NATIONAL PARKS MAGAZINE

Butterfly Milkweed

40th Anniversary
National Parks Association
Founded 1919

October 1959

Fifty Cents

Mountain Building in Action

MANY VISITORS to Yellowstone National Park on August 17-18 gained a better understanding of the geological forces which created the mountainous region. Every national park visitor may attend a campfire talk on park geology, but on this occasion, the demonstration was a "live" earthquake of considerable magnitude.

In the Hebgen Lake area of nearby Madison River canyon it was not a show; it was a catastrophe which killed ten persons and injured many more. A tremendous landslide, shaken loose by the earth tremors, now forms a natural 200- to 300-foot dam some seven miles downstream from Hebgen Lake.

A number of Yellowstone roads were closed by the gigantic upheaval which tore the earth's surface. Several old buildings—including the Park Service headquarters at Mammoth—were damaged, as were many of the business establishments in the town of West Yellowstone at the park's Madison River entrance.

Little damage has been noted thus far in the main geyser basins, although Giant geyser—dormant since 1955—is reported to have begun to play constantly to a height of twenty feet. This may mean some damage to the subterranean pipes which feed this once largest of the park's geysers. A subsequent tremor on September 5 is reported to have set off rockslides which crashed down Uncle Tom's trail and smashed a viewing platform and stairway in the Grand Canyon of the Yellowstone. (Further details will be reported in later issues.)

Explaining the cause of the phenomenon, geologists point out that the region is young geologically, and its mountains are still rising. The conditions which cause the upward pressure result in stresses in the rocks—from the earth's surface to a depth of several hundred miles. While this stress can build up over long periods of time, it occasionally results in an earthquake and more rarely in actual fracturing of the earth's surface.

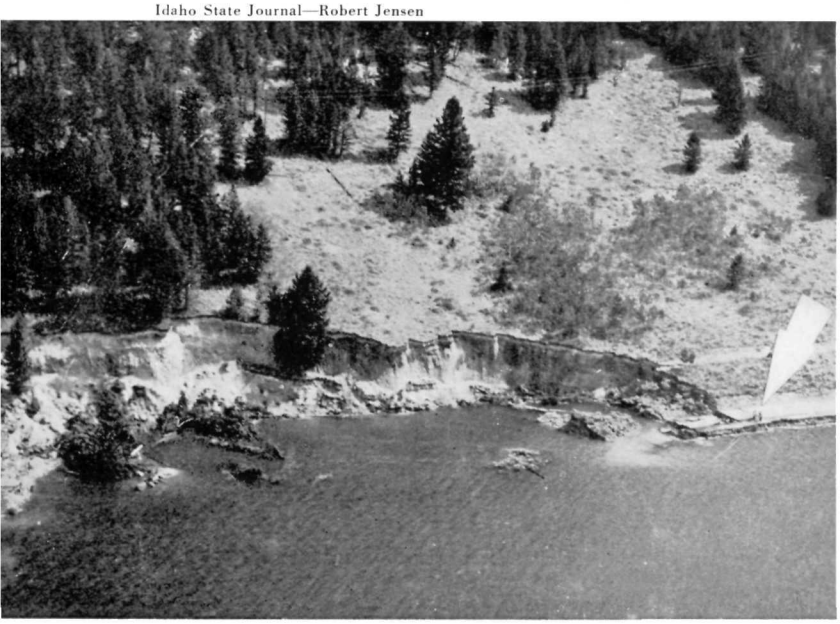
Such changes normally take place so slowly that during our short lifetime we think of mountains and oceans as static things which have been—and will be—there always. Not so at Yellowstone on August 17. Commenting on the suddenness with which the changes occurred, Geologist Edgar W. Spencer noted in the August 30 *Washington Post*, "Three faults moved at Hebgen Lake on the night of August 17 just before midnight. There was apparently no warning before the sudden and violent displacement occurred, opening up gaping fissures."

One interesting result of the series of quakes is a Forest Service proposal to establish a special "earthquake geologic area" in the hard-hit Gallatin and Beaverhead National Forests of Montana, adjacent to Yellowstone Park. Such an area would preserve for observation and study the slide area, the new lake created behind the slide and many prominent faults and fissures as the scene of one of America's severest earthquakes.

The quake has also dramatized the foresight of those early men who set aside the great natural areas of our national park system. For in these regions, we can not only see undisturbed scenic beauty, but we can also gain understanding of the natural forces of change constantly at work in planet earth.—*B. M. K.*

The August 17-18 earthquake, which struck near the Montana-Idaho-Wyoming border, caused most violent damage just northwest of Yellowstone National Park. The ripping tremors dumped several hundred yards of Montana Highway 287 into Hebgen Lake (left) and a mountainside tumbled down into Montana's Madison River Canyon (right) crushing campsites and trapping tourists.

Idaho State Journal—Robert Jensen



Idaho State Journal—Quane Kenyon

NATIONAL PARKS MAGAZINE

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OCTOBER 1959 Vol. 33, No. 145

Bruce M. Kilgore, Editor

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ON THE COVER

The bright orange flowers on our cover are favorites of butterflies—hence the common name "Butterfly Milkweed." This scene along the Blue Ridge Parkway, Virginia has as background, an historic split-rail fence made from American Chestnut killed in 1930 by the imported chestnut blight. The Parkway leads from Shenandoah National Park in Virginia to Great Smoky Mountains on the border between North Carolina and Tennessee.—Photograph by Grant W. Sharpe.

THE NATIONAL PARKS AND YOU

Few people realize that ever since the first national parks and monuments were established, various commercial interests have been trying to invade them for personal gain. The national parks and monuments were not intended for such purposes. They are established as inviolate nature sanctuaries to preserve permanently outstanding examples of the once primeval continent, with no marring of landscapes except for reasonable access by road and trail, and facilities for visitor comfort. The Association, since its founding in 1919, has worked to create an ever-growing informed public on this matter in defense of the parks.

The Board of Trustees urges you to help protect this magnificent national heritage by joining forces with the Association now. As a member you will be kept informed, through NATIONAL PARKS MAGAZINE, on current threats and other park matters.

Dues are $5 annual, $8 supporting, $15 sustaining, $25 contributing, $150 life with no further dues, and $1000 patron with no further dues. Bequests, too, are needed to help carry on this park protection work. Dues and contributions are deductible from your federal taxable income, and bequests are deductible for federal estate tax purposes. As an organization receiving such gifts, the Association is precluded by relevant laws and regulations from advocating or opposing legislation to any substantial extent; insofar as our authors may touch on legislation, they write as individuals. Send your check today, or write for further information, to the National Parks Association, 1300 New Hampshire Avenue, N.W., Washington 6, D.C.

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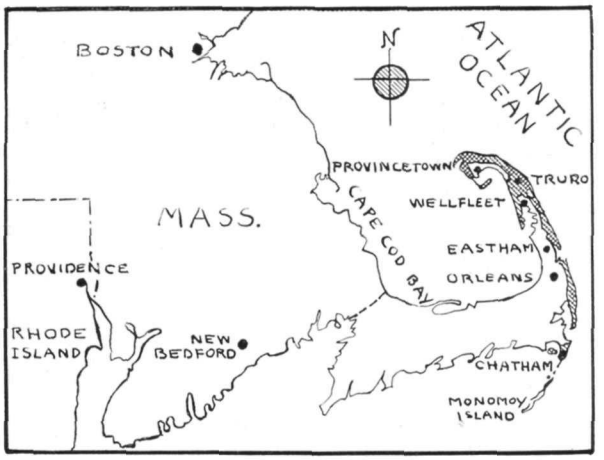
Pilgrim Lake dunes, North Truro, Massachusetts — Samuel Chamberlain

Cape Cod Seashore

By Elmer C. Martinson



ON THE coast of New England, amid our fast-growing nation's greatest concentration of population, there remains but one extensive reach of unspoiled ocean shore. And it is one of the finest in America. This seashore is on Cape Cod, Massachusetts, stretching for nearly forty miles along the ocean side of the outer Cape from Provincetown to Chatham.

A century ago, Henry Thoreau called it "probably the best place of all our coast to go to." Today, so many visitors agree that it is in grave danger of obliteration by summer cottages, resorts, and commercial enterprises of all kinds. If this happens—and it is already progressing with alarming rapidity—the very beauty which makes Cape Cod so greatly beloved will vanish under the surge of development.

To prevent this irreparable loss to the future, to preserve this historic natural scene for posterity, a Cape Cod National Seashore has been proposed by the National Park Service and is being considered by the Department of the Interior. Three bills which would authorize a similar area as a national park are pending in Congress.

As a park planner of the National Park Service it was my privilege to participate in studies, which generously donated funds made possible, of the park potential of the outer arm of Cape Cod. We had learned something of the outstanding quality of this historic peninsula during the 1954-55 survey of the Atlantic and Gulf Coast shoreline, during which we found the outer Cape to be one of the finest and last remaining along these coasts. The Secretary of the Interior's Advisory Board on National Parks, Historic Sites, Buildings and Monuments favorably considered Cape Cod's great outer beach for national park status and recommended further study. It was now to be our task, therefore, to go over this historically beautiful ground in detail, cataloguing and evaluating its features and seeking to ascertain whether a national seashore area here was truly feasible.

Ever since Thoreau's day, writers have extolled the scenic beauty of the Cape, its ever-changing pattern of cloud and wave, shifting dunes and wind-blown grass. We already had become acquainted with the compelling beauty of its shores and seascapes; now we would familiarize ourselves as well with the contrasting beauty of its healthlands, quiet woodland parks, and marshes filled with wildlife.

The shore, which at first commanded our attention, is a reach of almost 40 miles of ocean beach extending from the tip of the Cape at Provincetown down to Chatham. This almost unbroken beach is probably the most spectacular feature in the area now proposed for a national seashore. Thoreau called it Great Beach. "A man may stand there and put all America behind him," he wrote. At the tip of

Mr. Martinson is a Park Planner with the National Park Service's Region Five Office in Philadelphia. He was brought from the Omaha office about two or three years ago to work specifically on Cape Cod planning. To the extent that he touches on legislative matters, Mr. Martinson writes as an individual. Further details on the proposal are outlined in a 20-page *Cape Cod* brochure available from the National Park Service.

the Cape in Provincetown and Truro there are eight square miles of some of the most spectacular sand dunes along the Atlantic Coast. Here the sands shift like the clouds and sea, creating ever-changing scenic composition. The moving dunes engulf the forest, yet plant roots grip them in turn in the endless struggle for survival.

Fifteen miles of the central section of Great Beach is backed by the bold bank of original glacial deposits, sloping cliffs reaching heights of from 50 to 175 feet. Ocean panoramas from these headlands are among America's finest.

Below the headlands the beach extends southward for fifteen miles in a single sand spit, backed by low dunes, picturesque marshes, and the calm waters of Pleasant Bay.

We found a different, a more serene mood along the shores of Cape Cod Bay across the outer Cape. Here the surf rolls gently toward a wide foreshore. On the peninsula comprising Great Island, Great Beach Hill, and Jeremy Point, one feels remote from civilization, yet able to glimpse the activities of beach and harbor which are traditional on the Cape.

Up from the bayside beach roll extensive heathlands, dimpled with glacial kettle holes. This is a picturesque and colorful region, drained by the Herring River and Bound Brook with their interesting marshes abounding in wildlife. Farther inland the heathlands and marshes give way to forests of pitch pine and mixed hardwoods extending to the salt spray domain of the Atlantic. Here quiet fresh water ponds provide a striking contrast to the ocean nearby. There are twenty named ponds on the proposed area, ranging in size up to 109 acres and varying in characteristics with drainage and exposure to wind. North of the ponds area the Pamet River flows through a deep valley which glacial torrents cut into the rolling land.

Our scientific studies of the Cape began with its geology, for Cape Cod as we know it today is of glacial origin. The land mass now thrust out into the sea was heaped there by the last continental ice sheet, and glacial evidences are everywhere, not only along the ocean shore, but in the inland portions of the Cape as well. There the kettleholes, glacial lakes, boulders, and deposits of gravel make the area an outstanding one for the study of glacial forces. Added to the scope and diversity of its glacial features are the evidences of post-glacial modification of landscape by a rising sea level, by wave action, shore currents, and wind. The violent action of the sea against the thick but easily eroded glacial deposits gives the area its character and makes its geology of national significance.

We also found Cape Cod to be of great biologic importance because of the number of distinctly different plant and animal associations and the controlling effect upon them by their environment. The Cape's unusual variety of plant and animal life results from the fact that the area includes both northern and southern types. As glaciers receded, many plants and animals of the northern type took root upon the Cape. An ensuing warmer era caused southern species to range northward. Both now thrive in the maritime climate of the Cape.

Cape Cod, which is on the Atlantic Flyway, is in the wintering area of vast flocks of waterfowl. Nearly three hundred species of birds have been counted on nearby Monomoy National Wildlife Refuge.

In addition to the famous cod, the waters off the Cape support an abundance of fish and shellfish and Cape Cope is listed among the ten best saltwater fishing areas in America. The tidal areas and marshes offer unusual opportunities for studying communities of marine plants and animals.

History, too, adds to the Cape's national significance. That "mightie headland" stands as a reminder of those pioneer mariners who rounded this peninsula on their voyages of discovery in the northern waters of the New World. Perhaps the Vikings landed here. Certainly Champlain did in 1606, and here in 1620 the Pilgrims first set foot on American soil, found their first seed corn and drank their "first New England water with as much delight as we ever drank in all our lives."

Fishing, which gives Cape Cod its name, conditioned its development following permanent settlement in 1637. Every little Cape harbor and estuary had its fishing fleet, and the Cape's "drift whaling" and "shore whaling" began the great American whaling saga. Cape Cod lived under the threat of British naval attack during the Revolutionary War and in World Wars I and II experienced stern reminders of war upon the seas.

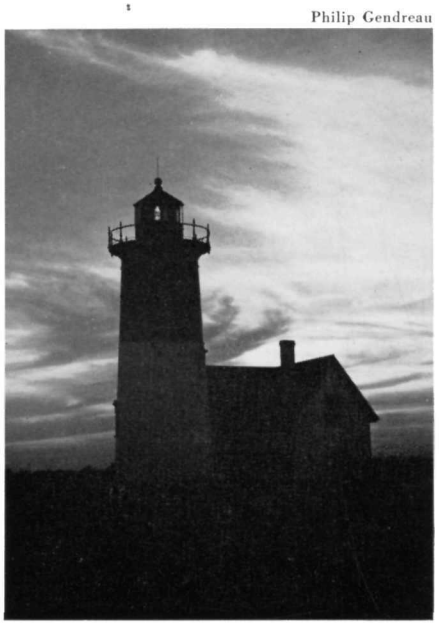
Cape Cod has long been famous as a New England vacation place, so we were not surprised to find it filled with opportunities for outdoor recreation, enhancing its great inspirational and educational value. Cape Cod offers opportunity for swimming, hiking bicycling, boating, camping, photography, fishing, sketching, bird study and other true research of many kinds.

Vast flocks of waterfowl winter on Cape Cod, located on the Atlantic flyway.

W. B. Long, courtesy Mass. Audubon Society

Nauset Light near Eastham is a reminder of pioneer mariners and the great American whaling saga.

Philip Gendreau



Great Pond at Wellfleet

National Park Service

Although comparatively undeveloped, the outer arm of Cape Cod nevertheless has a number of communities, and the area of the Cape which we studied embraces several hundred homes. In drawing up a proposed boundary for a national seashore, we were well aware of the importance of including a large enough area to preserve the many interrelated scenic and scientific features of the Cape intact as a unit as free as possible from human developments. This meant going across the Cape and including examples of the ponds, heaths, marshes and bay shore as well as the ocean coast. But here as in other parts of the study area, we endeavored to exclude as many homes or settled areas as possible. The boundary we have recommended left out the villages and other communities of the outer Cape as well as additional area for them to grow.

Our final task after evaluating the area and drawing up possible boundaries for it was to give some attention to uses of the area—where visitor centers, swimming areas and other developments might best be located. The National Park Service is not in a position to make detailed development studies in that area until such time as it is authorized by the Congress as a unit of the national park system. It was evident, however, that in this scenic, historic peninsula the least possible development consistent with public enjoyment and safety would be in order. Since our objective would be to preserve the traditional Cape Cod scene as free as possible from man-made intrusions, we recommended that commercial enterprises for visitor services, such as motels and restaurants, be provided outside the national seashore, in the surrounding community. This policy not only would preserve the integrity of the seashore but would benefit the surrounding communities economically.

In our studies of Cape Cod we were impressed by the love Cape Codders, both resident and summer, have for their narrow land. So far these people have managed to protect the traditional character of their Cape, but we saw on our Atlantic and Gulf Coast survey how crushing are the big business pressures of vacation development—how fast it is swallowing up the remaining unspoiled shores. We are convinced that unless a portion of the Cape is placed in public ownership, developments will spread indiscriminately across the entire peninsula, destroying the very scenes that are so greatly loved and attractive to so many people. Without such protection the Cape lands will be sold or subdivided and the natural spacious beauty of the "old" Cape will remain only in memory.

Inland from the shifting dunes and windblown grass, marshes and heathlands meet pine forests and quiet fresh water ponds.

Establishment of a Cape Cod National Seashore would mean that some who appreciate the lovely Cape features most deeply may have to make sacrifices, for as I said before, it would not be possible to avoid including some homes within the seashore boundaries. Among these houses are a number of charming old ones, some said to date back to the 17th century. Preservation of houses of outstanding architectural and historic significance would be an integral part of the any national seashore project on the Cape. The National Park Service initiated a study of these houses this summer under the Historic American Buildings Survey to locate and evaluate their importance. Recognizing that many property owners look forward to a lifetime of enjoyment on the Cape, however, the National Park Service has recommended that if the seashore is authorized, lands for it be acquired on a life occupancy basis wherever possible.

Many have asked about the economic impact of such an area. We know that in other sections of the country estab-

(Continued on page 11)

National Park Service

Almost 40 miles of unbroken ocean beach extend from the tip of the Cape down to Chatham. Thoreau called it Great Beach.

Landscape Protection in Peak Park

By John Foster

Mr. Foster, Planning Officer of the Peak Park Planning Board, has long been an advocate of international cooperation in the national park movement. In contrast to our great unspoiled wilderness parks, densely populated countries such as Britain often find it necessary to include villages and native industries in the protected areas. The British park administrator's task is thus a highly complex one of planning and directing developments in inhabited areas. All photographs were supplied by the Peak Park Planning Board.

IN BRITAIN, a national park is not a remote primeval wilderness owned by the State, but an extensive tract of beautiful and long-settled countryside in many ownerships, specially safeguarded against developments which would be out of keeping with its characteristic landscape. Despite the marked difference in character between the national parks of Britain and America, it is surprising how similar are many of the landscape difficulties encountered. The problems of the Tioga Road in the Yosemite National Park and the Great Smokies "Skypost" do not belong to the United States alone.

Since the passing of the National Parks Act in 1949, ten parks have been set up in England and Wales. The first, established in 1951, was the Peak District. Even yet it is one of the few run by a joint board—the administration envisaged by the Act—and the only one to have its own full-time staff of technical officers.

The Peak National Park lies at the southern extremity of the Pennine Range and is a vitally important oasis of high, unspoiled country closely encompassed by busy towns and cities, notably Manchester, Sheffield and The Potteries. These large urban centers look to the Peak as their recreational lung and their populations flock to it in thousands every weekend. Over twenty million people live within sixty miles of the national park.

The twenty-seven-member Peak Park Planning Board, with headquarters at Bakewell—the principal town in the park—is specifically charged under the National Parks Act with two important responsibilities: firstly, the preservation and enhancement of the natural beauty of the park, and secondly, the promotion of its enjoyment by the public. We shall here deal only with the first duty: how the Board—under available legislation—actively contributes to the care of the national park landscape.

Considering first the broader issues, in Britain a sound local economy is vital to the success of any region as a national park. In this respect the Peak is fortunate, for employment among the 43,000 local population is well founded, mainly on agriculture and quarrying which together account for forty-five percent of the working population. Quarrying may seem an odd industry to be accepted in a national park, but more about the reason for it later.

Undoubtedly, farming is the activity which has the most widespread effect on the Peak scene. It is vital, therefore, that the relative stability which exists in the industry should be maintained, for nowhere more than in an upland region does depressed farming tell its sad tale, with unkempt fields, tattered fences and derelict buildings. The provision of adequate housing and social and utility services in villages, along with opportunities for alternative types of employment for farm workers' families can do much to avoid depression, and the Board encourages any development which will strengthen the existing communities in this way.

In all but the high gritstone moorland of the north and west, woodlands are an important feature of the park scene. The Board can issue tree pres-

In Britain a national park is a specially safeguarded tract of long-settled land in many ownerships. This plantation was recently purchased by Peak Board and is now being restocked to prevent its falling into decay.

In England a sound local economy is vital to the success of any region as a park. The 43,000 people in the Peak are employed mainly in farming and quarrying.

Limestone quarry at Eldon Hill in England's Peak National Park.

ervation orders to safeguard existing trees and woodlands against immature felling and to ensure suitable replanting of felled areas when felling must take place for sound forestry reasons. Twenty-six tree preservation orders are in force in the park today, covering anything from a few trees to woodlands of seventy acres or more.

The Board can also take over and manage derelict woodlands and plant new ones, where necessary. Recently they bought an isolated fifteen-acre woodland which is both a well-known local landmark and valuable shelter for the little hamlet of Peak Forest (an odd name which is a reminder that the locality was once a heavily-wooded, royal hunting forest.) The woodland was in poor condition and is now being restocked by the selective felling of the worst trees and some new planting.

The planting of completely new woodlands has been on a small scale so far, but a novel scheme to plant over some ugly, old copper-mine tips, the only industrial scar in the lovely Manifold Valley in the south of the park, awaits Government approval.

The Board has just established its own forestry department and tree nursery and will in the future be able to carry out and maintain all its planting with its own staff. A qualified and experienced forestry officer is available to give advice to farmers and small landowners who are interested in improving existing woodlands or planting new ones. In all this work only species of trees are used that are truly indigenous or by long, local usage have come to be widely accepted as such. The Board does not experiment in the introduction of new species which might, in the long term, substantially alter the character of the park's woodland cover.

Almost one-third of the national park (mainly the northern and western moorlands) is water-gathering ground for the nearby towns and cities. The policies of the fifteen water-gathering authorities towards agricultural and other activities varies greatly. A few enlightened authorities allow farming and forestry almost down to the edges of their reservoirs, while others debar completely from their gathering grounds all but sheep grazing. The latter, involving as it does the demolition or dereliction of farm buildings and the neglect of fences and boundary walls, can have a most serious and depressing effect on the landscape. The Board holds the view that technical advances in water purification are such that it is no longer necessary to sterilize this land completely from useful activity, and they are pressing vigorously for a revival of the upland farming traditional to it.

A stranger might well be forgiven surprise at finding quarrying of such importance in a national park, but Peak District limestone is among the best in Britain and it has a national importance in many industries. Nevertheless, its winning must be achieved with as little destruction of the natural landscape as possible, and at the very outset the boundary of the park was drawn so as to exclude the heaviest concentration of quarries around Buxton, including one which is said to have the longest working face of any in Europe.

In 1952 the Board issued a statement of policy on limestone quarrying, designed to safeguard local employment, while preserving as far as possible the landscape integrity of the park. It reserves the right to exclude completely new quarrying from particularly unspoiled areas, and also encourages the extension of existing quarries rather than the opening up of virgin sites. The owners of the twenty-two active limestone quarries in the park have reserves for at least fifteen years' working and, in many cases, for much longer. The terms of their planning permissions ensure that quarries will not break important skylines, that they will be screened by the planting of trees wherever practicable and that they will have their plant and buildings (at best very utilitarian structures) as inconspicuously sited as possible.

The winning of vein minerals—fluorspar, barytes and a limited amount of lead—is not only an operation almost confined in England to the Peak, but it has the rare distinction of being one which can actually result in an improvement in the landscape. By carefully controlling the method of working (which is normally by digging over ancient lead-mining waste heaps) and by securing the restoration of the land on completion, the Board is able in a small way to bring derelict and sometimes unsightly land back to agricultural use.

From the wider landscape issues of farming, forestry, water gathering and quarrying we now turn to the smaller, but in aggregate no less important, problems which derive from man's individual needs. Past building in the Peak made use of local stone and took full advantage of the nature of the ground to give protection from the weather. It was virtually impossible to make a mistake in fitting new buildings comfortably into their environment. Today, new methods of construc-

tion, new materials and cheap transport have set building free from the regional ties of the past. Consequently, it is now all too easy to commit a blunder in siting or designing a building that may well ruin a particularly charming scene for many, many years.

The Board's general policy on siting new buildings is that all but those connected with farming should be erected in existing villages or hamlets, where they will help strengthen the communities, some of which are of many centuries standing. The new buildings themselves should sympathize in design with the traditional gabled forms of the district and their external color and texture should be in keeping with the distinctive limestone or gritstone of the region. Local stone is without doubt the best building material and is still well used despite its relatively high cost. Local firms have successfully developed artificial stones which are reasonable substitutes, and some of the concrete slates now available are a fair match for the fine, old, local stone slates.

To follow these basic principles is not necessarily to be a slave to past traditions. There is plenty of room for contemporary thought, and forward-looking architects have successfully introduced new features into their designs, while still maintaining sympathy with the old. Prospective developers can obtain technical advice on acceptable standards of siting, design and materials of new buildings from the Board's office, and an approach is welcomed at an early stage in any project. Cooperation by the public in this sphere has been very encouraging.

A new film on the famed Indiana Dunes (see August 1959 NATIONAL PARKS MAGAZINE) may be booked for group showings through Mrs. Willard Butz, Box 952, Ogden Dunes, Indiana. In 16 mm. sound and color, the 15-minute film features the area proposed as Indiana Dunes National Monument.

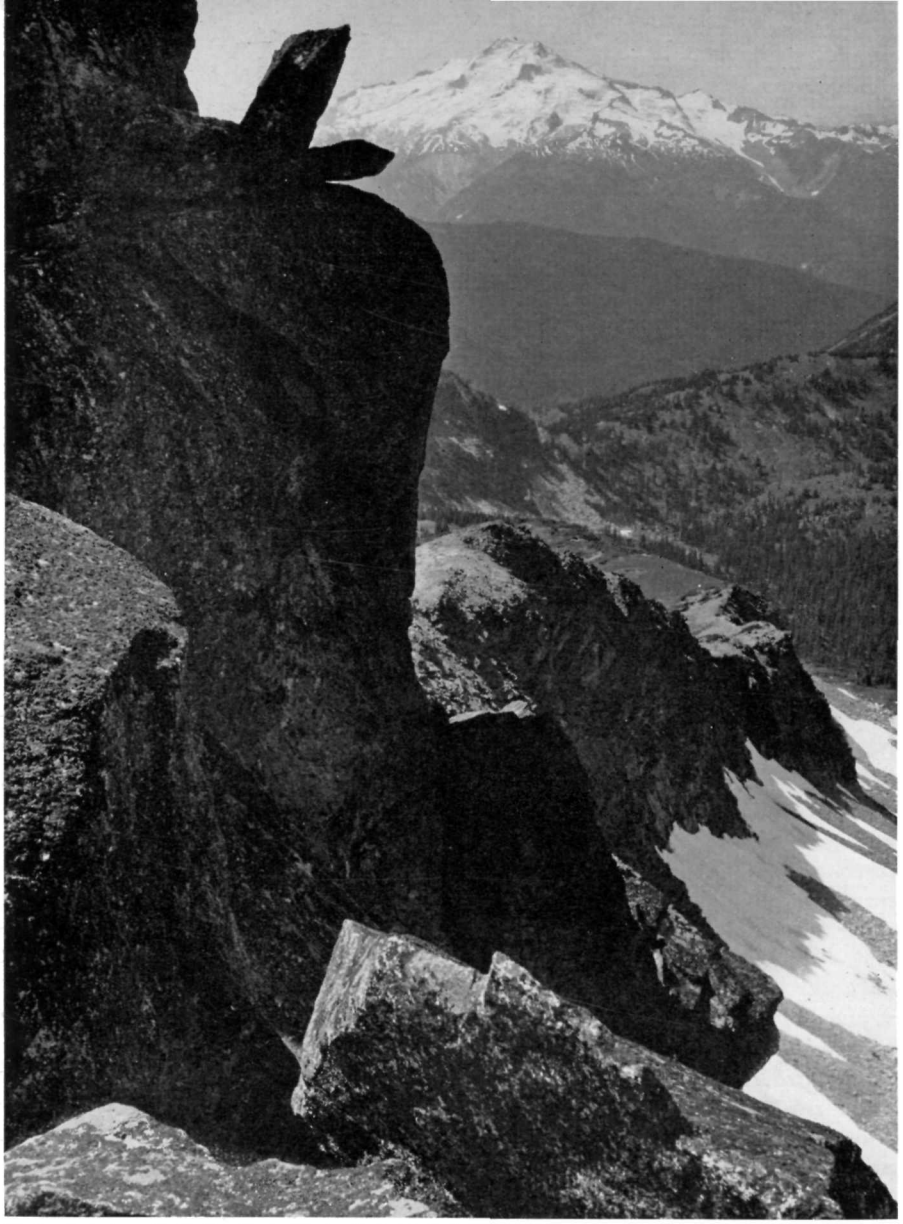
Most people would agree that outdoor advertising has no place in a national park and the Board has wide powers to control boardings, [billboards] and commercial displays. While the Peak is fortunately relatively free from commercial advertising blight, a few of the more tourist-frequented villages still have too many advertisements. At one, Baslow, nearly three-quarters of the existing advertisements were recently removed, with the cooperation of local hotel managers and shop-keepers, to the undoubted advantage of the scenic charm of the village. Similar work is now in progress in other villages.

The provision of electricity to the more remote hamlets and farmsteads raises specially difficult landscape problems, for the schemes put forward by the electricity boards often cross particularly fine open landscape highly sensitive to the introduction of poles and wires. Unfortunately, to provide these services at all is usually a costly business requiring long lengths of lines to pick up only a few properties. Every scheme must therefore be carefully examined on the ground and it is sometimes possible to find an alternative, if perhaps longer route which will reach the properties less conspicuously. Where this type of compromise is not possible the electricity boards are asked to put the most visually damaging parts of their schemes underground, although this may increase the cost substantially.

The wide scope of the Board's work in controlling new development of all types is demonstrated by the more than 4000 applications for planning permission which have been dealt with since the national park was established. The Board also has important powers in securing improvements in the landscape by removing derelict buildings and other eyesores. This is costly work, however, and national restrictions in capital expenditure have kept the level of progress down. The largest job tackled so far was the removal in 1954 of a derelict cafe, filling station and caravan site from a very popular and otherwise unspoiled part of one of the most famous dales in the park. Smaller projects have included the removal of isolated derelict houses and industrial and military structures. Some of this work has been done by regular demolition contractors, but some represents the generous voluntary and unpaid efforts of teams of enlightened young people from nearby towns. In one case the Army lent a hand by blowing up some old hut bases left behind by their wartime colleagues.

The Board continues its active efforts towards preserving the Peak National Park against the deterioration of scene which has come to be so well known as "Subtopia." For, as in American national parks, the price of protecting precious landscape heritage is nothing less than constant vigilance. In its work the Board is fortunate in having the support of so many of the ordinary people of Britain. ■

Old villages such as Edale with houses built of native stone are preserved, and new buildings must fit the landscape.



Glacier Peak from North Star Peak, Glacier Peak Limited Area, Washington.—Photo by Philip Hyde.

The Undiscovered Cascades

By Weldon F. Heald

Having visited and explored the northern Cascades for the past thirty-five years, Weldon Heald probably knows the region as well as anyone in the United States. His firsthand knowledge of its topography, climate, vegetation, glaciers and wildlife is supplemented by extensive background in a multitude of fields of outdoor activity. A member of the National Parks Association Board of Trustees, he now serves as chairman of the Grand Canyon NPA group. To the extent that he may touch on legislation, Mr. Heald writes as an individual.

I THOUGHT the Cascade Range of northern Washington was the most exhilarating and thrilling mountain region I had ever seen when I made my first pack trip there many years ago. After returning a half dozen times, I still think so. For sheer, wild grandeur of a country standing on end, it has few equals anywhere.

In an area the size of Connecticut is a spectacular land of snowcapped, glacier-hung peaks; deep, evergreen-forested valleys; sparkling emerald lakes; and rushing streams. Under the summer sun, the high-spread meadows are ablaze with wildflowers, and roaring waterfalls from the melting snowfields gleam white against the sky-piercing cliffs.

To enter it, as I first did one bright morning in June, you take off at the little town of Chelan and board a sleek, shiny motor cruiser for the trip up Lake Chelan. Like a long blue finger, the lake probes deep into the heart of the northern Cascades and provides a dramatic waterway from the dry, brown, eastern foothills into a stupendous maze of snowclad giants.

Lake Chelan is one of the wonders of the continent, rivaling the fiords of Norway or the Alaskan inlets. Fifty-one miles long and never over a mile and a half wide, it fills an enormous glacier-carved trench to a depth of 1500 feet, and at its upper end is shut in by precipitous, rocky mountain walls, 7000 to 8000 feet high.

The boat trip up the lake is like passing through a magic doorway into another world. Mile after mile you skim over the blue water, the peaks rising higher at every turn. The forests increase, too, and ranks of pines and firs cling to the plunging slopes and mottle the naked rock with ragged designs of dark green.

The cruiser streaks from one side of the lake to the other, stopping for passengers and mail at the little docks of resorts and summer cabin colonies. Tanned, healthy-looking men, women and children are on hand to see the boat come in and to pass the time of day.

"How are things out in the United States?" a man will shout.

"Terrible!" you call back. "You're lucky to be here."

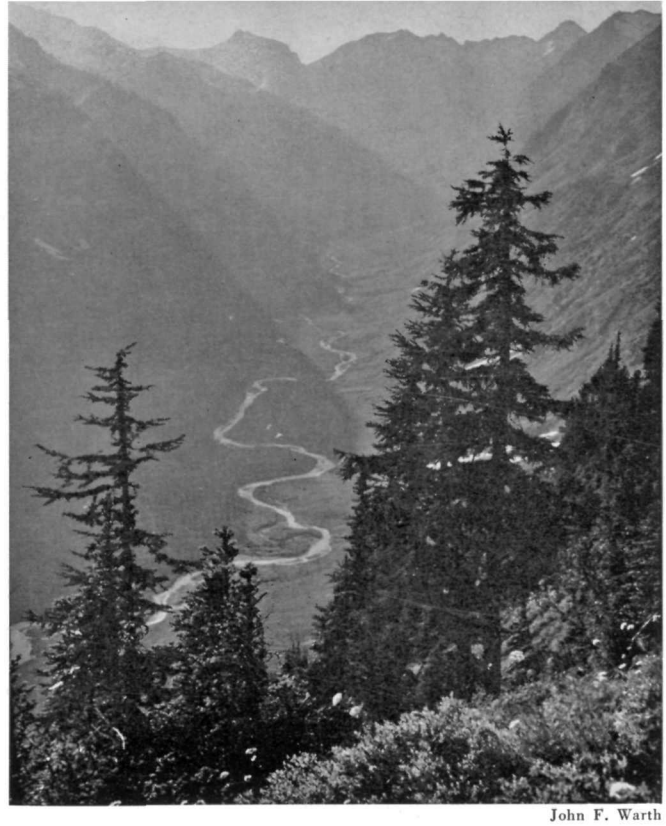
And the boat pushes out for the next port.

Stehekin, near the head of the lake, is the end of the line. I am sorry that you can't be met there, as I used to be, by Sid Coulter. He was a genial, wiry, tireless wrangler—as good a mountain packer as ever threw a diamond hitch over an ornery cayuse, and his coffee was a dynamic brew fit only for heroes. In retrospect, I can taste it yet.

"Hi Paul!" I would hear Sid's greeting above the chugging of the slowing motors. Throughout these mountains a man from Boston on a horse is naturally Paul Revere, and I was never known there as anything else. I haven't figured how many hundreds of miles Sid Coulter and I covered on horse-

back together, but wherever he may be today I hope his trails still lead in pleasant places.

Stehekin and Lucerne, across the lake a few miles below, are starting points for trips from the east side into the rugged labyrinth of the northern Cascades. Here, for a distance of ninety miles south from the Canadian border, and twenty-five to eighty miles wide, stretches a wild mountain region without roads, railways, towns, or even houses. But it is a paradise for hikers, campers, trail riders, and climbers. Fishermen, too, can catch their limits of unsophisticated but gamy trout from different waters each day of the week. Wildlife is abundant and unafraid; you will meet mule deer, black bears and an occasional grizzly and see mountain goats scale the dizzy heights far above you. And hidden away among these jumbled peaks are enough



Napeequa Valley from Little Giant Pass is a part of this "finest alpine country in the U. S."

John F. Warth

For a distance of 90 miles south from the Canadian border, and 25-80 miles wide, stretches a wild mountain region without roads, railways, towns or houses. In this spectacular land of snow-capped, glacier-hung peaks, deep, evergreen-forested valleys and sparkling emerald lakes, lie high-spread meadows ablaze with wildflowers under the summer sun. Below, Doubtful Lake.

David Simons

high-perched lakes, sky-parlor meadows, alpine basins, gorgeous camping spots, and sweeping panoramas to keep an outdoors enthusiast busy for a lifetime.

Of all the routes into the Cascade Wilderness, my favorite is the trail up Agnes Valley and over Cloudy Pass to Lyman Glacier and Lake. To me, it is a cross-section of all that is finest in the Cascades.

"If you've ever seen a prettier son-of-a-gun than Cloudy Pass, you can have my whole outfit," said Sid the first trip. But he knew he was safe—for I never had.

The trail leads up along Agnes Creek, which churns and boils through gorges and over ledges at the bottom of a steep-walled, U-shaped valley a mile and a half deep. You dip, turn and climb through twilit aisles among towering firs, hemlocks, and giant red cedars, two hundred feet high and ten to twelve feet in diameter, and traverse sweet-smelling openings bright with flowers. Ferns and tangled underbrush grow with tropical luxuriance, and thick, green moss covers rocks and fallen timber. Incredibly high above passes a procession of soaring peaks streaked with snow, and here and there the steely-blue crevasses and seracs of glacier icefalls show between lofty rock walls.

As Sid and I jogged along the trail my first time out, I was surprised to see Forest Service dot-and-dash blazes on the trees at least twenty feet above the ground.

"What's the idea?" I asked. "Do people grow that tall in this country or do they use ladders?"

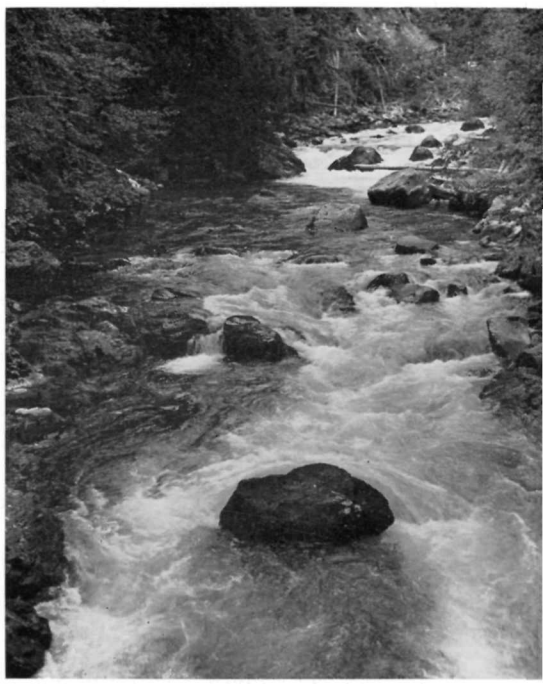
"Neither," said Sid. "Those blazes were made when the snow was on the ground so that miners and trappers can find their way back to their buried cabins."

Fifteen to twenty feet of snow!

Yet you run across lonely log cabins of these wilderness hermits throughout the northern Cascades. However, mining activity almost invariably ends in disappointment and unfulfilled hopes. One time, up on Bridge Creek, Sid and I spent the night with a miner. We were short on flour and he was long on pack rats, so Sid made a deal. The night was rendered hideous and sleepless by the sudden ear-splitting detonations of Sid's Police-Positive as he relentlessly stalked rodent marauders in the miner's grub shack. But the flour made tasty pancakes for the rest of the trip.

A long, steep zigzag up the Agnes Valley headwall puts you on top of Cloudy Pass, 6500 feet high, and it is a "pretty son-of-a-gun", if I do say so myself. Over this upland saddle is spread a velvet green timberline park enameled with flowers and dotted with groups of pointed alpine firs. In all directions stretch lines, clusters and knots of snowy mountains, and framed over lower Suiattle Pass to the southwest is the shining, ice-sheathed pyramid of Glacier Peak—10,528 feet elevation, highest in the region. On the southeast, you look down over meadows and groves of evergreens to shimmering Lyman Lake lying in a park-like basin at the foot of Lyman Glacier, which sprawls down the face of the 3000-foot rim. No one has ever counted the glaciers of the northern Cascades, but there are probably three times as many as in all the rest of the ranges in the United States put together. From the summit of one peak near Cloudy Pass I counted more than fifty of them, varying in size from a few acres to several square miles.

But Lyman Lake is just one of many alluring trips you can make in the Cascade wilderness. Certainly you shouldn't miss Buck Creek Pass and the Elysian Napeequa Valley; Cascade Pass and the great glaciers of Thunder Creek; Horseshoe Basin under the high

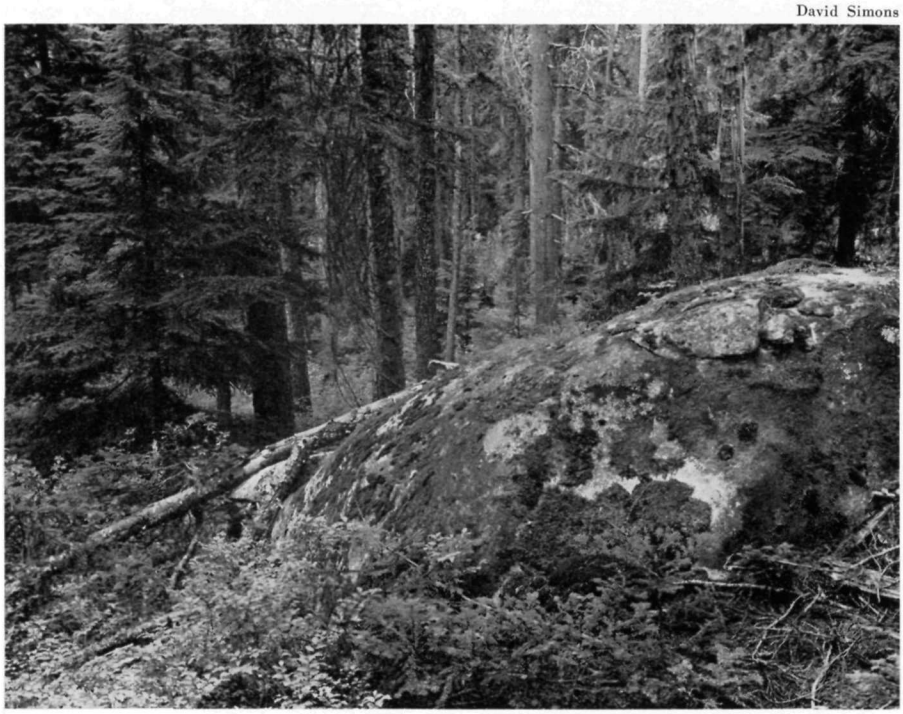


David Simons

Uncounted numbers of glaciers feed the crystal clear streams in which fishermen enjoy their sport to the fullest.

In the steep-walled, U-shaped valleys, ferns and tangled underbrush grow with tropical luxuriance, and thick green moss covers rocks and fallen lumber.

David Simons



ridges of the main divide; or Rainy Lake and Washington Pass by sheer-sided Liberty Bell Mountain. Each is a revelation in alpine scenery.

"Almost Too Late"

Virtually all this vast mountain region is publicly owned and is within three national forests. By far the finest alpine country in the United States, many believe it long ago should have been made a national park. As such, there is no doubt that it would outrank in scenic, recreational and wildlife values every existing national park in the nation. But, unfortunately, the American people failed to discover the northern Cascades in time, and now it is almost too late.

In a way, we old-timers are probably to blame for the strange, long-time neglect of the northern Cascades. Although we have known of their powerful allure for many years, we failed to let others in on our secret. Perhaps we took too much for granted. We felt that our particular wilderness would always be there, immutable like the sun, moon and stars. But we were wrong.

How Much Can We Save?

For economic interests also have finally found the northern Cascades. As yet, only small chunks of the wilderness have been nibbled away. But threats of lumbering, mining, grazing, road building and other developments increase each year, and it won't be long before pressures for full-scale exploitation will be irresistible. As a result, today it isn't so much a question of whether we can still establish a superlative national park as it is how much of the area we can save by whatever means are available.

The United States Forest Service has given protection to the extreme northern section in the North Cascades Wilderness Area and now proposes to establish the Glacier Peak Wilderness Area, further south. But the contemplated boundaries are grossly inadequate, and complete and permanent preservation cannot be guaranteed under Forest Service administration. What this area really needs is assured protection in its entirety. Perhaps it isn't too late if the American people act fast and together. ■

HEARINGS SCHEDULED ON CASCADE WILDERNESS

Public hearings on the Forest Service proposal to establish a 422,925-acre Glacier Peak Wilderness Area in Washington's northern Cascades are scheduled for October 13, 1959 at Bellingham, Washington and October 16 at Wenatchee. Formal establishment of such an area under regulation U-1 rests with the Secretary of Agriculture.

The boundaries proposed for such protective status by the Forest Service have been termed both "disappointing and unacceptable" by the North Cascades Conservation Council, a local Washington organization concerned with the long-range welfare of the scenic qualities of the North Cascades. This organization and many other conservation groups feel adequate protection must be given to a much larger area—ranging from 800,000 to 1,200,000 acres—probably by making it a national park.

The Forest Service proposal omits for timber harvest and mining purposes nearly all the stream-canyon approaches to the high country—areas which would normally be used for campsites from which to hike into the higher mountain regions. (See *A Wilderness Starfish*, April 1959 NATIONAL PARKS MAGAZINE). These "corridors" penetrate what would have been the outer boundary of the area with large deletions up the Suiattle River to Miners Ridge, up the Chiwawa River to Red Mountain, up Railroad Creek to the mouth of Big Creek and up White River, Whitechuck River and Agnes Creek. While Forest Service wilderness areas are roadless, their news release of February 16, 1959, made it clear that, "Should it develop that mineral values increase to a point that road access to the claims is needed, such access cannot be denied."

After exploring the region in 1937, the Department of the Interior concluded that "this area affords an opportunity for a superb national park which will outrank in its scenic, recreational and wildlife qualities any existing park." The NCCC feels that if the Forest Service cannot recognize this same potentiality, "they should permit a change in status" to a category which could adequately protect the recreational values of the area from Stevens Pass to Foggy Pass. Further information on the position taken by the NCCC can be obtained by contacting North Cascades Conservation Council, 3215 East 103rd, Seattle 55, Washington.

Persons desiring to express their oral or written views on this important matter may do so in person at the October 13 and 16 hearings at Bellingham and Wenatchee, or they may submit their written comments to Regional Forester J. Herbert Stone, P.O. Box 4137, Portland 8, Oregon, not later than October 30, 1959, with the request that they be included in the record.

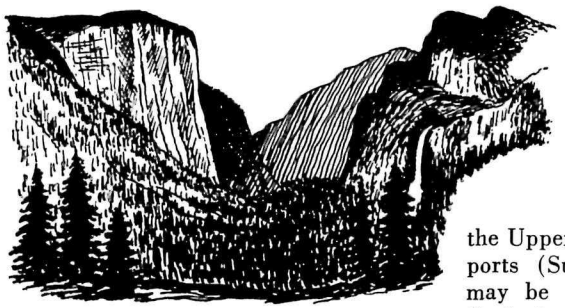
CAPE COD SEASHORE

(Continued from page 4)

lishment of national parks has resulted in substantial economic benefits to the surrounding communities, more than offsetting any loss of tax revenue from lands acquired by the Federal Government. We believe this will happen on Cape Cod if a national seashore is established there and that it will bring added prosperity to on area whose economy is already geared to recreation use.

Many things remain to be done in furthering this Cape Cod National Seashore proposal which our Department of the Interior is now considering. We are cooperating with the Selectmen of the six towns which would be affected by the proposal in a careful analysis of the recommended boundaries, and we hope that solutions to boundary and economic problems involved in the proposal can be found satisfactory to all concerned.

It is the Congress, of course, who must provide the authority to establish a Cape Cod National Seashore, and if authority is granted, money must be obtained to acquire the necessary land now in private ownership. The expense of acquiring the land subject to life estates, is considerable—estimated at $16,000,000. But with each passing year that cost will rise. At the same time the opportunity for preserving an adequate portion of the Cape will dwindle. If the opportunity passes, the American people will have lost more of inspirational value than dollar values can ever reflect. ■



Conservation News Briefs

October Hearings on Oregon Dunes

Field hearings on the establishment of an Oregon Dunes National Seashore will be held on October 5 in the Union High School, Reeds Port, Oregon, and on October 7 in the Student Union Building, University of Oregon, Eugene. Persons wishing to give written or oral testimony should contact Senator James E. Murray, Senate Interior Committee, U. S. Senate, Washington, D. C.

Funds for Roadside Beauty

Each state can obtain absolutely without cost scenic natural areas adjacent to public highways constructed with Federal aid funds, the Wildlife Management Institute reports. The law, effective August 1958, reads that state highway construction with federal funds may "include the purchase of such adjacent strips of land of limited width and primary importance for the preservation of the natural beauty through which highways are constructed . . ." Not exceeding three percent of the funds apportioned to the states per fiscal year may be used for this purpose, however, without being matched by such state. No state has as yet taken advantage of this clause.

Diminishing Returns Seen for Colorado River Dams

Hydrologists of the Department of Interior's Geological Survey have concluded "there is a limit to the practical gains which can be accomplished by building reservoirs on streams, and that limit may have been reached if not exceeded in some of the western drainage basins."

Walter Langbein and Luna B. Leopold use the Colorado River as an example of a river basin where storage development may be approaching, if not exceeding, the useful limit. According to Mr. Langbein, the gain in regulation to be achieved on the Colorado by increasing the present 29 million acre-feet to nearly 50 million would be largely offset by a corresponding increase in evaporation. Mr. Leopold, Chief Hydraulic Engineer of the Geological Survey, makes similar predictions for the Upper Colorado River basin. Both reports (Survey Circulars 409 and 410) may be obtained free from the U. S. Geological Survey, Washington, D. C.

Oregon to Get Recreation Lands

In accordance with the recent policy of making recreational use of appropriate areas of the Bureau of Land Management's 475 million acres of public land, the Department of Interior has proposed that the Bureau lease to local and state governments two million acres of "O & C" timberlands. These Oregon and California Railroad Grant lands in western Oregon are to be used for public recreation such as camping, boating, swimming, skiing, and picnicking.

Caution Urged on Hawaii Road

A road around the rim of the world's largest dormant volcano—Haleakala Crater on the island of Maui in Hawaii National Park—was proposed by the Hawaii legislature on June 1 in a memorial to Congress. With the scars of Yosemite's Tioga Road still fresh in mind, Ansel Adams, the eminent photographer, has urged great caution if this road circling the crater rim must be built. He would strongly oppose any road at all within the crater or on its inner walls.

Park Needs Provide Student Opportunities

Research projects of prime importance to Rocky Mountain National Park, which were outlined at the Western Resources Conference in Colorado this July, offer an example of national park research needs and opportunities throughout the country. Among the subjects of studies are: effects of deer and elk on critical winter range; succession in the park's aspen groves; distribution of fish, reptiles and amphibians; aquatic life in deep water pits; and exotic species.

Colorado University has a two-year contract to study human impact on tundra along Trail Ridge Road. In a voluntary project, two Colorado State University professors will try to find the relationship between the environment and natural vegetation. And other studies are being conducted on fishery resources and potential, timberline ecology, and the geology of the Never Summer Range.

Horace M. Albright Lectureship to be Established

A testimonial dinner for Horace M. Albright, former Director of the National Park Service and one of the nation's leading conservationists, will be given on December 4 in Washington, D. C. In his honor a Lectureship on Conservation is to be created at the University of California, which will provide the means for widespread distribution of the periodic lectures given by leading conservationists. The cost of this lectureship will be defrayed by public contributions secured by the Horace M. Albright Testimonial Committee.

Alaskan Hearings Set on Arctic Wildlife Range

Alaska field hearings on the bill to establish an Arctic Wildlife Range are scheduled for Ketchikan, Juneau, Anchorage and Fairbanks, starting October 18 or 19. Interested persons should contact Mr. Harry Hughes, Interstate and Foreign Commerce Committee, Room 5108, New Senate Office Building, Washington, D. C.

The Wildlife Management Institute reports that Governor Egan and the Alaskan delegation in Congress are finding their arguments against the 9-million acre range turning against them. They had said that withdrawal of the land would lose the new State $600,000 annually in Federal financial assistance for highways. (Under existing law the percentage of highway costs paid by federal funds is based on the amount of *unreserved* and vacant Federal public land within its boundaries.)

Interior Department witnesses showed at recent hearings that Alaska's reduction in highway aid would not be more than $275,000 annually, because more than one-half of the proposed Arctic range is already in a withdrawn (or reserved) status. In addition, about 20 million acres of withdrawn Federal lands in Alaska are being restored to unreserved status, which will swell its share of highway assistance many times.

* * *

MEETINGS: *American Forestry Association,* October 11-14, Bedford Springs Hotel, Bedford Springs, Pa. *Southern Division, American Fisheries Society,* October 25-28, Emerson Hotel, Baltimore.

Your NPA at Work

ARMY ANSWERS ON WHITE SANDS

In response to its protest against the dropping of a large missile in White Sands National Monument, NPA has received a reply from Army Secretary Brucker stating that an investigation has been made and corrective action taken to reduce likelihood of such occurrences in the future.

The missile did in fact fall in the monument; classified instruments were involved, and the choice was between using heavy equipment to remove the missile, with considerable disturbance to the dunes, or blowing it up. The latter choice was made, with the result that a crater six feet in diameter was formed and an additional area about 25 feet in diameter was blackened. The disturbed area was thus much smaller than reported (several acres) and the effects have since been covered by drifting sand. Interestingly, the investigation disclosed that parts of a second missile fell on June 23 and were removed.

Secretary Brucker went on to say that the cause of the malfunction has been determined. The Secretary remarked in closing that the Army shared with National Parks Association the desire to protect and preserve our National Monuments, and gave his assurance that every effort would be made to reduce the possibility of similar incidents in the future.

NPA ENDORSES RESERVE OFF FLORIDA KEYS

Concern over possible destruction of the magnificent coral reefs and marine life off the Florida Keys near Miami prompted NPA support of a proposal to establish a Federal nature reserve, comprising the reefs in Federal territory seaward from Key Largo. In a letter to Secretary of Interior Seaton, Executive Secretary Smith suggested that the State of Florida create a complementary reserve within the State Park System comprising the portion of the reefs which lies within State waters, and that the Federal reserve could be created by proclamation of the Secretary of Interior, either as a wildlife refuge or a national monument.

"Our endorsement pre-supposes an agreement between the Federal and State Governments which would give complete protection to the combined Federal-State area. The agreement should provide for regulations which would prohibit the removal of coral, the turning of rock to get at color fish, and similar destructive activities. They should also prohibit spear fishing. . . . The agreement should reserve complete control to the Federal Government whereby the Federal portion of these lands could be withdrawn if State administration of the agreement proved to be unsatisfactory."

GLACIER HOTELS CRITICIZED

New come-ons offered by Glacier National Park hotels have once again prompted NPA action. A recent article in the *New York Times* stated: "Hitherto, when darkness blacked out the scenery there was nothing to do. Visitors drooped with boredom. The Great Northern Railway, which managed the park's major facilities, noted dwindling interest year by year." Now new management has recruited talented college students to provide entertainment "from jazz to Chekhov." The article concludes: "The entertainment devices developed at the four sponsoring hotels have proved successful attractions. Vacationists who in the past would roll along the park's excellent roads and out of the park in a single day are now staying three days and more."

In a letter calling this situation to the attention of Park Service Director Wirth, Executive Secretary Smith wrote: "The effect of this entertainment seems to be to prolong the stay of visitors who come not so much for the park as for the shows. . . .We feel that policies which permit this method of operation interfere with the kind of popular use and enjoyment which the parks are intended to provide, and we urge you to call them to a halt promptly. . . . These criticisms, are not intended as any reflection whatsoever on the talents and purposes of the young employees of the hotels who have been drawn into these undertakings, nor of any normal and spontaneous amateur activities they may themselves desire to organize; we are critical only of the systematically organized entertainment which conflicts with proper and legitimate park use."

RESOURCES CONFERENCE REPORT

Weldon F. Heald, who represented the NPA at the first Western Resources Conference held in Boulder, Colorado this July, reports that, "Particularly encouraging was the strong emphasis on nature and wildlife preservation as a legitimate part of the recreational program." The prevalent attitude among the 175 participants was one of great urgency in coping with the two modern perils—population explosion and atomic warfare. Only through peak efforts in education, planning and cooperation will our resource needs be met. It is planned to make the Conference a yearly affair.

SMITH CHECKS WESTERN PARKS

Combining an inspection and an appraisal of NPA's two Student Conservation Program operations at Grand Teton and Olympic National Parks with a field analysis of the National Park Service's policies, Executive Secretary Smith visited both the visitor centers and the back country in these parks in late August. Park Service personnel reported that the students, working on the usual volunteer basis on tasks assigned by the Service, were making a magnificent contribution to the parks. Appraisals of this year's program and advance plans for next summer are now in preparation. Superintendents Oberhansley and Beard have been grappling bravely with the very difficult problem of preserving the wilderness in these two primeval parks despite the heavy pressure of increasing visitor use.

The Editor's

Bookshelf

THIS SCULPTURED EARTH: The Landscape of America, by John A. Shimer. Columbia University Press, New York, 1959. 255 pages including index and glossary. 62 plates, plus maps and diagrams. $7.50.

Have you ever looked at a map of the United States and tried to determine why the craggy 14,000-foot peaks of the Rockies should drop suddenly to the Great Plains, which stretch flat and endlessly as far as the eye can see? Why the West Coast has rugged wave-torn cliffs while in the East the land slopes slowly and imperceptibly into the Atlantic? Why some rivers are slicing great gorges in the terrain and others are meandering sluggishly through the countryside?

If you haven't wondered, this magazine's staff certainly has—in compiling the September "educational issue" we had to consult geology texts, maps, pamphlets, and human sources to collect what would appear to be simple information on our land's formation. Nothing seemed available which simply described our continent as a living whole. Then arrived a gem of a book—with the complete story knit together in highly readable form.

This Sculptured Earth, with its magnificent photographs, carries you over the face of the land with a lucidity that almost guides your hand over its malleable form. You feel the forces at work—lifting, cutting, eroding, flooding, sculpting our continent. "Viewed from the perspective of geologic time the surface of the earth is an ever-oscillating platform, where mountains rise and are washed away and where the sea floods first one part of the land, then another . . . The only constant factor in nature is change."

A glossary gives the finishing touch to the beautifully illustrated volume by supplying not only definitions but diagrams for common geological terms. The book is certainly unique and would add as much to the enjoyment of the Sunday drive as to the appreciation of a national park visit. Anyone would be fascinated by it. —*L.G.S.*

ADVENTURE IS UNDERGROUND, by William R. Halliday. Harper & Bros., New York, 1959. 206 pages. 63 plates, 5 maps. $4.50.

In recent years there has been a steady flow of books on caves. Some attempt to cover the field of speleology in a popular way; others, the adventure in cave exploration. *Adventure is Underground* is the latter type; it relates tales of the author's explorations and retells some of the old stories published in obscure books or newspapers. These experiences are confined to the western part of the United States but cover a variety of interesting features—the lava caves of Oregon, Washington, and California; America's deepest cave, Neff Canyon in Utah; and aqua-lung exploration in water caves in the desert. The book is well-illustrated and the adventure stories are supplemented by chapters on techniques of exploration, commercial caves, and a glossary.

The book serves its purpose well as a story of adventures, but fails to give a balanced perspective of the western caves. Descriptions of individual caves are too brief, and data as to size is often lacking. More maps of caves keyed to the text would have made it easier for readers to follow the narrative. The glossary on vocabulary is weak and definitions of terms are sometimes vague—for instance, the author defines "hibernate" as "what bears and bats do in the winter" and "belay" as merely "proper use of a safety rope." And a sound chapter on cavern research—whose activities are equally thrilling and make good copy—would help give a better picture of the field. As it is, the average reader will get the feeling that all who enter caves are looking for physical thrills or adventure—and this is hardly the case.

All in all, however, *Adventure is Underground* is, as its title indicates, a book filled with varied experiences and interesting narratives.

—*William E. Davies.*

A Quick Glance at . . .

MANUAL FOR OUTDOOR LABORATORIES: The Development and Use of Schoolgrounds as Outdoor Laboratories for Teaching Science and Conservation, edited by Richard L. Weaver. The Interstate Press, Danville, Ill., 1959. 84 pp. Illus. $1.25.

Put out by the National Association of Biology Teachers, this manual contains practical suggestions for teaching science and conservation with articles by successful teachers of conservation from all levels of education. The editor is Associate Professor of Conservation and Conservation Education at the University of Michigan.

The articles, describing ways and means of establishing outdoor laboratories, features to emphasize, and use of areas, will be of particular interest to school administrators and teachers. Suggestions are practical, understandable and adaptable. For instance, instructions are given on how to have a school garden, to erect a weather station on school grounds, to have a nice picnic area, maintain an outdoor theater, plan outdoor laboratories, etc., in detail. Teachers who carry a heavy load in teaching science and conservation should welcome the book.

101 WILDFLOWERS OF CRATER LAKE NATIONAL PARK, by Grant and Wenonah Sharpe. University of Washington Press, Seattle, 1959. 40 pp. Illus. $1.—

The fourth of Mr. Sharpe's 101 Wildflower species (others are Olympic, Mt. Rainier, and Shenandoah). A handy identification guide.

MOUNT COOK NATIONAL PARK HANDBOOK, edited by W. P. Packard. Mount Cook National Park Board, Christchurch, New Zealand, 1959. 64 pp. Illus. Maps.—

An excellent, well-illustrated, interpretative booklet about this essentially mountain and glacier area.

MOUNTAIN OF FIRE, by Jack Steffan. John Day Co., New York, 1959. 191 pp. $3.50—

Another of the "Fair Land" series of novels for 9-12 year olds, set in our national parks. This is the story of the Atsugewi Indians and neighboring tribes, who about a century ago spent their summers on "the Mountain" (Lassen Volcano) and lived in peace. Then the caravans of white men started to probe California's Sierra Nevada for gold.

ALLIGATOR CROSSING, by Marjory Stoneman Douglas. John Day Co., New York, 1959. 192 pp. Map. $3.50.—

Also one of the Fair Land Series. A young boy with a hide-away in the vast Everglades is led into adventure with an outlaw alligator hunter.

JESSIE'S CHILDREN, by Herman Silva Forest. Vantage Press, New York, 1959. 116 pp. Illus. $3.—

A simple but appealing chronicle about a vibrant biology teacher who led the Knoxville High School Hiking Club on many energetic jaunts into the Great Smoky Mountains of Tennessee and North Carolina.

The Parks and Congress

86th Congress

Legislation Introduced

H.R. 8358 (Miller) **S. 2428** (Engle) To set aside not over 35,000 acres as Point Reyes National Seashore (Marin County, California). To Committees on Interior and Insular Affairs.

H.R. 8445 (Dingell) **S. 2460** (Murray and 15 others) (1) To establish ten national shoreline recreation areas with following maximum acreages: Cape Cod, Massachusetts, 30,000 acres; Padre Island, Texas, 60,000 acres; Oregon Dunes, Oregon, 35,000 acres; Indiana Dunes, Indiana, 5,000 acres; Point Reyes, California, 35,000 acres; Cumberland Island, Georgia, 25,000 acres; Huron Mountains, Michigan, 90,000 acres; Channel Islands, California, 76,000 acres; Pictured Rocks-Grand Sable Dunes, Michigan, 100,000 acres; and Sleeping Bear Dunes, Michigan, 26,000 acres. The Secretary of Interior shall hold public hearings for each area before proceeding with establishment as recreation areas. Authorizes appropriation of not more than $50,000,000 from year to year to procure land. (2) To help states preserve shoreline areas, authorizes Secretary of Interior to pay one-half of purchase price, provided state has authorized and financed suitable acquisition program. Maximum of $10,000,000 from year to year for such aid. (3) Authorizes Secretary of Interior to investigate and determine appropriate action to preserve 10 other areas: Fire Island, New York; Cape Flattery, Washington; Leadbetter Point, Washington; Mosquito Lagoon, Florida; Pigeon Point, Minnesota; Debidue Island, South Carolina; Popham-St. John, Maine; Parramoure Island, Virginia; Smith Island, North Carolina. Authorizes $400,000 for such study. To Committees on Interior and Insular Affairs.

H.R. 8644 (Patman) **S. 2511** (Murray) To establish 6 cooperative outdoor recreation research and education centers. Authorizes Secretary of Interior to cooperate with federal, state, and local agencies, colleges and universities, business, private or scientific organizations to conduct research in outdoor recreation needs. Authorizes $150,000 per annum, provided Secretary initially establishes only one center with annual budget of not over $25,000. The five additional centers shall be established when approved by Interstate and Foreign Commerce Committee of Senate and Merchant Marine and Fisheries Committee of the House. To Committees on Interior and Insular Affairs.

H.R. 8661 (Metcalf) **S. 2549** (Murray & 30 co-sponsors) To declare a national policy on conservation, development, and utilization of natural resources. To create a 3-man Council of Resources and Conservation Advisers in the Executive Office of the President, which should, among other things, help him in preparing a yearly Resources and Conservation Report for Congress. Would establish a Joint Committee on Resources and Conservation, with eight members of House and eight members of Senate. To Committees on Interior and Insular Affairs.

H.R. 8898 (Rivers) **S. 2587** (Bartlett and Gruening) To require an Act of Congress for public land withdrawals in excess of 5000 acres for any department or agency of the Government. (Probably due to opposition to Arctic Wildlife Range, which could be set aside by Secretary of Interior's proclamation. A bill to establish such a range is now before Congress.) To Interior and Insular Affairs Committees.

H.R. 9050 (Keith) **S. 2636** (Kennedy and Saltonstall) To establish Cape Cod National Seashore Park, Massachusetts, which would include portions of Provincetown, Truro, Wellfleet, Eastham, Orleans and Chatham. Would provide new method of park establishment and operation in order to deal with special situation on the Lower Cape. (1) Each residential landowner is given a minimum guarantee of electing either life occupancy or occupancy for twenty-five years; (2) If a town adopts zoning applicable to all of the property in such town which is included in the Park, and such zoning meets standards defined by the Secretary of the Interior consistent with the bill, all homeowners in such town whose property is in the Park are assured the right to continue to own and occupy their homes without interruption or interference so long as the zoning is kept in force; (3) In order to accommodate possible growth and revenue needs of towns with land in the Park, up to 10% of the total private land in each town which falls within the Park may be set aside in the future for new home building on the condition that such property is subjected to acceptable zoning. To Interior and Insular Affairs Committees.

S. 2664 (Bible and Cannon) To establish Great Basin National Park, in Nevada. To include the present Lehman Caves National Monument. Hearings will probably be held the first week of December in Ely, Nevada. Persons interested in testifying should contact Richard Callahan, Clerk, Interior and Insular Affairs Committee, U. S. Senate, Washington, D. C.

Action Taken

H.R. 1932 (O'Neill)—superseded by **H.R. 5892** (Mrs. Rogers) **S. 1460** (Saltonstall) To establish Minute Man National Historical Park, Massachusetts. Passed House, reported by Senate committee.

H.R 3610 (Blatnik) Water Pollution Control Bill. Passed House and Senate. Senate amendments limit construction grants to a total of $80 million per year (House authorized $100 million). Senate version also lowered maximum for individual projects to $400,000 (House allowed $500,000), and would grant $500,000 for joint community projects only. Differences between bills will have to be worked out in joint conference committee in January.

H.R. 5813 (Metcalf) **S. 1575** (Magnuson) To increase the amount of money for studies of the effects of pesticides upon fish and wildlife from $280,000 to $2,565,000 annually. Passed the Senate with amendment removing limitation on funds authorized. Favorably reported to full Committee by House subcommittee.

H.R. 7045 (Bonner) **S. 1899** (Magnuson) To establish the Arctic Wildlife Range, Alaska. Reported by House committee.

S. 160 (Allott) To make Dinosaur National Monument, Colorado and Utah, a national park. Interior report recommends cutting the provision that "Nothing contained in this Act shall preclude the Secretary of the Interior from investigating . . . the suitability of reservoir and canal sites within Dinosaur National Park . . ." and substituting for it: "Any portion of the lands and interest in lands comprising the Dinosaur National Park shall be made available upon Federal statutory authorization for public non-park uses when such uses shall have been found to have a greater public necessity than the uses authorized by this Act." (Similar to the compromise wording in the C & O Canal bill.)

S. 713 (Bennett and Moss) To revise boundaries of Zion National Park in Utah by adding approximately 3500 acres. Passed Senate, still in House Interior Committee.

S. 812 (Humphrey et al.) To authorize Youth Conservation Corps. Passed by Senate by two-vote margin. No action in House.

S. 1123 (Humphrey et al.) The Wilderness Bill. Last scheduled meeting of committee canceled due to illness of Senator O'Mahoney. Amendments had been proposed which would eliminate Wilderness Preservation Council and require Congressional review of every area to go into the Wilderness System. Conservationists feel this would tend to emasculate the bill. Senate Interior Committee has postponed further consideration until second session of the 86th Congress.

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The first session of the 86th Congress adjourned on September 15. Those bills still pending will be considered when the second session convenes on January 6, 1960.

LETTERS TO THE EDITOR

Many are Against $25 Park Fee

Mr. Clawson ("Our National Parks in the Year 2000, July NPM) makes three suggestions, and on the first two I am in general agreement with him. (However) in order to reduce casual visits to national parks, Mr. Clawson suggests that entrance fees be raised sharply—"to something in the order of $25 where they are now $3." On this point it is necessary to disagree completely with him.

It is our conviction that the kind of experience people seek in the national parks, which are supported by and belong to them, should be available to all. As Lincoln reminded us many years ago, ours is a government "for the people"—all the people. No one is in a position to say that another person will not gain significantly from a visit to a national park, even though such a person appears to be interested primarily in recreational enjoyment rather than cultural enrichment.

Surely this country is sufficiently resourceful to develop an adequate national park system for our expanding needs of the future. We are working toward that objective, not only by careful planning and development of existing parks, but through comprehensive planning surveys to determine the kinds and location of areas to be recommended for inclusion from time to time in the national park system. Furthermore, we are confident the recommendations of the Outdoor Recreation Resources Review Commission will assist materially in pointing out the way to meet the long-range problems in planning outdoor recreation for the American people.

Fred A. Seaton
Secretary of the Interior

Marion Clawson proposes "to raise entrance fees to national parks sharply to something in the order of $25." The article implies that a raise in fees would not affect many people adversely who really wished to visit the park areas. What about the many people, who really enjoy the areas, cannot spend much money on a vacation, and come to camp?

When my husband was in college, as well as the first few years in which he was getting established in his profession, our funds were limited like many young couples "just starting out." At this time the national park areas not only served as our recreation areas, but also as an opportunity to see real wilderness. As a New Englander, imagine how I was impressed at my first sight of a mountain like the glacier-covered Mt. Rainier, or the virgin forest of the Olympics, or the tremendous expanse of the Sierra Nevada in the King's Canyon, or the giant Sequoias in Sequoia National Park, or the tropical wildlife and denseness of foliage in the Everglades. These experiences to me could not be classified in the field of recreation—they were an education. For the first time my history and geography lessons of the past came alive. These visits instigated a renewed fervor in my study of biology, zoology and geology. Because of the low entrance fee, I was able while still young to be able to have such experiences which shall always be burnt upon my mind.

Mrs. Elaine Gould
Mt. Rainier, Maryland

. . . For More Local and State Areas

Mr. Clawson's first suggestion (developing more state and local parks) is the one I have been working on for a long time, and we have got to move a lot faster along these lines in the next few years if any significant results are to be obtained, as suitable areas are fast being put to other use.

Richard H. Pough
The Natural Area Council, Inc.
Pelham, New York

Mr. Clawson presents some very telling statistics and raises some knotty problems. His proposed solutions deserve careful consideration though I am not at the moment prepared to accept the $25 entrance fee. It might reduce the number of visitors, but I fear that many excluded would be the very ones we want most to see and appreciate our national parks.

I am interested in the suggestion that state and local parks can take care of many park visitors. The state parks on the whole maintain the same standards maintained by the national parks and exclude most forms of active recreation. They do provide additional acreage and now cover about five and one-half million acres and in 1958 there were some 237 million visitors. It is in the county, metropolitan and city parks where we may expect types of active recreation not suitable for national and state parks.

Harlean James
Washington, D. C.

I read "Our National Parks in the Year 2000" with a great deal of interest, for it brought up many of the questions which we have thought about and discussed at the Advisory Board (on National Parks and Monuments) meetings.

I, frankly, do not know whether we should be charging larger fees for national park visitors, but I question whether we will be able to discourage the "quick" visitor too much. Americans are people in a hurry—too many of us do not know how to relax, and even if we do raise our fees, I am sure a great many people will simply pay them, dash through the park and go on their way saying they have seen Yellowstone, Grand

Canyon or wherever they may have been. I think the most important thing we can do is to see that our park system grows soundly and to encourage other agencies, such as states, counties and cities, to have park systems of their own. The entire park problem is one that is going to take a great deal of careful thinking in the next few years.

Edward B. Danson
Flagstaff, Arizona

. . . and For Reservations or Permits

As a leader of a boys organization, I regret to say that the worst vandalism I have seen perpetrated on our national parks has been by youth groups. Some years ago the late Frank Kittridge, then Superintendent of Yosemite, and I picked out a very pleasant area to be used for organizations—particularly for youth groups. When I visited the area last summer I was profoundly shocked to see what had happened to it. Fires had been built right up against lodgepole pines, fire scars had pock-marked the little meadow area alongside Unicorn Creek, tin cans and rubbish of all kinds were everywhere.

If every group had to make a reservation in advance, secure a special recreational permit, pay a small per capita per diem fee, and if such permits were issued by the Park Service only when the Service has been assured of competent adult leadership for the group and when that leadership has, in writing, assumed full responsibility for the conduct of the group, the misuse of such areas would be decidedly curtailed. Surely such a system, plus a simple reservation system for such use, would make people realize that the recreational facilities available to them in rich scenic areas are indeed of such rare value that they should be used with respect and reverence.

Harry C. James
Banning, California

More Studies are Needed

Mr. Clawson can always be counted upon to stimulate thinking about outdoor recreation resources, and I have read his article carefully.

As you perhaps know, the (Outdoor Recreation Resources Review) Commission is just beginning its studies of the nation's outdoor recreation needs and resources. The Commission recognizes that a great deal of information necessary to the fulfillment of its task must be uncovered by studies of a kind which have never before been made. For example, very little is presently known about the preferences which Americans have for one kind of outdoor recreation as against possible alternatives. We hope to find some answers to this and many other questions.

Francis W. Sargent
Executive Director
Outdoor Recreation Resources Review Commission
Washington, D. C.

Pole Praises U. S. Parks

It is with keen interest and anxiety that we are, here in Poland, watching the battle incessantly fought in the U.S.A. for an intact preservation of your magnificent natural treasures. Your national parks, treated as great nature reserves, are admired and their beauty enjoyed by millions of people throughout our globe.

Protection of nature is a problem of international interest. The very existence of an International Union for the Conservation of Nature and Natural Resources, whose 1960 meeting will be held in Poland, clearly shows how obvious this problem has become to people of many countries. Nowadays we know that, when endeavoring to save some priceless natural monument we are not isolated, but backed up by ever increasing numbers of associations and individuals. Though dispersed the world over, we are all pursuing a common aim.

Only as a wise manager of Nature, can man ensure lasting existence and favorable conditions for the development of his own nation and all humanity.

Stanislaus Malkowski
Member, State Council for the Protection of Nature in Poland
Warsaw, Poland

CORRECTION

In the top caption on page 3 of our August issue, the diameter given for the ancient bristlecone pine should be about 8 feet rather than 20 feet.

VALUES BEYOND RECREATION

There seems to be an almost universal tendency to measure the value of a wild area in terms of the number of people who visit it each year, without taking into account the quality of the experience each visitor obtains, and without making any allowance for the values that do not depend on the presence of any visitors whatsoever.

A lonely marsh may serve as a breeding ground for birds that move to other places and give recurring pleasure to countless people who may not even know the marsh exists; and that same marsh may form an overflow basin that can place a natural check on a flooding river that would otherwise wreak costly havoc in populated areas farther down stream. The marsh may also have great economic value as a place where water sinks into the ground to rise again in distant springs or wells, or as a place where nature maintains many of the marvelous and as yet little understood "mechanisms" and balances it has developed through millions of years of evolution. Vegetation plays a vital role in cleansing and renewing the very air we breathe, and when too many "green belts" give way to factories, housing, and crowded highways, residents come into more and more unpleasant contact with irritating (and sometimes killing) smog.

A great many people are beginning to realize that population pressures are tending to produce such universal regimentation that our lives will become poorer instead of richer unless we take immediate steps to preserve "variety." I contend that strange and beautiful things and biotic communities all over the world have enormous value to people who may never see them personally, and I feel that we have reached the stage where we can no longer ignore the possible destruction of those values in our quest for local benefits.

—*Theodore Edison.*

Glacier Peak as seen from Flower Dome in the Glacier Peak Limited Area, Washington. John F. Warth

The wilderness heart of the North Cascades is one of the few remaining areas where there is sanctuary from mechanization. This is a land of dramatic gateways, primeval forests, flashing waters, a wealth of glaciers, and superlative wilderness. America is not so poor in timber and pulp and ore that it need log or mine in such places.

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