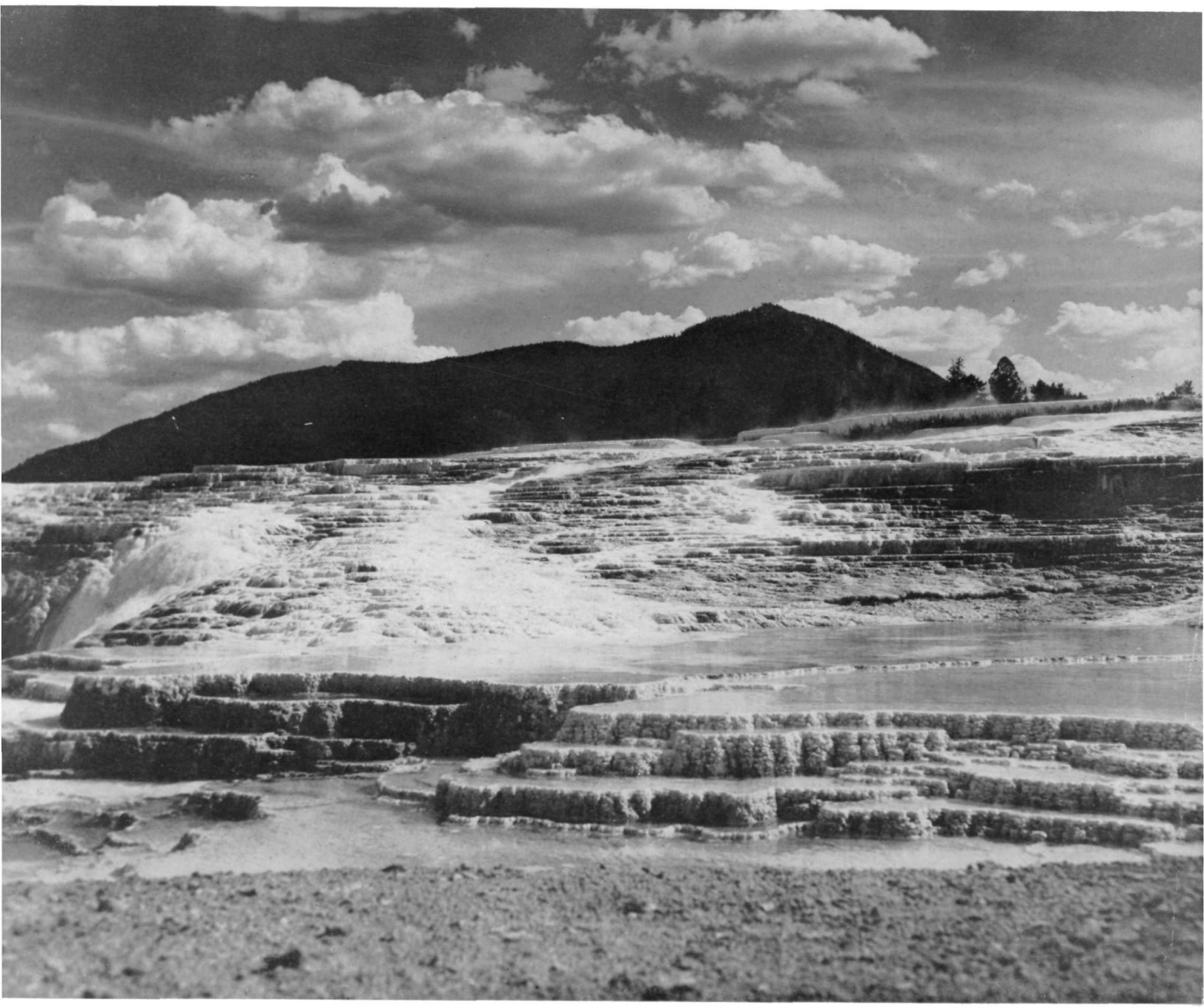
NATIONAL PARKS *Magazine*



Travertine terraces, Mammoth Hot Springs:
Yellowstone National Park, Wyoming

December 1964

The Editorial Page

A Conservation Year

THE HOLIDAY SEASON IS PERHAPS A good time to take stock of the favorable events of the year in conservation.

President Johnson's speech in Portland, Oregon, in September, reviewed recent conservation achievements impressively and set goals for the future which will be vastly encouraging to all conservationists. Not the least of these goals is to be the restoration and enhancement of natural beauty, whether in wilderness, countryside, or the green spaces of our cities.

The protection and restoration of the entire natural environment, so the President indicated, is to be a major objective of the incoming Administration. All people, everywhere in America, whose access to nature has been endangered by planless urbanization, are to be assured such access by establishing spacious new regions for recreation and regeneration.

The true advance of technology, as typified by the desaltation programs, is to be pressed with vigor. But the waste products of technology, the poisons and chemicals, are to be brought under control. New methods for the disposal of litter and junk are to be developed.

In his forthright declaration for conservation the President puts his firm stamp of approval on many policies which have had the support of his able Secretary of the Interior, Stewart L. Udall.

While the conservation achievements of recent years are the work of many men and groups, they could hardly have been realized in such record number without the dynamic leadership of Secretary Udall.

The year just closing has brought the establishment of Canyonlands National Park, Fire Island National Seashore, Ozark National Scenic Riverways, and Ice Age National Scientific Reserve; likewise, the Land and Water Conservation Fund, and the passage of the Wilderness Act. These events follow hard on the earlier creation of Cape Cod, Padre Island, and Point Reyes National Seashores.

Secretary Udall's espousal of scenic and conservation easements as tools for the preservation of green space and natural beauty in our cities and the enlargement and management of public land holdings for protective and recreational purposes has been a milestone in conservation history. His imaginative grasp of the possibilities of public transportation to relieve congestion in our big cities may open doors for similar relief in our great national parks.

The contributions of Agriculture Secretary Orville L. Freeman to the accomplishments of a conservation-minded Administration have also been great. Secretary Freeman's programs for the conversion of croplands to protective and recreational use look toward the reduction of agricultural surpluses and recreational deficits alike.

Under Secretary Freeman's direction also there has been a basic revision of administration and policy in respect to pesticides, so that emphasis will be placed increasingly on the biological control of destructive insects and other management methods not dangerous to wildlife and human beings.

Meanwhile, the recreational programs of the U. S. Forest Service move forward and give promise of relieving some of the load of visitation from our national park system. Of great benefit to the nation will be the cooperation between the Departments of Interior and Agriculture developed by Secretaries Udall and Freeman. The senseless old-time feud between the National Park Service and the U. S. Forest Service has been mitigated; interdepartmental teams are working on problems common to both agencies.

The President has expressed his desire to make the Potomac a conservation model for our great river basins. We hope he will endorse constructive plans for depollution, headwater storage, and the use of the fresh water estuary, advanced by this Association and others, in place of the destructive deep-drawdown major reservoir plans of the Army Engineers. The Potomac should be preserved as a free-flowing river throughout the Basin, except for a network of small headwater impoundments of the Soil Conservation Service type for flood prevention and recreation.

A complete restudy of the Pacific Southwest Water Plan of the Bureau of Reclamation is also definitely in order. A proper allocation of water from the Colorado to municipal and industrial use in Central Arizona would provide enormous revenues overlooked by the Bureau and make the proposed Bridge Canyon dam and reservoir, flooding into Grand Canyon Park and Monument, unnecessary. An imaginative development of the coal reserves of the lower Colorado Basin might render both the proposed Bridge Canyon and Marble Canyon dams uneconomic; new developments in desaltation and atomic energy seem almost certain to do so in the next decade or two. The entire stretch of canyon between Glen Canyon dam and Lake Mead should be incorporated into a national monument by Presidential proclamation and thus brought within the scope of existing protective laws. Wanting only, in this picture, is a far more vigorous plan for research and development in solar energy than has yet been proposed.

Both the Potomac and the Colorado, and the unsound plans developed by the Army Engineers and the Bureau of Reclamation for those rivers, demonstrate the necessity of the complete reorganization of the river basin planning operations of the government. Policy-minded commissions should replace the operations-minded construction agencies in the planning process; the construction agencies should be relegated to their proper place in the execution of plans prepared by men with an understanding of the needs and aspirations of all the people in the region and the nation as a whole.

The President's encouragement of the proposal for a Coast Redwood National Park has been widely acclaimed by lovers of natural beauty; we hope that plans for this project will be capacious, comprising watersheds adequate for their vital protective purpose.

Conservation is one of the great contributions of the American people to the emerging world-wide culture. The protection of natural resources in national parks, national forests, and wildlife refuges began in the United States; most of the world looks to this nation for leadership in conservation. In our effort to help solve the enormous planetary problems of our times, social, economic, and military, we can place heavy reliance, if we will, on the respect we have won as a nation of conservationists.

It is encouraging that in the execution of his vigorous plans the President will have another able and dedicated conservationist at his right hand in the person of the new Vice President, Hubert H. Humphrey.

A phalanx of President Johnson, Vice President Humphrey, and Secretaries Udall and Freeman might be a well-nigh irresistible force for conservation progress. —*A.W.S.*

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Front cover photograph courtesy Interior Department, National Park Service: Jack Boucher

Among the several thousand individual thermal features of Yellowstone National Park are many hot springs. These can be divided into two distinct classes: those whose runoff waters create terraces of travertine, or calcium carbonate, and those which precipitate geyserite, or silica. Of the first sort the springs of the Mammoth Hot Springs locality, just inside the northern boundary of the park, are typical; here the waters derive their mineral content from underlying calcareous rocks that are just adjacent to Yellowstone's volcano-created "plateau" province. In the plateau itself ascending hot waters bring forth minerals (mainly silica) which are derived from volcanic rocks, and which are directly connected with the Yellowstone earth-forces that created Army Lieutenant G. C. Doane's "solitude peopled with fantastic ideas."

The Association and the Magazine

The National Parks Association is a completely independent, private, non-profit, public-service organization, educational and scientific in character, with over 28,000 members throughout the United States and abroad. It was established in 1919 by Stephen T. Mather, the first Director of the National Park Service. It publishes the monthly *National Parks Magazine*, received by all members.

The responsibilities of the Association relate primarily to the protection of the great national parks and monuments of America, in which it endeavors to cooperate with the Service, while functioning also as a constructive critic; and secondarily to the protection and restoration of the natural environment generally.

Dues are $5 annual, $8 supporting, $15 sustaining, $25 contributing, $150 life with no further dues, and $1000 patron with no further dues. Contributions and bequests are also needed. Dues in excess of $5 and contributions are deductible for Federal taxable income, and gifts and bequests are deductible for Federal gift and estate tax purposes. As an organization receiving such gifts, the Association is precluded by law and regulations from advocating or opposing legislation to any substantial extent; insofar as our authors may touch on legislation, they write as individuals.

Membership in the Association carries with it subscription to *National Parks Magazine*. School and library subscriptions are $4 a year; individual copies 50 cents. Letters and contributed manuscripts and photographs should be addressed to the Editor at Association headquarters. The Association is not responsible for loss or injury to manuscripts and photographs in transit. Return postage should accompany contributions.

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NATIONAL PARKS ASSOCIATION, 1300 NEW HAMPSHIRE AVENUE, N. W., WASHINGTON, D. C. 20036

AN APPRECIATION OF YELLOWSTONE NATIONAL PARK

By Weldon F. Heald

Several years ago a companion and I took a leisurely knapsack trip in Yellowstone National Park. We drove up from Jackson Lake by way of the south entrance, parked the car at Lewis Lake, and hiked the forest trail to Heart Lake.

I think it was my most memorable wilderness experience. For six days we explored both sides of the continental divide around the headwaters of the Snake and Yellowstone Rivers, and forgot that other human beings existed. At Heart Lake a beaver swam by our camp in the moonlight, a mountain lion's scream woke us one night on Two Ocean Plateau, and moose browsed at dusk in the swamps along the Yellowstone. We threaded dense stands of lodgepole pines, firs, and spruce, crossed wildflower gardens on top of the world, and met deer, elk, bears, pelicans, eagles, and scores of other wild creatures in their natural surroundings. For good measure we followed stygian Witch Creek with its hot springs and hissing fumaroles, passed steaming, growling Factory Hill, and spent an absorbing hour among the bubbling pools and scalding fountains of Heart Lake Geyser Basin.

But it was from the summit of Mount Sheridan that I first fully realized the utter magnificence of the Yellowstone wilderness. There the sudden revelation struck me with the impact of a physical blow. The entire northwestern corner of Wyoming lay before us, and we looked over a 5000-square-mile realm of natural grandeur extending to the horizon in every direction. Vast forests, meadows, open parklands, shining lakes, canyons, and mountains filled the 360-degree panorama without a sign of man or his works. It was a cloudless, crystal-clear August day, and we spent hours studying the details of the park and the five great surrounding national forests. Never can I remember being more impressed with the transcendent nobility of the wilderness than atop this lofty crest in the heart of the northern Rockies. There, I fully agreed with Paul Brooks' philosophy that "appreciation of wild nature can be a creative act, like appreciation of painting or literature or music."

A Far-Sighted Group

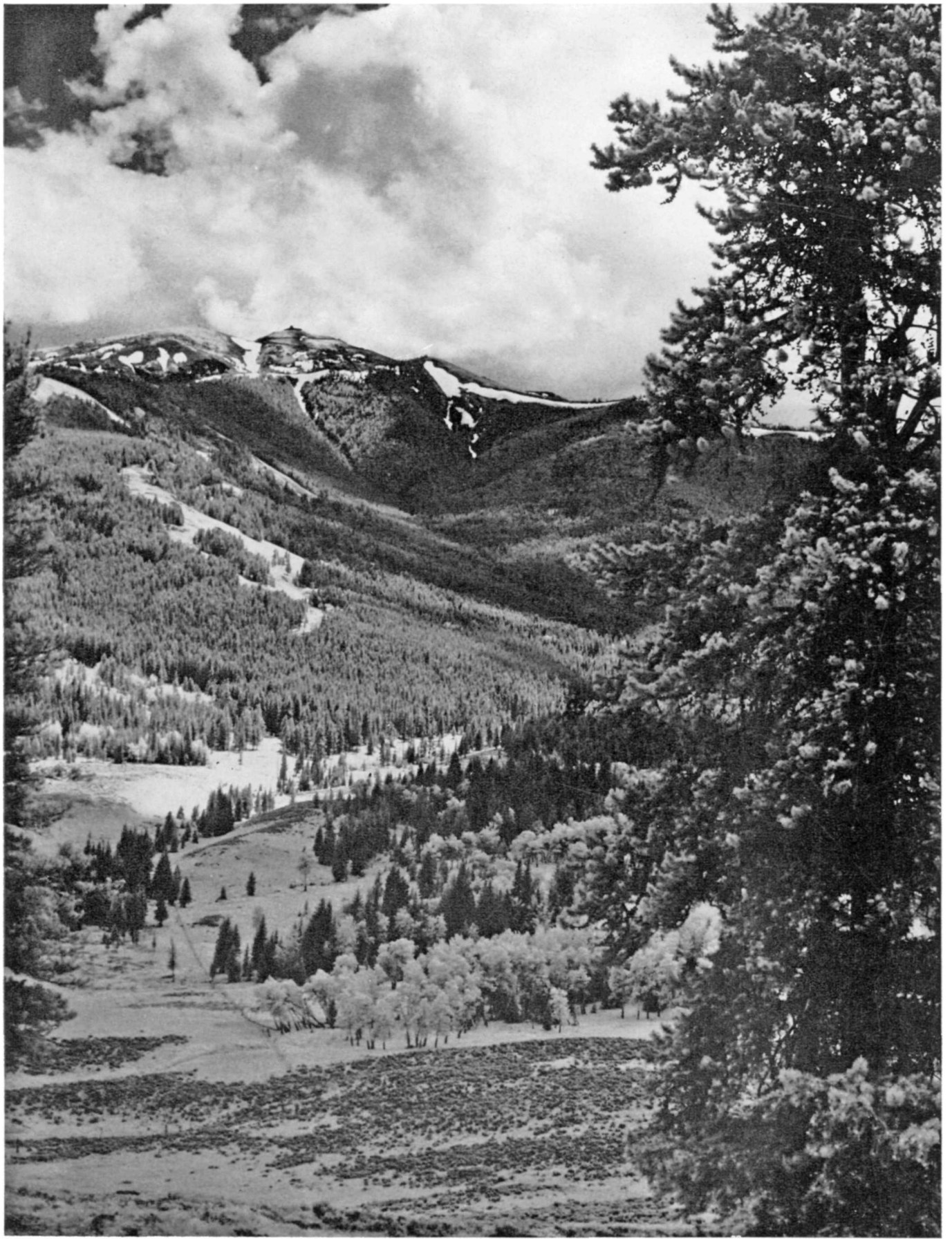
Yet it is a happy accident that we still possess this superb piece of original America. Had it not been for a group of altruistic and far-sighted men almost a century ago, Congress would never have been persuaded to create our first and largest national park "dedicated and set apart as a public park and pleasuring ground for the benefit of the people." Established in 1872 and covering an area the size of Rhode Island and Maryland combined, Yellowstone is known the world over for the number and diversity of its natural wonders. Several of our national parks have more striking single features, but none rival Yellowstone's opulent abundance of outstanding scenic, geological, zoological, and botanical phenomena.

Scene of remarkable volcanic activity for more than the past fifty million years, the subterranean fires of Yellowstone are by no means dead, and the park is a vigorous center of thermal energy. It has more active geysers than the rest of the world put together. There are also hundreds of boiling pools, mud volcanoes, steam vents, dripping terraces, and hot sulphur springs so weird and startling they must be seen to be believed. But perhaps the marvelously-colored Canyon of the Yellowstone River, with its two thundering falls, surpasses even the geysers in spectacular splendor, while Yellowstone Lake is one of the finest bodies of water in the country. The park's fossil forests, too, are the most extensive of their kind on earth, and none are more interesting in the dramatic geological story they tell.

But to nature enthusiasts Yellowstone's teeming wildlife has, perhaps, the greatest appeal. The park is our largest and most successful refuge, and provides natural habitat for an outstanding number of native animals. The last free herd of bison roams the remote northeastern section of the park, and the pronghorn antelope frequents the lower open valleys. Deer are everywhere, coyotes are numerous, moose dwell near the lakes and larger streams, and even the rare bighorn sheep can sometimes be seen near the mountaintops. In addition, nearly 200 species of birds may be identified in the park.

Bears, however, are Yellowstone's most popular and ubiquitous wild inhabitants, and every visitor can usually see a black bear along road or trail. Grizzlies lurk in more remote areas of the park, while the black bears stroll alongside slowly-moving cars and greet visitors at campsites. But this ursine

Mount Washburn, 10,317 feet at summit, dominates the high plateaus of the Yellowstone country; Antelope Creek Valley in foreground. A Franz Lipp photograph.



acceptance of co-existence with humanity has its drawbacks. The fearless, free-booting ways of the Yellowstone black bears makes them a problem. Besides being inveterate vandals and adept camp-robbers, they can sometimes be dangerous.

Yellowstone National Park covers an area of 3472 square miles in the northwestern corner of Wyoming, with narrow strips extending into Montana and Idaho. It consists largely of a rolling, hilly plateau having an average elevation of nearly 8000 feet. Surrounding it on all sides are mountain ranges with peaks rising 2000 to 4000 feet above the general level. Ninety percent of the park is covered with coniferous forests which spread across the country from the almost treeless sagebrush valleys in the north to subalpine parks near timberline at around 10,000 feet of altitude. Scattered lakes break the green carpet of forest with sheets of blue, and here and there among the close-ranked trees are meadows brilliant in summer with wildflowers.

I am not a sports fisherman myself, and only cast for an occasional supper when on the trail. But this is one of the few national parks in the country where no fishing license is required. Besides the native cutthroat, grayling, and whitefish, Yellowstone's lakes and streams are planted with rainbow and several other varieties of trout. At Fishing Bridge, where the Yellowstone River leaves the lake, anglers stand elbow to elbow from dawn to dusk, and one wonders how the beleaguered trout withstand the onslaught.

With such a multiplicity of outdoor attractions, no wonder Yellowstone is one of the nation's most popular parks. During the touring season—from May first to the end of October—the park has more than a million visitors. At this time roads and campgrounds are crowded, and reservations well in advance are necessary at hotels, lodges, and cabins. The Grand Loop Road circles through the center of the park and includes the most famous geyser basins and concentrations of thermal activity, skirts the northwestern shore of Yellowstone Lake, and passes the Grand Canyon of the Yellowstone, Tower Falls, and other major sights. It is now a wide, smooth highway, very different from the dusty stagecoach route of fifty years ago. At a half-dozen points along the way are rustic villages which have grown almost to the proportions of small cities. At these, overnight accommodations are available, as well as eating places, campgrounds and trailer parks, stores, souvenir shops, and automobile services. Under the Mission 66 project, the Park Service is engaged in an ambitious program to provide adequate facilities for Yellowstone's rapidly-increasing number of visitors. These include new and enlarged campgrounds, additional visitor centers, museums and exhibits, expanded interpretive services, utility buildings, and road and bridge improvement.

Questionable Facilities

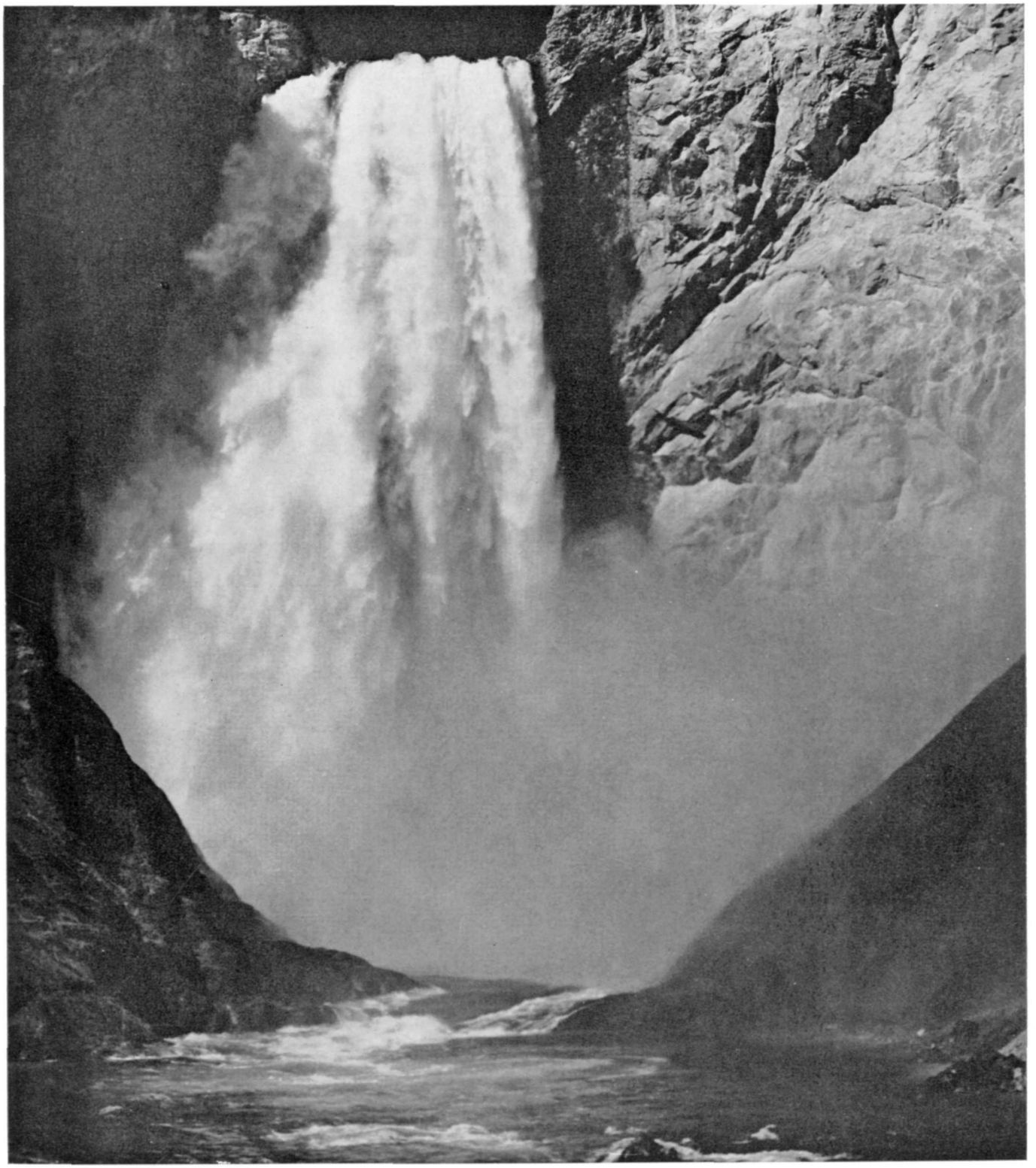
Some of the most recent facilities, however, such as the big marina under construction at Yellowstone Lake, are questioned by conservationists as being contrary to the purposes of a national park. They argue that facilities for purely physical recreation are undesirable in areas dedicated to wilderness preservation. Yellowstone Lake is probably one of the brightest gems in our entire park system. With an area of 139 square miles, it has 110 miles of forested shoreline and eight islands which are favorite haunts of pelicans, gulls, ducks, geese, and other water birds. The delicate balance in a land-and-water ecology is easily disturbed, and many believe that opening Yellowstone and Lewis Lakes to hundreds of privately-owned craft is a sad mistake.

The Park Service's interpretive program contributes greatly to an appreciation and understanding of the many natural wonders along the Grand Loop Road. At each point of interest are self-guiding nature trails, ranger-naturalist conducted walks, or both. The museums contain geological, biological, and historical exhibits, with graphic demonstrations of how geysers work and exactly why Old Faithful erupts year after year on the average of every sixty-eight minutes. The formation of the delicately-tinted terraces is explained, the origin of the black obsidian glass ridges revealed, and the cause of the impudent eructations of the mud-pots made clear. At Mammoth Hot Springs, the park's administrative headquarters, one may take a two-hour evening wildlife safari by motor caravan, and at all Yellowstone centers there are illustrated lectures and campfire programs.

But Yellowstone's greatest value is in being one of our most extensive remaining areas of untouched wilderness. Between eighty and ninety percent of the park is roadless and without human development. It is still the same exhilarating, untamed country that trapper John Colter saw in 1807 and first reported to an unbelieving world. Today the park offers more than a thousand miles of trails which penetrate every section and lead into the high mountains of the surrounding national forests. Chief of the trails is the Howard Eaton, which parallels the Grand Loop Road for 150 miles. This well-maintained hiking and horsebackriding route reaches all the major sights in the central portion of the park.

Then there are numerous paths from the road to delectable nearby spots. The surprising thing about these short walks is that a few hundred feet from the busy highway the world of man is left behind and the forests, lakes, streams and meadows have a refreshing primitive naturalness. Especially rewarding are the trails to Shoshone Lake and Geyser Basin in the Old Faithful area, and the hike from the Loop Road at Dunraven Pass up flowery slopes to the fire-lookout station atop 10,317-foot Mount Washburn. From there almost the whole Yellowstone region is in view, from high Montana peaks on the northern horizon to the distant, turreted Tetons in the south, while the eastern skyline is dominated by the ruddy wall of the Absaroka Range.

We Americans are fortunate to have saved this great natural treasurehouse from the despoliation of man. We cannot, of course, protect the present Yellowstone from natural changes, even if we wished. The fossil forests in the Lamar River Valley tell us that the region was buried twenty-seven times by layers of rocks, ash, and volcanic debris from violent eruptions that spanned a period of some 20,000 years. The geysers still spout steam, and bring forth boiling water, and earthquakes still alter the thermal activity. It is possible that eruptions may break out and bury the country once again. If so, our Yellowstone will be lost. But undoubtedly the new Yellowstone would be filled with equal wonders—for this is a region with a built-in natural grandeur that is really vulnerable only to man and the tools of his civilization. ■



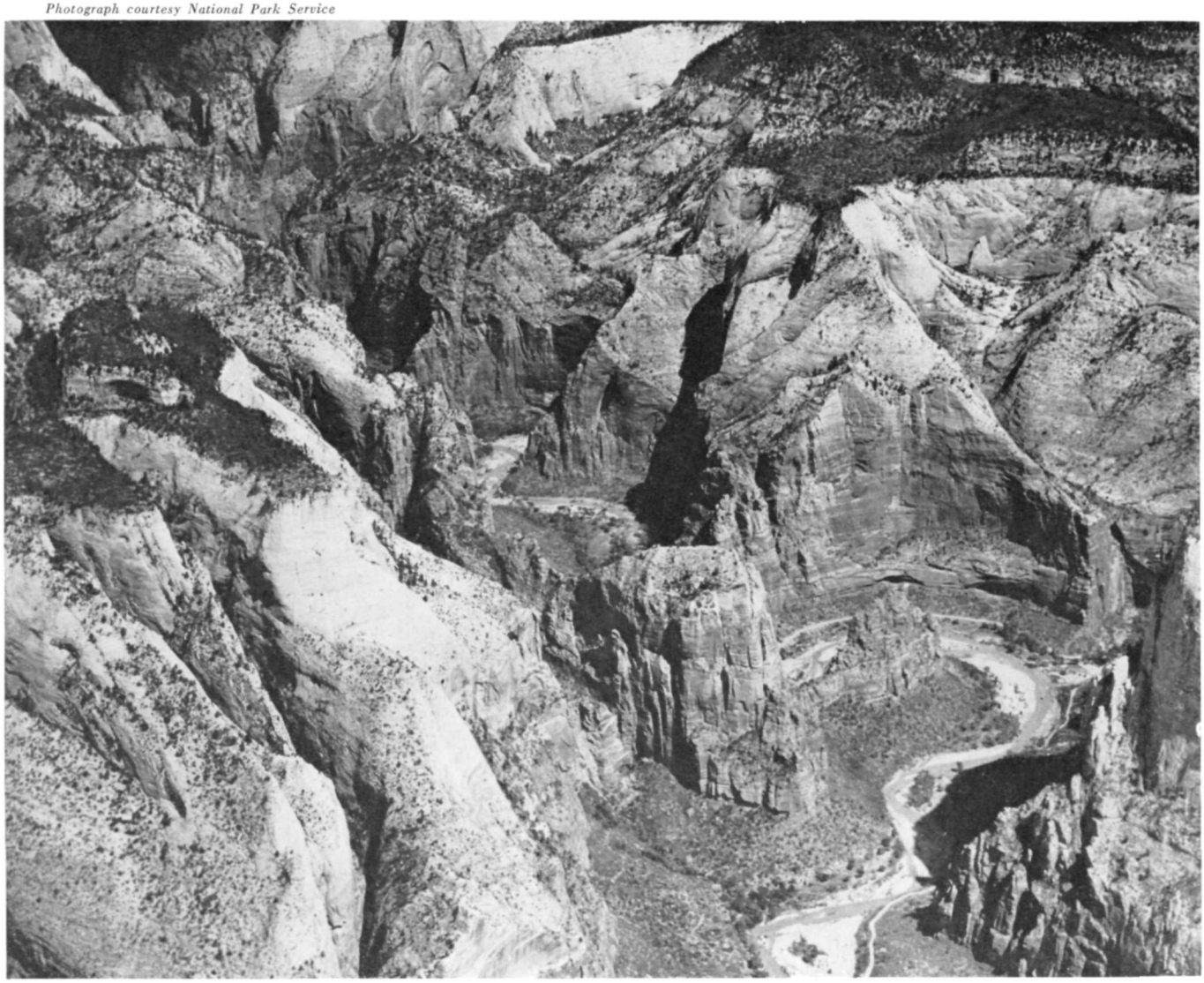
At Lower Falls, the Yellowstone River drops 308 feet on its way through a deep and incredibly colorful canyon hewn from sheer bodies of decomposed volcanic rock.

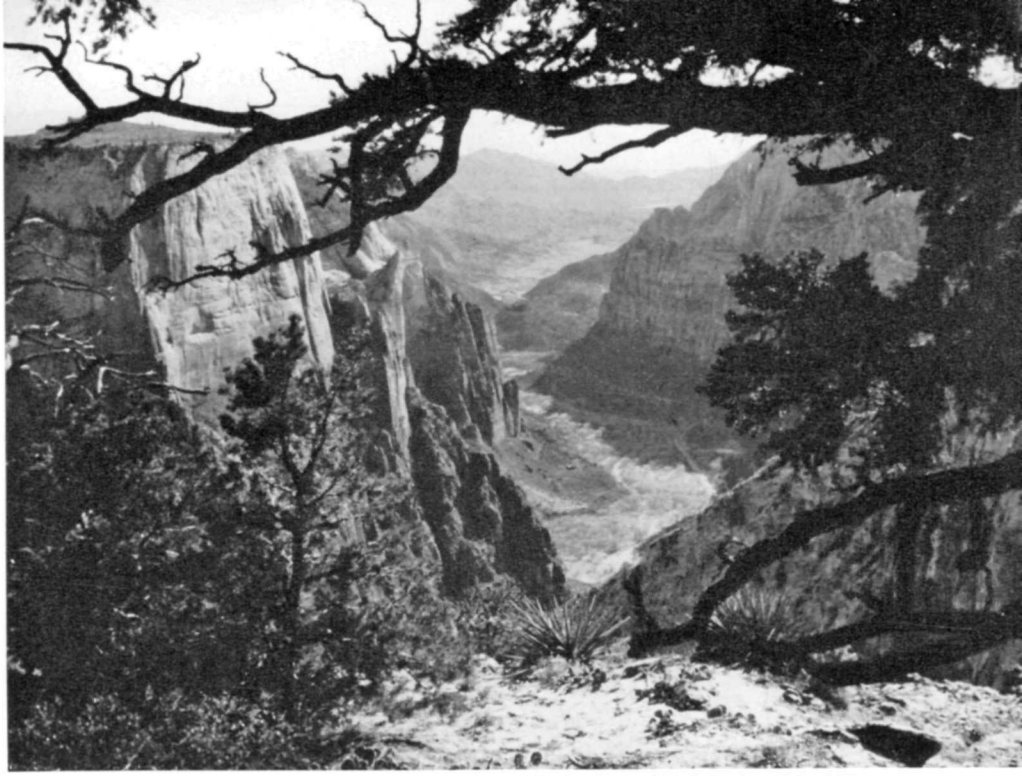
A photograph by Franz Lipp

Hiking in Zion National Park

By Roland H. Wauer

Photograph courtesy National Park Service





Photograph courtesy Interior Dep't., National Park Service: Roland Wauer

This is Zion Canyon, seen from a hiker's viewpoint along the East Rim Trail. Branches which frame the scene are those of the pinyon pine.

APPROXIMATELY 750,000 PEOPLE will visit Zion National Park in southwestern Utah during 1965; but only a small minority will see more of the park's natural wonders than Zion Canyon—from the road. But Zion is a hiker's park. To see and enjoy Zion thoroughly, you must leave your car and sample this canyonland of color on foot. Only a fraction of Zion is visible from the roadway, but more than 140 miles of trails reach into the less accessible parts of the park. These are available to any visitor whose interest and imagination—and legs—will carry him forward. Short and easy walks, like the Weeping Rock and Canyon Overlook Trails, might lead the visitor to more difficult hikes; and there are also back-packing trips available.

When you reach Zion, a little time spent at the visitor center and museum will pay dividends. Information about the park's physiography and a map and guide to its trails can be acquired here. The museum is well worth some extra attention, for it tells the geologic and human history of the park and the nature of its animals and plants. The spectacular view of Zion Canyon from atop the East or West Rim can mean a great deal more to the visitor if he knows something of the manner in which this canyon, along with many others in the vicinity, was etched by erosion into the Markagunt Plateau during the past thirteen million years. Zion Canyon itself was cut into soft Navajo sandstone by the Virgin River, which looks like a fine ribbon as it meanders along the canyon bottom nearly 3000 feet below.

To know and understand the superb natural features of Zion National Park, you must hike its trails and acquire kinship with its rocks and cliffs. Toward this end, the East Rim Trail is an excellent start. It offers a quick route, through Echo Canyon and along the ridge of pinyon-pine forest, to the high cliffs and a breathtaking view down Zion Canyon, past Angel's Landing and the Great White Throne. Sharp-eyed hikers may spot a big-eared mule deer, a cougar, a golden eagle, or a coyote along the trails. Observation Point, at the end of the 3.7 mile trail, is 2150 feet above the canyon floor. Automobiles, traveling along the canyon road far below, look very much like children's playthings.

Exploring the West Rim

Directly across the canyon from Observation Point is the West Rim. Beginning at the Grotto parking area, the West Rim Trail climbs the cliff and enters Refrigerator Canyon by way of twenty-one switchbacks known as "Walter's Wiggles" (after the park's first custodian, Walter Ruesch), to Scout's Lookout. The trail to the right follows along the knife-like ledge to the end of Angel's Landing; the trail to the left continues along the West Rim. There is a Park Service shelter cabin at the top of the high rim, about six miles from Zion Canyon; the cabin is never locked, and hikers are invited to use both cabin and a nearby spring. The West Rim Trail offers one of Zion's finest back-packing adventures, allowing an overnight stop at the cabin and a continued hike the following day to view Phantom Valley and the Great West Canyon, then on to Potato Hollow.

Potato Hollow is a lush green valley high in Zion's Kolob region. Here is a grassy forest-land of ponderosa pine, white and Douglas firs, and aspen. The animals are not those of the lower portions of the park. Elk and bear occasionally visit the Kolob, as does Zion's largest predator, the mountain lion.

Zion Park visitors have a choice of more than a dozen hikes. Most strenuous of these is Lady Mountain. Although the trail is only two miles in length, it climbs 2680 feet from bottom to top. Starting from the Zion Lodge, the trail crosses the Virgin River by swinging-bridge and climbs the front slope of Lady Mountain. Spots of red and yellow paint mark the route; and chains, a ladder, and stairs aid the climber. The sweeping view from the summit equals any in Zion; the canyon road, river, and ledge are seen far below.

Off-trail use is encouraged by Park Officials, but only after a permit has been obtained at the visitor center

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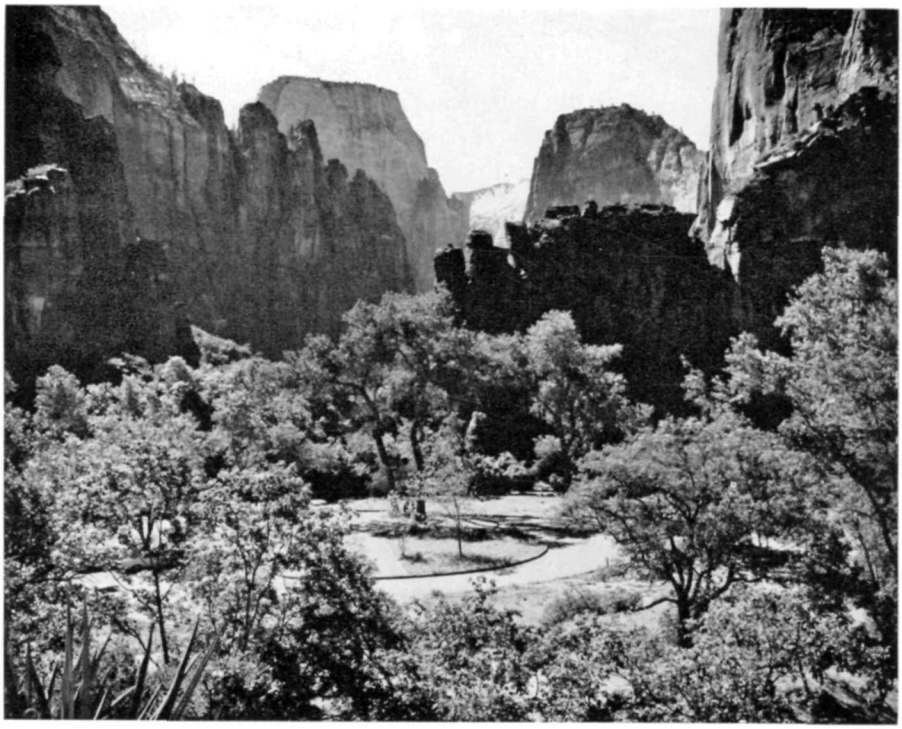
From the air, the big bend in the Virgin River and Angel's Landing is dwarfed by the majesty of Zion Canyon's sheer, multi-colored cliffs. The canyon was visited for the first time by a white man in 1776; nearly a century later Mormons settled nearby and named it "Zion."



Photograph above, by the author, shows the Temple of Sinawava, located at end of the Zion Canyon Scenic Drive. In the background are the Great White Throne and Angel's Landing. The long, arching structure in the photograph below is the natural bridge on Bridge Mountain. Photograph by the National Park Service.

(park headquarters). High temperatures during the summer months, maze canyons, and narrow ledges can be hazardous to the off-trail hiker. However, with proper instructions from a ranger at the visitor center and use of a topographical map, many additional points of interest and beauty can be reached. One of these is a natural bridge on Bridge Mountain. Located directly across the canyon from the visitor center, it looks somewhat like a toothpick perched on the cliff, 2300 feet above the canyon floor.

Although the route to the natural bridge is only three miles in length, it is a difficult and strenuous trip and requires well-developed rock-climbing skills. A fifty-foot high chimney, almost directly above the switchbacks in Pine Creek Canyon, tests one's skills at climbing. Halfway along the trail is Hepworth Wash, one of the few places where sheep and cattle were not pastured during Zion's earlier history. High grasses and a good stand of ponderosa pines mark this pristine little valley.

Monument to Change

The ancient sandstone bridge is well worth the strain it takes to see it at close range. It is a fine monument to the everlasting changes which modify the earth's rocky face, often grain by grain; park naturalists hesitate to guess how much longer this delicate structure will remain to fight wind, water, frost, and the slow but inexorable bite of chemical erosion.

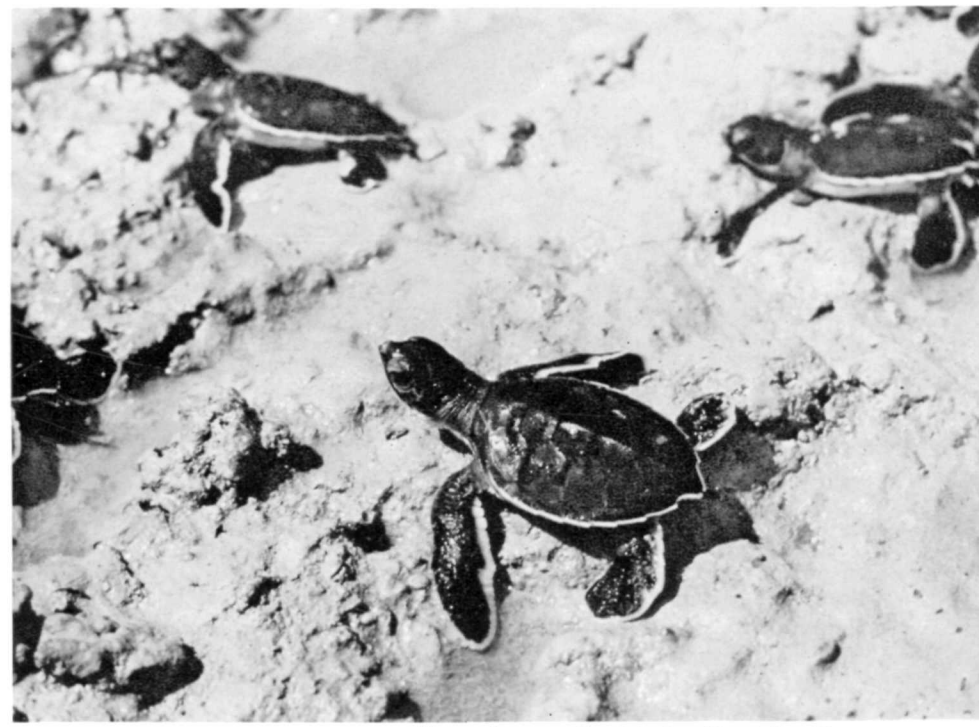
Zion National Park is an ever-changing land, whose magnificent cliffs and beautiful canyons are known throughout the world. Early explorers were so impressed with its outstanding features that they gave them names like the Great White Throne, Angel's Landing, Three Patriarchs, and Kolob (a Mormon word signifying the star nearest the home of God). Zion is a park that seems to have its feet in the desert and its head in the sky. To reach that sky one must leave the pavement and civilization behind, and follow the advice of John Muir. He said that "going to the mountains is going home, that wilderness is a necessity, and the mountain parks and reservations are useful not only as fountains of timber and irrigating rivers, but as fountains of life." ■

Saving the Atlantic Green Turtle: A Biological Experiment

By Gale Koschmann Zimmer

At 4:20 p.m. on a Saturday afternoon last September, a message was relayed from a U.S. Navy plane over the Caribbean to Homestead, Florida, where many of the Everglades National Park staff live. Several of us had been eagerly awaiting the call. When we heard that the plane was to land in Miami in ten minutes, we hopped into a Park Service station wagon and crowded the speed limit all the way to the airport, some thirty-five miles away. Along the road we could hear hurried conversations on the Park Service radio arranging for a boat to be readied in Flamingo and a ranger to man it. Speedy arrangements were essential now, for the plane was carrying a fragile and precious cargo—baby Atlantic green turtles.

These baby turtles, only two days old, had been hatched in Costa Rica in the area where the Caribbean Conservation Corporation has undertaken an experimental project—with the full cooperation of the Costa Rican government—to try to repopulate the Caribbean area with the green turtle *Chelonia mydas mydas.*



Photograph courtesy Everglades Nat. Hist. Ass'n.: Zimmer

Pausing for a moment before heading into the sea, a two-day-old Atlantic green turtle blinks into the dazzling Florida sun. This baby turtle was one of two thousand which had just been released to start a journey into the Caribbean.

The idea of "seeding" the ocean with baby turtles was born a number of years ago when Dr. Archie Carr of the Biology Department of the University of Florida, a well-known herpetologist, brought forth his findings on the life history, migrations, and plight of the green turtle. These huge sea creatures, which weigh approximately 800 pounds when grown, had once been plentiful. As the population of humans increased in the Caribbean area, that of the turtles declined. The turtles were butchered for food. In addition, their nests were robbed and the eggs taken for food or "magic" purposes. Many turtle eggs were also destroyed by wild dogs, the by-products of advancing civilization. These combined factors have placed the Atlantic green turtle on the list of endangered animal species. Dr. Carr feels that the loss of the species would be a double-pronged disaster; first to the economy of the people of the Caribbean, and secondly as an esthetic loss to the world. The turtles furnish an excellent source of meat for the protein-hungry Caribbean people. In adult form, the reptiles eat the abundant sea vegetation (turtle grass) of the Caribbean almost exclusively, and are hence "primary consumers" that do not rob the sea of other animal life. For these reasons Dr. Carr became interested in protecting the turtles both as an endangered species of animal and as a valuable food resource. He has

Photograph courtesy National Park Service: Haugen

The author, at right, inspects a hardy, flapping baby turtle as Park Ranger Ernst Christensen reaches for a turtle that is trying to scramble out of the box. Photograph was taken at the Everglades Natural History Association just before the turtles were released into the sea.

been aided in his project by private funds and by a grant from the National Science Foundation.

Dr. Carr's project commences with thousands of turtle eggs, which are hatched with the help of the Caribbean Conservation Corporation staff each year. The newly-hatched babies are then crated and flown by the Navy to chosen beaches throughout the Caribbean. These are areas that are suitable nesting sites for the green turtles when they mature; the sites are also protected by the governments having jurisdiction over them.

Our part in the green turtle experiment was to meet the cargo of hatchlings at the airport, transport them to Everglades National Park, and then release them into Florida Bay. At 5 p.m. we reached the airport and began to look for the turtles. There was some confusion as to where we were to find them; airport officials looked dumbfounded when we asked, "Have you seen our little green turtles?" Finally the turtles were located, and with the assistance of a representative of the Caribbean Conservation Corporation we loaded ten large, flat crates into the station wagon. Inside each crate were 200 hatchling Atlantic green turtles.

Second Year of Experiment

This was the second year we had hurried to the airport to meet a planeload of turtles. The previous year there had been 2800 hatchlings. Some had been destined for Virgin Islands National Park, but a hurricane had prevented their landing there and we had received both allotments. This year the Virgin Islands acquired its own turtles.

At 6 p.m. we were back in Homestead, eating a hurried supper. We knew from previous experience that turtle-launching can be an all-night affair. At 7:15 we were in Everglades National Park. We fueled the car, and proceeded toward Flamingo. Although speed was not essential, we knew that the sooner these babies entered the water the lower the mortality from transport would be. It was 8 p.m. when we started loading the crates aboard a skiff. Two boxes were left behind in the boatshed so that their turtles could be photographed by daylight as they went to sea.

It was a dark, moonless night. We left Flamingo and headed west toward Cape Sable. As we went, we pried open the well-made crates. As soon as the lids were raised a scramble of tiny, black and white bodies began. Many of the baby turtles had been asleep, and were awakened by the flashlight shining in their eyes. We had been warned to expect as much as a thirty-three percent mortality, but to our delight less than

a dozen turtles in the entire shipment were dead.

Slowly we chugged along—or in very shallow areas over grass bottom, poled along—and lowered handfuls of eager, flapping turtles into Florida Bay.

Although the animals are called "green turtles," the babies are far from being green. Their carapace, or upper shell, is black or dark charcoal-gray. The symmetrical serrations at the edge are tipped in white. The plastron, or underside of the shell, is white. This is protective coloration; a hungry bird, looking down from above, sees a dark turtle on a dark sea, while a large predatory fish in the water below sees a white turtle against a pale sky. Each hatchling is about two and a half inches long, and is a perfectly-formed replica of the adult. It is hardy, and an amazingly strong swimmer. Its front feet are elongated flippers, while the back feet resemble round paddles. The youngster is sleek and streamlined; when swimming it resembles a flying bird.

For the first year of their lives the young turtles feed on invertebrate life and such fish as they can manage to secure. Then they become vegetarians.

Gale Koschmann Zimmer is editor of *The Anhinga*, monthly publication of the Everglades Natural History Association, and a full-time ranger at Everglades National Park. This is the second year of her participation in an experiment to repopulate the Caribbean Sea with the Atlantic green turtle.

It was 11:45 p.m. when the last handful of turtles paddled away from the boat. We headed back toward Flamingo. The sea-foam sliced back by the prow shone with planktonic bioluminescence. Stars splotched the sky, and the moon was rising. We were almost out of range of Miami's neon.

We left the boat at Flamingo and wearily drove back up the park road. Along the road a grand assortment of toads and frogs leapt out of the way, and we bypassed several water-moccasins. Nighthawks disturbed their hunting watch to let us by, and one deer bounded off into the 'glades.

The hatchlings are launched at last. It is hoped that four years from now, when the turtles are mature enough to mate and nest, they will choose a beach near the spot where they entered the sea. The results of the project are still unknown, but at least there have been a lot of little turtles entering the sea.

Early next morning we went back to release the last of the hatchlings and to take pictures. This was done so that we could see in daylight that which we had been unable to see at night—what the turtles did when they entered the water.

The animals were placed on the shore, a foot or two above the waterline. They hesitated, then raised their heads and began to labor down to the water. They stopped where they were first engulfed and then set forth, paddling exuberantly. Out from the land they went, against wind, waves, and tide—tiny, helpless, and dauntless. As far out as we could see small, shiny black heads came up for air.

Two thousand turtles were launched. How many will survive to grow up and reproduce the dwindling species? We can only hope that enough mature green turtles will at a future time heave themselves out of the sea at Cape Sable, to mount the beach by night and lay their eggs in the sand; in effect, to help us to save their kind from extinction. ■

CAMPER ON THE BEACH

A mist, propelled and swirling, caressing
Snow-capped crests of greenish-blue sea-swells . . .
A timeless, spiraling, crystalline web, reflecting
Morning's rays and night skies' cool-fresh moonglow . . .
The misty silence, severed only by the gentle
Slapping, celestial churnings of a restless sea . . .
The salt's smell, the sand's grit, the gull's cry, and life's spark
Moves creeping lassitude o'er taut and vibrant nerves . . .
And sleep comes soundly to the camper on the beach.

—*James T. Staples*

News and Commentary

Parks Advisory Board Meets

The 51st session of the Advisory Board on National Parks, Historic Sites, Buildings and Monuments, held during October, recommended establishment of a Fossil Butte National Monument west of Kemmerer, Wyoming, to preserve an outstanding locality for fossil fish and other animals and associated plant life of the Eocene, or earliest period of Tertiary time. The board also endorsed the proposal to straighten wherever possible the boundaries of Shenandoah National Park in Virginia; there were bills in both House and Senate during the second session of the 88th Congress to accomplish this, but no public law was enacted. Recommended further by the board was establishment of the Boston National Historic Sites, a complex of seven historic buildings: the Old State House, the Shirley-Eustis House, the Paul Revere House, the Old North Church, Faneuil Hall and Bunker Hill. The last four named sites are presently under non-Federal preservation; the first two would be established as national historic sites under Federal ownership. The board also recommended national historic landmark status for the Old Sacramento (Historic District), in California; the Clara Barton House in Glen Echo, Maryland, and the Thomas A. Edison Birthplace in Milan, Ohio.

Taming a Wild River

The St. Croix River rises in the vast spruce and tamarack boglands that lie just south of western Lake Superior and, converging with the Namekagon River some miles farther south, forms the boundary line between Wisconsin and Minnesota for a hundred miles on its way to a confluence with the Mississippi near Prescott, Wisconsin. Both the St. Croix and the Namekagon are beautiful and still unspoiled streams; indeed, both were investigated in recent months by the joint Interior-Agriculture Wild Rivers Study Team with a view toward including them, or portions of them, in a national system of wild rivers. (See newsnote in the Magazine for February, 1964, page 16; NPA understands that the study report on the first twelve proposed wild rivers, originally to be made public in late 1964, has been postponed until the spring of 1965).

But a power company now has its eye on the St. Croix as a site for a coal-fired electrical energy plant that would completely change the character of the lower St. Croix, said to be "probably the most unspoiled river of its size left in the Middle West." Aside from inevitable pollution and the dumping of heated water into the St. Croix, its lower reaches would be used for barging coal to a generating plant just south of Stillwater, Minnesota. Considerable opposition to the proposed plant is developing along the river, and at least two organizations—the "Save the St. Croix Committee" and the "St. Croix River Association"—have been formed as crystallization points for local and national sentiment. Conservationists have already pointed out that there is a feasible alternative generating site on the already polluted Mississippi River not far from the Stillwater location.

Park Administration Course

The University of Michigan's School of Natural Resources has scheduled a short course in the administration of national parks and equivalent reserves for May 10-29, 1965, for executives and administrators of such areas throughout the world. Cooperating with the University will be the National Park Service, the Bureau of Outdoor Recreation, and the Forest Service. Purpose of the short course is intensive study of situations, problems, methods, and new developments in national parks or equivalent reserves, with emphasis on the protection of natural conditions, scientific research opportunities and wise public use; field study will be conducted in selected park, forest and recreational areas in the United States. Inquiries concerning costs and arrangements for attendance should go to the Director, National Park Service, Interior Department Building, Washington 25, D.C.

On Policy and Zoning

The recent division of national park system areas into three categories—natural, historical and recreational—has placed on the National Park Service the burden of policy statement formulation for management of the three categories, and of development of master and subordinate plans for particular units; these plans are made necessary in part at least by the Wilderness Act of 1964. Apparently the Service is to provide for public participation in development of master and subordinate park plans, with two notable exceptions: the cases of Yellowstone and Great Smoky Mountains Parks. Seemingly, however, the Service will make no such provision for expression of public opinion in formulation of policy statements for the three categories.

NPA has made strong representations to Director George B. Hartzog, Jr., of the Park Service over this apparent foreclosure in a matter of vital public concern and has urged the Director to reconsider decisions that seem to be negative. The Association has suggested that public participation in these matters could take the form of both consultation and public hearings, following which the Director would make the decisions for the Service. The Association also recommends provision for appeal from the Director's judgment to that of the Interior Secretary, at which level consultation and hearings open to an informed and responsible public also should be in order.

NPA has also objected vigorously to the Park Service's master and subordinate plans which are currently being prepared for Yellowstone Park. The Association understands that Yellowstone is being zoned into a number of primitive areas and a combination of recreational classifications (based on Bureau of Outdoor Recreation classifications); boundaries of the primitive areas have been withdrawn for some three miles on each side of park roads, it would appear.

In a letter to Director Hartzog, President Smith of the Association said that "it had been supposed by most persons that the territory of Yellowstone Park, either from the roadsides, or a line of some kind not far from the roadsides, should be considered wilderness; as such it would be subject to protection in nat-

OUR RESPONSIBILITIES AND INFLUENCE ARE GROWING!

The Association is called upon constantly to assume greater responsibilities for conservation throughout America. We are enlarging the Magazine by four pages beginning January 1965 because there is so much to report to you.

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ural condition under the National Park Service Act and the Yellowstone Park Act. We have been given to understand that the new primitive areas will be the areas recommended for wilderness classification under any new Wilderness Bill for the parks; and for purposes of the hearings required by the present Wilderness Act.

"It seems clear that these steps represent a serious retraction of wilderness within Yellowstone Park and a prospective use of the Wilderness Act and any subsequent Wilderness Bill in such manner as to confirm such retraction. We do not think that this was the intention of the sponsors of the Wilderness Act . . .

"It will be quite inevitable that if the remaining portions of the park are surrendered into the various categories of recreational areas . . . these surrendered portions will rapidly be occupied; roads, campgrounds, trailer courts, sanitary facilities, parking lots, and doubtless even structures, will begin to invade them; Yellowstone Park will soon be settled."

President Smith further noted that Yellowstone is surrounded by vast areas of national forests and, beyond the forests, the national land reserve and privately owned lands. These could provide ample space for expansion of recreational facilities, either public or private. "The proper public policy in the management of all these lands, including the park lands, is to spread out the facilities for use and visitation, and to reserve the wilderness within Yellowstone Park as wilderness," he said.

Curbing Fire Island Speculation

Interior Secretary Stewart L. Udall has moved quickly to head off land speculation on Fire Island which started shortly after passage by Congress of an act authorizing a Fire Island National Seashore. Already established is a land acquisition office at Patchogue, on Long Island, to be headed by Seashore Superintendent Henry G. Schmidt, formerly superintendent of Isle Royale National Park. The 88th Congress provided $1,100,000 for land acquisition in a supplemental appropriation just before it adjourned in October. Secretary Udall minced no words in discussing the speculation problem at Fire Island; he indicated that condemnation suits would be filed immediately on tracts essential to the seashore where scenic values might be impaired by developments. "We do not intend to stand idly by while valuable resources are destroyed and the cost of the project is unnecessarily inflated by hasty 'overnight' development by selfish individuals," the Interior Secretary warned.

Buchheister Elected Chairman of Natural Resources Council

The president of the National Audubon Society, Carl W. Buchheister, was elected chairman of the Natural Resources Council of America at the organization's annual meeting in October. For the past two years, Mr. Buchheister has served as vice-chairman of the group; he now succeeds Thomas L. Kimball, executive director of the National Wildlife Federation. Both Kimball and Stewart M. Brandborg, executive director of The Wilderness Society, were named members of the Executive Committee of the Council, which is a coordinating group representing major national and regional conservation organizations.

The Everglades Nike Site

The "hole in the doughnut" of Everglades Park, an inholding of some 8000 acres, has received notice on these pages several times in recent months. Some 4200 acres of the "hole" are currently in possession of the Farmers Home Administration, which acquired them by foreclosure. The parcel is to be turned over to the National Park Service eventually for administration as part of the park; but many conservationists have not been happy over the arrangement between the Service and the Army Department for transfer of 700 acres of the inholding, after acquisition, to the Army for a Nike missile site. NPA has protested the interdepartmental arrangement as weakness on the part of the Service, and has pointed out that there are plenty of alternative non-park missile sites available; that rejection of the Army's request for the future park land would not raise any legitimate questions in regard to national defense. NPA also reminded the Service that the Everglades Park Act specified that the inholding should be used for park purposes if agricultural use were discontinued. In response the Park Service indicated that in its judgment the best course was to take what it could get and hope for the remaining 700 acres at some future date. NPA's view of the proceeding remains unchanged, however: if the Service felt inclined to take a stronger position in this kind of thing, most conservationists would be happy to lend it support; and that the Service should in this instance have made recommendations to the Interior Secretary in favor of resistance to the intrusion.

First Illinois Nature Preserve

The Illinois Nature Preserves Commission has announced the October birth of the first Illinois State Nature Preserve —786 acres of Illinois Beach State Park on Lake Michigan. The preserve contains fine examples of sand prairie, low dunes and marshland, and supports many interesting and unusual plants. Dedication of the tract on October 16 will help protect it from encroachments and assure proper management. The tract has been protected from encroachments in the past by the Illinois Dunesland Preservation Society. Areas within several other Illinois State Parks and a number of areas owned by other organizations and agencies are currently being considered for nature preserve status; for example, the widely-known Forest Preserve District of Cook County has offered 11 tracts within its holdings for dedication as nature preserves, and the Nature Preserves Commission has already approved them in principle.

Rules for management of Illinois nature preserves define in detail the allowable development, management, and use of preserves within the system. A master plan will be prepared for each preserve, and all deviations from the rules must be provided for either in the articles of dedication or in the master plan. Dedication of an area as a nature preserve consists of a formal declaration by the owner and acceptance by the State; the articles of dedication are recorded with the county recorder. Upon dedication an area becomes part of the State nature preserves system and is afforded stringent protection against encroachments for other public purposes.

(*newsnotes continued on following page*)

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Study of the Redwoods

When the white man first saw California's redwood forest it covered some two million fog-shrouded acres stretching in a narrow band along the northern and central coast of the State. Today there are little more than 102,000 of the original acres under protection, and of these only a little more than 48,000 support virgin stands—about two and a half percent of the original redwood forest.

Throughout the late 1800's there were many attempts to preserve the best of the redwood groves. California's Big Basin Redwood Park, established in 1901, was the first public redwood park; it was followed in 1906 by the Monterey Forest Reserve, and then, in 1908, by the Muir Woods National Monument. Today the California Redwoods State Parks preserve many of the remaining monumental groves.

While the idea of a Redwood National Park is not a new one, the fact remains that such a preservation has never been established; and further, that if it were to be established, establishment would have to take place in the fairly near future.

Momentum for a Redwood Park has picked up very considerably since the California Highway Commission decided, on December 18, 1963, to cut through nearly a mile of primeval redwoods in the National Tribute Grove of the Jedediah Smith Redwoods State Park, Del Norte County, to clear land for a high-speed freeway. The decision touched off protests throughout the nation. In April, 1963, the National Geographic Society made a grant to the National Park Service for a study of remaining redwood forests and a recommendation for preservation of outstanding portions. The study found but three remaining concentrations of the great trees significant for park purposes: Mill Creek drainage southeast of Crescent City; Redwood Creek and Lost Man Creek drainages near Orick; and the Yager Creek drainage, about twenty miles southeast of Eureka.

Three alternatives for preservation emerged from the study, each involving Federal assistance to California in rounding out its State preservations, and Federal acquisition of additional outstanding redwood and related lands for a possible Redwood National Park. According to a Park Service report, such a park would not only benefit Californians economically and recreationally but would also preserve for Americans a cultural and scientific asset not measurable in dollars and board feet.

Battle Over Boundary Waters

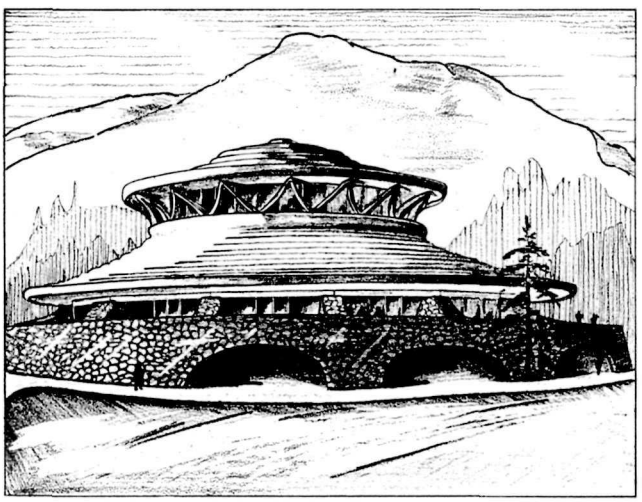
The rugged Boundary Waters Canoe Area, which includes a million acres of wilderness country in northeastern Minnesota and comprises about one-half of the Superior National Forest, is currently the object of a heated vocal battle between conservationists and loggers over how the area should be managed. Conservationists have long been interested in eliminating timber-cutting and vehicular traffic—including winter travel by snowmobiles—in the canoe area and making it a true wilderness. Timber interests, on the other hand, would like to continue and expand the multiple-use concept of the U.S. Forest Service which permits timber harvesting, and under which the area is presently controlled.

Only two-thirds of the canoe area is actually open to lumbering. The remaining third is supposedly reserved for wilderness recreational purposes. A charge that this reserved area is being invaded by logging and road-building was recently leveled at the Forest Service by Minnesota Senator Hubert H. Humphrey, who contended that Service officials exhibited lack of concern over invasion of the wilderness. To investigate the charges, Secretary of Agriculture Orville L. Freeman has set up a six-man Review Committee to study the situation and report its findings to him. The Committee will also study the present management program of the canoe area and recommend a long-range management goal.

Two Proposed Parks

Two proposed national parks have recently been endorsed by the Department of the Interior: Great Basin National Park, in the Snake Mountain Range of Nevada, and Guadalupe Mountains National Park in Texas, fifty-five miles southwest of Carlsbad, New Mexico.

Great Basin National Park would encompass a lonely stretch of isolated mountain ranges, steaming desert plains, and unusual valleys which contain a large variety of plants and animals as well as important geologic forms. Original legislation to establish the park called for 53,120 acres; the National Park Service, however, claims that its studies indicate this area is not sufficiently large to assure protection for some of the most important and recreationally-desirable portions of the Great Basin region. Pine and Ridge Creeks, which contain the Utah cutthroat trout; Mount Washington; extensive forests of bristlecone pines, thought to be the world's oldest living trees, and several other important features would not be included in the park under the original legislation. It would, however, include the fine lime-



A Concrete Hat for Paradise Valley

The structure shown at left, which is a day-use center, is abuilding in Mount Rainier National Park's high-altitude Paradise Valley. On completion of the center the old Paradise Inn, which is nearby, will be torn down. The new center, with four levels reached by ramps, will be of concrete and stone masonry and about 200 feet in diameter; it will house an auditorium, exhibit rooms, cafeteria, ski shop and sales area, and other facilities, including an observation deck. Many conservationists will doubtless feel that Mount Rainier Park is exchanging an antique for a monstrosity. Others may feel that, while the Vulcanian motif of the new building is apparent, Mount Rainier does not need this kind of competition. One conservationist has suggested that a vent might be built in the top of the structure which could erupt at intervals with bursts of smoke and ashes, lending the educational touch to an architectural effort that has little else to recommend it.

stone caverns of existing Lehman Caves National Monument.

The proposed Guadalupe Mountains National Park, containing 5632 acres already under the jurisdiction of the Park Service, would embrace both desert and high-country land, as well as what the Interior Department has called ". . . the most diversified and beautiful scenery in Texas [and] some of the most beautiful landscape in the entire southwestern part of the United States." Guadalupe Peak, the highest point in Texas, would be included in the 77,500-acre proposed park. Other important features are unique assortments of plants and animals; archeological artifacts; and a group of Permian marine limestone mountains which contain, according to the Department, "the most extensive and significant fossil reefs in the world."

Desalting Plant for Israel

For some time the United States has been cooperating with the State of Israel to find ways of irrigating that arid country and utilizing the desert for agricultural purposes. Toward that end, the White House recently announced that reports from the joint United States-Israeli scientific team indicate that a combined nuclear electric power and desalting plant in Israel seems practical.

The next step in the plan to turn salt water into fresh water for Israel's use, said the scientists, is to launch an engineering consulting firm on a study of the various types of plants necessary to provide the needed power and water. Between 175 and 200 megawatts of electricity and 125 to 150 million cubic meters of fresh water are the estimated yearly requirements.

Air Pollution and Cancer

Air pollution, which is already menacing economic and esthetic values in all major United States cities and many foreign cities as well, may also be a prime cause of lung cancer, according to one medical expert.

Dr. Corneille J. F. Heymans of Belgium, who won the Nobel Prize in 1938 for respiratory studies, recently declared in a speech to the Symposium of Science and Society at Georgetown University, Washington, D.C. that ". . . we must . . . give more attention to the inhalation of air polluted by . . . carcinogenic (cancer causing) compounds, mainly by residues of combustion of petrol, coal, and oil," as a prime cause of lung cancer.

Dr. Heymans urged that city officials take steps to limit—and hopefully to eliminate—air pollution in cities and large industrial centers to protect public health.

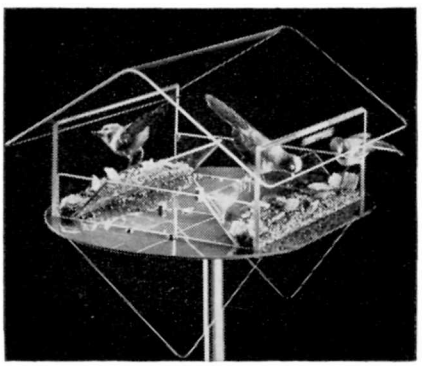
Population Time-Bomb

Time is running out on what Arizona Congressman Morris K. Udall calls the world's "population time-bomb." The glowing accomplishments of medical science in cutting international death rates has caused a rapid increase in population—an increase which Representative Udall and others feel is acting to the detriment of humans in all parts of the world.

"Just when men and women everywhere are awakening to the possibilities of a decent life and are thus demanding improvement in their standard of living, the population explosion is wiping out most of the benefits of economic growth," said Mr. Udall in his "Congressman's Report" for August 10, 1964. "A key democratic nation in Asia, for example, attempting to rise by its bootstraps, recently completed a successful five-year program by increasing its economic output twelve percent. Are its people better off? No, because in this time its population increased fifteen percent and net living standards are *worse* than before."

Other struggling nations have similar problems, all of which center around an alarming population increase. In the underdeveloped areas of Latin America, Africa, and Asia—where two-thirds of the world's people live, says Mr. Udall—birth rates are exceptionally high. There is an endless struggle just to obtain the necessities of life in these areas; education and economic and cultural improvement is impossible under such conditions.

As one way of helping solve the problem, Representative Udall, together with Senators Clark of Pennsylvania and Gruening of Alaska, introduced a resolution into Congress to urge the President of the United States to expand research programs on population within the National Institutes of Health and make the findings available to other nations, and to request the President to create a Presidential Commission on Population to study growing birth rates and inform the American people of the implications of unchecked population growth.



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Book Review

AFRICA'S WILD LIFE—SURVIVAL OR EXTINCTION? By Eric Robins. Taplinger Publishing Company. New York, 1963. 220 pages. $5.95.

Suddenly, like a loud cry of anguish, there has come a deluge of books and articles on the rather staggering problems of wildlife conservation in Africa. Different authors have different ways of saying it, but in each case the message is clear: mass slaughter of wild animals continues in Africa. The methods are cruel, the people hostile or apathetic to the conservation idea, and the situation so acute that in a few years most of Africa's larger wildlife may be gone. African conservationists need money to educate other Africans and save native mammals—now.

Robins' book carries essentially this message. But instead of trumpeting his horror, this author has quietly and competently described the facts in such detail that the reader is transported by words and photographs to Africa to witness the great tragedy for himself.

Zebra sprawl in the bushes, strangled by native-set wire snares. Near the waterholes the ponderous, rotting bodies of elephants testify that the illegal ivory trade is still profitable. The trails are littered with the swollen bodies of buffalo, speared by poachers. Even in the national parks human predators allow the wildlife no peace; while Robins was at Amboseli Park in Kenya he noted that ". . . apart from unconfirmed reports of five lions slaughtered, two elephant, five rhino, and four giraffe had been speared to death by poachers, and two buffalo calves had been fatally trampled down in a stampede of Masai cattle on a grazing ground normally reserved for game. . . Zebra were being killed for their tails alone—to make fly-switches."

The slaughter goes on so fast, and has gone so far, that desperate game wardens now feel the only way to save the animals is to appeal to the United Nations for funds. But even the United Nations seemingly cannot comprehend Africa's disaster. "Mon Dieu," one African conservationist has exclaimed, "the United Nations, it seems, is prepared to spend ten million dollars on some Egyptian temple when only a tenth of that money would serve all the national parks in Africa."

In two years, Robins warns, much of Africa's wildlife already may have passed the point of no return. If the United Nations cannot or will not offer immediate aid, he says, the only hope is that interested individuals in other nations will, through organizations like the World Wildlife Fund or by themselves, contribute enough to save at least a few animals of the remaining species.

Extinction of wildlife would constitute an overwhelming esthetic and financial disaster not only for the new Africa but for the entire human race. As Robins asserts, "Wildlife, part of the balance of nature on which our existence depends, is a challenge to his [man's] self-respect." And at this moment, while people all over the world are trying to decide whether or not to meet the challenge, the slaughter in Africa goes on. —*M.A.R.*

THE CONSERVATION DOCKET

During May identical bills were introduced into Senate and House (S. 2807, Byrd of Virginia and Robertson, H. R. 11157, Marsh) to revise the boundaries of Shenandoah National Park in Virginia. NPA's staff has seen a map of the proposed revision, which would have the effect of straightening to some extent the extremely irregular boundaries of this park for management purposes; it is not possible to detail here the various additions and deletions involved. In total effect, however, the bills would add some 16,544 acres to the park, which presently contains 193,178 acres of Federal lands. The bills have been referred in Senate and House to respective Committees on Interior and Insular Affairs; no hearings have been scheduled as of this writing (mid-May).

In the May Magazine the Conservation Docket reported on twin Senate and House bills (S. 1605 and H. R. 9739) to eliminate the registration of pesticides under protest. It was indicated that the Senate bill had passed, and that the House bill had been reported out of committee. Since then the House bill has been passed, and the legislation sent to the President, who signed it on May 12. The new law puts an end to the marketing of pesticides "registered under protest" with the Department of Agriculture; the Department now can refuse a manufacturer permission to market a pesticide until it meets labeling and public-safety standards.

Meanwhile, the Senate Commerce Committee has favorably reported a bill (S. 1251, Neuberger) that would require labeling of pesticides to disclose possible hazards to fish and wildlife, and to increase funds available for research and evaluation of possible toxic effects of pesticides on humans.

Not long after the Leopold Committee had presented Secretary Udall with its national park wildlife management report, for which it was recently honored with Interior Department Service Awards, the Secretary posed the sturdy committee another touchy task: an appraisal of the Government's role in predator and rodent control. The committee's report, titled *Predator and Rodent Control in the United States*, was published during March and maintains the same high standard of forthrightness and readability as the first work. In very brief summary it states that: in some situations predator, rodent and even some bird control is essential; control work as presently practiced at State and Federal levels is considerably in excess of that necessary, and tends to become an end in itself; that such work is sometimes solicited by the controllers, and is carried out without regard for social values of the affected wildlife; that in some instances cost of control exceeds value of predator damage; that bounty payment systems are worthless; that predator control methods and goals are in need of much basic research; that a drastic revision of present Federal predator control practices is indicated.

It might be noted here that a House bill (H. R. 9037, Dingell) to establish a national policy and program with respect to wild predatory animals, introduced into the first session of the 88th Congress and now before the House Merchant Marine and Fisheries Committee, has as yet to receive hearings; at the present time none are scheduled.

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NATIONAL PARKS *Magazine*

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Entries appearing in *italics* are titles of general articles. The abbreviation (edit.) signifies an editorial. The month of issue is followed by the page number.

Authors of Articles Appearing in the Magazines for 1964

Titles of Books Reviewed in the Magazines for 1964

Foredune and footprints: proposed Assateague Island National Seashore, Maryland-Virginia

JANUARY'S NATIONAL PARKS MAGAZINE will bring Association members twenty-four pages rather than the customary twenty. Your Association needs the additional space to keep you informed on the ever-expanding events and challenges of the national park and general conservation fields, and the ways in which the Association is meeting its responsibilities in connection with them. Over the past year alone the Association has, for example, presented for official consideration a program for providing water and electrical power to Arizona and California without need for invasion of Grand Canyon National Park and Monument by reservoir waters. It has advanced an imaginative plan for developing the recreational potential of the proposed Assateague Island National Seashore with the least possible disturbance of natural conditions there. It was instrumental in the cancellation of the proposed 1964 hunt of the rare Kaibab squirrel of the Southwest. It has led in presenting feasible alternatives to water management in the Potomac River Basin by the antiquated and destructive big-dam approach.

However, your Association can no longer ignore the now-familiar yearly advances in the costs of operation and publication. Increased costs have made it necessary to raise basic dues as of January, 1965, to $6.50, and to increase other dues categories proportionately. The Association needs the loyal assistance and understanding of its membership in this matter; you can help by renewing promptly at the new rates; by raising your membership class; by contribution over and above basic dues; and by helping secure new members for the Association. Contributions, and membership dues in excess of the new basic rate of $6.50, are deductible for Federal income tax purposes.

National Parks Association

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