

Splendor in the Parks

THE GREAT National Primeval Parks of America are examples of the pristine beauty of the continent before the white man came.

They were set up to preserve the most perfect specimens of the natural environment for the enjoyment of present and future generations.

They can be thought of as fragments of the past, but better as symbols of the future of a high civilization within which men will reestablish a fruitful relationship with nature.

When Yellowstone Park was established in 1872, the march of European civilization across North America to the Pacific Coast had already been completed and the railroads had brought agriculture and then cities and industrialization into what had been unbroken wilderness.

More and more units were added to the National Park System during the next 50 years in an effort to preserve outstanding examples of untouched wilderness.

The purpose of the National Park Service is to protect the scenery and the historic structures and artifacts in the parks and to preserve their wildlife while making them available for enjoyment by compatible methods.

The task of preservation has been a difficult one all down the years. Always there were tendencies to build too many roads, and to permit excessive commercial activity by concessioners.

As the Nation grew in numbers of people and as they acquired greater mobility and leisure, traffic increased in the parks to the point where enjoyment of the natural features was impaired for visitors.

Protection can be achieved within the parks by careful planning and management. Free shuttle-buses are being established (albeit slowly) to reduce traffic. Public transit can be developed from outlying communities, again reducing traffic.

Facilities can be moved out of the parks and relocated in surrounding communities. Visitation can also be redistributed into the surrounding National Forests, other public lands, and private lands on the periphery.

These remarks are adapted from *EPA Journal*, Volume 5, Number 6, June 1970, published by the U.S. Environmental Protection Agency, Washington, D.C.—condensed slightly from the original because of space limitations.

An effective interdepartmental planning system is needed to accomplish these relocation and redistribution functions. Preferably it should be at the Cabinet or White House level. Operations should turn around comprehensive outdoor recreational regional plans.

BUT AFTER ALL is said and done as to management and planning within the parks and adjacent public lands, the fact remains that the National Parks are seated within the entire national environmental setting, and cannot be protected without attention to that setting.

For example, one of the problems in the wilderness parks is the deterioration of air quality over the parks. This has been true quite notably in a number of the southwestern national monuments, affected by coal-burning power plants fueled from stripmining operations on the public domain.

Air pollution problems of this kind can be approached to some extent by raising the standards for air quality on a regional basis, and conservationists have done so. But the great cyclonic storms which move from west to east across the country really do not know any regional boundaries. As air pollution has increased all over North America, and everywhere else on the planet, air quality has declined, regardless of location.

And so, if the National Wilderness Parks are to continue as good samples of the world as it was before the industrial age, and as examples of what it could be in the future, conservationists and environmentalists must tackle the problem of air quality all over the country for its own sake.

The problem of water quality is certainly no different. There is hardly a National Park in America which does not include streams arising from outside its boundaries. As things were going until the American people became serious about water quality, these watercourses were tending toward serious pollution from mining, agriculture, the clearcutting of timber, and municipal and industrial wastes.

There is very little that can be done inside a park about river pollution arising outside the boundaries. Needless to say, the National Park

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COVERS Glimpses of the Great Basin, by Eileen Lambert Burnished to a rich gleam by centuries of wind and snow, an ancient bristlecone pine (front) frames Mount Wheeler in the Snake Range of Nevada's little-known Great Basin. These spectacular mountains, along with hidden canyons—alive with birds, bright with wild flowers, and sparkling with streams like Baker Creek (back)—are being evaluated for possible inclusion in the National Park System. (See page 4.)

Eugenia Horstman Connally, Editor Joan Moody, Assistant Editor Nancy Schaefer, Editorial Assistant

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by EILEEN LAMBERT

Key characteristics of the little-known Great Basin are superbly exhibited in and around Nevada's spectacular Snake Range

A National Park in the **GREAT BASIN?**

HIKE ACROSS Wheeler A Peak's rock glacier is an unforgettable experience. High in the Snake Range of eastern Nevada's Great Basin region, you are surrounded on three sides by towering rock walls. From their topmost edges, nearly two thousand feet above, fingers of rock peer down like creatures from another planet. You hear the muted tones of invisible water running beneath the jumbled boulders and the sounds of weather-dislodged rocks tumbling down. You have been thrust back into the beginning of time. It's as if a giant had clawed out a huge handful of Wheeler Peak and left this vast cavity of bare rock, ice, and snow.

This awesome spot is in one of the four areas in Great Basin being evaluated for possible inclusion in the National Park System.

TOPOGRAPHY not yet rep-A resented among our national parks, the basin-and-range configuration of the Great Basin is distinguished by broad valleys

(basins), three thousand to six thousand feet above sea level, separated by long, narrow mountain ranges—nearly two hundred of them—running north and south. This characteristic fault-block structure extends from the Wasatch Range in central Utah across Nevada to the Sierra Nevada Mountains in eastern California. The accompanying features of aridity (annual precipitation averages eleven inches) and interior drainage (streams disappear into the land or form ephemeral lakes in valleys instead of running to the seal have produced the region's distinctive patterns of vegetation and wildlife.

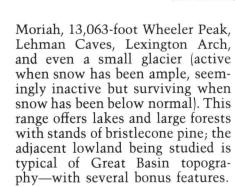
Unfortunately, few people know this sparsely settled land. Most travelers speed across its sagebrush-shadscale flats completely unaware of the sparkling creeks, lush meadows, tall fir trees, and gnarled bristlecone pines hidden among its towering peaks.

Of the four Great Basin areas being studied, the White Mountains area is the farthest west. Mostly in California and thus outshone by the nearby Sierra Nevada range, which already boasts longestablished Yosemite and Sequoia-Kings Canyon national parks, this lofty range has become known as the site of scientific investigation of the bristlecone pine. The Monitor Valley study area—

about a million acres in central Nevada—includes typical Great Basin scenery provided by the Monitor and Toquima ranges, 11,-807-foot Mount Jefferson, and a remarkable hot spring called Diana's Punch Bowl.

Southwest of Monitor, the million-acre Railroad Valley study area contains the Grant, Pancake, and Hot Creek ranges, with such features as Lunar Crater, Hooper Canyon, Morey Peak, and 11,268foot Troy Peak, as well as the active Trap Springs oil field and an abandoned atomic testing site in Hot Creek Valley. (Hot Creek, by the way, gets its name from a large thermal spring.)

Snake Range—the fourth study area—includes 12,067-foot Mount



O QUALIFY as a national park an area must not merely be a representative of the geographic region but also must be scenically and scientifically superb. My study and experience convince me that the Snake Range meets these requirements. Named for its sinuous course, it is eighty miles long, ten to fifteen miles wide. Rising spectacularly above its surroundings, providing far-reaching vistas of basin-and-range topography to both east and west, it clearly exhibits Great Basin characteristics. It is a tilted fault-block range, its great mass of quartzite, limestone, and granite strikingly upthrust along

major faults, with adjacent valleys dropping dramatically. Set in arid surroundings, its dashing creeks sink out of sight soon after leaving their canyons.

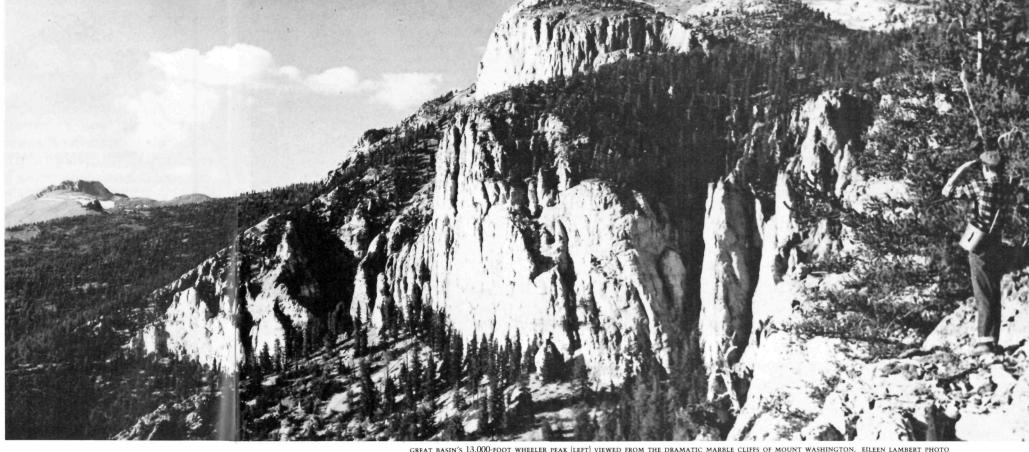
A good way to experience the Snake's qualities is to explore its canyons, many of which now have dirt roads or jeep trails. Here you will find dramatically displayed five of North America's seven climatic zones with flora and fauna representing Great Basin character in varying ecosystems that elsewhere stretch from the Mexican border to northern Alaska and Canada. On the low floor of Snake Valley are stands of creosote bush that suggest even a sixth zone.

In either Snake or Spring Valley vou can start at the desert level of shadscale, sagebrush, and cactus, with jackrabbits, cottontails, coyotes, foxes, and pronghorn antelopes, and climb through piñon pines and junipers (the most common trees in the Great Basin), along a creek with cottonwoods, willows, and water birch, up past mountain mahoganies, aspens,

ponderosa pines, and extensive stands of white and Douglas fir.

Above nine thousand feet you would find stately Engelmann spruce, limber pine, and in some places young and straight bristlecone pine. Near timberline (approximately eleven thousand feet) you would find the more ancient, weather-tortured bristlecones. Limber pines are often contorted, too, and the spruce make groundhugging mats because of the cold and strong winds. Above timberline are arctic-alpine slopes with moss silene, geum, and other tundra-type plants. Slope exposure, soil type, moisture, and temperature differences prevent strictly altitudinal lines between zones. In high rocky places signs of mountain sheep have been found, and once just north of Wheeler Peak four of us saw a great bull elk disappear behind a ridge.

Among my favorite canvons is Lincoln on the west side of the South Snake. Here, as you climb higher and penetrate deeper, white cliffs soar a thousand feet above





you; and the canyon narrows so you can almost touch both towering walls at once. Such walls frame vistas of arid land far below; they have been compared favorably with features of Zion National Park. Lincoln Canvon (and adjacent Pole Canyon) cut into 11,676-foot Mount Washington, which thrusts out amazing gray and white limestone cliffs. In places there are several giant steps, each about a thousand feet tall, separated by narrow ledges with pines; such drop-offs are weathered evidences of the faulting that broke the valleys from the mountains. On the way to the Mount Washington summit—via Pole "trail," which in part is more like a ladder—are surprising juxtapositions of Douglas and white fir with cactus. Gnarled bristlecones grow from cracks or ledges in the cliff.

THE GREAT BASIN bristlecone (Pinus longaeva) produces by far the oldest trees thus far known on our planet. They grow on many of the higher elevations of the region—on the Whites and on mountains in the Railroad study area, though apparently not on the Monitor range—reaching the greatest ages where the climatic and geologic conditions are harshest. These ancients, unlike the same species lower down, look like the

fighters they are—survivors in epic struggles that somehow toughen them for longevity. Strong winds and scouring ice have carved and smoothed the tortured trunks into fantastic shapes. Through the millennia many have had all but a few inches of living bark on the leeward side eroded away, but this thin strip sustains life and goes on feeding the "bottle-brush" foliage and viable cones in trees well over 4,000 years old. The ancients may be thirty feet or more in circumference, and not much taller, with grotesque limbs. The naked wood of such living sculptures is finegrained and hard, polished to a high glow; it may be silvery in color or old ivory or shades of yellow from ochre to rich sienna.

Another surprising phenomenon of Mount Washington is the relict timberline nearly 500 feet higher than the present one; it is marked with old snags still in place, indicating much change of climate since bristlecones were established here. Ancient remnants of wood, in place, where they grew, are valuable to scientists in helping to determine past conditions. The wood still smells like pine even though it may have been dead for thousands of years after having lived thousands of years. Left unmolested in the dry, cold environment, this beautiful wood is nearly imperishable—but it is vulnerable to hatchets and saws. Some of it already has been used for bonfires or hauled off to decorate homes and yards. This destruction is a strong reason for protecting the area with designation as a national park; many qualified persons consider the bristlecone stands alone, both alive and long dead, reason enough to create a national park in the Snake Range.

N THE MORE gradually sloping east side of the range, Lexington Canyon is especially noted for its limestone arch that could span a six-story building. Here an observant hiker might discover, as we did, a remnant of the long-gone era when this land was under a huge shallow sea—a fossilized trilobite (extinct marine arthropod from the Paleozoic era) that conjures up images of life before humans roamed the earth. Farther north is a different spectacle—Big Wash, a deep Y-shaped gorge with massive cliffs. In common with many Great Basin canyons, its lower reaches contain dense thickets of wild rose, chokecherries, elders, and willow.

Snake Canyon, with its rugged lichen-decorated rocks, lively stream, coppery-brown water birches, graceful quaking aspens, and large yellow pines, is another



Long, narrow, and sinuous, the Snake Range (far left) strikingly exhibits the characteristic fault-block structure of Great Basin's more than two hundred mountain ranges. Its steep-walled canyons provide habitat for plants and animals representative of five climatic zones and its limestone cliffs contain Paleozoic fossils. The gnat-sized human figure perched atop Lexington Arch (left) suggests the scale of this enormous aperture, big enough to span a six-story building. The bristlecone pine, below, is one of a species that has produced the oldest trees on Earth. Bent, twisted, and stripped of most bark by wind and weather, bristlecones have nevertheless survived for millenia in the harsh environment of Great Basin's mountain tops.

of my favorites. There, in a yellow pine, I once met at close range a porcupine, a strange-looking creature with a really "nice" face. From the looks of the tree, Porky had been eating there for some while. Another time we stopped to let a parade of skunks have the right of way-a mother with five little replicas, so cute I could hardly resist skunk-napping. And once my son and I had a face-to-face encounter with a great horned owl at the base of a towering cliff. The bird must have been twenty inches tall, and it had a tremendous wingspread, fierce yellow eyes, and long talons: but we quickly saw it was a baby, too young to fly. It must have tumbled from a nest on a ledge. It still had soft down on its head and pin-feathers on its thighs. Numerous bones scattered about indicated that the parents were taking care of their youngster.

THE MOST VISITED part of the South Snake Range consists of lavishly decorated Lehman Caves (a national monument since 1922) and the two canyons adjacent to it. A million or more years in the making, Lehman Caves is filled with typical calcite-crystal formations but is especially noted for its rare shield formations—thin, broad disks with dripstone hanging from thin margins—and for its delicate,



curling helictites that seem to defy gravity.

The Snake Range has other caves, too—one of them an ice cave that is naturally refrigerated all summer; others are ornamented with Indian pictographs; still others shelter colonies of bats.

For decades picnicking, camping, and fishing have been popular in Baker and Lehman canyons. Under the Forest Service's multiple-use system, we once shared our Baker Creek camp with big white-faced steers. Other Baker Creek memories: hairy woodpeckers feeding their young in a hole in an aspen

tree; a calliope hummingbird on her tiny lichen-covered nest fastened to a fir branch overhanging the boisterous creek. Another year a friend discovered a magic "humming" tree just downstream from our camp. We were astounded to see twenty or so tiny flying jets zooming in and out and around a water birch tree, buzzing, humming, squeaking, and flashing jewellike colors in the first rays of sunlight. We identified three species of hummingbirds—calliope, broad-tailed, and rufous. Apparently they were feasting on sap and insects at sapsucker holes.

Wheeler Glacier, in Great Basin's Snake Range, is a river of ice half a mile long and a hundred feet deep. A remnant of the Ice Age that pervaded the region ten thousand years ago, the glacier is still active when there is enough snow.



The upper campground on Baker Creek is a starting place for hikes into the wild, high bristlecone country and Baker or Johnson lakes. Once, while temporarily lost from the Shoshone Trail that crosses over to Snake Creek, we found what could have been world-record-size aspens (about three feet in trunk diameter). And cougar tracks on top of our own back tracks! Another time we found fantastically sculptured old but dwarf-size bristlecones on a trailless spur ridge.

Lehman Creek has an improved road now, passing near the world's record mountain mahogany tree and on up to Wheeler campground at 10,000 feet. You can hike from there to Stella and Teresa lakes, gemlike reflectors of lofty peaks, and on past Brown Lake into the bristlecone forest on glacial moraine where the oldest living tree vet known was chain-sawed down in 1964 by a Forest Service crew helping a science student in his doctorate project. Of course, they did not know it was the very oldest until they had counted the rings, but the tragedy was as great as if they had. The tree was some 4,900 years old-more than 1,700 years older than the most ancient living Sequoia and centuries older than the next oldest tree found to date (4,600-year-old Methuselah on

the White Mountains). From the Wheeler moraine bristlecones you can hike into the peak's awe-inspiring northeast cirque past the rock glacier and onto the ice glacier—if you're in good physical condition. Wheeler glacier, back on the north-facing wall, is about two thousand feet long and five hundred feet wide, with blue ice more than a hundred feet deep, sometimes exposed in deep crevasses, unique because this remnant of the Ice Age that pervaded the higher ranges of the whole region ten thousand years ago survives near the center of the Great Basin desert. Standing here, you can see this desert far below, with Mount Moriah forming a backdrop for the dramatic view.

THE GHOST mining town of Osceola is another dimension of the Snake Range. Voices from the past come to you when you roam around the ruins and through the little cemetery, or when you see where gold was washed out by hydraulic methods with water from an extraordinary ditch that ran almost level around large mountains. Whether the sagebrush is soft spring-green or the rabbitbrush fills the little canyon with its yellow blossoms in late summer, the scene is always stirring.

Ghost towns typify Great Basin history. In the 1950s a group of us sheltered from a summer storm in Osceola's long-abandoned Marriot home. Lilac bushes still flourished by the front gate. Tattered lace curtains dangled outside a broken upstairs window. We built a fire in the old kitchen range and cooked dinner—including applesauce from green apples growing near the back door. We found a pack rat's nest in a dresser drawer and a robin's nest in the henhouse.

been made to establish a national park in the Great Basin area. The first tentative proposal (by Nevada's Senator Key Pittman) was made in 1928; it was soon buried by protests from stockmen and miners who were dominant then in Nevada. The idea came alive again in the 1950s. The National Park Service studied the south half of Snake Range, and in 1959 recommended 147,000 acres of mountains for park status.

That second South Snake proposal was endorsed by three presidents (Eisenhower, Kennedy, and Johnson), the Nevada legislature, scientists, national conservation organizations, and others. It came within a hairsbreadth of enactment. A bill sponsored by both Nevada senators passed the U.S. Senate in 1961. But a few Nevadans protested, defending their "rights"—grazing, mine-claim staking, hunting—and the bill never came to a vote in the House.

The Park Service approach to the Snake Range this time is different. The study area is much larger. The area investigated before did not include massive Mount Moriah, nor the Swamp Cedar, White Sage Flat, and Shoshone Pygmy Sage natural areas in Spring Valley, nor the ghost town of Osceola—any or all of which could increase opportunities for interpretation of Great Basin features.

Not only has the government study plan changed, but the east-central Nevada situation is different also. Local support for a national park may prove firmer now, not just to have a majestic place for visitors to enjoy but to give much-needed support to the economy. Copper production, economic mainstay for decades, is drastically curtailed. Non-park-type land uses in the Snake Range itself have dwindled.

Although potential opposition to a national park in the Snake Range may have subsided for economic reasons, efforts to establish a national park in any of the other study areas—thereby ending such traditional uses of public land as grazing, mining, and huntingwould undoubtedly generate strong opposition. Similar opposition can also be expected to the selection of other possible park sites such as Nevada's Toiyabe, Schell, or Ruby ranges, or western Utah's Horse Range (with dramatic Notch Peak), or in far northwest Nevada where a recent NPS announcement says the Emigrant Trail might be studied. But surely these obstacles can be resolved. We must try.

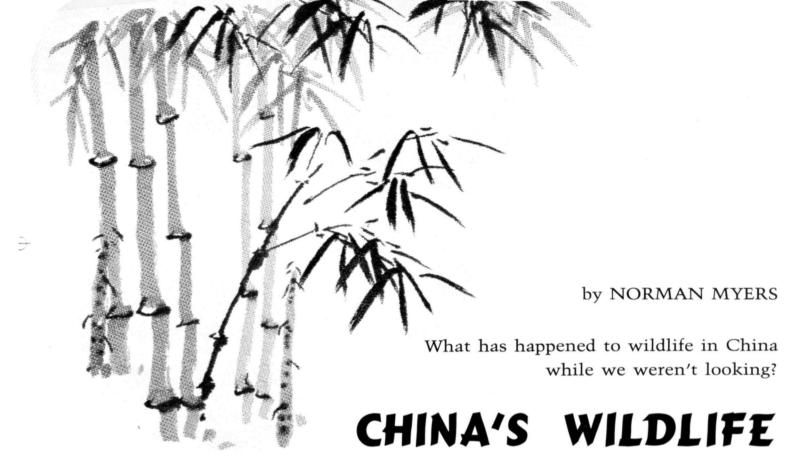
HAVING LIVED in a Great Basin valley and having explored much of the region by plane, car, foot (and sometimes snowshoe), I strongly feel the importance of establishing a national park there. This land that may seem desolate in the harsh light of noon is magic in the slanting light of morning and afternoon when long shadows suggest mysterious unknowns. Sunrises and sunsets arch over the distinctive landscape

and round the scene in colors and rhythms that are symphonic in power and that play intricate variations on the Great Basin theme.

The Great Basin's special attributes richly justify a national park of substantial size. Any one of several areas might conceivably serve. But let's first try again for the best—the Snake Range.

Naturalist Eileen Lambert, who now works as a free-lance writer at her home just outside Shenandoah National Park, Virginia, has lived, camped, hiked, and explored in the Great Basin region of which she writes.





THE PEOPLE'S REPUBLIC of China is proud of her pandas. Every Chinese citizen knows that all the world is watching what happens to this popular but rare species. Cinemas in China run films on the nation's commitment to ensure a future for the giant panda, school walls display posters to publicize the animal, and panda enclosures at zoos attract huge crowds all day long.

The publicity about pandas is part of an evolving environmental education program in mainland China aimed at informing people about the value and significance of wildlife.

In fact, the good news from China is that the conservation climate is improving and that the panda and some other threatened species are making a comeback thanks to government-backed protective measures.

A network of parklands expands year by year in mainland China. The movement toward conservation of natural resources seems to have started at the Third Plenary Session of the First National People's Congress in 1949, and by 1974

more than forty national reserves and sanctuaries covering more than 325 million acres had been established.

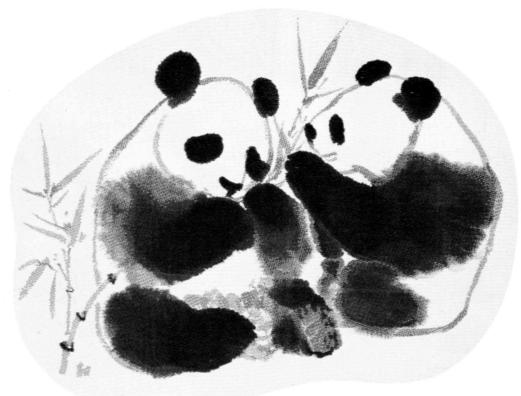
On the other hand, when I visited different parts of eastern China during that same year, I observed some disturbing signs as well; for example, I saw fewer birds than I observed in any other part of five continents.

Even while conservation has taken a definite upswing, the nation has been confronted with the population pressures common to Third World countries. What have these pressures done to wildlife in China, whose population has doubled in the past thirty years—from 500 million people in 1949 when the communists gained power to more than 900 million now.

Many a person is ready to wave the flag for his nation's wildlife; as an individual, however, he must support his family and deal with wildlife seeking living space in the bailiwick where he may want to plant his crops. How will the Chinese deal with this core conflict of the needs of wildlife versus the needs of humans? I was told that China hopes to grow more rice, sorghum, and soybeans, and to raise more cattle, buffalo, and pigs without breaking ground in another acre of wilderness.

ISTORICALLY, with the necessity of feeding a burgeoning population, loss of habitat has been the main cause of decline of wildlife in China. Overhunting, however, also has taken its toll, especially on deer. Deer supplied not only meat but antlers prized as phallic symbols. Nine species or subspecies of China's seventeen species of deer are listed in the IUCN's Red Data Book of threatened wildlife. Some, such as the brow-antlered deer of Hainan Island in the South China Sea, are down to very low numbers. Others, such as Père David's deer, no longer survive in the wild. Hend's and Sinhoe's deer are extinct.

Now some of China's depleted species of deer are making a comeback; for example, Chinese sources indicate that because of the government's wildlife management policies the endangered whitelipped deer is now relatively se-



PANDAS & BAMBOO, DETAILS FROM CONTEMPORARY CHINESE WOVEN PANEL

cure. Although all four races of sika deer maintain only scant numbers in the eastern third of China where 90 percent of the human population lives, several herds are faring well on communes that raise them.

Deer are raised partly for the sake of producing hides and venison on a sustained yield basis, partly to conform to a national plan to maintain some herds in captivity. Although many Chinese scorn the belief about deer antlers as an aphrodisiac, this attitude does not stop the Chinese from exporting deer antlers to Korea, where apparently the people are less scornful of the idea.

In several parts of the country musk deer breeding is a flourishing business, now that the Chinese have found out how to extract the pasty secretions from musk glands of the living animal. Musk is used less as a base for perfume than as a medical ingredient for antispasmodic and restorative drugs. So successful are these centers for raising musk deer that a certain amount of hunting of the animal is permitted. Other deer are accorded total protection.

The Chinese reported not long ago that seven other species in addition to deer will also be raised in this manner, but they did not specify which species they are.

Among other herbivores, several wide-ranging creatures of the arid regions in western China have suffered from competition with domestic stock. Domestic herds not only consume forage; worse, a single herdsman can monopolize a waterhole in the semidesert plains, keeping wild creatures away for weeks on end. Since the early 1960s nomads have been encouraged to settle near artificial water supplies to halt the spread of stockmen into every last corner of China's western wildlands.

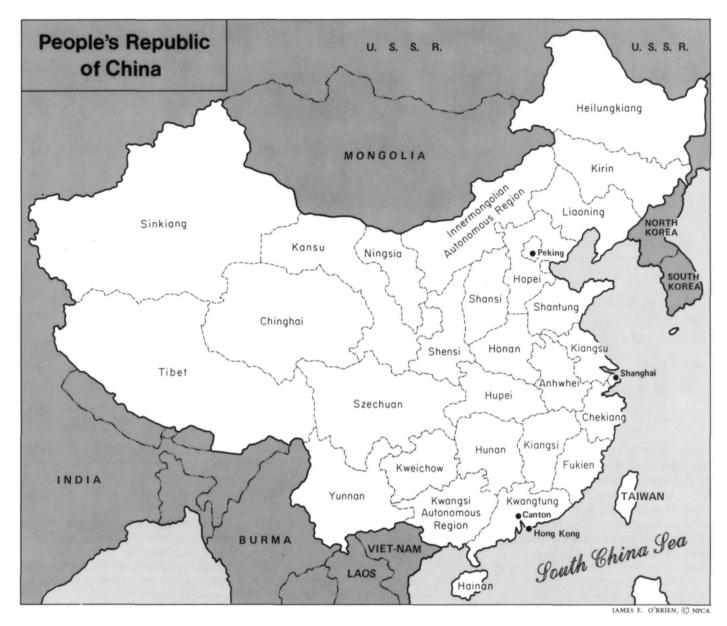
New herds of Przewalski's horse reputedly are sighted from time to time south of the border with Outer Mongolia, and—better news still for this extremely rare animal—China's leaders plan to leave extensive tracts of Sinkiang undeveloped for the foreseeable future.

Likewise to remain sparsely occupied is a 12,000-square-mile zone in Sinkiang between Lakes Lop Nor and Bagrach Kol near China's atomic testing ground, a situation that benefits another wild herbivore in potential conflict with man's herds, the wild bactrian (two-humped) camel.

Brighter prospects apply also to the Mongolian wild ass, or kulan, once relished for its meat, now building up its numbers through strict protection and other management measures.

The Asiatic wild ass, or kiang, of Tibet is, like Przewalski's horse, dependent on water every third day or so and is easily frightened by human beings. But according to reports by scientists who reviewed the situation there in 1973, its decline has now been halted.

The giant panda undoubtedly is the best known of China's threatened mammals. Once it ranged over tens of thousands of square miles. Steadily its forest habitats gave way to the axe and the digging hoe. In a few localities of central China the panda still hangs on, however, notably in bamboo patches about 7,000 feet in altitude and sometimes as high as 13,000 feet. In the Min Shan Mountains in the heart of Szechuan Province



is located the 80-square-mile Wang Lang Reserve, a ravine-riven stronghold for several hundred pandas. Scattered groups of pandas are also alleged to survive in other mountain retreats of central and western China.

Although the panda must have totaled many thousands only a century or two ago and is now down to mere remnant numbers, the Chinese consider the species relatively secure. For one thing, plenty of areas are better suited to agricultural settlement than the harsh fastnesses where the panda is making its last stand. For another thing, nobody wants to buy the panda's coat, eat its flesh, or

use its tonsils for pseudomedical purposes. Most important, though, the animal is totally protected.

peared, birds as well as mammals lost habitat. Worst hit of all were those that favored forest edges, notably pheasants. Equally bad, pheasants were overhunted for their decorative feathers. One of them, Cabot's tragopan, is said to be doing rather better now, and the ring-necked pheasant better still; but at least another half-dozen species or subspecies are extremely threatened. All of them receive full protection by law, supported by the public education campaigns.

Fortunately, the earlier attrition of natural forests is ending, which will favor not only pheasants but also other wildlife. One reason is that timber plantations established in the 1950s are now ready for harvest, thus taking exploitation pressure off virgin tracts. Another reason is that the official agricultural policy in China is to make more intensive use of existing farmlands and to reclaim badly eroded and arid lands, rather than to open up fresh territories. So forests seem safer now than in the past perhaps safer than anywhere else in the developing world.

As an example of the way China is prepared to safeguard individual

species, the Manchurian craneone of the rarest birds in the world and surviving only in relict populations in Japan, eastern Siberia, China, and possibly Korea—has been subject to a series of special protection measures. A waterfowl research team conducted field studies of the bird's ecology and behavior in the wetlands of Heilungkiang Province in northeast China, whereupon the research findings were used to formulate a management plan. Hunting of all kinds was stopped in some areas, and in a few localities unauthorized entry is prohibited for any purpose, including long-standing activities such as reed cutting. Above all, local leaders were taken to see the crane in its wildland refuges, whereupon these leaders were able to inform local commune residents of the rationale for protecting the bird.

China's record on threatened species makes one wonder why the country does not take a more enlightened stance on birds in general. The scarcity of birds I observed may be explained partly by the fact that, in a meat-hungry country, there has been a tradition of hunting whatever birds were available. Partly, too, the lack of birds may be due to a campaign of the 1950s to eliminate the sparrow as one of four major pests, the others being rats, mosquitoes, and

houseflies.

Sparrows were alleged to take large amounts of grain, so, with the enthusiasm and systematic application that has enabled the Chinese to virtually clear their country of the other three scourges, hundreds of millions of people set about killing sparrows. During the years-long effort, however, many other birds no doubt came to grief. Eventually the Chinese reaped the consequences to their food-growing schemes of killing so many birds. The sparrow's place among the Big Bad Four was taken by bedbugs, and a ban was placed on killing insect-eating birds.

A final factor contributing to the demise of birds lies, in southerly sectors, in the trade between China





and Hong Kong. The traffic accounts for huge numbers of birds, especially of small sparrow-sized birds, reckoned a great delicacy.

PREDATORS have an especially difficult time in developing countries as expanding human settlements encroach on their habitat.

The tiger has been steadily pushed toward extinction wherever it exists. As human beings encroach upon its habitat and eliminate its prey by hunting deer and other wild herbivores and, more importantly, by appropriating the *prey's* grazing land for domestic stock, the tiger turns to cattle for food. Not unnaturally, people strike back. Result: A conflict that escalates continually, with poor prospect of being resolved.

For a time the Chinese followed conventional practice: The tiger stood in the way of human progress, so the tiger must be kicked out of the way. From 1950 until about 1965, the Chinese government pursued an explicit policy of eliminating the tiger in most areas as quickly as possible.

Then a few leaders urged that the government take another look at the extermination campaign, and the decision was made to preserve the tiger in some areas of China. In other areas tigers would continue to be eliminated. In areas where tigers would be protected, groups of people who were bothered by tigers living in their backyards were allotted land elsewhere.

The race known as the Chinese tiger persists in forests and mountain zones of southeastern, southwestern, and southern provinces. A refuge system for the race was worked out.

In southern parts of China the Bengal tiger exists in mountainous areas of Yunnan and Kwangtung Provinces, the Kwangsi Autonomous Region, and in other areas along the frontiers with Burma, Laos, and Vietnam. Like the Chinese tiger, the Bengal tiger receives partial protection.

In northeastern China lives the Siberian tiger, a long-haired variety



TIGER UNDER PINES, ALBUM LEAF, CHINESE, MING, EARLY 17TH C. (?)

that is the largest of all tigers. This subspecies is totally protected. It hangs on, in severely reduced though perhaps recovering numbers, in mountain zones in Kirin and Heilungkiang Provinces. The Chinese are reforesting part of this region, a measure that supplies new habitats for deer, boar, and other prey animals. A further initiative is the Uhangpaishan Reserve on the border with North Korea, a locality of pine and birch forests that supports not only tigers but brown bears, sable, and lynx.

FTER this promising start to wildlife conservation, what are the future prospects for wildlife in China?

By the year 2000 China's populace is likely to have reached, or be close to, a stage of no further growth, assuming that the present extraordinary birth-control program can maintain momentum. China has hardly started on its Green Revolution with respect to using improved seeds, so there is much scope for advance there. The country's vast oil reserves will soon supply quantities of nitrogenous fertilizer to go with the or-

ganic fertilizer that peasants already use to such good effect. The oil will also help with mechanization, hence intensification, of agriculture.

What about China's goal of increasing agricultural productivity without encroaching further on wilderness? When party officials say they intend to do something, they mean it. In 1965 they said they intended to plant 25 million acres of forest every year-an area almost the size of Ohio-in a country only a little larger than the United States. Today it is easy to believe that they have done it, with trees on every side: on hilltops, in the plains, along every roadside and rail track, throughout the cities as well. Exactly how much "wilderness" remains in China is unclear to outsiders, however.

Although we in the Western world still know too little about how China manages her resources, she certainly seems to have taken some big strides in the past thirty years. She also has made obvious progress in feeding, clothing, and housing her people. Whether China can indeed ensure *lasting* protection for natural resources and

whether those resources can withstand her current striving for economic growth and rapid industrialization will have international significance—particularly for developing nations.

Now that relations between the United States and the People's Republic of China have been reestablished, the two countries are making tentative plans for joint efforts to conserve living resources. We should be able soon to acquire a more solid basis for evaluating conservation in mainland China.

So far, though, the prospects for wildlife in China at least look brighter than they have for many years. True, factories still smoke, some rivers could be cleaner, many communes are hardly modernized. But there also is reason to believe that at the end of the century we will still have pandas, tigers, and white-lipped deer in the world.

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

article & photographs by LEON S. MINCKLER

We still have a long way to go before the challenge of proper forest management is met

The Challenge of Forest Management

'HE OPTIMUM USE of the nation's forests depends on the application of silviculture and management principles within the existing social and political environment. This application is the practice of forestry, a profession of broad scope and extreme complexity. Essential considerations include biological, social, economic, and political aspects, bounded by ecological constraints if the forest and soil resources are to be saved for future generations. Management decisions are like a medical diagnosis and prescription; all factors are considered, and a silvicultural-management prescription is planned and carried out. Good foresters do not depend on rules-ofthumb.

In 1816 the German forester Heinrich Cotta wrote a preface to his book, *Anweisung zum Waldbau*, which contains wisdom I am afraid we still have not entirely learned. A few excerpts are appropriate to this discussion.

Forestry, however, does not offer any nostrums and can do nothing against the course of nature. The celebrated physician Verdey said: "The good physician lets people die; the poor one kills them." With the same right one can say the good forester allows the most perfect forests to become less so; the poor one spoils them.

. . . The good forester takes the highest yield from the forest without deteriorating the soil, the poor one neither obtains this yield nor preserves the fertility of the soil. Three principal causes exist why forestry is still so backward: first, the long time which wood needs for its development; second, the great variety of sites on which it grows; thirdly, the fact that the forester who practices much writes but little, and he who writes much practices but little.

The essence of forestry is accomplishing three things simultaneously: maintaining the productivity and integrity of the forest ecosystem; harvesting timber products as appropriate; and using, maintaining, and enhancing those values associated with the forest as an existing, living environment. This can be done only with scientific understanding, social awareness, and tender loving care.

CONFUSION regarding the objectives of forestry practice jectives of forestry practice has caused more controversy and trouble than anything else. Foremost has been the confusion between short-term financial profits and long-term values from the forest resource. Foresters have tended to be relatively unsympathetic to long-term environmental values; and environmentalists have insisted that silvicultural practices enhance values such as recreation, wildlife, water, and aesthetics. Integrated forestry based on ecological principles would provide both types of values. In actual practice it is better to determine the biological and ecological requirements, then fit these to the objectives. Practices for short-rotation-dominant timber objectives would be quite different than for objectives of large, highquality logs plus environmental values.

The confusion over objectives is closely associated with lack of appreciation of the difference between ownership classes. Small private owners have not understood the potential for producing all values on their woodlands. Many such owners believe that timber harvesting will ruin those woods for the environmental values, so they miss the chance for true integrated forestry. Practices on public forests are too often oriented heavily toward quick timber returns when this is neither silviculturally required nor desired by the public. Industrial lands are frankly managed for timber products, sometimes with practices not designed to protect water and future productivity. The environmental values are byproducts of timber growing. Foresters should not dictate objectives; they should show how to attain objectives and point out alternatives.

It is difficult to improve practices until past mistakes are recognized. At least five serious mistakes have been made, and are still being made, in the practice of forestry in this country.



- 1. Premature cutting of immature trees. This practice involves waste from clearcutting immature forests and heavy commercial cuts for maximum current stumpage returns.
- 2. Leaving poor and cull trees in the forest to occupy growing space; lack of improvement cutting.
- 3. Waste of useable wood left in the forest and waste at sawmills. There is currently considerable improvement in reducing this waste, but the amount is probably still greater than the timber left uncut in all the parks in the country.
- **4.** Lack of deliberate management for environmental values; the profession has not grasped the full scope of its function.
- **5. Damage** to soil, site, water, and residual forests; destruction of integrity of ecosystems. This is the most unforgiveable mistake of all.

A somewhat different kind of professional mistake that must be corrected is the weakness of "cost analysis" in determining values from the forest resource. These analyses have been heavily biased toward timber because dollar values for timber are obvious and because the economists who make such analyses think in those terms. As a consequence, the environmental, nontimber values have not received a fair evaluation, and the profession has lost credibility with

Commercial logging in upland hardwoods in Illinois (above) ignores silviculture principles by cutting immature trees for sawlogs and failing to remove cull trees. Hardwood reproduction about ten years after a clearcutting in West Virginia (below) has resulted in low quality stump sprouts because many small trees were cut. Small trees sprout multiple stems that are susceptible to rot from the old stump instead of good quality stems. Commercial logging in swamp hardwoods in the South (bottom) took only the best trees, with no effort to remove cull trees, prevent damage to remaining trees, or assure desirable regeneration.





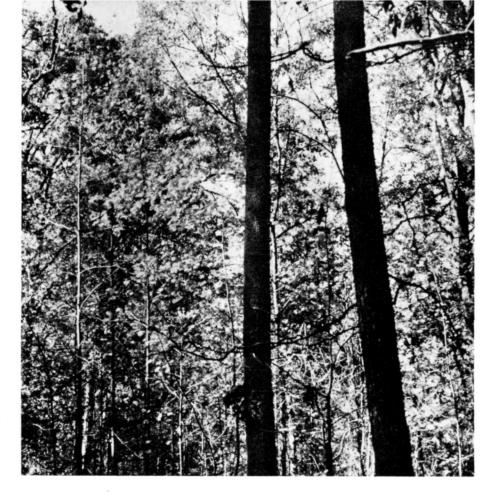
large segments of the public. This issue is not confined to this country. In "A World Conservation Strategy" (second draft), 1978, prepared by the International Union for Conservation of Nature and Natural Resources the following statement appears under the heading "Costs and Benefits."

Living natural resources cost nothing to make and little to take, but when destroyed some are extremely expensive to replace and others are irreplaceable. It is not difficult to put monetary values on those plants and animals and their products that are traded-and these values are considerable. Other living resources, however, benefit the economy and the rest of human life in ways whose value is virtually impossible to quantify even though it is often much greater. Few of the essential ecosystem processes or of the species and varieties of indirect but nonetheless critical economic importance lend themselves to cost-benefit analysis, but this is a measure not of their lack of value but of the lack of sophistication of cost-benefit analysis.

The lack of sophistication in our cost-benefit analyses is serious, and progress toward a fair appraisal will be slow until it is corrected.

SILVICULTURAL SYSTEMS are rational prescriptions based on forest conditions, the soil and site, the values desired, and on eliminating damage to the site-soil-water complex. At least seven criteria should be used in prescribing silvicultural systems or practices:

- 1. Management objectives
- 2. Environmental protection
- 3. Economic (value) equation
- 4. Species regeneration requirements
- 5. Forest structure and age management
- 6. Amount and quality of tree growing stock
- 7. Site quality and diversity
 Needless to say, there is not a
 single national forest or ranger district in the East where one cutting
 system (for example, clearcutting)
 should be the only or the dominant
 system. (See "Flexible Silviculture:
 Help for Environmental Forestry,"
 National Parks & Conservation
 Magazine, November 1978.)

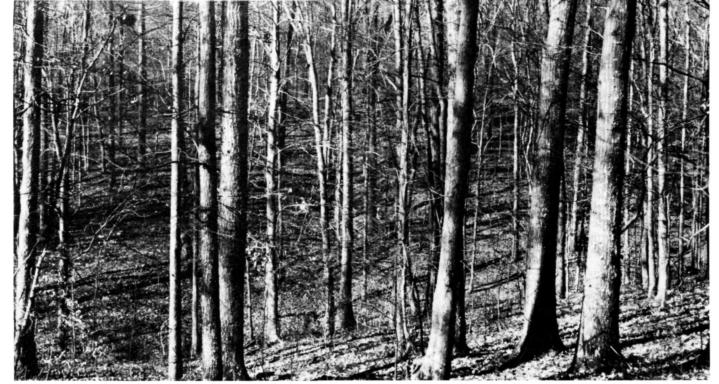


The issue of clearcutting on national forests, especially in the East, has become an acute forestry and political issue. This issue deserves careful examination. What reasons are usually given for the necessity for clearcutting and even-aged management? (1) Clearcutting is necessary to obtain regeneration and development of the desired species. (2) Clearcutting is needed for wildlife habitat. (3) Even-aged management is the best way to "regulate" a forest and, in effect, the only practical way. In actual fact all these objectives can be obtained by the proper use of group selection silviculture combined with improvement cutting and small-patch clearcuts as re-

So what are the real reasons for the wave of clearcutting sweeping the eastern United States? The reasons are not biological or ecological, not public demand, not to fulfill public objectives, not greater long-term yields of timber, not better protection of the sites and the ecosystem, not the prevalence of mature stands, and not the common presence of derelict or diseased stands. I must conclude that the real reasons for clearcutting and even-aged management are some or all of the following:

- 1. Administrative efficiency
- 2. More immediate profits to timber operators and/or owners or the United States Treasury
- 3. Less professional input in management and therefore fewer personnel and costs required
- 4. Effective use of heavy logging equipment
- 5. Objectives are dominant pulpwood or fiber production These may be good reasons in some circumstances, but they are not imperative to management for integrated uses on public forests or small woodland ownerships where immediate dollar returns are not the primary consideration.

Ecological forestry for integrated uses would use flexible silvicultural practices. All silvicultural systems form a continuum ranging from the most severe to the least severe cutting; they grade into each other as follows: clearcutting \rightarrow seed tree \rightarrow shelterwood \rightarrow patch



An upland hardwood stand in Illinois (left) about twenty years after combined stand-improvement and group-selection cuts. Note the immature sawtimber trees left and the new pole-sized trees in the opening. Harvest trees were mostly large and did not sprout. Culls of all sizes were killed and left standing. This is an uneven-aged stand of good quality and great diversity. Above, an upland hardwood stand in Illinois about twenty years after improvement treatments to kill cull trees and to cut an occasional mature tree. The stand was well stocked with mostly immature growing stock trees as well as a substantial proportion of low quality and cull trees.

cutting \rightarrow group selection \rightarrow single-tree selection. Each system is appropriate to a given set of objectives and to site and forest conditions. Each provides space for new regeneration if properly used. Objectives vary, and site and forest conditions have great diversity. Thus, as with a physician's prescription, the forester prescribes the treatment or, more likely, a combination of treatments. This prescription should be done on the ground to satisfy the conditions present. It requires intensive professional inputs, and it yields maximum multiple values. (See "Flexible Silviculture," loc. cit.)

I said earlier that damage to the soil-site-water complex and to the remaining forest caused by timber harvesting is a serious shortcoming of forestry practice in this country. We should change our whole attitude toward timber harvesting and think of it as an integral part of silviculture. The most careful marking of trees to cut will be useless unless the logging is done carefully and in accordance with management objectives. Too long

have foresters marked and recorded trees and then turned the job over to the timber operator. The results often have been disastrous. Loggers need training, careful supervision, and penalties for infractions of rules. The harvesting of timber is often the weakest link in the forest management process, but it need not be that way. I know from personal experience of twenty years of management and logging on the Kaskaskia Experimental Forest in southern Illinois. Forestry will never be a fully respected and effective profession until timber harvesting is made an integral part of silviculture.

O'N THE NATIONAL FORESTS, there is, in my opinion, one other major stumbling block to the practice of good and effective forestry. That lies in the bureaucratic organization of the U.S. Forest Service. There should be management units (perhaps ranger districts) small enough and homogeneous enough to be manageable. Each unit should be in the charge of a professional forester (and ap-

propriate staff) with the authority and responsibility to manage the unit within general regional guidelines or objectives, and with coordination by and technical help from the Forest Service office in Washington. Such organization would place responsibility for forest management on the ground where it belongs and would eliminate large hunks of bureaucratic superstructure.

A forester should be a "man of the woods" and know his forest. How else can he make the right decisions? The challenge of forest management must be met on all fronts—ecological, social, economic, and political—and with effective government organization. Obviously, we still have a long way to go to achieve success.

A trustee of National Parks & Conservation Association, Leon Minckler served with the U.S. Forest Service for thirty-three years. He has taught silviculture at several major universities and has written many articles about forestry and silviculture for this and other publications.

NPCA at work

YELLOWSTONE

Geothermal Leasing: The Day Old Faithful Goes Dry?

When some people look at Old Faithful, the geyser that has awed pilgrims from around the world and is an international symbol of the birth of the national parks at Yellowstone, apparently all they see is something to sacrifice on the altar of national energy (with a capital E).

So far nobody has advocated directly tapping Old Faithful for energy, but scores of plans to develop geothermal energy just outside Yellowstone National Park could destroy or seriously damage the park's sprouting geysers, hot springs, and bubbling mud pots.

More than seventy companies and individuals have filed lease applications to explore and develop speculative geothermal energy resources in an area of the Targhee National Forest known as Island Park, which lies on the eastern Idaho state line as close as 13.5 miles from Old Faithful. The proposals would involve drilling 10,000-foot-deep wells in the Island Park area. Later, if commercially feasible geothermal resources were discovered, industrial facilities and power plants would be constructed near the power source.

Exploration or development would jeopardize a number of endangered or threatened species of wildlife found in both Island Park and Yellowstone. A quarter of the Island Park area has been designated by the U.S. Fish and Wildlife Service as habitat critical to the survival of the grizzly bear; the area is also one of the last places where the extremely endangered Rocky Mountain wolf still appears. Bald eagles feed extensively on the area's lakes, while peregrine falcons also have been known to use this habitat.

The reason for the intense interest in leasing is that Island Park, like Yellowstone, has geothermal vents that release subterranean heat from beneath the earth's crust. This heat can be tapped and used to produce electricity, but naturally this process reduces the amount of heat in the region.

NPCA has criticized a draft environmental impact statement on the Island Park proposals that mentions but fails to answer one of the most critical questions concerning geothermal development there: "How will leasing affect Yellowstone's remarkable geothermal features, thirteen of which are within twelve miles of the Island Park area?"

The Forest Service, as the managing agency for the Targhee National Forest, prepared the draft statement in cooperation with the Bureau of Land Management, which is in charge of leasing.

But when high-ranking officials at the Interior Department reviewed the statement, they warned that it fails to note that geothermal development has had profound effects on geyser basins in other areas of the world. For instance, Geyser Valley in New Zealand was totally destroyed as a natural discharge area when the Wairakei geothermal area was developed.

Springs and geysers in the Beowawa Geysers area of Nevada—second to Yellowstone on the North American continent when geothermal exploration began there in the 1940s and 50s—had ceased flowing by 1961.

Yellowstone has 10,000 thermal features. Of ten world-ranked geyser areas, the park is one of only three that remain essentially undisturbed.



NPCA has protested that the Forest Service statement does not call for monitoring of declines in heat, pressure, or chloride content until development comes within five miles of the park.

NPCA stated that considering Old Faithful's close proximity, the strong possibility of a subterranean connection between Island Park and Yellowstone's geothermal resources, and the fact that exploration would tamper with a system that may be many miles across, such a monitoring setup would be grossly inadequate.

This Association has called for prohibiting any kind of geothermal development in this area unless conclusive evidence of the lack of a subterranean connection is provided. Yellowstone has been given the highest possible recognitions of national and international significance: national park, World Heritage Site, UN International Biosphere Reserve.

Yet one leasing applicant reportedly commented, "The beauty of Yellowstone park cannot be allowed to influence the development of alternative sources of power in other geothermal fields of our country. Why let emotions restrict development of an energy source outside the park?"

National Park Service Director William Whalen does not agree: "There is only one Yellowstone on this earth. Only two other geyser systems in the world approach its wonders. No amount of energy potential at Island Park justifies risking damaging Old Faithful and the other spectacular geysers of Yellowstone.

"As of today, if the final environmental impact statement of the Forest Service permits any leasing for geothermal development in this area, I will request Secretary Andrus, pursuant to his authority under the Geothermal Steam Act, to veto the leasing of federal lands for that purpose. Frankly, this potential threat to Yellowstone is so unsettling to me that if leasing is approved, I would not rule

Continued on page 22

ANNOUNCING A MOST IMPORTANT NEW PORCELAIN PLATE COLLECTION . . .

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by Peter Skirka

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The great cats. "They are fierce, rapacious, subtle, and cruel, unfit for society among each other, and incapable of adding to human happiness." So wrote a 19th century naturalist. "They are among the most princely lords of creation." So wrote a contemporary naturalist. They are without doubt some of the most magnificent animals in existence.

How long they will exist in the wild is questionable. They are all endangered, chiefly because their living areas have been greatly reduced or destroyed entirely, and also because they continue to be illegally hunted.

Now, through the artistic brillance of Peter Skirka, you can add to your personal happiness and satisfaction by preserving the beauty and majesty of the eight most magnificent great cats permanently in your home. For Peter Skirka, one of America's most outstanding and highly honored wildfire artists, has created his first works of art in fine porcelain -- The Great Cats--a series of eight collector's plates portraying the beauty, strength, and mystery of eight of nature's most superb creatures. And as the first works in porcelain by this exceptional artist, this collection is destined to have lasting importance.

Included in the collection will be the Tiger-the first plate, shown above -- and the Leopard,
Panther, Lion, Cheetah, Snow Leopard, Puma,
and Jaquar.

Commissioned by the American Collector's Guild, the plates -- 9 full inches in diameter -- will be crafted by Phoenix China, one of America's premier producers of fine-art porcelain china. The exceptional translucence and whiteness of fine porcelain china are ideally suited to bring out the subtle colors and precise



details of Peter Skirka's art. Additionally, each plate will be bordered with precious 23 karat gold.

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The collection will be issued to subscribers at the convenient rate of one plate every other month. The original issue price of just \$45 per

plate will include specially written reference material, Certificate of Authenticity, and special display stand for each plate in the collection. Due to the time and care required for the crafting of each plate in this superb collection, please allow 8 to 12 weeks for delivery of your first plate.

Note: Upon the completion of the collection, the American Collector's Guild will make a substantial contribution to the Jersey Wildlife Preservation Trust, founded in the Channel Islands by naturalist Gerald Durrell, and dedicated to the preservation, breeding, and eventual reintroduction into their native habitats of endangered species of the world.

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Name (please print)	
Signature	
StreetState	Zip
NOTE: Please allow 8 to 12 weeks delivery.	-6

Yellowstone—from page 20.

out legislation to include the Island Park Geothermal Area in an expanded Yellowstone National Park and end all mining activity, period."

You Can Help: If Yellowstone is sacrificed in the hunt for energy, will any place be spared?

At press time the Forest Service was expected to release the statement on October 1. The official comment period on this statement has expired, but you can still express your views on it by writing the Forest Service and BLM and sending copies to Secretary Andrus.

Hon. Cecil Andrus, Secretary Department of the Interior Washington, D.C. 20240

Frank Gregg, Director Bureau of Land Management U.S. Department of Interior Washington, D.C. 20240

Max Peterson, Chief U.S. Forest Service Washington, D.C. 20250

NPS APPROPRIATIONS

Bare-Bones Park Budget in Danger of Cuts in Congress

Even though the parks budget proposed to Congress by the Carter Administration already was shockingly lean—withholding funds needed just to maintain and rehabilitate our parks so that they don't fall into disrepair—the proposal suffered further cuts this past summer at the hands of a House appropriations subcommittee.

These cuts were not restored by the full Appropriations Committee or by the full House.

The subcommittee sliced out funds for critical programs such as studies of new park units. However, at press time NPCA was pushing to restore these crucial funds as the Interior Department appropriations legislation works its way through the Senate.

The Administration had proposed a National Park Service budget for fiscal year 1980 that would be \$30 million below the NPS budget for fiscal year 1979. The proposal is extremely inadequate—especially in its lack of sufficient funding for maintenance, trans-

portation, and rehabilitation and repair of existing buildings. (See NPCA at Work, "Administration Budget Request Would Offer Peanuts to Parklands," April 1979, page 24.) But the appropriations subcommittee added insult to injury.

Although the subcommittee's total reduction in the NPS budget was only one-half million dollars, several necessary programs were cut and less necessary ones received funding.

One of the worst hit programs was the new area studies program, which the subcommittee cut from \$1.1 million to \$300,000. If adopted, this extremely large reduction would not only reduce the number of studies conducted on potential new areas for the Park System, but would also impair the quality of those studies that are actually carried out.

Another target of subcommittee slashing was the park science program, which suffered a cut of more than \$1 million. This program is an essential element of the Park Service's effort to deal with the growing number of cases in which developments on lands adjacent to park units cause pollution and other problems for the parks. Moreover, the already low maintenance budget was carved up once again, ensuring further deterioration of park resources.

The subcommittee also cut about \$1.4 million from the already-insufficient budget for the Park Service's cultural resources program. Inadequate funds will endanger protection and maintenance of historical and prehistoric sites and resources.

Nevertheless, somehow the subcommittee was able to add \$24 million for further construction of the Natchez Trace Parkway, which runs through the district of Rep. Jamie Whitten (D-Miss.), chairman of the Appropriations Committee.

On the plus side, an additional \$27 million was provided for land acquisition in park system units. These funds will come out of the Land and Water Conservation Fund administered by

Continued on page 24

Gallup Poll Shows Vigorous Support for Spending More on Parks

A recent Gallup poll survey of a representative sample of the American public demonstrates that the public loves and visits the national parks and believes they deserve full funding—almost half calling for increased funding for the parks. The National Park Service reports that attitudes on this issue were favorable in 1955 but are even more favorable today as indicated by the results of this year's Gallup study.

The question asked in both surveys was "There has been some discussion over how much the government should spend on the national parks. To the best of your knowledge, would you say the federal government spends too much or not enough for the care and upkeep of the national parks?"

The percent saying "not enough" is being spent has doubled since the 1955 survey, with 44 percent giving this answer in the recent survey as compared with 21 percent in 1955. Only 5 percent said they felt too much was being spent currently. The remaining answers were "about the right amount," 26 percent, and "no opinion," 25 percent. In sum, then, 70 percent either said "about the right amount" or "not enough." Among recent park visitors, 84 percent said either "about the right amount" or "not enough."

These results are particularly noteworthy in light of public opinion about government expenditures in general, NPS points out. In a different Gallup Poll survey earlier this year, 75 percent of the public said that the federal government spends too much money in general.

Among those who believe that not enough is spent on the parks, reasons given were divided between those who think that the parks are not as well maintained as they should be or need more facilities for visitors (28 percent) and those who believe that the national parks are important national preserves (14 percent).



Don't get lazy now-keep on writing, calling, and sending telegrams about Alaska!

ALASKA BATTLE IN SENATE

Efforts by citizens such as NPCA members like yourself contributed heavily to the recent victory for the conversation bill in the House and will be even more critical as the legislation begins what could be a tense battle in the Senate this month.

The issue of public lands in Alaska is now before the Senate Energy and Natural Resources Committee, the same committee that tied up Alaska deliberations in 1978. This year—despite a request by Sen. Mike Gravel (D-Alaska) to hold up the bill with repetitious, extensive field hearings—committee chairman Henry Jackson (D-Wash.) vowed to have a bill reported before the August congressional recess. But with pressure to complete pending energy legislation, the Alaska bill was again put on the back burner.

The committee could consider the matter at any time after Congress returns on September 5. NPCA's T. Destry Jarvis is coordinating the Alaska Coalition's work on the committee, which will be considering two bills: S 222, the bill supported by NPCA and other members of the Alaska Coalition, and S 9, the weak bill approved by the committee in 1978. The trouble is that S 9, introduced by committee chairman Jackson, will likely be the starting point for whatever bill the committee reports and has a good chance of winning support.

As compared to the bill just passed by the House (see July 1979, page 22), S 9 cuts 40 million acres out of the proposed conservation systems, completely eliminates five national wildlife refuges, opens the Arctic National Wildlife Range to mandatory oil and gas exploration, and chops the Housepassed Gates of the Arctic National Park into two fragments, one preserve, and two national recreation areas open to mining and road construction.

Across the board, S 9 creates horrendous management problems by failing to preserve whole ecosystems and slicing many of the proposed parks and refuges into areas managed under differing rules by a variety of agencies.

Less than half the total NPS acreage is placed into national parks and monuments. The rest would be put into national recreation areas—where mining and hunting are allowed—and national preserves—where sport hunting is permitted. Half the land left in national parks would be nothing but barren ice and rock.

By contrast, S 222 and the Housepassed bill (HR 39) maintain the integrity of the park and refuge areas along natural ecosystem lines and eliminate conflicting management rules within each unit.

At the same time, they leave 95 percent of Alaska lands with "high" or "favorable" potential for oil and gas, 100 percent of offshore oil resources, and 70 percent of the state's mineralized areas wide open to development. S 222 was introduced by Sen. John Durkin (D-N.H.), Sen. Gaylord Nelson (D-Wisc.), and Sen. William Roth (R-Del.) and has twenty co-sponsors to date (see list).

You Can Help: All NPCA members are urged to immediately write, call, or telegraph both their senators about the Alaska wildlands issue. If they are cosponsors of S 222 (see list), thank them and emphasize your support for any additional efforts they can make to bring about a strong bill. If they are not co-sponsors, ask them to show their support for strong Alaska legislation by co-sponsoring S 222 right away in order to strengthen the position of conservation forces in committee. In addition, if you are represented by a senator on the Energy and Natural Resources Committee, urge him to press for early consideration of the Alaska wildlands issue and emphasize that S 9 is completely unacceptable to you. Even if the committee approves S 9, a record of opposition to it will strengthen our case before the full Senate. Call the Alaska Hotline at 202-547-5550 for a recorded update.

Henry Jackson (D-Wash.), chairman
Frank Church (D-Idaho)
Bennett Johnston (D-La.)
Dale Bumpers (D-Ark.)
Wendell Ford (D-Ky.)
John Durkin (D-N.H.)
Howard Metzenbaum (D-Ohio)
Spark Matsunaga (D-Hawaii)
John Melcher (D-Mont.)
Paul Tsongas (D-Mass.)
Bill Bradley (D-N.J.)
Mark Hatfield (R-Oreg.)
James McClure (R-Idaho)
Lowell Weicker (R-Conn.)

Energy and Natural Resources Committee

Pete Domenici (R-N.Mex.) Ted Stevens (R-Alaska) Henry Bellmon (R-Okla.) Malcolm Wallop (R-Wyo.)

U.S. Senate: Members of

Co-Sponsors of S 222 John Durkin (D-N.H.) Patrick Leahy (D-Vt.) Gaylord Nelson (D-Wis.) Paul Tsongas (D-Mass.) William Proxmire (D-Wis.) Howard Metzenbaum (D-Ohio) Claiborne Pell (D-R.I.) Gary Hart (D-Colo.) William Roth (R-Del.) Abraham Ribicoff (D-Conn.) Joseph Biden (D-Del.) Ernest Hollings (D-S.C.) Carl Levin (D-Mich.) George McGovern (D-S.Dak.) Edward Kennedy (D-Mass.) Max Baucus (D-Mont.) Donald Riegle (D-Mich.) Alan Cranston (D-Calif.) John Culver (D-Iowa) John Chafee (R-R.I.)

Budget—from page 22

the Heritage Conservation and Recreation Service and will especially boost efforts to acquire lands in the Cuyahoga Valley National Recreation Area in Ohio and the Santa Monica Mountains National Recreation Area in California.

At the same time, however, the subcommittee dealt a devastating blow to state recreation programs by hacking \$159 million from funds available to states for acquisition and development of outdoor recreation areas and facilities. If this huge reduction in the LWCF is not restored, state recreation and construction efforts will be damaged for some years to come.

NPCA has already begun the work necessary to replace these much needed funds in the Senate. The Interior Department Appropriations legislation, containing both the NPS and LWCF funds, is expected to be on the Senate floor in September.

NPCA CHESTNUT PROGRAM

Wanted: More Friends for the American Chestnut

As the trees begin to take on their autumn colors and drop fruit, it is again time for NPCA's annual search for American chestnut seeds.

For many years NPCA has undertaken a program aimed at restoring the American chestnut. Once the king of the eastern hardwood forest, the tree has been virtually wiped out by a fungus imported into this country from China in the late 1800s.

Five years ago NPCA initiated a seed collection and replanting program focused on the development of American chestnut strains tolerant or resistant to the blight. Seeds have poured in from NPCA members and friends all over the country. By raising trees grown from these seeds, NPCA is hoping to find such a resistant genetic strain. Leo Pahl, nurseryman in charge of NPCA's restoration program, plants the seeds on his farm in Maryland.

Two years ago, a two-acre plot within a remote area of the U.S. Army's Aberdeen Proving Ground in Maryland was offered to NPCA for use in raising seedlings. At that time 150 of the seedlings were planted there.

MORE NPCA WORK Around the Parks

Appalachian Trail: NPCA program associate T. Destry Jarvis was recently appointed by Secretary of Interior Andrus to the Secretary's Appalachian National Scenic Trail Advisory Committee.

Mammoth Cave: In a new development in the NPCA Mammoth Cave lawsuit—aimed at forcing the National Park Service to remove from its present site a Job Corps Center that is polluting the national park—NPS Director Whalen recently made a public announcement that the center will be relocated outside the boundaries of the national park.

The NPS press announcement left out a critical point: the present center will be allowed to continue operation for another two years at its present site while the new camp is under construction. This lengthy delay would result in continued pollution of streams in the park's limestone cave systems by sewage from the Job Corps Center. (See July 1979 article and August 1979 NPCA at Work.)

Therefore, NPCA is continuing to press for timely action to preserve the caves. Destry Jarvis of NPCA, along with House park subcommittee staff and co-plaintiffs in the suit from the Cave Research Foundation, recently inspected the polluted and vandalized portions of the cave system. The group also visited the proposed new site for the center at Childress Farm, just north of the park. NPCA publicly commended Amos Hawkins, outgoing superintendent at Mammoth Cave, for his excellent performance and courage in vigorously supporting implementation of the master plan at Mammoth Cave for the past several years despite intense local opposition and lack of support at higher levels of NPS.

Then, this past April Pahl joined Bill Russell and Joe Ondeck of the Aberdeen Ecology Division in transplanting an additional 300 chestnut seedlings from NPCA's nursery bed to the military proving ground plot.

Seedlings will be added yearly until they number 1,000. There they will remain undisturbed to mature and, it is hoped, to bear fruit. Although the blight, which is carried as spores by the wind, will probably infect and kill these trees eventually, it is hoped that they nonetheless will produce some offspring with increased resistance. In turn, these offspring will be planted and should produce trees with even greater resistance.

You Can Help: To ensure an adequate and diverse source of American chestnuts for the restoration program, NPCA asks that members send chestnuts they find to Leo Pahl, 8136 Ventnor Road, Pasadena, Maryland 21122. Please enclose samples of leaves and burrs as well so Pahl can verify the species. To protect the chestnuts from desiccation, we ask that you wrap them in plastic for safekeeping.

NPCA chestnut consultant Leo Pahl proudly displays one of the seedlings grown from nuts contributed by readers from around the country. Pahl plants the nuts on his Maryland farm. Later, seedlings of the endangered species are transplanted to the U.S. Army's Aberdeen Proving Ground.



ENDANGERED SPECIES

Peregrine Penthouse on Interior Department Restores Falcons to Nation's Capital

When Blue got into trouble her first time away from home, no one really lost their cool about it because they knew she probably could take care of herself. Green, Yellow, and Red just went about their business as usual.

Of course, the two scientists who had moved to Washington, D.C., and set up housekeeping in the U.S. Interior Department just to look after Blue and her fellow falcons did a bit of rushing around. From the nearby roof of the General Services Administration building, they tried to track Blue with scopes and by radio transmitter.

And not long after she was reported missing, Secretary of Interior Cecil B. Andrus just happened to pop into the room where Fish and Wildlife Service officials were monitoring a remotecontrol TV scan of the area surrounding the falcons' twelve-foot tower, located on the roof of the Department of the Interior.

Meanwhile, a lunchtime crowd gathered in the department's lobby to wait and to watch on another video screen as Green energetically pulled apart a dead quail. They were observing a pilot program to reintroduce the endangered peregrine falcon into the eastern urban areas where it once flourished; Green, Blue, Red, and Yellow (the lone male) are the fledglings selected to launch the program.

Finally, officials at the Federal Reserve Board called officials at the Interior Department with the news that Blue was tapping on the Board's windows, upset at some crows that were surrounding her on a ledge. No catastrophe. Though less than two months old, Blue had been buzzed by crows before; and she was already as large as they anyhow. With the scientists standing by the window ready to retrieve her from the ledge if necessary, Blue took off on her own and returned to her penthouse, which commands a magnificent view of the city several blocks from the White House.

Several stories down, "bird sitters" Tom and Sharon Allan returned to their home, Interior Department room 2624, an office with a mattress, hot

plate, cooler, and a few chairs. Despite their concern for the peregrine falcons in their charge, Tom and Sharon have had no direct contact with Blue, Red, Green, and Yellow—to ensure that the birds will not be imprinted on humans. Through a delayed release feeding system the birds are fed dead quails raised for this purpose. Tom and Sharon will continue to feed the birds until they develop their own hunting skills.

Tom says the scientists refer to the falcons by the colors of the birds' transmitters "because they are wild birds, they are not pets." On the other hand, FWS has named Green, the first female to take off from the tower, "Rachel Carson," after the scientist who publicized the dangers of DDT in her classic book, *The Silent Spring*. DDT and other toxic chemicals have led to the species' endangerment, wiping out all wild breeding peregrines east of the Rocky Mountains.

The tower atop the Interior Department marks the first attempt to restore a wild breeding population of this endangered species into a major U.S. metropolitan area. Cities, with their high buildings and plentiful food supply of pigeons, sparrows, and other birds, provide ideal falcon habitat. The project is a cooperative effort of the U.S. Fish and Wildlife Service and Cornell University's Peregrine Fund, which has led the way in the successful breeding of peregrines for release into the wild. (See our July issue.)

In the East several hundred peregrines already have been placed in mountain and shore eyries from New Jersey to Virginia. But because of a problem with predation on the fledglings by great horned owls, the scientists are interested in experimenting in the city, where that is not a problem.

Although some people have protested the fact that the peregrines will prey on pigeons and starlings, at least one mayor has called to inquire about the possibility of peregrines controlling his city's troublesome pigeon population. FWS public affairs officer Megan Durham explains, "We are trying to inform people not only about endan-



With an older peregrine looking over his shoulder Secretary of Interior Cecil B. Andrus gets acquainted with one of the chicks brought to the Interior Department from Cornell University in New York.

gered species but also about the role of birds of prey and their value." So far the experiment is a success.

Less than three weeks after they came to Washington in a cardboard box as chicks still covered with white down, the young falcons were released from their enclosure; Blue took her short but dramatic flight to the Federal Reserve Board the next day. By that time the fledglings were almost full-sized.

At press time the falcons were expected to disperse from the Interior Department tower before fall. It is hoped they will return to Washington to breed in a year or two. If so, most likely they'll choose a taller structure on which to rear their young.

Secretary Andrus says, "The prospects of seeing this magnificent bird once again soaring above the nation's capital testifies to the fact that all the news about endangered species is not gloom and doom."

news notes

MORE NOTES
P.S. on Parks

The Jordan Pond House at Acadia was destroyed in a huge blaze of unknown origin on June 21. This gracious inn with birch bark rooms, massive stone fireplaces, and a special feeling of history touched the lives of residents of Seal Harbor, Maine, and summer visitors for 132 years. Seal Harbor resident and author Russ Butcher wrote in The Bar Harbor Times: "We literally grieve for the passing of an old friend. The loss closes forever an historical era

that embraced many generations of tea-and-popover devotees. It will be a long time before my wife and I won't automatically think: 'Let's go for a hike and end up at the Jordan Pond House for some fresh peach ice cream and popovers. . . .' The greatest losses beyond the rustic old rambling building and delicious food, are those intangibles." No one was injured in the fire. At press time the National Park Service, Acadia Corporation concessioner, and Pond House devotees were considering the future use of the site. The

North Atlantic Regional Office and the Denver Service Center of the National Park Service are analyzing alternatives ranging from as complete a restoration of the house as possible to returning the land to nature.

Lincoln's Gettysburg Address was returned to Gettysburg this summer. One of five original copies of the Address—the first and second drafts handwritten by Lincoln—will be on display at Gettysburg National Military Park through this month. Under a special loan arrangement with the Library of Congress, starting next year they will be exhibited at the park from Memorial Day to Labor Day for five years.

The late journalist Edward R. Murrow is now commemorated by a park at 18th Street and Pennsylvania Avenue in Washington, D.C. In remarks at the dedication, Secretary of Interior Andrus said that Murrow "brought the outside world closer to a whole generation of Americans, telling us what it was like in London during the years of cruel pounding from the air, and later how it was in postwar Europe and America." Mrs. Murrow, widow of the late journalist, and retired CBS commentator Eric Severeid were among those gathered for dedication of the new park near the U.S. Information Agency. Severeid noted that praise had embarrassed Edward R. Murrow. But when Mrs. Murrow unveiled the commemorative marker, it carried the following inscription: "This park is dedicated April 25, 1979, to Edward R. Murrow, 1908-1965, reporter and broadcaster; director, USIA, 1961-1963, who gave his profession a standard of excellence and whose clarity. humanity, and courage helped his country and the world to know what America at its honest best could be."

Glacier National Park Superintendent Phil Iversen recently upset award-winning movie director Michael Cimino by withdrawing filming privileges in the park for Cimino's movie "Heaven's Gate." Although the filming had already started, Iversen says he had to make the hard decision to halt it because the re-creation of a frontier

Continued on page 30



CITIZENS' ACTION GUIDE TO THE NATIONAL PARK SYSTEM

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reader comment

Dead End for Nuclear Power

I have just finished reading your latest issue of the magazine [June]. It just happens I have just returned also from a trip through four of our national parks and one Indian tribal park in the Southwest, all of which I have visited several times before—at least. The first time I was in the old Utah parks was some fifty years ago!

I have some comments:

Your editorial on nuclear power to me is as one sided as your opposition could possibly be. It seems to me we have little real choice in this day and age but to find new sources of power and I personally believe nuclear power can be made as safe as another [source], once this hysteria is over. You have succumbed to it.

Your article about coal is the same old line that has been presented by others. Of course, there is a bit of truth to it, but here again, we are bound to need energy to grow on and this is certainly a reasonable source. We are not yet [resorting] to using squirrels turning a cage for power! Come now, be reasonable. I feel your attitude was not good.

Lastly, your comments concerning the use of concessioners in national parks is not true in my observation. At none of the Utah parks, for instance, is there any crime against nature by new buildings. In fact, in the fifty years [in which] I have known something about it, there is hardly a new building in the parks at all. I cannot think of one except perhaps one lone small gas station—much needed. The gift shop is the same as it was when I was a teenager! There are no new "fancy" places for anyone that I saw. I think you need to take another look and stop making blanket accusations that cannot be backed up in fact!

Rev. A. W. Bruehl Des Plaines, Illinois

I have enjoyed Mr. Anthony Wayne Smith's statements in the NPCA Magazine for a long while, finding him both a keen observer and a delightful stylist. But I have rarely felt more strongly stirred nor so utterly in agreement with anyone than in the instance of his recent "Dead End for Nuclear Power" in the June issue.

He has pulled no punches in his evaluation of what is, at basis, a monstrous technological development. At the same time, he is honest about the feasibility of alternative sources, especially those involving renewable forms such as solar, which the nuclear industry is only too eager to discredit in

the public judgment.

As a single brief statement of the current status of our energy dilemma, I can think of no better presentation than his editorial, and I hope you will extend my warmest congratulations to him on it. I look forward to many future issues of your publication and to further editorials by Mr. Smith.

Phillip M. Allen, MD Huntersville, Alabama

Grand Canyon Cover

What a beautiful cover on the June issue! Are any prints available?

Miss Ida Fox Brookline, Mass.

Yes, you can order an 11 × 14 Cibachrome print from the photographer for \$40. Write John Richardson, Botany Department, Southern Illinois University, Carbondale, Illinois 62901.

Anyone for the Old CCC?

Many of us wonder what happened to the 3 million men who served in the Civilian Conservation Corps from 1933 to 1942. So last summer, some 500 former members of the CCC from thirty-nine states met at the VFW Hall in West Sacramento, California, and organized the National Association of Civilian Conservation Corps Alumni (NACCCA). Anyone who served in the CCC, in any capacity, is eligible to join NACCCA. For details, please write me. We are TRYING to locate the EX-CCC BOYS who did so much for our country during the Great Depression. We hope YOU will help us locate the hundreds of EX-CCC BOYS who read National Parks & Conservation. Thanks a million.

Iack Vincent 1709 Michigan West Sacramento, California 95691

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NPCA 20 YEARS AGO

NPCA 1919 1979

The Tioga Road

One of the most urgent responsibilities confronting the Incoming Executive Secretary of NPA last fall was the problem of the new Tioga Road in Yosemite National Park.

Editor Kilgore had seen this project and was horrified. Ansel Adams had contributed an eloquent article for the MAGAZINE, protesting against the hideous destruction of natural values.

Flying to San Francisco Monday, September 22 [1958], I drove to the park Tuesday with NPA Western Field Representative Carithers and was out on Tioga Road Wednesday. . . .

With Superintendent John C. Preston, we travelled the new road from Crane Flat on the west to the Leevining entrance on the east. We looked at the new camp grounds at White Wolf Lodge. The Service has done an excellent job with this camp. . . .

There is room for more camp grounds of this kind under the forest canopy along the new road, and the old road as well; in fact, the old road must be kept open for this purpose. Pressure can be lifted from Yosemite Valley in this manner.

But the hideous gash of new road on the high mountain east of White Wolf is a tragedy. The wilderness atmosphere of the park at this point has been utterly broken.

The devastation wrought by the road itself, which cuts a 60-foot swath through the forest, is compounded by high parking overlooks that knife into the granite 20 or 25 feet on the vertical. . . .

At the far eastern end of the new development there has been another disaster. The limpid beauty of the north shoreline of Tenaya Lake, where the high granite once sloped down to meet quiet water, is gone forever. . . .

I remember this spot when I first saw it a dozen years ago, and again later on, when I drove the old road. Now there is a deep cut in the rock, a broad fill, a foot-walk in addition to the road; at the east end a pile of broken granite looms over the beach.

But all this damage was done and irrevocable in September, and our problem was the still unfinished new road in Tenaya Canyon, west of the Lake. Here the drills were moving up a mountainside of glacially polished granite, travelling southwest, headed eventually across a rocky saddle toward the west. Another deep cut was planned, and a rubble of granite would be pushed down the slope to make one more

by Anthony Wayne Smith, Executive Secretary National Parks Association

big parking overlook. In our judgment such drilling and blasting of the natural scene was an inexcusable impairment of the values the parks were created to preserve. We said so in no uncertain terms to the National Park Service representatives who escorted us. We stood on the glacial polish and pulled out the maps. What were the alternatives before it was too late to make changes? . . .

The contractor's blueprint called for Route "A" high on the face of the rock, where the destruction would be visible for miles. The engineers were considering even a higher location. We recommended a low route marked "B," along the foot of the slope, much of it almost level, the western part rising at a slope of 8 to 12 percent to reach the saddle; such grades are within Service standards. We urged that the parking lot be at the low level, with a short walk to a knoll, marked "F," where a magnificent view can be had of Tenaya Lake to the

Inspecting the Tioga Road in Yosemite National Park in 1958 are (left to right) A. W. Smith, National Parks Association Executive Secretary (today NPCA President); John C. Preston, superintendent of Yosemite; Volney J. Westley, Yosemite landscape architect; David R. Brower (pointing), Executive Director of the Sierra Club (today chairman of the Board of Friends of the Earth); and George Abbott, solicitor, U.S. Department of Interior.



northeast and Half Dome in Yosemite Valley to the southwest; a pedestrian overlook, not a parking overlook, should be built at this point.

We made a second trip to the site the next day with Executive Director Brower of the Sierra Club and Mr. George Abbott, then Assistant to Interior Secretary Seaton. . . .

I flew back to Washington Friday to prepare our recommendations to Park Service Director Wirth on Saturday . . . we proposed the low road and the pedestrian overlook, and protested strongly against the high road.

Director Wirth and Mr. Abbott conferred on Tuesday. On Wednesday the Director advised me that a new road location had been agreed on at approximately route "C" on the map. [The NPA recommended] route "B" had been accepted west of Station 830, resulting in a definite reduction of rock fill and a closer adherence to contour west of that point. From Station 845 to Station 830, the road had been moved approximately 125 feet down the slope, perhaps halfway to the point we recommended.

By early November the snow was falling on the High Sierra and this unhappy chapter in park history was closed, at least until spring. Director Wirth has stated to us that he will adhere to route "C," and perhaps reduce the size of the proposed parking lot. . . . What, if anything, did we accomplish? Most of the glacial polish lies northeast of Station 845 on the map, and we saved little of that. But west of this point we prevented a most flagrant destruction of scenery which would have ensued from following the high route and the heavy fill in the original contract plans.

Most important, perhaps, we made it clear to the Service that conservationists intend to have a voice in road location and road standards in the parks from now on. And the Secretary has indicated his continuing interest in protecting park values.

Road construction of this kind has no place in national parks. . . . All people who are willing to enjoy the parks without impairment are entitled to do so, and the opportunity must be provided; but facilities which destroy the environment and scenery which constitute the essential park experience defeat their ostensible purposes and must be opposed.

—National Parks Magazine January 1959

conservation docket

Omnibus Amendments, Olmsted

As Congress returns from August recess, they are expected to take final action on a number of park proposals this fall. Included are proposals to expand the Channel Islands National Monument and redesignate it as a national park; to establish a Frederick Law Olmsted National Historic Site; to freeze entrance and admission fees at units of the National Park System at current levels; to create a North Country Scenic Trail running from New York to North Dakota; to expand Point Reyes National Seashore; and to make certain technical amendments to the omnibus parks act of 1978.

Many of these proposals have passed back and forth from House to Senate in various bill packages, but with the exception of the Olmsted proposal, they all originated as part of HR 3757, a House-passed bill introduced by park subcommittee chairman Rep. Phillip Burton (D-Calif.) to amend his omnibus parks act. They are now part of S 495. This bill passed the Senate as the Olmsted bill but when the House passed it, they amended it to include all these proposals.

At press time it was unclear what legislative package(s) would be used for considering the proposals. Details on some of them follow.

Channel Islands: The Senate parks subcommittee held hearings on July 19 on S 1104, a bill identical to the House-passed bill. (See August, page 30.) There was no major controversy at the hearings, but attempts to weaken the bill are still possible. This issue probably will be considered in September. The new national park in California would include the present Channel Islands National Monument (Santa Barbara and Anacapa islands) plus Santa Cruz, Santa Rosa, San Miguel, and Prince islands. The islands are rich in flora and fauna.

Entrance Fees: A Carter Administration proposal to impose a sharp increase of almost 74 percent on admission fees and charges at National Park System units met with stiff opposition on Capitol Hill. The President's Office of Management and Budget wanted certain critical NPS functions to be largely underwritten through fees

charged to park users rather than through general revenues. But the move was opposed on the grounds that these public lands should be accessible to everyone regardless of economic status. The House passed Rep. Burton's legislation prohibiting any increase in entrance fees or imposition of such fees in new areas without the express approval of Congress. In the Senate, Sen. Dale Bumpers (D-Ark.), chairman of the parks subcommittee, championed the successful provision to impose a fee moratorium.

Frederick Law Olmsted: This new national historic site would preserve the Brookline, Massachusetts, home and office of Olmsted, the great American landscape architect and designer. Introduced by Rep. Robert Drinan and Senators Ted Kennedy and Paul Tsongas of Massachusetts, it passed the House and then the Senate but



November 2 & 3, 1979 Toronto. Canada.

Seventeen organizations from the US and Canada will sponsor an international citizen's conference on acid rain. By understanding its causes and effects, the technological and legal mechanisms for its control, and by questioning involved politicians first hand, participants will pose solutions and prepare a follow-up action program.

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c/o National Clean Air Coalition, 620 "C" Street Southeast, Washington D.C. 20003 (202) 543-0305





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15111 New Hampshire Avenue Colesville, Maryland 20904 awaits resolution of differences in the S 495 package.

Olmsted's ingenuity in planning New York City's Central Park, the first large public park in the nation, has earned him the name "Emerson with a hoe" because the venture was rooted in the belief that man's tie to nature would bring out his moral qualities and help society. Olmsted also was a prime mover in preserving Yosemite Valley in California—thus sowing the seeds for future creation of a National Park System—and in setting aside land in the Adirondacks in New York.

Among his many projects were designs for a number of universities and for the nation's Capitol. Practically all the major cities of his time bore his signature. However, growing population and industrialization destroyed many of his plans. Ahead of his time, Olmsted died broken in mind and body at 81 in an asylum he had helped to design.

Archeological Resources

The Archeological Resources Protection Act of 1979 (HR 1825), a bill aimed at stopping the wanton, organized destruction of archeological sites and resources on the public domain and Indian lands, passed the House on July 9 and passed the Senate on July 30 in amended form. Differences between the bills could be worked out early this month. The legislation is aimed at commercial profiteers; it would set up a permit system for archeological research and impose civil and criminal penalties on individuals who illegally damage or remove artifacts.

As passed by the House, the definition of "archeological resource" is vague and may pose enforcement difficulties. The House required that all items in question be at least 100 years old, whereas the Senate called for 50 years. Arrowheads and bullets are exempted in the House-passed bill. Both bills include grandfather clauses.

P.S. on Glacier-from page 26

settlement had gotten out of hand and was endangering the natural resources of the park. Snowmobile interests jumped on the chance to criticize Iversen, and one person took out an advertisement entitled "Iversen Must Go." But a number of local people stood by his action as necessary to protect the wilderness, and Rep. Pat Williams of Montana commended Iversen for trying to safeguard "a tiny segment of undisturbed earth."

Do you have an idea for P.S. on Parks? Send it along to P.S.—Editorial Department, NPCA, 1701 18th Street, N.W., Washington, D.C. 20009. Your suggestions count! Thanks to NPCA member Tom McKnight, who suggested we publish more park information that would help a person "maintain his familiarity with the special places of his memory," we will feature "More Notes—P.S. on Parks" as often as possible.

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Continued from page 2

Service can and must control pollution from visitation and facilities inside the park, and where trouble arises on public lands outside the parks, a measure of control can be obtained by interagency planning. But beyond that point, water pollution inside the parks is tied inevitably to pollution in the upstream communities, and the full sweep of the environmental protection laws must be brought into play at that point.

Real estate development is another problem. There have always been inholdings of private land inside the parks which occasioned a great deal of trouble. Adverse uses of these holdings were almost inevitable as efforts to abate them resulted in furious political controversy. These properties are now being acquired, and perhaps the difficulties will be eliminated in due course with fair consideration for the interests of the people involved.

On the other hand, real estate developments are creeping up to the edges of the parks. Long vistas are being destroyed. Air pollution is a consequence. The glare of settlements blots out the stars at night. In many units of the System, particularly those located close to cities, such as the Santa Monica Mountains National Recreation Area near Los Angeles, the pressures of crowding and traffic are destructive. This is part of the picture of the urban sprawl which is destroying farmlands, woodlands, wetlands, and open space all over America.

WILDLIFE POPULATIONS, such as, for example, the elk in Yellowstone, move outside the National Parks on a seasonal basis. Most of the parks were not set up on a foundation of ecologically intact regions. And so, when habitat is destroyed by mining, logging, grazing, and agriculture, wildlife in the parks may suffer serious damage.

The long views from high places in the National Parks frequently reach out across the privately owned timberlands. When these holdings are clearcut, the majestic outlooks which characterize the parks are destroyed. Moreover, the secluded nooks in the forests within which campers might enjoy the woods are no longer there to help with the overflow of visitation from the crowded National Parks. Management practices in the forests around the parks affect the parks in both ways.

The silences of wilderness are among the finest experiences in the parks. Few people realize how the noise of the cities has surrounded us in recent generations and changed the entire quality of our environment. The agricultural countryside was a quiet thing, particularly at night, and the woodlands and wilderness beyond it were deeply embedded in silence. The roar of the motors of automobiles, trucks, and airplanes can shatter silence. Noise carries a long distance, and can often be heard in the parks as an intrusion from surrounding communities.

The glare of lights from surrounding towns and cities, now a constant phenomenon all night, rises as an urban aurora into the skies and can destroy the genuine experience of night in the wilderness. Astronomers who struggle to use their big telescopes in the vicinity of cities like Los Angeles understand the problem. Conservationists should get together with astronomers to focus all this light on the ground, not the sky.

THE HISTORIC PARKS, including the battle-fields, are in many ways the greatest sufferers from the advances of traffic, sprawl, and industrialization all around them. Established as rural areas where historic events occurred, they once looked out upon rolling countryside with a background of wooded hills or snowy mountains. Now all too often the view is one of city streets and tall buildings, and at night the vista is ablaze with glare.

In brief, the present problems of the National Park System arise not so much from difficulties of internal management, nor the management of the public lands around the parks, but from the deterioration of the natural environment everywhere.

Much as they might like to restrict their focus, conservation organizations are constantly relearning the lesson that they cannot protect their special concerns, whether parks, forests, wildlife, wilderness, or whatever, without attention to the general environmental situation within which their peculiar concerns are set.

Assuredly, the parks are set within the entire national and continental environment. Only when Americans resolve to restore a natural setting for their lives in every respect will primeval conditions be restored and protected permanently in the National Parks.

For sixty years NPCA has been working to expand the National Park System by adding qualified new areas deserving of preservation—and to protect them once they are added. You can help, too. Write for a free copy of the leaflet, "How to Help Plan Parks." Also, please send your tax deductible contribution today to help your Association continue this important work.

