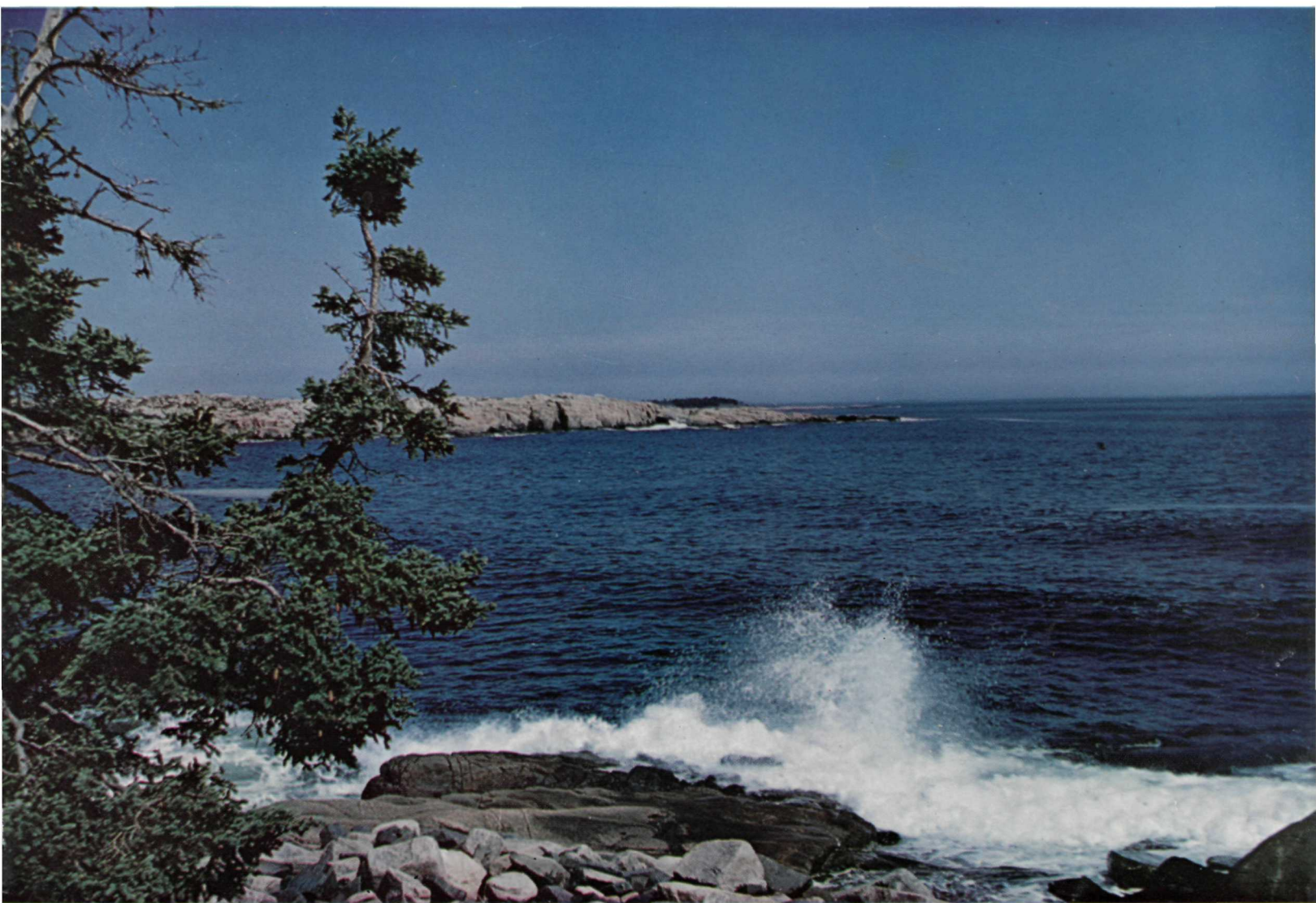


How Much Do You Really Know About Acadia National Park?

NATIONAL PARKS *Magazine*



Eastern shore of the Schoodic Peninsula
in Acadia National Park, Maine

July 1963

The Editorial Page

The Eastern River Basins

THE RECENT POTOMAC RIVER BASIN Report of the Corps of Engineers, starting off with the wrong goals, necessarily reaches the wrong results.

It assumes that the problem is to store the maximum quantity of water in reservoirs large and small, and that this is the way to provide supplies for municipal needs and pollution abatement.

Unfortunately, the East, unlike some arid areas in the West, is densely settled country; the valleys which would be flooded by the sixteen major dams proposed in the Report for the Potomac have people in them, homes, churches, farms, businesses, and communities.

The reservoirs will inundate 78,530 acres, and with surrounding recreation areas, will require a taking of 179,453 acres. Some 1125 families, mainly farm families, will be dispossessed completely, and many others in part. These will be only a few of the dislocations.

The major reservoirs will have deep drawdowns, and in many cases half of the normal reservoir pool will be dry in the fall-color tourist and hunting season.

The imminent destruction of so many settled communities and such vast expanses of fine rural and mountain country has resulted in widespread protest. Nonetheless, as we write, the Corps, with typical military and bureaucratic stolidity, is refusing to hold the public hearings which have been widely demanded.

The stated purpose of the big impoundments is to provide the Washington Metropolitan Area with water for municipal needs and pollution abatement by the time its population reaches an expected 5 million in the year 2010.

Studies by this Association, endorsed by other conservation organizations, demonstrate that the water needs of the Metropolis can in fact be met by the flow of the Potomac River, supplemented from the freshwater Estuary after depollution, during dry periods.

In fact, these studies show that these water needs can not be met by the reservoir method during recurring 3-year periods of low flow after increase of the population to an expected 6,280,000 in 2030; nor can the Estuary be cleansed effectively by the impoundment system even at present.

The central problem is the elimination of plant nutrients in the form of phosphorus and nitrogen compounds from the effluents from intensive sewage treatment plants. These nutrients would result in

the heavy growth of algae and the choking of the Estuary. Modern methods developed for desaltation of saline water can be used to eliminate these nutrients, by distillation or otherwise, at lower costs than those of the big-dam method.

It is high time we began looking at our river basin management problems, and particularly those in the settled East, in the light of modern technological potentialities. Big reservoirs may or may not have their proper place in lightly settled regions; in the densely populated East they do far too much serious harm to human values.

In an age scarred by high tensions and great anxieties, one of the objectives of all public programs should be the reduction, not the enlargement of dislocations. That is to say, development, so-called, is not an end in itself; it is desirable where it serves human purposes only; the social costs of the big construction projects must always be counted, including the intangible dislocation costs.

These mountain valleys of the Appalachians have great value as they are, containing some of the best near-wilderness in the East, excellent potential timber lands, fine farms on the alluvial bottoms, beautiful rural countryside, and communities whose charm links us to an invaluable historical past; they need to be protected, not destroyed.

Whether the Corps of Engineers can ever alter its perspectives toward planning in terms of these human values is greatly in doubt; as a construction agency it has done its duty as it saw it; but thus far, it has been a construction agency, nothing more, and poorly qualified for the river basin planning assignments it has increasingly been given.

The President's Water Resources Council ought to have a long hard look at the Potomac Program, unless the Board of Engineers for Rivers and Harbors has the good judgment to set the Program aside for a better one.

The Report should be rejected in favor of a plan for intensive pollution abatement, including effluent purification, throughout the Basin; the construction of adequate numbers of small impoundments under the Small Watersheds Act for flood control, recreation, and, if need be, water supply; and the expansion of state and national park, forest and game land holdings for recreational purposes, with improved access and facilities.

But, in addition, a general shakeup is needed in our official approaches to river basin management everywhere. The protection of countryside, forest, and wilderness, and of the people who live in and enjoy these places, should be the first consideration. Intensive water purification and well-established methods of watershed management and water storage can be relied on for water supply purposes.

If new agencies need to be created capable of viewing this important work in such light, then created they must be.

If the ill-advised Report of the Corps of Engineers on the Potomac serves to touch off such fundamental reforms, then it will have served a good purpose, despite the unsound and archaic proposals it contains.

—A.W.S.

Surrender at Ocmulgee

THE NATIONAL PARK SERVICE AND THE Bureau of Public Roads have arrived at a comfortable accommodation: when the BPR knocks at the door of a national monument, the NPS surrenders; this has the great administrative advantage that it avoids conflict. Interstate Highway 16 will soon split Ocmulgee National Monument in Georgia, which has conserved the remains of a prehistoric mound-building Indian culture, crossing between Great Temple Mound and the Ocmulgee River. It will rob the monument of what little primitive atmosphere has remained and will spoil the floodplain where the ancient inhabitants cultivated their crops. It was because of the fertile plain and the abundant crops raised there that the Indians could devote time and energy to mound-building rather than fishing and hunting. In other words, the road will destroy an important part of the purpose of the monument.

The National Park Service granted permission for the construction of this road. True, there was an understanding that the Bureau of Public Roads would provide funds for archeological salvage, and this work appears to have been completed. However, the monument itself has been seriously impaired. We assume that the proposal of the Georgia State Highway Department could have been resisted by the Bureau of Public Roads, considering the big Federal money which goes into these developments. The National Park Service, likewise, could have said no, had it chosen to do so. —A.W.S.



NATIONAL PARKS Magazine

OFFICIAL PUBLICATION OF THE NATIONAL PARKS ASSOCIATION

VOLUME 37

JULY 1963

NUMBER 190

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Front Cover Photograph by Paul M. Tilden

Acadia National Park, on the ragged and island-dotted coast of northeastern Maine, was first established in 1916 as Sieur de Monts National Monument. Three years later it was designated Lafayette National Park, and ten years later—in 1929—it received its present name. In the cover photograph the reader looks northeastward along the east coast of the Schoodic Peninsula portion of the park, a bare dozen airline miles from Mount Desert Island and the main portion of Acadia Park, but five times as far by road. The gentle swells that foam on the Peninsula's rocky shoreline are coming in from the Gulf of Maine to the right.

The Association and the Magazine

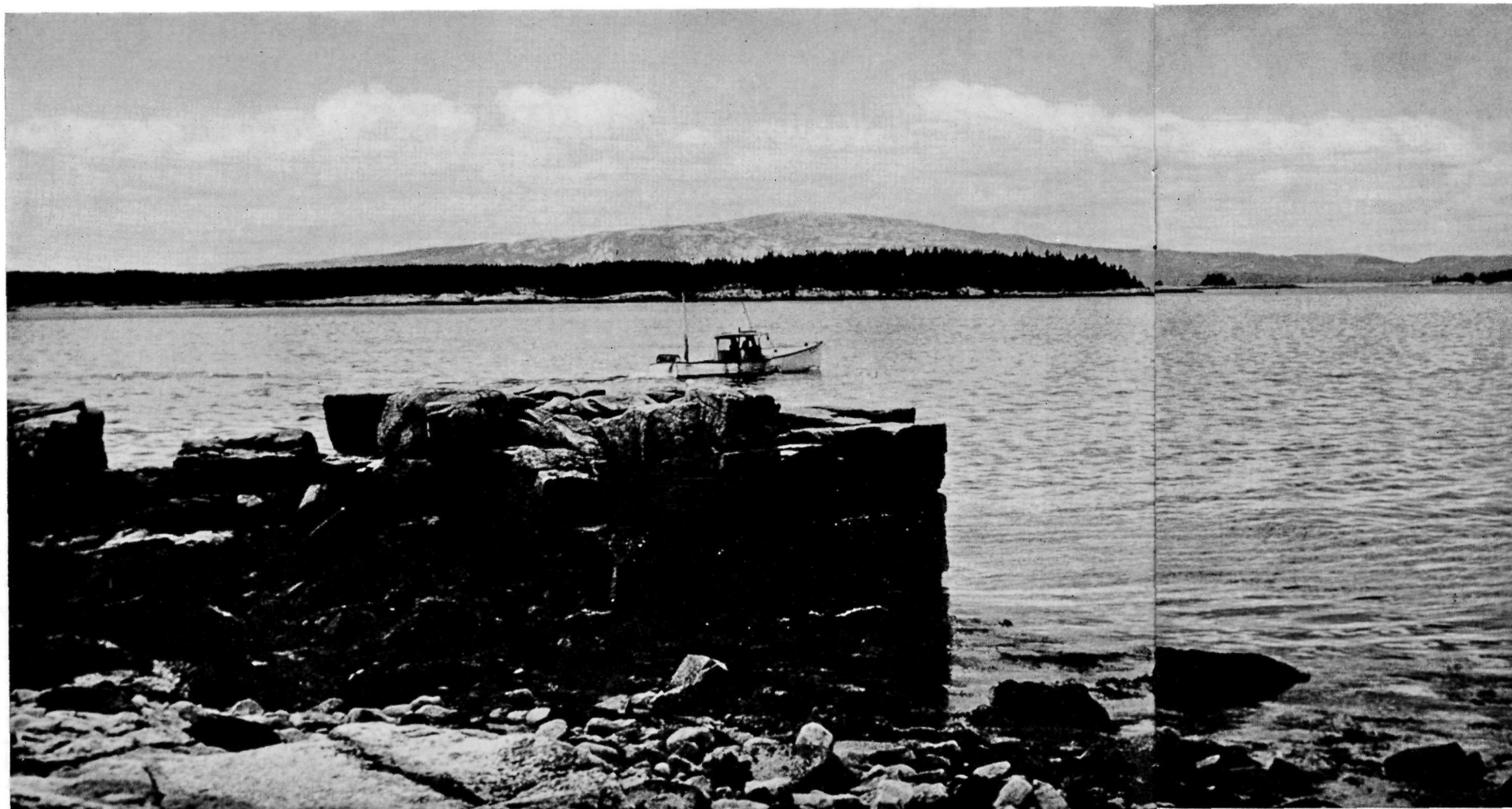
The National Parks Association is a completely independent, private, non-profit, public-service organization, educational and scientific in character, with over 26,000 members throughout the United States and abroad. It was established in 1919 by Stephen T. Mather, the first Director of the National 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.

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NATIONAL PARKS ASSOCIATION, 1300 NEW HAMPSHIRE AVENUE, N. W.,
WASHINGTON 6, D. C.



From the Schoodic Peninsula sector of Acadia Park the smooth granite profile of the Mount Desert Island Range—culminating in Cadillac Mountain—dominates the skyline beyond the islets of Frenchman Bay.

Acquaintance with Acadia

By Freeman Tilden

IN A RECENT WELL-WRITTEN AND INFORMATIVE book about the varied landscape of our continent, the author mentions the approach of Champlain to the island we now call Mount Desert in Maine, and remarks: "From the sea it appeared nearly destitute of trees, so he named it 'Isle des Monts Deserts—Island of the Barren Mountains.'" His error arises from a misconception of the French word *desert*, which did not mean to Champlain what we commonly call a desert, but simply an uninhabited wilderness. Far from being barren in

appearance, except for the bald rock of the mountain tops, the forest was lush when the navigator saw it. Champlain mentions the "pines and white birches." He was not a botanist—spruces and hemlocks, tamaracks and cedars were all pines to him.

But if Samuel Champlain could have visited this rock fortress ten or twelve thousand years before he actually arrived—then indeed he might have looked upon as barren a landscape as man's eyes ever beheld. There would have been no sprig of vegetation,

hardly a suggestion of organic life save for the screaming of seafowl. The retreating ice of the Pleistocene glaciation had mercilessly scoured off everything that in a warmer period had thriven there, leaving as souvenirs of the visit U-shaped valleys, a fjord-like gouge up the middle of the island, moraines and transported boulders. Desolation: and an invitation to plant life to start all over again by the slow process of making soil from rock.

The Acadia National Park which we know today, set in this island so con-

stantly beleaguered by the ocean, dates from the time when that melting of the mile-high ice cap of the final invasion from the North left a new bare topography to be built upon. From this point of view, the previous ice-advances do not count. The latest one was the sculptor so far as we can be aware.

The geologist will take you hundreds of millions of years back of that, certainly, and explain the nature of the forces that by turns built up and demolished the face of this region. The basement rock was at times beneath the

sea; at times above it; there were lava flows, intrusions of molten rock into fractures of older rocks; and finally there came the formation of the great granite range we observe so clearly in Acadia today. The pink granite of Cadillac Mountain tells us of the giant pool of magma which rose to gnaw the surface structure, collapse it and fill its space. Sometimes the slow-cooling dough engulfed large fragments of older rock, as the visitor to Blackwoods Campground may see in the cliff wall nearby. "Xenoliths," these inclusions are called. Clever naming; for in Greek a *xenos* is a stranger.

The Shaping of Acadia

Mountain building, mountain wasting, the attack of the sea and a catastrophic deluge of ice—these, then, are the basic elements which formed the Acadia we see. Catastrophic? We are told in geology to shun the word. Yet what do you make of an ice-age whose causes nobody understands? At any rate, it is good for the visitor to the park to have a rough understanding of its geology. He will be in no doubt of the powers of the sea when he sees, for instance at Anemone Cave, how the inrush of waves works upon a crushed and weakened zone in the rock. The ocean means to destroy the isle and has allied forces to help it. Whether other forces may come to the aid of the stubborn stronghold we cannot know.

If the visitor has in addition enough knowledge of rocks to name a granite, a schist or a diabase dike; of minerals to name a quartzite, a feldspar or a shale; enough of botany to identify a dozen of the deciduous trees and evergreens; some little familiarity with the animals and birds—he will be doing very well as our park visitors go. He may join a guided tour with a naturalist and be told a good deal more about what he sees. How much of it will he sink into his memory? To be frank: not much. But he has gained; if not in concrete realities, at least in widened comprehension. A skillful interpreter has made him *feel* some of the rich truths that lie behind.

Acquaintance with Acadia is something else than all this background we have been describing, and something that is harder to secure; and for that matter this is true of any of

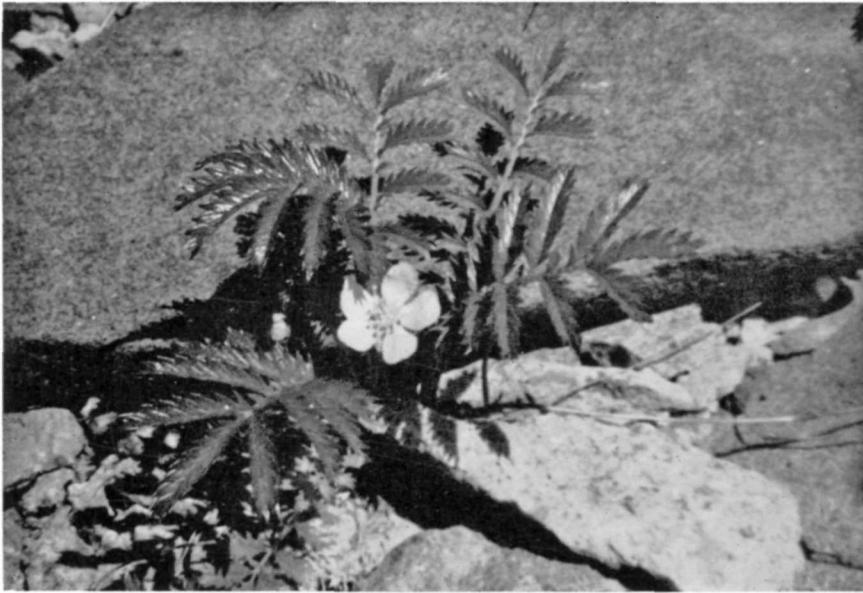
the great scenic and scientific parks. Acquaintance "implies more than a superficial knowledge, though without a complete understanding." It borders upon intimacy. And how can the day-visitor or even the lively two-weeks camper attain that relationship in any fullness? Other benefits, other joys, surely he may take. From Paradise Point on the entrance road, he may look out on a fine day upon one of the most beautiful seascapes in the world. So far as a picture can reveal it, here is the very essence of Acadia: a preface. Everything you see from here is, in spirit, the park.

The grand expanse of sea and land, from the top of Cadillac, is not to be erased ever from your memory. Along the eastern front there are Schooner Head, Thunder Hole, precipitous Otter Cliffs . . . then Jordan Pond, Eagle Lake, Somes Sound . . . a cruise over to Little Cranberry Island . . . and these are the same pleasures that a hundred years ago were captivating the "summer visitor" from Boston and New York and Charleston. There was more time to look at things then, as the horses toiled up and down dirt roads. And those visitors did not try to do too much in one short day. In a sense, they lived with Acadia.

Small Worlds of the Park

Well, then, where and how can we achieve at least a small part of that acquaintanceship with Acadia, ripening like the communion of two persons into friendship, and based upon as much understanding as we can hope to have? I seem to have been a bit discouraging, so far; perhaps revealing my own limitations. But I truly believe that we must gain the acquaintance by little and little; and by approaching Acadia's integrity by loafing among the less spectacular things.

I would begin, perhaps, with trying to know those little worlds, the tidal pools. Anemone Cavern? Yes, if you wish, but these kelpy, teeming communities can be found almost anywhere. They are merely hollows among the rocks which the tide covers and uncovers twice a day. When you first look into one of these crystal-clear basins, you see very little save some dark or light green vegetable growth. But this is really a busy and highly competitive world of housekeeping.



The overlapping of plants representative of both Northern and Temperate Zones make Acadia National Park a preservation of great botanical wealth. Shown in the photographs are two cold-climate plants flourishing in the harsh environment of Little Moose Island, in the Schoodic Peninsula sector of the park. These are (at left) a silverweed, *Potentilla anserina*, with a seemingly precarious roothold in a rock crevice; and (below) a tiny Labradorean representative of the iris family, *Iris setosa*.



I say *housekeeping*, because if your scientific word *ecology* does not mean just that, we have picked the wrong Greek root. The life that goes on in this environment would not fit elsewhere. Compared with the rest of the sea-life, this population is dense. The sea-anemones look like flowers, but they are really deceitful little animals with a touch poisonous to their prey.

The rock is green-plushed, and this covering is of a primitive plant that dates back to the origin of organic life on the planet. You see the whelks and the acorn-barnacles, these latter crustaceans having a convenient trap-door, from which emerge the plummy feet that act as sweepers-in of the plankton food—invisible to your eyes—that is the foundation of the food-chain of ocean animal life. Perhaps we had better call this busy life boarding-housekeeping. The struggle to survive is incessant, but a certain swaying balance is maintained. Do not think you have exhausted this little corner of Acadia in any one day. You may return again and again, always observing something you had not seen before.

Not far from Southwest Harbor, on the island's westerly side, is Seawall. There is a pleasant campground nearby. Here is your place to spend a lazy, profitable day in your search for the understanding of Acadia. You would not call it a spectacular spot. Perhaps your reason for coming down

to the water's edge here is that the summer day is blazing hot; and however high the temperature, there is refreshment coming from the fifty-degree water. The giant strength of the wind-driven waves has here built a crescent sea wall, fifteen or more feet high, from boulders swept from a shallow seabottom. The wall is not continuous, for between the horns of the crescent is a great granite platform. You will like to believe that some of the scratches in the surface of the rock were made by glacier carving tools. But the ocean uses the same engraving method, too, so that agency is more probable. But you will not fail to notice this granite—a little different in color from that on Cadillac—and the stringers of quartz that penetrated it, for these small veins carry the lovely apple-green microcline feldspar known as amazonite, the same that you will discover later over at the foot of Mount Mansell. And here mark the violence of the sea! for the great slabs that have been torn from the platform were riven by pounding at the joint-lines of the rock. The slightest weakness of the strongest land barrier has thus been exploited. This is a favorite place to cast a fishing line. I never saw a fish caught here, but no true fisherman cares about that. He enjoys being where he is.

Nor will you fail, certainly, in your hunt for the real Acadia, to gain a knowledge of the native people of

these stern shores. For two hundred years since they came up from Massachusetts (already too many people there, by thunder!) they have lumbered and fished and caught a meager crop from the lean soil, to the end of becoming as rugged as the land itself. Some people would call this climate of the Gulf of Maine inhospitable—though it can have rarely fine days. But so can Greenland. Certainly it was no Bermuda to which these white men came. But what is a hospitable climate? Is it not, after all, one to which a group of people have adapted themselves, and call home?

Blunt spoken, but willing to be on friendly terms, self-reliant, generations born to a sense of direction in a dangerous coastal maze of shoal and island, you will find the fishermen and lobstermen a salty lot. They have been amply described in fact and fiction: I need not say more than that human history is an important part of Acadia's whole. For, this park was not

like most of the others carved out of land that was already in Federal ownership, and thus needed only a transfer of management to devote it to the highest quality of public use. When Yellowstone was a wilderness yet to be dedicated, this island was settled and exploited; to the supplementing of a meager income had long since come the vacationer, the wealthy man to build a mansion at some sightly place, steamboats were unloading excursionists—a bustling lot of harbors in the “season.” No; it was the devotion both to beauty and to humanity that led a group of lovers of Acadia to acquire private land, parcel by parcel—great gifts like those of John D. Rockefeller, Jr.; many lesser but no less fine in purpose—till Acadia, peppered as it is with private lands, still is able to provide for the whole people an experience with nature of high quality. And it still has wilderness—even if of a cramped kind.

A Park Within a Park

If you could go across Frenchman Bay to Schoodic Peninsula as the seabirds can fly, it would be no long jaunt; but then, for that matter, if it were not for Penobscot Bay, the trip from Portland to Mount Desert would be much shortened. It is only a way of saying that these fingering embayments of the sunken coastline permit no such straight highways. It is better as it is. The longish road trip to Schoodic will disclose some of those snug villages of both the native people and the elder type of summer visitor; places like West Gouldsboro and Winter Harbor. And pause on the highway before you get to Winter Harbor and see Mount Desert now, looking at it across the bay past Ironbound Island! Only now do you appreciate the massiveness of the granite-founded Acadian height as Champlain saw it from his ship. It is exactly the other side of the picture that you looked upon from the top of Cadillac.

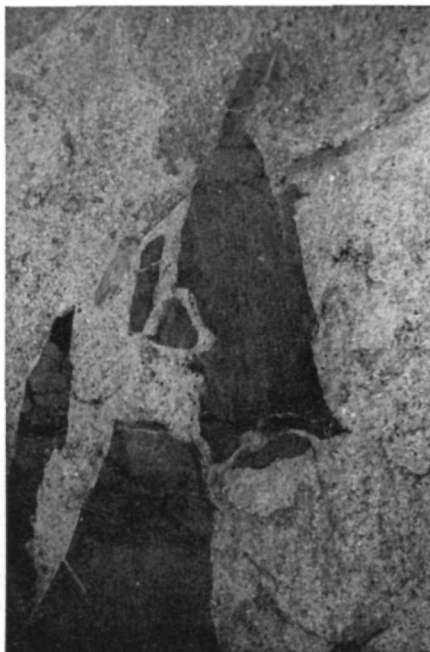
Separated from the rest of the park by this island-dotted bay, yet still a part of Acadia National Park in public ownership, this Schoodic Peninsula is possessed of an individuality all its own. Not quite like the rest of the mainland; certainly much different from the Mount Desert of the traveled roads. You emerge, at the Point, into

a parking spot from which you look straight into the Atlantic—the most defiant jut of coastal rock you have ever seen. What a beating this place has taken from the storms! The scrub trees have scudded before those blasts, unable to make their branches on the windward side; but their roots, like those of the natives, are firm in the soil, or what may pass for soil.

In the background the land rises gently through sparse and struggling vegetation to Schoodic Head. The Head is but 440 feet above ocean level; yet it is the Cadillac of the Peninsula.

And just over yonder is Labrador, or what seems a tiny sample of it that has drifted down here into the United States with the polar current. Really this sample of the subarctic is called Little Moose Island. There is no bridge to it. It is accessible only when the tide is sufficiently low. If you cross the seaweed and rock, better keep track of the time. You could easily miss your dinner appointment and have more time to examine the plant life than you had planned. Here, and perhaps in bloom for you, are arctic and subarctic species like the roseroot, mountain cranberry, mountain sandwort,

For the amateur geologist there is a fine array of xenoliths (rocks that are strangers) in the sea-cliff walls near Acadia's Blackwoods campground. In the picture below, the dark xenoliths are diabase fragments torn from an adjacent rock-mass by upwelling Cadillac granite in past geologic time.

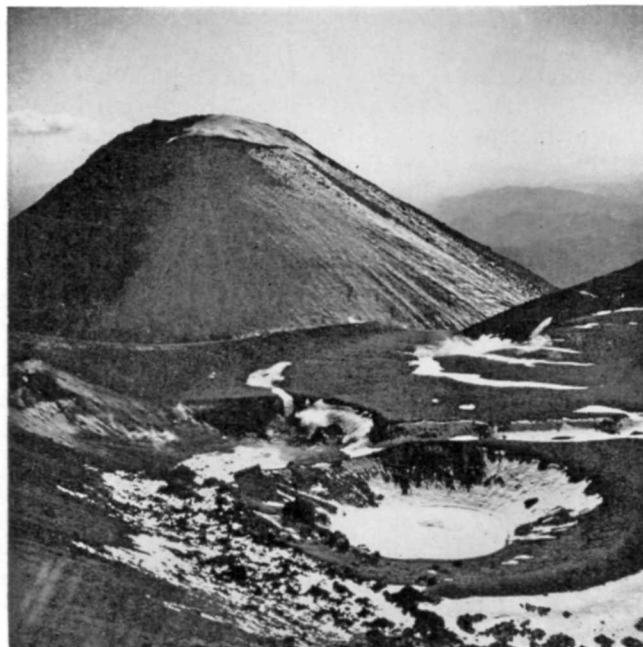


beachflag iris, dwarf three-leaf rattlesnakeroot, and Rand's eyebright. There are probably more than these; and of course the black crowberry, the food of the golden plover before he takes off on his long trip to South America, is everywhere snuggling close to ground.

Acadia Can Be Moody

On another day, you are sitting at the edge of one of the many Acadian lakes. Behind you are red spruces, cedars and towering yellow birches. At the water's edge the pipewort bends before the breeze and the lily pads ride the ripples sent in by a passing rowboat. An enterprising spider, you notice, has engineered a web, using the waterplants as stanchions. He now is set up in business and awaiting his first customer. Behind you rises the granite mountain, and now and again you get a voice of happy hikers who aspire for a summit and a sunburn. Then, suddenly, a whimsical change of wind brings to the nose the tang of the sea; that unmistakable briny odor of the cold North Atlantic. You awake to the fact that over there, just a short distance, the waves are pounding the cliffs, the lobsterman is hauling his traps, white-sailed sloops are skimming the waters.

Or it might be a day in heavy fog that you have needed to seal your beginning of acquaintance with Acadia. Acadia is what it is partly because it is *where* it is: and this land is in the grip of climate elements that never can be trusted. The native people long ago ceased to worry about it—they expect the worst. But to the visitor who comes a long way for a short stay, it is undoubtedly depressing to have the fog blank out the view. No pea-soup fog is this, but an invigorating fleece that wraps around you; but that fact may not be consoling. For those who can spend more time here, however, the fogs are just another path to acquaintance. The dim light softens the edges of the coastal cliff. The greens seem greener in the woods; the flowering plants appear more colorful. The trails have a mystery unknown when the sun is bright. You have swapped one kind of rendezvous with nature and with Acadia for another, no less satisfying if you accept it and make it so. ■



A view of Mount Meakan, in Akan National Park on the Island of Hokkaido. This park, established in 1943, embraces more than 216,000 acres of high volcanic terrain covered in part by a virgin forest of conifers and white birch.

The National Parks of Japan

By Eleanor E. Gamer

Photographs courtesy the National Parks Association of Japan

IN THE AUTUMN OF 1962 our family had an opportunity to visit the Japanese Islands for a period of several months. As we have often felt that foreign visitors to the United States have but a limited experience of America if they fail to spend some time in our own national parks and monuments, we determined to see in Japan as many of their parks as was possible for us in the time at our disposal, and considering the season of the year. We made our first excursion in the balmy days of late October to Japan's southern sea.

The Seto-Naikai, or Inland Sea National Park, comes as a surprise to those of us who are accustomed to the isolated character of America's great Western parks. Boarding a small but luxurious liner in Kobe, which was filled to capacity with Japanese tourists—we were the only Westerners aboard—we sailed from early morning until late afternoon through scenery of marvellous beauty: tiny, pine-crowned islets; majestic, snow-clad mountains; bays and coves sheltering compact fishing villages; and, tying all together, the clear, blue sea.

Not for one moment of that day were we allowed to forget that Japan's population is one of the densest in the world. The Inland Sea teems not only with fish, but with

humanity as well. Everywhere there were boats; pleasurecraft like our own, busy ferries transporting the inhabitants from one island to another, small freighters, tankers, and fishing boats by the thousands. Standing in the bow of the ship one was tempted to remark on a certain likeness to Broadway and 42nd Street, in New York. The traffic seemed comparable.

The boundaries of this park enclose some 163,000 acres, exclusive of water area; including the latter, the total is more than 452,000 acres. Of the land area more than half is privately owned; only one-seventh is owned by the State, of which part four-tenths of one percent is under the jurisdiction of the Ministry of Health and Welfare's National Parks Division, the rest being managed by the local prefectural governments.

The Seto-Naikai is a perfect example of an area which has been designated as a national park on an entirely different basis than that familiar to us. It must be remembered that the land adjacent to the Inland Sea has been thickly inhabited since earliest times; that industry and agriculture have flourished, and still flourish, along its shores. In 1934, the year of its designation, it was too late by centuries to preserve any part of it in a "natural"

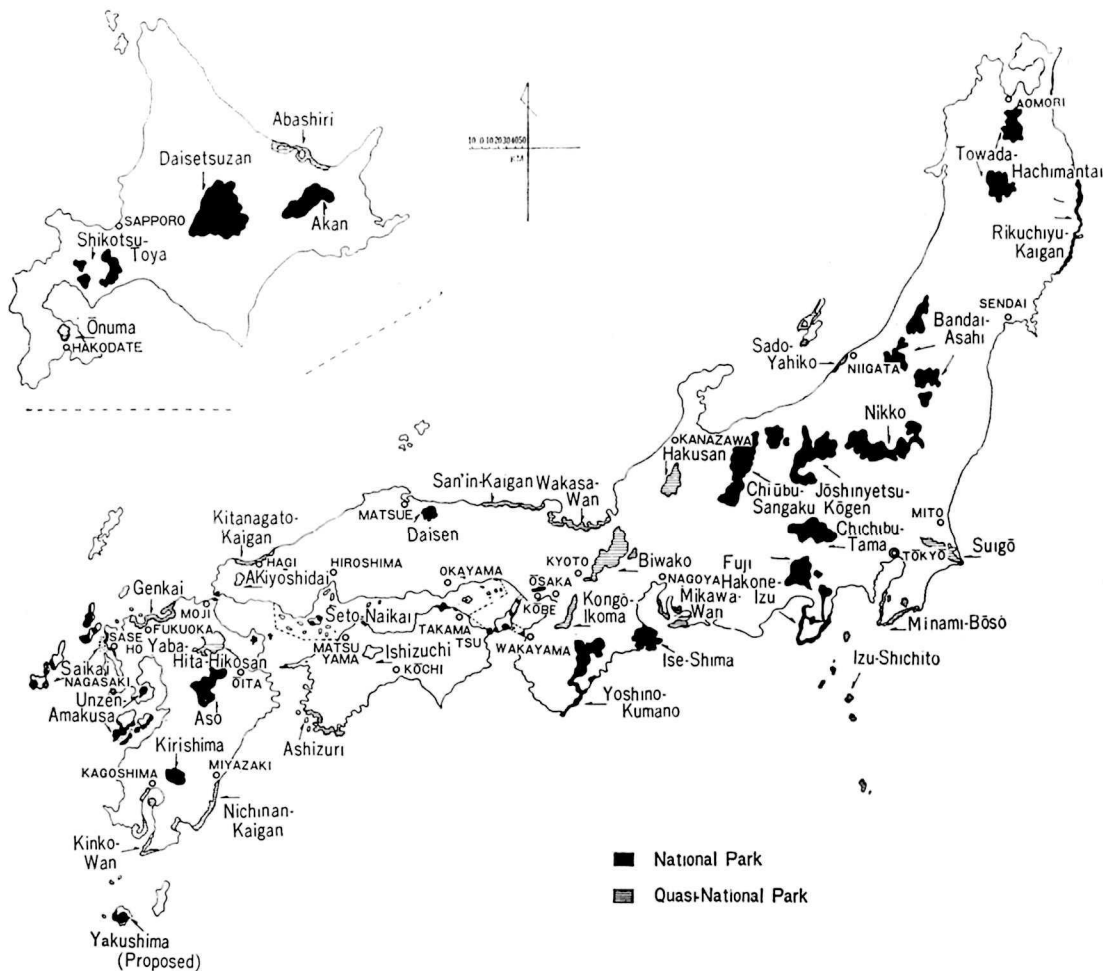


Illustration courtesy National Parks Association of Japan

Located on the map above are the nineteen national parks of Japan, and the twenty quasi-national parks. These latter are designated by request of the prefecture in which the park lies, and managed and supported by the prefecture.

condition; nor could the State obtain control of sufficient lands to make even an attempt at restricting the growth of industry or tourism. By designating the Seto-Naikai as a national park, the State could only hope to remind the users of its land and sea that they lived, worked, and played in one of the most beautiful areas in all Japan—hoping, perhaps, to reduce or retard the obliteration of its loveliness through careless and selfish misuse by a relatively enormous population—one which is still growing even though at a reduced rate as compared with past years.

Trip Through a Wilderness Park

In early November we moved on to Daisen National Park, the only national park on the Japan Sea coast of Honshu. Daisen is more of a true wilderness area. We reached it from the town of Matsue, after several hours of travel by local train and a rural bus which services the village of Daisenji halfway up the slopes of the mountain. Rain was coming down in sheets as our bus slithered along a narrow dirt road between paddy fields. As we began to climb the condition of the road grew worse, and we often seemed to be hanging well out over the slippery ledges carved into the mountainside high over the valley

floors. Unfortunately we missed the magnificent views that greet one in every direction when the weather is clear, but we did enjoy the virgin forests of yew and beech that clothe the mountainsides.

These forests are set aside as areas of “special protection” and signs at the entrance to the 30,649-acre preserve—one of the smallest in Japan—forbid hunting, mining, wood-cutting, or any other disturbance of the natural state of the park. Such restrictions are more realistic here, as half the area of the park is owned by the State. A mere 2500 acres are in private hands, including the small village of Daisenji which caters to the needs of tourists who come to visit the remains of a cluster of unremarkable temples, to hike, or to ski on Mt. Daisen’s slopes. But, despite its remoteness from populated areas and the difficulty of access, visitors to the park in 1957 numbered 630,000.

In the Tokyo area in late November, we were able to make a two-day visit to Nikko National Park, a three-hour journey into the mountains by luxury-train. Nikko has long been a favorite spot for religious pilgrimages. Early in the 17th century the Tokugawa family began building mausolea of great magnificence for two of the shoguns of their line. In the midst of dark groves of giant *Cryptomeria*



At left is island-dotted Kurushima Channel in the Seto-Naikai (Inland Sea) National Park of southern Japan. Essentially a park of shore and water, Seto-Naikai encompasses a total area of more than 452,000 acres, and includes portions of nine prefectures, or provinces.

(Japan cedar) trees these buildings, ornately carved and brilliantly lacquered, sparkle like jewels. The natural setting of the shrines matches them in grandeur. The town of Nikko lies in an area of volcanic mountains, swift streams, deep gorges, spectacular waterfalls, and alpine meadows. It was the first area in Japan to be mentioned as a possible national park in response to the enthusiasm generated in that country by the establishment of Yellowstone National Park in the United States, in 1872. Enthusiasm soon waned, however, and it was not until the early 1930's that it was brought to life again through the work of Tsuyoshi Tamura. Around Mr. Tamura a National Parks Association of Japan was formed, which saw the first fruits of its labor when the government designated eight national parks in 1934. Nikko Park was one of that group.

Arranging a Tour of Nikko Park

In Tokyo we lunched with Mr. Matao Kimura, Director of the National Parks Division of the Ministry of Health and Welfare, and with Mr. Tetsumaro Senge, Executive Director of the National Parks Association of Japan. From them we learned much of the administration of the national parks and something of their peculiar problems. They arranged for us to tour Nikko National Park on the following two days with a representative of Tochigi Prefecture, Mr. Tsunesaku Tezuka, and Mr. Toshihiko Kanai, Nikko's chief and only permanent ranger. To these men we owed two days filled with beauty and interest. We learned that the Prefecture shares with the central government both the costs of maintenance and administration of the park; that Nikko is one of the two parks—the other being Fuji-Hakone-Izu—to have a permanent park office; and that the work of the fifty rangers in the whole park system is mainly administrative.

Nikko National Park had approximately nine million visitors in 1961. Besides Mr. Kanai, there are four rangers who assist him in the summer. His duties throughout the year oblige him to oversee the use of the park by both visitors and the inhabitants of the numerous towns and resorts within the park boundaries. Almost all of the lakes, ponds, and streams in the area are used for the genera-

tion of water power. There is some mining of sulphur in the mountains and considerable forestry, all of which comes under Mr. Kanai's watchful eye. Besides this, the Chief Ranger Kanai is well aware of the vital need for a real interpretative program in the park. The Japanese are avid visitors to spots of natural beauty, but their interest is more esthetic than scientific, and little has been done to awaken them to natural marvels of their land. Chief Ranger Kanai manages a small museum of natural history, the only one of its kind in the park system. The museum was closed for the winter when we were there, but we were able to visit a fascinating and beautifully kept botanical garden, which is privately operated. During other seasons Mr. Kanai guides thousands of school children through the exhibits of the park museum. He also travels to the upland campgrounds to give "fireside" talks on nature, and on the meaning of the national parks, to groups of summer hikers and campers. On one occasion he escorted the Emperor of Japan, well known for his interest in the natural sciences, and the Empress along the nature trail of Oze-ga-hara, a high moorland treasurehouse of alpine swamp flora. It is a magnificent spot; a grassy plain surrounded by great volcanic peaks whose foothills are covered with birch forest. There is now a movement under way to convert the entire valley into a vast reservoir. Industry's need for water power is so great in the rapidly expanding economy of Japan that the Ministry of Health and Welfare, the Prefecture, and the National Parks Association of Japan anticipate a bitter struggle in the attempt to save this especially fine section of the park.

Strangely enough, in Japan these groups work hand-in-hand. The National Parks Division of the Ministry of Health and Welfare is small, with an office staff of about thirty. Its budget in 1960 was \$470,380 to "protect scenic beauties, execute park work, guide tourist industries, and strive for improvement and completion of utilization facilities."¹ The National Parks Association makes available

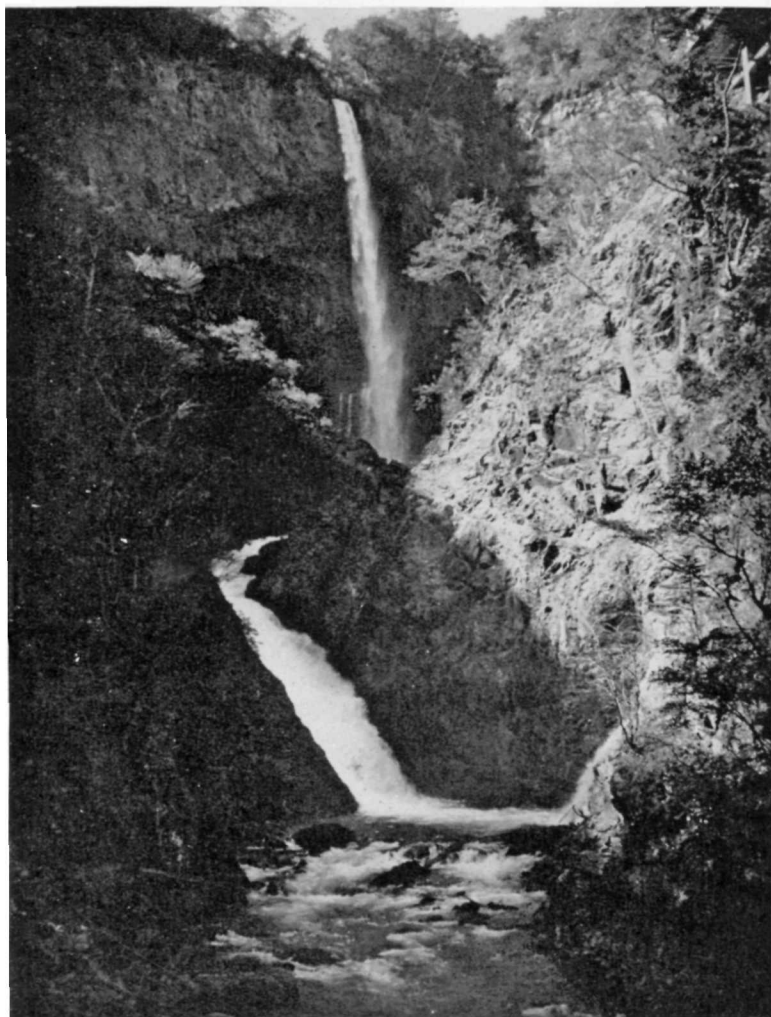
¹ This quotation is taken from the paper *Information for National Parks and Quasi-National Parks of Japan*, published in English by the National Parks Division of the Ministry of Health and Welfare, 1960.

to the National Parks Division private funds subscribed by members, and assists the government agency with its personnel in an attempt to fill the great gap between the expectation and the actuality.

At this time there are nineteen national parks, and twenty quasi-national parks, so designated at the request of the Prefecture within which the proposed park lies. These areas are subsequently managed and supported by the Prefecture. Of the national parks, eight were designated in 1934, four in 1936, and the remainder have been designated since the end of the war—the last in 1955. It is obvious that in such an old and heavily populated country it has been virtually impossible to find uninhabited “wilderness” areas. The State has not been able to do more than “designate” a park area. It cannot dispossess the inhabitants, nor can it prohibit them from continuing to support themselves in their traditional ways, even when such ways are detrimental to the preservation of the natural features of the park. This situation has resulted in the division of the parks into “ordinary areas,” “special areas,” and “areas of special protection.” It is only in the last that the State can, to some degree, effectively control building, the use of the land for industry or tourism.

The inhabitants of a national park are enthusiastic about their status, as it involves few annoying restrictions and—at no cost to themselves—enormously increases their gains from tourism, which flourishes wherever a national park is established. Moreover, the Japanese people, on the whole,

Nikko National Park, in the central part of Honshu Island, is a mountain preservation of many streams and falls. Below, Kegon Fall.



are hard on their parks. The approximately seventy million visitors (more than sixty percent of the total population) to the national parks each year have little consideration for one another when it comes to the Japanese equivalent of the ubiquitous beer can of the United States. Even such a remote park as Daisen is liberally strewn with wooden lunch boxes, bottles, and garbage.

The more remote parks of Hokkaido—Akan, Daisetsuzan, and Shikotsu-toya—have the greatest areas under control of the State and are the least visited; but even they could boast of four million visitors to their one million acres in 1957. The parks of central Honshu, apart from Nikko—Bandai-Asahi, Joshin-Etsu-Kogen, Chubu-Sangaku, Chichibu-Tama, and Fuji-Hakone-Izu—saw twenty-three million visitors on their two million acres! And in Kyushu, the great volcanic parks of Aso, Unzen-Amakusa, and the island archipelago of Saikai, totaling some 350,000 acres, were visited by six million people.

In many of the parks, it is not nature alone which attracts such large numbers. From time immemorial the Japanese eye for scenic beauty has led these people to erect shrines and temples in spots of natural magnificence. Many of the parks are visited as pilgrimage sites, and as sites of interesting archeological and cultural remnants, as well as for recreation. Two parks in particular, besides Nikko, fall into this category. As the old Japanese saying goes, “He who never climbs Fuji lacks religious fervor, patriotism, or both. He who climbs Fuji twice is a fool.”

Today, Fuji is not only an object of pilgrimage. Her slopes support ski-runs, and adjacent towns boom with winter-sports enthusiasts. Ise-Shima, however, is still visited primarily for religious and patriotic reasons. There stand the great Shinto shrines at which religious respects are paid at least once in a lifetime. The great shrines of raw cedar wood, built without nails, are renewed every twenty years. In contrast to the mausolea of Nikko, in their stark, unadorned beauty, the shrines are reminiscent of the South Sea element in the Japanese people. To have one's name announced to the entire pantheon, as we did, is an awesome procedure. In striking contrast to the solemn dignity of the shrines is the stretch of sparkling seacoast encompassed by the park. This has become a veritable Coney Island of resort towns filled with tourist hotels, cheap gift shops, soft-drink parlors, and exhibitions by pearl divers and trained porpoises.

These are some of the contrasts to be met with in the Japanese national parks, which are open to visitors the year around because they lack the facilities for closing! If one had limited time as an American tourist² in Japan, he would do well to concentrate on these parks. He would come away with a good picture of the land and the life of the people of these islands, and he would have seen it as it is seen by the Japanese themselves, and not merely as a foreign visitor. ■

² All generally available publications in English on the national parks of Japan are published by the National Parks Association of Japan and may be had by writing this organization in care of the Ministry of Health and Welfare, 1, 2-chome, Kasumigaseki, Chiyoda-ku, Tokyo, Japan.



A partial reconstruction and realignment of U. S. Highway 89 in Utah's Logan Canyon, in the Cache National Forest—with its accompanying destruction of scenery, recreational opportunity, and biological balance—has caused several Federal and State agencies to wonder whether the cheapest road construction is always the best. Photograph above welcomes the visitor to the Forest Service's Logan Canyon Recreational Area; the straightened channel of the Logan River is visible at the right below the road.

Logan Canyon Road Controversy: Anatomy of a Principle

By Jack H. Berryman

Photographs by the Author

THE CONTROVERSY OVER A PROPOSED highway improvement project on U.S. Highway 89, which passes through Utah's Logan Canyon, has brought into sharp focus the increasing conservationist concern over the impact of highway construction on the nation's streams and rivers—a concern heightened by an accelerated highway construction program and a diminishing national “river resource.”

For example, the Montana Fish and Game Department, in a study of thirteen streams throughout that State, found that 250 of 768 miles had been altered from their natural condition. Four of the streams had more than half their lengths reshaped by man. Other studies revealed reductions in trout and whitefish populations of up

to 94% in channelized areas. Similarly, of the sixty-two miles of Idaho's Lemhi River, thirteen miles or 21% has been lost to salmon spawning because of channelization. And so the story goes, all across the nation.

The public has generally been apathetic, or at least silent, as highway planners have rechanneled rivers and streams, and bulldozers have ripped away protective vegetation and moved relentlessly up and down stream channels.

The public has not considered this a great threat to either the scenic, recreational, or fishery resources because there remained a river with water, and over a period of years the streamside vegetation generally returned. What has not been understood by the public

at large, by highway planners, or by legislators is that a body of water is a living thing in delicate balance—that there is a relationship between riffles and pools, shade and sunlight, stream gradient and velocity, biota and stream maturity. It has not been understood that a disturbance of the channel upsets this very delicate balance; and worse, the impact of the disturbance at one point is very often felt over long stretches downstream.

Let us look for a moment at the world of living things beneath the surface of the water. Here are the plants, some rooted and some free floating—the only organisms able to transform sunlight and the chemicals from soil, air and water into vegetable material. And, there are countless tiny animals.

These plants and animals are a part of the food chain upon which the insects and some fish feed. These latter are eaten in turn by larger fish.

Here, in this underwater world, each stone and rock is an intact biological community with a growth of algae or diatoms living in close association with the nymphs or larvae of insects.

Straightening or rechanneling of a stream results in siltation which scours the stream bed and removes the all-important aquatic vegetation. Spawning beds are destroyed, and even where spawning takes place, silted water reduces egg hatchability. The straightened channel increases stream velocity, reducing or removing resting places for fish. The valuable food chain is broken. Overhanging vegetation is removed, altering water temperature and reducing bank stabilization. The exposed banks erode, causing further damage. Steeply-cut banks are a source of still more silt.

In addition to the biological impact upon the living water, scenic beauty is usually reduced. A road passing by a natural stream and curving through overhanging vegetation gives way to an

"efficient" superhighway. Quite often the pleasant, shaded picnic and camp areas are reduced or replaced by open and less attractive facilities.

The Reasons for Conflict

Why is there this conflict between highways and rivers?

First, there is an engineering consideration. A canyon bottom provides the most direct route, with fewer curves and a greater efficiency of design. Second, there is the economic factor. It costs more to avoid the stream channel. Most State highway departments, and the Bureau of Public Roads, have not felt justified in spending the "highway users'" funds "excessively" for protecting esthetic values. Finally—and this is important—there is a lack of appreciation of either the problem or the values involved.

These issues came into sharp conflict in 1959 as the Utah State Department of Highways was completing plans for the first section of the improvement project for Highway 89. From the city of Logan, situated at the mouth of Logan Canyon, to the Bear Lake summit, a distance of some forty-five miles,

the highway winds through the Cache National Forest, passing through Logan Canyon. For a portion of its distance the road parallels the Logan River, remarkable for its scenic beauty, its picnic grounds, campsites, and recreation areas; it is one of Utah's finest remaining trout streams.

It is true that the road needs to be improved. In places, it is tortuous. There are insufficient passing zones. On busy days traffic piles up behind slow-moving cars and trucks. For much of its distance—especially on its lower end—speed is restricted to thirty-five miles per hour. It should be pointed out, however, that in spite of the need for improvement there is no record of any recent highway fatality, and serious accidents have been very rare.

Logan Canyon is one of the most heavily used recreational areas in the Western national forest system. For example, the river affords 42,000 man-days of fishing yearly. Based on average State fisherman expenditures, this represents an annual expenditure of more than \$500,000. In addition, the Canyon is used heavily by picnickers, campers and sightseers. For example,

In the photograph below, the Logan River is seen in its natural channel, with overhanging vegetation; water, plant life and myriad unseen aquatic animals are in a delicate state of adjustment. At the right is shown a section of straightened stream channel on the Logan River. Aside from esthetic and recreational considerations, channelization has completely disrupted the life of the stream; siltation and increased water velocity will remove underwater plant life, alter water temperature, and expose raw streambanks to swift erosion.





"Before and after" in the vicinity of the Third Dam on the Logan River in Logan Canyon. At the left, a fisherman displays a catch on the bank of the dam; the old highway is on the right. In the picture at the right, taken from almost the same position after reconstruction, the new highway has altered the scene. For obvious reasons, the fisherman is missing, as is about one-third of the water surface of Third Dam, which furnished about twenty-one percent of the fish harvested on the Logan River. The old highway curve at the right has been removed, with the remnants of the former road still visible.

on a midweek July 4, in 1962, there were 2292 visits logged at the Spring Hollow Area, 2856 at Malibu, and 2184 at Guinavah. For the year there were more than 1,150,000 visits, not counting through traffic. Bear in mind that Logan City has a population of only about 20,000.

Fortunately, more information was available on Logan River than on any other river in the State. It has been studied extensively by the Wildlife Resources Department of Utah State University, being in the "back yard" of that institution, so to speak. Further, the State Department of Fish and Game had extensive data on creel surveys and fisherman pressure, and the Forest Service had accurate information on recreational use.

In Logan Canyon, the issue was clear cut. It was obvious that the road needed improvement. By the same token, there was demonstrated and documented need and justification for protecting other resource values. From an engineering standpoint, it was feasible to make the necessary modifications to protect the resource. It all boiled down to the matter of additional costs.

During the planning stage of the first phase, Logan residents were silent. Only one lonely protest was launched.

Public hearings were poorly attended, except by supporters of the road improvement project; strongest among these was the Cache Chamber of Commerce. The State Department of Fish and Game, a sister agency of the State Department of Highways, launched a formal protest. The Forest Service, before issuing a special-use permit, insisted on some compromise from the original design. Nevertheless, in the face of a silent public, the Fish and Game Department found itself in a difficult position with its sister agency, and the Forest Service found itself squarely in the middle. The final design did not adequately protect resource values.

Nor did the public become alarmed, or for that matter even concerned, until the bulldozers began their work late in the fall of 1960. Then there was a rude awakening.

Controversy and crisis provide the seed-bed and opportunity for public education. All during construction of the first phase, and while plans were being drawn for the second phase, the public was aware, alert, and responsive.

Letters began appearing in the public forum sections of the newspapers. At least two organized groups drafted

resolutions urging resource protection. The controversy stimulated the College of Forest, Range, and Wildlife Management in cooperation with the Extension Services of Utah State University at Logan, to appoint a committee¹ to examine the entire question of road construction and resource use. Once again, as the plans were being developed for the second phase, officials of the State Department of Highways, Bureau of Public Roads, Forest Service and State Department of Fish and Game began to meet, although now in a different climate. The press concerned itself, and was represented as field inspections were made. And, again the State Department of Fish and Game took a position to safeguard the fishery resource. The Forest Service, now faced with a Congressional mandate through the Multiple Use Act and with added public support, began to take a stronger position.

The plans were revised three times.

¹ Prof. Jack H. Berryman, Extension Services, Chairman; Dean J. Whitney Floyd, College of Forest, Range, and Wildlife Management; Dr. A. D. Smith, Range Management Department; Dr. John Neuhold, Department of Wildlife Resources; Dr. Frank Kearns, Forest Management Department.

Each time additional concessions were made to protect the resources, and, quite obviously, each time cost estimates increased.

In November, 1961, the Forest Service issued its position statement, indicating that additional protection must be afforded before a special-use permit would be issued. At about the same time, the College of Forest, Range, and Wildlife Management of Utah State University issued a draft statement of its committee report, *Road Construction and Resource Use* (No. 3, Land Grant Centennial Diamond Jubilee Series, Utah State University, Logan, Utah). The committee report, incidentally, bore the endorsement of the entire College faculty and the approval of the Colleges of Agriculture and Engineering. Combined, the two statements created a renewed interest in the press, and resulted in charges and counter-charges.

The end result has been that the State Department of Highways, supported by the Bureau of Public Roads,

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has at least temporarily reallocated the money to other areas, refusing to make additional concessions. The Forest Service continues to insist on additional changes which it considers necessary to provide minimum protection. Meanwhile, Washington officials of the Bureau of Public Roads and the Forest Service have conducted an on-the-ground review followed by an inspection of similar problems in surrounding States.

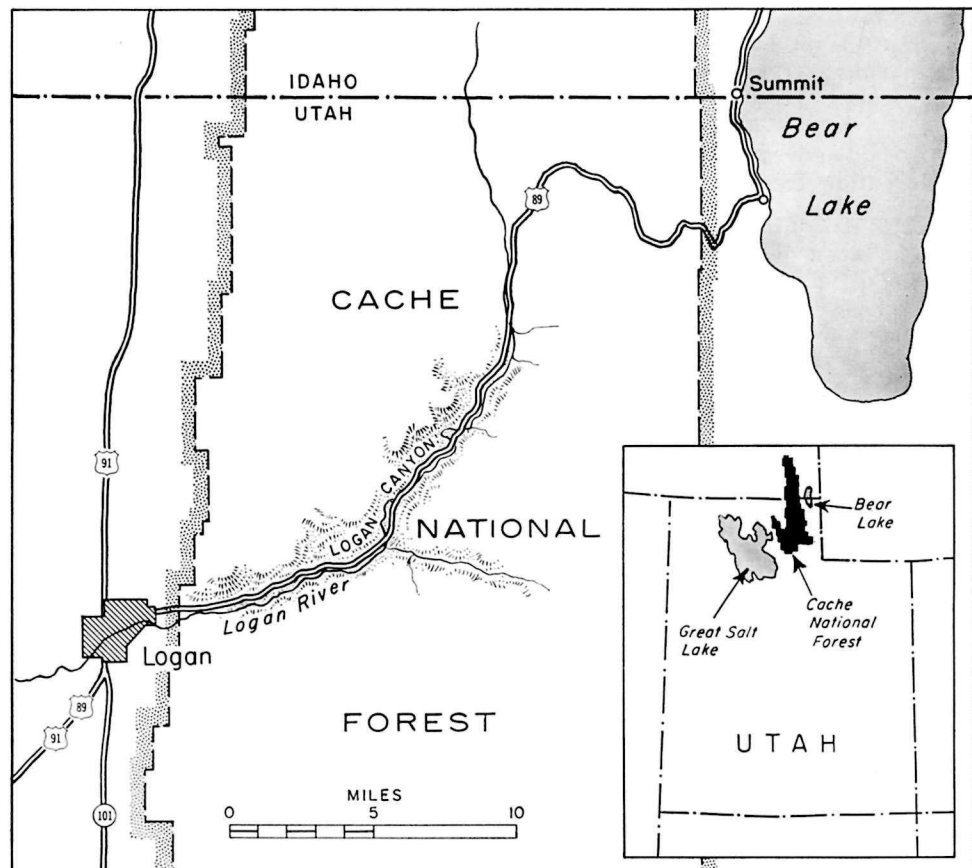
There will be an improved highway in Logan Canyon. It will not meet the hopes of most resource managers. It will cost more than the Highway Department and its constituents consider necessary, but the cost of protecting

these resources must be considered as a normal cost of highway construction.

As a nation, we have become increasingly materialistic even at the expense of esthetic and other values. It is the impoverished nations which must first satisfy materialistic needs. We pride ourselves on being one of the richest nations on the face of the earth. To concede that we cannot afford the protection of our scenic and recreational resources is unthinkable.

Progress has been made and a principle is being established. We must have a modern highway network. This, however, cannot continue to be engineered at the expense of irreplaceable public resources. Further, there is a need for mandatory coordination between highway planning agencies and the public and private organizations concerned with resource use, together with legislative recognition of the need for adequate resource protection. And the public must assume more responsibility in making its wants and desires known. ■

The map at right shows location of Logan Canyon and River, and U. S. 89 through the Cache National Forest between Logan and Bear Lake. Some five miles of Highway 89 has already been realigned and reconstructed, commencing approximately at the west boundary of the national forest, adjacent to the city of Logan; a further stretch of five miles is proposed for reconstruction; and long-range plans call for the improvement of the highway over the entire distance from the Logan boundary of the Cache Forest to Bear Lake.



Federal Graphics

News Briefs from the Conservation World

River Study Team Appointed

Five men were recently appointed by the Secretaries of the Interior and Agriculture Departments to study the need for preservation and conservation of free-flowing rivers which are particularly suited to outdoor recreation. The group will be headed by Director Edward C. Crafts of the Bureau of Outdoor Recreation. Other members are: Byron B. Beattie of the Forest Service; Dr. Laurence I. Hewes, Jr., of the Office of Rural Areas Development; Ben H. Thompson, of the National Park Service; and A. Heaton Underhill, of the Bureau of Outdoor Recreation.

In 1961, the Senate Select Committee on National Water Resources recommended that "certain streams be preserved in their free-flowing condition because their natural scenic, scientific, esthetic, and recreational values outweigh their value for water development and control purposes now and in the future." The study team will identify those portions of streams and rivers which have the highest recreational potential, looking toward their dedication to such use "by appropriate legislative and executive action." The team's report and recommendations will later be submitted for review by the President's Recreation Advisory Council, probably late in 1963.

Leedy to Head Recreation Research Program

Dr. Daniel L. Leedy, chief of wildlife research for the Bureau of Sport Fisheries and Wildlife since 1957, has been appointed chief of the division of research of the Bureau of Outdoor Recreation. Dr. Leedy will lead and coordinate a nationwide program of research in outdoor recreation, which will include a study of recreation area needs. Public, private, and educational institutions will also be encouraged to conduct their own research in outdoor recreation.

Dr. Leedy began his government career with the Ohio State Cooperative Wildlife Research Unit; in 1948 he transferred to the Fish and Wildlife Service.

Senator Anderson Receives Conservation Award

National recognition for outstanding contribution to the conservation of America's natural resources was accorded to Senator Clinton P. Anderson of New Mexico at a May testimonial dinner given in

his honor by twelve leading conservation organizations at the Statler Hilton Hotel in Washington, D.C.

The dinner was attended by Secretary Udall, Secretary Freeman, many members of Congress, and other government officials. He was presented with an award of recognition by the sponsoring organizations, which included: the American Conservation Association; the American Forestry Association; the Conservation Foundation; the Izaak Walton League of America; the National Audubon Society; the National Parks Association; the National Wildlife Federation; the North American Wildlife Foundation; the Sierra Club; the Sport Fishing Institute; the Wilderness Society, and the Wildlife Management Institute.

Interior Recommends Hubbell Trading Post Preservation

Congress has recently received a Department of the Interior recommendation for establishment of a Hubbell Trading Post National Historic Site at Ganado, Arizona which, if established, would become the first national historic site in the Southwestern United States. A proviso was added specifying that the neighboring Navajo Indian Tribe would have first opportunity to purchase any excess tillable land and water rights from the 160-acre tract.

Commenting on pending bills that provide for retaining only such acreage as is reasonably required for carrying out the purposes of the act, the Department suggested that the bills be amended to add that "any excess tillable land, together with water rights, shall first be offered for sale to the Navajo Indian Tribe at a price proportionate to the price paid for the total area acquired."

The Trading Post is surrounded by Navajo reservation lands, and is included within the Ganado Indian irrigation unit of the reservation. The sprawling adobe home was built sixty years ago on a site that was used for trading about 1876, and continued to be so used for many years.

The Post includes many important relics of earlier American frontier life; the rooms of Hubbell's home are rich in books, guns, art, ethnological objects, and other furnishings that typify the life of an early American trading post.

Leopold Committee to Study Predator Control

During the latter part of May, Secre-

tary of the Interior Stewart L. Udall announced the initiation of a study which will be followed by conservationists with the deepest interest: an appraisal, to be conducted by the so-called Leopold Committee, "to determine whether the Department of the Interior is doing a proper job in controlling rodents and predators; whether the Government should attempt such control work on private as well as public lands; whether there is too much control or not enough; and whether or not some animal life is threatened with extinction as a result of Government predator control work."

Readers of this magazine will recall the recent report of the Leopold Committee in respect to wildlife management in the national parks—a report considered by many conservationists as a reaffirmation of basic park management policy; the report was printed in full as an insert in the April issue of this magazine, and is obtainable from the National Parks Association, as a reprint, for ten cents a copy postpaid.

Dr. A. Starker Leopold will serve again as chairman of the group, whose other members are: Dr. Ira Gabrielson of Vienna, Virginia; Dr. Clarence Cottam of Sinton, Texas; Thomas L. Kimball of McLean, Virginia, and Dr. Stanley A. Cain of Ann Arbor, Michigan.

Secretary Udall has noted that the Interior Department's predator control program involves approximately \$1.9 millions per year, and \$3.5 millions in farmer, rancher, State and local funds.

A New Brochure on the Tule Elk

A four-page brochure recently received from the Committee for the Preservation of the Tule Elk, whose headquarters are in Los Angeles, indicates that the search for a suitable refuge for that little mammal is being vigorously prosecuted.

The tule elk, which once roamed the central valleys of California in great numbers, was at one time on the brink of extinction, and exists today as only a few hundred individuals. That the animal exists at all is probably attributable to the long-term efforts of G. Walter Dow, of Whittier, California, one-time Owens Valley businessman and rancher, who is presently chairman of the Committee, and who foresees the possibility of an Owens Valley refuge for the remaining elk. The Owens Valley, east of the High Sierra in Southern California's Inyo County, is largely owned by the City of Los Angeles

as a watershed, and is leased to stockmen and ranchers.

The Committee, through its secretary, Mrs. Beula Edmiston, will be glad to furnish interested persons with current information on the status of the tule elk; her address is: 5502 Markland Drive, Los Angeles 22, California. Individual memberships in the Committee for the Preservation of the Tule Elk are \$2.00 (or more, optionally) per year.

(*National Parks Magazine* is informed that Resources for the Future, Inc., Washington, D.C., non-profit research and education corporation, has recently made a substantial grant to the University of California for a two-year biological and economic study of the tule elk and its problems. Principal investigators will be Drs. A. Starker Leopold and S. V. Ciriacy-Wantrup.)

Conservation Organizations Ask Rampart Dam Hearings

Several of the national conservation organizations, including the National Parks Association, have recently expressed deep concern over the proposed withdrawal of nearly 9,000,000 acres of land on Alaska's Yukon River in connection with the proposed Rampart Dam in Rampart Canyon, some 90 miles northwest of Fairbanks.

This big-dam project is known as the Rampart Canyon Power Project. Application for land withdrawal has been made to the Bureau of Land Management by the U. S. Geological Survey; the Rampart Dam, if constructed, would impound a body of water ten percent larger than

Lake Erie for hydroelectric and other purposes. Its proponents see in the vast project a variety of alleged goodies—a tremendous source of low-cost power for Alaska, flood control for the Yukon River, and a bigger dam than any ever built by the Russians, among other things.

The conservation organizations which have protested to the Bureau of Land Management have stressed the tremendous and largely unknown impact of such an impoundment (only one, incidentally, of several planned for the Yukon) on the natural and scenic resources of Central Alaska. They have pointed out that little investigative work has been done on ecological or any other implications of the project; one organization (the National Parks Association) characterized the Rampart Canyon Power Project as "an extravagant plan which appears to make little if any provision for the invaluable natural and scenic resources which would be submerged or destroyed by draw-downs."

When the project was first planned, the Fish and Wildlife Service requested a period of nine years and a million dollars to fully assess the wildlife wealth of the area to be flooded; the time and money allowed were greatly reduced, so that a bare minimum is known about the biological implications of such an enormous impoundment. It is known through preliminary studies, however, that the terrain proposed for inundation furnishes the four major North American flyways with some half-million ducks yearly; these presumably would be lost. Mineral, timber, and oil and gas studies have never

been included in the program, nor have human and property relocation investigations been made. An estimated 2000 persons live in the area which would be affected by flooding.

The protesting conservation organizations have requested the Bureau of Land Management to hold full public hearings in both Alaska and Washington, D.C., before issuance of a withdrawal order. The organizations include: the National Parks Association; the Wildlife Management Institute; the National Audubon Society; the Nature Conservancy, and the National Wildlife Federation.

Dan Beard Named Southwest Region Director

During the latter part of May, Secretary of the Interior Stewart L. Udall announced the transfer of Daniel B. Beard, who has been the National Park Service assistant director for public affairs for the past year and a half, to the Southwest Region as regional director. Beard, whose Park Service career dates to 1933, will replace Thomas J. Allen, recently appointed special field assistant to Park Service Director Conrad L. Wirth.

Mr. Beard—better known simply as "Dan" among his many friends in the conservation and preservation fields—has held field superintendencies in Dinosaur National Monument, and Everglades and Olympic National Parks; he was made chief of the Division of Interpretation in Washington headquarters in 1960, and became an assistant director of the Service in 1961.

Annual Meeting of the National Parks Association

On May 21, the annual meeting of the Corporation and Board of Trustees of the National Parks Association was held at the Association's headquarters in Washington, D.C. Twenty trustees were in attendance for all or part of the 1963 annual meeting, as were the executive secretary, the business manager, the editor, the research secretary, and the Association's consulting engineer.

Elected as trustees of the Association for three-year terms were: Horace M. Albright, Carl W. Buchheister, Grant Conway, Robert C. Cook, Newton B. Drury, S. Herbert Evison, Weldon F. Heald, Michael Hudoba, Darwin Lambert, Martin Litton, Frank E. Masland, Jr., John Osseward, and Charles G. Woodbury. A revision of the bylaws, aimed toward bringing the Association's

corporate structure into conformity with that of similar organizations, was approved by the trustees and resulted in the naming of Anthony Wayne Smith as president of the Association and general counsel; Dr. Clarence Cottam as chairman of the board of trustees and executive committee; and Frank E. Masland, Jr., vice-chairman of the board of trustees and executive committee. John H. Cover was elected secretary, and Donald A. McCormack treasurer; these two officers also became members of the Association's executive committee, to which Willard E. Brown, Spencer M. Smith, Jr., and Charles G. Woodbury were also elected.

Reviewed during the meeting were a number of problems which presently confront national park system units, or touch

on basic park policy; prominent among these were current and future threats to Grand Canyon Park and Monument; the use of motorboats on national park waters; wildlife management in the parks; fishing in park waters; the need for more public information in park planning; the dangers which confront Everglades Park; and others.

Following the meeting the trustees, officers, staff and invited guests attended a dinner at "Stronghold," on Sugarloaf Mountain near Frederick, Maryland, through the kind invitation of the trustees of that preservation. (The August issue of this magazine will carry a description of "Stronghold," its history, and the manner in which it came under preservation.)



LAND POLICY. A Report published by the Board of Forest Preserve Commissioners of Cook County, Illinois. 64 pages in self-cover. Foreword by President John J. Duffy. Revised Edition, 1962.

In the history of park preservation over the years no fact is more painfully obvious than this: that the chief dangers of dilution and despoliation arise not from efforts of chiselers animated toward "making a fast buck," but from the desire of well-intentioned individuals and groups to press for their schemes with a zeal equaled only by their total lack of understanding of the basic purpose for which a recreational area was created.

The Forest Preserve District of Cook County, now consisting of more than 47,000 acres, constitutes a green belt around Chicago affording more than 4,000,000 people open space with forest, water and wildlife for their physical and spiritual health. Through the devotion and wise administration of its protectors, this property of the people has become a world-famous example of wise land use. Here is a place of recreation in the highest sense of the word.

Instance by instance, from its files, the Commissioners disclose the many attempts that have been made to invade the Preserve, and the polite but peremptory refusals either to be intimidated or cajoled. Here are no glittering generalizations. This is the official correspondence; these are the stark facts, presented without emotion or ornament. The NO of the Cook County custodians has unfailingly meant just what they said: "Your proposal may be praiseworthy in purpose, but you cannot do it *here*."

Rarely, there have had to be compromises. But even in these cases the doggedness of the retreat has accentuated, rather than diminished, the stout resolution of the defenders. This fine pamphlet, a revision and updated edition of a former publication, "is issued for the benefit of administrators who may be confronted by similar problems, and all who are concerned with the preservation of publicly owned lands for recreational use." It will do just that. —F.T.

THE GEOLOGY OF MOUNT DESERT ISLAND, MAINE. By Carleton A. Chap-

man. Available from the author, Department of Geology, University of Illinois, Urbana, Illinois. 1962. 52 pages in paper cover. Diagrams, map. \$1.00 postpaid.

The visitor to Acadia National Park will appreciate this small booklet, relating the geologic story of Mount Desert Island, prepared by a leading geologist. While the natural history of the Island is quite complex, Dr. Chapman has presented the discussion of its geology in a manner which is clear, concise, yet technically accurate.

The booklet is divided into two parts for convenience. Part I describes the over-all geologic history of Mount Desert Island through several major stages of its development: (1) the formation of sedimentary layers; (2) the intrusion of volcanic material into the region; (3) sculpturing of the Island by weathering and erosion; (4) scouring and deposition by glaciers, and (5) the most recent modifications of the shoreline by wave action. Several diagrams and a geologic map of Mount Desert Island serve to clarify points made in the text.

Part II of *The Geology of Mount Desert Island, Maine*, consists of a description and explanation of specific features and localities on the Island. Notable examples of the geologic phases and features which may be observed from roads and trails are discussed in this section. Thus, the visitor to Bar Harbor, Cadillac Mountain, Hunter's Beach Head, Otter Point, Thunder Hole, Seawall and other prominent features will have at hand a brief description of the origin of these features. The two parts of the booklet combined provide the visitor with a basic understanding of the evolution of the Mount Desert landscape. —H.A.R.

PUBLIC OUTDOOR RECREATION RESOURCES IN TENNESSEE. Tennessee State Planning Commission, Nashville 3, Tennessee. Publication No. 322, 1962. In three parts.

This three-volume report presents the results of a two-year study of a State-wide recreation plan for the State of Tennessee. It surveys and evaluates public recreation facilities, present and future, at the local level in the State. It

also outlines "available legislative and administrative procedure by which the State and Federal governments can aid the municipality and the county in the establishment and operation of a local program." Another objective of the study is "the review and formulation of guidelines and standards of operation applicable to the local community." Part I consists of a survey and recommended standards. Volume I of Part II is a compilation of maps which—together with the text of Volume II—constitutes an inventory and plan for development of public outdoor recreation in Tennessee.

At a time when the President of the United States has expressed concern with the lagging economy of the Appalachian Mountain region—including Tennessee and seven other States—and has prescribed a program of assistance, a report of this sort is potentially of great value beyond the boundaries of a single State. It is to be hoped that the other Appalachian States have such studies in progress, and have the opportunity to present their findings to the Federal agencies concerned with accelerating the economy of the region; for recreation can be lucrative, and most assuredly would be in this great scenic area. —J.H.

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MONUMENT VALLEY mapped, thorough, accurate, interesting. Publication number 10: 50¢ each from the publisher, Robert M. Woolsey, RFD 2, Box 92, Reeds Ferry, New Hampshire.

Your National Parks Association at Work

Conservationists Confer with Agriculture's Secretary Freeman

During late May, representatives from eight national conservation organizations met with the Agriculture Department's Secretary Orville L. Freeman in a conference sponsored by the National Parks Association for discussion of two general topics of deep interest to the conservation world. The first of these dealt with the Department's attitude toward its use of pesticides; specifically, it was the feeling of the group that promotional activities in behalf of pesticide use on the part of the Extension Service, county agents, or any agency within the Department should be suspended, and that pesticide advertising and lobbying by public officials should cease. Further, the group felt, in cases where technical information on the use of pesticides is made available by Department personnel or agencies, it should be accompanied not only by a warning to follow label restrictions but by full information on possible or prob-

able deleterious effects on soil, produce, wildlife and people—in short, that such information should encompass all reasonably possible dangers. The position of the group in this matter was presented by Dr. Clarence Cottam, chairman of the board of trustees of the National Parks Association.

The second topic dealt with public hearings on national forest management matters, and the views of the group were presented by Anthony Wayne Smith, president of the National Parks Association. It was the consensus of the conservation group that full and open public hearings should be held on such questions as the opening of virgin timberlands; changing the status of wilderness, primitive and wild areas or their boundaries; management plans for recreational areas, long-term timber management plans, and the like.

Further, the group felt that field hearings should be held with ample public notice and opportunity to participate before a representative of the Chief of the

Forest Service in regard to plans developed by supervisors or regional foresters, and that departmental hearings should be held before a representative of the Secretary on proposals formulated by the chief. The group also felt that the Secretary's decision should be made after consideration of the findings and conclusions of the departmental hearing officer in regard to the chief's proposals.

Secretary Freeman received the presentation with sympathy and interest; the group itself was composed of the following persons: Dr. Walter S. Boardman of the Nature Conservancy; Carl W. Buchheister of the National Audubon Society; Dr. Clarence Cottam of the National Parks Association; Dr. Ira N. Gabrielson of the Wildlife Management Institute; Thomas L. Kimball of the National Wildlife Federation; Anthony Wayne Smith of the National Parks Association; Dr. Spencer M. Smith, Jr., of the Citizens Committee on Natural Resources; and Stewart M. Brandborg of The Wilderness Society.

THE CONSERVATION DOCKET

Water Pollution. Shortly after this writing, public hearings on the general problem of water pollution will be initiated by the Natural Resources and Power Subcommittee of the House Government Operations Committee. Expected to run for at least a month, the Washington hearings will precede a series of field inspections and hearings in selected water basins around the country; evaluations of the 1956 Federal Water Pollution Control Act and its amendments of 1961 will be requested of witnesses as well as ideas for improving techniques for preventing or controlling water pollution.

Outdoor Recreation. S. 20 (Anderson & others) and H. R. 1762 (Aspinall). Acceptance by both houses of the conference report, issued by the committee in charge of adjusting the differences between the bills as passed by the House and Senate, paves the way for enactment of the legislation. Already operating under a Presidential order, the Bureau of Outdoor Recreation should shortly have the formal approval of Congress. The new bureau is responsible for Federal recreation studies and the coordination of Federal and State programs in the planning, acquisition and development of outdoor recreation resources.

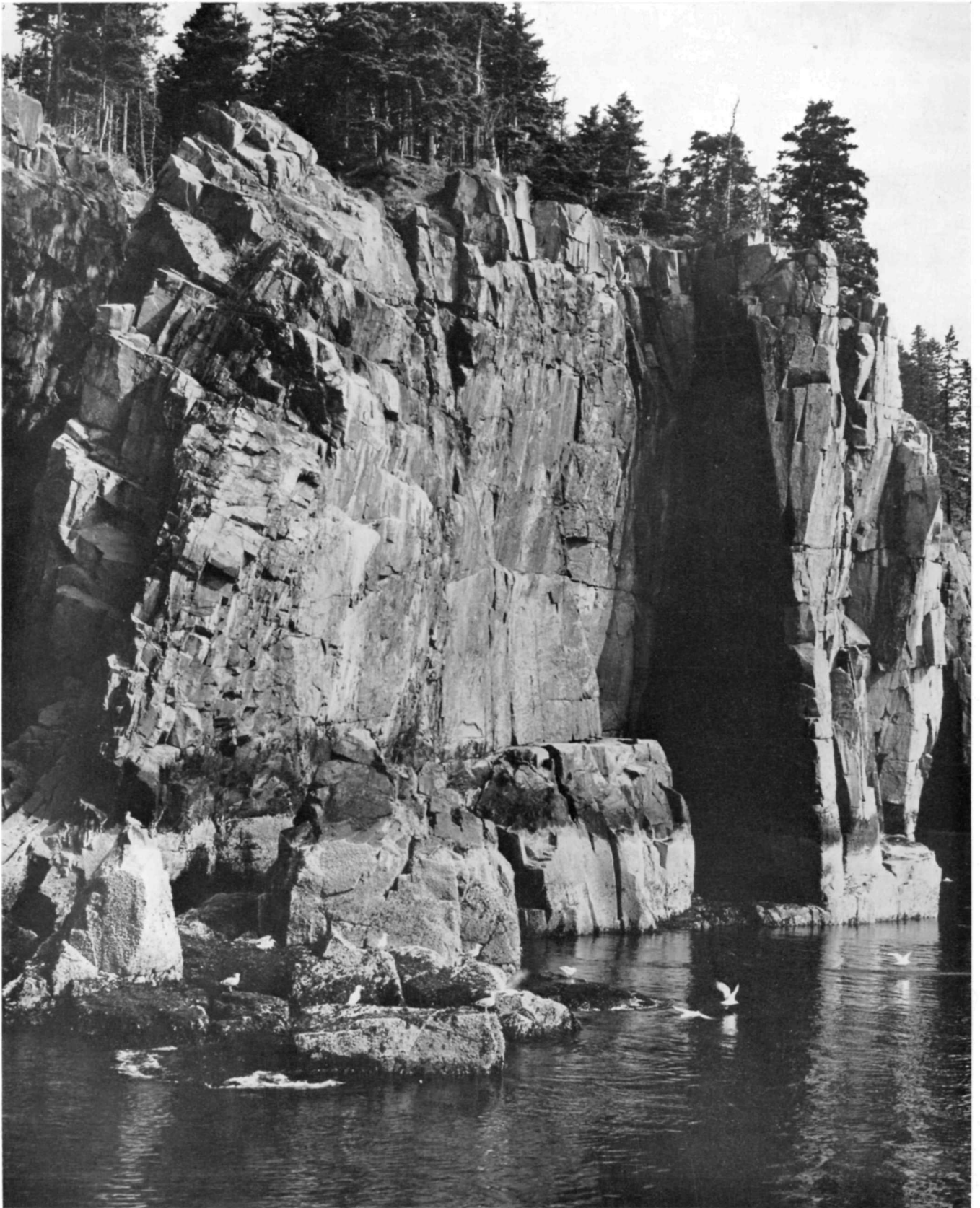
Oregon Dunes National Seashore. S. 1137 (Neuberger). Before prestime the National Parks Association will have participated, upon invitation, at a hearing for national organizations wishing to present their views on the bill. Earlier hearings were confined to the opinions of government witnesses and citizens of Oregon. Following a presentation by the sponsor of the legislation, Senator Maurine Neuberger, Secretary of Interior Stewart L. Udall and Associate Director of the National Park Service George B. Hartzog, Jr., lent their support to the bill. Of concern to some members of the Senate Public Lands Subcommittee at that time was the section in the bill granting authority to the Secretary to condemn commercial or industrial property if a use application were not filed within the first year following enactment, and the latitude of the

discretion which the bill would permit the Secretary in administering the national seashore.

Strip Mining Study. S. 1013 (Lausche, Scott & Hartke) and H. R. 934 (Saylor). Almost identical bills calling for an Interior Department report to Congress on a proposed departmental survey of strip-mining operations in the United States. The Senate version calls for Interior Department cooperation with appropriate Federal and State agencies, including the Department of Agriculture; the House version refers only to the State agencies. The survey would include studies of the effect of mining operations on highway programs, scenic areas and fish, wildlife and other natural resources.

Appalachian Highlands Development. H. R. 5525 (Perkins). In April, President Kennedy proposed a program of economic development for the eight States constituting the Appalachian Highlands, where unemployment is particularly serious. Coincidentally, Congressman Perkins introduced this bill to provide for a resource and economic development program for the area. Its four titles call for a joint State-Federal Commission to formulate policy, agreements between the Agriculture Secretary and property owners for needed changes in land use, the acceleration of public works programs, and the amendment of the Watershed Protection and Flood Prevention Act.

Spruce Knob-Seneca Rocks National Recreation Area. S. 1022 (Byrd & Randolph). A one-hundred-thousand-acre recreation area, administered by the Secretary of Agriculture under national forest regulations, would be established within and adjacent to the Monongahela National Forest in West Virginia, to lie primarily in the drainage of the South Branch of the Potomac River. The legislation appears to follow the fourth principle of cooperation agreed upon by the Secretaries of Agriculture and Interior in February of 1963; that each department will undertake the full development and management of the recreation lands presently under its jurisdiction.



Spruces grow to the very edge of the jointed granite cliffs of Acadia National Park on Mount Desert Island, Maine. Barnacles and marine vegetation are awash at the foot of a barrier which must finally fall before the attack of the sea.

*A National Park Service photograph
by Jack E. Boucher*