to stop wasting so much energy in the United States. This would provide for an average energy growth of about 3.5 percent per year over the next ten years. The total consumption of energy in 1974 was 75 quads of energy.

Bruce Hannon of the University of Illinois told the authors of the Wolfcreek statement, published by the Georgia Conservancy after the meeting, "A carefully designed program of energy conservation can create up to 930,000 jobs per quad of energy saved." And alternative energy sources promise to provide more employment by diverting government and private resources from capital-intensive

power plants to more job-intensive programs.

It is in man's self-interest that the era of nuclear energy be as brief as possible. Many scientists and engineers all over the world are confident that by a major and sustained research, development, and demonstration program, the world could develop during the next few decades a major renewable energy industry.

I am convinced that government action away from a plutonium economy and toward conservation of energy and the development of alternative sources of energy is the only sane course of action. It is crucial that the United States take the lead on these issues. The conservation of life itself depends upon such leadership. ■

Dr. Russell W. Peterson, president of New Directions, a public interest citizens' lobbying organization focusing on global issues, was formerly chairman of the President's Council on Environmental Quality and, before that, governor of Delaware. A scientist and environmentalist, Dr. Peterson has had a distinguished career in industry and public service and is deeply concerned with the energy problem and with the quality of human life everywhere.



Bronze bust of Justice William O. Douglas by Wendy Ross, National Park Service



Justice William O. Douglas rests during the 185-mile C & O Canal hike in 1954

C & O Canal Dedicated to Justice Douglas

When Supreme Court Justice William O. Douglas hiked the length of the Chesapeake & Ohio Canal twenty-three years ago to protest a proposed parkway there, he could hardly foresee that the 185-mile canal from Cumberland, Maryland, to Washington, D.C., would one day be dedicated to him to honor his work as a conservationist. On May 17, 1977, seventy-eight-year-old retired Justice Douglas visited the canal for the dedication ceremony and unveiling of a commemorative bronze sculpture of him by Wendy Ross, director of the National Park Service Children's Experimental Workshop at Glen Echo Park, Maryland.

Several hundred people—including Chief Justice Warren E. Burger, other justices, senators, congressmen, friends, and admirers—gathered beside the towpath to honor the man who had worked so tirelessly to establish the C & O Canal as a national historical park.

Justice Douglas had prepared a speech, yet chose to speak extemporaneously on the history of the canal and his interest in the area. He concluded by promising to "get well and take that walk again." (He had suffered a stroke in 1974 and resigned from the

Supreme Court in 1975.) The audience gave Justice Douglas a standing ovation, and many shook his hand as he was wheeled through the crowd. The speech he had prepared for the dedication ceremony follows:

"Harry Golden, the owner and publisher of *The Carolina Israelite* in North Carolina, was raised in the lower East side of Manhattan. In one of his writings he wrote a line that was very moving to me. He said that in front of his New York house there was a crack in the sidewalk and in that crack twenty-three blades of grass had grown and they were bright and refreshing.

"We Americans often think in terms of thousands of acres when we think of the wilderness, but Harry Golden's wilderness was twenty-three blades of grass, and can be made available to almost any city dweller. Smaller things are sometimes the most beautiful of all.

"Lady Bird Johnson, when she was living in the White House, had the idea of brightening up Washington, D.C., by planting flowers in desolate spots. That was done and has made a great transformation in the city.

"I don't suppose there is any Ameri-

can city that is being planned that has in its planning stage the inclusion of a hiking trail as attractive as the C & O Canal towpath. The canal and the river offer almost untold opportunities for wildlife from raccoon up to the deer. Not far from this spot is my home and I've always had on that place a bevy of quail. They like to show off and I'm often awakened by the call of the mourning dove.

"I wish every large city had as attractive a place for walking, for retreat, and meditation as Washington, D.C., and its C & O Canal. It was built for commercial purposes but ended up as a place of wildness, in the heart of a metropolitan area and is good not for making money but for rest and relaxation to man. There are in other metropolitan areas pieces of old canals that could serve the same recreation function that the C & O Canal now serves. Efforts should be made to integrate them into urban planning.

"I am made speechless by the honor bestowed upon me by the President and the Congress by dedicating this towpath and water course for me. I was one of those who in 1954 hiked the canal in protest of its conversion to a highway but I was only one of many. Since that time there have been annual hikes and the people turning out have been in the hundreds. There were 137 people who started the 1954 hike and nine of us went the whole way (Colin Ritter, Harvey G. Broome, Grant Conway, Dr. Olaus Murie, John Pearmain, Al Farwell, George F. Miller, Constance Southworth, and Justice William O. Douglas). I was one of the nine, but the other eight need to be honored with me because their tireless legs and spirit helped bring about the preservation of this wilderness. Those deserving special recognition include Harvey Broome, Colin Ritter, Tony Smith, Grant Conway, Olaus Murie, Al Farwell, John Pearmain, George F. Miller, Constance Southworth, Senator Charles McC. Mathias, and Congressman Gilbert Gude. Some promoted the project by hiking, some by writing, others by speaking."

Without Justice Douglas' dedication to the protection of the C & O Canal, this historical park would not exist. He greatly deserves every honor bestowed on him for his efforts to preserve this area of natural beauty. ■

NPCA at work

INDIANA DUNES

Interior Department Steps Aside for Bailly Nuclear Powerplant

To the dismay of NPCA and other conservationists the Interior Department recently announced it will not try to block construction of the Bailly nuclear powerplant next to Indiana Dunes National Lakeshore.

On May 19, 1977, Interior Secretary Cecil D. Andrus explained, "We would have been better off if the plant had not been licensed. But the company [Northern Indiana Public Service Company] has spent \$80 million. Until there is new evidence, we do not feel we can ask for a rehearing."

Through contact with both Secretary Andrus and new National Park Service Director William Whalen, NPCA is attempting to persuade the Interior Department to review its decision and file suit along with the state of Illinois and the city of Gary, Indiana.

The Nuclear Regulatory Commission has granted a license for the plant construction, using the lakeshore as a

low-density buffer zone for the plant. Indiana Dunes—an 8,500-acre expanse of beaches, sand dunes, and marshes located near Gary, Indiana, and thirty miles from Chicago—is used by thousands of people each day. Any atomic accident could be a catastrophe.

Included in the construction plans are a reactor building located only 800 feet from the lakeshore boundary and a cooling tower 500 feet high and 450 feet in diameter. Not only will the plant be visible from any part of the lakeshore, but it will create environmental problems such as acid vapor and salt depositions. Extensive excavation would endanger rare plant and aquatic species.

In meetings and other communications NPCA urged Secretary Andrus to review his decision on the Bailly Nuclear Plant and commit the Interior Department to opposing construction of the plant "because it nei-

ther furthers the interests of wise development nor preserves the environment." Not only will the plant harm the Indiana Dunes, but another site farther from an urban population is available. Much of the amount expended at the current site would be recoverable at another site.

At a meeting with Director Whalen and other conservationists NPCA asserted that the threat to Indiana Dunes is the most serious threat to any unit in the Park System, with the exception of the logging practices around Redwood National Park, California. Director Whalen responded that the Park Service recognizes the seriousness of the threat. He promised to review the matter with Interior Assistant Secretary Robert Herbst, who planned to tour the Indiana Dunes area to get firsthand knowledge of the problem. ■

CLEAN AIR & THE PARKS

Lord Byron, Rep. Breaux, & the Clean Air Act

Would Lord Byron have lasted all the way through several hundred pages of a nitty-gritty impact statement on a powerplant? Or waded through complex Clean Air Act amendments? Such are the questions that may pop to mind immediately on reading "Views" by Anthony Brandt in the July issue of *Atlantic Monthly*. But then we're left wondering why our message about pollution dangers to national parks hasn't reached author Brandt.

Pointing to unnamed reports about the need to preserve air quality and visibility in parks of the Southwest, Brandt labels environmentalist concern for the rainbow plateau country as a culture-bound preference for spectacular "views" that can be traced directly back to Romantic poets Byron, Shelley, and Wordsworth. Who says a strip mine isn't just as interesting a view anyway? he asks. Brandt's academic treatise implores environmentalists to acquire a little humility, to come down from their park overlooks and admit they're brothers under the skin to industrialists because both

are interested in nature for their own purposes only. Reminding us that everything in nature is interconnected and that many places are being destroyed, he concludes, "It contributes little to the preservation of the world and nothing to our respect for it to concentrate our environmentalist love on places like . . . Bryce Canyon. . .

What we might better work on are our own ambiguous attitudes." Let's all do so, Mr. Brandt!

Why single out places such as national parks for protection? Quite simply, national parks have been recognized as our nation's outstanding natural treasures. We're having trouble enough saving very many places at all, so we may as well start with our national parks and wildernesses, which comprise only 1.3 percent of the total land in the nation. Much more than esthetics is involved. The various projects currently planned for Utah would have significant effects on nearby national parks and other resources. Some effects—such as the manner in which sulphur dioxide emissions from coal-

burning plants result in acid rain—are known. But many "unknowns" persist. What is the extent of long-term effects of various pollutants on the functioning of total ecosystems and on human health? Shouldn't we all be humble enough to admit our lack of knowledge and preserve pristine air quality *somewhere*? If we don't do so in our national parks and wildernesses, *where* will we preserve clean air?

This article admittedly crossed our desks at a time when some of us "environmentalists" were rather sensitive about the issue. The House and Senate were heading to conference on amendments to the Clean Air Act.

Perhaps Mr. Brandt doesn't realize that existing and proposed power projects in the Southwest alone threaten a cluster of lands adding up to about one-fifth of the Park System.

The hottest project under consideration now is the Intermountain Power Project (IPP), a 3,000-megawatt power plant that would be built just 8.5 miles from Capitol Reef National Park. Even with the best pollution

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NPCA at work

controls, the huge plant would emit tons of pollutants each hour. The waters of the wild Fremont River just below the park would either be diverted into a reservoir or dammed. In addition, in order to supply Southern California with what utilities forecast as future power "needs," the project would afflict areas in Utah with all the problems wrought by sudden industrialization. Such power developments mean a loss of habitat and water sources for many species of wildlife.

Current EPA regulations under the Clean Air Act would preclude construction of this project, so IPP backers

mounted a campaign to gut the Act. They were successful in the House but were defeated in the Senate.

Congressmen and senators were considering the "significant deterioration" provision of the law and regulations implementing it. EPA has divided areas that are cleaner than required by national ambient air quality standards into three categories: Class I (virtually no increase in pollution would be allowed), Class II ("moderate well-planned growth" would be allowed) and Class III (pollution could increase to limits set by national ambient standards). NPCA has long advo-

NEW RIVER

The Designation Makes the Difference

The debate over whether and how to protect the New River Canyon area of West Virginia has yet to be resolved. The New River is the oldest river on the American continent and one of the wildest and most scenic in the eastern United States. The deep New River Canyon is marked by a narrow channel, massive rock walls, springs, and waterfalls that provide outstanding white water for boaters and rafters.

NPCA has been working with the

staffs of Senators Robert Byrd and Jennings Randolph (both D-W.Va.) and Rep. Nick Joe Rahall (D-W.Va.) on legislation to protect this canyon area. At the request of the congressional staff, NPCA has drafted a bill calling for an 88,000-acre, 66-mile corridor of the New River area to be designated a national river under the management of the National Park Service. Others have suggested designating the area as a national wild and scenic river, national

PARK TRANSPORTATION

Parks to the People & People to the Parks

If we can get people to the moon (as the old saying goes), why can't we get some kids from the Bronx to Gateway National Recreation Area? (And do it for considerably less money.)

That thorny transportation issue grabbed the limelight at recent congressional hearings on legislation to facilitate mass transportation to national parks. But the bill in question addresses a problem that Gateway shares with Yellowstone, Mount Rushmore, and many other diverse areas throughout the National Park System—cars, cars, and more cars—not to mention the traffic jams and air pollution that often accompany them. The Interior Department says that more than 90 percent of all national park visitors arrive in automobiles.

Because this almost exclusive reliance on private automobiles for park

access is—as in the case of Gateway—discriminatory, environmentally unsound, and contrary to our national energy goals, Sen. Harrison A. Williams, Jr. (D-N.J.), recently introduced the "National Parks Access Act." NPCA endorsed this bill in recent congressional testimony presented on invitation before the Senate Interior parks subcommittee.

S 975 and House companion bill HR 4804, introduced by Rep. Jonathan B. Bingham (D-N.Y.), would give the Secretary of the Interior authority to plan, develop, and provide for alternatives to the automobile for access to National Park System units. It calls for a three-year pilot program to provide access to a minimum of nine national parks and recreation areas including Gateway in New York and New Jersey.

Sen. Williams maintains that cur-

cated Class I protection for national parks and other areas.

To the dismay of the Carter Administration, NPCA, and other major environmental organizations, the House passed an amendment sponsored by Rep. John Breaux (D-La.) that would virtually eliminate Class I protection. This amendment would permit air pollution projected for the worst eighteen days of each year to be ignored in calculating whether or not a plant's emissions would cause significant deterioration. The 18-day variance sounded innocuous enough to some observers, but it would actually make

recreation area, or national park. Designation as a national river would give the area better protection than designation as a wild and scenic river or a national recreation area. NPCA does not believe that the area qualifies for national park status. Citizens in West Virginia have not reached a consensus on this matter, so their representatives have not yet introduced a bill.

Sen. Byrd has asked Interior Secretary Cecil Andrus for his recom-

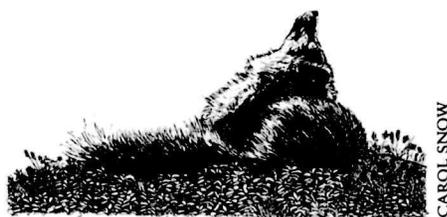
ment federal policy is discriminatory because "the federal government pays for construction and maintenance of highways leading to national parks. But it does not provide for any alternative means of getting there. People who don't have cars—particularly the poor, the elderly, the young, and the handicapped—are thus denied the opportunity to enjoy the natural splendors of their country."

Both supporters and opponents of the bill have naturally focused on Gateway because of its location in metropolitan New York and the fact that many people in the city do not have the cars or the means to get to the park. A Park Service transportation proposal to bus people from the inner city to Gateway units proved very controversial with neighborhoods through which large numbers of buses would pass.

a mockery of Class I by permitting emissions of certain pollutants to increase fourfold to tenfold.

The power industry put forth another major lobbying effort in the Senate. Sen. Ted Stevens (R-Alaska) offered an amendment that would have allowed a huge deterioration in air quality in national parks and wilderness areas. It was defeated by a vote of 33-61. Under the version that passed, national parks of more than 6,000 acres and wilderness areas of more than 5,000 acres would be designated Class I. Other federal lands such as national forests, recreation areas, and wild and scenic rivers

mendations, based on both the 1975 Bureau of Outdoor Recreation Study, which recommended a wild and scenic river designation, and a 1977 Bureau of



The Park Service, however, is still drafting its plans for Gateway, and NPCA maintains that with a little imagination planners can surely come up with some expedient, economical solution by utilizing existing rail and bus lines in combination with new ferry and bus service, free shuttlebuses, and curbs on the number of autos entering Gateway by means of the neighborhoods in question. The new authority granted by the Act will facilitate such planning.

Despite the opposition from some neighborhoods near the park, representatives of many citizens groups in New York and New Jersey testified in support of the bill at the June hearing.

Assistant Secretary of the Interior Robert L. Herbst pointed out that "approximately 75 percent of all national park visitors are members of the 15

would be Class II. States could reclassify Class II areas to Class I status but could not downgrade either Class I or Class II areas.

In invited testimony before both the Senate Environment and Public Works Committee and the House Commerce Committee, NPCA had advocated Class I protection for many more areas.

However, the Senate bill would protect the most outstanding natural areas, and at press time environmentalists were hoping the conference committee would deliver a verdict in favor of parks. ■

Mines study, which found that the New River Canyon area still contains about 35 million tons of recoverable coal. Although at least one-half of this coal could be mined through deep mines originating outside the boundaries of a national river, companies would have to stripmine the remaining half of the coal on canyon walls. To prevent destruction of the canyon face, the remaining coal would have to be bought or donated by the companies. ■

percent upper-income segment of the population. . . . Even our recent efforts with the new urban parks do not greatly change this unbalanced opportunity for public use of parks, primarily because 90 percent of the visits to these nearby areas are also by automobile. The public transportation services in cities like New York and San Francisco do not provide the weekend public transit services that are needed to provide convenient access. . . ."

NPCA emphasized that the legislation should be considered as a solution to systemwide problems. In addition to Gateway, at least eight other national parks and recreation areas would be the beneficiaries of pilot programs authorized under the Act. These areas are Cape Cod (Mass.), Cuyahoga (Ohio), Fire Island (N.Y.), Glacier (Mont.), Golden Gate/Point Reyes (Calif.). In-

Continued on page 25

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Getting Involved

A special thanks to some special people

In the past year we have asked you often to "get involved" in strengthening NPCA by recruiting new members. Whether you have "hooked," "netted," or "lassoed" them, you have come through for us. Now we would like to thank you. The efforts of some have been breathtaking: Board Member Dr. Jerene Robbins of Bayonne, New Jersey, gave 87 gift memberships; Dr. Paul Torrey of Austin, Texas, gave 8.

We regret that we do not have room to list all who gave gift memberships, but we do want to thank them, and we especially thank the following people who rallied to our "Get-A-Member" recruitment campaign:

Dr. John Ahrens, Mountain Home, AR
George Bacon, Petrified Forest, AZ
Capt. Grover C. Barfield Tucker, GA
Ruth Barr, Plainfield, NJ
Rich Barth, Thornwood, NJ
David Birkner, Seattle, WA
Mrs. Dickerman Brown, New York, NY
Jack E. Brown, Fort Meade, MD
Dr. R. N. Brown, Dayton, OH
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Eugenia Connally, Arlington, VA
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Don Daniel, Grand Canyon, AZ
Martha Dittermore, Fredericksburg, TX
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Kenneth Holland, Bronxville, NY
Dr. John S. Huff, Minneapolis, MN
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Dan Waloga, Minneapolis, MN
Paul Weidhaas, Battle Creek, MI
Wilma E. Wetterstrom, Cambridge, MA
Robert Willcox, Warwick, RI
Elinor K. Willis, West Haven, CT
Carol Wunder, Whittier, CA
Dr. Bernard Zimmerman, Morgantown, WV
These loyal members can be proud of contributing to the "strength in numbers" of NPCA. If you have not yet recruited a new member, please do so today. The future of our magnificent national parks depends on us.

Continued from page 23

diana Dunes (Ind.), Mount Rushmore (S.D.), and Yellowstone (Wyo., Mont., and Idaho).

NPCA has long advocated replacing the private auto in the parks with public transit in order to improve both resource protection and the visitor's experience. NPCA told subcommittee members that "public transit systems in the national parks would reduce congestion, increase energy savings, reduce the growing number of accidents, and curtail the escalating costs of cleanup and maintenance."

If fact, NPCA noted that use of private autos and construction of facilities in parks in order to accommodate the cars limits the number of people whom the park can serve effectively. Thus, when considering the expenditures authorized under § 975, provision of public transportation systems into and within parks should be considered as an alternative to development of facilities. Parking lot construction can be reduced or eliminated where such systems are implemented. Wider roads would not be needed. Existing roads

would require less maintenance. Enroute interpretive programs would eliminate the need for auditoriums.

Thus, the \$6 million authorized by the bill for expenditure on the pilot projects (over a three-year period) is relatively small when compared to expenditures for construction and maintenance. For instance, the Ford and Carter administrations both have endorsed a proposal to spend \$240 million over the next four years on paving and new road construction, parking lots, bike trails, and road maintenance in the parks. A substantial amount of these expenditures would never have been necessary if park access and circulation systems had been implemented in the areas.

In most cases the Park Service could deal with existing transportation companies to improve schedules and information services and add transportation services. The bill would enable the Park Service to make up the difference between unprofitable or marginally profitable operations and those worth conducting financially.

A significant provision of the bill

would release the Park Service from providing preferential rights to concessioners for transportation services. In many parks concessioners having a virtual monopoly over visitor services charge private bus operators a per-passenger-fee for the right to enter the park.

In addition to curtailing private auto use in parks, regional recreation planning is the other key to park protection, NPCA stressed at the hearings. Protection of natural areas of the Park System requires dispersion of recreational facilities and crowds, and transportation plans should be developed accordingly on a regional basis, NPCA said.

NPCA fully endorsed § 975. However, the Office of Management and Budget opposes the expenditures that would be authorized under the bill. Therefore, the Interior Department testimony, which was directed by OMB, expressed concurrence with the bill's findings about the *need* to provide public access to parks but said it needed more time to study the means and costs involved. ■

OIL TANKER STANDARDS

Coast Guard Proposes Tough Regulations at Last

The Coast Guard has finally responded to the pressure of NPCA and other environmental groups and to this past winter's rash of oil spills by proposing tough regulations for all oil tankers—domestic and foreign—entering U.S. ports.

In March President Carter gave the Coast Guard sixty days to draft strong oil tanker regulations. In response to Carter's specific instructions, in May the Coast Guard proposed rules requiring all tankers over 20,000 deadweight tons (DWT) built after December 31, 1979, to feature double bottoms. Such construction decreases the likelihood of a spill should an accident occur. Similarly, the regulations would require segregated ballasts on all ships entering U.S. ports after January 1, 1982. In both cases, if another technology is found that solves the problem equally well, the Coast Guard can give permission for its use. The ships also will have two years to install specified

emergency steering equipment. Within one year after acceptance of the regulations all ships over 10,000 DWT would have to install two radar systems to help avoid collisions and groundings. Furthermore, within five and one-half years after the regulations' enactment all ships over 20,000 DWT should have inert gas systems installed to prevent explosions.

Although continued pressure must be applied to ensure tight enforcement of these regulations and the dates of compliance with double hull and segregated ballast requirements might be moved up a little, the regulations are good and strong. They meet most of the requirements advocated by NPCA and other organizations in litigation and other actions for years.

You Can Help: The public can submit comments on the Coast Guard's proposed regulations until September 1, 1977. NPCA members can help by

congratulating both President Carter and the Coast Guard for taking such a strong stand on this important issue. Write Admiral O.W. Siler, Commandant, U.S. Coast Guard, Washington, DC 20590. ■

YOUR MAGAZINE IS LATE . . .

Production of your magazine was delayed this month by a strike of the Columbia Typographical Union, Local 101, Washington, D.C. (International Typographers Union). Delivery of the September issue may be delayed as well. We sincerely regret this inconvenience to our readers.

CARTER ENVIRONMENTAL MESSAGE

Landmark Action Plan Would Shift Conservation Programs in to High Gear

Even if President Carter's May 23 environmental message to Congress did sound like a familiar textbook of goals to environmentalists, they heartily welcomed the comprehensive action plan as a breath of fresh air after years of stale rhetoric from the White House.

This message is no paper tiger. President Carter plans to accomplish some of its objectives through administrative action. But he still must sell some other stock-in-trade tenets of the environmental movement to Congress. The message is short on specifics in some cases in which the White House still must do its homework before sending proposals to Capitol Hill. Carter also dusted off some proposals that were devised by other administrations—but are worth repeating.

In any case, the scope and intent of the message are impressive, and its timing is perfect. Rep. Morris K. Udall (D-Ariz.), long an environmentalist and currently chairman of the House Interior Committee, said he thought it important that the President chose to release a significant environmental pol-

icy statement at a time "when virtually all congressional attention has been turned to production of energy resources. It is vital that the White House show its sensitivity for the environment now. President Carter has done it—and I am very pleased."

Setting the tone for his environmental stance, Carter asserted, "I believe environmental protection is consistent with a sound economy. Previous pollution control laws have generated many more jobs than they have cost. And other environmental measures whose time has come—measures like energy conservation, reclamation of strip-mined lands, and rehabilitation of our cities—will produce still more new jobs, often where they are needed most. In any event, if we ignore the care of our environment, the day will eventually come when our economy suffers from that neglect." Charles Warren, head of the Council on Environmental Quality, said this attitude marks "the sharpest shift in national policy on environmental matters since Theodore Roosevelt."

Carter backed protective measures for wilderness, wetlands, and wildlife; better enforcement of air and water pollution laws; an attack on chemical pollution; restrictions on offroad vehicle use and mining on public lands;



CAROL SNOW

and restrictions on offshore leasing and other energy development.

At press time one of the first tests of Carter's pull as an environmental leader was still underway as the House and Senate headed for a conference on amendments to the Clean Air Act. (See page 21.)

Environmentalists singled out the President's call for legislation updating the anachronistic 1872 Mining Act and his proposals for accelerating federal programs for preserving wilderness,

YELLOWSTONE

Park Service Discloses Ripoff Operations in Land of "Old Faithful"

The Yellowstone Park Company management "cannot respond to visitor needs because the company is not oriented to service to the public, but only to the generation of profit dollars," according to a recent Park Service report. The report criticizes virtually every phase of the private concessioner's services in Yellowstone National Park.

Now this huge park in Wyoming, Montana, and Idaho not only has the distinction of being the first national park, but has become the stage for the first intensive review of concessions management in a park. On May 9, 1977, the Department released a 356-page report, *Concessions Management Review of the Yellowstone Park Company*, which describes the activities of the park's principal concessioner in detail.

The issue has more than provincial importance: the National Park Service

has chosen to investigate the private contract system and become a leader in the field of concessions management. NPCA has often criticized the Park Service for not making the concessioners more accountable.

The Yellowstone Park Company, a wholly-owned subsidiary of General Host Corporation, annually serves more than 1 million meals and on any given night can house more than 8,000 guests. But in the opinion of the National Park Service study team who wrote the report, the company needs to undergo a "complete overhaul."

Assistant Secretary of the Interior Robert L. Herbst said that the Yellowstone Park Company has been advised of the report's findings, which cover the period of February through September 1976. Representatives of the National Park Service and the company are discussing methods to upgrade food, lodging, and service.

For a start, the NPS study team indicated that revitalization of the company hinges on the hiring of a director in charge of the day-to-day operation of the concession and other full-time professionals to increase the level of management skills. At press time the Yellowstone Park Company had hired the operations director as well as a sanitarian and a lodging director.

The concessioner can overcome the poor morale and high turnover rate in the lower levels—largely college-age students working at summer jobs—by more careful screening of applicants and a better job package, the NPS says. Higher wages, better food and lodging, and a five-day work week for employees will result in improved service to the visitor in Yellowstone. The National Park Service is also participating in an extensive orientation program for new seasonal concessions employees.

In theory the contract between the

wild and scenic rivers, and wildlife as particularly significant moves.

The Mining Law of 1872, which was intended to encourage settlement of the West and rapid development of minerals there, still allows almost unlimited mining on public lands. Anyone discovering deposits of hardrock minerals on the lands acquires almost exclusive rights to them and can develop them without regard to environmental considerations. Carter has asked Secretary of Interior Andrus to prepare a proposal for a law that would replace the current act with a leasing system and establish federal authority over exploration and development of minerals on public lands as well as provide for a fair return to the federal treasury. Andrus says the law should have been amended long ago, but "there are interests who do not want it changed. They think it's their God-given right to go upon the public domain and rip, rant, rave, and tear, and that should be changed."

Carter's wilderness package included some new proposed additions to the

National Wilderness Preservation System—notably the Colorado River in the Grand Canyon—as well as support for scores of proposals already under consideration. The Administration endorses more than seventy existing wilderness proposals pending before Congress. In such cases as that of the Grand Canyon, Carter would expand current proposals. In addition, Carter recommends five new national park wilderness areas in Arches, Canyonlands, and Capitol Reef national parks in Utah; Buffalo National River in Arkansas; and Gulf Islands National Seashore in Mississippi. He also supports protection of areas listed under the Endangered American Wilderness Act (see Conservation Docket). The President has directed the Secretary of the Interior to initiate a vigorous program to create wildernesses on Bureau of Land Management lands for the first time.

Carter's message notes the special need to expedite wilderness proposals for areas east of the Rockies and in Alaska. In June the Forest Service announced

Continued on page 28

National Park Service and the Yellowstone Park Company will not expire until 1996. However, the latter party has not met all the terms of the contract; specifically, they did not spend the required \$10 million minimum capital expenditure on park renovations by the end of 1975. The National Park Service extended the contract by special provision while studying the situation. The contract can be extended another nineteen years if the company makes satisfactory progress in improving visitor services within Yellowstone.

An important recommendation in the Yellowstone report is that the Park Service at Yellowstone "develop an organized, professionally staffed concessions management program to deal directly and effectively with the concessioners and their problems."

Herbst indicates that changes to date show some willingness by the conces-

sioner to cooperate in making necessary improvements and the summer visitor to Yellowstone will be seeing better service and accommodations. The National Park Service is continuing an intensive evaluation this summer to determine how the promised improvements are actually working at the various concessions in the park.

It is widely believed that concessions would be more accountable and provide better services if they were owned by the Park Service, which would hold management contracts with private concessioners. Legislation has been introduced that would provide the NPS with more control over park concessions. The bill would prevent companies such as Yellowstone Park Company from monopolizing concessions in the parks and provide for easier contract termination by the NPS when desired. See Conservation Docket, page 28. ■

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Continued from page 26

nounced a fifteen-month evaluation of the potential wildernesses in national forests across the nation. The agency will inventory wilderness candidates using more enlightened criteria than the narrow definitions that the FS has adopted in the past to exclude many areas that were once used by people but have returned to a true wilderness state. (For information on August field hearings across the nation on this issue, call NPCA.) The President supports legislation to add segments of eight rivers totaling 1,303 miles to the National Wild and Scenic Rivers System, plus a study of twenty others for possible inclusion later.

A bill to create three new scenic trails will be presented to Congress. These trails would include a Continental Divide Scenic Trail of 3,100 miles, a 3,200-mile North Country

Scenic Trail from eastern New York to North Dakota, and a Potomac Heritage Scenic Trail of 847 miles along the Potomac River.

Following the environmental message Interior Secretary Andrus sent Congress a legislative proposal for creating a new category of trails in the National Trails System—national historic trails.

Environmentalists also especially welcomed Carter's new executive order increasing the authority of the Interior Department to govern use of offroad vehicles on federal lands. The executive order that was on the books limited departmental action to attempts to mitigate damage from the vehicles. The new executive order requires the heads of federal land management agencies to close off particular areas or trails where use of offroad ve-

hicles is causing or will cause considerable adverse effects on the environment, or cultural or historical resources.

Before the release of the environmental message 80,000 offroad vehicle buffs wrote Carter in reaction to rumors of plans for a general ban on ORVs on federal lands. In explaining the recent executive order and answering a flood of complaints after its issuance, Secretary Andrus noted the concerns of these citizens and at the same time commented, "These are everyone's lands, and their public values must survive to be used and enjoyed by future generations." (NPCA has long advocated banning offroad vehicles in the natural area units of the National Park System and certain other areas but has not called for a general ban.)

conservation docket

Concessions: HR 313 and HR 3092 would amend the Concessions Policy Act of 1965 (PL 89-249) to restore control of park concessions to the National Park Service. Although Rep. Silvio Conte (R-Mass.) and Reps. Jack Brooks (D-Tex.) and John Dingell (D-Mich.), respectively, several months ago introduced these two bills that would influence service to park visitors, Congress has not acted on the legislation.

These bills would reduce the concessioner's power and stimulate more competition in three ways. First, the National Park Service would regulate the fee paid by the concessioner for the privilege of operating a business on federal land. Under present conditions the NPS and a concessioner must agree on the fee, and concessioners can—and often do—veto requests for raising fees. The amendments would allow the Park Service to fix the fee; the concessioner could appeal to the Secretary of the Interior.

Monopoly by concessioners would be discouraged by removing the "preferential rights" clause from present

contracts. Currently at contract renewal time potential new concessioners are virtually ignored because the current concessioner must be granted preference to continue operation—regardless of the quality of service. Limiting the length of the contract to ten years also would lead to improved service.

Contract termination will be more feasible because the bills would eliminate "possessory interest"—requirements that the concessioner be reimbursed for park improvements when a contract is terminated. The bills would prevent this possible financial burden for the National Park Service and block entrenchment by concessioners.

Land & Water Conservation Fund: President Carter has signed a bill amending the Land & Water Conservation Fund to provide an extra \$450 million during the next two years for purchase of lands already authorized for addition to the National Park System, national recreation areas of the National Forest System, national wild and scenic rivers, and national scenic

trails and of inholdings in wilderness areas. The bill, introduced by Rep. Phillip Burton (D-Calif.), also provides new authority to the Interior Secretary that enables the Park Service to accept donation of lands adjacent to park boundaries; to carry out certain preacquisition work, title searches, and mapping before authorization of a new area that seems likely to be approved by Congress; and to exceed the acquisition ceiling for an area by 10 percent or \$1 million, in any year, without passage of legislation.

Endangered Species: During the past few months, several bills have been introduced in Congress that focus on amending the Endangered Species Act, supposedly in an effort to make the Act more "reasonable." At press time the House Subcommittee on Fisheries and Wildlife Conservation was expecting a GAO report and other information on the Tellico dam project (which threatens the snail darter) and planned to hold hearings sometime this summer. The Senate Subcommittee on Resource Protection planned to hold oversight hearings on the Act on July 19–22.

Carter's message reiterates Administration support for protecting natural areas in Alaska and for the Land Heritage Program that was first proposed by President Ford and was previously discussed in these pages. (The current Administration version of the program is an accelerated five-year program including—among other measures—\$759 million to develop new and existing national parks and \$295 million to rehabilitate and improve the National Wildlife Refuge System.) The Administration is also developing legislation to establish a National Heritage Trust to protect smaller areas of historic, cultural, or ecological value.

Actions to protect wetlands and wildlife include a proposed budget increase of \$50 million for acquisition of wetlands to maintain important feeding and wintering habitats for migra-

tory waterfowl, executive orders to direct federal agencies to refrain from supporting development in floodplains and wetlands, and support for the program regulating dredge spoil disposal in wetlands.

Despite moves in Congress to relax the Endangered Species Act, Carter has directed the secretaries of Interior and Commerce to accelerate identification of critical habitat areas under the Act. "The purpose of this program," President Carter stated, "is to avoid the possibility that such habitats will be identified too late to affect federal project planning. Major projects now underway that are found to pose a serious threat to endangered species should be reassessed on a case-by-case basis."

President Carter has given the Council on Environmental Quality a

solid vote of confidence and directed CEQ to expand its responsibilities beyond an advisory role in order to lead a coordinated interagency effort to combat harmful chemicals in the environment and in the workplace. (See July 1977 issue.) The council's work has long been highly respected, but members sometimes had to struggle to get a hearing at the White House during past Administrations.

Among numerous other items in the environmental message is support for a prohibition on commercial whaling in the U.S. 200-mile fisheries zone.

Carter stresses that many of his proposals are building on the "admirable record" of Congress. Now it remains to be seen how much political capital Carter will spend on controversial parts of his message—and how much Congress will buy. ■

The way Congress deals with the Tellico project could establish a precedent not only for future cases under the Act, but for natural resource issues generally. Most conservation groups oppose any amendments to the Act. They maintain that the Tellico case is the exception to the general rule and that the Act is flexible. To date there have been 4,500 consultations between the Fish and Wildlife Service and other agencies in cases of potential conflict

between projects and the welfare of endangered species and their critical habitats. In the vast majority of cases, simple administrative resolutions of the issues were possible. Only three cases were so contested that they wound up in the courtroom. Such cases should become increasingly rare as future projects involve initial investigation of any possible conflicts with critical habitat. Consideration of congressional exemptions for specific projects is already possible without changing the provisions of the Act, however.

Rep. Robin Beard (R-Tenn.) has introduced three identical bills, each with a different co-sponsor: HR 4167 with Rep. John Duncan (R-Tenn.), HR 5002 with Rep. Marilyn Lloyd (D-Tenn.), and HR 5079 with Rep. Ed Jones (D-Tenn.). All these bills would eliminate the Act's application to federal projects in cases where construction had begun before publication of a species' listing notice. Beard's district includes the Columbia Dam on the Duck River, another TVA project. The dam is about 15 percent complete and could affect a number of endan-

gered species. This legislation does not account for the habitat involved, the actual stage of construction, or the species involved and would provide the Secretary with the power of discretionary mitigation measures. However, this power is vaguely stated and presumably could not conflict with completion of the project.

Sen. James McClure (R-Idaho) introduced S 363, a bill that would require NEPA impact procedures before listing any species' critical habitat under the Endangered Species Act. The result of this action would be to impose delays upon protective efforts under the Endangered Species Act.

Rep. Duncan also introduced another bill (HR 4557) on behalf of the TVA Tellico Project that allows exemption from the Act. This bill includes a procedure for last-resort consideration of an endangered species conflict by Congress when administrative and judicial processes have failed to resolve the issue. A specific exemption bill, it includes fact-finding hearings.

HR 5879 was proposed by Rep. Albert Gore, Jr. (D-Tenn.). This bill is



conservation docket

similar to Rep. Duncan's bill, but it provides an exemption for the TVA Columbia Dam. However, unlike Rep. Duncan's bill, Gore's bill attempts to shortcut the administrative-judicial process and have Congress make the decision.

At press time other draft legislation was being prepared for possible introduction and probably would attempt to more broadly amend the Endangered Species Act—particularly the sections on critical habitat protection and prohibitions. It would eliminate the Act's protections whenever the head of a federal agency (or the Secretary of Interior) made a subjective judgment that there was no "feasible and prudent" alternative to a project in question.

National Forest Wilderness: Earlier this year, Rep. Morris Udall (D-Ariz.) introduced a bill entitled the Endangered American Wilderness Act of 1977. The bill would designate twenty-one national forest roadless areas in six states as either "instant wilderness" or wilderness study areas. A total of 914,610 acres would be instantly added to our wilderness system, and 945,500 acres would be studied for possible future designation. At press time the Interior Subcommittee on Public Lands and Indian Affairs had held hearings on the bill.

Eleanor Roosevelt National Historic Site: On May 27 President Carter signed into law a bill designating Val-Kill Estate, Hyde Park, New York, a

national historic site. A memorial lecture hall will honor Mrs. Roosevelt's contribution as an educator.

Two miles from President Franklin D. Roosevelt's birthplace and lifelong residence at Hyde Park, the 175-acre estate was set aside by FDR in 1924 and subsequently became his wife Eleanor's principal home until her death in 1962.

In tribute to Mrs. Roosevelt—author, lecturer, world traveler, and diplomat—who, as First Lady, gave a new dimension to that role and, as U.S. delegate to the United Nations, helped to draft the first Universal Declaration of Human Rights, the bill was co-sponsored by every female member of Congress.

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Continued from page 2

were expressing their determination not to be smothered by smog, nor poisoned by toxic wastes in water. The result was a proliferation of environmental laws and novel agencies to deal with newly recognized and very grave dangers. Long in the forefront of thought and education on these matters, the NPCA played a prominent part in the environmental revolution.

ONE OF THE GREAT THREATS to the primeval National Parks has always been the overbuilding of highways. Sometimes the answer was to get the highways deflected around the parks; sometimes they had to be stopped altogether. And so we found ourselves engaged with national transportation policy. The highway pressures can be mitigated in the end only if transportation goes back to the rails.

As conservationists struggled with environmental problems in river basins, air and water pollution, park, forest, and wildlife protection, transportation, energy, and urban degradation, they recognized a need for comprehensive land-use planning against a background of well formulated, long-range social objectives. Land use planning emerged as a major field of concern for most environmentalists during the first half of the decade of the 70s. Involved are the estuaries, wetlands, woodlands, farmlands, critical ecosystems, historic structures and landscapes, wilderness, wildlife, forests, and parks and open spaces in the cities.

We wrote recently in these pages on the cities. Pressures on the distant National Parks arise in considerable part from bad conditions in the cities. Millions of Americans make transcontinental journeys to the parks every year to escape the congestion of the cities. The recent movement for the establishment of National Recreation Areas as units of the National Park System close to the big cities reflects the same trends. Renewed efforts on behalf of more open space inside the cities themselves will relieve pressures on the National Parks.

VERY EARLY we learned the uses of the courts. We pioneered litigation in 1960 to stop the District of Columbia from constructing a highway through Glover-Archbold Park in Washington. Later we sued to protect Rainbow Bridge National Monument against the reservoir which was to arise behind Glen Canyon Dam: Lake Powell. Many similar efforts have been made since then, often jointly with other conservation organizations on projects of broad concern.

We have never found the restrictions required by

our tax-deductible status to be serious barriers to well planned and executed legislative action. From the beginning we have made it a practice to testify on critical legislation on invitation; committees of Congress have customarily extended generous invitations, expressing appreciation for our help.

IT HAS BECOME a commonplace that in addition to the executive, legislative, and judicial branches of government there is a fourth: the budgetary. The NPCA has led the way in recent years in its analyses of federal budgetary processes, conclusions, and influence in both wildlife management and National Park administration.

The breadth of our interests in a wide spectrum of environmental issues has made it possible to bring together some of the most comprehensive coalitions ever developed for environmental protection, including park protection. The Potomac coalition was the first; the Everglades Coalition, with powerful labor participation, tackled the giant jetport once planned for the Big Cypress in Florida, and won the battle; the Environmental Coalition, joining the Everglades Coalition, pushed on to another victory in the establishment of the Big Cypress National Preserve; it lent its powerful influence to the effort to divert the trans-Alaska pipeline to a better route. It now becomes abundantly clear that many of the misgivings of the conservationists about the pipeline at that time were well founded.

QUITE OBVIOUSLY, few conservation organizations can afford a professional staff with specialized skills in such a wide array of responsibilities. For purposes of contact with the executive branch, the NPCA necessarily focuses personnel on the National Park System. The staff must have wide versatility and be able to deal with the other environmental issues where they impinge on the parks, but also within reasonable limits where the other resources present problems in themselves. The Magazine works under less restraint; while it concentrates again on the parks, it has carried an article on the survival of endangered species every month for many years; as a matter of policy it tries to publish at least one significant article on general conservation or environmental subjects once a month. Thus we maintain our focus on the parks but set our major interest within the perspective of the entire environmental cause.

—Anthony Wayne Smith

