

# National Parks & Conservation Magazine

The Environmental Journal November 1977



# Relieving the Pressures on the Parks

**T**HE OVERCROWDING in the National Parks, which is mainly a problem of too much traffic and too many automobiles, but in some cases actually too many people, could be alleviated greatly if more abundant outdoor recreational opportunities were provided on the other public lands around the parks, and people were aided in using them. For example, more campsites could be provided in the National Forests, but logging in the forests would have to be

done by selective methods to protect the beauty of the woods for the enjoyment of the people. The NPCA has long been an advocate of interdepartmental recreational regional planning for these purposes and has recently suggested to Interior Secretary Cecil D. Andrus that the approach be revived. A letter from President A. W. Smith of NPCA to Secretary Andrus renewing these recommendations is reprinted here.

Hon. Cecil D. Andrus  
Secretary of the Interior

Dear Mr. Secretary:

The NPCA has been delighted by the fresh perspectives you have brought to the work of the Department of the Interior, and by your excellent appointments to key positions. You have already accomplished a great deal in a short period of time, and we are confident that the progress will continue.

We wish to lend full support to Assistant Secretary Herbst and Directors Delaporte and Whalen in their efforts to develop orderly procedures for the integrated management of the federal lands, the protection and development of outdoor recreational resources, and the preservation of our cultural, historical, and natural heritage.

I thought I should bring to your attention certain recommendations the NPCA made to previous Administrations for the preservation of natural conditions in the National Parks by providing expanded recreational opportunities in the other federal public lands, including the National Forests. The program would involve the development of comprehensive regional recreation plans to be prepared and administered by the Bureau of Outdoor Recreation.

As you know, the BOR has statutory authority to make recommendations to other agencies, even outside of the Department of the Interior, with respect to the coordinated management of the federal recreational lands. This authority was strengthened, prior to the Nixon Administration, by an Executive Order giving the BOR actual administrative authority for such coordination. In practice the administrative tool was the signed inter-agency agreement, of which about a dozen

were developed during the Johnson Administration. The NPCA recommended the use of the signed inter-agency agreement for the implementation of the program we proposed for the dispersion of excess visitation away from the parks and into the other public lands around the parks.

Dr. Edward C. Crafts, who was then the Director of the BOR, approved the approach and assigned personnel to work it out; when President Nixon replaced Dr. Crafts by patronage appointments, the effectiveness of the BOR was gravely curtailed, and no further effort was made to carry out the program. We suggest that it be revived.

Briefly, many of our great National Parks are surrounded by other public lands of much larger extent. This is true, for example, of Yellowstone, situated in a region which contains several National Forests. Within that region there are other lands administered by the Bureau of Land Management and the Fish and Wildlife Service. There are Indian lands which could be developed for recreational purposes where the Indians themselves desire this to be done. In such regions we also have state forests and parks which could be integrated into a comprehensive plan. There are tremendous open spaces here, and much beautiful scenery, which is not being used adequately for outdoor recreation purposes; if it were so utilized much of the overcrowding could be taken away from the National Park System, and more abundant recreational opportunities could be provided for the American people.

The development of such a system calls for integrated planning on an interdepartmental basis. A measure of cooperation has always existed for such purposes between the NPS and the U.S. Forest Service, but it has not been system-

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# National Parks & Conservation Magazine

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FRONT COVER Mount Rainier and Tipsoo Lake, by Ed Cooper  
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Nisqually Glacier, by Bob and Ira Spring  
*Although we think of mountains as eternal, considerable change  
has been observed in parts of Mount Rainier National Park  
within a relatively short span of time. (See page 4.)*

Eugenia Horstman Connally, *Editor*  
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During the past forty years  
natural forces and human impact  
have caused considerable change  
in Mount Rainier National Park

by ALTON A. LINDSEY

# TIME AND THE MOUNTAIN

**T**IME is a more elusive concept than space, partly because our idea of time is so related to our own experience. When one is young, the days are short and the years are long. When one is old, the days are long and the years are short. Although some philosophers have claimed that time is an illusion, for practical purposes our common sense and demonstrations of change support the reality of time. Time flows irreversibly through our consciousness, and through the unconscious biological clocks of living myriads. Scientists, but not all philosophers, think that time predated man and thus exists independent of his consciousness. Was there time before the universe began?

Acting through time, the processes of nature bring about usually gradual, noncatastrophic changes; but sometimes they bring sudden ones like volcanic eruptions and lightning-caused forest fires. Man-induced changes also may be rapid, or his harmful effects on nature may be slow and almost imperceptible until they have reached serious levels. But recovery, through soil-building and natural succession after a change, is a slow process.

Although forty-one years is not a long time in the life of a mountain, it is time enough to allow con-

siderable observable change in the landscape and vegetation around its base.

In 1933 I spent the summer as a ranger-naturalist stationed at Mount Rainier National Park's museum at Longmire, Washington, and made a personal collection of 35mm negative rolls of park scenes, using a model-A Leica. Because I left the park in September to serve as a biologist at Little America with the Byrd Antarctic Expedition II, I missed the 1934 summer in the park; but I returned just after the expedition ended, in June 1935.

In 1941 I took my first color slides at Rainier, which completed the early set of about four hundred pictures, most of which had been taken in 1933. None of the negatives were printed until 1973, when I decided to return for a fourth summer in 1974 to rephotograph the same sites in order to bring out changes through photo-comparisons.

The most conspicuous changes I saw about Mount Rainier occurred outside the park; nevertheless those changes jarringly intrude on one's attention from many points in the park. None of my photographs from the thirties shows logged areas in the distance, nor do I recall seeing any then from viewpoints on the flanks of Mount Rainier. Today, extensive continuous areas of recent

logging in the adjacent lands owned by a large timber corporation are depressingly evident, especially beyond the west and south boundaries of the park.

In the absence of a needed buffer zone along the parkside edges of the surrounding lands, an effective policy and mechanism for scenic protection was lacking. Still, it might have been expected that then-current forestry doctrine on clear-cutting-by-blocks would have been practiced, with no clear-cut areas much larger than a hundred acres. Instead, whole mountainsides have been completely logged. In at least one case, logging was done over the top of a formerly wooded mountain. Forest regeneration will be extremely slow on these steep exposures.

Of course, the National Park Service has no control or direct influence over such activities just outside the park boundaries. It would be interesting to know whether anyone raised objections in advance to this style of lumbering in these crucial scenic locations. For these denuded, eroding mountainsides will for years to come serve as a striking contrast to Mount Rainier's forests and the national park idea.

*Continued on page 6*



1933



1974

## human impact

The trail to Mirror Lakes crosses a rill in a flat spot below white water. All the water that has cascaded downslope in forty-one years has produced less change than the feet of hikers who followed the people in the picture. The trailside boulders make good reference points for comparing these pictures. Despite the new footbridge built to protect the banks of the rill, the trails here have been worn, though only moderately deeply compared to many other trails. Trail deterioration tends to be less severe in level ground such as this. It is worse on sloping trails in the high meadows, where trampling is combined with erosion from running snow-melt water, and new side trails may be braided into the low vegetation where hikers try to avoid the mud and water in the older trail. The popularity of Indian Henry's Hunting Ground makes regeneration of ground cover difficult, even though overnight camping is prohibited.

By 1941 the wide meadow above the parking area at Paradise had been caught in a repulsive network of interconnecting informal trails and trappings. Recent management of that meadow—the most visited in Mount Rainier National Park—has stimulated good recovery, but at the cost of black-topping the trails. Klapatche and St. Andrews parks suffered the most abuse from hiking and especially camping in recent decades, but protective regulations are beginning to alleviate the problem. Van Trump Park is in relatively good condition, and the ban against overnight stays there is causing further improvement.

*Continued from page 4*

Within the park itself insidious deterioration went on for years, as park use intensified, before the serious nature of the damage was recognized. The park administration is now active in the rehabilitation of braided trails with the assistance of young men and women of the Youth Conservation Corps. Their presence struck me as perfectly normal, because the Civilian Conservation Corps was at work in Mount Rainier during my first summers there. The Corps has marked superfluous trails as closed. They have pegged down burlap and ropelike mesh to stabilize the surface and permit ground cover to be reestablished. This situation provides one more example of the general rule of environmental abuse. It goes on exponentially, quietly doubling and redoubling on a progressively shorter interval. The doubling period just before the damage is fully recognized makes it

seem as though a sudden crash has occurred, though the problem was actually simmering for decades.

Forest fires are no longer considered much of a problem in Mount Rainier. In the twenties and thirties fires in the park were not uncommon. Lookout towers were still in use, including one on Anvil Rock, below Camp Muir, which has since been removed. A full-time fire warden was responsible for organizing staff and CCC men to detect and put out fires in the park. The greatest fires known here occurred in the last half of the nineteenth century in the southeast portion. Before that, Indians set fires to open up the country for hunting and berry-picking, as in the Indian Henry area.

**F**IRE, snow, damage by man, erosion, mudflows, and other natural and man-caused forces have all left their mark on Mount Rainier National Park. In a sense these pho-

tographs have tamed that elusive idea of time by recording a few of the changes that have occurred there during the past forty years. Time heals, time destroys—and these phenomena are dramatically demonstrated in Mount Rainier National Park. ■

**Alton A. Lindsey, Professor of Ecology, Emeritus, at Purdue University, has written a number of books and articles dealing with ecology, botany, and biology. His most recent book, a study of the beech-maple regions of nine states, was written under the sponsorship of the National Park Service. A recipient of numerous awards and honors for his work in the field of conservation, Dr. Lindsey worked as a ranger-naturalist for four summers at Mount Rainier and Glacier national parks. He also worked as editor of several ecology-oriented serials and served as a consultant to the Park Service and other state and federal agencies.**

## erosion

A favorite spot for taking reflection pictures of Mount Rainier is the Mirror Lakes area of Indian Henry's Hunting Ground where there are several usually placid ponds. The paired illustrations indicate the disappearance of one of the main ponds; its outlet stream eroded its bed deeply enough to drain the pond. The family of boulders of varying sizes became obscured from view by the growth of subalpine fir and by the tendency of the meadow surface to overgrow the smaller rocks and build up new soil around and over them. In Klapatche Park also, one pond that lay slightly higher than the largest one has been lost in the time between two of my visits there. On spectacular Mildred Point above Van Trump Park, much larger boulders on a tundra-covered ledge seem to be shrinking because the ground is progressively rising around them.

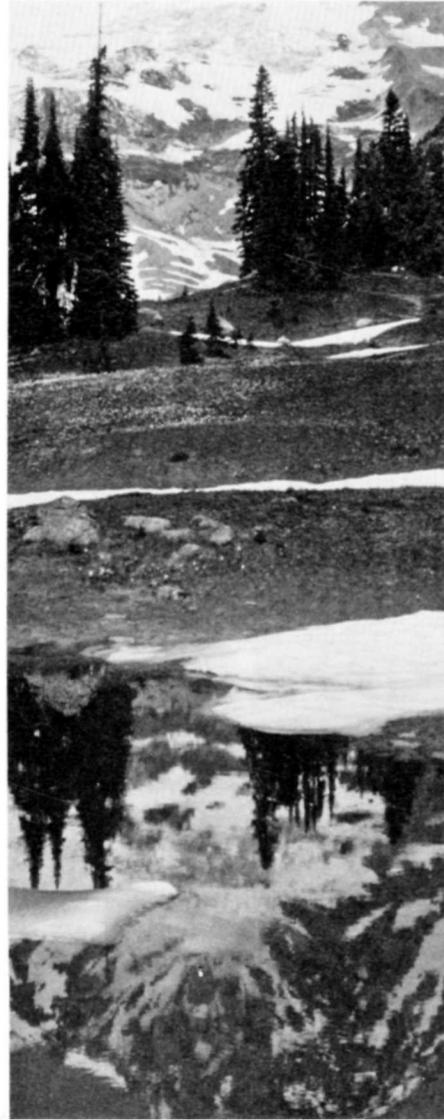




PHOTO A, 1935

## mudflow

The first point of interest for the visitor entering the park by the southwestern or Nisqually entrance is at the highway crossing of Kautz Creek, where a great mudflow in 1947 raised the terrain surface fifteen feet on the forested flood plain and smothered a mature Douglas fir forest. The 1935 photograph shows the situation in a typical summer preceding the catastrophe. This print has surprised present park staff and ecologists who had not expected dead trees to have been so prevalent before the mudflow. Photo A was incontrovertibly taken on July 20, 1935. This damage to the old flood plain forest, before 1935, was caused by swings of a braided stream back and forth across the flood plain of a broad valley over a period of years, killing mature trees. Picture B shows the far more extensive forest destruction still evident long after the 1947 mudflow. The killed Douglas firs remain standing, but the living vegetation is now composed of fast-growing black cottonwood and young Douglas firs and, nearer the stream channel, willows and red alders.



PHOTO B, 1974

## fire

The most spectacular glacial valley in the park that can be reached by road is the amphitheater below the hanging snout of the Puyallup Glacier, which is at the end of the West Side Road. The highest elevation on this road is 4,300 feet at Klapatche Point, where the road rounds the end of Klapatche Ridge and starts its decline into the lovely valley of the North Puyallup River. The forest at Klapatche Point burned in 1930, killing but not felling the forest of true firs, western hemlock, and Douglas fir. Another smaller fire came in 1934; I took photo A in 1941. A few surviving trees that appear in the photo-pair served as the source of seed for the new stand in B. On the steep rocky slope below the road, regeneration failed. Above the road nature has made a start, but remarkably little recovery has taken place considering the time that has passed. Few young trees in B exceed ten feet in stature, and I estimated that the largest Douglas firs of the young generation are only about twenty-five years of age. Considering that this area is the moist west side of the mountain, recovery from fire at this elevation has been surprisingly slow.

PHOTO A, 1941



PHOTO B, 1974



The tiny fish *Gambusia gaigei*, once reduced to a population of three, is now thriving in one of the world's smallest habitats—an artificial pond in Big Bend National Park



by JANET M. SCHLATTER

## Big Bend Gambusia: ...And Then There Were Three

**T**HINK OF an endangered species. What comes to your mind? Most likely a sizable creature like a whooping crane or a whale. But down south, in the vast reaches of Big Bend National Park, Texas, your thoughts must shrink to below minnow size—to a tiny fish named *Gambusia gaigei*. A man-made pool in the Rio Grande Village area of this park currently provides the world's only habitat for this little fish.

Some fifty years ago, back in 1928, a University of Michigan zoologist named Carl Hubbs was studying fishes in the Rio Grande area when a colleague named Fred Gaige brought him a small fish he had found in Boquillas Spring. The fish was buff-gray and silver and about two inches long. As far as Hubbs could determine, it had never been classified, and it occurred nowhere else in the world. In 1929 Hubbs published his findings on *Gambusia gaigei*.

In 1954 Boquillas Spring was discovered to have dried up. However, another population of the Big Bend *Gambusia*, which was estimated at more than 1,000, was discovered near Rio Grande Village in that year. Unfortunately, the develop-

ment of a park campground threatened its survival.

In 1956 Clark Hubbs, a University of Texas zoologist and the son of Carl Hubbs, went into action with coworkers to save the species. They collected twenty-five fishes—twelve females and thirteen males. Fifteen of these—seven females and eight males—were introduced into three pools scattered around the park. All fifteen died.

Six of the remaining ten fishes stayed in a metal tank at park headquarters. Two died, but the others multiplied. Then all died during the cold winter before they could be transferred to warmer water.

The remaining four fishes—two males and two females had been taken to the University of Texas at Austin. One female died—and then there were three. A population reduced to one female and two males is in precarious condition at best.

In 1957 these remaining three members of Big Bend *Gambusia* were returned to the park and released into a special pond constructed for them at Rio Grande Village. Luckily these three lived, thrived, and reproduced. One count showed more than a thousand specimens. Their descendants

JANET M. SCHLATTER



make up the world's population of the species. Efforts to find more Big Bend *Gambusia* in Texas and Mexico failed.

**U**NLUCKILY, soft-hearted fishermen, convinced that fish are welcome wherever water exists, kept throwing their extra baitfish into the *Gambusia* pond. The small green sunfish and another type of mosquito fish (also of the genus *Gambusia*) took over, and the *Gambusia gaigei* declined. Irrigation overflow containing mosquito fish may have contributed to the decline. When scientists once more seined the pool in April 1960, they found the situation again critical. Instead of hundreds of Big Bend *Gambusia*, they collected fifteen.

The fifteen fishes included two pregnant females, one mature male, one immature male, and eleven immature females. This population was once again transferred to the University of Texas at Austin. One of the two pregnant females and the mature male died enroute. The others eventually produced about forty young in two broods. Thirteen of these offspring plus three of the immature females were sent to the University of Michigan at Ann Arbor, under the care of Dr. Robert R. Miller (Carl Hubbs' son-in-law) as insurance against catastrophe in Austin.

During that summer park naturalists reserved another park pond for the Big Bend *Gambusia*, this one situated above irrigation overflow. In August workers introduced into their new pool all the surviving fish except those at Ann Arbor and eighteen kept in Austin.

Park officials erected a fence around the new pond. Beside it they placed a large sign whose message

was composed by Roland H. Wauer, Chief Park Naturalist at the time: "Fish So Fragile—This pond contains the world's population of *Gambusia gaigei*. These minnow-sized fish have lived here since mastodons. Unique and fragile, they survive only because man wants to make it so."

The new pond implants lived and thrived, and their descendants multiplied. The Michigan stock was eventually discontinued, but the Austin stock was maintained. In 1974 an additional stock was dispersed to Dexter National Fish Hatchery in New Mexico.

The survival of the population of *Gambusia gaigei* in Big Bend National Park has been threatened several times since 1960. In 1968 green sunfish were found in the pond and had to be removed. In December 1975 during a cold spell the resident park ranger observed numerous dead and dying *Gambusia* in the park refugium. In March and April of 1976 no fish at all were seen, but in August a limited number were seen. At that time about a hundred other fishes were released into the pond from the now abundant stocks at the University of Texas at Austin. Now, in 1977, the population numbers several hundred.

An Essential Habitat Management Plan for the *Gambusia gaigei* has been developed by a team established by the National Park Service and coordinated by Roland Wauer, who now works at the NPS Southwest Regional Office in Santa Fe.

**A**S THE RESULT of all this effort by scientists and park naturalists, *Gambusia gaigei* has not shared the fate of the passenger pigeon. It is alive and doing well, al-

though it is believed to have one of the smallest ranges of any known vertebrate—a fenced pond approximately twenty feet by ninety feet. The Big Bend *Gambusia*'s continued existence depends entirely upon man's efforts.

The *Gambusia* pond nestles close by a rock and cactus ridge. Cottonwoods shade the water, and tall grasses surround it. Knowledgeable visitors approach quietly to enjoy the wildlife the pond attracts. Usually they find a few green-winged teal, a killdeer or two, and an alert green heron. The secluded pond makes a snug home for an endangered species.

To see a *Gambusia gaigei* for yourself requires patience. You look into the shallows when the light is right for peering through the water. Binoculars bring the depths closer. You focus on a submerged grass or twig and watch for movement. Eventually, if you are fortunate, a *Gambusia* will dart through your field of vision—merely a small flash of silver. The species you are observing is on a par with the whooping crane. You cannot observe it anywhere else in the world. You ponder. Would you miss *Gambusia gaigei* if it should become extinct?

You can find no better time or place to reflect on extinction and eternity than when lingering under a cottonwood and gazing into an artificial pool that contains almost the entire known population of one species of small, vulnerable fish. ■

Janet M. Schlatter has been writing feature articles, frequently on nature subjects, for many years. Her and her husband's annual visits to Big Ben National Park during the past eight years sparked her interest in Big Bend *Gambusia*.

The croplands of Egypt and the Sudan are disappearing, and the process of desertification may already have swallowed 40 percent of the potential farmland worldwide

by SALAH GALAL

## The Desert Made By Man

**I**T COMES as no surprise in Egypt to hear that the 1977 State of the World Environment Report predicts a halving of the area of cultivated land per person by the year 2000. Egypt has already seen it happen once. The area of cultivated land per head has dwindled from 0.39 feddan (approximately the same number of acres) per head in 1930 to 0.1 today, a fall of more than 50 percent.

Population increase has of course played an important part. The past twenty-five years have seen the number of Egyptians rise from about 20 million to 38 million, and the next twenty-five years will see it rise again to about 70 million.

But the loss of the land itself is also important. Although 919,000 feddan of land were reclaimed during Egypt's first two five-year plans, more than 600,000 feddan have been lost in the same period to industrial and urban sprawl alone. Just to maintain the area of cultivated land per person at present levels means reclaiming at least

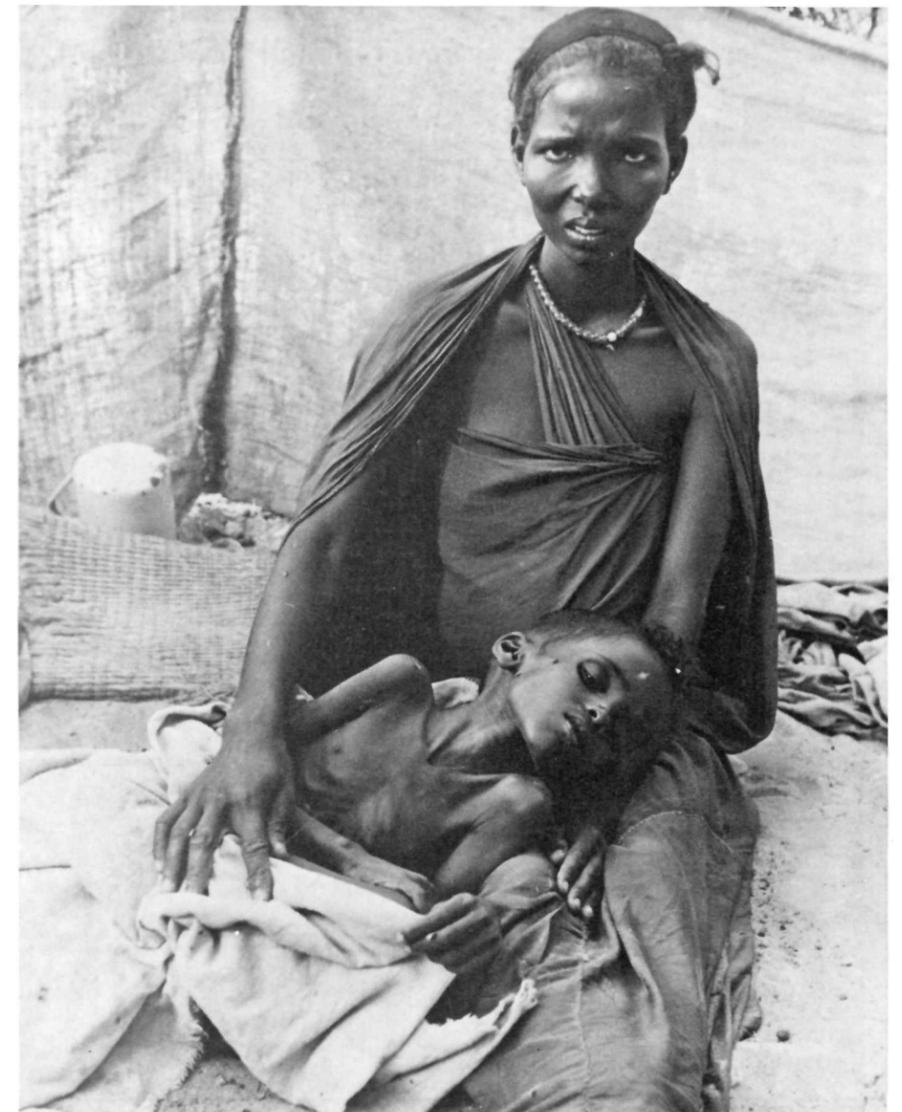
*A dehydrated child in drought-stricken Somalia is too weak to move.*



UNICEF PHOTO BY BILL CAMPBELL



FAROUK EL-BAZ



UNICEF PHOTO BY BILL CAMPBELL

*In the aerial view at left sand dunes are advancing from right to left and encroaching on fertile land of the Nile Valley 150 miles south of Cairo. Above, a Somali mother despairs as her emaciated child rests on her lap. Unchecked deforestation and overgrazing followed by three years of subnormal rainfall in Somalia climaxed recently in the worst drought in that country's recorded history. In the northern half of the country it destroyed the livestock of hundreds of thousands of nomads and drove some 200,000 people into relief camps.*

150,000 feddan each year. But in practice land reclamation has almost come to a standstill.

Although the control of the Lower Nile, delivered into Egyptian hands by the construction of the Aswan High Dam, has not led to the significant agricultural expansion on which Egypt counted, the loss of arable land to construction and the encroachment of the desert continues to narrow the agricultural base on which the progress of

Egypt so heavily depends. The area between Alexandria and the Libyan border, for example, used to be the well-populated and prosperous vineyard of Ancient Rome. Today it is a desert.

Every year, in North Africa as a whole, at least 100,000 hectares of land (247,000 acres) are lost to "desert-creep." South of Khartoum, the acacia scrub zone has marched 90 kilometers (56 miles) southward in the past twenty years.

The precise causes of "desert-creep" are complex and insufficiently understood. Sometimes it is a by-product of progress. In the Kordofan Province of the Sudan, for example, where seven hundred wells have been sunk since the mid-1950s, medical and social services provided around the well sites have concentrated the formerly nomadic populations and considerably reduced their death rates. The resulting population increase has

been more than matched by the increase in the number of cattle; in the Arab lands as a whole the increase in human population is running at 2.5 percent a year whilst the number of goats, sheep, cattle, and camels is increasing at 2.9 percent a year. The result of this animal population explosion is overgrazing and the trampling of vegetation, which leaves the soil open to erosion and paves the way for the advance of the desert. In addition,

mechanization of farming has uprooted trees and shrubs, and irrigation of sorghum fields has sluiced away water, leaving the soils brittle and exposed.

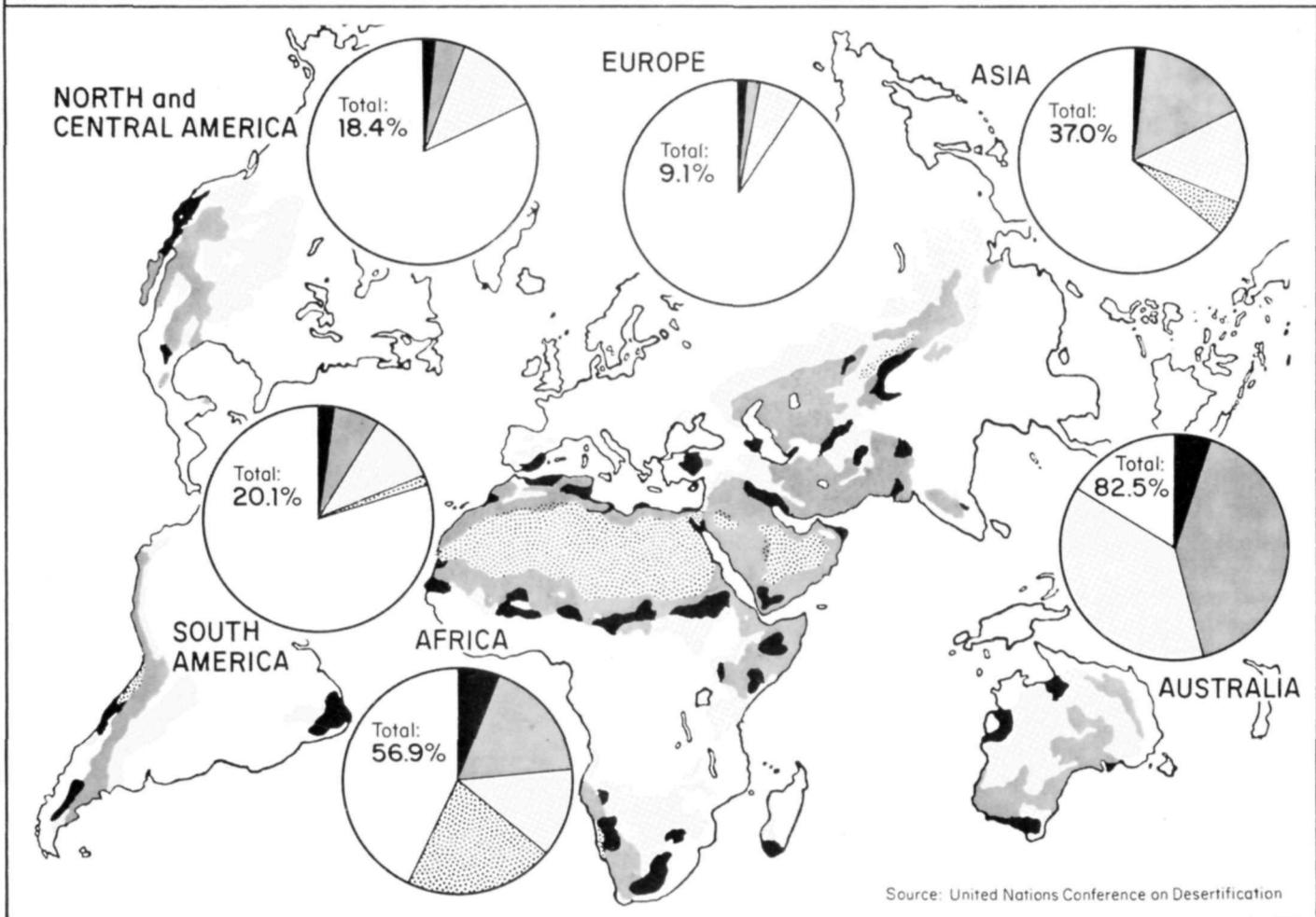
As desert conditions spread, so do the crop yields fall. In Kordofan the area planted with sesame increased sevenfold from 47,000 to 327,000 hectares (116,090 to 807,690 acres) in the twelve years from 1961 to 1973. But the actual production of sesame has not even doubled, and

yield per hectare has dropped by 70 percent from 0.91 to 0.21 tonnes (1.0 to .23 tons). Groundnuts tell the same story: although the crop area has increased fourfold, production has actually fallen.

As the land deteriorates and the yields decrease, the herders and cultivators shift farther south, and the cycle begins again. Desert creeps into steppe, steppe into savannah, and savannah into forest. By this process, the trees have re-

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# THE EARTH'S SPREADING DESERTS



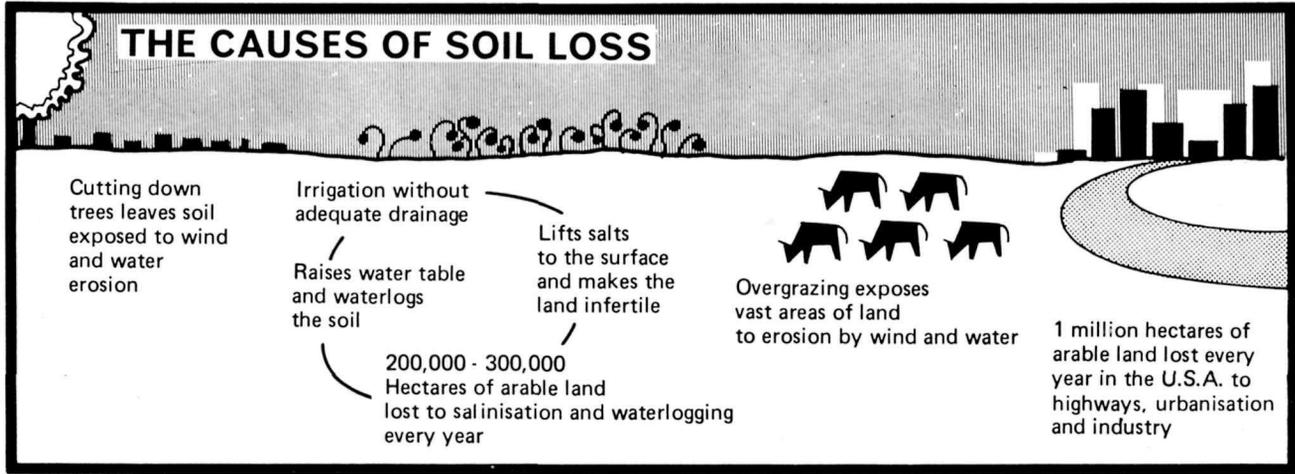
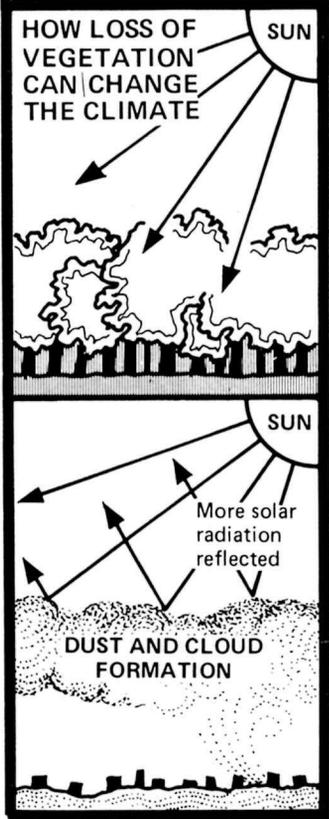
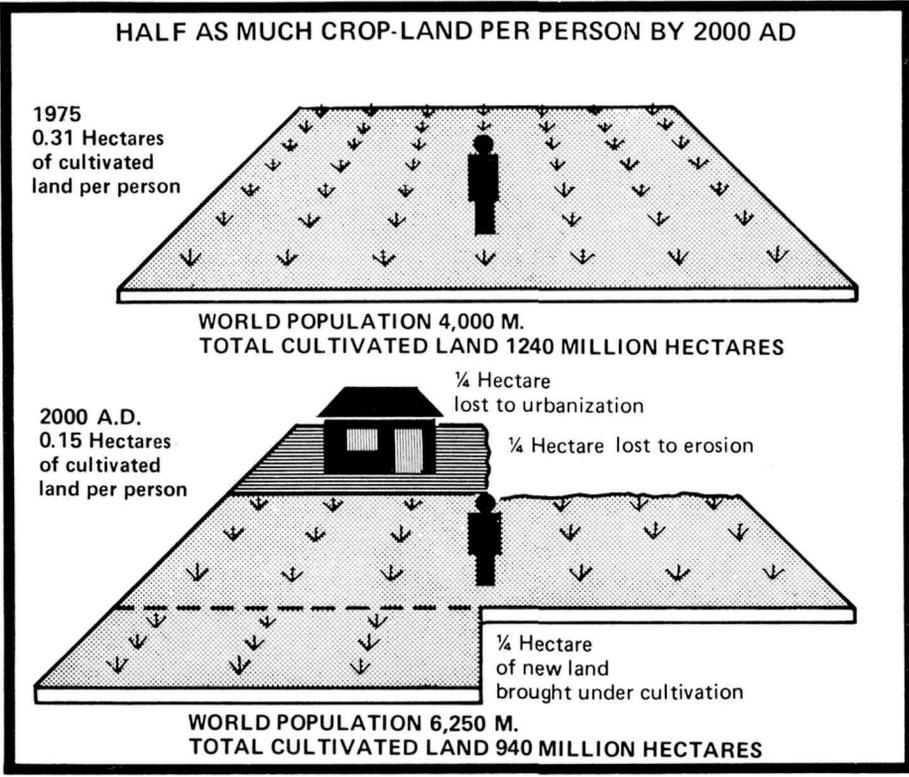
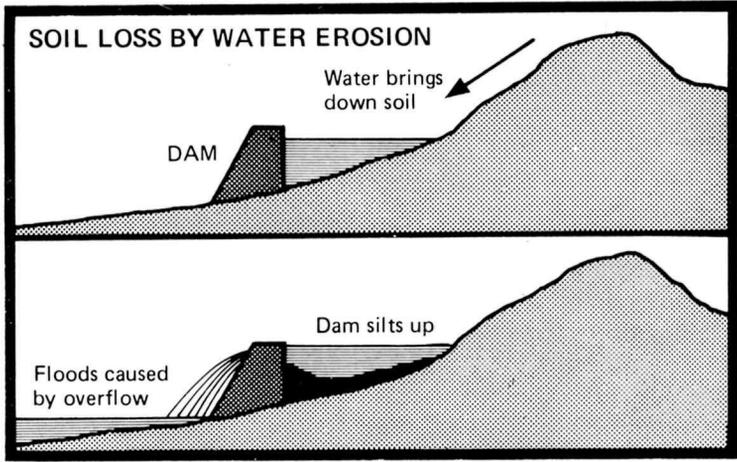
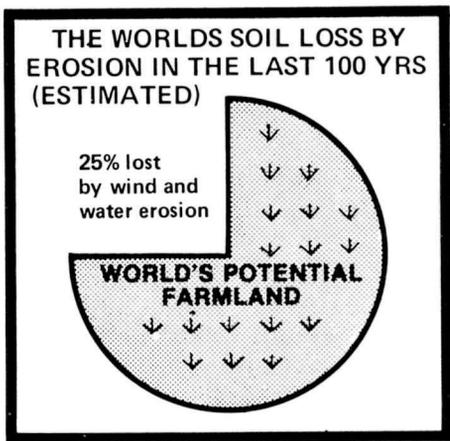
This map shows the earth's existing deserts and areas into which deserts may spread. The desertification hazard is based on a calculation of rainfall and evaporation in a given place. Where rainfall is low and evaporation high, the desertification risk is great. Circles show percentage of total land area on each continent that is or may become desert.

In Libya the Food and Agriculture Organization (FAO) has experimented with dune fixation by planting various grasses.



FAO PHOTO

# Losing Ground



treated before the march of the desert.

The problem is not confined to North Africa. Professor Mohamed Kassas of the University of Cairo estimates that the area of man-made desert worldwide is now more than 900 million square kilometers (360 million square miles) of once arable land. As the area of land available for cultivation today is not more than 30 million square kilometers (12 million square miles), according to Kassas, approximately 40 percent of the world's arable land has been lost to desert.

This stealthy march of the deserts went almost unnoticed until 1967–72, when drought struck at the countries on the southern fringe of the Sahara. As the long hot years passed with no sign of rain, fears grew that the drought was not a freak but a sign that the Sahara itself was advancing southward.

The worst fears were confirmed: between 100,000 and 250,000 peo-

ple died and 2 million nomads lost half their livestock. The advance of the deserts—which now cover 36 percent of the world's land surface and contain 628 million people—suddenly became news.

The United Nations reacted by calling a World Conference on the issue for August 29, 1977, and asking the U.N. Environmental Programme (UNEP) to "assess available data on desertification." So little was known about the subject that the small team preparing for the U.N. Conference on Desertification led by UNEP's Executive Director Mostafa Tolba, virtually had to create a new science of "desertology."

Much has already been learned. Overgrazing and trampling, slash and burn agriculture, and firewood cutting; industrialization and construction; mechanization and excessive ploughing; land-tenure systems and water rights; feeding habits and kinship patterns; population growth; and the settling of

nomads—all these factors play a part in the complex interaction between development and desertification. But the common factor in the pattern is the hand of man.

Nowhere is the pattern more clearly visible than in Egypt. Here in the Mariut area, the vines that once inspired the lyrics of Virgil have withered into the Western Desert. Yet only 60 kilometers (37 miles) to the east lie the irrigated croplands of the Nile. Impoverished desert and lush delta, both are equally man-made. ■

Salah Galal has been science editor of the Cairo daily *Al Ahram* for almost twenty years. He is also a correspondent of the weekly science journal *Nature* and editor of the Arabic edition of *World Health*. This article was released as part of the 1977 State of the World Environment Report, issued by the U.N. Environment Programme in Nairobi, Kenya.

*A manual laborer in Niamey, Niger, must now spend one-quarter of his income on fuel. But the price is even higher than he realizes. The caravans that bring this precious resource into the towns are contributing to the creation of desertlike conditions in a wide band along the desert's edge. The increase of human population, cutting of trees, and overgrazing by animals contribute to the spread of deserts all over the world.*



MARK EDWARDS, UNEP

A wild creature works subtle magic during the

# Summer of the Porpoise

by KAROL L. FLEMING

**T**O THINK that we almost missed it all. The time was right for it in those clear sparkling days of early June, when cottony puffs of clouds drifted lazily across our powder blue Alabama sky and a soft wind whispered into restless ears that it was vacation time. And all the three little boys and their dad wanted was to be off on our annual trip to an old log cabin on a Florida inlet off the Gulf of Mexico.

We usually spend two weeks of every summer at Phillips Inlet on the far side of the bay. We ferry our supplies in by boat and sometimes stay the whole time without seeing another soul. But this year I felt that the gathering and packing of groceries, not to speak of two weeks without electricity or running water, would be too much of a struggle. I kept thinking that a nice sight-seeing trip with meals in restaurants and nights in motels would offer me a vacation with much less effort. So I suggested this alternative—gently at first, then in stronger tones. But when I saw the shocked disbelief on the faces of our three sons and the forlorn look that brushed my husband's eyes, I reluctantly began to make preparations for the log cabin.

"All right," I said, "but you'll all have to help get ready." Their faces brightened, and I sighed.

I was still sighing a week later when Emmanuel Adams met us as we drove into his fish camp where we rent a boat for our stay. He looked just the same, browned and

wrinkled by the sun, his soft blue shirt just matching his lively eyes. We unloaded under the tall pine trees, each of us carrying an armful out to the end of the dock where the freshly painted boats bobbed over their anchors.

It was there that we first saw the porpoise. He swam in close and flipped his tail, sending a shower of spray into the clear blue water.

"He came into the bay in March," Mr. Adams said, grinning as he watched the boys and their reaction to the porpoise. "I first saw him the day after the big storm, so he must have blown in with it."

He tossed aside his shirt to help with the unloading. His undershirt was as white as his hair and his arms and face as brown as the pine needles over which we crunched back and forth from our car to the dock, pausing after each load to gaze out at the porpoise that was swimming close to shore.

As Mr. Adams was helping fasten the outboard motor on the boat, he began to tell us about the porpoise.

"He's wild—but playful," he said, watching my husband, Charles, give a couple of yanks on the crank cord and frowning at the choking cough of the winter-weary motor. "The pass into the Gulf is open now, good and deep again, but he doesn't seem to want to go back to the deep water. I think he's homesteading here." A homesteader himself, he chuckled as the porpoise came close to the dock

and blew water on the three little boys standing there. Their bubbling laughter made us all grin, and I realized that I hadn't sighed lately.

"'Course, we call him Flipper," he said over his shoulder as he went back for another load.

By this time, our son Frank, the most adventuresome of the three—as middle children often are—shucked off his shoes and shirt and waded out into the bay. Flipper swam in close to him, and the boy reached out to touch his back, but the animal veered away.

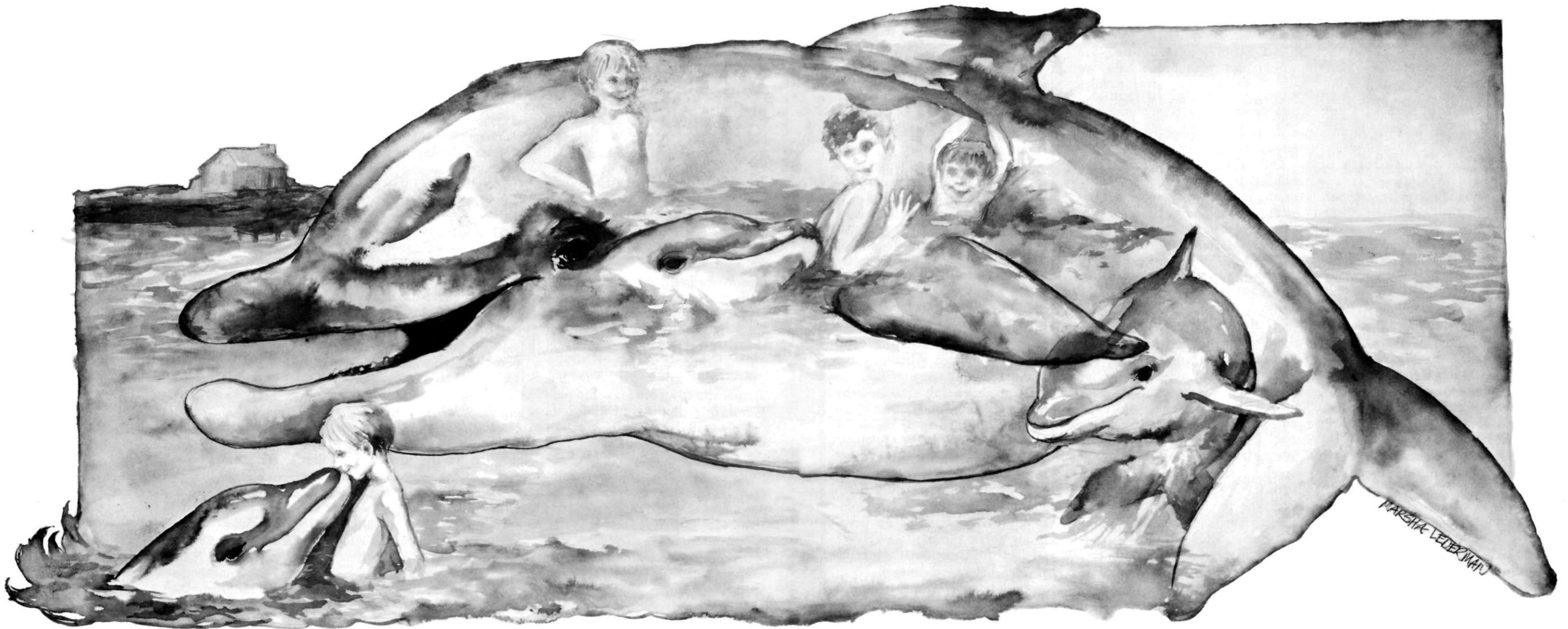
"Don't like to be touched yet," Mr. Adams said, back with a sack of groceries, "but he's coming around."

"Yes, he is!" I said, not taking my eyes off Frank and the porpoise. Mr. Adams seemed to be lost in his own thoughts, so I said, "Look," very quietly, afraid my voice would shatter the scene before us.

Flipper swam right up and lay very still just within the little boy's reach. Frank stretched out his hand, ever so gently for a little boy, and stroked the animal's back, talking softly as he rubbed. Flipper raised his head, looked at this new friend, then flipped his tail, drenching the boy.

We laughed, and so did Frank—after he recovered from the shock of the cold water in his face. "He wants to play! Mama, did you see him smiling at me?"

"All porpoises smile, son. That's just the way their mouths are made," Charles said. Then, under



his breath, obviously to himself only, he muttered, "Or maybe they smile because they don't fret and worry like humans." But I heard and thought of how I had fussed over this trip.

Frank, deciding that Flipper was not coming back to him, waded in to join the rest of us in the boat. We shoved off, waving to Mr. Adams.

"I thought they call them dolphins," I shouted above the irregular clatter of the small outboard.

"Some people do, but this one is

really a bottlenose porpoise," my husband informed us, yelling. We giggled when his shout split the silence as the motor suddenly cut off. He grinned, shrugged, and turned to adjust the contrary little engine.

"My, I am impressed with your knowledge," I said, shifting the duffel bag filled with sheets away from the side of the boat.

"Oh, I know a lot more," he bragged, an exaggerated grin on his face, as he fumbled around in the

boat for his tool box. "For instance—there's a bright-colored fish that's also called a dolphin. That's why most people call our friend a porpoise. Avoids confusion like crazy."

Charlie, our twelve-year-old, helped me move a suitcase on top of the duffel bag to make sure we would sleep on dry sheets that night. "A porpoise is like a whale—he's a mammal," he said.

"That's right, son," Charles said, and "son" came out in a shout as

the motor sputtered, then roared splendidly.

I was busy trying to keep things covered with raincoats against the spray coming over the bow of the boat. "We should have made two trips," I muttered under my breath, worrying about the heavily loaded boat but catching myself before I let go with another of those bone-weary sighs.

Just then the boat lurched. I jumped. We had hit something! There. It came again. A bump. I

glanced back at Charles, but he wasn't even looking where we were going. Instead he was grinning broadly, leaning over the side of the boat.

Trying to see whatever it was he saw, I peered into the dark blue water, only to have it come up in my face. Flipper was there! Like an inflated toy he rose up through the water, erupting through the crescent-shaped blowhole as if he had been punctured.

The boys shrieked, and I knew

just how Frank had felt when Flipper had surprised him with the tail flip.

Sleek and graceful, the animal followed us all the way across the bay, then swam around close by while we unloaded at the dock in front of the cabin. The boys could not wait to get into the water, so we let them off from their usual unloading duties. They stopped long enough to skin out of shirts and shoes, then hit the shallow water off the end of the dock.

Charles and I carried all the gear up the board walk to the log cabin snuggled in the scrub oaks at the top of the hill. By the time we finished opening up and sweeping out the winter debris, we were tired and thirsty. We primed the pump on the back porch, then, armed with tall glasses of icy well water, sat on the front screen porch to enjoy the breeze.

The soft wind was salty and cool, tinged with the faint scent of the spray-swept Gulf sand. But the show out front captured more of our attention. The porpoise seemed to sense that here were new play-fellows, and he intended to take advantage of the company. He would swim in close, then veer away, splashing all three of the boys. Then he would submerge and, while they were looking for him, nudge one of them from behind. Once he swam between Charlie's legs, sending him sprawling like a rag doll.

Little John, just four years old, was delighted with this new attraction at his beloved cabin. He whirled in circles, trying to keep the animal in sight. Strangely, Flipper never got close to this littlest boy. He was rough with the others, bumping and nudging them, but he always turned away before touching John.

From that day on throughout our whole vacation, we never spent a day without a visit from Flipper.

**O**NCE, we were snorkeling in the bay, floating on the surface just above the seaweed, watching the minnows and crabs darting about in the underwater jungle. It was a bright day, so taking advantage of the sunlight streaming through the water, I swam out to dive deeper. Just as I reached for a shell on the bottom, I felt a nudge on my shoulder. Thinking that Charles had joined me, I turned. There, his nose pressing against my face plate, was Flipper. He whistled

then clicked, laughing at his own joke.

His antics were unlimited. He would play with beach balls we would throw, jump over paddles held from our moving boat, and romp with the boys for a half-hour at a time; but he never once hurt anybody except by accident.

Once Frank stuck his hand into Flipper's mouth, then jerked it out again. He came up to the cabin with a few scratches from his own carelessness but kept insisting, the whole time we were painting it with mercurochrome, that Flipper didn't mean to do it.

If the boys got too rambunctious with him, as they did at least once each day, the porpoise would flip them up in the air with his nose, then quickly swing around and swat them—right where little boys are supposed to be swatted—with his broad, flat tail.

But he could be a nuisance. One day when we were crossing the bay from a morning spent on the Gulf beach, a sudden squall came up with unexpected force. Concerned with the rough water and struggling to reach our dock ahead of the rain, we had for the moment forgotten about our friend. But this was Flipper's kind of weather. He frolicked in the spray, seeming to take special delight in the white-caps frosting the water.

He met our boat, bumping it, then swimming to the stern to lift the outboard motor out of the water. Then he swam to the bow, pushing it away from the dock. We were helpless.

Just as the first curtain of rain came swishing across the bay, Flipper leaped out of the water, laughed at us, then swam away, scattering sparkles of spray on the rippling surface of the darkening bay. We were able to dock the boat before the rain hit, but we were a sodden, motley crew when we finally reached the cabin. Whether it was relief, exhaustion, or just the

thought of our frenzied plight, I don't know; but we all collapsed in a heap on the porch, laughing until tears ran down our rain-washed faces.

Flipper turned over sailboats, flipped up motors, blew in the faces of people riding in boats, and drove serious fishermen crazy. But then he would appear at Adams' dock when it was lined with people and put on a show. Or he would play with the children so gently, easily, that the wonder of him would grow into forgiveness for all his irritating pranks.

**W**E LEFT Phillips Inlet that summer with a special kind of joy we had never before experienced. The fascinating world around us, blurred a little by the rapid pace of our everyday life, had been brought sharply into focus by our new friend. And it was of Flipper that we talked as we began the ride back home.

The two little boys snuggled down to sleep in the back seat, their heads still whirling with thoughts of the purpose. The oldest boy sat between us up front, talking about the days past as he watched the Gulf Coast whizzing by. Just before we turned north toward Alabama, he asked me to lower the window so he could take one last sniff of the soft, salty air. He stared dreamily out at the Gulf, letting the clean breeze caress his face and rumble his sun-streaked hair.

"And remember, Mother? You didn't really want to come."

I sighed, but it was a comfortable, soul-satisfying, toe-tingling sort of sigh. Not at all like the ones I had arrived with just two weeks before.

"Yes," I said. "I'll remember." ■

**Karol Fleming is editor of the Geneva County Reaper, a weekly newspaper in Geneva, Alabama. Her three sons keep her well supplied with animal subjects for articles and photographs.**

# NPCA at work

## REDWOOD

### Capitol Hill Lag Could Narrow Chances of Salvaging Redwood Park

At press time conservationists were hoping that Congress would pass strong redwoods legislation before the scheduled October adjournment rather than further jeopardize the survival of Redwood National Park by allowing the chainsaws to continue working around the borders of the vulnerable park.

While redwoods legislation was wending its way through the congressional maze, this summer and fall loggers felled about a thousand more acres on private lands in the already-damaged Redwood Creek Basin, which drains into the California park. Siltation from clearcutting just outside park boundaries is endangering the ancient redwoods within the park, including those in the world-famous Tall Trees Grove.

As we went to press, a committee-approved bill had not yet reached the floor of the House, where the parks subcommittee did an excellent job of developing the legislation in cooperation with the Administration. Meanwhile, the Senate did not hold hearings on redwoods legislation until September 6; conservationists feared that the congressional lag could prove costly as the timber companies previously received state approval of numerous plans for cutting operations and a moratorium on other harvest plans expires this month. Furthermore, the companies soon could be submitting a whole season's worth of

new plans to the state; they may be able to work through the winter if strong legislation is not passed.

The House Interior Subcommittee on National Parks & Insular Affairs, chaired by Rep. Phillip Burton (D-Calif.) approved a bill designed to expand the park by the 48,000 acres recommended by the Carter Administration. (See June issue, p. 22.) Burton agreed to reduce the acreage from the 77,000 acres contained in his own bill and devoted much effort to devising provisions for employment and/or compensation for workers from the timber industry who would be displaced from their jobs by expansion of the park.

The legislation under consideration in both the House and Senate at this writing would give the Secretary of Interior substantial authority to regulate timber harvesting practices and rehabilitate cutover lands outside the park in the watersheds flowing through the national park.

In invited testimony before the Senate Subcommittee on National Parks and Recreation on September 6, NPCA emphasized that such authority is particularly important because the 44,000-acre park expansion would not include all the areas upstream from the park.

This Association has long pointed out to the Interior Department that it currently has authority under the act

that established Redwood National Park to acquire interests in lands on watersheds surrounding the park in order to protect the park itself. The available means of acquisition under that law include condemnation and declarations-in-taking. However, NPCA noted in the recent testimony that to date the Interior Department has been reluctant to utilize the full extent of this authority, and that the language of the bill under consideration by the Senate would foster utilization of the relevant section.

By acquiring management interests, the Interior Department could require timber companies to use ecological methods of harvesting and thus protect the park at little or no cost to the government, NPCA contended at the hearings. The NPCA representative explained, "There is no reason to suppose that the management of redwood timberlands by selective methods over a rotation period of eighty to one hundred years would be any less profitable than management by clearcutting or large block cutting, with regeneration throughout an extended period." NPCA urged the Senate subcommittee to ask the General Accounting Office to make comparative profitability studies of the selection method and the presently used clearcutting method in order to test this contention. ■

## CLEAN AIR ACT AMENDMENTS

### Fresh Air for the National Parks

Environmentalists breathed a sigh of relief when President Carter signed the Clean Air Act Amendments of 1977 into law on August 8, culminating a three-year legislative battle. A key provision giving first-class protection to national parks had emerged intact from a marathon seven-hour session that House-Senate conferees devoted to this provision and to the much-publicized auto-emissions controversy. NPCA had heartily supported the parks provision in invited testimony.

Luckily, Senate conferees managed to dilute substantially a House-passed amendment that would have facilitated

siting of huge power plants next to national parks and wildernesses. In particular, this victory for environmentalists could spell defeat for promoters of siting the proposed Intermountain



B. PRATT

Power Project (IPP)—the largest coal-fired power plant ever constructed—on the doorstep of Capitol Reef National Park, Utah. At press time the Interior Department had contracted a study of alternate sites, and a draft environmental impact statement on the IPP project also was forthcoming.

The new law, PL 95-95, finally writes firmly into law what the Supreme Court decided in 1973: that when congressmen passed the Clean Air Act in 1970, they intended to prevent significant deterioration of air quality in those areas of the nation—such as Capitol Reef—in which the air quality is al-

ready cleaner than required by national ambient standards. The Nixon and Ford administrations had been recalcitrant about implementing a nondegradation policy, even though national parks and wildernesses comprise only about 1.3 percent of the total land in the nation.

PL 95-95 sets up three classes of clean air areas with different limits on allowable pollution increments for each class. (These increments are smaller than those permitted under previous EPA significant deterioration regulations.) Class I is the most pristine category; virtually no "significant deterioration" is allowed in Class I areas, so developments next to parks would be limited.

All existing national parks larger than 6,000 acres, national wilderness areas larger than 5,000 acres, national

memorial parks larger than 5,000 acres, and international parks receive mandatory Class I protection under the law.

NPCA had called for protection of more federal lands, but the bill identifies the most outstanding areas. Preliminary figures show that 36 national parks, 120 national wilderness areas, 1 national memorial park, and possibly 1 international park qualify as Class I.

All other clean air areas are Class II but may be reclassified as Class I or III by states or Indian tribes. However, the following federal lands generally could *not* be reclassified as Class III: national parks and wilderness areas that are established after passage of the law and exceed 10,000 acres in size and national monuments, primitive areas, wild and scenic rivers, wildlife refuges, lakeshores, and seashores in excess of that acreage.

Federal land managers must review all other national monuments, primitive areas, and national preserves and within a year recommend to Congress and the states for Class I designation those areas where air quality values are important attributes.

An important provision of the bill will eventually require retrofitting of existing pollution sources near Class I areas. The Interior Department has until February 8, 1978, to identify mandatory Class I areas where visibility is an important value. Then a year after that date the EPA Administrator must promulgate related regulations. Pollution from the huge Four Corners power plant in New Mexico and the Navajo Plant in Arizona—projects that are currently impairing visibility in a number of parks—possibly will be curbed by this provision.

## BOUNDARY WATERS CANOE AREA

### Administration Backs Strong Wilderness Plan for BWCA

At September congressional hearings examining future management options for Minnesota's Boundary Waters Canoe Area, the button-wearers generally were divided into two slogan camps: Proponents of allowing logging, motorboats, and snowmobiles in the BWCA—largely citizens from local communities in Minnesota—sporting "The BWCA Is For Everyone" buttons, while advocates of full wilderness protection declared "I Like It Wild."

The buttons neatly distinguished clearcut differences between several legislative alternatives currently in the hopper for the BWCA, a 100-mile swath of North Country forest—much of it virgin—and 1,000 pure lakes. NPCA testimony before the House Subcommittee on National Parks and Insular Affairs clarified that we really cannot have it both ways in this national wilderness area, which is a threatened preserve within the Superior National Forest.

The BWCA is, of course, public land belonging to all Americans. But to claim, as some witnesses at the hearings did, that the BWCA "has ample room for all uses" is just wishful thinking. What if everyone in the nation were to visit the BWCA at the same

time? A wilderness area simply cannot support logging and logging roads, mining, snowmobiles, motorboats,—or for that matter unlimited numbers of canoeists, cross-country skiers, and campers—and still be preserved for future generations as a *wilderness*.

The Carter Administration agrees. On September 13 Secretary of Agriculture Robert Bergland and Assistant Secretary Rupert Cutler announced the Administration's proposal for legislation that would give strong protection to the BWCA. Contending that legislation introduced by Rep. James Oberstar would result in conflicts between canoeists and motorboaters as well as logging that would endanger the wilderness, whereas the conservationist-supported bill offered by Rep. Donald Fraser would not meet all of the concerns of local resort owners, the Secretary explained that the Administration tried to combine the best of both bills. (See "We Like It Wild," p. 20, October 1977 issue for a description of those two bills.) The draft Administration bill would establish a 1,053,000-acre national wilderness area—most of the present BWCA and additional acreage—within which motorboats would be excluded from all but five lakes, snow-



mobiles would virtually be banned, and all future logging sales would be prohibited.

In addition to this wilderness refuge, the Administration recommends designating a 206,640-acre national recreation area of three corridors within which motorized vehicles and logging would be permitted.

To offset loss of timber in the wilderness area, the Forest Service proposed to intensify timber management in the rest of the Superior National Forest and in the Chippewa National Forest.

The subcommittee heard from more than a hundred witnesses during two long days of hearings. NPCA and all the other major national environmental organizations, numerous Minnesota organizations, and citizens groups such

NPCA pointed out to congressional committees a long-term trend in visibility deterioration in the open spaces of the Southwest. In some areas where the visibility range once was a hundred miles, now one can see only within a thirty-mile range. Much of this problem can be attributed to the previously mentioned power plants. In fact, existing and planned power projects in that region alone threaten a cluster of lands adding up to about one-fifth the acreage of the National Park System. (See the July 1975 issue of this Magazine.)

Utilities promoting such projects had waged a successful campaign in the House to gut the significant deterioration provision of the Clean Air Act amendments. Rep. John Breaux (D-La.) sponsored a provision tailored to the IPP project and others that, in effect, would have eliminated Class I protec-

tion. (See "Lord Byron, Rep. Breaux, and the Clean Air Act," August, p. 21.)

However, conferees from the Senate side, which had passed a stronger provision, prevailed in the conference. Although the new law allows a power plant to exceed Class I limits for eighteen days a year, it is much more restrictive than the Breaux amendment.

Furthermore, the governor of a state may grant the eighteen-day variance only if it will not adversely affect the air quality (including visibility) of the park and only if he receives the concurrence of the federal land manager. For instance, Secretary of Interior Cecil Andrus would have to concur with the proposed site for the Intermountain Power Project. If the Secretary and the governor disagree on a project, the proposal goes to the President, who must decide within ninety days.

IPP is, of course, the hottest project that would be affected by the Clean Air Act Amendments. The gargantuan plant would need 10 million tons of Utah coal and 50,000 acre feet of water a year; the waters of the wild Fremont River just below Capitol Reef National Park would either be diverted into a reservoir or dammed. In addition, it would result in an influx of 11,000 people into a county with a present population of 1,600 as well as extensive associated developments such as railroad tracks and transmission lines to deliver the power to Southern California, Utah, and Nevada. More than 75 percent would go to six California municipalities. In effect California taxpayers will be financing the massive industrialization of Utah.

At press time a draft environmental  
**Continued on page 24**

as the national League of Women Voters supported full wilderness protection for the BWCA such as that proposed in Rep. Fraser's bill.

The Administration plan, which was unveiled for the first time at the hearing, was generally greeted with enthusiasm by conservationists. Miron Heinselman, chairman of the Friends of the Boundary Waters Wilderness, an umbrella organization leading conservation forces working for the BWCA, commented that, "On balance the Administration proposal is a major step forward toward resolving the long-standing battle over protection of the BWCA. We appreciate greatly the fact that almost none of the present BWCA would be removed from the wilderness system, that future logging and motorboat use would be stopped in almost the entire wilderness area, and that the current snowmobile ban would be continued and written into law. We are disappointed, however, that motor use would be continued on Lac La Croix and that Brule Lake, Lake Isabella, and Kawishiwi Lake would be removed from the wilderness. We do believe that the national recreation area corridors along the Echo Trail, Fernberg Road, and Gunflint Trail would give badly

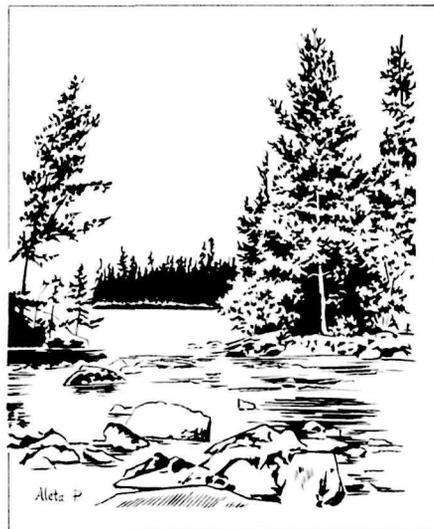
needed land management controls to important buffer areas adjacent to the wilderness."

However, current timber harvesting contracts would remain in effect for one year under the bill. During that time the Forest Service says it would try to "clean up" the sales by offering alternatives to timber companies. A moratorium on contracts on 10,000 acres expired on September 15, but cutting could not begin until the timber companies agreed to environmental

modifications that will be offered by the Forest Service following the directive of a 1976 court order.

Dr. Heinselman, a noted professional forester who conducted research in the BWCA for many years, presented detailed factual testimony refuting the need for timber harvesting within the wilderness.

At the hearings some of the supporters of motorboats and logging characterized advocates of wilderness protection for the BWCA as "selfish preservationists." But NPCA testimony, submitted to the subcommittee upon invitation, emphasized that the BWCA should be treated as a national—not a local—resource. This national wilderness area is of particular importance to all Easterners because it includes one-half of all wilderness east of the Rockies. There are thousands of lakes and ample acres of timber outside the BWCA for the vehicle users and loggers. The BWCA, however, is our nation's only lakeland wilderness area. It is no wonder, therefore, that people across the nation want to preserve it not only for the sake of primitive wilderness recreation but also because it may become the last permanent stronghold for some species of wildlife. ■



DRAWINGS BY ALETA PAHL

## OMB

### Executive Branch Opens Conservation Budget Process to Public Scrutiny

During past administrations the Office of Management and Budget not only tightened the federal purse strings whenever natural resource agencies came asking but did so out of the public light—often with drastic effects on national environmental programs.

For some years NPCA has urged OMB to open the budgeting process to public participation instead of quietly cutting agency budget requests long before conservationists had a chance to scrutinize them. NPCA also has criticized budget officials for making behind-the-scenes attempts to scuttle a variety of conservation programs even while at the same time they sometimes were responding to the pressure of special interests such as the timber companies who have a stake in the California redwoods controversy.

Because of an apparent OMB turnaround, however, the efforts of this Association to catch the ear of the

budget officials finally have paid off in terms of public participation.

The Carter Administration has appointed a new Associate Director of OMB for Natural Resources who controls the entire Department of Interior budget as well as those of several other agencies such as the Environmental Protection Agency. The new associate director, Elliot Cutler, has shown an unprecedented willingness to meet with and listen to conservationists on a wide variety of issues.

An attorney and former staff member on Sen. Edmund Muskie's Environmental Pollution Subcommittee, Cutler already has held a series of meetings this year with NPCA and other conservationists on a variety of issues including the Fiscal Year 1979 budget. On all of these important issues, OMB is playing a vital role in determining both the general direction and substantive details of the Administration's positions.

• *1979 Budget:* Most important, for the first time conservation interests had the opportunity to meet jointly with OMB top budget staff and their counterparts in the Interior Department to discuss a budget while it is under development. Previously, NPCA and other public interest organizations had not been invited to express their views about the Interior Department's budget before the President's submission of the budget to Congress in January of each year.

Recently, through Associate Director Cutler's initiative, representatives of NPCA and the Sierra Club, National Wildlife Federation, Izaak Walton League of America, National Recreation and Park Association, and Citizens Committee on Natural Resources met with both Cutler and Heather Ross, Interior Department Deputy Assistant Secretary for Program and Budget, to present specific recommendations on

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### Continued from page 23

impact statement was scheduled for release in October by BLM, the Interior agency that would have to grant rights-of-way and various other permits before construction. Following a directive of Secretary of Interior Andrus, contractors for BLM are working with the Park Service and EPA on a study of alternate sites; in addition, a task force consisting of state, federal, and IPP officials is working cooperatively on alternatives.

Indications are that Andrus, who supported the stronger significant deterioration provision approved by the Senate, will vote against the site if the upcoming studies confirm that the power plant would have significant effects on park resources.

"The nation needs energy development in some areas, but nine miles from Capitol Reef just doesn't seem like one of those areas," an Interior spokesman remarked.

In addition to IPP, a recent EPA summary of the current status of some of the projects on the drawing board for sites near national parks shows three

# reader comment

the need to make increases or reductions in key items in the FY 1979 budget.

In the case of National Park Service funds, NPCA urged OMB to slash substantially funds for construction of new facilities and increase monies for rehabilitation and maintenance of existing facilities and services that have deteriorated as a result of previous inadequacies in the budget. Instead of building new interpretive facilities, NPCA said the Administration should boost interpretive staffing levels in the parks.

This Association recommended a substantial increase in funding for the NPS New Area Studies Program. (Under Public Law 94-458, each year NPS now must submit to Congress a list of at least twelve areas that potentially would qualify for inclusion in the National Park System.) NPCA also advocated an expanded program for  
**Continued on page 26**

large power sources that would be located from thirty-five to fifty miles from Petrified Forest National Park, Arizona. Of these potential polluters, a 1,050-megawatt Coronado plant southeast of the park and a 500-megawatt addition to the present Cholla plant have received state permits, and papers have been filed on a 1,050-megawatt Springerville power plant. A gigantic 2,000-megawatt Harry Allen project is planned just thirty miles from Lake Mead National Recreation Area in Nevada. And at press time an environmental impact statement was underway on a power plant to be sited in the Warner Valley of Utah just twenty-five miles from Zion National Park.

Power projects in other areas of the nation could be affected by the new Clean Air Act amendments as well.

**You Can Help:** If you are interested in studying the effects of the new law on protection of our national parks at ongoing workshops and in monitoring problems in your area, write to Rita Molyneaux, at NPCA, 1701 18th Street, N.W., Washington, D.C. 20009. ■

## Unctuous Eyewash

Last issue, your magazine took a swipe at smokers. [July, p. 13] The August issue gives us orangutans and a lot of eyewash about plutonium's link with civil liberty. Please let's stick to saving national parks and avoid peripheral (not to say unctuous) issues.

*David H. Stewart, Head  
 Department of English, Texas A&M*

## Congratulations

I have just had the pleasure of reading the June issue of the Association's magazine. It is a most interesting number with exciting and well-written articles. The pictures and the cover are superb. Your editorial "An American Springtime" is outstanding. I congratulate you on this excellent statement, and I trust your optimism will be proven in results as the years pass.

*Horace Albright  
 Sherman Oaks, California*

[A founder and noted former director of the National Park Service]

## You Can Help

As an Environmental Management student at the State University of New York at Buffalo, I am very interested in learning how to get to the "grass roots" of a problem. That is, *who* to contact specifically about a problem, *when* to get in touch with them, etc. Your "Editor's Notes" at the end of your articles help facilitate that end immensely! (As a past editor myself, the layout is eye-catching and copy is easily read—GOOD POINTS!)

Please continue this service for your readers. It helps transform a "oh, isn't that too bad" attitude into a pen-writing *action!*

*Joan M. Naffky  
 Kenmore, New York*

I am often moved to action by your magazine, which I read closely and count on. Keep up your fine environmental awareness efforts.

*Mrs. Sharon Clark Gaskill  
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Continued from page 25

establishing mass-transit circulation systems within the parks and full funding of the Land and Water Conservation Fund for both the federal and state portions of this \$900-million-a-year fund. Other sessions with OMB focused on specific issues.

• *Land and Water Conservation Fund:* For instance, Cutler and his budget staff consulted with NPCA concerning the merits of legislative amendments to the Land and Water Conservation Fund during their consideration by Congress. In both the meeting with OMB and previous invited congressional testimony NPCA supported the amendments, which President Carter subsequently signed into law, because they

increase the amount available for park-land acquisition and other important conservation uses by \$450 million during the next two years.

• *Park Transportation:* NPCA and other groups including the Sierra Club, National Wildlife Federation, the Institute for Public Administration, the National Association of Railroad Passengers, and the National Council of Senior Citizens met with Mr. Cutler to discuss the benefits of S 975, a bill that NPCA previously supported in invited testimony. This legislation would direct the National Park Service to provide mass transit access to certain units of the National Park System.

Although OMB apparently agrees that many of the national parks are

overcrowded with automobiles, the officials seemed to be unconvinced that giving the National Park Service authority to provide mass transportation to the parks is the answer. Instead, they argued that the Park Service should restrict which areas autos may use within parks and prevent automobile entry under certain conditions while providing mass transit within the parks.

NPCA, on the other hand, contended that both increased access to the parks and restrictions on autos will be necessary in some cases. Furthermore, public transit would mean that more people could visit the parks with less environmental impact. In any case, the bill would not involve large capital expenditures.

## NEW RIVER CANYON

### NPCA Helps Defeat Canyon Rim Development

With introduction of legislation to protect the New River Canyon in West Virginia imminent, NPCA recently helped defeat a rezoning request that would have facilitated development on the canyon rim.

At the request of local citizens, NPCA staff testified before the Fayette County, West Virginia, Planning Commission on a request by the Berwind Land Company to change the zoning

of 300 acres on the rim of the canyon. The acreage is presently classified as a conservation zone, but the request would have changed its classification to a development zone, allowing the company to develop home sites.

NPCA and local conservationists argued that such development would be detrimental to the goal of preservation of the canyon. In addition, Assistant Interior Secretary Robert Herbst

had informed local officials of the department's concern for protection of the canyon and also requested that the commission deny the rezoning at this time so that Congress and the Carter Administration could determine whether the New River Canyon should be included as a unit of the National Park System.

After the planning commission hearing the members voted six to three

## OIL TANKER STANDARDS

### Proposed Tanker Safety Regulations Need Boost from Public

Strong tanker safety regulations proposed by the Coast Guard were meeting stiff opposition at press time. Opponents of such measures had managed to funnel more comments against the standards to the Coast Guard than proponents such as NPCA had produced in support of them. Related legislation was pending.

This past spring the Coast Guard proposed the regulations, which would require tankers to meet safety standards long advocated by NPCA and other environmental organizations. Without these requirements, we will see an increasing number of disastrous oil spills from tankers.

The proposed regulations call for double bottoms on all ships 20,000 Dead Weight Tons (DWT) and more constructed after December 31, 1979,

and segregated ballast tanks on all ships entering U.S. ports after January 1, 1982.

Double bottoms are essential to guard against the high potential for oil leaks when ships run aground or strike an obstacle. Because many supertankers feature deep hulls, there often is as little as two to three feet of clearance in the shallow coastal waters in which many tankers operate. Once a ship's hull is punctured, it is practically impossible to stop leakage.

Similarly, the need for segregated ballast tanks has long been apparent. Upon unloading their oil cargo, ships in the past have filled the same tanks with sea water for ballast. When this water is expelled, often as much as 2,000 tons of residual oil that have lined each empty tank are released into the

ocean. The separation of ballast from cargo would eliminate this pollution.

The rules further propose inert gas systems for all tankers, eliminating the potential for explosion while the oil is being unloaded. Additional radar and collision avoidance systems would be required on all ships 10,000 gross tons or more.

NPCA was pleased to see the Coast Guard respond to President Carter's directions on oil tanker safety with these proposed rules, and we expressed our support for the safety requirements before a Coast Guard hearing.

More recently, we presented testimony upon invitation before the House Merchant Marine and Fisheries Subcommittee on Coast Guard and Navigation headed by Rep. Mario Biaggi (D-N.Y.) and the Senate Commerce

## news notes

• *Alaska D-2:* Members of the Alaska Coalition, of which NPCA is a participant, met with Associate Director Cutler to discuss the coalition's support of HR 39 and S 1500. (See previous reports on NPCA invited testimony.) OMB had a key role in shaping the Administration's recent legislative recommendations (page 28) before their submission to Congress.

These issues provide examples of OMB's significant policymaking role, a role that will no doubt receive more public attention in the future. Although OMB's new spirit of openness and candor is laudable and encouraging, we have yet to determine whether our recommendations on various issues will be acted upon. ■

against the rezoning; their decision subsequently was upheld unanimously by the three-member county commission.

At press time West Virginia Senators Robert Byrd and Jennings Randolph and fellow Democrat Rep. Nick Joe Rahall seemed ready to introduce legislation to preserve the New River Canyon, waiting only for Interior Secretary Andrus' recommendations. ■

Committee, which were considering legislation that would mandate such rules. At press time the Senate had approved the legislation, and it was awaiting House action.

These rules could have important international implications because, if accepted, they will be presented at the February meeting of the U.N. Intergovernmental Maritime Consultative Organization as a world model.

**You Can Help:** NPCA members are urged to write the Coast Guard supporting the draft rules before November 15, the deadline for comments. Or you may express your views more quickly via a telegram or inexpensive Western Union mailgram or public opinion message. The address is: Commandant (G-CMC/81) U.S. Coast Guard, Washington, D.C. 20590. ■

### JOBS

#### Work in a National Park

If you would like to work in a national park, you probably already know that paid park jobs are hard to land. Nonetheless, if you're an early-bird applicant, the picture isn't all gloomy; in fact it's particularly bright for young adults thanks to the new Young Adult Conservation Corps program. A breakdown of some of the jobs that are available follows. Both year-round and seasonal jobs are listed; some are paid positions and others are volunteer slots. Note that the Young Adult Conservation Corps, Youth Conservation Corps, and Job Corps are interagency programs, but only the Park Service parts of the programs are detailed here.

• *Regular Seasonal Jobs:* For paid seasonal jobs with the *National Park Service* there were eighty applicants for every job in 1977. But if you're interested in working as a tour guide, interpretive aide, trail crew member, or fire-control aide, it's worth a try, particularly if you're willing to work in lesser known areas. A brochure entitled "Seasonal Employment in the National Park System," which includes the necessary application form, will be available on December 1 from the Office of Personnel, National Park



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Service, Washington, D.C. 20240. Applications will be accepted from January 1 to February 15 for 1978 NPS summer jobs. The brochure also has information on locating jobs with *private concessions* in the parks.

• *Young Adult Conservation Corps*: President Carter just signed this program into law on August 5, 1977. The Corps provides full-time employment for young adults in positions ranging from trail maintenance workers to interpretive aides. It is designed for persons from nineteen to twenty-four years of age, but applicants who are sixteen to eighteen may be considered under special circumstances. At press time the Park Service had obtained approval to hire 2,550 young adults in twenty-four parks; the program is expected to expand in future years to enroll 5,900 people in the parks. As the program gets underway, applications

for jobs in parks and forests will be handled by the Department of Labor. Write to the Office of Youth Programs, National Park Service, Washington, D.C. 20240, for the most up-to-date information on how to apply for the new program. Professional personnel to run the program will be hired through standard NPS recruitment.

• *Youth Conservation Corps*: This program will employ about 3,500 youths aged fifteen through eighteen in 1978 summer programs in 106 parks. Recruitment of enrollees varies from state to state, but detailed information should be available from most school guidance offices. Or write to the YCC Selection Office, P.O. Box 23400, L'Enfant Plaza, Washington, D.C. 20024.

• *Job Corps*: The National Park Service operates three Job Corps centers providing year-round employment for 600 persons aged sixteen through

twenty-two. Enrollees, who are given professional skill training in the construction trades, are recruited through the Employment Security Division, Department of Labor, Washington, D.C. 20210.

• *Volunteers-in-the-Parks (VIP) program*: If you would like to be a VIP, just apply to the park of your choice. Persons of all ages can help the Park Service in a great variety of volunteer positions ranging from participants in archaeological digs to bakers in living history programs. You might even have some ideas of your own for your favorite park!

• *The Student Conservation Association*: This Association offers spring, summer, and fall programs for sixteen- to eighteen-year-old high school students and college-aged individuals eighteen years and older. Students volunteer their services in more than fifty

## conservation docket

### ALASKA D-2

#### Administration Discloses 92-Million-Acre Alaskan Land Proposal

On September 15 Interior Secretary Cecil Andrus announced the Administration's long-awaited legislative proposal for protection of the "crown jewels of Alaska"—a plan that would more than double the present size of both the National Park System and National Wildlife Refuge System.

Andrus recommended protecting 92 million of Alaska's 375 million acres as national parks, wildlife refuges, scenic rivers, forests, and wilderness areas.

Conservationists, developers, and proponents of other Alaskan proposals had waited anxiously for the announcement. The Interior Department proposal, presented to the House Interior Subcommittee on General Oversight and Alaska Lands, calls for somewhat less acreage than the 116-million-acre bill introduced by Rep. Morris Udall (D-Ariz.) and supported by NPCA and other conservation organizations in invited testimony.

But the environmentalists lauded the Carter Administration for lining up solidly behind protecting the public lands in question within the four fed-

eral conservation systems rather than creating a "fifth system" for joint federal-state management. The fifth system approach is advocated by Alaska Gov. Jay Hammond and the two Republican members of Alaska's congressional delegation as a means of allowing mineral and commercial development within 57 million acres of reserves. They would designate only 25 million acres for protection in the four federal conservation systems.

Thus, both the Udall and Administration plans would preserve about four times more land in the conservation systems than advocated by "fifth system" proponents. Udall's plan would provide the most protection by designating all the new park, refuge, and wild river acres as national wilderness areas, whereas the Administration would place only about half the acreage in the wilderness system.

In contrast to the Alaska state plan, both Secretary Andrus and Mr. Udall emphasize that Alaska represents our last opportunity to preserve large untouched areas of wilderness and com-

plete ecosystems and to avoid the costly mistakes made in the lower forty-eight states. It is truly our last wilderness frontier.

But conservationists and Administration representatives must mount an educational campaign to counter the criticism of developers who characterize the movement to protect these areas as a "federal land grab." For instance, Secretary Andrus told the subcommittee, "Some people seem to fear that we are trying to hoard resources needed by Americans today and in the immediate future. There are roughly 375 million acres in Alaska. Our proposal involves 92 million acres. The State of Alaska will be receiving 103 million acres, much of which will be open to development. The natives are receiving more than 44 million acres, much of which will be developed. [The Interior Department made its land conservation recommendations in conjunction with the provisions of Section 17 (d-2) of the Alaska Native Claims Settlement Act under which land allocations are still being decided.]

national parks, national forests, and other conservation areas. High school students work in a three- to four-week program a week of which is devoted to hiking and the rest to maintenance work. Some financial assistance is available for those in need. College students spend eight to twelve weeks performing duties similar to those carried out by professional park and forest personnel—interpretation, backcountry patrol, research. Park and Forest Assistants receive grants to cover travel and living expenses. Housing is provided. Program announcements and applications will be available on November 15 by writing the Student Conservation Association, P.O. Box 550, Charlestown, New Hampshire 03603. Detailed lists of all positions offered will be sent with the application. Deadline for receipt of the applications will be March 1, 1978, for summer programs. ■

## CONSERVATION AWARDS

### Zimmerman Prize Recognizes Achievements in Israel

A committee of prominent leaders in Israel recently announced that they have awarded the first Zimmerman Prize for outstanding work on behalf of the environment to Mr. Josef Tamir, M.K., chairman of the Subcommittee for Environmental Quality of the Israeli parliament. The committee is accepting nominations for 1978.

The Zimmerman Prize was established recently through the efforts of NPCA trustee William Zimmerman and Israeli environmentalists. A lawyer and real estate developer with a deep interest in environmental law, Mr. Zimmerman has represented NPCA on several occasions such as the UN Conference on the Human Environment at Stockholm, a regional conference on the Law of the Sea at Rio de Janeiro, and the UN Conference on Population at

Bucharest. In order to encourage protection of the natural resources of Israel and to recognize special contributions to that cause, each year Mr. Zimmerman will donate an award of \$1,000 to the person chosen by a special prize committee.

Mr. Tamir was recognized for his pivotal role in establishing and working through what is now the Committee on the Interior and Quality of the Environment of the Knesset—the parliament of Israel.

Dr. Uri Marinov, distinguished director of the Ministry of the Interior of Israel, is chairman of the Zimmerman Prize Committee. For more information, write to Dr. Marinov at the Ministry of the Interior, Environmental Protection Service, P.O.B. 6158, Jerusalem 91060, Israel. ■

“So there will be tens of millions of acres remaining outside the Four Systems which will be largely available for mining, grazing, timber, hunting, fishing, and various multiple uses,” Andrus continued. “If we err in this decision and exclude some precious and delicate areas from the four systems, these areas could be lost forever. But if we err in

conserving too much, this can always be changed in the future.”

Andrus noted, however, that the Administration proposal is “extremely sensitive to the resource needs of Alaska and America.”

The Administration proposal would establish ten new Park System units—some of them six or seven times larger than Yellowstone, our largest park in the lower forty-eight states—and expand three existing parks. The U.S. Fish and Wildlife Service would acquire nine new wildlife refuges and expand five others. Thirty-three rivers and river segments would be included in the Wild and Scenic Rivers System.

The plan would add 41.7 million acres to the National Park System, 45.1 million acres to the National Wildlife Refuge System, 2.45 million acres to the National Wild and Scenic Rivers System, and 2.5 million acres to the National Forest System.

In comparison, the Udall bill would protect 64.3 million acres as NPS units, 46.5 million acres in the refuge system, 4.07 million acres in the wild and scenic

nic rivers system, and up to 1.6 million acres in the forest system.

Conservationists were upset that the Administration plan deletes more than 5 million acres from the Udall proposal for a 13-million-acre Gates of the Arctic National Park. The acres in question are located on the oil-rich North Slope, and natives have filed claims for them under the settlement act.

Likewise, the Administration plan would delete a critical section from the Udall proposal for a Noatak national preserve in northwest Alaska and would thereby cut off part of one of the few truly undisturbed complete watersheds on the continent. (See June 1977 issue.)

Unlike the Udall proposal, the Carter Administration would not create an Alaska Peninsula Wildlife Refuge to protect important habitat for brown bear and migratory waterfowl.

The Administration does call for wilderness protection for most of Admiralty Island, an area in southeast Alaska that harbors more bald eagles than all of the lower forty-eight states



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# conservation docket

put together. But conservationists urge that the national interest lands legislation designate other areas in that part of the state as wilderness as well. In particular, they point out that key wild lands in the Tongass National Forest are threatened by plans to clearcut timber for export to Japan. The Forest Service has been putting off proposing wilderness in the southeast region.

With the exception of these deficiencies, however, the Administration has

backed a generally comprehensive plan for protecting Alaskan resources; and details concerning proposals for each specific area will be continuously under revision as Congress considers the Alaska d-2 legislation.

The Alaskan d-2 land battle involves the most important land conservation program in this nation's history. The resources at stake range from gaunt tundra to lush rain forests and from Swiss Alps-type mountain peaks to

coastal estuaries. The vastness and magnificence of the lands involved are breathtaking. For instance, the proposed Wrangell-St. Elias National Park alone would contain the nation's greatest collection of mountain peaks and a glacier larger than Rhode Island. The wild areas of Alaska are alive with abundant fish and wildlife—and, if Congress chooses wisely, with promise of remaining a splendid legacy for future generations. ■

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Continued from page 2

atically developed, nor has it been tied in with other agencies and departments.

Such comprehensive planning can be done only at the Presidential or Cabinet level, or by an agency exercising comparable authority; the BOR has had such authority in the past, which presumably it has retained, or with which in any event it could be equipped again.

Essentially this means a planning and administrative agency exercising interdepartmental authority, but situated within the Department of the Interior, ideally the BOR. The NPCA would strongly support the re-establishment of such a system and we believe that we could mobilize broad support for it from the environmental movement, the recreational interests, the Indians, and perhaps from organized labor.

As to the content of the planning, the following elements could be involved:

A freeze would be imposed on facilities catering to overcrowding in the National Park System;

Free public transit would be substituted as rapidly as possible for the private automobile in the National Park System;

Paid and regulated long-line public transportation would replace the private automobile as rapidly as possible to bring visitors into the facility areas in the National Parks from the communities outside the public lands;

Restraints would be placed on further campsite development in the National Parks, and particularly on motorized vehicle camping;

An abundance of new campgrounds, including recreational vehicle camping, would be provided in the National Forests;

In place of the present system of internal concessions within the National Parks, an external concession system would be established, whereby the NPS would authorize consortiums of local recreational businesses in the communities around the public lands to provide overnight accommodations on private land in those communities and operate the long-line transportation facilities into the parks;

With a view to the preservation of outdoor recreation potentials of the National Forests, including scenery, wildlife, and the woods themselves, selective cutting systems would be substituted wherever feasible for clearcutting in the National Forests;

Ranger stations would be established at the highway entrances to the regions containing the parks and forests to guide travelers to available campsites and permit them to make reservations;

A comparable system for the dispersion of visita-

tion would be developed with respect to the wildlife refuges where feasible, the Indian lands where the Indians desire it, the BLM lands, the Defense Department holdings, the reservoirs managed by the Corps of Engineers and the Bureau of Reclamation, and by agreement with the states, the state parks and forests;

The departments involved would include, at least, Interior, Agriculture, Defense (because of its land holdings), Commerce (because of its responsibilities for recreational businesses), Transportation (because of the impact of the highway system), and HUD (because of the urban-type units of the National Park System and the need for developing urban open space to help take the pressure off the parks).

The governing policies of the program as a whole would be spelled out in a signed inter-agency agreement of the kind referred to above. The BOR would coordinate the implementation.

The NPCA has done a number of in-depth studies of the way in which the primeval national parks and several of our national seashores could be protected by this approach. We analyzed the kind of internal planning for the protection of natural conditions within the parks which would be made possible by such a system for the dispersion of crowds. In each case we coupled this analysis with a preliminary plan for the surrounding region as a whole.

These comprehensive plans were submitted to the National Park Service and the Bureau of Outdoor Recreation during the Johnson Administration in support of the comprehensive planning program we proposed. We summarized these studies, of which there were 24 in all at that time, in a compendium entitled *Preserving Wilderness in our National Parks*, a copy of which I am sending to you with the present letter.

We believe that the program we recommended at that time is still valid. It would seem to be in harmony with the comprehensive land administration programs which you have broached for your Department.

I would like to suggest that you allow me and one or two of my associates to meet with you personally to discuss its potentials for the Carter Administration and the American people. It might be very fruitful if you were to have Assistant Secretary Herbst and Directors Delaporte and Whalen join with you in such a conference. Please let me know at your convenience whether you would like to do this.

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