

# National Parks & Conservation Magazine

The Environmental Journal

July 1978



# Individual Responsibility

**T**HE WORLD is composed of individuals. They are the primary units. They bear the burden of existence. It is as individuals that we relate to one another and to our environment. In all forms of life, the individual is paramount—the nucleus around which the natural processes operate, the vehicle through which evolution moves.

In a nature so organized—a nature in which we are a very small part—the decline of the individual inevitably leads to the decline of the collective; yet, in almost every age, the individual has been an endangered species.

From the beginning, this has been the American philosophy, reflected in our articles of government. Our Founding Fathers lived by it, as, grounded in the wilderness, the nation took shape, to become the crowning achievement of western man—a society of free people, self-regulating, self-sustaining, and, for the most part, self-employed. Farmers, artisans, shopkeepers, tinkers, and the like, they were, at home in field and hamlet.

But time wrought changes. With the coming of industry, a centralizing force was generated, drawing people from the countryside and clustering them into factories, mill towns and cities. The pressures to conform and merge into the larger entities grew. Life became standardized.

**T**ODAY, the individualism of our forebears is often questioned as impractical and even undesirable. It is questioned by those who have little faith in our system of government and, I might say, little faith in humanity or in man's ability to find the solutions to his problems without doing violence to his nature. Living as we do, "cheek-by-jowl" with our fellows in tightly packed conurbations, it is *easy* to think along their lines.

True, no man is an island. He is a link—the link through which society maintains, perpetuates, and, on occasion, transcends itself. Links fail, of course, and, when they do, our collective existence, both human and natural, is diminished.

Individuals though we are, we are not ours. In a sense, we possess no life of our own. It comes to us from the environment. And, being free to think and act for ourselves, we share accountability; we are responsible for that environment.

We are responsible, not only at the local level, but at that of the region, the nation, and the world. The environment is indivisible. When our actions disrupt its orderly functioning, the effects may be registered far beyond the point of impact. The environment is finite. It behooves us to measure the demands we place upon it, and to make certain, within the limits of our ability, that nature's life-support systems do not founder under the weight of those demands, or through our abuse, and that they retain their natural capability of providing the human community, globally, with the fundamentals of life—food, shelter, clean air, and clear water. Nor can we forget our fellowship with the wild in this matter.

We have surfeited ourselves in this country for years. Our GNP is an indicator of this unhealthy proclivity. Whole segments of our populace still live starry-eyed in the fantasy-land of the past, when it was fashionable to think of natural resources as inexhaustible. We have made some progress in bringing ourselves down-to-earth in recent years, but our efforts are falling somewhat short and need to be revitalized. If we are waiting for some catastrophe to rouse us, consider the children in Africa and Asia who are dying because they do not have enough to eat—while we pave over good farm land, or strip-mine it. We feed a galloping inflation and disrupt our balance of foreign trade so we can play with dune buggies and snowmobiles and pleasure ourselves along the highways. Are these not catastrophes?

**T**HE SPRINGS of motivation originate in the human capacity to be concerned—to care. It is not so much a matter of mind as of heart—a sense of kinship with nature, a feeling of sympathy for life. This feeling lies deep at the core of each of us. We hold it inviolate, and many of us in secret. It has never suffered separation from

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FRONT COVER Yukon-Charley by Robert Belous, NPS  
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*The proposed Yukon-Charley National Rivers Preserve in interior Alaska abounds in wildlife, geologic and biologic records since pre-Cambrian times, and human history—most notably the romantic era of the Klondike Gold Rush of the 1880s and 1890s. (See page 4.)*

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ROBERT BELOUS, NATIONAL PARK SERVICE

by WILLIAM E. BROWN

## YUKON-CHARLEY:

**T**OM'S URGENT pointing frustrated me more. I couldn't focus the glasses on the right place, and the helicopter bucked a wind that would soon force us away from the cliff face. Finally I spotted them, two peregrine falcon nestlings, balls of white fluff in an eyrie four hundred feet above the Charley River. I signaled "OK" to Tom. He nodded to the pilot, and we began to move away from the cleft that held the nest.

Stark against the cliff, the helicopter's shadow began to rise. A flick of movement caught my eye, a smaller shadow hovering above our own. Crunching against the window, I looked up through the whirling blades into the eyes of an angry peregrine, whose screams were muted by the slapping racket of the machine. To that protesting bird we were a bigger and noisier raven or eagle, another predator to be driven from its nest. Our hasty departure must have proved that this was so.

This experience—during a raptor survey with ornithologist Tom Cade in July 1975—struck me then, strikes me still, as mythic. The scientific purpose of our mechanical intrusion meant nothing to that proud creature, honed to instinctual and physical perfection by this remote riverine landscape.

Next time we come, we should come gently, in a way fitting to this place and its inhabitants. We, too, should be shaped—at least a little—by the terms of the country.

The proposed Yukon-Charley Rivers National Preserve can take you back to Gold Rush and frontier times—and even to primordial times

## Rivers to Yesteryear

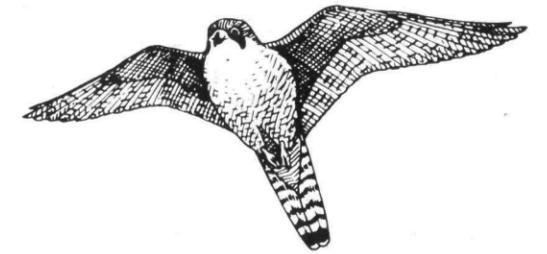
**I**N THE UPLANDS of interior Alaska two rivers—the Yukon and the Charley—bring together natural and human history. The mighty Yukon provided a highway for migration and transport used by man from earliest times. This history culminated in the romantic era of Gold Rush stampeders whose artifacts still haunt the river corridor. But the Charley basin was hardly touched by modern man. It is one of very few entire river drainages where natural rhythms remain unbroken.

These two waterways traverse the heartland of Alaska's eastern Intermontane Plateau. Cutting into the plateau, the rivers have exposed rock formations and fossils that reveal earth's geologic and biologic evolution—a nearly unbroken record from pre-Cambrian times, unparalleled in the United States, perhaps in the world. A long botanical history survives here, for the region's lower elevations were untouched by glaciers. Evidence of ancient hunters, ancestors of modern Athapascans, has recently been discovered on the benchlands of the upper Charley in the undisturbed zone between glacial scour and river floodplain. The area abounds in wildlife, including the nation's greatest concentration of endangered taiga peregrine falcons. Thus, combined in Yukon-Charley, in ancient geological settings, are incredible paleontological records, plant and animal survivors of a bio-geographical island,

and a long history of human interaction with a dynamic environment. Here, in one place, exists a veritable laboratory where evolutionary responses of living things can be traced in nature's foundations and in its living mantle.

To preserve a rich and representative segment of this region, a 140-mile-long segment of the Yukon River corridor and the entire drainage of the Charley River have been proposed for addition to the National Park System as the Yukon-Charley Rivers National Preserve. The proposal stems from the Alaska Native Claims Settlement Act of 1971. Now being considered by Congress, this proposal is one of thirteen that, together, would establish a comprehensive and balanced system of national parklands in Alaska.

**O**N THE FRONTIER between Canada and Alaska, the Yukon-Charley proposal combines the majesty of a mighty river and the intimate beauty of tributary streams. The Yukon—here constricted between soaring palisades—drains the greatest mountain systems of North America. Its opaque waters bear glacial silt from a thousand icy peaks. But the Charley River and its sister tributaries flow clear. Their sources in the Yukon-Tanana uplands and the Ogilvie Mountains are, under the present climatic regime, too far from the sea to catch the deep snows that make glaciers. The



Charley River is proposed for designation as a wild river within the proposed preserve.

Rimmed by mountains, guarded by its own shoals and rapids, the Charley River has foiled massive assault by man. From alpine headwaters the Charley flows north eighty-eight miles to its junction with the Yukon. Along the way it traverses a broad spectrum of interior Alaskan landscapes. Expansive uplands form gigantic tundra-clothed amphitheatres, skylined by ragged granite monoliths. Golden eagles and gyrfalcons soar over these sentinel rocks on glide patterns that nicely trace the mountain airs. Caribou trails lace the high ridges.

Imprinted like outstretched hands on the open mountainsides, stream courses descend thousands of feet in sweeping steps to the narrowing midsection of the Charley. Nourished by the streams, sheltered by their lower canyons and gorges, fingers of subalpine forest reach upward to penetrate the tundra slopes.

As the upper tributaries converge, the Charley plunges into a region of cliffs and bluffs. Dall sheep, normally found on mountain crags, are often seen scaling these riverside scarps. In summer, peregrine falcons guard nesting sites hidden in the bluffs' inaccessible crannies. The Charley's crystal waters gain speed and depth as they careen through alternating shadowed and sunlit narrows



JOHN W. WISE, NATIONAL PARK SERVICE

*The entire drainage of the Charley River is proposed for preservation as a wild and scenic river. Ideal for wilderness canoeing, the Charley is bounded in places by gentle slopes and in others by high bluffs where peregrine falcons nest or Dall sheep leap from ledge to ledge.*

where arctic grayling flash. Side streams are bigger here. In flood they slant through forested benchlands tumbling huge boulders into the Charley, creating the white-water rapids that dominate this part of its course.

Wildlife and trapline trails wind through the bordering forests of white spruce, birch, and aspen. Occasional trapper's or hunter's cabins blend into the forest shade. Along the trails, wisps of hair on bushes mark the passage of black bear or grizzly.

Finally the swift waters break from the hills, and the river changes once again. Now it meanders slowly and deeply through a lowland of sloughs, marshes, bogs, and stands of black spruce. This is moose and bald eagle country. Here, too, lurks the northern pike.

Near its outlet the Charley carves into its banks to expose thick lenses of ice, crumbling sections of the permafrost underlying this country. Even in summer, warmth is superficial here.

Debouching into the Yukon, the Charley's clear waters spill forth against the silt and for a while run bannerlike against the bank. Then they merge and disappear.

**T**HE CHANGE of tone from Charley to Yukon is profound. From a river, one enters the river—big, continental, the central artery of a vast Canadian-Alaskan interior. To be on that river, beyond sound from either shore, is to experience the timeless present.

Now the landscape loses sharpness and blends into distant horizons. Massive cliffs rise toward mountain backdrops. Skyscapes vary from fair-weather cloud puffs and towering thunderheads to lowering squall-driven nimbus and scud. When rain blots out the shore and spindrift whips the waves, then the forested islands float by like ships at sea.

This is the historic environment of steamboats and roadhouses and mining camps where men seeking gold surged up and down the Yukon, alternating between Canadian and Alaskan strikes. Before

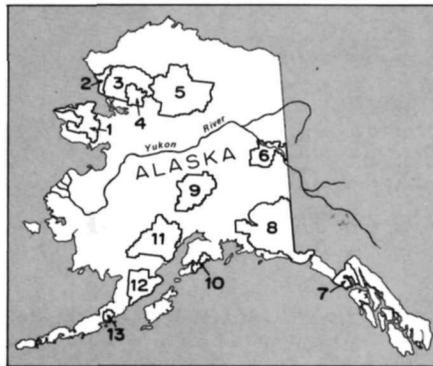
gold, furs brought Europeans into the land of the Kutchin and Han Indians. Along the Yukon the banners of the Hudson's Bay Company and, later, the Alaska Commercial Company flew from trading posts. Before then the Indians spent millennia here, knowing all there was to know about this land, this climate, and the resources that meant survival.

The upper Yukon today is almost deserted by comparison with the yesteryears of the gold moilers. Where a few score people now live along its banks—clinging to its memories or reliving its history—boom towns once sprang up overnight. Shallow-draft, stern-wheel steamers plied the river by the hundreds to bring mail and supplies to the miners and the retinue that followed them from strike to strike.

Circle City, Paris of the North in the 1890s, once boasted an opera house, a library, a hospital, and debating and theatrical groups, along with its dance halls and saloons. By 1899 this glory had faded, and from a population that numbered thousands, Circle City declined to less than a hundred souls.

The light of fortune moved on to shine on Eagle, 160 miles upstream near the Canadian border. As Indian village and trading post, Eagle antedated the gold-rush era. But under the impact of the last stampede in these parts, it reached its heyday: center of military and civil administration in northern Alaska, crossroads of transportation and communication, port of entry and supply center. These solid reasons for existence lent an air of permanence and order to Eagle's history, still evident today. Here, too, the heyday ended when the miners moved on, but a heritage embodied in the town's proud people and its reclaimed historic buildings recalls the days of Fort Egbert and the bustling river port.

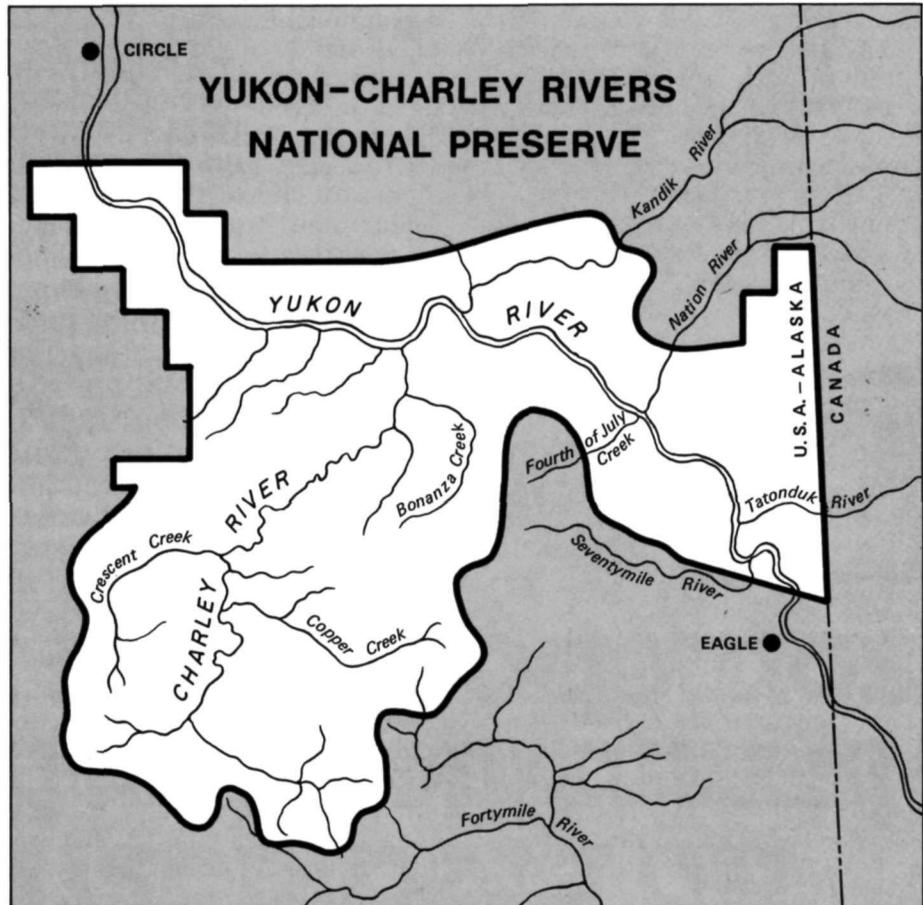
Along the banks of the Yukon old cabins and camps molder into encroaching vegetation. Collapsing fish racks, a broken stove, a child's shoe, old catalogs and letters and diaries—these are the hints of the



MAPS BY JAMES F. O'BRIEN

#### NPS PROPOSALS IN ALASKA

1. Bering Land Bridge National Preserve
2. Cape Krusenstern National Monument
3. Noatak National Preserve
4. Kobuk Valley National Park
5. Gates of the Arctic National Park
6. Yukon-Charley Rivers National Preserve
7. Glacier Bay National Park
8. Wrangell-St. Elias National Park
9. Mount McKinley National Park
10. Kenai Fjords National Park
11. Lake Clark National Park
12. Katmai National Park
13. Aniakchak National Monument





The Yukon River has long served as a pathway of migration and travel. During Gold Rush days stampedees, enduring unbelievable hardships, swarmed down the Yukon from its headwaters in a multitude of jerry-built crafts and up the river from its mouth in paddlewheel steamboats to the gold fields of the Klondike, the Fortymile, and other rivers. Throughout the 1880s and 1890s the Yukon was the Mississippi of the North, serving as the transportation route for hordes of prospectors and for tons of supplies. Now, moldering cabins and abandoned equipment remain as reminders

people who once listened for the boat whistle and gathered at a score of landings to get news of a distant world or to load cordwood on the deck of an insatiable steamer.

This part of the Yukon corridor recalls a much longer historic corridor that stretched from Seattle to Skagway to Circle City and beyond to the Bering Sea when the glitter of gold spurred stampedees to the Klondike. Today a string of international parklands and historic environments—including nearby Dawson City in Canada's Yukon Territory—commemorates those frenzied days.

In time, pan and sluice box were succeeded by mechanized placer mining. Still-active dredges on Coal and Woodchopper creeks perpetuate this history. Here, and on other streams and creeks, are the last holdouts of a past century—prospectors and trappers who would be right at home with Klondike's discoverers or whooping it up at a Hudson's Bay rendezvous. These people migrated from someplace because they wanted to go back to a bygone era. Some of them learned their woodcraft from the Indians of Eagle Village, who themselves are torn by the painful tug of different eras.

**T**HE Yukon-Charley country is not always a place of sunlight, verdance, and flowing streams. Fall colors, brisk nights, and diminishing daylight signal the rapid onset of winter. All too quickly water congeals, arctic night descends, snow flies, and cold sets in. This is polar cold—50, 60, 70 degrees below zero. It ushers in a frost-clinched time of snug cabins and wood fires. Silent, snow-clad landscapes glow dimly in the brief and slanting light. At night auroral brilliance shimmers across the margins of outer space. Away back in the valley a lonely trapper seeks the lynx that seeks the hare.

But then the sun comes back and the light returns. There are stirrings in deep dens. Brittle trees and bushes limber up and put forth buds. Green pioneer shoots push through melting snow. The candled ice on the river begins to crack and groan. With thunderous sound and massive movement the winter's armor breaks up and jams, and floods flush it away. All that once was dormant shakes itself awake. The drone of the mosquito is once more heard in the land, the myriad birds return, and it is summer again.

**I**N YUKON-CHARLEY the rivers and terrain and climate and insects pretty well dictate how people conduct themselves. Not many people go there in the depths of winter. It's too damn cold and dark. Some people enjoy the place in early winter and early spring: good light, not too cold, and the place is very beautiful then. Currier and Ives couldn't come close to portraying its silent silhouettes. But you need to be expedition equipped, and you have to hook up with a guide and a dog team to do it right. So it isn't exactly a mass transit operation. Anyway, the roads are closed from about mid-October to mid-April. Flying in is expensive.

Most visitors come in summer—say mid-June to late September. During this time the insects are hellacious. Back from the rivers, past bordering spruce and natural levies, stretch insect-infested bogs. Nobody camps there, unless they want to lose a lot of blood. You camp on the river bars, islands, and banks where a little breeze helps to keep the mosquitoes and their mean relatives away. You don't hike around much, unless you can get to a ridge shoulder and on up to the high places.

of this historical era. Dog teams were an essential mode of travel then, and they still have not been replaced completely by snowmobiles. At right a team rests briefly near Eagle, Alaska.

The nature of the climate and terrain means that Yukon-Charley is a place to be taken on its own terms. The people already in the region do just that. I said earlier they want to go back about a century (at least some of them in some ways). I think a lot of people who commit themselves to visit Yukon-Charley want to go back, too. That's why they left home to bust their windshields on the Alcan Highway. Wouldn't it be dandy if they come to this historic environment—this place where you can see forever, where you can see *the same things* that a prehistoric Indian saw, or a Hudson's Bay trader, or a Klondike stampeder, or a teacher on a steamboat, or a sled-running mailman—I say wouldn't it be dandy if they found it just the way it is? I think so. I want to go back, too. ■

**William E. Brown** has worked as a historian and park planner with the National Park Service for most of the time since 1957. He has occasionally taken time off to work with environmental groups on Southwestern and Alaskan issues and is now working with a research division of the University of Alaska on North Slope subsistence and cultural resource studies.



KEITH TREXLER, NATIONAL PARK SERVICE



R. CAULFIELD, NATIONAL PARK SERVICE

Long thought extinct in the East,  
the panther recently has been sighted  
numerous times  
in the Southern Appalachians

article by SUSAN POWER BRATTON  
drawings by LUCIA DE LEIRIS

## Is the Panther Making a Comeback?



**S**HE WALKS QUIETLY, as if she were totally aware of her own magnificence. Two spotted kittens follow behind her, a rambunctious contrast to their cautious mother. Weaving down the mountainside, they step out of the forest shadows into a clearing. Several picnickers suddenly see something that is not supposed to be there, and everyone stares in awesome disbelief as the mountain lion family slowly crosses a road in the middle of Great Smoky Mountains National Park. Did these lucky park visitors really see a lion?

**T**HE EASTERN mountain lion, known in the Appalachians as the panther (often pronounced "painter"), is now nationally endangered. The species originally occurred throughout eastern North America, but extensive hunting and destruction of its wilderness habitat resulted in a severe reduction of the lion population. A few panthers are known to inhabit the Florida Everglades, but the species has long been considered extir-

pated from the remainder of the eastern United States. In the early 1900s both the eastern timber wolf and the mountain lion were pronounced extinct in the Southern Appalachians. Although occasional sightings of big cats continued through the thirties, forties, and fifties, most of these reports were met with skepticism and were attributed to too much corn liquor and an overeager imagination. Recent evidence indicates, however, that this fascinating animal not only may be living in the Appalachians, but could be slowly increasing in numbers.

Ben Sanders, of the U.S. Forest Service, was one of the first biologists in the area to realize that the panther might well be recovering part of its former range and that its endangered status would make proper management of the species a critical issue on federal lands. Sanders began to investigate sightings himself and urged other wildlife managers to do the same. Perhaps the incident that most spurred the effort was a widely re-



ported sighting in 1975 in Pisgah National Forest, North Carolina, where a group of visitors saw a female with kittens cross the road in broad daylight. Most of the witnesses could describe the animals exactly, down to the dark tip on the mother's tail. The panther was later seen again near the same site by a Forest Service employee.

Nicole Culbertson, a college student working with Uplands Field Research Laboratory in Great Smoky Mountains National Park, interviewed dozens of people who had reported seeing panthers in or near the park. In a report finished in March 1977, she concluded that at least forty-four reliable sightings had been made since the 1930s. Nicole also discovered that the greatest number of sightings were from the areas of highest deer density, not from areas of highest visitor density, such as the Appalachian Trail. This discovery is not surprising, inasmuch as deer are the panther's principal source of food. If people were merely imagining panthers, however, one

would expect the sightings to correlate strongly with the number of people using a site. They don't.

Many of the recent sightings have been made by rangers from both the Smokies and the Blue Ridge Parkway, by trail crews, and by other people who "know the woods." A sighting by Park Service ranger Kent Higgins in June 1977 is typical. Ranger Higgins was driving along Laurel Creek Road just outside Cades Cove in Great Smoky Mountains National Park when he thought he saw a redbone hound cross in front of him. Taking a closer look, he realized that the legs of the "critter" were much too thick to be those of a dog and that he was seeing something far more exciting. He got a good look at a young panther, "red-brown in color, same as a deer in summer, and having a long tail." (Panthers range in color from a tawny grey to a reddish-brown.)

Another impressive sighting from the Great Smokies occurred in 1975 near Chimneys Picnic Area on Newfound Gap Road. Among a

group of visitors who saw a panther with kittens was a Mr. O'Harris, a retired animal trainer who had worked with big cats for fifty-five years. He followed the panthers down to a nearby stream and provided a very accurate description. During 1976 two other sightings of panthers with young in other areas of the park were reported.

With sightings of panthers should come other sorts of sign as well. A few cat scats (droppings) that are too large for bobcat have been found in areas where lions have been reported. Ben Sanders has photos of covered kills found in national forest areas and is attempting to obtain more of this sort of evidence. A dead buck found in the winter of 1976 in the Tremont area of Great Smokies may have been a panther kill. The marks left by the predator's teeth were too far apart to be those of a bobcat, and the claw marks made by the front and rear feet were also widely spaced. The buck was large and did not seem to have any injuries other than those caused by the



predator. The only animal other than a lion large enough to be capable of the kill would be a black bear, but they should have been denned up and not eating then.

In the past two years panther tracks have been identified at several locations in the region. Frank Singer, a Park Service wildlife biologist, found a set of panther tracks near a dead deer in Cades Cove. J.R. Buchanan, an expert tracker who frequently participates in mountain rescues, was following a wild boar family along the Appalachian Trail when he noticed a set of lion prints in the snow. Apparently the lion was also tracking the hogs.

**A**S REPORTS of panthers become more numerous, the need for a clearly defined management program in the Southern Appalachians becomes more and more pressing. The U.S. Fish and Wildlife Service in cooperation with the Forest Service is now setting up a regional study that will attempt to determine the abundance and distribution of the east-



ern cougar in the Appalachian Highlands. This study, to be supervised by Dr. Robert Downing, will include investigation of sightings and tracks and an attempt to use scent posts and recorded calls to attract the predators to sites where they might be photographed. The Forest Service plans to continue other research, including the use of a professional lion hunter to verify the presence of cougars on federal lands.

The elusive panther may eventually influence a number of policies concerning land management in the Appalachians. Panther habitat could be affected by a number of proposed road-building projects, including the controversial Transmountain Road in Great Smoky Mountains National Park. For instance, the suspected panther kill found near Tremont in the Great Smokies was within a few hundred feet of the suggested route for the new road over the mountain. Forest cutting practices that favor deer should also favor panthers. This factor could be considered in

Forest Service policy in the future. The presence of designated wilderness areas may also help to preserve the species; and protection from hunting, especially from poachers with dogs, may be very critical. Panthers have large home ranges and may move great distances to establish new territories. Cooperation among several state and federal agencies will probably be necessary to ensure proper management for the whole region.

**T**HUS FAR, the return of the big cat has been viewed with great interest by park and forest managers. The Forest Service has been enthusiastic in its support of research on panthers, and plans to continue the effort in the future. The Superintendent of Great Smoky Mountains National Park, Boyd Evison, has a personal interest in panthers and collects sighting records himself. He believes that the big cats may be important to future park management and is very much aware that the Great Smokies is one of the few places

in the eastern United States where enough wilderness habitat is available to support large mammals such as panthers and bears. The day may be coming soon when the Smokies is one of the only places in the East where a hiker can sit in camp and hear the unforgettable scream of the panther echoing over the ridges.

Panthers are large, powerful animals but are usually quite shy of man. No finer symbol of the eastern wilderness exists than this solitary lord of the mountains. Many wildlife enthusiasts hope that the proud cat may someday again become a permanent resident of the Southern Appalachians and live undisturbed—a wild and mysterious creature in a wild and protected land. ■

**Susan Bratton is an ecologist involved in research work in southeastern national parks. She has completed a number of studies on the European wild boar and its impacts, backcountry visitor use, and plant community structure.**



How can we achieve benefits of economic growth without suffering its adverse side effects?

## Dynamic Equilibrium as an Alternative to Unrestricted Growth

LAST YEAR I interviewed government and European Economic Community officials and nongovernmental representatives working on environmental problems in several European countries. Most of them were interested primarily in short- or medium-term aspects of the problems, were more concerned about pollution than energy shortages, and did not perceive population growth as an important aspect of the problems. Their chief worry was that the needed environmental measures would be blocked by public fears that they might increase unemployment or inflation. To these fears they had no convincing answer. Inasmuch as they could see no way of getting rid of unemployment and inflation, they were more or less resigned to waiting until these short-term problems went away by themselves before getting substantial measures of environmental protection adopted.

This experience, which somewhat parallels the situation in this country, made me aware that we are caught in a dangerous short-term, long-term bind. The long-term environmental problems won't go away for being ignored. And the short-term problems of inflation and unemployment won't cure themselves either. Indeed, they are likely to be intensified by growing world shortages, and by the rising costs of pollution control.

To break out of this vicious circle, it seems to me we must convince the public and the officials that problems of unemploy-

ment and inflation *are* soluble and should if possible be solved by measures that will reduce rather than intensify the environmental problems that lie ahead. Moreover, we must show them that unless we tackle the environmental problems seriously, we are likely to make our short-term inflation and unemployment problems worse and that finally solving the environmental problems is not a luxury that can afford to wait but a precondition for the survival of our civilization.

To do that, we must give people a better understanding of the nature of the world crisis toward which we are moving. In addition to its obvious military, political, and social aspects, this crisis has three primarily economic aspects. It is to these aspects alone that this paper is addressed. They comprise what might be called the "Exponential Growth Syndrome" and two major negative externalities.

**EXPONENTIAL GROWTH**, which is, of course, growth at a constant or rising percentage rate, produces rapidly increasing, and finally explosive, absolute amounts of growth. For example, for 99.99 percent of the time that *Homo erectus* has been on earth, his numbers have grown on the average by only 300 *individuals* a year, or fewer. But in the past 165 years the numbers grew by an average of 24 million a year, and within a decade it will probably be increasing by 110 million a year—almost half the present U.S. population. But the size of the earth and

the amount of nonrenewable resources it contains are fixed. I don't think that the Meadows study on the *Limits to Growth* (or even the detailed followup in *The Dynamics of Growth in a Finite World*) really prove that disaster is inevitable within 125 years if past growth rates continue. But I have examined the detailed criticisms of their models and have been forcibly impressed by how little difference it makes even if one accepts the alternative assumptions of the critics.

Professor William D. Nordhaus, for example, has argued that the "ultimately recoverable" resources are far larger than presently estimated reserves, and he concludes that ultimately recoverable amounts of coal would suffice for more than 5,000 years of current world consumption.<sup>1</sup> But at past rates of growth in consumption this would last, not 5,000 years, but less than 150 years.<sup>2</sup> Indeed, if past rates of growth are continued, it is impossible to see how any of the presently known nonrenewable resources could possibly last more than 200 years.<sup>3</sup> Even if we entered an age of fantastic substitutions and recycling, as envisioned by Alvin Weinberg of the Department of Energy and others, and if the requisite energy from breeder reactors did not quickly destroy us by violence, radiation, or thermal pollution, we would postpone the day of reckoning by only a few centuries. On my calculations, if the tons of minerals presently mined increased by only 3 percent a year, we would be annually mining more

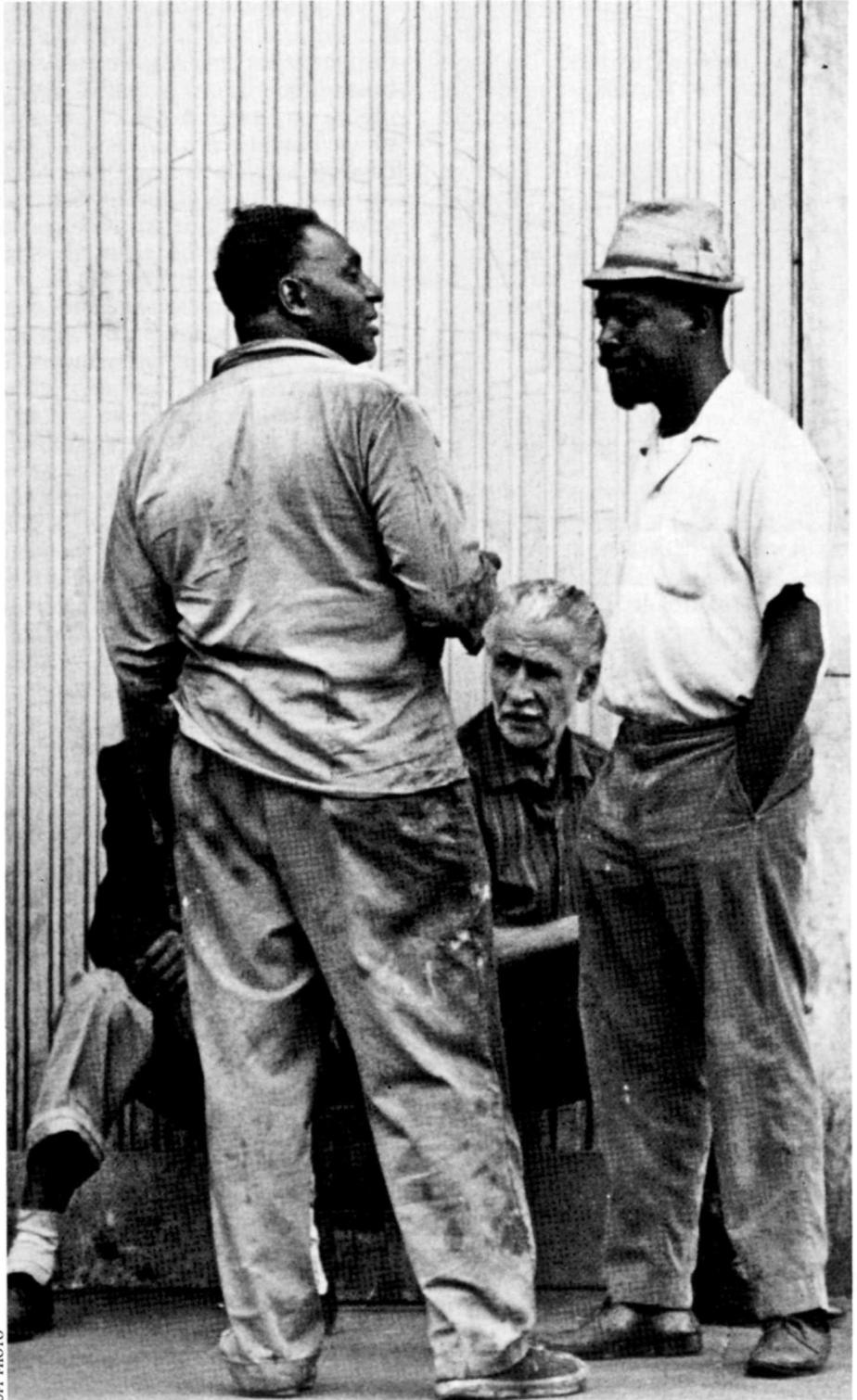
by EMILE BENOIT

than the weight of the earth within a thousand years.<sup>4</sup> And one thousand years is only a quarter of recorded history. Relative to the 3½ million years or more that *Homo erectus* has already been around, this is much like diagnosing an illness of a relatively young man as terminal.

I realize, of course, that no simple mechanical projection can yield realistic results. But I am chiefly interested in understanding *why*. That is what these simple calculations (which were not intended as projections) were intended to help explain. If growth is already beginning to slow down, it is partly because an awareness of incipient shortages and the rising costs of environmental protection have contributed to inflation and unemployment. But there is an enormous difference between what looks like a tragic failure to achieve one's central objective and the recognition that one's central values can be reached only by a slightly different route.

The Exponential Growth Syndrome involves not only indulgence in exponential growth, but modification of institutions and attitudes such that continuation of exponential growth seems indispensable, and reliance is placed on technical fixes to overcome any barriers to its indefinite continuance. More and more this involves living on capital, rather than on income—borrowing from the future and running risks that cannot be objectively estimated in advance and often involve recourse to desperate expedients. To justify

*Unless we tackle environmental problems seriously, we are likely to make our economic problems worse.*



UPI PHOTO

this, the costs are ignored or grossly underestimated.

The crucial costs here are two negative externalities and what might be called The Macroeconomic Diseconomies of Scale, when production exceeds certain limits.

**T**HE FIRST of these negative externalities—pollution—has long been recognized by economists; but its significance has been minimized by viewing it as merely a “disamenity”: i.e. an esthetic disutility, not remotely comparable in importance to the positive utilities created by economic growth. Only gradually are we coming to recognize that beyond a certain point pollutants can undermine the health, productivity, and even the viability of mankind. Moreover, the comforting assurance that adequate pollution control can be obtained, despite continued exponential growth, by devoting a small and fixed percentage of the Gross National Product (GNP) to this purpose now seems to be sheer delusion. It overlooks the fact that as the natural sinks become overloaded, they will no longer automatically disperse, neutralize, and recycle our wastes—and that the attempt to do so artificially can become astronomically expensive, especially as energy costs rise and as the waste products of consumption and production contain more and more artificial and novel components resistant to the purifying effects of natural sinks and often extremely noxious to various components of the biosphere, which have evolved no natural defenses against them.

This discussion brings me to the second type of negative externality, which I have previously identified as “excess depletion.”<sup>5</sup> Clearly, the unaided free market cannot equitably allocate nonrenewable resources between present and future generations, because future generations are not yet in the market. Colin Clark demonstrated in his seminal article on “The Economics of Overexploitation”<sup>6</sup> that the rational entrepreneur who sufficiently discounts future income may very well find that it pays to

overexploit and destroy even renewable resources. For nonrenewable resources, the case is even stronger. Actual depletion charges reflect the estimated sacrifices made by the present owner in relation to the possible appreciation of these assets in his lifetime, or that of his children. But potential future income is heavily time discounted, and there is absolutely no room in the equation for what uncoun­ted future generations would be willing to pay to leave the resources unused until they arrive. This gap between what the resources are worth to the present owner and what they could be worth to mankind in the very long run is what I call “excess depletion.”

So long as production and consumption were small in amount, and mainly of a type using relatively little nonrenewable resources, and creating only small amounts of noxious and nonbiodegradable pollutants, these negative externalities could be viewed as of relatively minor importance, not significantly offsetting the welfare benefits arising from the growth in the GNP. With the advent of the exponential growth syndrome, this can no longer be taken for granted; and it is high time for economic theory to give explicit recognition and formal analysis to the profound change that has now occurred.

Nevertheless, as a practical matter we must remember that we are already “hooked” on the Exponential Growth Syndrome and are unlikely to abandon it unless we can find a substitute that will achieve its central goals: a rising average level of welfare, reasonable minimal standards, and the hope of one day eliminating material care from the world. This, I am afraid, could not be achieved by a Steady State Economy—at least not starting from where we are now. A world GNP per capita of around \$30 a week is grossly insufficient to provide a good life, and no amount of redistribution could raise that figure—although through its adverse effects on incentives it could drastically lower it. And the rate of productivity gains, without net capital inputs would be far too low

to give substantial hope to the miserably poor—as we all would be if income were equally divided.

How, then, *can* the essential benefits of growth be achieved without its adverse side effects? It seems an impossibility, but I believe that if we can examine our society sufficiently objectively, as an anthropologist studies an alien culture, and can think away the conventional wisdom rationalizing the pursuit of power by various vested interests, then we can perceive at least the general outline of a possible solution.

**I** CALL IT Dynamic Equilibrium. It is dynamic in that it involves continuous growth in knowledge and technology, as well as in investment in the acquisition of this knowledge and technology, and continuous and reasonably rapid improvements in real levels of welfare. It is an equilibrium—not automatic but sustained by policy—between the economy and its natural milieu, because it avoids any accumulation of pollutants in the environment or any excess depletion and ultimate exhaustion of resources. Its quintessential features are as follows:<sup>7</sup>

**Conservation/Simplification:** The abolition of avoidable wastes; provisions of strong incentives to economize in the use of nonrenewable resources; the progressive elimination of those elements in consumption that are not primarily intended to provide intrinsic satisfactions but to establish and display status (purely symbolic means of status display may be substituted if necessary); a shift in lifestyles emphasizing leisure, personal activities, social and political involvement, cultural enjoyments, and consumption of services instead of goods, as the prime constituents of the good life.

**A Scientific/Technological Renaissance:** Spending the *maximum* useful amount on higher education and research and development priorities toward environmentally relevant problems, such as development of renewable nonpolluting energy sources, recycling, population control techniques and pro-

grams, ecologically sound agricultural programs, conservation programs, measurement and control of pollutants, and so forth.

**Negative Population Growth:** Involving the abolition of existing pronatalist tax and welfare benefits, as well as the privilege of exploiting child labor within the family circle—substituting instead regular payments, and supplementary retirement allowances, to those with only one or two children (plus, of course, widespread diffusion of well-publicized free population control services).

Although these programs are admittedly controversial and their optimal provisions can be determined only after much more analysis and research, I am convinced that each of them is indispensable and that no single one of them would be adequate. I also believe that they could be implemented via the existing governmental powers of taxation, subsidies, licensing, contracting, and the establishment of minimal standards. It is sheer defeatism to assume that they would require tyranny and the diminution of democratic liberties. On the contrary, they would require, in my view, additional safeguards against corruption and the arbitrary use of governmental power and would be aided by a strengthening of the democratic process.

However, space is lacking to discuss this important dimension of the problem, and we must return to the economic issues, particularly to the short-term issue of inflationary recession that is now blocking action on environmental reforms.

**A**FTER working for thirty-five years on full-employment problems,<sup>8</sup> I have encountered only one credible program for assured full employment—that of Dr. John H. G. Pierson, a Yale economist, who worked for years in the Labor Department and the United Nations.<sup>9</sup> His program is based on a dual set of guarantees.

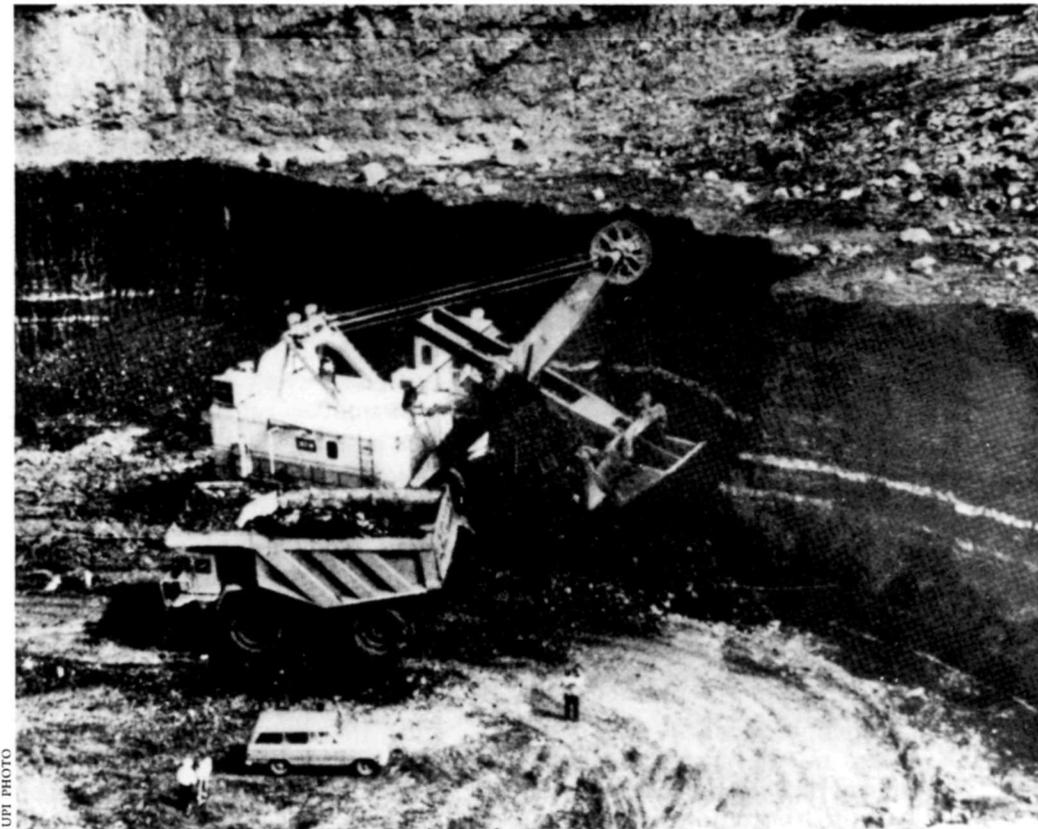
First there would be a government guarantee that a level of consumer spending would be main-

tained that (together with anticipated investment and government spending) will both avoid inflation and provide employment opportunities for all qualified workers—except for minimal frictional unemployment. Moreover, the government would also guarantee that to the extent that there is a shortfall in the number of job opportunities, despite the achievement of the guaranteed level of consumer expenditure, it would supply temporary public service or public work jobs to the extent of the shortfall. The first guarantee would be implemented by flexible and quasi-automatic changes in taxes affecting consumer disposable income. (Today with a computerized and wide-based withholding tax this could be done very easily.)

The second guarantee would require the prior establishment of a shelf of needed public works and public services that could be rapidly expanded or contracted as required and the funds for which had already been voted in advance, but



*Natural resources will become ever more precious to future generations as the resources become scarcer.*

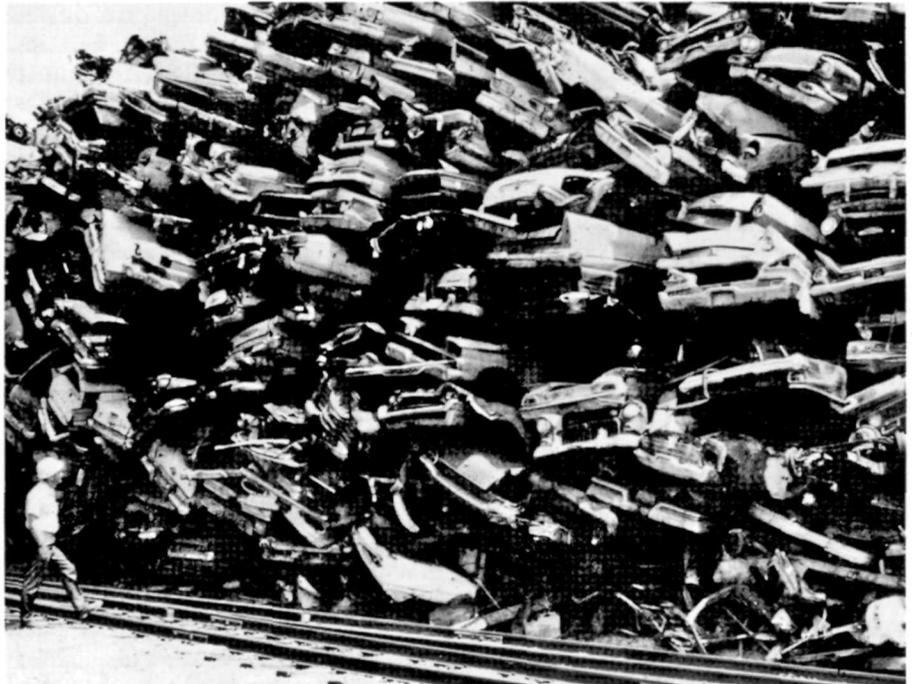


to be expended only under the specified conditions.

Such a set of dual guarantees would, like self-fulfilling prophecies, facilitate their implementation by helping to stabilize consumption over time and thereby also stabilize investment anticipations and expenditures. It would also provide the key reassurance to private enterprise that the public sector would not become permanently larger than is desired for its own sake.

I now think that one important change in emphasis is required by the emerging long-term problems. Although I have been arguing for deficit-financed tax cuts as an antirecessionary measure for thirty years,<sup>10</sup> I now consider that they have one serious weakness: they tend to restore and revive the previous pattern of consumption and investment, not to *change* these patterns as required by Dynamic Equilibrium. I now feel that the same short-term stimulative effect can be achieved, with better long-term ecological benefits, if instead of tax cuts we increasingly resort to subsidies. For example, instead of tax cuts that help people to continue buying more big cars and roomy houses, we could well subsidize the production of mopeds, the building of bicycle paths, the restoration and improvement of the railroads, the insulation of existing houses, and the restoration of structurally sound but decaying apartment houses. (The American preference for concealed subsidies, via tax allowances, restrictive licensing, and so forth over overt subsidies to achieve public objectives is part of the Free Enterprise mythology.)

It is one of the most dangerous illusions of modern times that full employment is inherently inflationary and that to contain inflation we must accept a substantial amount of excess unemployment (i.e. in excess of frictional unemployment). The Phillips curve, which holds that we must accept excess unemployment in order to control inflation, is today's analogue to the nineteenth century's



UPI PHOTO

*A shift in lifestyles to consume fewer goods and waste less is one factor in balancing economic growth with environmental reality.*

Iron Law of Wages. Completely overlooked are the antiinflationary effects of increased production and the cost reductions from fuller utilization of plant.<sup>11</sup> Moreover, full employment via consumption level guarantees would have built-in controls against a major component of demand inflation by automatically raising taxes and reducing consumer disposable purchasing power whenever consumer expenditure exceeds a predetermined maximum.

This process would moderate but not end *cost-push* inflation. The cost of living, or the GNP deflator, has risen every single year in the past quarter century—even during recessions and when raw material prices and import prices declined. The Phillips curve notwithstanding, we have now had rampant inflation *and* mass unemployment simultaneously, and the outlook is for more of the same.

**M**Y OWN proposed formula for controlling *domestic* cost-push inflation is (1) a 100 percent or larger tax on profits of firms in concentrated industries with substantial market control, to the ex-

tent that such profits are derived from price increases greater than increases in production costs; and (2) a similar tax on trade union treasuries and trade unionists of any wage increases in excess of productivity increases. Although this formula would superficially resemble an incomes policy, it would avoid the stifling effect of detailed regulation and would leave the initiative in the hands of business and labor. It would simply penalize, after the event, any abuse of oligopoly power. Although it would require some additional record keeping or disclosure, it would be quite in line with already well-developed precedents for retroactive renegotiations or price adjustments in defense contracts.

Imported cost-push inflation poses a more difficult problem. Even with flexible exchange rates, import prices can be successively raised by a cartel to offset changes in the terms of trade. Under these circumstances subsidies are more than ever necessary to help develop domestic sources to replace imports and to reduce costs of *other* domestically produced products and services that importantly af-

fect the cost of living index. Moreover, insofar as higher import costs do involve genuine sacrifices for the importing country, these sacrifices must be made either by fixed-income recipients paying higher prices or by the public at large being forced to cut back on consumption by higher taxes. If we prefer the noninflationary path, we must have the courage to raise taxes, especially on overpriced imports and items that use such imports and on luxury and wasteful consumption generally.

I hope it will now be clear how long-term and short-term solutions can be made to reinforce rather than to obstruct one another. As I visualize it, full employment can be helped by major government subsidies to industries both old and new that are environmentally needed. It will also be aided in time by reducing the number of people looking for work through negative population growth. And inflation can be reduced by new technology cutting our need for expensive imports and by a change in lifestyle deemphasizing goods and emphasizing activities and services.

On the other side, only if we recapture the confidence that full employment can be maintained and disemployed people quickly rerouted to new jobs and that average price levels can be stabilized (by reducing some prices as others go up) can we realistically expect to embark on the long-term environmental programs we need—which will necessarily cause disemployment in some environmentally dangerous or waste-

ful industries and require substantial increased costs for new energy sources and antipollution equipment.

**I**N CONCLUSION, I would like to revert briefly to certain sociopolitical implications. Energy Secretary Schlesinger said in Paris on October 5, 1977, that failure of the Western alliance to control oil imports would cause a major economic and political crisis by the mid-1980s, producing "a degree of political and social unrest of a kind we did not see in the 1930s" and "threatening the future of our free society." Similarly, a study by two scientists, Jerry Decker of Dow Chemical, and Dr. Willem Vedder of General Electric, was reported by Jack Anderson to be circulating within the government, on a highly classified basis, warning that "social upheaval and revolution" may destroy the United States by the year 2000 unless the nation takes prompt and drastic steps to cope with the energy crisis.

In evaluating such predictions, two political considerations should be kept in mind. First, the U.S. constitution, with its federal structure and its built-in checks and balances, is well suited for preventing sudden changes, except in the case of recognized emergencies like wars or depressions; but it offers severe obstacles to prompt, courageous, and necessary changes to head off a pending crisis that has not yet arrived. (And the recent wave of *neo-laissez faire*, reinforced by well-justified revulsion against past government corrup-

tion and inefficiency certainly doesn't help.)

Second, our society already faces powerful enemies, both internal and external. The internal enemies will be greatly strengthened if we persist in keeping a substantial segment of the population unemployed in order to moderate inflation, and our external enemies are especially skilled in augmenting the discontent of our internal enemies and giving it a revolutionary edge. Moreover, my recent research in Europe has strengthened my impression of the enormous difficulty involved in getting major new policies adopted on a coordinated basis across national boundaries, even in a group like the European Economic Community, nominally dedicated to policy coordination, and with their vital interests at stake in achieving it.

Thus the survival of free societies, even in the middle term, requires a vivid awareness of the interrelations of our short-term and long-term problems and a strategy for attacking them both simultaneously. It is precisely this strategy that Dynamic Equilibrium is intended ultimately to provide. ■

**With deep regret we have learned of the death of Dr. Emile Benoit in early May. Dr. Benoit was Senior Research Associate and Professor Emeritus at Columbia University. This paper was presented at a session on Economic Growth Theory and Models of the Atlantic Economic Conference on October 13, 1977, at the Hyatt Regency Hotel in Washington, D.C.**

#### Notes

1. William D. Nordhaus, "Resources as a Constraint on Growth," *AER*, May 1974, p. 23.

2. Emile Benoit, "Must Growth Stop?" in *Frontiers in Social Thought Essays in Honor of Kenneth E. Boulding*, North Holland Publishing Company, 1976.

3. Emile Benoit, "The Coming Age of Shortages," *Bulletin of the Atomic Scientists*, January 1976.

4. *Ibid.*, pp. 14-16.

5. In "Optimal Use of Non-Replenishable Energy Resources as Between Generations." Paper presented at AAAS meeting, Boston, February 1976.

6. In *Science*, August 17, 1973.

7. These features are more fully described in "The Dynamic Equilibrium Economy," *Bulletin of the Atomic Scientists*, February 1976, and "The Path to Dynamic Equilibrium," Joint Economic Committee, U.S. Congress, December 2, 1976, U.S.G.P.O. Doc. 78-115.

8. See e.g., "Net Investment, Consumption, and Full Employment," *AER*, December 1944; "Full Employment, Its Legal and Economic Aspects," *Antioch Review*, Fall 1946; and "On the Meaning of Full Employment," in *Review of Economic Statistics*, May 1948.

9. A list of Dr. Pierson's publications is presented in *A Full Employment Program*

for the 1970s, ed. by A. Gartner *et al.*, Praeger, 1976. See also my review: "Full Employment Policy Revisited," in *The New Republic*, April 28, 1973.

10. *Vide supra*, and especially "A Tax Cut Now?" (Debate with Senator Paul Douglas), *The New Republic*, August 13, 1962.

11. See Emile Benoit, "Inflation-Unemployment Tradeoff, and Full Economic Recovery," *American Journal of Economics and Sociology*, October 1975, reprinted in *A Full Employment Program for the 1970s*, *op. cit.*

THE NATIONAL PARK SYSTEM

# Thirteen Possible Additions

THE NATIONAL PARK SERVICE'S 1978 "wish list" of thirteen possible additions to the National Park System is no mere bureaucratic daydream. Public Law 94-458, otherwise known as the General Authorities Act, passed in 1976, requires the Park Service to submit a yearly list of at least twelve possible additions to the Park System, with the areas ranked according to their national significance. Threats to resource values and cost

escalation factors are also taken into consideration in listing the areas in order of importance or merit. Descriptions of the thirteen areas on the 1978 list follow, in sequence of the National Park Service's assigned priority.

Congress has taken action on most of the areas the Park Service recommended, so pending congressional proposals are indicated for those areas involved.

**1. FRIENDSHIP HILL NATIONAL HISTORICAL PARK** in western Pennsylvania would preserve the home of Albert Gallatin, a man of extraordinary talents who figured prominently in the early history of the United States.

Gallatin's story provides a romantic and adventurous example of immigration from the Old World to the New. The son of a well-to-do Swiss family, Gallatin received an excellent education in Geneva. There, his interest in such radical ideas of the day as Rousseau's call for a return to nature, caused a philosophical break with his family that led to an abrupt departure for America shortly before his nineteenth birthday in 1780. For the next several years he tried his hand at selling West Indian goods to Maine farmers with little success and later taught French at Harvard College.

In 1784, apparently still intrigued by Rousseau's philosophy, or at least caught up in the spirit of the new country, Gallatin set out across the Alleghenies with a small exploring party. (He was later to establish his permanent western home, Friendship Hill, in the wilderness of Pennsylvania.)

With characteristic energy, however, Gallatin at last found the course best suited to his natural talents. An

unusually gifted young leader, he launched a career of public service that would span four decades. He served several terms as a U.S. representative, and held the office of Secretary of the Treasury under President Thomas Jefferson. He was chief negotiator of the Treaty of Ghent, which ended the War of 1812, and served as both minister to France and ambassador to the Court of St. James. During his later years he was president of the National Bank of New York, later the Gallatin Bank, and helped found New York University. He also wrote a book on the Indian tribes in the United States and founded the American Ethnological Society of New York, earning himself the title of "father of American ethnology."

Gallatin built Friendship Hill, the house that still stands on the banks of the Monongahela River, in 1789, but spent little time there during his lifetime. His various duties in Washington and abroad kept him away much of the time; and when he was free to return to Pennsylvania, his family objected to the cultural isolation of the area.

Now privately owned, Gallatin's house still stands, built of local stone and shaded by fine old trees. However, the integrity of the site, which is underlain by coal, is threatened by strip mining recently begun in the area.

**2. WAR IN THE PACIFIC NATIONAL HISTORICAL PARK and GUAM NATIONAL SEASHORE** would be located on the island of Guam in the western Pacific Ocean. Part of the Spanish Empire for three hundred years until annexed by the United States in 1898 as a result of the Spanish-American War, Guam has since played an important role in the history—particularly the military history—of the United States.

With Japan's attack on Pearl Harbor, Hawaii, on December 7, 1941, the first phase of World War II in the Pacific began. After this success the Japanese occupied the Philippines, Malaya, the East Indies, Wake Atoll, Guam, Tarawa, and other key points in the Pacific, developing a defensive perimeter against allied attacks from the east. This defense was breached in mid-1942 with the strategic victory on Midway Island. One Allied victory after another followed as the Allies occupied previously Japanese-held strongholds.

Further Allied victories in the Pacific during 1943 and 1944 virtually assured Japanese defeat and cleared the way for a possible invasion of the Japanese mainland. Allied commanders were planning such an invasion when the devastation of Hiroshima and Nagasaki by atomic bombs ended the war.

The Allied victory on Guam, in August 1944, seriously weakened the Japanese defense in the Pacific. Though the war in the Pacific continued for another nine months, after Guam Japanese defeat was inevitable.

The proposed War in the Pacific National Historical Park would commemorate the Guam campaign of World War II and provide a center of information on the amphibious operations in the Pacific from 1941 to 1945. World War II is not now represented among the historical areas of the National Park System.

Guam, now a U.S. territory and the site of major naval and air force facilities, is becoming increasingly impor-

tant as a tourist center, particularly for young Japanese. As a result, the scenic and natural beauty of this tropical island has been subject to the pressures attendant on a rapidly growing tourist industry: urban sprawl, traffic congestion, and pollution. The proposed Guam National Seashore would protect an area not now represented in the National Park System—the Trust Territories Natural Region. This region includes several magnificent bays with unspoiled beaches surrounded by clear water, coral and barrier reefs that house a wide variety of marine life, and other areas that include unusual geological features or that exhibit wilderness characteristics. The proposed seashore would provide for a wide range of ocean-oriented activities such as swimming and snorkeling, provide an opportunity for the study of marine life and history of the area, and protect the setting of unspoiled tropic beauty.

Both these areas on Guam are included in HR 12536—the "Omnibus

Parks Bill"—introduced by Rep. Philip Burton and reported favorably by the House Interior and Insular Affairs Committee in May 1978. No Senate action had been taken as of press time.

Guam National Seashore

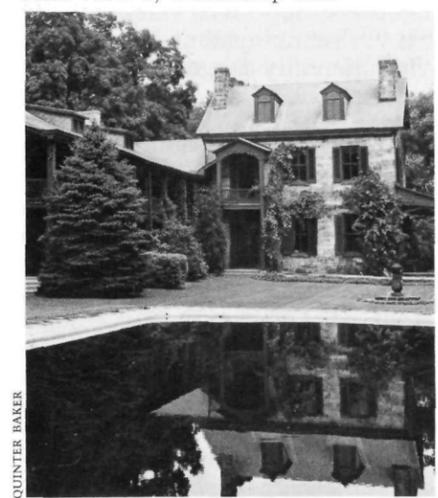


NATIONAL PARK SERVICE

The Jeffersonian Period is not represented at all in the National Park System, and the theme of Political and Military Affairs, 1783-1830, is represented in only one area.

HR 1084, a bill to provide necessary funds to acquire the house and 720 acres at Friendship Hill, was passed by the House of Representatives in April 1978. The Senate Committee on Energy and Natural Resources is considering this House bill but had taken no action at press time.

Rear view of Friendship Hill



QUINTER BAKER

**3. PRAIRIE NATIONAL PARK** would preserve a part of the nation's heritage that is nearly gone. The prairie played an important role in the settling of the country. Trails that crossed the rolling prairie hills carried pioneers westward. Those rugged souls who made the prairieland their home built sod houses, dug wells, and tilled a soil that would eventually feed not only this nation but many other nations. Now only a small portion of prairieland remains to show us what our land was like during the pioneer period.

The proposed park—in the Flint Hills region in Kansas—was never turned to agricultural use because the soil there is thin, and in some places flinty limestone lies very close to the surface. Although this made farming impossible, the Flint Hills have been grazed over for many years. Scientists say however that the areas that have seen heavy erosion could restore themselves in several decades if left to recover.

But the prairie is more than a reminder of bygone days. For although most of the large native mammals that once roamed the prairie—such as buffalo, antelope, elk, white-tailed deer—are gone, it still houses a huge variety of plant and animal life—quail, horned larks, night hawks, prairie chickens,

badgers, skunks, beavers, and more than 250 varieties of flowering plants. Some prairie enthusiasts have suggested the possibility of reintroducing the larger species of animals if a prairie park is established.

The concept of a national park devoted exclusively to the appreciation and study of the prairie has been discussed for years, but no major park system unit yet represents the Great Plains Natural Region Theme.

HR 9120, a bill to establish a Tallgrass Prairie National Park and Preserve sponsored by Rep. Larry Winn, Jr. (R-Kans.), has not had hearings scheduled as of press time.

Eastern meadowlark



KANSAS STATE UNIVERSITY

**4. ANTIETAM NATIONAL BATTLEFIELD SITE** was the scene of one of the most crucial battles of the Civil War. Here, in September 1862, near the quiet town of Sharpsburg, Maryland, the invading Southern army, led by General Robert E. Lee, collided with General George B. McClellan's Army of the Potomac. Lee's strategy was to invade Maryland, where his army would be a constant threat to the Union forces. He then planned to press on into Pennsylvania to disrupt east-west rail communications of the North. A victory for Lee was crucial at this point for other reasons as well, for a Northern defeat might result in a negotiated peace and intervention by England and France as mediators.

Although Antietam was tactically a draw, resulting in heavy casualties—12,410 for the North and 10,700 for the South—the battle was a strategic Union victory. Foreign intervention was no longer a threat, and the outcome of the battle gave the war-weary North a psychological boost. As a direct result of the Battle of Antietam, President Lincoln issued the Emancipation Proclamation (on January 1, 1863), injecting a new moral and spiritual force into the Union cause and shifting European opinion to the Union side.

In recognition of the national significance of Antietam, the present battlefield site was established on August 30, 1890. The new proposal would extend the boundaries of the existing site in Washington County, Maryland.

Antietam National Battlefield would be expanded by HR 12536, which was favorably reported by the House Interior and Insular Affairs Committee in May 1978. As of press time no action had been taken in the Senate.

President Lincoln meets with General McClellan after Battle of Antietam



**6. GREAT BASIN NATIONAL PARK** would preserve part of a unique natural region, the whole of which encompasses western Utah, parts of California, Oregon, and Idaho, and the entire state of Nevada.

Great Basin derives its name from the region's interior drainage system, which results in a number of separate basins created by mountain run-off that does not reach the sea. Set apart from other areas in the United States by its topography, climate, and drainage, Great Basin is characterized by an equal occurrence of rugged mountains and broad alluvial-filled basins. The climate is arid, with scanty precipitation occurring in the form of torrential summer rains and winter snows. Because the balance between precipitation and evaporation is a delicate one in Great Basin, the associated lakes fluctuate greatly in size, sometimes drying up completely.

Stella Lake, near Wheeler Peak



Areas that are under consideration for inclusion in a national park—all in Nevada—are the Snake Range in the vicinity of Wheeler Peak, which includes desert lowlands, alpine tundra, unique bristlecone pine, evidences of glaciation, and the outstanding cave formations of Lehman Caves; the White Mountains, which represent the only occurrence of granite mountains in the Basin; and Railroad Valley and Monitor Valley, more typical of the Great Basin as a whole, which include sand dunes and thermal springs works of volcanism.

Part of the area under consideration for park status is administered by the Forest Service and the Bureau of Land Management, and may be subject to mining, mineral leasing, or grazing permits, and to off-road vehicle use. Private land under consideration for inclusion in the park is now subject to development.

**5. CITY OF ROCKS NATIONAL MONUMENT** in southern Idaho would include the oldest exposed rock in the Far West. Granite outcroppings, ranging from between 25 to 30 million years to two and a half billion years old, dominate the area, creating, as the name implies, a city of rocks. These rocks have endured geologic upheavals and erosion and have witnessed countless changes in the natural history of the area and in man's history.

**7. NEW RIVER GORGE NATIONAL RIVER** would protect the oldest and one of the wildest and most scenic rivers in the eastern United States. West Virginia's New River is a descendant of the Teays river system, which was created by massive geologic upheavals during the Mesozoic era and then in large part destroyed by glacial action during the Cenozoic era. The New River Gorge was formed during eons of time by the downcutting action of the Teays, which survived uplifts of the Alleghenies and cut an ever-steep gradient. Eventually great blocks of weakened rock fell to the river's bed, creating a gorge some sixty miles long and one thousand feet deep now known as the Grand Canyon of the East.

In addition to its scenic wonders, the New River offers excellent opportunities for both fishing and river running. One of the highest-volume whitewater streams in the United States, the New offers the best whitewater runs in the East.

During the Paleozoic era the present New River drainage area was flooded by a saltwater sea, resulting in deposi-

**9. MINERAL KING VALLEY**, an arm of Sequoia National Forest, California, that juts into Sequoia National Park, and long the subject of a classic conflict between resource protection and commercial development, has been proposed for addition to the park. Mineral King is ecologically important both on its own merits and as part of the Sequoia National Park ecosystem. The valley has barren mountain peaks and cirques, alpine lakes and streams of high-quality water, and scattered forest stands and rock outcroppings. Rare, endangered, or threatened species of animals including the California condor, peregrine falcon, wolverine,

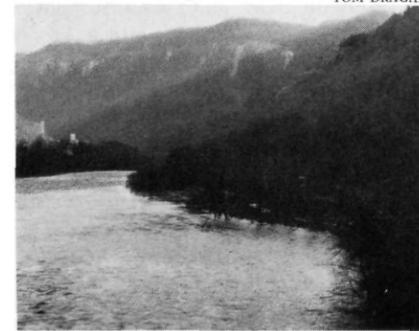
A natural stopping place at the headwaters of the Raft River, rich in game, firewood, and plant life, the City of Rocks was the junction of a number of pioneer transportation routes, among them the California Trail. Some of the inscriptions left by passing pioneers still remain, mute testimony to the historic importance of the area.

The area combines geologic and historic significance with scenic grandeur and a rich array of wildlife, birds, and

tions of sandstone, shale, conglomerates, and bituminous coal. This geologic background has made the New River area a prime target for unsightly coal mining activities, which could occur uncontrolled if the national river is not authorized. The Appalachian Plateau Region, of which the New River is a part, has little or no representation in the National Park System.

S 2866, introduced by West Virginia Senators Jennings Randolph and Robert Byrd, and HR 12001, introduced by West Virginia Representative Nick Rahall, are pending in Congress and are expected to receive early action.

New River Gorge area



California bighorn sheep, spotted owl, and pine marten make their homes there. Mineral King also houses varied flora including record-size foxtail pines and rare understory plants. Development of the valley not only would endanger Mineral King itself but also would pose a serious threat to the giant sequoias of the bordering national park.

The fragile alpine valley was originally excluded from the park's boundaries because mining of the valley was contemplated. However, no minerals were found there, so the idea was abandoned years ago. A new threat to Mineral King appeared in 1965 when

plants. But the historic pioneer inscriptions have been threatened by defacement, and lack of protection has exposed the rock formations and the remains of the historic California Trail to outside pressures from careless campers or picnickers, damage from motorcycles, and the possibility of development. No units emphasizing the California Trail are presently included in the National Park System.



Mica-studded granite, City of Rocks

**8. SAN ANTONIO MISSIONS NATIONAL HISTORICAL PARK** would preserve four eighteenth-century Spanish missions—San Jose, Concepción, Capistrano, and Espada—and the historic irrigation system for the farmlands of Mission Espada, all located along a seven-mile-long historical district on the San Antonio River in southern San Antonio, Texas.

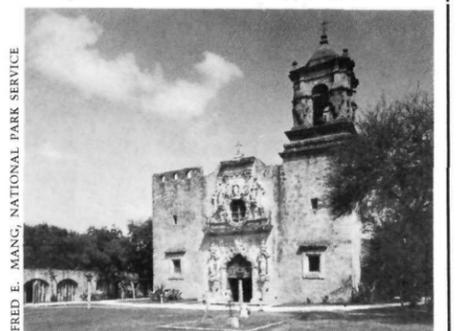
The Spaniards established mission settlements in San Antonio and elsewhere during the eighteenth century in response to the arrival in Texas of French explorer Louis Juchereau de Saint Denis in 1714—thus effectively ending French aspirations there. The present church of Mission San Jose was the largest and most prosperous mission of its day. Noted for the beauty of its Mexican baroque facade and the baptistry window carved by Pedro Huizar, the "queen of the missions," as it has been known since the eighteenth century, is one of the architectural treasures of the United States. Of the Texas missions, Mission Concepción is the best preserved. The four missions that—along with the state-protected Alamo—would be included

in the historical park represent one of the greatest concentrations of Spanish missions in the United States and the finest remaining monuments of Spanish rule in Texas.

The National Park System does not now include any intact missions illustrating the importance of the Spanish influence in Colonial America.

HR 12536, which includes a proposal for the San Antonio Missions, has been favorably reported by the House Interior and Insular Affairs Committee. Action on S 1156, introduced by Lloyd Bentsen (D-Tex.) in the Senate, was pending at press time.

San Jose Mission



Mineral King area



the Forest Service issued a prospectus for developing a large public ski area and year-round recreation in Mineral King and shortly thereafter granted Walt Disney Productions a planning permit. That action was the beginning of the controversy over Disney Corporation proposals for a huge mechanized ski resort in Mineral King including ski lifts, lodging for hundreds or even thousands of people, and other intensive recreational development. To make the valley accessible, a road cutting across Sequoia National Park and financed with public funds would be necessary.

Although the Disney Corporation's

plans for Mineral King have been thwarted so far, the only sure protection for Mineral King would be its incorporation into Sequoia National Park.

HR 1771, to add Mineral King to Sequoia National Park, was introduced by California Rep. John Krebs and has

been incorporated into HR 12536 and favorably reported by the House Interior and Insular Affairs Committee. S 88, introduced by Alan D. Cranston (D-Calif.), has had hearings in the Senate Energy and Natural Resources Committee.

**10. HAGERMAN FAUNA SITES NATIONAL MONUMENT** in Idaho would preserve one of the largest and best preserved Pliocene fauna sites in the world.

The Pliocene epoch began ten million years ago, directly preceding the Glacial epoch. Characteristic mammals of this period in North America included camels, hornless rhinoceroses, beavers, large cats and sabretooths, mastodons, and large ground sloths. Fossil evidence of the ground

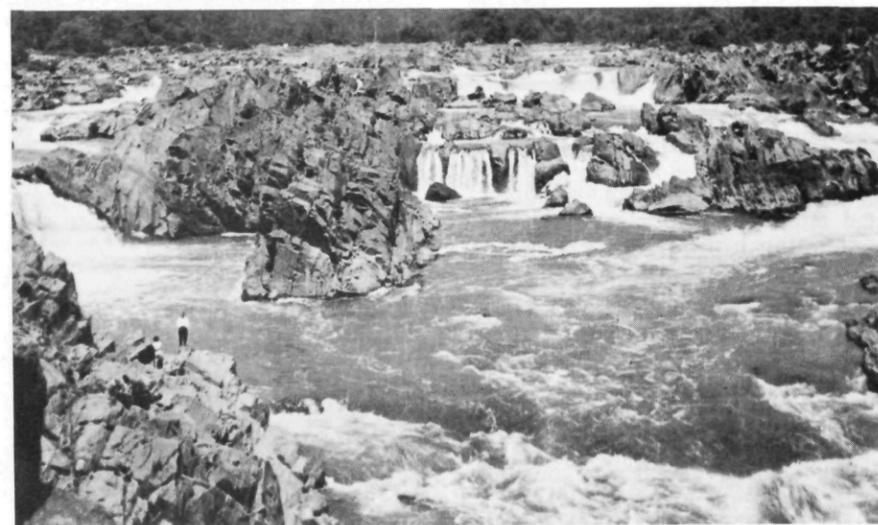
sloth in North America testifies to the reestablishment of the connection between the North and South American continents during this epoch.

The Hagerman fossil locality is presently designated as a natural landmark. However, the landmark is threatened by damage from off-road vehicles. Although several paleontological areas are now included within the National Park System, no unit as yet represents the Pliocene epoch.

*Hagerman Valley, 3 million years ago*



**12. POTOMAC NATIONAL RIVER** would protect the cultural, recreational, historical, and natural resources along the banks of one of the most beautiful and least spoiled of America's great eastern rivers. The Potomac River rises in the Appalachian mountains of West Virginia and flows eastward through Maryland and Virginia into the Chesapeake Bay. The river forms the boundary between West Virginia and Maryland from its source to Harpers Ferry; from there to its mouth it forms the boundary between Maryland and Virginia. Its descent from the Piedmont to the coastal plain twelve miles upstream from the nation's capital has created the Great Falls of the Potomac, which include a thirty-five-foot-high cataract.



*Great Falls of the Potomac*

NATIONAL PARK SERVICE

**11. CHANNEL ISLANDS NATIONAL PARK** would preserve the present Channel Islands National Monument, which is comprised of Anacapa and Santa Barbara islands, and other islands and surrounding waters of the Santa Barbara Channel, offshore from Los Angeles, California.

The Channel Islands are outstanding examples of isolated ecosystems. Thousands of years of adaptation to an island existence have resulted in flora and fauna fascinatingly different from that of the mainland. For instance, the island fox, found on all the islands except Anacapa and Santa Barbara, is different from its mainland relative, the gray fox, in that it weighs only four and a half pounds and is diurnal as well as nocturnal. The islands provide nesting, breeding, and resting grounds for magnificent rookeries of sea birds and large colonies of elephant seals, sea lions, and other species of pinnipeds.

Each island has its own distinctive characteristics. Anacapa and Santa Barbara consist of treeless rocky terrain, high sea cliffs, and small sandy beaches, with succulents as the primary flora. Mountainous Santa Rosa boasts a luxuriant plant life and is rich in archeological and paleontological treasures. Santa Cruz, the largest of the Channel Islands, at ninety-seven square miles, is characterized by extensive grassland where livestock graze, with forests of oak, holly, ironwood, pines, and prickly pear cactus.

Santa Cruz, San Luis, San Miguel, San Nicolas, and Santa Rosa islands

have all been identified as potential natural landmarks. Santa Catalina, a sprawling tourist resort, and San Clemente are not being considered for inclusion in the national park.

The Channel Islands have been subject to intrusion and damage from human activities since the early 1800s, when Russian pelt gatherers and, later, American trappers decimated the islands' pinniped population and almost drove the sea otter to extinction. Later, ranchers introduced domestic animals that critically damaged island vegetation, causing erosion from loss of ground cover. Erosion from grazing continues to be a problem to this day on some of the islands. The islands and their wildlife are also endangered by offshore oil exploration and potential oil spills similar to the Santa Barbara Channel oil blowout of 1969. Development such as has taken place on Santa Catalina also threatens some of the wilder areas of the Channel Islands.

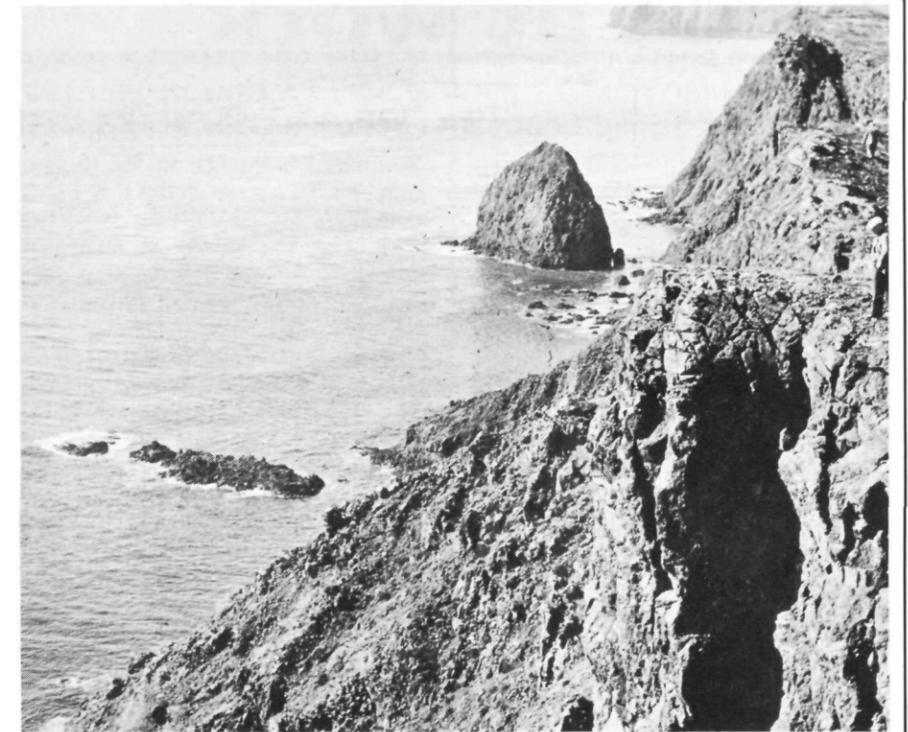
An enlarged area of the Channel Islands redesignated as a national park would provide adequate representation and protection for the themes of seashores, islands, and marine environments in the South Pacific Border Natural Region in the Park System.

HR 7264, introduced by Rep. Anthony C. Beilenson (D-Calif.), and S 1906, sponsored by Sen. Alan D. Cranston (D-Calif.), propose to incorporate the Channel Islands into the Santa Monica Mountains Seashore and Park. No bill now pending proposes a separate Channel Islands National Park.

The Potomac flows through a region rich in American history. Eighty significant historical sites as well as a number of national historic landmarks can be found along its upper banks.

Creation of a national river would protect the river's southern edge in the same way that the C & O Canal National Historical Park, which provides a green strip running parallel to the river, protects the north side.

HR 12089, introduced by Rep. Joseph Lyman Fisher (D-Va.), and S 2888, introduced by Sen. Charles McC. Mathias, Jr. (R-Md.), would establish a joint local/state/federal commission to study and recommend the proper protection for the Potomac River.



*South shore, Anacapa Island*

NATIONAL PARK SERVICE

**13. VALLE GRANDE-BANDELIER NATIONAL PARK** would combine the present Bandelier National Monument, renowned for its cliff and open pueblo ruins of the late prehistoric period, and part of the Valles Caldera, both in New Mexico. Calderas are saucer-shaped depressions caused by the collapse of the central part of a volcano or by volcanic explosions of extraordinary violence. The Valles Caldera, one of the largest and best understood calderas in the world, was created by a gigantic collapse followed by a series of catastrophic eruptions

less than a million years ago, when some fifty cubic miles of ash and pumice blanketed nearly four hundred square miles of the surrounding area with deposits up to one thousand feet thick. The caldera is twelve to fifteen miles in diameter, some fifty miles in circumference, and five hundred to two thousand feet deep.

The proposed addition of the Valles Caldera, now privately owned, would add a valuable example of the work of volcanism in the United States to the National Park System.

*Valles Caldera and Valle Grande*

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# NPCA at work

## ILLEGAL IMMIGRATION

### NPCA Urges Strong Controls to Stem the Tide of Illegal Aliens

"It is the illegal alien who may well defeat all our efforts at the solution of our environmental problems in America. It is also the illegal immigrant who may well defeat all our efforts to achieve full employment in America," stated Anthony Wayne Smith, President and General Counsel of NPCA, in testimony in May before the Senate Judiciary Committee's hearings on S 2252, the Administration's bill that deals with the problem of illegal immigration.

Although Mr. Smith lauded such attempts at legislation to deal with the problem, which is believed to contribute some 800,000 illegal aliens to our population each year, he criticized the Administration's proposals as being too weak. Specifically, he recommended imposing criminal rather than civil penalties on employers of illegal aliens, pointing out the key role employers play in perpetuating the problem. He urged that the legislation include a requirement that employers be required to obtain proof from employ-

ees of legal residence in the form of tamper-proof social security or Immigration and Naturalization Service (INS) cards. In answer to expressed concern over abridgment of civil liberties, Mr. Smith pointed out that to require aliens to produce proper Social Security or INS cards is not a proposal for a national identity card. In fact, Social Security cards are already in use for many identification purposes, and an INS card is required for temporary immigration for employment purposes. "Well-conceived proofs of legal residence cannot impair civil liberties; on the contrary, they bolster the orderly enforcement of our laws and strengthen democratic government, and with it, personal freedom," Mr. Smith said.

Although Mr. Smith recommended that the five-year temporary residential permits for persons who entered the United States illegally between January 1, 1970, and January 1, 1977, be stricken from the proposals as unjustified, he recommended that natural

economic processes in the form of inability to find work be the motivating factor in illegal aliens finding their way home, rather than rapid mass expulsion. "Such action would offend our sense of humanity; as an administrative matter it would be unworkable," he said.

Mr. Smith also questioned the portion of the bill that allows preemption of state and local laws by federal legislation, citing differences in local situations and local sentiment.

In general comments about illegal immigration, Mr. Smith answered criticisms of strong immigration controls based on charges of elitism and racism by stating that "Fighting unemployment is not elitist: The illegal alien takes jobs from American workers. . . . These proposals are not racist. They will apply across the board to all races and nationalities."

"It must never be overlooked," Mr. Smith stated in his closing comments, "that we are dealing with violations of the laws of our country. To permit the

## ALASKA D-2

### Landslide Victory in the House, Uphill Struggle in the Senate

Score one for Alaskan wildlands. The Alaska National Interest Lands Conservation Act (HR 39) didn't merely win votes in the House, it captured the imagination of Capitol Hill legislators.

On May 19 the House seized what Interior Committee Chairman Rep. Morris Udall presented as "the greatest land and conservation opportunity ever to be placed before the House of Representatives" by passing the bill with a sweeping 277 to 31 margin. Udall had introduced HR 39, which also was championed by Alaska subcommittee chairman John Seiberling of Ohio.

Well over 100 million acres of new national parks, wildlife refuges, wild and scenic rivers, and forest wildlands would be protected under the bill. The National Park System would be doubled in one fell swoop, ranking this bill as at least as important historically as the creation of Yellowstone National Park in 1872.

But these areas on the last wilder-

ness frontier in the United States and our nation's last great wildlife populations obviously will not be safe until the public persuades the Senate to follow suit.

In fact, the huge margin in the House would have been impossible without overwhelming public support of the bill from across the nation and citizen participation unmatched by any issue since the civil rights movement of the 1960s. Most important, this landslide victory has given the conservation movement increased momentum and leverage for the current uphill struggle in the Senate.

Alaskan senators have threatened to filibuster the bill there so that it cannot be passed before the December 18 deadline set by Congress for decisions on Alaskan national interest lands. The Senate traditionally does not consider bills that affect a single state when they are opposed by that state's senators. However, massive nation-

wide support for the bill, the fact that the Alaska wildlands in question are *public lands* belonging to all the American people, and the backing of the Carter Administration eventually should drive home the fact that the bill is indisputably a *national*—not a state—issue.

At press time the Senate Energy and Natural Resources Committee was finishing hearings on Alaska legislation and had set a goal of June 30 for reporting a bill for consideration by the full Senate.

In the Senate, NPCA and the thirty-six other environmental, labor, and civic organizations that form the Alaska Coalition will have to refight some of the same skirmishes fought in the House, where controversies centered on portrayals of the bill as a federal "land grab" of riches and on proposals to gut the wilderness acreage. Ultimately developers' arguments were defused by the facts themselves.

## CHANNEL ISLANDS & SANTA MONICA Two New Parks for California?

widespread and continuing violation of our laws encourages the flouting of laws everywhere."

**You Can Help:** As domestic population growth stabilizes and immigration skyrockets, immigration policy becomes *de facto* population policy in America.

NPCA is actively pursuing many avenues to bring about meaningful immigration reforms. We would like to be in touch with members who are especially interested in our population/immigration program and would be willing to serve as contact persons in the field. Please let us know of your interest by writing to:

Gerda Bikales  
Administrative Assistant for  
Immigration & Population  
National Parks &  
Conservation Association  
1701 18th Street, NW  
Washington, D.C. 20009 ■

NPCA has recommended establishment of a Channel Islands National Park and a Santa Monica Mountains National Recreation Area, both in California, to the Senate parks subcommittee.

NPCA recommended that the Channel Islands park be composed of the islands currently in Channel Islands National Monument plus additional islands—Santa Cruz, Santa Rosa, and San Miguel. (See p. 26.)

The Santa Monica Mountains and adjacent seashore include approximately 220,000 acres. NPCA recommended that the entire area be part of a national reserve and that a core area of approximately 65,000 acres become the Santa Monica Mountains National Recreation Area. About one-half of the 65,000 acres are already state and local parklands. The Santa Monicas are part of a magnificent natural area with deep canyons, flowing creeks, sand dunes, beaches, and a diversity of plant and animal life. (See February 1978.)

NPCA also recommended that the area in the national reserve that is not included in the national recreation area be protected by federal, state, and local action. A commission would prepare a plan to ensure compatible development throughout the area and all levels of government would agree to carry it out. The Santa Monicas already experience substantial development. Establishment of a national recreation area would heighten the demand for development around the park. In addition, NPCA proposed that the Secretary of the Interior be given the authority to veto inconsistent federal licenses, permits, loans, loan guarantees, or grants for the area surrounding the recreation area.

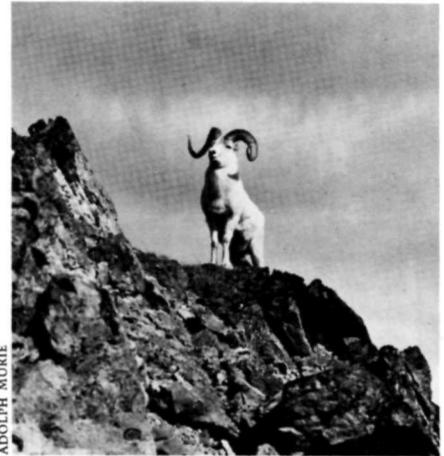
Similar legislation to establish a Santa Monica Mountains National Recreation Area has been included in the omnibus national parks legislation (HR 12536) that has been approved by the House Interior Committee. (See page 28.) ■

The House Interior Committee and the Administration had conducted painstaking studies of extensive data on areas of mineral potential in Alaska from both government and private sources and had eliminated from the conservation units proposed by HR 39 most of the areas in the state with mining and oil leasing potential. As a result, according to the state of Alaska's own computerized analysis of resources, between three-fourths and five-sixths of Alaska's potentially mineralized areas were outside the boundaries of the units that the committee reported.

The effects of the legislation on oil and gas development are even more minimal. Most of Alaska's oil reserves are offshore and unaffected by HR 39, and even the vast majority of onshore areas lie outside the boundaries of the Alaska National Interest Lands Conservation Act. Yet the oil developers still crave the calving grounds of the

Porcupine Caribou herd within the Arctic National Wildlife Range. The lands in question represent only about 5 percent of Alaska's favorable onshore oil lands. Although their oil deposits are speculative, their critical value to the survival of the last great caribou herd in all of our country as well as to polar bears and other wildlife populations is a known value.

In fact, the state and Native peoples already have selected the best of the prime mineralized areas, oil and gas leasing areas, and agricultural lands in our forty-ninth state. Out of the 375 million acres in Alaska—once all federal land—the 1959 Statehood Act and the 1971 Alaska Native Claims Settlement Act have granted the state and Natives the right to select 104 million acres and 44 million acres, respectively. Along with one million acres in private ownership, those laws entitle the 400,000 residents of Alaska to 149 million acres. Thus, an area the size



*Sen. John Durkin has introduced a bill that—among other things—does not include a House-passed loophole allowing commercial sport hunting guides to continue their operations in NPS units for twenty years. The loophole would threaten all big game species in Alaska, particularly Dall sheep.*



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of California and Washington states combined belongs to a population less than half that of metropolitan Sacramento.

Right now some 226 million acres remain in the federal domain; of those acres, only 27.5 million acres currently are protected as parks and refuges—much too little to preserve our greatest wilderness. Currently only about 0.7 percent of the entire nation is protected as wilderness; Alaska contains our last vast, unspoiled wilderness.

The majority of the House rejected claims that HR 39 would "lock up" needed resources. As a matter of fact, the final passage of HR 39 was an anticlimax, as the real floor excitement had come on the preceding day when the House beat back various proposals by Rep. Lloyd Meeds (D-Wash.) and Rep. Don Young (R-Alaska) that would have slashed wilderness acreage in half, removing all wilderness in the Arctic National Wildlife Range; opened wildlife refuges and national preserves to hardrock mining; and sliced away parts of ecosystems to accommodate state development interests.

As passed by the House, in general HR 39 is a hybrid between the versions of the bill approved by the Interior and the Merchant Marine committees. Fortunate a loophole that could open the Arctic National Wildlife Range to oil development was dropped.

As passed HR 39 would include 101.5 million acres in the four federal conservation systems plus 22.5 million acres of the Navy "Pet 4" area designated by a floor amendment for management by the Fish and Wildlife Service with continuing oil exploration. Within new and existing conservation units, the bill would designate 66 million acres as wilderness—in comparison with 146 million acres in the original HR 39.

Although the strong bill protects most critical areas, some important

wildernesses were lost. Moreover, the House tacked on an amendment by Rep. Jim Santini (D-Nev.) that postpones until 1981 decisions on whether to open all conservation units in Alaska to mineral exploration and development. Meanwhile, for the interim period wildlife refuges would be exposed to oil and gas exploration.

In an attempt to resolve some of these problems in the Senate, Sen. John Durkin (D-N.H.) has introduced an amendment to S 1500. S 1500 is the Senate counterpart to the original HR 39—the bill as it existed before the House altered it and amended it. The amendment, No. 2176, represents the legislative package preferred by NPCA and other members of the Alaska Coalition, in which this Association is one of the leading participants.

S 1500, as amended, would protect 110.5 million acres of national parks, wildlife refuges, wild and scenic rivers, and forests. In comparison to HR 39 as passed by the House, it would increase acreages of various conservation units in an attempt to ensure protection of complete ecosystems, watersheds, and key wildlife habitats. In addition, it would restore about 23 million acres of wilderness cut from HR 39 by the House. Much of this wilderness is located within national wildlife refuges, where Alaskan wildlife biologists consider such wilderness designations as critical for protection of species that are dependent on relatively undisturbed habitats for their survival—caribou, wolves, bald eagles, and others. It also restores a number of wilderness areas in the forests of the Southeast that were deleted from HR 39.

The House left scenic rainforests and commercially valuable fisheries there without wilderness protection. Particularly tragic was the House's deletion of the Misty Fjords area, a place of rugged coastline and deep fjords, acclaimed for its outstanding scenic beauty. By contrast, the Durkin amendment to S 1500 would designate a 2.28-million-acre Misty Fjords National Preserve and give the preserve full wilderness protection.

The amendment would close all conservation units to new mining or oil and gas leasing while providing for

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continuing assessments to establish more precisely the nature of any mineral resources in these areas.

"This proposal in no way hinders a reasonable and orderly development of Alaska's resources," Durkin stresses. "Some 235 million acres, or about 60 percent of the land mass, lie outside the conservation systems and can be used for timber harvesting, mineral and oil and gas extraction." On the other hand, "the wilderness and wild-life values will not always be there if we do not act to preserve them now. Unlike the minerals in the ground, they will disappear if they are not protected from careless development."

Mr. Sam Full Moon, a resident of an Eskimo village in Alaska, put it differently: "If we do not spare his land, God in his great tolerance may forgive us. But our children never will."

**You Can Help:** The Alaska National Interest Lands Conservation Act will come under heavy attack in the Senate. It may be a tight squeeze to make the December deadline.

At press time it was unclear whether the bill passed by the House or another piece of legislation would serve as the "markup vehicle"—the Senate committee's starting point for work on the legislation. For a recorded update on the status of this legislation, call the Alaska Coalition hotline at 202-547-5550. Please write, call, or send Western Union messages immediately to your senators urging them to support timely consideration of the Alaska National Interest Lands Conservation Act. Ask them to support strengthening amendments to the bill based on Durkin amendment 2176 to S 1500. Let your senators know that you support preservation of complete ecosystems and substantial wilderness areas in Alaska because this bill represents our last chance to preserve them anywhere in our nation. Urge them to oppose any attempts to weaken protection of Alaskan wildlife habitats such as proposals that would open the Arctic wildlife range or any other wild area to oil and gas leasing or hardrock mining. You can reach your senators in care of the U.S. Senate, Washington, D.C. 20510 or 202-224-3121. ■

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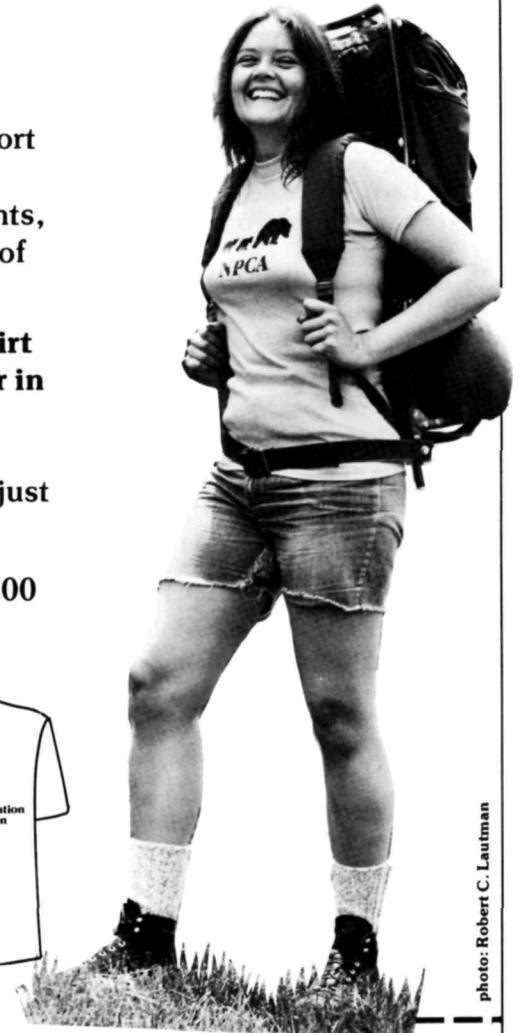


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# conservation docket

## Omnibus Parks Bill

Boundary changes and development and acquisition ceiling increases for numerous National Park System units are contained in an omnibus bill—HR 12536, known as the National Parks and Recreation Act of 1978—now being considered by the House of Representatives.

The huge bill, which reflects the special legislative style of parks subcommittee chairman Rep. Phillip Burton (D-Calif.), would establish eleven new national parks, historic sites, and recreation areas and make boundary changes and property additions to more than thirty NPS units.

Among the new parklands are several places included on the Interior Department's recent list of thirteen areas worthy of inclusion in the Park System: the **Mineral King** addition to Sequoia National Park, **Antietam Na-**

**tional Battlefield**, **Guam National Seashore**, **War in the Pacific National Historical Park**, and **San Antonio Missions National Historical Park**. (See pages 20 to 25.)

Grants for planning and acquisition of the **Pine Barrens Ecological Area**, New Jersey, and the establishment of the **Santa Monica National Recreation Area**, California, are also in the act.

Among eight new wild and scenic rivers is a stretch of the **Delaware River** in the area of the controversial proposed Tocks Island Dam. The legislation also would transfer authority for land acquisition in the Delaware Water Gap National Recreation Area from the Corps of Engineers to the Park Service.

The legislation would grant wilderness status to acreage within twelve units of the National Park System and

triple the number of trails in the national trail system.

Other provisions of the act would authorize purchase of the **Old Faithful Inn** from the concessioner in Yellowstone National Park and would permit the Secretary of the Interior to establish **historic sites** to commemorate each twentieth-century President of the United States and Speaker of the House of Representatives.

At press time the bill had already been approved by the Interior Committee and floor action was expected in late June or July.

The Senate, too, is considering omnibus parks legislation, S 2876; but it is much more limited in scope and provides only for increases in development and acquisition ceilings and boundary changes for Park System units. ■

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*Continued from page 2*

the rest of nature. It has never forsaken us to the cells of the man-made world or to the devices that divide and shatter our natural estate, but embraces us still, keeping us mindful of rocks and trees, hurt hawks and polluted seas, and high mountain meadows with "moss-grown springs and grass softer than sleep," as Virgil knew. Call it love of the land, if you will. That is what it is. It is a door left open to the garden that the earth once was—and can be again, if we will put our minds to it—and our *hearts*.

Do we care? Do we care that our human endeavors are threatening the last of the wilderness places and crowding to the wall the remnants of the world's wildlife? Do we care that our traditional energy sources are dwindling, or that our inordinate consumption of raw materials and our taste for luxuries are causing worldwide economic difficulties and monetary dislocation, plus storing up future suffering for ourselves? Do we care that we are depriving others, who can least bear it, of the essentials of life? Do we care about the earth—our part of the universe, our home? "To try may be to die," said William Redfield, "but not to care is never to be born."

**S**O LET US try while there is still time. The hour is late. In the tropics, rain forests are being felled at the alarming rate of 50 acres per minute, exposing fragile lateritic soil to crust formation which renders them, poor to begin with, practically unfit for crop production. An acre of these trees recycles 4,000 gallons of water daily into the atmosphere, and their destruction could, in time, affect the regional hydrology adversely. Then, there is the plight of our agricultural gene pools. "Only 15 major food plants stand between health and starvation for the human population," states biology professor Garrison Wilkes. Yet, the source areas of primitive plant stocks upon which we can draw to secure new strains are fast disappearing.

Strip-mined land on our western prairies can be contoured and revegetated, but the spirit of place will have been erased from them forever, and it is doubtful whether the nutritious native grasses that have sustained our magnificent beef herds will ever be able to establish themselves again on the mutilated soil. Our forestry practices are in critical need of overhauling. Large-block clear-cutting is an abomination! It flies in the face

of sound ecological principles and the intent of the laws governing the management of the National Forest System.

In some areas we are approaching the point-of-no-return. Below a certain level of decline, wild animal populations cannot recover. Hundreds of species of birds, mammals, reptiles, amphibians, fishes, mollusks, and insects are on the verge. Add to this some two thousand plants. All of them are living "on borrowed time," except those that have already recently become extinct. Everywhere, natural habitat and the creatures that depend on it are vanishing before our eyes.

**U**NLESS we, as individuals, are sufficiently concerned about these problems to respond to them with urgency, they will never be solved in any meaningful or lasting way. The governmental mechanisms for their mitigation or solution are conveniently available, and, as a democratic people, we should use them.

They are so constituted, however, that they yield most readily to the weight of numbers—to the power and determination of individuals multiplied and acting in concert. As in any field, the power to move large bodies, whether governments, institutions, systems, or the world, must be concentrated—the power of the many in the one. Hence, much of our effectiveness lies in collective effort.

**T**HIS is what organizations like NPCA are for. NPCA believes in individuals. It believes that environmental reform must begin at the grass-roots level. It believes that only through personal motivation can there be generated the kind of public will to do the job.

NPCA's position is pivotal. It is where things happen. It is where the environmental concerns, ideals, and hopes of Americans in every walk of life are brought together to bear on governmental process. Its President and Staff are experts in federal law and procedure. They are grounded in years of environmental experience. They know what to do and where and when to do it. Their voice is heard on Capitol Hill. They maintain a powerful presence in the halls and offices of the various bureaus. They conduct active liaison with the Executive Branch—working always in the knowledge that only a free and individually motivated people can be strong enough to secure the enduring protection of their environment.

—Gilbert F. Stucker  
*Chairman of the Board*

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