NATIONAL PARKS *Magazine*

Little Five Lakes and the Kaweah Peaks,
Sequoia National Park, California

January 1964

The Editorial Page

Time for a Change

THE RECOMMENDATIONS OF THE BOARD of Engineers favoring the Potomac River Basin Program of the District Engineer, U. S. Corps of Engineers, including sixteen major deep-drawdown reservoirs, afford the final proof of the unfitness of the Corps for river basin planning work.

The recommendations ignore the overwhelming protest of the people of the Basin, from headwaters to estuary; the availability of superior technologies, including modern processes for eliminating plant nutrients from effluents of sewage treatment facilities; and the enormous cost of the Program in intangible resources.

There is not a word in this curt document about the priceless treasures of the old C & O Canal National Historical Monument, nor the homes, farms, businesses, and communities which are to go under water, nor the thousands of human beings who will be dispossessed if the Program goes through.

The recommendations disregard the defacement of the rural and mountain country by reservoir fluctuations in the fall-color tourist and autumn hunting seasons, vitally important to recreation business throughout the Basin.

They are founded on inadequate data, extravagantly projected into unreliable conclusions even as to the elementary physical facts of the need for water.

It is clear that the American people can no longer tolerate this kind of bungling by a construction agency untrained and unsuited for the planning function; professionally qualified and socially responsible commissions must replace the Corps of Engineers in its planning functions, and the sooner this happens, the less the irreversible damage.

WE PRESENT ON THIS PAGE AND THE back cover two photographs of man-made deserts already in existence in the Potomac and Monongahela Basins, handiwork of the Corps.

These pictures reveal the desolation which emerges as reservoirs of this kind are drawn down to levels typical of the late summer and early autumn recreation season in the rural and mountain country.

Most of the benefits attributed to its Program by the Corps consist of so-called pollution abatement and recreation factors. The major reservoirs are played up as having great recreational benefits. Persons passing judgment on such contentions should examine the facts through photographs or direct observation.

The drawdowns pictured are not an off-season event; they deface high-quality residential and recreational country at critical times every year. To present these facilities as having recreational advantages greater than those destroyed is to misrepresent the facts in a completely inexcusable manner.

THE GRUDGING OBEISANCE PAID BY THE Corps to the incontrovertible facts of modern water technology in conceding that effluent distillation may make the Seneca dam unnecessary is a measure of the central weakness of the Corps' position.

Conservationists, led by this Association, supported by major farm, labor, and citizen organizations, have demonstrated that by making intelligent use of the fresh-water estuary of the Potomac in periods of extreme low flow on the river, and eliminating plant nutrients from treatment facility effluents, the water supply and pollution abatement needs of Metropolitan Washington can be met at comparable or lower costs for investment, debt service, and operation, and possibly at a profit.

The scientific data which support these conclusions are publicly available in the Federal Government agencies in Washington; the Corps of Engineers chooses to ignore them, to treat them as bare possibilities which may be helpful after enormous damage has been done through-

(continued on page 18)

For the fall foliage viewer, the hunter, and the would-be fisherman, the Corps of Engineers' Youghiogheny reservoir, in Fayette and Somerset Counties of southwestern Pennsylvania and Garrett County of western Maryland, offered the scene below during the autumn of 1963. Stranded on the mud-flats in right foreground are boat docks. The magnitude of drawdown in this "recreational area" may be judged by the apparent size of the empty 55-gallon oil drums scattered about the muck of the center foreground.

National Parks Association photograph

NATIONAL PARKS *Magazine*

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Front Cover Photograph by Weldon F. Heald

". . . There are still, and should ever be, sequestered spots where men may get away from the crowds to say with Wordsworth, 'Ne'er saw I, never felt, a calm so deep!' "—Colonel John R. White, former superintendent of Sequoia National Park.

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. Title Registered U.S. Patent Office. Indexed in the *Reader's Guide to Periodical Literature*. Printed in the U.S.A. Second-class postage paid at Washington, D. C.

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

That Old Hotel in Paradise

By Leo Gallagher

Photograph courtesy National Park Service, Department of Interior: Louie G. Kirk

FOR THE PAST SEVERAL YEARS conservationists have been keeping a watchful eye on a superb valley on the south flank of Mount Rainier, in Washington State's Mount Rainier National Park. This is Paradise Valley, through which the icy meltwater of Paradise Glacier drains south and southwest into the Nisqually River on its journey to Puget Sound and the Pacific Ocean.

For many years there has been a hotel for overnight visitors to the park in Paradise Valley, still used but now woefully outmoded and falling into a state of decay. In fact, because of the peculiar geographical location and climatic conditions of Paradise Valley, the original concessionaire gave up operation of the hotel in 1952 as a bad job, and it had to be taken over by the National Park Service and operated on lease. Conservationists feel that, with the eventual passing of the Paradise Inn, overnight accommodations in the Valley should be eliminated altogether, and located at a lower-level site, preferably outside of the park.

But the construction of a modern hotel at Paradise Valley has been constantly urged on the National Park Service by some Washington State politicians and by Chamber of Commerce enthusiasts in the counties nearest to Mount Rainier Park. This in spite of the fact that as far back as 1958 a study, financed by Jackson Hole, Incorporated, of the feasibility of hotel operations in Paradise Valley showed that "there are many arguments for removing all overnight facilities from Paradise Valley and placing them outside the park." The study concluded that a hotel in the Valley was economically unsound, barring subsidy from State or Federal Governments; and it has historically been the position of the Department of the Interior and the National Park Service that private enterprise should be encouraged to finance and operate such accommodations or concessions within the units of the national park system.

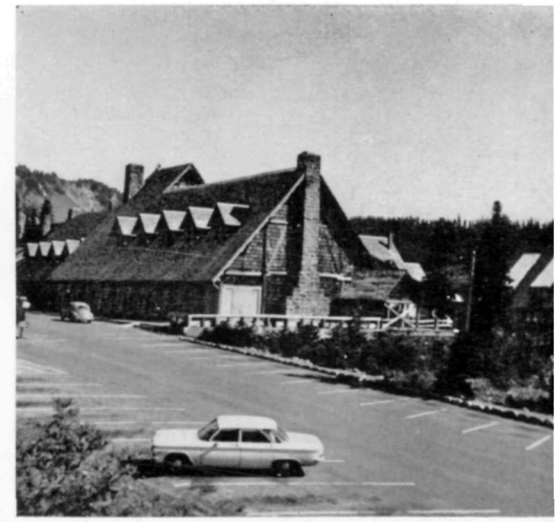
The hue and cry of local interests for a bigger and better hotel at Paradise did not subside with the issuance of the 1958 feasibility report, however. So, in 1961, the Department of the Interior proposed another survey, in cooperation with the State of Washington, to determine the possible location of a new inn to replace facilities at Paradise Valley. This latest survey, which was made by an experienced West Coast consulting firm, came up with the same conclusion as the first, and reported in addition that "there is no place for hotel facilities at a high level on Mount Rainier," and that there is "no highly desirable site for overnight facilities" anywhere in Mount Rainier National Park.

Too many of the conclusions of those who plug for hotel accommodations in Paradise Valley have overlooked the matter of weather on Mount Rainier. Climatically, Paradise Valley has approximately the same sub-arctic conditions which prevail in the latitude of southern Hudson Bay. Moreover, the Valley is subject to the erratic influences of the mountain's huge mass on weather conditions. For example, records reveal that, on an average, visitors have slightly less than a fifty-fifty chance of enjoying clear weather at Paradise Valley during the summer months. Skies may be expected to be completely overcast one-third of the days during July and August.

Abbreviated Season at Paradise

In a normal summer it is usually mid-July and often later before park visitors can engage in a normal range of park activities at the 5500-foot elevation of Paradise Valley, because of lingering snow. So, conservationists feel, all the talk is really about providing accommodations for a small segment of the public in order that it may utilize and enjoy the Paradise area for a period of about eight weeks or less a year. Is it reasonable, they ask, to use the precious space of Paradise Valley for overnight accommodations for a mere handful of visitors?

At the elevation of Paradise Valley on Mount Rainier, in Washington State's Mount Rainier National Park, as much as fifty feet of snow may fall during a season, resulting in a snow-pack of from fifteen to twenty-five feet. The view of Rainier on the opposite page looks across Paradise Valley to the mountain's south side; Paradise Inn is seen in left center of the photograph. «

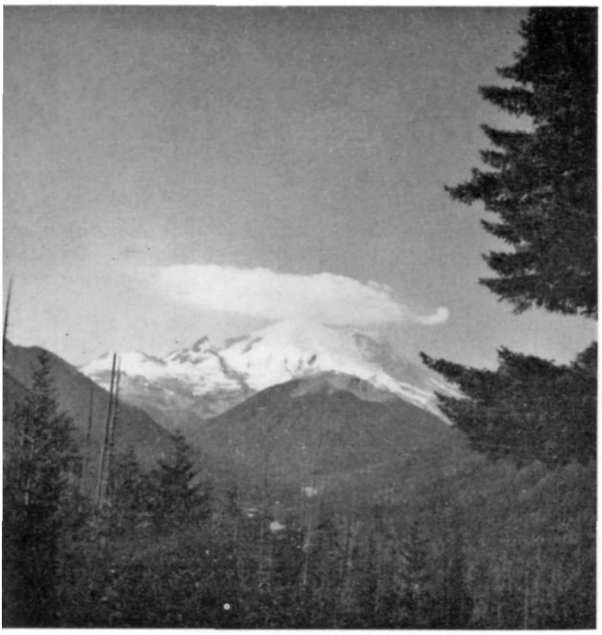


Photograph by the Author

A recent close-up view of Paradise Inn, in Paradise Valley. The inn opened in 1917 after completion of the Longmire-Paradise road and now has, conservationists feel, outlived its usefulness.

Geographically, Mount Rainier is "tucked away" in a remote corner of the United States. It is not on one of the nation's "crossroads," as is Yellowstone Park, for example. Mount Rainier frequently is a destination in itself for the traveler, and is not convenient to include in the itinerary of a general vacation trip. Unlike Yellowstone or similarly located parks, however, the visitor to Mount Rainier is not captive after he arrives. He can sight-see, or engage in outdoor activities for a day; but he can then proceed to accommodations in nearby cities. The records show that most visitors do this, or else they find outside accommodations first and then return to visit the park for a day. This has been a "fact of life" at Mount Rainier since the day of reasonably good roads and the adoption of the automobile as the American way of travel. Therefore, even the most attractive and reasonably-priced overnight accommodations that could possibly be built at Paradise would not materially change this pattern. As background for the overnight accommodation problem at Mount Rainier, we should trace the changes that have taken place there since the turn of the century.

The first overnight accommodations in the area which is now the park were built at Longmire, in 1890—the



Photograph by the Author

A view of Mount Rainier from the Chinook Pass Highway, a half-mile east of the possible overnight-accommodations site at Crystal Creek (see map, opposite page).

same year in which James Longmire constructed a crude wilderness road to the springs there. People were coming to the region in increasing numbers over the rough road by means of horses and wagons. Much of the highway was of corduroy construction, and two days were required to make the trip from Tacoma to Longmire, with parties stopping for the night enroute at Eatonville. It was in the late 1890's that a tent-camp, known as "Camp of the Clouds," was operated at Paradise, and this enterprise was gradually developed to accommodate those who hiked the trail from Longmire.

End of the Tent Camp

This camp served the hundreds of people who hiked to Paradise, and who later came by horse and wagon over a road which was being built into Paradise Valley. The close of the 1915 season marked the end of "Camp of the Clouds," for the Longmire-Paradise road was opened to public travel during the early part of that summer. In the following year the Rainier National Park Company was organized, and construction of Paradise Inn was begun. The inn was formally opened on July 1, 1917.

In the early days, those who came to see the park ordinarily stayed for many days because of the difficulty and time involved in reaching it. One either had to hike or travel by horseback to reach Paradise, so it was natural that those who came were of the hardy variety—the kind who wanted to stay for a real outing. The Tacoma Eastern Railway extended its rails to Ashford, just west of the southwest boundary of the park, in 1907, leaving only thirteen miles of bumpy road over which horses and wagons carried tourists to Longmire. The eventual opening of the road from Longmire to Paradise Valley, and the construction of Paradise Inn, furnished the impetus which sent increasing numbers of people to Paradise to view the mountain scene.

Highway standards were raised, and automobiles improved to the point where they were dependable; a road from eastern Washington to the flanks of "The Mountain," for which a survey had been made in 1904, became a reality in 1931. When this so-called Chinook Pass highway from the east was opened, the idea of furnishing further overnight accommodations took hold and plans were made for a large hotel at Sunrise, in the northeastern part of the park. A day-use lodge was constructed there, where meals and souvenirs could be purchased; and the foundations were poured for a hotel (which was never built). With this expansion the Rainier National Park Company also built about 500 one, two, and three-room housekeeping cabins at Paradise, Longmire and Sunrise; but because of the short summer season, this was not a fruitful venture. The cabins were sold by the company during World War II, and removed from the park to relieve the housing shortage in the Puget Sound area.

The Rainier National Park Company tried in every possible way to make Paradise Valley popular, attempting to keep it open by encouraging winter sports along with the summer activities. The firm lost money every year on the winter operation, however, and finally closed it out. The automobile continued to bring in hundreds of thousands of people, who came only for the day to get a close-up look at the mountain. The use of the hotel at Paradise diminished to such a point that the company admitted it could not "make a go of it," and, in 1952, a bill for governmental purchase of all facilities in the park, excepting the buses, was enacted by Congress.

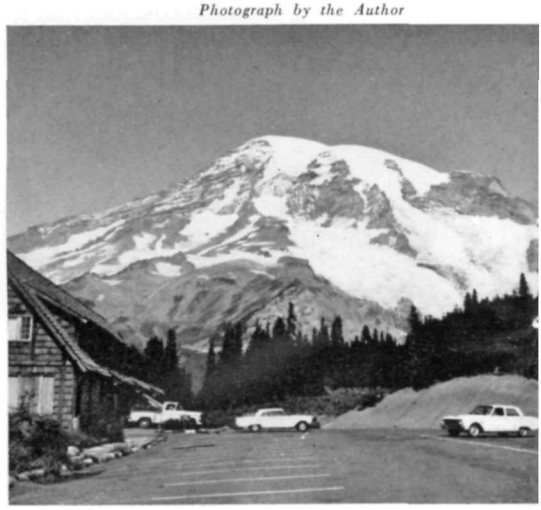
Invitations Are Ignored

After the purchase of the Rainier National Park Company properties, the National Park Service publicly invited private capital to build a new and modern hotel in the park; but there were no takers. Since then, the old hotel has continued in government ownership, operated from year to year under the management of the old Rainier National Park Company. Money spent by park visitors in Mount Rainier, per park visitor, has continued to drop. In 1928, park visitors spent about $6.00 per person for hotel services. In 1961, spending averaged about 50¢ per person. Park visitation has continued to climb, however; 219,531 in 1928, 456,637 in 1940, and 1,905,302 in 1962.

With this background, then, let us look at the problem of hotel-building in such a high area from the point of view of good park management. Paradise is a small, fragile, high-altitude valley that cannot stand much abuse

At left in the picture below is a portion of the existing day lodge at Paradise Valley. A new day lodge is to be built just beyond the automobile at right in the photograph, and the old lodge will be eliminated.

Photograph by the Author



because of a short growing season. The hundreds of thousands of people who visit the park—most of whom concentrate in Paradise Valley—create continual problems there. The task of keeping the visitors on the trails is not an easy one; unauthorized trails are made and erosion problems swiftly follow. (The National Park Service is continually doing what it can to obliterate such short-cut trails.)

Nevertheless, local political pressure is being exerted in favor of a new hotel, regardless of the operational problems. Such a hotel would have to be built with tax dollars, for no private operator so far discovered would consider such an investment. Most conservationists believe that such a hotel would not be a wise financial investment for either the State of Washington or the Federal Government.

There is another side of the picture, too. If a modern hotel were built for those who could afford such an establishment, how about the "little fellow," who could not afford such accommodations and who might like to stay in a reasonably-priced motel? Thus pyramids the problem of facilities for the day-to-day tourist. There is simply not room for overnight accommodations in Paradise Valley and additional extensive facilities and developments for those who come for the day. Good park management would seem to indicate that neither is actually desirable.

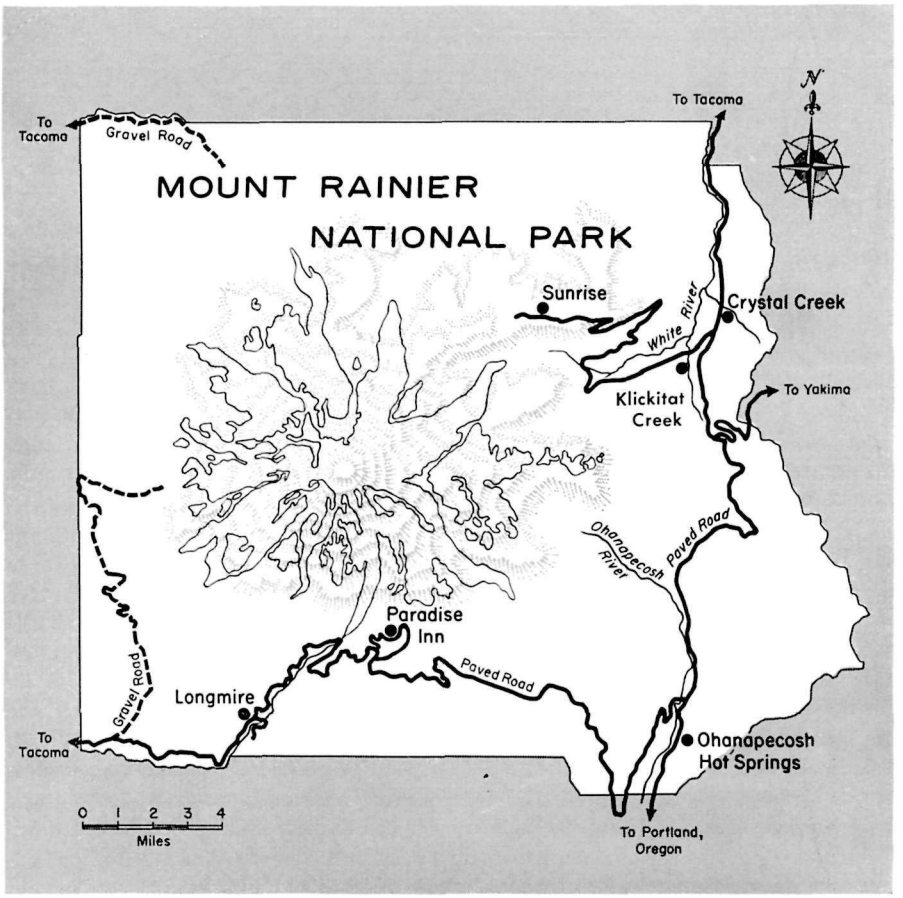
Many conservationists feel that, if a hotel must be built, it should be at a lower elevation—preferably outside the park—so that it could be used during the greater portion of the year and so that it could be self-sustaining. Several localities at lower elevations within the park have been canvassed; Longmire Springs (where there is an existing old hotel) Klickitat Creek, Crystal Creek, Sunrise, and others, as well as localities adjacent to the park. From any of these locations buses could take visitors to Paradise Valley, Yakima Park, Stevens Canyon, and other points of interest on one-day tours. However, as we have seen, the report of the most recent professional survey of a nationally-known consulting firm on resort, motel and hotel areas has rejected all of these sites; it has, as an alternative, recommended improved day-use facilities in the park.

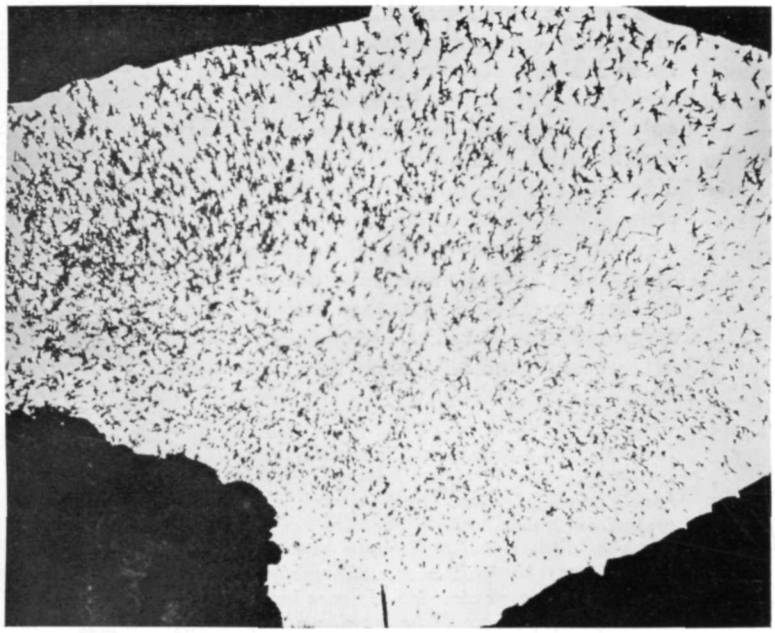
It is unfortunate that, locally, Paradise Valley has been promoted primarily and Mount Rainier National Park secondarily, if at all. In reality, it is only the hiker and climber who really see this park. Van Trump Park, Indian Henry's Hunting Ground, Klapatche Park, Spray Park and others which are at elevations equal to Paradise Valley are almost unknown to the average visitor; yet they are all as beautiful as Paradise.

One must conclude that the construction of a subsidized hotel at Paradise Valley would be most unwise. Indeed, one well-known conservationist has said that "Paradise Valley should be returned eventually as nearly as possible to its natural condition." The construction of such a hotel now seems rather unlikely, in view of the most recent recommendations; but, in the words of the Commissioner of Pierce County, in which the larger part of the park lies: "This fight isn't over yet . . . We haven't given up at all." ■

Located on map below is the site of the present Paradise Inn, in Mount Rainier National Park's Paradise Valley. Local interests have pressed for a new hotel in Paradise Valley; conservationists feel that, if a new overnight facility is to be built within the park, it should be at a lower elevation. An even better solution, they feel, would be location of any new overnight facility close to the park but outside its boundaries. Also shown on the map are the most important of the sites in the park which have been studied as possible alternatives to Paradise Valley for overnight accommodations. Some of these have been studied by the Park Service; all were included in a recent survey by a firm specializing in evaluation of resort and hotel sites.

Maps by Federal Graphics





"Up, up come the bats, spiraling like a coil of smoke out of the huge bowl in the Guadalupe Mountains. . ."

FLIGHT OF THE BATS

By David Holland

Photographs by courtesy the National Park Service Department of the Interior

THE ANCIENT BELIEF THAT BATS are vile creatures that delight in entangling themselves in women's hair —prevalent in literature such as Aesop's Fables—is based, of course, wholly on superstition and folklore. Bats actually are harmless to humans; they have no more desire for human company than humans have for theirs.

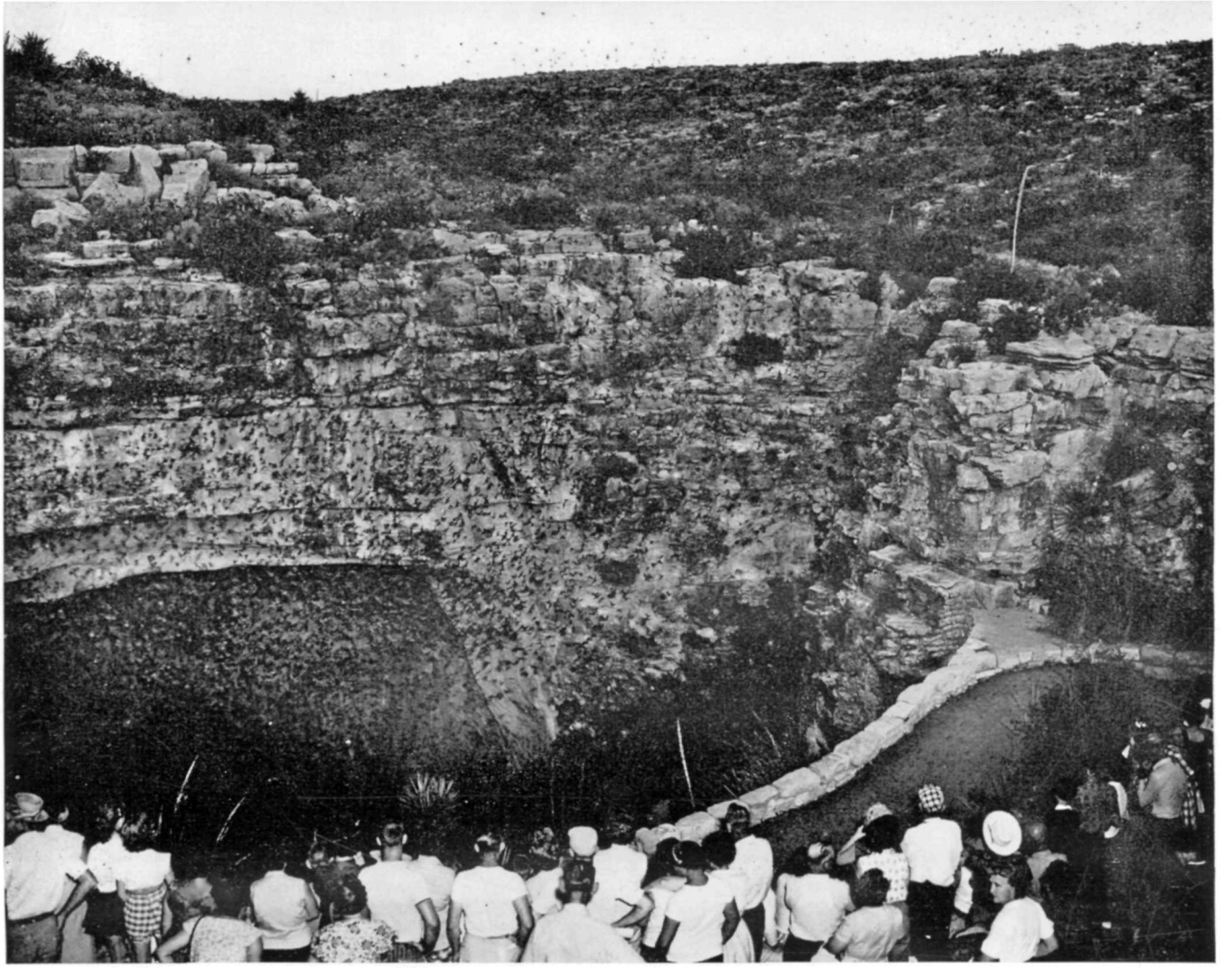
Contrary to general belief, bats are not birds but mammals. The females bear one young a year, which is suckled at the breast. They produce milk and lay no eggs. They are the only mammals capable of true flight, and a high body temperature when the bat is active is the sole characteristic it has in common with animals of the Class Aves—the birds.

One of the most famous concentrations of bats in the world is that of the Mexican freetails, *Tadarida brasiliensis mexicana*, that live with a scattering of other species in the Carlsbad Caverns of southeastern New Mexico, preserved in Carlsbad Caverns National Park. Every evening at dusk during the warmer months of the year these winged mammals make their exodus from the cave entrance, circle upward from its surrounding crater-like depression, and leave for the desert below to feed during the night on insect life. Thousands of park visitors gather around the brim at the appropriate time to observe the spectacle.

Up, up come the bats, spiraling like a coil of smoke out of the huge bowl in the Guadalupe Mountains, fluttering their wings rapidly to gain altitude in the fading light; hundreds, thousands, tens of thousands, boiling out at the rate of perhaps 600 per second for an hour and a half until some three millions have emerged and disappeared far out over the broad Pecos Valley. Flying at a speed of ten to fifteen miles per hour for as long as ten hours a night, an individual may cover as many as 100 to 150 miles in a single foray for food.

After flying for a time in a straight line over the desert, the bat horde breaks up into separate flocks, each flock gliding down to seek its own area in which to forage. There are no leaders on these nocturnal flights, and the mammals fly in groups only because they are headed in the same direction.

The Mexican freetail bat derives its name from the one-inch caudal appendage that projects beyond the tail membrane. These are small bats, having a maximum wingspread of eleven and a half to twelve inches, and weigh-



One of the spectacles afforded visitors to Carlsbad Caverns National Park, in southeastern New Mexico, is the evening emergence from the cavern entrance of an estimated three million Mexican freetail bats, along with a sprinkling of bats of other species. The horde proceeds from the cavern in a line toward the surrounding desert country, where it breaks up into flocks which spend the night feeding on insect life.

ing but half an ounce at maturity. Being strong and rapid flyers, they skillfully breast the stiffest winds, rising and falling to take advantage of favorable air currents.

Bats are creatures which are, incidentally, beneficial to man's more selfish interests. They may eat their own weight in insects, including pest insects, in a single night's feeding. Although its stomach holds only a quarter of its weight at one time, the bat's high metabolic rate allows it to consume three to four stomach-fulls during an evening. Carlsbad's three million bats thus will consume nearly a hundred thousand pounds of insects on an evening's junket. The teeth have intricate cutting crowns which grind the insects into fine shreds. All food and water is scooped up in mouthfuls on the wing.

The bats seldom if ever alight from the time they leave the cave at dusk until they return before dawn. Should they alight on the ground, the necessary folding of their wings interferes with mobility. They prefer a position above the ground, as on a rock or ledge, when launching off on spread wings; but can manage, if awkwardly, to take off from level ground by first leaping into the air.

Freetails bear their young in May and June, having mated the preceding July or August. For a time the mother carries her young, hairless bat with her on the nocturnal quests for insects, but after this the feeding of the baby freetails becomes more or less a communal affair. The young are left hanging from the ceiling in a community "nursery" while the adults are resting during the day. The mothers periodically leave their roosting area and fly to the nursery to feed the young. Since the nursery may contain several thousand babies at one time, it is scarcely possible for the mothers to search out their own; consequently an individual picks up and nurses a baby at random, her own or not. A quarter the weight of its mother, or about one-eighth of an ounce at birth, the newborn bat develops rapidly and begins to fly at about four weeks. The young have a life expectancy of about eight years and, since they have few predators except for hawks and owls, most are able to attain the full life span.

Though bats have poor eyesight, they are provided with a compensatory faculty for sight, for use as needed. This is echolocation—sound-wave equivalent of man's radar; the use of high-frequency sound waves to deter-

The bats of Carlsbad Caverns roost in a gallery which extends for half a mile underground east of the cavern entrance. First arrivals from a night's feeding suspend themselves by the hind claws from the ceiling and walls of the gallery, as in the photograph above. Later returnees may cling to those already in place to create living "chains" of bats.

mine obstructions to flight. The bats *hear* their way through the darkness by "chittering" to themselves, and are guided by their ears rather than by their eyes. By listening for the echoes of their incessant, high-pitched cries, which are largely inaudible to human ears, bats judge with uncanny accuracy their distance from surfaces or obstacles, and rarely strike anything. The supersonic cries are emitted at a rate which varies from twenty-five to fifty sounds per second, and a bat will approach a wall or light upon a perch with natural ease; it will even find a small cavity in which to rest without any apparent search. When its cries fail to vary in frequency, the bat is in danger of collision with obstructions. Other animals, including man, can and do use echolocation to at least some extent; but the Order Chiroptera—the bats—have perfected it to its highest degree, so far as now known.

The Mexican freetail looks like a mouse with short, soft fur of a sooty color. Its ears are stubby and broad, eyes beady and partly concealed by fur. The body measures approximately four inches in length. The wings are attached to the limbs, the forelegs being greatly modified by elongated digits; long bony appendages that form the structure of the wings. These threadlike fingers, jointed across forepart and width, support the skin membrane so that it can be drawn in folds like a fan against the animal's sides, much as a protecting mantle.

The tightly-stretched membrane of the wing is as fine as silk, and ramifications of tiny blood vessels and nerves delicately interlace this leathery skin. Attached to the bat's breastbone are powerful pectoral flight muscles which work the wings; the hind legs merely support the narrowing membrane down the thigh and shank.

In spite of its appearance, the bat is not a member of the rodent family, but probably evolved from the tree-living shrews. Here, again, is a fruitful field for misconception. Aesop's Fables indicated that the creatures were rodents; and the word "bat" in other languages also indicates the same error. In German, it is *fledermaus* (flying mouse); the French is *chauve-souris* (bold mouse), and the Mexicans call the animals *ratone voladores*, or "flying rats."

The first few bats begin the return flight to Carlsbad Caverns shortly after midnight, while others follow throughout the early morning hours. But the greatest number do not make their appearance at the cave until dawn. Then the sky turns black with bats waiting their turns to funnel down into the huge bowl in a steady cascade of orderly descent, to disappear into the cavern and roost.

The roost is in a gallery which extends back for a half-mile east of the cave entrance, and has a dome nearly a hundred feet high. The first bats to arrive suspend themselves with their

(continued on page 19)

NATIONAL PARKS ASSOCIATION
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Policy Report of the
President and General Counsel

Policy Report of the President and General Counsel

to the Corporation and Trustees of the

NATIONAL PARKS ASSOCIATION

at the Semi-Annual Meeting, November 19, 1963

THE FIVE-YEAR PERIOD marked by the present semi-annual meeting of the Corporation and Trustees has been a time of remarkable growth for the Association in membership, financial stability, and influence in American life.

It has also been a period of growth in our own concept of our function in national affairs.

The Colorado River

As a major responsibility in the next few years we face the imminent danger of the inundation of the Grand Canyon of the Colorado through some 80 miles of Grand Canyon Monument and Park. The Bridge Canyon dam proposal has been revived as part of the central Arizona project and the Pacific Southwest Plan of the Department of the Interior. The reservoir will not be needed for water storage, but its power production is presented as necessary for pumping water from lower down on the Colorado into central Arizona, and the revenues as necessary to liquidate the investment.

Preliminary studies indicate that both power and revenue can be provided by existing facilities on the river, granted a realistic readjustment of present power rates, at least if the proposed Marble Canyon dam is to be built, and perhaps without Marble Canyon.

If conservationists are to be more than a shrill voice of protest in such situations, they must make the necessary economic and engineering studies, at least in preliminary outline, which may in due course be convincing to the ultimate sovereign, the American people. We are seeking foundation grants and other financial assistance toward this end, and are mobilizing the talent of writers and photographers for the pages of *National Parks Magazine.*

As we report, Rainbow Bridge Monument itself has not been invaded by the Glen Canyon dam reservoir, but huge log and rubble jams have developed on Bridge and Aztec Creeks; renewed pressure may develop for protective structures; the upper protective site is still available, and even if inundated in the future may be dry again from time to time; the battle to protect Rainbow Bridge is not yet over.

Upriver is the region of the proposed Canyonlands National Park; measures which have been criticized as inadequate are stalled in Congress; a Presidential proclamation creating a Monument would clear the confusion away, and add another magnificent unit to the national park system without further ado.

Still farther upriver is Dinosaur Monument, the scene of the reprehensible Green River fish poisoning, opposed by this Association and others without success. The protest was powerful enough, however, that repetitions in the near future seem unlikely.

Following the Pacific Southwest Plan to its far-flung reaches, we note that great water diversions are contemplated from northern California into southern California to compensate for the proposed diversions into Arizona. Competent handling of our resources on the Colorado necessitates examination of the northern California programs in the Colorado Plan. We hope to seek foundation or other financing for this purpose when our limited facilities permit.

Pursuing the inevitable interrelationships, there is the ultimate possibility of a diversion of Columbia River water into northern California, thus completing a Pacific Southwest program of enormous proportions, the destructive effect of which on many environmental resources can hardly be exaggerated.

It is obviously essential that conservationists seek to understand these problems as they affect their peculiar responsibilities towards the natural environment within the entire social and economic context; otherwise, they shall be and remain a dissident minority, defensive and powerless.

Pacific Northwest

Proceeding northward along the Coast, we have an elaborate complex of questions which must be answered if a humanly sound plan of resources management is to emerge from the chaos of the Pacific Northwest.

The Association participated in discussions on forest management policies held at Goose Prairie, Washington, on the initiative of Justice William O. Douglas in September. Mr. John Osseward of the Board of Trustees presented our position at hearings conducted by the Interior-Agriculture North Cascades Study Team considering park and forest management questions in October. We concurred in conclusions endorsed by major national and West Coast conservation associations favoring establishment of a Northern Cascades National Park with the present Glacier Peak Wilderness Area as its nucleus; also included would be lower-level timberlands and the region between the Wilderness Area and Northern Cascades Primitive Area; the latter to become a wilderness area; the Lake Chelan locale to be a recreation area under Park Service administration with hunting permitted; wilderness area status to be conferred on Alpine Lake Limited Area, and Cougar Lake Limited Area to be enlarged.

Involved in these developments is a new institution, the interdepartmental study group, centered in the planning functions of the Bureau of Outdoor Recreation. The creation of this institution follows recommendations made by conservationists led by this Association to the Secretaries of Interior and Agriculture soon after the present Administration took office. The strategy and purpose from the beginning has been to eliminate the fruitless bickering between the Park and Forest Services and solve the land management problems involved at the Cabinet level, or if need be, the Presidential level.

It seems likely that recommendations favoring a new national park in the Northern Cascades will now emerge, and that instead of being hopelessly frustrated by powerful opposition, they will move ahead with Presidential support. If so, the beginnings of a broad regional resources management program may have appeared and a new governmental tool may have been forged.

The State of Alaska

If Alaska be our last frontier, so it could also be the final refuge of the violence against the natural environment which characterized the expansion of Euro-American civilization into the regions west of the Mississippi.

That Alaska's destiny includes settlement should be obvious. That it ought to include a spacious and beautiful life-environment, considering the opportunities, should likewise be apparent. The Arctic Wildlife Range must be preserved as it is; the proposed Rampart Dam must yield to a reasonable measure of alternative hydro-power development or perhaps atomic energy; access to irreplaceable wildlife and human refuges like Mount McKinley National Park must be handled in such manner as to prevent simultaneous destruction; the present extravagant road and facility plans must be rigorously cut back. Commercial facilities like limestone quarries, which can be located elsewhere, and nearby cement plants, must be vigorously combatted; tax concessions which impair park protection should not be granted; the Federal Government should use its bargaining power with the State for protective purposes.

The Eastern Seaboard

Crossing to the Atlantic, programs for the Allagash have been presented by both the National Park Service and the Bureau of Outdoor Recreation; approval of either would be a long step toward effective protection; the latter incorporates imaginative proposals on so-called scenic easements. Meanwhile, the Passamaquoddy tidal hydropower plan moves ahead, implying related hydropower development in the Allagash region. The Association has a duty to appraise all these plans, albeit with severe staff limitations; we shall try to distribute this work load to persons retained under foundation grants if these can be obtained.

The national seashores and similar programs initiated by the National Park Service and furthered by the Bureau of Outdoor Recreation have proved to be a conservation breakthrough. The Association endeavors to follow the master plans being developed for the recently established national seashores, Cape Code, Padre Island, and Point Reyes, and the long-established seashore at Hatteras; and to comment on new proposals such as those for Fire Island, Assateague Island, Sleeping Bear Dunes, Indiana Dunes, Oregon Dunes, and the Ozarks Riverway. In some instances the Association advanced the earliest plans for these projects, and in all cases has analyzed the plans constructively and supported them.

Late in June, the Association submitted an Analysis of the Potomac River Program of the District Engineer, U.S. Corps of Engineers, to the Board of Engineers for Rivers and Harbors. It obtained the concurrence of nearly all the major national conservation organizations and regional groups in the Potomac Basin; this concurrence in itself was a singular success in a united conservation presentation. By popular demand the Corps was obliged to hold a public hearing in Washington; great crowds of opponents attended and the sentiment was in almost unanimous opposition. At this writing it is hoped that the Corps will withdraw the proposal, containing as it does a plan for the construction of sixteen major reservoirs with vast inundations and deep drawdowns; the purpose of the impoundments is mainly pollution abatement at Washington; the Association and the concurring organizations presented alternative solutions, reported in the Magazine, and available in the printed Analysis.

The method customarily followed in such public planning for river basins is fundamentally wrong; planning should be done by persons professionally equipped for the task, and not by the construction agencies; this means essentially by persons versed in the social sciences; the difficulty will not be solved by appointing interdepartmental committees or teams if these groups merely attempt to coordinate thinking in several agencies. We are dealing with problems in economics, demography, sociology, town planning, regional planning, industrial management, ecology; indeed, a very large number of natural and social scientific disciplines. The Association is pressing for a revision of basic governmental planning along these lines.

The Florida Water Problem

Southern Florida may soon present the acid test of the ability of American democracy to manage its natural resources, and particularly its environmental resources, in a civilized fashion. The impending desiccation of Everglades National Park has been reported in many places; the responsible agencies are achieving a keener understanding of the imperative necessity of a solution. The problem of protecting the park cannot be solved as a park protection problem alone; the issues are region-wide, comprising drainage for flood control and agricultural purposes from Lake Okeechobee, reclamation south of the park, water storage southeast of the agricultural lands, and urban and industrial water demands in Miami and at nearby industrial developments.

Most of these processes can be controlled by public investment decisions; as for example, on drainage, and on the construction of deep-water channels to industrial facilities. Thus far there has been no competent generalized thinking on these questions, related to specific social objectives. The Association will be seeking foundation grants or other support to undertake studies in this field; it will also endeavor to persuade responsible bureaus to do at least part of this work on their own account. This is another example of the way we are forced into broad responsibilities in social science and technology; ecological studies in these matters are of profound importance, but they cannot in themselves begin to cope with the social and economic pressures involved.

The Protective Obligation

Also in the Southeast we have the Great Smoky Mountains National Park. We referred in earlier reports and in the Magazine to the regrettable road into the Cataloochee area and the unfortunate so-called automobile trail; comparable was the dismemberment of Ocmulgee National Monument by a wide, fast highway. A serious erosion of the physical features of the parks is constantly going on in ways like this; it is quite beyond the power of any private organization, unless it were staffed with money and personnel comparable to that of the National Park Service, to follow the master and subordinate plans in all the parks and protest against all violations of this kind.

The ultimate question is whether the public officials responsible for park protection in the Park Service and the Interior Department are to be men committed to such protection; to dedicated public officials we can offer considerable support; the choice of such officials involves critical decisions with long-lasting effects on invaluable public land holdings; of necessity therefore we must and do keep closely in touch with such developments.

We welcome the newly designated Director of the National Park Service, George B. Hartzog, Jr., who will take office as of January 11, 1964, and assure him our cordial cooperation in the important and difficult task he is undertaking. We extend to the retiring Director, Conrad L. Wirth, our heartfelt commendation on work well done and express our keen satisfaction that his abilities will not be lost to the Service, but that he will be representing the Secretary of the Interior on an important assignment in Africa.

Connie Wirth has discharged responsibilities during his decade or so of tenure which few men could have managed for more than a brief term, considering the immense pressures of visitation upon our parks, and has done so with a high measure of success, whether his achievement be judged by standards of public use of the parks or their protection; conservationists everywhere owe him a deep debt of gratitude.

The problem before the incoming Director is to reconcile the promising recreation program of the present Administration, and its already successful expansion program, with the obligation to protect the parks and similar reservations for the esthetic, scientific, historical, and cultural values. This problem can and must be solved, but will require strong convictions as to the necessity of protection and resolute determination to create and maintain the essential defenses.

The Eastern Mountains

Returning to the Appalachians, President Kennedy recently appointed a President's Appalachian Regional Commission under the chairmanship of Assistant Secretary of Commerce Roosevelt, closely linked with the Appalachian Governors' Conference. Concerned particularly with the chronic economic depression of the Appalachian region, it is considering also the many problems of natural resources management there. Parks, forests, wildlife, and related agricultural, industrial, and urban issues are part of the complex. The Association has submitted its Potomac River Basin materials to the Commission and has asked for the opportunity to present additional recommendations.

Late in May we met with Agriculture Secretary Freeman, accompanied by representatives of a number of other conservation organizations, to express support for Agriculture Department programs intended to help shift some 50 million acres of cropland into recreational use during the next 20 years; a variety of such programs has been originated and embodied recently into law, with respect to which extensive educational and promotional work must be done, offering great opportunity for the protection of natural outdoor conditions throughout America.

At the same conference, we impressed upon the Secretary the great need for better management of pesticide programs in his department; we opposed the uncritical promotion activities of Departmental agencies, national and local.

Land Acquisition Policies

Returning to specific areas, the proposed Ozark National Riverway raises a host of questions as to the best method of protecting such areas and expanding the national park system. Plans for the acquisition of large amounts of land in relatively settled country may meet with increasing local opposition in the years ahead. There appear to be ways of mitigating this opposition by softening the impact of protective measures on the people involved; but unfortunately as yet the Federal agencies have been largely deaf to such proposals.

Repeating ideas thrown out previously to the Trustees in this connection, it is urged that more consideration be given to protective and managerial easements, as distinguished from scenic easements on one hand, and fee simple acquisition on the other. The protective easement, intended to keep areas green, must be sharply distinguished from pre-emptive easements of the kind proposed in some cases by the Corps of Engineers, which merely mark land for eventual destruction. The protective easement has already proved its place in suburban green space preservation, but has not broken through the frozen thought barriers in the Federal land management agencies.

Not far from the Ozarks, in the Kansas prairie country, the proposal for a Prairie National Park has met with bitter local opposition which might possibly be reduced if the needs of the local people were considered. The plan here is to restore a relatively settled portion of our country to the original natural prairie conditions; obviously, some very painful dislocations are inevitable. We have suggested that reappraisal of eminent domain procedures is in order here, recommending free negotiation, purchase, and sale, carried out patiently for an extended period of time at generous price levels. Reasonable compensation for business losses in affected communities should also be part of such a program.

A very fundamental readjustment of land acquisition techniques along some such lines will be necessary if the enlargement of public holdings is not to become an authoritarian attack by the American government on local minorities; moreover, if it is not to fail by arousing indomitable opposition.

The Sequoias in Danger

Drawing these specific examples to a close, we return to the Pacific Coast and consider the Coast Redwoods. Here a

national calamity has been in the making for a number of years; the loss of some hundreds of closely protected Big Trees as the result of erosion on surrounding watersheds, in turn the result of destructive timber cutting, brings this issue into sharp focus. Many years ago, while there was yet time, a proposal had wide acceptance for the acquisition of a new national forest comprising the entire Coast Redwood belt, the monumental groves in the State parks to be enlarged, the balance to be managed by selective-cutting, sustained-yield methods. The lands surrounding the groves have now been for the most part heavily cut over, and the stumps are being bulldozed for other uses, in some cases Douglas-fir plantings. The time would seem to be here for a new and comprehensive attack on the Coast Redwoods problem if anything at all is to be saved.

The Giant Sequoias of the Sierra are likewise endangered, embraced though they be within the boundaries of national parks and forests. A heavy understory of other species has developed as a result of unnatural protection against burning, and any small fire generated by campers or lightning could now blaze into a crown conflagration in the Big Trees. The Leopold Report, and now the Robbins Report,[1] recommend clearance of the understory, and this policy has already been endorsed by this Association. Reversing the dictum of a recent commentator, if we are to be guardians, we must also, in some measure, be gardeners.

The Robbins Report deserves much fuller comment than space here permits. Suffice it, of necessity, that it recommends greatly expanded and well-coordinated research on park ecologies, mission-oriented, and management compatible with the ecological knowledge thus developed. It is fortunate that the publication of the full text of this Report was insisted upon; anything less would have been scandalous. The Report's conclusion, summarized in a phrase, is the imperative requirement of well-informed protection. The Report should provide an excellent starting point for an Administration determined to provide such protection.

The Association's Operations

As the Trustees know, the Association's method of operation is to maintain contact with the activities of the Federal land management agencies, particularly the National Park Service, and with their plans; to study the programs of which these plans and activities are a part; to report occurrences and decisions in these fields to the membership and to the general public through the Magazine; to meet with and discuss the problems involved with the responsible administrators; to confer with other educational and scientific institutions, and with its own Consultants, in policy formulation; and, within the limits of its tax-exempt and tax-deductible status, upon invitation, to present objective analyses occasionally to Members and committees of Congress.

[1] Report of the National Academy of Sciences-National Research Council Advisory Committee to the National Park Service on Research, submitted to the Secretary of the Interior on August 1, 1963, released October 18, 1963; Dr. William J. Robbins, Chairman.

The programs of the Association presented by its Conservation Education Center for the Greater Washington Region have continued, consisting of lectures on the parks and natural resources management policy, motion picture presentations on parks, wilderness and wildlife subjects, and field trips into the surrounding region. This program has been patronized by large numbers of grade and high school teachers in the Metropolitan Area. It may serve in time as a model for similar programs in other cities.

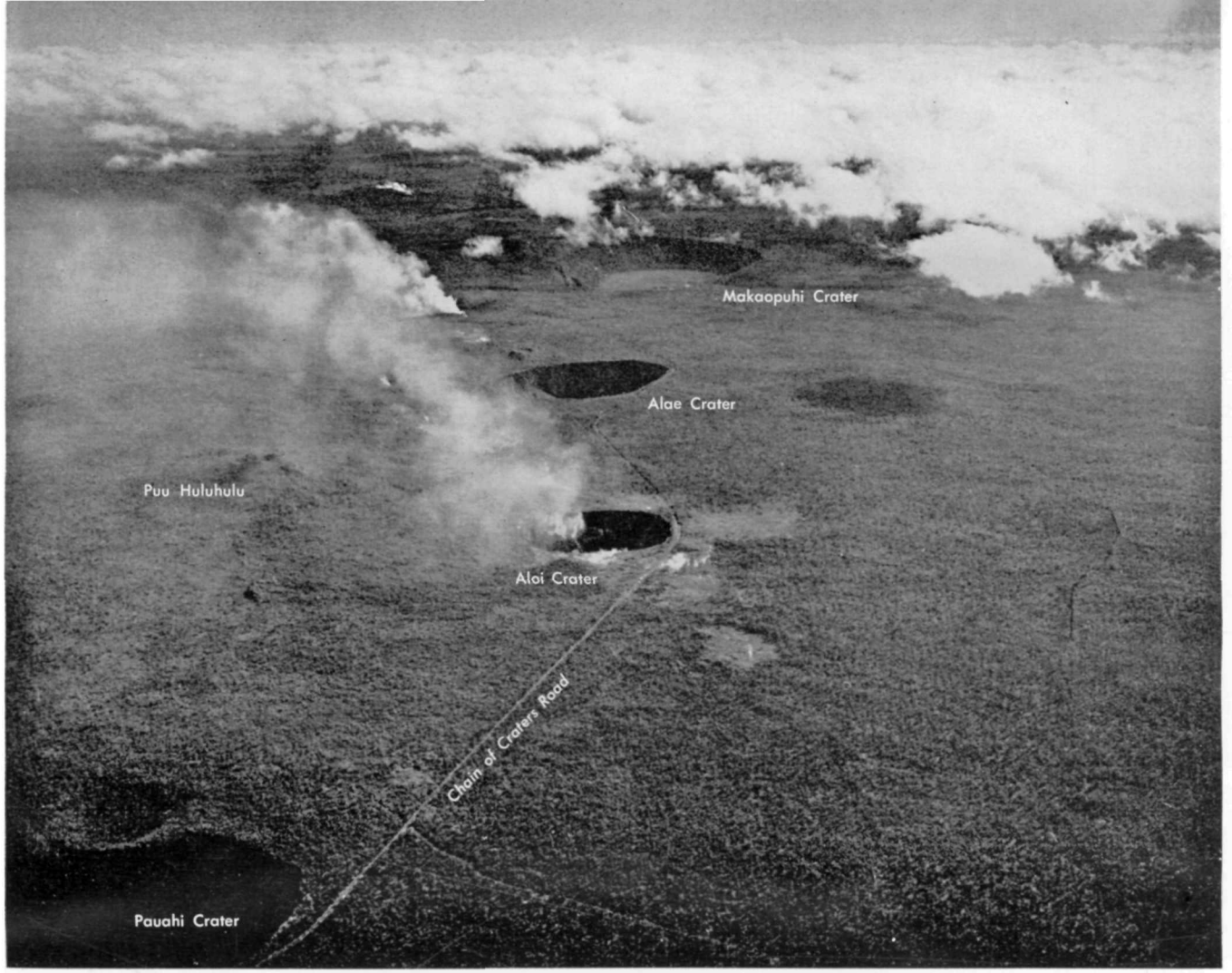
Most students of resources management and environmental protection are well aware that one of the major destructive forces with which we must contend is the population explosion. We are struggling at the moment with the overcrowding which has resulted from increased birth rates and lower death rates after World War II; within a few years we shall feel the massive impact of a second wave, the grandchildren.

The experts and specialists now point out that unless our population stabilizes itself in the reasonably near future, our best hopes for the preservation of a reasonably natural environment, including the strategic bases in the national parks, wilderness areas, and wildlife refuges, will be seriously endangered; a finite environment cannot withstand the impact of an indefinitely expanding population indefinitely. We have a duty to contribute to essential public education in this field, through the Magazine and otherwise.

We maintain continuing contact with park, wildlife, and natural area protection abroad. We were represented at the recent conference of the International Union for the Conservation of Nature and Natural Resources in Africa by Mrs. Cazenove Lee, a member of the Board of Trustees; a considerable number of other Trustees also participated.

In connection with the protection of wilderness conditions in the national forests, public defense against extermination programs, control over extravagant road and facility construction, and the like, the Association has been pressing for what can best be described as Open Government; that is, open planning, open hearings, and full publication of reports and programs. The growing tendency toward bureaucratic secrecy, almost military in quality, must be combatted in the interest of good resources management and democratic government generally.

Many other phases of our work could be discussed if space permitted: our support for the Land and Water Conservation Fund, for wilderness preservation, for open-space protection, for locating the full responsibility for park road planning in the National Park Service, not the Bureau of Public Roads. As our work progresses in these fields we report the developments in the Magazine; from time to time we have recounted them in our Policy Reports, and shall continue to do so. The opportunities for public service which are opening to the Association along so many lines are limited mainly by the need for greatly increased financial assistance from the members and from foundations concerned with the wise management of natural resources and with the protection and restoration of a natural environment for all life everywhere. ◆



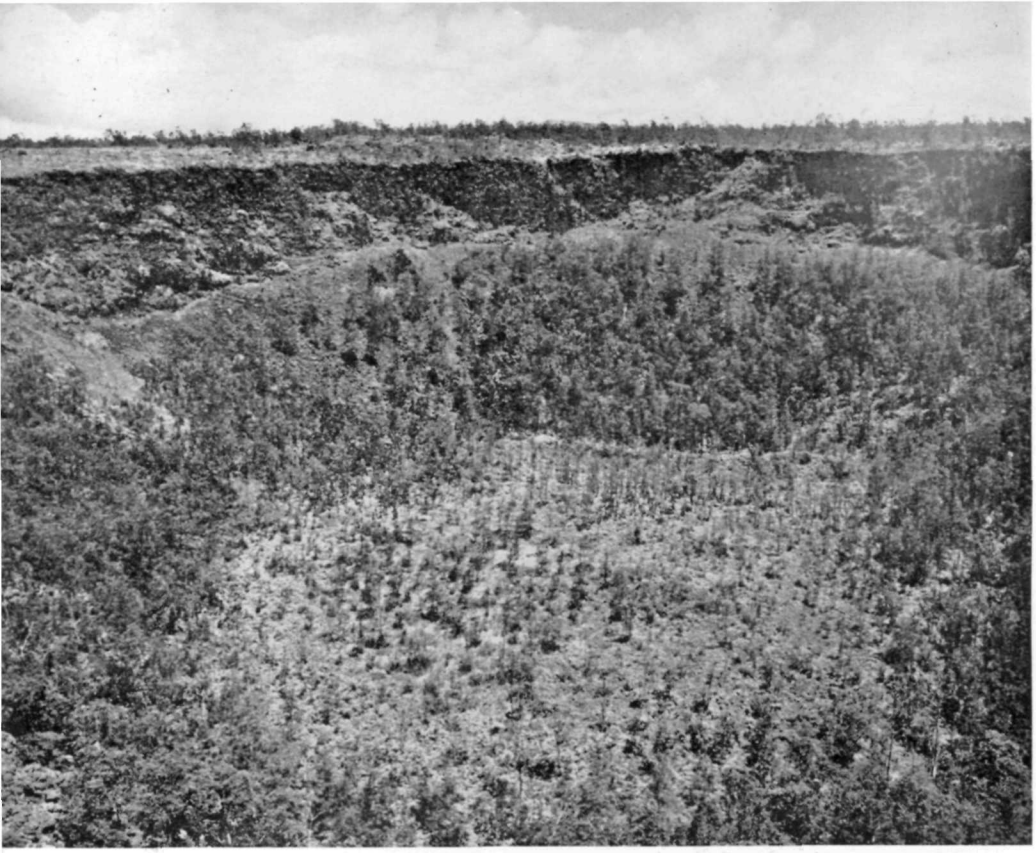
Southeast of Kilauea Crater in Hawaii Volcanoes National Park, on the Island of Hawaii, a number of smaller craters lie along a zone of weakness known as the east, or Puna rift. In December, 1962, rising lava in Aloi Crater engulfed the trees of the crater's floor and, subsiding, left the once-living trees as lava "molds."

HAWAII'S TREES OF STONE

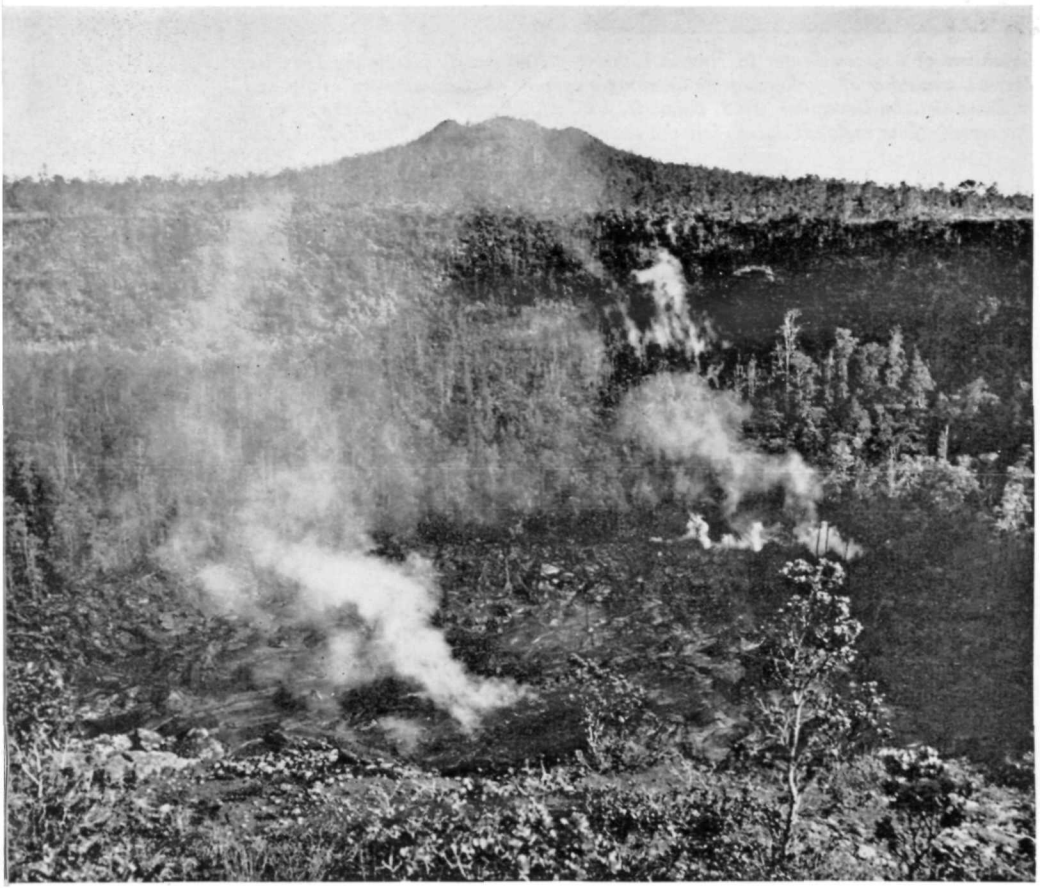
By Dwight L. Hamilton

HAWAII'S GODDESS OF VOLCANOES, Madame Pele, frequently creates new land through eruptions of her volcanoes, Kilauea and Mauna Loa. Sometimes her lava flows are destructive to farm lands and man-made developments as they move relentlessly down the slopes of these volcanoes toward the sea. At other times she confines her activities to pit craters at the summits or along the volcanoes' "rift" zones. Occasionally she creates natural oddities. Her latest such production—Aloi Crater's "trees of stone."

During the early morning of December 7, 1962, following hours of increased earthquake activity, lava broke to the surface through rifts across the floor of Aloi Crater, eight miles from Park Service headquarters in Hawaii Volcanoes National Park. This 240-foot-deep collapsed crater had never been the site of an eruption. But now, for several hours, lava fountains 200 feet high played within the crater. Gradually a lake of lava formed, engulfing trees growing on the crater floor as it deepened. These trees were not immediately consumed, as might be expected, for moisture within them



Aloi Crater, shown above in a pre-eruption view, was formed in prehistoric time by collapse of the ground surface following withdrawal of molten lava below. In the post-eruption scene below, the maximum depth of the lava lake created in 1962 is shown by the difference in elevation between the present crater floor and the high-lava line which rings the crater.



caused the lava to cool on contact and to form an insulating crust a few inches thick around them. Within four hours the lava lake reached a depth of fifty feet, completely covering all vegetation on the crater floor. Then the eruption ceased abruptly at this locality, only to break out again two miles lower down the mountain, causing drainback of lava into the vent and lowering of the lava lake. Trees that had been entirely covered reappeared through the newly-cooled lake crust as it continued to drop. The now-dry trunks and branches of the lava-encrusted trees smoldered for hours and eventually many were entirely consumed, leaving the hollow lava tree-molds pointing starkly toward the sky.

* * *

Eight days after the eruption, Dr. James Moore, United States Geological Survey geologist and scientist in charge of the Hawaiian Volcano Observatory, led our two-man party into the still-fuming crater and among the fantastically-formed lava trees. Here we set foot on America's newest parcel of "real estate," and wandered over the yet-warm lake crust. We examined closely the new natural wonders which in the future will be used to explain a most interesting phase of volcanic activity, and which surely will add to the enjoyment of park visitors for many years to come. ■

Photographs by the author, courtesy the National Park Service, Department of the Interior

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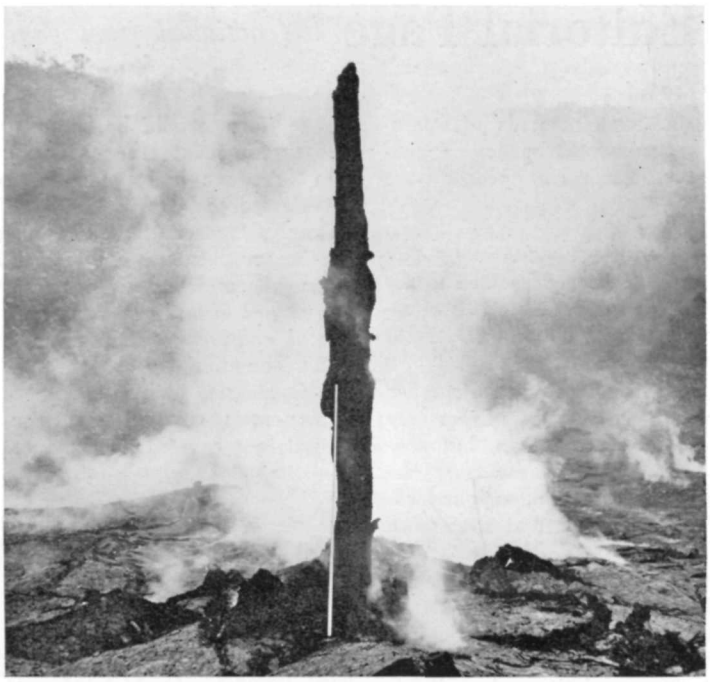
Dwight L. Hamilton is Chief Park Naturalist at Hawaii Volcanoes National Park, Island of Hawaii. Many readers of this magazine will recall that in 1961 the former Hawaii National Park was separated, for administrative purposes, into two parks: Hawaii Volcanoes, on the "big island" of Hawaii, and Haleakala, on the Island of Maui.

In the photograph at the right, a nine-foot survey rod leans against one of Aloi Crater's tree molds. This fragile, twenty-one-foot tree of stone, which at the time may have been Hawaii's tallest, collapsed some months later, perhaps toppled by earthquake activity. Below, a portion of the lava lake's crust (about five inches in thickness) remains perched atop a three-branched tree mold.



The Editorial Page *(continued from page 2)*

out the Basin. Such methods of operation by a governmental agency responsible to the American people are intolerable.

TWO YEARS AGO, BEFORE ANY OF THE essential facts had been presented to the public, the Corps initiated a series of so-called hearings throughout the Basin to promote its conclusions.

A year and a half ago it staged another series of so-called hearings, purportedly part of its official procedures, but conducted without benefit of the most elementary public information, such as location maps of reservoirs, and drawdown tables.

Thereafter it mounted an intensive propaganda drive throughout the Basin, using a promotional motion-picture, junkets for State legislators, and meetings of local citizens associations where it has refused participation to opponents of its Program.

Only after the defenders of the Potomac registered massive protests against a decision without a hearing did the Board of Engineers announce public hearings in Washington this past September.

At all the earlier meetings throughout the Basin and the final hearing in Washington there were overwhelming protests against the Program; nonetheless, unruffled by the views and feelings of the people over whose lives it has such great power, the Corps now proceeds to move its Program forward implacably.

THE GENERAL PUBLIC KNOWS TOO MUCH about this institution to permit it to continue in its destructive operations any longer; too much about the top-heavy civilian bureaucracy; the hand-out line of big and little contractors, concrete mixers, and big machinery operators; the real estate speculators, set to sell lots beside the drawdown deserts to innocents; the damage to good fishing, hunting, and scenic country for the sake of bigger sales of bigger motorboats; and about the supposedly autonomous Board of Engineers, with its pretentious review functions, which is not autonomous at all.

There have been efforts in the Pentagon in recent years to abolish the Corps of Engineers for the sake of greater military efficiency and improved national defense. The thought is that the military personnel might better be distributed to the Division level; such reorganizations have proved helpful in handling certain other outmoded military services. The peacetime military training and standby functions of the Corps would be better served by this arrangement; the civilian construction functions and personnel could be transferred to bureaus like the Office of Saline Water or the Soil Conservation Service, or to a new Rivers and Harbors Agency, completely civilian, operated in the service of and subordinate to a number of comprehensive planning commissions. The abundant civilian talent which the Corps no doubt shelters within its bureaucratic structure might thus be employed in a constructive manner.

THE MANAGEMENT OF NATURAL RESOURCES, including water resources, in the Potomac River Basin is hopelessly entangled and deadlocked.

The Gordian knot can best be cut by an Executive Order establishing a top-level Potomac Basin Planning Commission. The Program of the Corps has already been submitted to the committees of Congress; despite elaborate preparations for a *pro forma* submission to the governors and federal departments, it can lie on the committee tables as adequate compliance with committee requests for a re-examination of the earlier program developed eighteen years ago; it can lie there and usefully gather dust. The President should take this problem firmly in hand and protect the people of the Potomac Basin against any further assault on their lives and properties.

As a matter of elementary political science, the necessary nature of such a commission should be apparent. Its personnel should be drawn from the social and biological sciences and the humanities; it should include professional regional and urban planners, historians, economists, lawyers, demographers, ecologists, artists, and writers; all of them should be distinguished by their broad grasp of public policy, by their sensitivity to the values of civilization, as distinguished from mere technology; and by their ability to visualize the objectives which must inform and orientate a humanly sound regional economic and engineering program; in short, while the commissioners should be specialists in the social and biological sciences, and in the humane professions, they must be top-level generalists, and incontrovertibly recognized as such.

The President of the United States can establish and appoint such a commission for the Potomac by decree. This is the only quick and effective way out of the hopeless disorder which has resulted from the incompetent operations of the Corps of Engineers.

THE COMMISSION SHOULD HAVE ITS definite policy directives and specific assignments. It should evolve a program for the utilization of the fresh water estuary for metropolitan water supply purposes in periods of extreme low flow and for the elimination of plant nutrients from sewage facility effluents; explore the possibility of using residual concentrates for agricultural purposes; develop comparable local programs for water supply augmentation purposes in any critical locality throughout the Basin; prepare a comprehensive and detailed program for the maximum feasible reduction of urban, industrial, and mining pollution, looking toward complete abolition; and prepare more specific recommendations for a network of headwater flood detention structures of the watershed management type to reduce flood damage, provide good recreation, and augment local water supplies where necessary. It should be empowered to call on the bureaus in the Departments of Interior, Agriculture, Commerce, and Health, Education and Welfare having technological competence in these fields to provide engineering services needed in formulating and executing such plans, but these agencies must remain subordinate to the planning power.

It is entirely within existing scientific and technological competence to develop such a comprehensive plan for the Potomac and begin its application within five years. The Corps of Engineers has conceded that a restudy of the estuary and effluent treatment may show the proposed major reservoir at Seneca to be obsolete; the same reasoning applies to the other reservoirs proposed for current construction, for no such municipal water or pollution emergency exists as to necessitate any forced-draft construction pending a comprehensive re-examination of all the facts.

There should be a five-year executive moratorium immediately on all major dam construction, and attendant government propaganda, on the Potomac. The interests of an advanced civilization require that the Potomac be protected as far as possible as a free-flowing river, from headwaters to estuary, save for a network of small impoundments of the watershed management type.

We are satisfied that as the facts emerge such a commission will find these goals entirely feasible; meanwhile their great potential should not be wrecked by the inertial advance of a cumbersome and archaic governmental institution, whose days are numbered. —*A.W.S.*

THE CONSERVATION DOCKET

Organizations like the National Parks Association, which enjoy special privileges of tax exemption, may not advocate or oppose legislation to any substantial extent. Individual citizens of a democracy, however, enjoy the right and share the responsibility of participating in the legislative process. One of the ways citizens can take part in their government is by keeping in touch with their representatives in the legislature; by writing, telegraphing, or telephoning their views; by visiting their representatives in the national capital, or in their home town between sessions.

Land and Water Conservation Fund. H.R. 3864 (Aspinall). By a vote of 20 to 6, a Land and Water Conservation Fund bill was approved in October by the House Committee on Interior and Insular Affairs. In line with the recommendations of the Outdoor Recreation Review Commission, the bill calls for the establishment of a Fund to finance a State grant program for recreational planning and development and Federal acquisition programs to eliminate inholdings in national parks and forests and wildlife refuges. Three major sources of revenue for the Fund were approved: receipts from the sale of Federal surplus real property and related personal property; receipts from the existing 4-cent per gallon Federal tax on fuel used in motorboats; and a new system of recreation user fees and charges on Federal recreation areas. The present bill provides that no entrance or admission fee shall be charged except at areas administered by a Federal agency where recreation facilities or services are provided at Federal expense.

Indiana Dunes National Lakeshore. S. 2249 (Jackson, Anderson, Douglas, Hartke, Bayh and others). The Administration's bill, as recommended by the Interior Department, to create an 11,700-acre Lakeshore between Gary and Michigan City, Indiana, was introduced by Senate Interior and Insular Affairs Committee Chairman Henry M. Jackson in October. The bill suspends the Interior Secretary's authority to acquire property by condemnation for one year from enactment of the legislation, and permanently thereafter as long as zoning ordinances aimed at protecting the property from commercial or industrial use (as approved by the Secretary) are in force. The Lakeshore boundaries would no longer include the "unit two" of previous legislation, since more than half of this unit has been leveled by the Bethlehem Steel Company. Instead, a number of inland areas are sought for nature preserves or wildlife sanctuaries. And, should the State of Indiana consent, Indiana Dunes State Park would be administered as part of the Lakeshore.

Ozark National Rivers. S. 16 (Symington and Long) and H.R. 1803 (Ichord). Far from certain is the fate of the bills as first introduced in the first session of the 88th Congress for preserving portions of the Current and Jacks Fork Rivers in Missouri as free-flowing streams. In October the Senate passed S. 16, having approved Committee amendments (1) directing the Secretary of Interior to negotiate with the State of Missouri for the donation and inclusion of three State parks in the Ozark National Rivers, which, without the State parks, could encompass a maximum of 94,000 acres and (2) eliminating the provision authorizing compensation to counties for tax losses incurred as a result of Federal acquisition. Later, the House Subcommittee on National Parks adopted the Senate proposal for inclusion of the State parks, but by omitting the land not immediately adjacent to the rivers reduced the area originally sought by almost a third. The smaller area, according to the subcommittee, should be known as the Ozark Rivers National Monument, for which no more than six million dollars could be appropriated for acquisition purposes. The Senate and House versions of the legislation both retain the clauses directing the Interior Secretary to permit hunting and fishing in accordance with State law. The National Parks Association, in commenting on the Ozarks proposal earlier in the year, suggested that the Interior Secretary be authorized to determine whether or not hunting and fishing should be permitted within the national river preservation and to administer regulations.

Sawtooth Wilderness National Park. S. 2188 (Church) and H.R. 8659 (Harding). The U. S. Forest Service has proposed for reclassification as the Sawtooth Wilderness Area the existing Sawtooth Primitive Area in Idaho. More recently Senator Frank Church of that State introduced a bill seeking the establishment of a Sawtooth Wilderness National Park. Composed of two segments, the core of the National Park (equivalent to the Forest Service's proposed Wilderness Area) would be maintained as wilderness "wherein the primeval character and influence is retained," excluding motorized equipment, motorboats, and any "structure or installation, in excess of the minimum required for the administration of said portion of the park." Adjacent to the wilderness area 34,000 acres would be reserved for administrative purposes and visitor accommodations. Grazing permits granted by U. S. Government agencies prior to the enactment of the bill would be allowed to continue subject to protective regulations approved by the Interior Secretary.

Flight of the Bats

(continued from page 10)

hind claws clutching the ceiling, head down and wings folded. Long before the last have returned to roost the bats will be clinging to each other, four and five in tandem, heads downward, from ceiling and walls, like circus aerialists clutching one another in mid-air. In this manner the animals rest and sleep through the day. A square foot of ceiling will accommodate some 300 bats; and, as might be expected, a constant rain of excrement falls to the floor of the cave.

The bats were known to sojourn in the Guadalupes at a relatively early date, and a few of the early settlers of the region had made their way to the Cavern. But when, at about the turn of the century, the rich deposits of guano (bat dung) inside the Cavern were discovered, human activity in the mountains began to rival that of the bats. A wagon-trail was cut in the rock alongside a winding canyon leading to the cave entrance, and over it an operating company brought mining equipment for removal of the fertilizer. Time had impacted the guano to rock-like hardness.

Years later, when the United States Government made a national monument of the magnificent Carlsbad Caverns in 1923, the removal of guano for commercial purposes was discontinued; more than a hundred thousand tons of fertilizer had been taken out up to that time, however. While the bats share the same entrance to the cave as the half-million people who visit the Caverns each year, the winged animals inhabit only the gallery in which they roost.

The spectacular bat flights from the cave entrance occur from mid-April to mid-October. On the final flight in October, the bats pick up their last feeding of the season in the valley and, instead of returning to the cave roost, continue on south to the warmer and more productive fields and caves of Old Mexico. The longest recorded migration flight of a Carlsbad bat was some 800 miles to the south—to Atengo, Mexico. A small number, however, return to the gallery in Carlsbad Caverns as "custodians," hibernating the winter out at roost. But in mid-April, when the great horde of migrant bats returns from across the border, these caretakers rouse themselves and join in the renewed cycle of nightly flights into New Mexico's Pecos Valley. ■

News Notes from the Conservation World

Parks Advisory Board Submits Its Recommendations

Meeting for the 49th time since its creation under the Historic Sites Act of 1935, the Department of the Interior's Advisory Board on National Parks, Historic Sites, Buildings and Monuments recently recommended to Interior Secretary Stewart L. Udall the addition of eight areas to the national park system. Endorsed by the eleven-member Board, which met during November of the past year in Big Bend National Park, Texas, were:

- An Allagash National Riverway of 192,000 acres in Piscataquis and Aroostook Counties, northern Maine. This recommendation is based on the recent report of the Bureau of Outdoor Recreation (July, 1963) rather than on the Park Service's proposal of 1961, which foresaw a national recreation area of 296,500 acres. Recommendation by the Interior Department of the Dickey damsite on the upper Saint John River in conjunction with the proposed Passamaquoddy Tidal Power Project at Eastport, Maine, would seem to insure the feasibility of either proposal so far as flooding of the Allagash River is concerned.
- A Buffalo National River in the Ozark Mountains of north-central Arkansas (which, if it followed the outline of the National Park Service's field investigation report of April, 1963, would embrace 103,000 acres in four Arkansas counties).
- The Assateague Island National Seashore off the coasts of Maryland and Virginia. That portion of Assateague Island lying within the jurisdiction of Virginia is presently the Chincoteague National Wildlife Refuge, administered by the Fish and Wildlife Service. Within recent months there have been many proposals and counterproposals by the Interior Department, the State of Maryland, and Worcester County, in which the Maryland portion of the island lies, concerning creation of this national seashore and its development if created.
- A Fire Island National Seashore off the south coast of Long Island in New York. The Advisory Board rated Fire Island "top priority" as being adjacent to the largest population center of the nation. The February, 1963, issue of this Magazine examined the proposed area in detail.
- A Guadalupe Mountains National Park in northwestern Texas "to preserve the outstanding scenic and scientific values of the North and South McKittrick Canyons and part of this famous mountain range." This would be in an area almost directly south of present Carlsbad Caverns National Park in southeastern New Mexico. See a related article in this Magazine for March, 1963: *A Biological Visit to McKittrick Canyon;* and front cover, same issue, for Guadalupe Mountains scene. Just before presstime for this issue of the Magazine, Congressman Joe Pool (Texas, at large) introduced a bill in the House to establish the Guadalupe Mountains National Park. Congressman Pool had previously introduced legislation (H. R. 3100, to establish a Guadalupe Peak and El Capitan National Park) requiring the Secretary of the Interior to submit a feasibility study of the area. The study bill covered an area of some 50 square miles; further details concerning Congressman Pool's national park bill will be printed in the next issue of the Magazine.
- An Amistad National Recreation Area at Amistad Dam and Reservoir (dam now under construction) on the Rio Grande in Texas.
- An Allegheny Parkway in West Virginia, Virginia and Kentucky "to provide extensive opportunities for recreation travel . . . in the large population centers of the East."
- A Nez Perce Country National Historical Park in Idaho "to commemorate and interpret the history and culture of this greatly scenic northwest area."

In respect to the recent General Accounting Office proposal for transfer of road planning functions in the national parks from the Park Service to the Bureau of Public Roads (treated editorially in the Magazine for November, 1963, page 2) the Advisory Board recommended to Secretary Udall that "there be no relinquishing of any of the responsibilities and authorities now vested in and exercised by the National Park Service—including the decision to build, location, standards, funding, and construction of all roads within units of the national park system."

College of Forestry Offers Graduate Aids

The College of Forestry at Syracuse University, State University of New York, is now accepting applications for the 1964-65 program of graduate assistantships, scholarships, and research fellowships. Thirty-four assistantships at about $2300 for a nine-month period are available, and assistants may pursue studies leading to the Master of Forestry, Master of Science, Master of Landscape Architecture, and Doctor of Philosophy degrees.

Specially qualified applicants will be considered for research fellowships sponsored by industry, research foundations, and government agencies which the college awards for work on assigned research projects. The industrial and other sponsored research fellowships carry annual stipends varying from $2250 to $3100, and are available in several fields. A limited number of scholarships are also available for deserving students.

Applications for assistantships, research fellowships, or scholarships for the year 1964-65 must be completed not later than March 1, 1964. Applications and detailed information on graduate programs may be obtained from the Associate Dean for Graduate Studies, State University College of Forestry at Syracuse University, Syracuse 10, New York.

Seven Young Whoopers Arrive at Aransas

Thirty-one whooping cranes, including seven young birds, have arrived on their wintering grounds at the Aransas National Wildlife Refuge in Texas, according to a November, 1963 report.

The seven youngsters represented the largest number of young birds counted since the winter of 1958-59, and prompted Interior Secretary Stewart L. Udall to remark that: "For once, a report on a population explosion is good news."

A. Clark Stratton Named NPS Associate Director

George B. Hartzog, Jr., who assumes directorship of the National Park Service on January 11, has named A. Clark Stratton as his associate director.

Mr. Stratton joined the Park Service in 1936, and was assigned to head an extensive dunes stabilization and beach erosion control project on the Outer Banks of North Carolina, now in the Cape Hatteras National Seashore. He was later a Service inspector and field supervisor in a number of the eastern States.

In 1951 he became project manager for the Cape Hatteras Seashore Recreational Area, and in 1954 was transferred to the Richmond regional office of the Service as soil conservationist and chief

(*Continued on next page*)

Your National Parks Association at Work

Proposals for a John Muir National Monument

During October, President Anthony Wayne Smith submitted for the National Parks Association, upon invitation, an analysis of H.R. 439, a bill by Congressman Baldwin to establish a John Muir National Monument in Contra Costa County, California. The monument would preserve within the national park system the adulthood home of the conservationist John Muir, plus a detached parcel of land known as the Vincente Martinez Adobe Home, associated with "Muir Manor."

The analysis commended Congressman Baldwin's concern for a historical monument to the "father of our national parks and forest reservations," and termed the bill a step in the right direction. It suggested, however, that certain boundary amendments proposed by the National Park Service—which would incorporate small additional acreages into the monument as buffer zones for the property, provide for a small visitor facility and parking lot, and prevent intrusions between Muir Manor and the Adobe Home —be seriously considered by the Committee on Interior and Insular Affairs' Subcommittee on National Parks, which was hearing the bill.

Two Organizations Protest Refuge Land Transfer

During the latter part of the year just past, the Wildlife Management Institute, nationally known wildlife restoration organization of Washington, D.C., and the National Parks Association, through President Anthony Wayne Smith, made a joint protest to the late President John F. Kennedy over the possible return of some or all of the islands which constitute the Hawaiian Islands National Wildlife Refuge to jurisdiction of the State of Hawaii. All Federal lands in Hawaii are being reviewed by the Director of the Budget Bureau under terms of the Hawaii Statehood Act, and those found no longer needed by the United States are being returned to the State.

The Institute and the Association pointed out that the Hawaiian Wildlife Refuge—which consists of a number of small islands and reefs near the extreme western end of the Hawaiian Archipelago —is habitat for many unusual birds, a number of which are on the list of endangered species; and that only the Federal Government can afford them the necessary firm protection. It was suggested that, while the Budget Bureau is well qualified in respect to financial matters, it is not well equipped to make judgments in regard to biological management problems, and that issues touching this latter subject might well be referred to persons qualified to handle them.

In response to the protest of the two organizations, Mr. Ralph A. Dugan, special assistant to the late President, indicated that the assessment of a Federal need for the refuge must be weighed against the intent of the Hawaii Statehood Act to provide a land grant to Hawaii out of the property now held in the State by the Federal Government; but that final decision by the Director of the Budget Bureau will not be taken until additional information is received from the State of Hawaii in the matter; specifically, in regard to the State's plans for protecting the wildlife refuge.

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of operations; in 1956 he was assigned to Washington headquarters, first as chief of concessions management and then as assistant chief of design and construction.

Mr. Stratton is a native of Aurora, Missouri, and presently a resident of Falls Church, Virginia.

Key Deer Refuge Dedicated During Fall

During November, the Key Deer National Wildlife Refuge in Florida, with headquarters on Big Pine Key, was formally dedicated by Secretary of the Interior Stewart L. Udall.

More than 735 acres on Howe and Big Pine Keys have now been set aside as a haven for the Key deer—more properly known as the Florida Key white-tailed deer—thanks to a campaign which was spearheaded by the North American Wildlife Foundation of Washington, D.C., and to which many persons and other organizations contributed effort and money. Total acreage of the refuge now stands at 7,117.

The Key deer, which in earlier days ranged throughout the southern group of Florida Keys, at one time appeared headed for extinction because of destruction of natural habitat by human developments—homes, motels, restaurants, and the like; poaching, fire and hurricane have also played a part in the drastic reduction of the tiny animal's terrain. This is the smallest of the eastern races of the white-tailed deer, and one of the smallest of any of the deer of North America; an adult male may stand, at shoulder height, from 28 to 32 inches as compared with the 36 to 40 inches of the common Virginia and northern woodland white-tails. In 1947, it was estimated that there were but 35 of the Key deer left; today it is thought that the little mammal may number from 250 to 300.

BLM Is Developing Conservation "Showcase" Areas

The development of 85 "showcase" land areas in 10 Western States for demonstrations of resource conservation problems and their solutions has been announced by the Interior Department's Bureau of Land Management. Such resource conservation areas vary in size from a relatively few acres to thousands of acres, in regions representing the entire spectrum of land-types managed by the Bureau.

The program planned for these special areas is aimed at demonstrating in visible form how wise management practices on the public lands can increase their productivity in better forage for domestic livestock and wildlife, in higher sustained yields of forest products, and in the general benefits of good soil and water conservation practice.

Audubon Award to Miss Carson

Rachel Carson, biologist and writer who has done so much in the recent past in alerting the American public to the present and potential destructiveness of pesticide misuse, was the recipient, during December, of the National Audubon Society's highest award for conservation achievement—the Audubon Medal. Presentation of the medal was made by Carl W. Buchheister, president of the Society, at its annual dinner in New York City.

THE QUIET CRISIS. By Stewart L. Udall. Holt, Rinehart & Winston, New York, 1963. 209 pages, illustrated, with introduction by John F. Kennedy. $5.00.

"This is primarily a work of synthesis and interpretation, the transference of old wine into new bottles," the author modestly says of his book in his "Acknowledgments" at the end. "Even so," the reader may reply, "those were great years for the grape when such wine was pressed out, and these new bottles are not only gracefully but honestly labeled; the mark of the vintner whose heart is in his wares."

Though the fact is barely mentioned, even on the dust jacket, one cannot fail to be aware that the author of "The Quiet Crisis" happens to be Secretary of the Interior. In such an office, as he says, he "participates in a revolving seminar on resources." But that does not tell the whole story. It is difficult to think of a government department which offers more chances for an unhappy family than this of Interior. The word "conservation" means so many things that the greater the bureau zeal, the greater may be the conflict. What is the wisest use for any given natural resource? If it is an irreplaceable thing of great beauty and meaning, preserve it! Ah, not so easily done, it seems: other bureaus file claims, the Gross National Product is dusted off and exhibited: someone is destined to disappointment. Not only in baseball must the umpire thicken his skin. The quiet crisis may frequently be a Secretary's personal one, in which he is forced to negate his own best thought.

No matter what may be the fortunes of Pressure, we know now, clearly and in refined, sensitive prose, just where Mr. Udall stands; or, rather, where his heart is. It has been sometimes said, how fine it is that the Secretary is an enthusiastic "outdoor man," who loves the mountains and the trails. But that could be said of many who are not deeply concerned with the fate of the generations to come. Mr. Udall has cared to read back through the years and understand the fellowship, and realize the supreme service, of the men who told eternal truths when few would listen: George Perkins Marsh, our first real ecologist, John Wesley Powell, Thoreau and Muir and Schurz—all those far-seeing Americans who knew so well that their generations were eating seed-corn. This book would be worth the buying for the sixth chapter alone: the story of that almost universal genius, Marsh the Vermonter, whose *Man and Nature*, published nearly a century ago, remains a substantial guide to the efforts of the preservationist today.

Not merely a good book; perhaps a courageous book as well. It is not usual for a cabinet officer to put his real beliefs on the counter; no equivocation, just in round frank terms. No doubt the Introduction written by the late President John F. Kennedy was the source of some confidence to the author. In politics, as with any other institution, there must be a not unreasonable conformity. The Introduction was an enthusiastic approbation. —*F. T.*

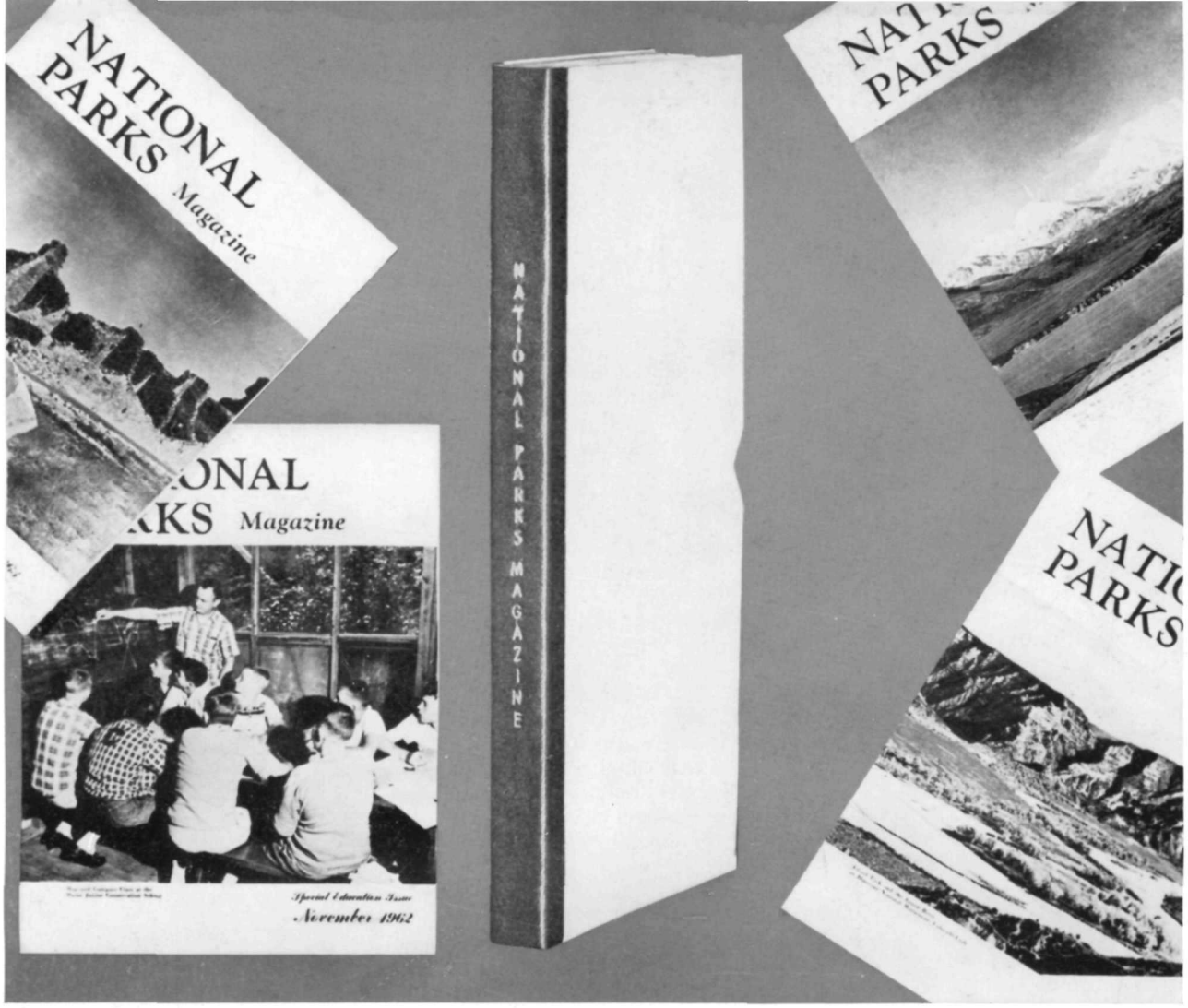
EXPLORING OUR NATIONAL WILDLIFE REFUGES. By Devereux Butcher. Houghton Mifflin Company, Boston, 1963. Second edition, revised. vii + 340 pages, profusely illustrated, with bibliography and index. $6.50.

This is the second edition of the standard work on the nation's wildlife refuges, administered by the Bureau of Sport Fisheries and Wildlife. The first edition was brought out in 1955 under title of *Seeing America's Wildlife in Our National Refuges.*

Those persons in this country who possess a more intimate knowledge of our national wildlife refuges than the author of this book are few indeed. Devereux Butcher, widely known conservationist, editor, writer and outdoors photographer has packed between the covers of the volume a vast amount of description and information about the refuges and their purposes, and has welded all into an entity with his own deep regard and concern for their inhabitants. A selection of some 340 top-flight wildlife and scenic photographs accompanies the text. —*P.M.T.*

BIRDS OF YOSEMITE. By Cyril A. Stebbins and Robert C. Stebbins. Yosemite Natural History Association, Box 545, Yosemite National Park, California. 1962. iv + 80 pages, in paper cover. $1.05, postpaid.

An excellent guide to the birds of Yosemite Park and their habitats, profusely illustrated with line drawings and replete with much additional helpful material in appendix form for the non-professional birder. A watercolor of a male Western tanager by Robert C. Stebbins furnishes the front-cover motif for the volume, and it is a beauty. This is a revision of a work which was first published in 1954 as Vol. 33, No. 8 of *Yosemite Nature Notes.* —*P.M.T.*



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National Parks Association photograph

Crabtree Creek, a tributary to the Savage River in the Appalachian mountains of western Maryland, gurgles through the muck and rock debris of a fifty-foot drawdown on the Corps of Engineers' Savage River reservoir.

TAKE A GOOD LOOK at the photograph above. It was made during the fall of 1963, just after the height of the autumn foliage season. It could have been taken many weeks before; and although the raw wreckage of a once-beautiful Appalachian stream will later be covered by a kindly mantle of snow, there will be no change in its condition for many weeks or months to come, offensive to hunter, fisherman, and outdoorsman alike. This is a drawdown on the Big Impoundment behind the Big Dam. The Big Dam is being sold by the Corps of Engineers, in part at least, as a producer of first-class outdoor recreation.

Look at the photograph again. What do *you* think?

National Parks Association 1300 New Hampshire Avenue, N.W., Washington, D. C. 20036