NATIONAL PARKS *Magazine*

The Canyonlands of southeastern Utah:
a scene in the nation's newest park

November 1964

The Editorial Page

Visitor Access to the Seashores and Parks

ONE OF THE MANY REFRESHING QUALITIES of Interior Secretary Stewart L. Udall is his willingness to sponsor public discussion of genuinely creative ideas. His most recent suggestion is that small buses be used to take sightseers around the National Capital, at a reasonable fare good for the day; passengers would get on and off where they chose; they would leave private cars at outer parking lots.

Downtown Washington has been experimenting with small buses for shoppers in the central city at a nickel a ride. There has been some Federal cost-sharing; if this needs to be continued, it should be, because the experiment may unlock many problems.

The minibuses are but one more application of the indispensable idea of public transportation, misnamed mass transportation; the essential point is that people should be able to escape the burden of their own private cars, and the nuisance and danger of other people's private cars, when they visit the central city.

The sensible alternative to the family-car traffic jams is public transportation, whether operated by public utilities regulated by commissions, or by public agencies, or by concessioners under public contract.

The public transportation idea is equally applicable to the national seashores; indeed, even to the great national parks and monuments; and we hope the Secretary will extend it to those places.

We present in this issue a simple plan for the management of the proposed Assateague National Seashore which will protect the seashore in its natural condition, and yet encourage compatible outdoor recreation.

Water access is the essence of the idea. Visitors would cross the beautiful Sinepuxent Bay by motorboat or sailboat, docking at a public marina at the north end, near a proposed State park. Public motor-launch transportation, operated by concessioners, would supplement private boats. The launches would dock at several places along the bay side of the island, but not in the wildlife refuge which lies south of the park; they would connect with the small park operated by the Chincoteague-Assateague Bridge Authority at the southern end of the island, and with the town of Chincoteague on the mainland. Private motorboats and sailboats would also use the landings along the bay side of the seashore; these landings would consist of small docks, adjacent picnic grounds, and sanitary facilities; most people would walk from these landings to the seaside beaches. There would be no roads, motels, or parking lots, and no automobiles, on the national seashore; automobiles would be confined to the State park, served by the recently-completed bridge from the mainland. A lodge would provide the overnight accommodations, required by proposed legislation, near the main marina at the north end of the national seashore.

One of our major articles last month discussed the proposed Cape Lookout National Seashore. Preliminary plans for Cape Lookout call for water access, except for the southernmost island, Shackleford Banks. We see no reason to admit the private automobile to Shackleford Banks; the water access idea should govern here, as at Assateague.

Water access to the seashores has the further great advantage that it will give many small communities along the mainland an opportunity to participate in the outdoor recreational development of the general area. Water transportation can take off from many points on the mainland, and motels can be developed there; and the crossing can be made to a variety of places on the bay side of the island.

As Lewis Mumford and others have pointed out, there is probably no way to save our central cities except by excluding the private automobile; reliance must be placed on public transportation in the form of streetcars, buses, subways, and taxicabs; the shopping or sightseeing shuttlebus is the latest excellent refinement of the public transportation idea.

Pleasant public transportation must rescue us from the deadly traffic which is destroying our cities physically and culturally.

We need as a nation to make some clearcut decisions in these matters. Like the downtowns, the national seashores are places from which the private automobile might well be completely excluded; at least the public should not subsidize a private automobile invasion of these areas by providing blacktop roads and parking lots.

But the implications of these ideas extend beyond the seashores, to the great national parks and monuments. This Association proposed some years ago that public transportation in the form of comfortable buses operated by concessioners be provided where automobile congestion tended to become a problem in the parks.[1]

This proposal was endorsed in principle by the National Park Service, but has never been honored to any significant extent in action.

[1] Statement on Visitor Accommodations in the National Parks and Monuments. *National Parks Magazine*, July, 1960, p. 2.

The present trend in national park management, comprised in the new master plans which may zone the parks into so-called primitive areas (wilderness) on the one hand, and various recreational classifications on the other, represents a retreat from wilderness protection in the parks toward occupation by the private automobile; toward overdevelopment in the form of campgrounds, trailer courts, and perhaps auxiliary structures, and certainly in the form of blacktop roads, turnoffs, and parking lots.

The crucial problem presented for solution is the congestion occasioned by the private automobile in the parks; the new master plans apparently look toward the planned retraction of wilderness in the parks and the distribution of automobile facilities throughout the remainder of the parks.

The correct solution, in our judgment, lies not in a retreat of this kind before the private automobile, but in the substitution of well-considered public transportation wherever feasible; and beyond that, in placing a definite limitation on private automobile visitation within the parks, directing it in some reasonable measure toward the surrounding national forests, public lands, and recreational facilities on private lands.

This will call for planning of a broader scope than has ever before been attempted; it will call for planning cooperation among several government agencies; but this is not too much to expect, for the beauty of our great national parks and monuments is at stake, and the protection of that beauty, within the limits of compatible, but not excessive, visitation, is the responsibility of the Federal Government.

Is it too much to suppose that we might establish parking facilities near the visitor centers in our great national parks, but just outside the boundaries of the parks, from which attractive and pleasant public transportation would move the crowds to the main points of interest within the park and to the day-use facilities there?

We strongly suspect that great numbers of people would be happy to change from the family car to attractive and inexpensive public transportation. The popularity of minibus shopping in downtown Washington suggests this; likewise, the popularity of Secretary Udall's idea for sightseeing minibuses in the Capital.

One other idea might well be added: that the electric battery and motor be substituted for the internal combustion engine in public transportation facilities for the seashores and parks. Public transportation could well be noiseless and stenchless; this would be an achievement which the private car can never match.

—*A.W.S.*

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Cover illustration courtesy Interior Department, National Park Service
M. Woodbridge Williams

The front-cover scene was taken from a point not far south of Junction Butte near the center of the newly created Canyonlands National Park in southeastern Utah (map, page 17). The camera is looking to the southwest across the course of a small tributary of the Green River, which here lies in the depths of Stillwater Canyon; both river and canyon are unseen in the broken terrain of the picture. Sandstone sculpture in the foreground faithfully preserves the cross-bedding of dunes that once marched across this country in the middle ages of earth-history.

The Association and the Magazine

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

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

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

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Assateague Island: Challenge in Park Planning

The National Parks Association looks at a proposed national seashore and suggests a plan for its management and development

An arm thirty-three miles long, with sinews of shifting sand, thrusts outward from the sea a short distance off the Maryland coast. Here the broad, surging Atlantic rises, rolls shoreward, and crashes in a foaming, frothing jumble. Assateague Island, born of storm, throws back this oft-flung and open challenge of the sea which gave it birth.

A more subtle challenge hangs over the lonely barrier beach today—the question of ownership. Will private ownership and development restrict the use of the island to a relatively few people, or will Federal protection insure perpetual access for all Americans?

Assateague, like many of the barrier beaches that fringe the Eastern seaboard, possesses a background rich in color and variety. Long ago several communities flourished on this sliver of sand, which once supported a forest cover. Shipwrecks provided a livelihood as the island people rescued survivors and salvaged what they could of cargoes.

Formerly part of a peninsula which extended into southeastern Delaware, Assateague was given geographic independence by a 1933 storm which scoured an inlet just south of Ocean City, Maryland. The forests, the communities, and the people were all gone long before this stormy birth, and today the almost complete lack of development is one factor that makes the island so valuable for preservation in its natural state.

The broad beach slopes gently upward from the sea and is backed by uneven ranks of low dunes. In many places these dunes are in the process of rebuilding themselves, having once been bulldozed to facilitate the building of summer homes. Hardy beach-grasses serve as pioneer species in the foredune ecology. Their role is vital, for they not only prevent erosion of the dunes, but aid in the building process as well. Toward the bay side, the vegetation provides more cover; there one finds succulent meadows of marsh-grass punctuated by stands of pine.

Wildlife of the Island

The island's wealth of bird life ranges from the ubiquitous sea-gulls to the black ducks which frequent the bay to feed on the abundant aquatic life. Thousands of migrating ducks, geese, and swans make use of the area as a feeding and resting stop during spring and fall migrations. The famous wild ponies of Chincoteague are found largely within the boundaries of the Federal wildlife refuge on the southern end of the island. Every year there is a roundup of these small horses and a number of them are sold. Rabbits and foxes are found throughout the island, and it is also habitat for the tiny, introduced sika deer.

Assateague's sea front is divided between Virginia's Accomack County, covering nine miles, and Worcester County in Maryland, in which the remaining twenty-four miles lie. The entire Virginia portion is in Federal holding—the Chincoteague National Wildlife Refuge—administered by the U.S. Fish and Wildlife Service.

In 1950 the fifteen miles of island just north of the Federal refuge was subdivided. The subdivision, Ocean Beach, Inc., consists of 5,850 lots owned by about 3,200 individuals; however, only a few residences actually have been constructed because of several difficulties. Most importantly, access to the island has, until recently, been entirely by water. The Maryland State Department of Health has refused to grant permits for construction of septic tanks on most lots because of the low elevation. In addition, the dunes do not provide sufficient protection from the sea, so that in heavy storms large portions of the island are awash.

About fifty summer homes had been constructed on Assateague Island by March, 1962. At that time a severe storm lashed a large sector of the northeast coast. Only eighteen Assateague buildings survived, and of these, seven were damaged. However, despite such difficulties and dangers, property owners and Worcester County officials still press for private development.

Bordering the subdivisions on the north is a two-mile acquisition of the State of Maryland which is being developed as a State park. The northernmost section of the island is comprised of large private holdings.

A bridge built by the Chincoteague-Assateague Bridge Authority was opened in 1962 to provide the first direct link with the mainland. A free lease from the U.S. Fish and Wildlife Service to the Authority resulted in construction of the bridge, a road to ocean parking areas, and some modest day-use recreation facilities in the southern portion of the refuge. A sec-

ond link is the Assateague Bridge, constructed by the State of Maryland. This bridge became available to the public late in September of this year, and leads from the mainland into the State park. A third means of public access is a ferry which crosses Sinepuxent Bay a short distance south of the new Assateague bridge.

The National Park Service surveyed the Atlantic seaboard in 1935 to identify sites suitable for preservation for public use; Assateague Island was one of the twelve areas studied. No action was taken, however, on several bills introduced in Congress during the 1940's to place the island in public ownership. Another survey was conducted in 1955. By then, token development had occurred and the Park Service did not recommend acquisition of Assateague.

The Bureau of Outdoor Recreation, in its study of the island, cites two reasons for the increased interest in the eventual ownership of Assateague Island.[1] The first was the ruinous toll exacted by the March, 1962 storm. Second was the prediction of an increasing demand for public recreational facilities as opposed to a vanishing supply of available sites. This situation was also pointed up in the well-known Outdoor Recreation Resources Review Commission report of 1962.

The Population Picture

A population of nearly four million lives within about a 150-mile radius of Assateague, including the metropolitan centers of Washington, D.C., and Baltimore, Maryland, as well as Wilmington in Delaware and Norfolk in Virginia. Extension of this radius to 250 miles brings in Philadelphia and New York City, and encompasses a total of nearly 34 million people.

In its report, the BOR calls the surf fishing in this area "outstanding," with bluefish, weakfish, striped bass and other sport fishes abundant. Swimmers, sun-bathers, and beach explorers will find Assateague a delightful island retreat. For those of a gastronomic turn of mind, the island is an excellent place for crabbing and digging clams.

In its natural condition, Assateague could thus provide a broad spectrum of recreational pursuits. With some 33 miles of ocean-front, outdoor recreational activities could be followed under reasonably uncrowded conditions. The island contains roughly 18,000 acres of Atlantic shore property, a resource which is rapidly disappearing. A recent survey shows that only seven percent of the entire East Coast is not in private holdings.

Man can blame himself, in part, for the dwindling supply of sandy beaches along this segment of coast. Jetties were built on either side of the inlet near Ocean City, Maryland, after the 1933 storm. These halted the southward transportation of sand by longshore currents and resulted in a growth of beach at Ocean City and the "starvation" of the northern Assateague coast. This sand-starvation has been so severe that the island's shoreline has receded some 1,000 feet over a thirty-year period. Some type of beach stabilization on Assateague is essential to prevent a continued westward migration of island sand into the bay; otherwise the Maryland mainland will one day become the seacoast.

Any extensive home-building south of the State park would require the construction of protective dunes. Estimates of the cost of such protection range into the millions of dollars, for protection of Ocean Beach (that portion of the island lying between the State park and the Federal refuge). The Corps of Engineers could provide such dunes and pay half of the cost if the beach is made available to the public. Private owners would pay the remaining costs. The Federal government would, on the other hand, pay seventy percent of the total if the land is in public ownership, either State or local. It has been pointed out by the BOR that if there is a large Federal expenditure for protective measures, it would seem best to insure the distribution of these benefits to the public as a whole by management of the island as a national seashore.

A bill introduced by Senators Brewster and Beall of Maryland in the fall of 1963 would have created the Assateague Island National Seashore to preserve the island in its natural condition. However, Representative Morton of Maryland, whose district includes Worcester County, presented a proposal the following month which would have allowed construction of three communities on the island.

Under either Federal or private ownership long stretches of Assateague Island's Atlantic frontage will require beach erosion control and dune stabilization work. Some stabilization work has already been done by private property owners, as in the Ocean Beach sector (above). In the picture below, taken just south of the proposed State park, dune grasses begin to cover an area once bulldozed flat by a developer. Photographs taken September, 1964.

[1] *Assateague Island and Vicinity;* Bureau of Outdoor Recreation, April, 1963.

Parts of Assateague Island may be inundated and sometimes obliterated by heavy coastal storms. The picture above, taken north of the proposed State park, shows an area washed out by the great storm of March, 1962. September, 1964.

In May, 1964, Morton followed up his original bill with another designed as a compromise measure. This called for a square mile of the Federal part of the island to be developed to provide "suitable overnight and other public accommodations." During 1964 Senate hearings on the Brewster bill, this compromise was accepted by Senator Brewster and Secretary Udall.

Public hearings will very likely be held in the spring of 1965, when consideration will focus on an 89th Congress version of the seashore proposal.

Should Assateague Seashore eventually materialize, the management of the island would present a further challenge to the Park Service. An Assateague Seashore could serve as a management model for similar seashores that might be acquired in the future—Cape Lookout, for example—or even for seashores already existing.

A plan which would protect the natural beauty of the island while providing for outdoor recreation would include the following guidelines for the management of Assateague Island as a national seashore:

The Federal portion of the island should be kept roadless, and all access to it should be by boat. For this purpose, there could be a marina constructed adjacent to the State park. Visitors could then use private boats, or arrive by public motor-launch from the mainland. Such water access would provide city residents with a leisurely, lulling 45-minute boat ride as an introduction to the seashore. Long lines of cars, laden with irate families waiting an opportunity to cross the bridge, would offer an unhappy contrast to the bobbing arrival of boats.

Numerous back-bay towns could benefit economically by serving as bases of operations for water traffic to the island. It is unlikely that these towns would benefit as greatly from road-access travelers, who would very likely congregate at the bridgeheads. Only such vehicles as are required for administration or emergency use should be permitted on the Federal portion of the island. All private vehicles that crossed the Assateague Island Bridge should be confined to the State park; the State might eventually need to limit vehicular access. This park management technique is neither arbitrary nor without precedent—Isle Royale National Park, for example, is roadless and still free of motor vehicles. Were a road to be built on Assateague, there would follow the immediate need for turn-arounds and parking lots. Eventually, Assateague would become largely an asphalt island.

Nor should any concession be made to drivers who maintain that their vehicles need no road; or who feel that four-wheel-drive is a passport to all public lands. The dunes on Assateague are already scarred with the tracks of such vehicles. The danger in allowing this activity lies not only in the esthetic damage done, but also in destruction of precious dune vegetation. Once this cover is gone, the dune itself may soon follow into oblivion.

The overnight accommodations which will very likely be called for in future legislation should be provided by a lodge located near the northern Federal marina. Such a lodge, available to private boaters and persons brought by public launch, would be enhanced in beauty because it would require no vast expanses of parking areas.

Although the area would be kept as natural as possible, it still would be made available to the public. Visitor circulation could readily be accomplished by motor-launch service which would run the length of the island on the Chincoteague Bay side. Docking facilities for both the launches and private craft would be provided at perhaps five locations in the present Ocean Beach section and another at the Chincoteague Bridge. None should be set up in the wildlife refuge.

Toward Less Asphalt

Such a common-carrier circulation system would complement a recent suggestion by Secretary Udall which looks toward lessening the need for more parking lots around leading tourist attractions in the nation's Capital. Surely the wisdom which would slow the spread of asphalt in Washington (and other cities) could prevent its mass introduction to the seashores!

Only such facilities as are required to allow use of the existing recreation potential should be provided. These could include picnic and sanitary facilities, located at the docks previously mentioned. Swimming pools, tennis courts, and golf courses are not in keeping with use and enjoyment of the island's natural attractions. All strucsures should harmonize with the natural environment in regard to architecture and building materials.

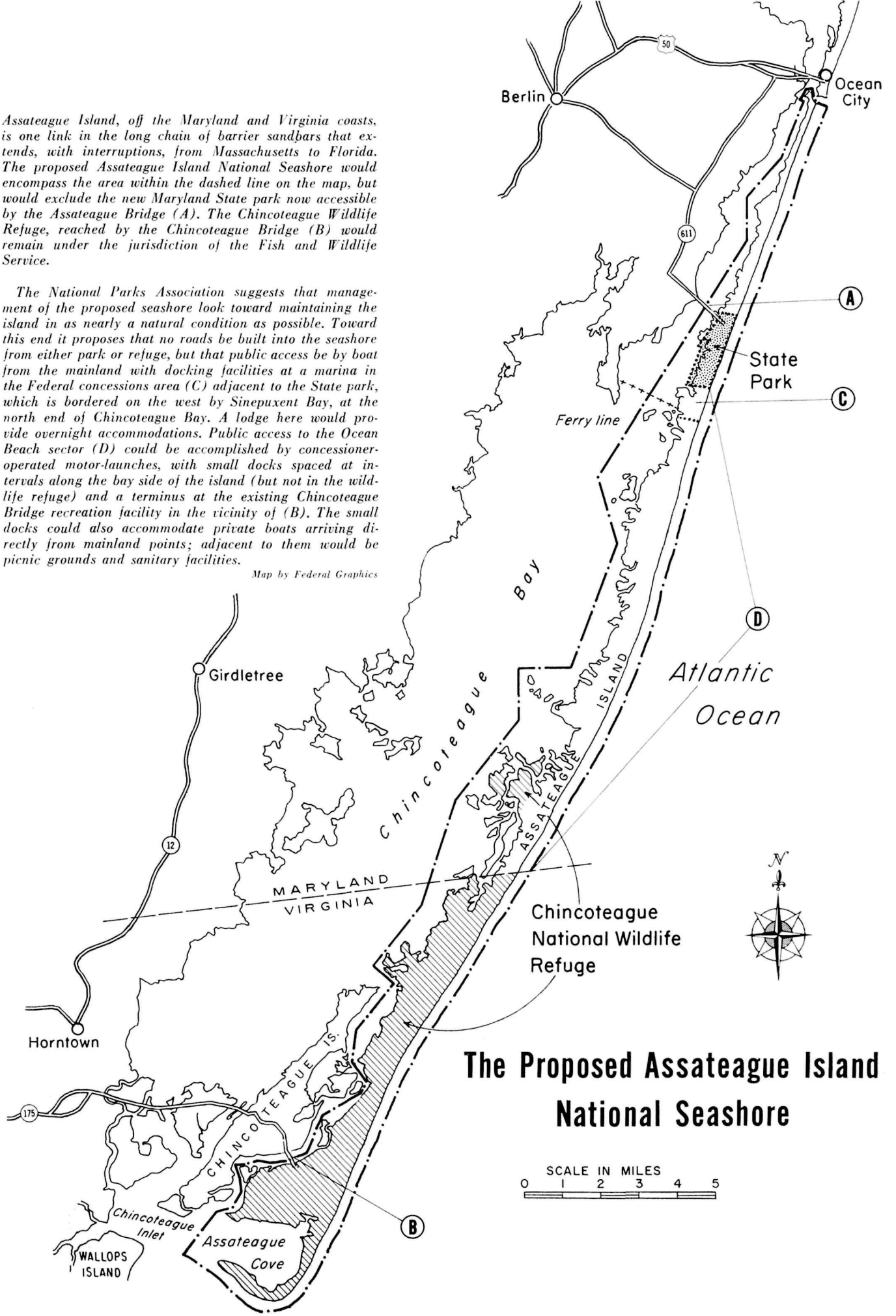
A system of handling developed residential property should be established for the few people presently dwelling on the island. The owners might agree to easements that would prevent further development, and the National Park Service would have a first option to buy at fair market value should the owner decide to sell.

In the prospective Assateague Island Seashore, maintenance of the natural conditions beyond the concession area should be the primary management principle. ■

Assateague Island, off the Maryland and Virginia coasts, is one link in the long chain of barrier sandbars that extends, with interruptions, from Massachusetts to Florida. The proposed Assateague Island National Seashore would encompass the area within the dashed line on the map, but would exclude the new Maryland State park now accessible by the Assateague Bridge (A). The Chincoteague Wildlife Refuge, reached by the Chincoteague Bridge (B) would remain under the jurisdiction of the Fish and Wildlife Service.

The National Parks Association suggests that management of the proposed seashore look toward maintaining the island in as nearly a natural condition as possible. Toward this end it proposes that no roads be built into the seashore from either park or refuge, but that public access be by boat from the mainland with docking facilities at a marina in the Federal concessions area (C) adjacent to the State park, which is bordered on the west by Sinepuxent Bay, at the north end of Chincoteague Bay. A lodge here would provide overnight accommodations. Public access to the Ocean Beach sector (D) could be accomplished by concessioner-operated motor-launches, with small docks spaced at intervals along the bay side of the island (but not in the wildlife refuge) and a terminus at the existing Chincoteague Bridge recreation facility in the vicinity of (B). The small docks could also accommodate private boats arriving directly from mainland points; adjacent to them would be picnic grounds and sanitary facilities.

Map by Federal Graphics



The Proposed Assateague Island National Seashore

Conservation *and the* Camp Fire Girls

Text and photographs by the Camp Fire Girls

"I GIVE MY PLEDGE AS AN AMERICAN to save and faithfully to defend from waste the natural resources of my country—its soil and minerals, its forests, waters and wildlife." With solemn young faces, a half-million girls ranging in age from seven to seventeen have declared their promise to help protect the natural resources of the nation by making this pledge when they became members of the Camp Fire Girls.

An integral part of the philosophy of the Camp Fire Girls organization is the conviction that the beauty and bounty of nature must be combined with an obligation to learn, to absorb the importance of natural resources, and to help preserve nature in its many manifestations.

Curious Camp Fire Girls explore the mysteries of seaweed as their adult leader provides some background information.

Camping as one of the earliest Camp Fire Girls activities began with Dr. Luther H. Gulick, organization founder, and his family back in 1910 at their own camp at South Casco, Maine. Conservation of nature was important even then; it continues to be a major preoccupation and an important influence on the programs of both the girls and their adult leaders in the organization.

With the growth of American industrialization and the increasing need for conservation in many forms, the efforts of the early days have become more varied, and the responsibilities assumed by the girls have become greater. In the early days, tree planting and hacking out trails constituted the major efforts of the girls. Today, however, when emphasis on wide-scale conservation is a national concern, Camp Fire Girls are carrying their work from the camps to the metropolis.

Perhaps it is their camp experience and intimate communion with nature which have made Camp Fire Girls more aware of their obligation to protect the natural resources of the country. Added to their enthusiasm and interest is the additional stimulus of guidance by experts in the conservation field. At Camp Kiwanee, for instance, which is conducted by the Greater Boston Council, hundreds of evergreen trees which were the pride of the camp were destroyed

Lessons in appreciation of the intimate relationships between man and nature start early for members of the Camp Fire Girls. A romp in the woods can become a fascinating adventure for a youngster who is gently reminded, by informal discussions and on-the-spot experimentation, that the smallest of nature's wonders contributes to the balance of a natural area. In the photograph below a Camp Fire Girl creates her own artistic balance from natural materials found on a forest hike.

by Hurricane Carol, which struck them in 1954. State and local conservation experts were consulted for advice. In three years of following that advice, the girls replanted 2,000 pine, cedar, and hemlock seedlings during the camping seasons. The trees were later staked, and planted areas were roped to protect them during the early period of growth. At one time during a drought, each girl chose a seedling and watered it after every swim by dipping her bathing cap in the lake and carrying the water—in the cap—to her seedling. Now the trees match the girls in height, and are affectionately referred to as "our babies."

Another problem at Camp Kiwanee was soil erosion along the edges of the lake and over portions of the sloping areas of the campgrounds. Again conservation authorities were consulted. They suggested a cover of wet sawdust; for the next seven years more than forty tons of wet sawdust was used to fill in gullies around the camp. Erosion has now ceased, and the ground is well covered.

Near Bakersfield, California, the Kern County Council of Camp Fire Girls, with the help of the U.S. Forest Service and the County Parks and

Recreation Department, set up a nature trail. "The result of this trail," according to the camp director, "was to rouse and focus the girls' attention on the varied and interesting phenomena of nature in this geographic area."

At camps today, considerable attention is given to the beauty and safety of the campsite. Girls are helped to use the best ways to achieve the desired results; in making trails, for example, they are taught to retain as much as possible of the natural beauty of the area. With hatchet, shears, saws, and axes, they carve out a trail while leaving the area mainly undisturbed for hikers and bird-watchers.

Tree planting, erosion work, and construction of shelters for birds and mammals are an integral part of the Camp Fire Girls group and resident camping summer program. In the winter their efforts are turned to conservation in urban areas.

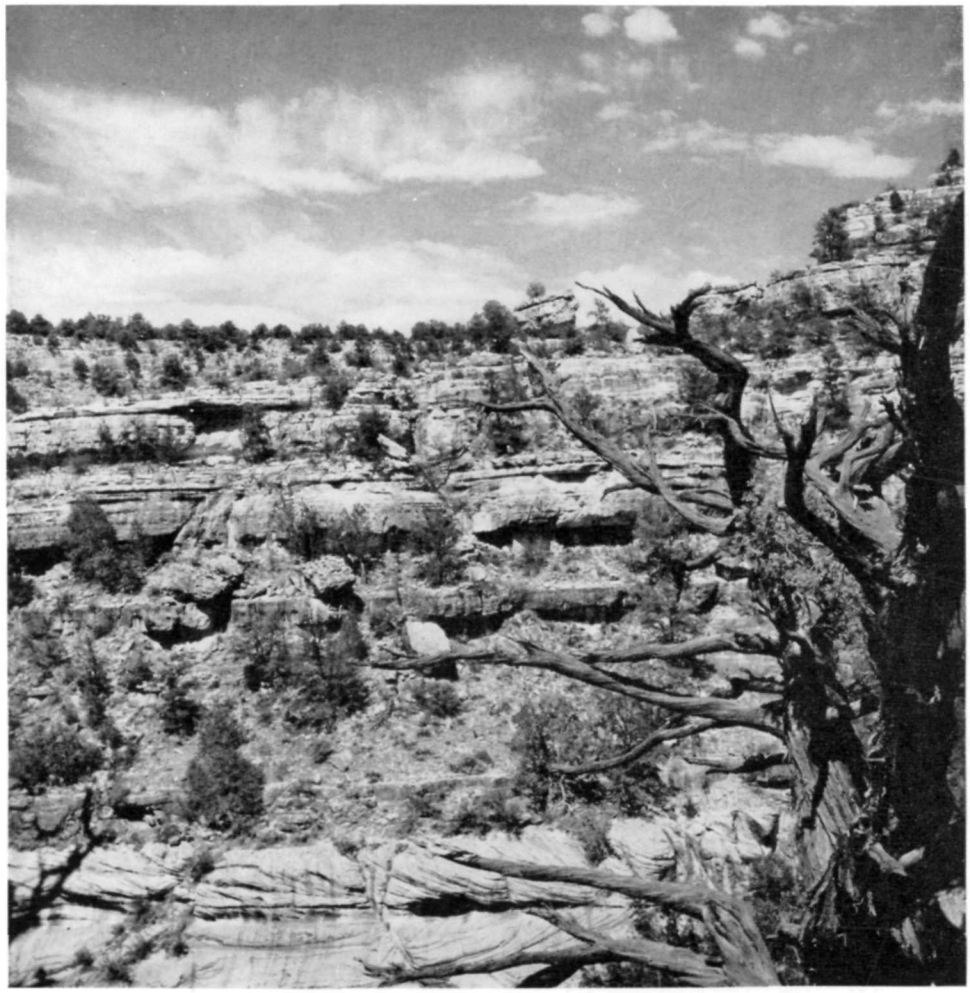
Seeking Recreation Sites

Big cities receive attention from the Camp Fire Girls in many ways. Recreation areas are badly needed in congested low-income areas in almost every city, and to help ease the problem Camp Fire Girls have made surveys of hundreds of city blocks to find possible recreational sites. They have also conducted vast and effective anti-litter campaigns. The girls have made hospital authorities realize the need for plantings to relieve the boredom of patients. They have made many city officials aware that their shade trees were diseased; catastrophe was averted many times when Camp Fire Girls conducted a tree census, followed by reports concerning the location and extent of the damage. In some places, they started new trees from seeds and seedlings. Parks in Washington, D.C. and Coos Bay, Oregon, were among those replanted by the girls.

Mammal and bird life, too, have received the care and attention of Camp Fire Girls. Bluebird houses, wood-duck houses, dove nests, and bird feeding trees have been constructed by the thousands for birds which are beneficial to crops.

In all parts of the country, Camp Fire Girls are learning the actual and practical as well as the esthetic values embodied in the conservation pledge, and are making material contributions toward the conservation of this nation's treasure of natural resources. ■

When conservation problems arise, the girls consult experts in the field. Here a Forest Service employee shows seven-year-olds how to plant seedlings.



A Sinagua cliff-dwelling on one of the walls of Walnut Canyon blends into a background of Kaibab limestone. Ruin is in center of photograph just to left of dead tree.

Walnut Canyon National Monument

By Ida Smith

Photographs by Moulton B. Smith

WALNUT CANYON, IN CENTRAL ARIzona, is one of the national park system's lesser-known but nonetheless intensely interesting archeological monuments. Its cliff-dwellings—built during the early Pueblo period of Southwestern Indian culture—are situated on the sides of a steep "island" in the canyon and also on ledges on the canyon walls. The dwellings encircling the island were built in the upper parts of the sheer cliffs, beneath overhanging rock ledges. A side-canyon, leading in from the north and nearly on the level of the cliff-dwellings, gave access to these homes of prehistoric times. Today a paved foot-path circles the island at the level of the ruins, and a visitor to the monument may view them, walk through a floral life-zone that includes plants like the ponderosa pine, juniper, and Douglas fir, and a few minutes later find himself in another zone of cactus and yucca.

Did these prehistoric puebloans live in the desert section in the winter and among the cool ponderosa in summer?

At Walnut Canyon an inconspicuous self-guiding trail (with keyed booklet) drops 185 feet by ramp and stairway to lead the visitor around the "island." Most of the Sinagua dwellings were constructed under protective ledges, as that in the picture below.

"They may have, but we do not know," said Monument Superintendent John F. Turney. "I have seen snow lie thick in the northern section, and have walked around to the desert area where the drifting flakes melted almost as fast as they reached the ground."

The people who inhabited the cliff-dwellings nine hundred and more years ago were the Sinagua Indians—the "people of little water." They are believed to have migrated from the Mogollon Indian groups to the south and east. Beautiful Walnut Canyon, with its continuous stream of water, must have seemed a delightful place. Walnut Creek came out of the forest south of today's town of Flagstaff, tumbled over the rock formation we now know as the Kaibab limestone, and down into the Toroweap sandstone to a "horseshoe" bend, coming back to almost meet itself at the open end of the horseshoe. In the center of the "shoe" rose the eroded island with its Toroweap base and its Kaibab top. Today the creek is dry. The water was dammed in 1904 to form Lake Mary, a part of Flagstaff's water supply. Most of the vegetation along the former stream bed died out, save for a few box-elder trees and shrubs; but a large variety of plant life grows on the canyon slopes.

The Sinagua were Stone Age people, but were expert farmers, craftsmen, and architects. They grew their corn, beans, and squash on the plateau, back from the rim of the canyon. The area was covered with rich, moisture-holding volcanic ash, which contributed to successful dry-farming.

Farming was the Sinagua's principal livelihood. Each day he climbed the arduous trail to the canyon's rim, and walked two or three miles to the north to till his crops, using a sharp stick and a stone hoe. Plants like the snowberry, serviceberry, currant and elderberry furnished seasonal additions to garden stuff. Salt was obtained from one of the aboriginal salt mines—possibly that near present Camp Verde—and was probably traded for other minerals. Ruins on the rim of the canyon indicate that at one time the Sinagua had lived there also, and in the vicinity there are pit-house ruins of an earlier people that date back to about A.D. 700, or into Pueblo I Culture.

Among the Sinagua's crafts were black and white and smudge-type pot-

tery; baskets and other utensils made of yucca; ornaments of turquoise obtained from ancient Arizona mines; shells from the coastal trade; and stone objects from a prehistoric quarry in the Chino Valley. They made feather robes, and did some cotton-weaving. It is thought that they obtained cotton by trade, although it is possible that they grew it at a lower elevation.

The Division of Work

"The women did most of the building," says Ranger-Naturalist James R. David of the monument. "They built while their menfolk farmed, laying stone walls with a mortar of yellow clay. In one room the handprints of the builder are still preserved in the plastered wall.

"The men undoubtedly helped with the lifting of heavy objects. On top of a five to six foot, double wall are stones as large as a small automobile. How they were placed there, no one knows. The wall enclosed a plaza which could have been used for protection or for ceremonial dances. However, these hard-working, friendly puebloans kept their religion mostly within themselves rather than expressing it in ritualistic ceremonies. No kivas have been found in Walnut Canyon."

Tree rings, revealing a drought from A.D. 1276 to 1299, may explain why the Sinagua left Walnut Canyon, where they had lived from about 1120 to around 1300.[1] Indian legends lead us to believe that some migrated to the Verde Valley, some to what is now Hopiland, and others may have been ancestors of the Pimas.

Walnut Canyon itself is 400 feet deep. Its lower part is lined with cross-bedded Toroweap sandstone, a sedimentary rock that dates back some 200 million years into earth-history; it had its inception on an ancient flood plain which was covered with shifting sand dunes. During the Permian period the plain lay beneath a sea, which deposited on the dune sand the limestone we now know as the Kaibab. Ages later the plateau was lifted to its present elevation. The uplift initiated stream cutting, and this, with other agents of erosion, carved Walnut Canyon as the visitor sees it today.

The Walnut Canyon National Monument area was once called a "monument to vandalism" before the National Park Service took it over. Many of its artifacts, seen by early scientists, were subsequently removed by vandals. Even the walls of ruins were knocked down. The monument was established in 1915 to protect the unusual cliff-dwellings and the natural beauty of the area.

The self-guiding trail, which can be followed with the aid of a numbered booklet, drops 185 feet into the canyon by ramp and stairway, and visitors can see more than 100 of the 400 cliff-dwellings, interesting flora, and wild, beautiful scenery.

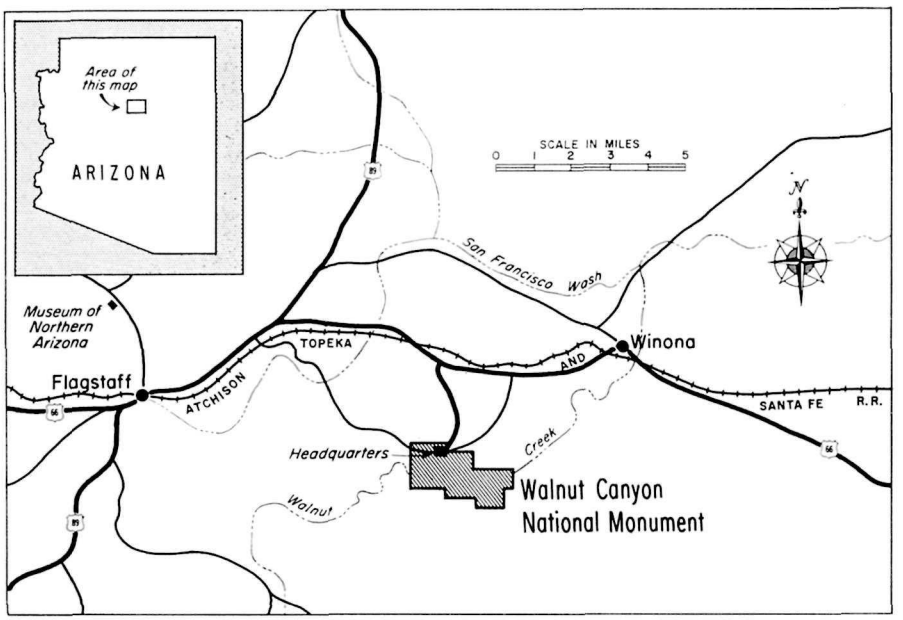
On a large, flat rock along the trail a tiny pinyon pine and an equally tiny juniper are growing in shallow sand pockets—but these may not be seedling trees at all. Scientific examination of one or two small trees growing in other restricted spots in the area showed them to be dwarfs more than a hundred years old. The black walnut, from which the canyon takes its name, grows in better soil pockets of the canyon walls; the tenacity of pinyon and juniper—as one can see along the canyon rim — makes them important rock-breaking tools in nature's long-range process of erosion and soil-making.

Visitors to the monument are greatly on the increase, and it seems to the writer that vandalism, in comparison with visitor increase, is diminishing. However, for the benefit of the thoughtless, this helpful suggestion heads the Walnut Canyon trail: "As the carving of names or the defacement of *any* object is prohibited by law, visitors who feel that they *must* mark up something, are requested to use this slab from which removal may be less costly to you."

Walnut Canyon is indeed an impressive place in which to wonder about the prehistoric peoples who created their own happiness without benefit of radio, television, automobile, or faucet. To try to preserve that quality of inner peace born of communion with nature, all things here, as in other national reserves, are protected for the enjoyment of today's Americans and those to come; and nowhere will one find a more dedicated group than the park rangers who guard them here. Monument headquarters houses a remarkable museum, built up with the artifacts that early-day vandals missed.

The monument is open the year around, although there are presently no restaurants or camping facilities. However, there are ample eating facilities and overnight accommodations in the vicinity; the entrance road to the monument is only seven miles or so east of Flagstaff, on U.S. Highway 66. This town also provides a convenient base for visits to a number of other Southwestern archeological monuments in the general area. ■

Federal Graphics



[1] The construction of some of the Walnut Canyon cliff-dwellings is dated by archeologist H. S. Colton at between A.D. 900-1100; the builders of that period were not, however, the Sinagua.

News and Commentary

New Motorboating Regulations

Many readers of this Magazine will remember the controversy that was touched off several years ago by a change in Park Service motorboating regulations; launching of motorboats into park and monument waters not directly accessible from existing park roads had, up to then, been prohibited. The 1961 change of regulations opened previously protected park and monument waters to motorboating with permission of superintendents, so that both motorboating pressures and the burden of decision-making were placed squarely on the shoulders of field personnel.

This state of affairs continued until mid-1964, when two new boating codes for the Park Service were promulgated by the Interior Department; one for national recreation area waters and the other for park and monument waters. The new boating code for the parks and monuments corrects the previous regulation, which was viewed by many conservationists as a very bad one, thus: "The launching and operation of any motorboat on waters which are not directly accessible by a designated public road is prohibited." This language is nearly identical with that which governed prior to the 1961 relaxation of regulations.

Conservation Foundation Established in Australia

A group of Australian conservationists and businessmen interested in the preservation of Australia's natural resources have recently joined to form the Australian National Conservation Foundation. Formation of such a nationwide conservation organization was first suggested by the Duke of Edinburgh during a visit to Australia in 1963. The Duke is President of the British National Appeal for the World Wildlife Fund. The Foundation, a private organization, will concentrate on encouraging and supplementing the activities of government conservation departments. The Foundation may eventually give financial aid to selected conservation projects in Australia.

Toward Olympic Coast Protection

The coastline of the United States, wild and rugged when this country was young, has now been largely transformed into a network of roads and freeways, with asphalt scarring the face of the land like wrinkles on an aging woman. Most Americans, who once gloried in the wilderness and went out to meet it on its own terms, have seemingly grown old too; they now prefer to do their pioneering from the seat of an automobile, safe from ocean winds, the sting of hot sand, and the curious stares of wildlife. Except for Alaska, practically the only remaining wilderness coast in this nation is the ocean strip of Olympic National Park, where eagles still soar above the trees, where the hiker, alone with his shadow, can hear the seals barking on the offshore cliffs, or watch deer and elk come down to the edge of the sea at twilight.

Lately there has been renewed agitation for a scenic parkway along this primitive coastline, to make it, as it is said, more accessible to park visitors. To show that the beach is sufficiently accessible now to anyone who cares enough about seeing it to leave his car for a while, Justice of the United States Supreme Court William O. Douglas and 160 wilderness-enthusiast friends—including at least twenty-five more than sixty years old—conducted a three-day hike along the Olympic coastline last August.

This is the second time Justice Douglas has led a protest hike along the coast. In 1958 he and his followers hiked from Cape Alava to LaPush; this year's hike covered the middle third of the coast, lying between the Hoh and Quillayute Rivers. The area is still roadless and in essentially the same condition as it was when seafarer John Meares sighted the highest glittering peak of the interior peninsula and named it Mount Olympus. Main purpose of the hike was "to point out to the public the fact the beach is presently accessible; and that although wild, it is not so remote that it can be visited by only a few hardy souls."

Conservationists hope that the hardy souls who traversed the coast with Justice Douglas have demolished the notion that a parkway along the Olympic beach would accomplish anything but destruction of a valuable national asset.

Commission Suspends Hearings

The Federal Power Commission recently suspended until December 31, 1966, any further consideration of applications by the Arizona Power Authority and the City of Los Angeles for licenses to construct the Authority's proposed Marble Canyon dam, upstream from Grand Canyon Park, or the City's Marble Canyon dam and Kanab Creek aqueduct scheme, which would have diverted some 92 percent of the Colorado's flow from Grand Canyon Park. The suspending order was issued shortly after President Johnson signed Public Law 88-491, which provides that no licenses be issued under the Federal Power Act for further development of the Colorado between Glen Canyon dam in Utah and Lake Mead in Arizona-Nevada during the period ending December 31, 1966.

A Voyageurs National Park?

The lusty voyageurs, who paddled, hiked, and fought their way over 3,000 miles of wild country from Montreal to Lake Athabasca in Western Canada to start westward expansion and cultural development in Both Canada and America, saw marvels of nature during their travels that most modern adventurers only dream of seeing. The wilderness character of part of the historic voyageurs route is now being preserved through Provincial and United States regulations as the Boundary Waters Canoe Area of the Superior National Forest in Minnesota, and Quetico Provincial Park of Ontario on the Canadian side. That part of the route which lies immediately to the west of the Quetico-Superior area and east of International Falls, which the Park Service describes as a "superlative area," is presently in the hands of loggers and other interests. To protect this area from destruction and to "preserve for the public a region of great scenic, natural and historic significance to the nation," the Park Service recently proposed a Voyageurs National

OUR RESPONSIBILITIES AND INFLUENCE ARE GROWING!

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

Regretfully, after long years of holding the line on dues, rising costs of operation and publication are forcing us to raise them beginning January 1, 1965. Basic annual dues will be $6.50.

We need your help greatly in the vital cause which concerns us all. You can help most by renewing promptly at the new rates, and raising your dues category if you can. See the outside back cover for details.

Park, to encompass 168,000 acres of land and water in Minnesota.

Official interest in the proposed park was stimulated in 1961 when the Minnesota Department of Conservation asked the Park Service to study the area. Investigators found miles of lush forests, rugged shorelines hugging shimmering lakes, sandy beaches and jutting cliffs, and a variety of wildlife that includes species nearly extinct in other parts of the nation. In July, 1964, the official proposal to establish a national park in the area was sent to public and private conservation groups for comment and review.

If established, the Park Service intends to administer the area to provide visitors with a "high quality (wilderness) experience, with essentially no scarring of the surroundings and a minimum of visible intrusive developments." Primary means of travel within the park would be by boat, to enable visitors to come in close contact with the primitive beauty of the area. Conservationists and others wishing to escape the noise and fumes of the seemingly ever-present automobile will certainly applaud the Park Service idea that here "The boat will replace the car as the primary means of transportation . . ."

Saving Historic Structures

In a recent issue of *The New York Times*, one observer of urban developments called New York "the city that saves nothing," including many of its important and charming historic landmarks. Although the National Trust for Historic Preservation has designated many New York structures as worthy of preservation, the old buildings are continually being sledged into oblivion to make way for dull rows of glass and steel office and apartment buildings. Latest victims are the ancient chateau-like Brokaw mansions on Fifth Avenue, which are to be demolished by apartment-house builders.

Legislation to prevent further destruction of worthy old buildings in New York has at last been sent to Mayor Robert Wagner by the city's Landmarks Preservation Commission, established in 1962. Under the proposed bill, builders and real-estate interests would need a permit to alter or demolish any structure in a designated historic district. In addition, owners of costly landmarks might be granted partial or complete property-tax exemption, and in special cases the Commission could recommend that the city acquire interest in a building to save it from being torn down.

In the past, salvage of notable old buildings has been largely accomplished by interested New York groups, one of which must be credited with the recent rescue of the old Jefferson Market Courthouse in Greenwich Village. The courthouse occupies a valuable site coveted by developers; but the massive charm of its High Victorian Gothic architecture spurred a group of city residents into preserving it for use as a public library. It took the group seven difficult years of pushing and pulling to save the Jefferson Courthouse; legislation like that proposed by the Landmarks Preservation Commission might conceivably save both time and buildings in New York and elsewhere.

Exit the Brown Pelican

The clown of the southern seacoast—the engaging brown pelican—has disappeared from the shores of Texas and Louisiana. Not a single brown pelican chick was hatched in either State last year, and only six adults of the numerous flocks that were once present have been seen. Only ten years ago large numbers of the birds delighted tourists and bird-watchers by dive-bombing for fish and allowing people to come within a few feet of them. Now, because man-caused tragedies have threatened their existence on the Texas and Louisiana shores, the pelicans are gone.

According to Dr. Henry H. Hildebrandt, marine biologist of the University of Corpus Christi, the birds were being killed off by pesticides—especially endrin and dieldrin—which entered their bodies through consumption of contaminated fish. "Scientific data show that many species of birds are threatened by the ingestion of these toxic substances," Dr. Hildebrandt added. Other reasons for the exodus of the popular pelicans from Texas and Louisiana are the destruction of their rookeries by commercial development and the shooting of the big birds by fishermen who wished to keep them from taking their share of fish.

Will the birds ever return? Conservationists think not. Perhaps the story of the brown pelican in Texas and Louisiana will prompt further review of unwise pesticide use, over-development and unwise shooting.

Parks vs. Parking Lots

Over nine million tourists swarm into the metropolitan and fringe areas of the nation's capital every summer; and all of them are anxious to see the sights that in the opinion of some conservationists and planners have made the nation's capital a model urban center. One of the most pleasing aspects of the city is its many small parks, which in the warm months present a refreshing display of flowers and trees and provide a haven for squirrels, birds, lunch-hour visitors, city-dwellers, weary shoppers, and, of course, for the numerous tourists. As tourism increases, however, these pleasant spots of greenery are in danger of being destroyed by the constant demand for more parking spaces for the tourists, who contend that they have no place to leave their cars while visiting major attractions.

To save the parks from being displaced

(continued on following page)

by parking lots, and to make touring easier and more enjoyable for District of Columbia visitors, Secretary of the Interior Stewart L. Udall recently proposed a special service that would enable tourists to leave their cars at private fringe-parking areas and see the sights by bus. Minibuses, or miniature buses seating about eighteen passengers, would run from the Capitol to Arlington Cemetery, with trips to the White House and the Jefferson Memorial. Visitors would be free to stop at any attraction along the way.

Those who value green-spots in the Capital—or in any other urban area, for that matter—feel that Secretary Udall's plan might provide a tool for dealing, in part at least, with the tyranny of the automobile in American cities.

Sanctuary on the Palisades

Poetess Katherine Allison MacLean once said of the Hudson Palisades in New York that "They only, have not changed, you see them now/As they were then—a startling grandeur, flung/In sheer magnificence against the sky . . ."

Despite a recent move by Consolidated Edison Company to change the face of the Hudson Highlands and the Hudson River with a power plant on the north face of Storm King Mountain, near Cornwall, there is one spot of outstanding beauty atop the Palisades that has not changed since nature created it more than 150 million years ago. This is the Lamont Nature Sanctuary, owned by the Lamont family of New York and now preserved by the American Humanist Association. Corliss Lamont, a member of the Board of Directors of the Association who is deeply interested in conservation, and his brother Dr. Austin Lamont of Philadelphia, turned the Sanctuary over to the Association in 1963. The Sanctuary is south of Storm King Mountain and would not be affected by the Con. Edison plant, if it were built.

Only half an hour by automobile from bustling New York City, the Sanctuary combines the natural beauty of the Palisades with an adventurous history of visitation by fighting forces during the American Revolution. The Sanctuary was probably the site where American soldiers peered down to spy on British activities along the Hudson; it is likely that General George Washington stood atop its majestic cliffs to observe the British fleet.

In the May-June, 1964, issue of *The Humanist* magazine, the Sanctuary is described by Corliss Lamont as a place where visitors can obtain ". . . fine views up, down and across the Hudson . . . breath-taking moments at the top of the Sanctuary cliff as you peer over the edge, then down 400 feet or more to the water level [to] admire the sheer drop of the precipice and the lofty stone columns that rise in many a strange and picturesque shape from the base of the wall . . . dead trees . . . jut out from rocky ramparts like gargoyles from a cathedral."

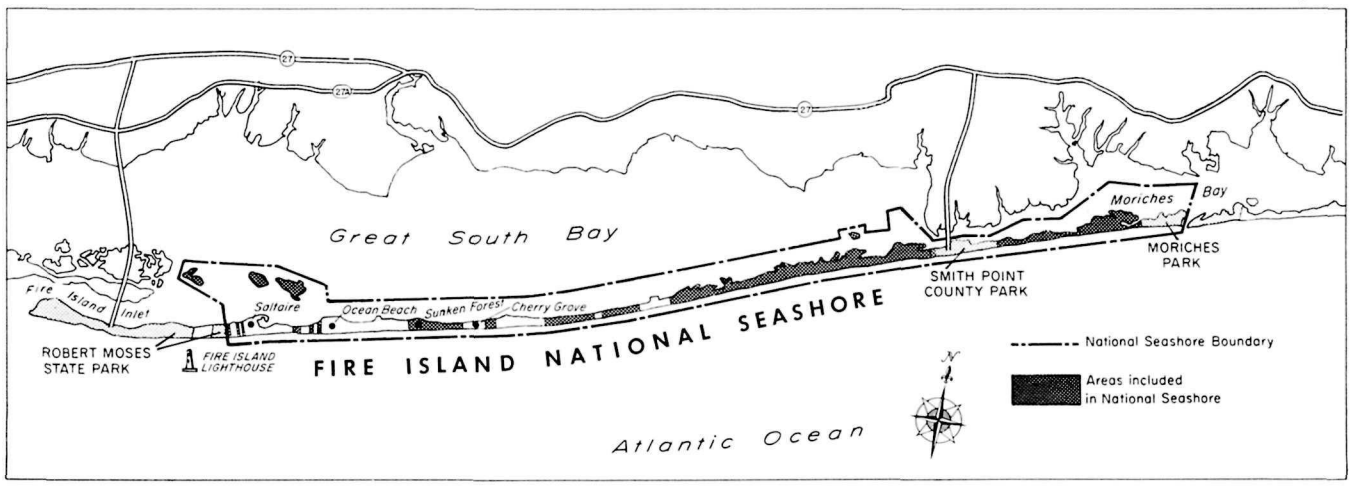
Hemlock, oak, ash, linden, sycamore and tulip are found in the Sanctuary; and deer, foxes, squirrels, woodchucks, and many birds make their homes there. As a quiet retreat for visitors, the Sanctuary offers the unspoiled grandeur of nature; as an example of personal initiative in the preservation of natural areas, the Lamont Sanctuary is an inspiration to all conservationists.

A Sketch of the Newly Created Fire Island National Seashore

WITHIN A FEW MILES of New York and the human millions of that city and its satellites is the nation's newest seashore—Fire Island, a barrier beach just off the south coast of Long Island that has successfully resisted the rush of development for two prime reasons: its relatively few inhabitants have wanted no development, and the developers have had no convenient way of reaching the island. When several years ago a superhighway to run the length of the narrow sandbar was seriously proposed, the national seashore idea, more or less dormant since the National Park Service's East Coast seashore study, came very much alive. Inhabitants, conservationists, and not a few scientists were inspired to work toward preservation of the very considerable scenic, scientific and recreational interests of the island, and during mid-September of 1964 the national seashore became a reality. The boundaries of the reserve are outlined on the map below; its 32-odd miles are broken at a number of points by settlements, although beaches adjacent to the settlements will come under Federal jurisdiction. Boundaries will be designated for the communities within which further development can proceed under local zoning regulations approved by the Interior Secretary.

Park Service development plans for the seashore call for a system of hiking and bicycling paths, but no roadbuilding (there is already access by bridge to the State and county parks on the island, as shown on the map). Access to the balance of the island will continue to be by ferry and private boat, with the Park Service providing docking facilities at intervals along the bay side of the island. The visitor contact station will probably be near the Smith Point Park bridge.

Federal Graphics



Canyonlands, Our Newest National Park

SOME SIX YEARS AGO THE NATIONAL Park Service sent a group of men into the arid and broken country in southeastern Utah that surrounds the confluence of the Green and Colorado Rivers—a country that has been called by one American conservationist "the last great wilderness south of Alaska." Objective of the team was a thorough study of the natural history and scenery of some 800,000 acres of wilderness terrain which contained not a single permanent human inhabitant—and relatively few other inhabitants, for that matter. The area possesses a few bighorn sheep, possibly; a scattering of mule deer; a small bird population, and a fair assortment of reptiles. The study was to lead eventually to a Department of the Interior proposal for a Canyonlands National Park, then to the park itself.

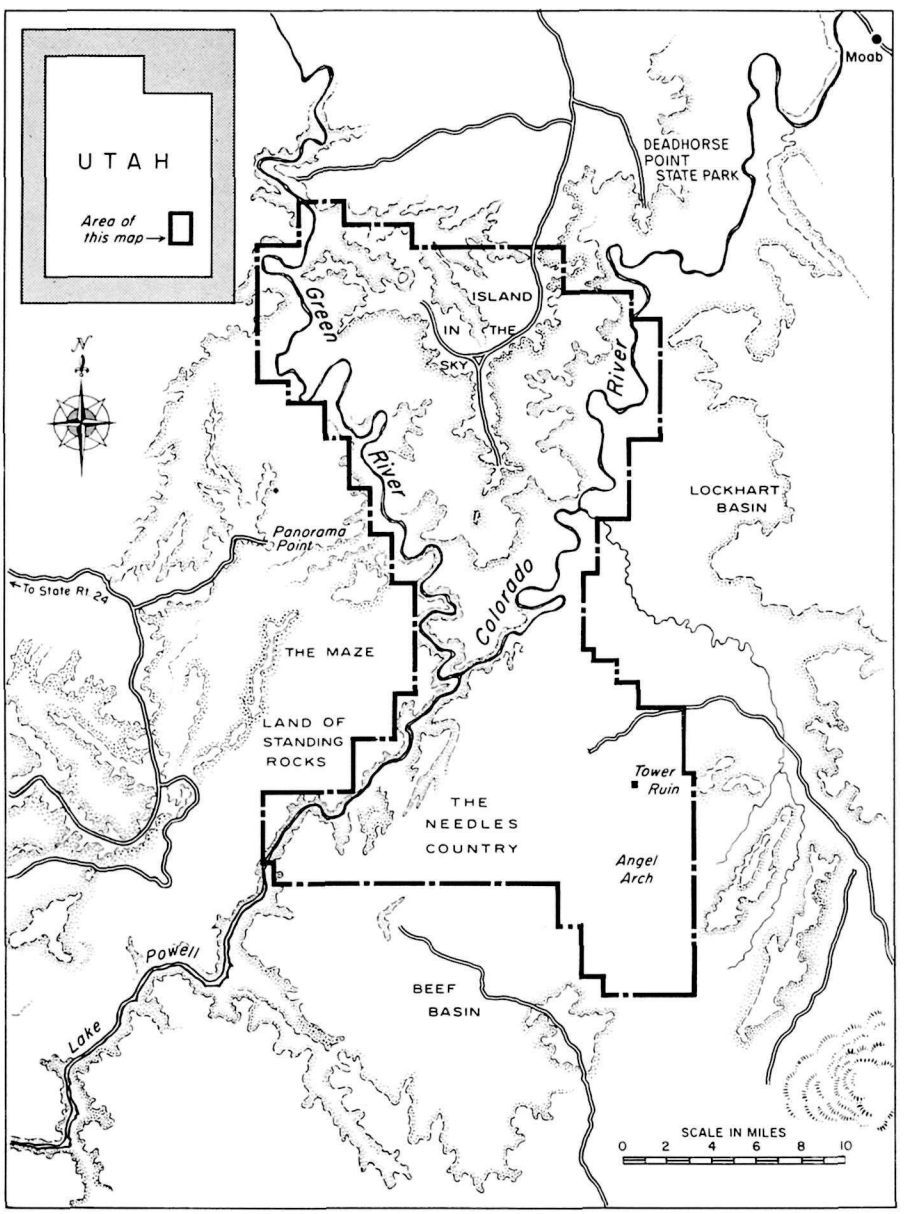
Dominating all other natural history interests in the Canyonlands of the Green and Colorado is the geological story, which is, in a sense, the scenic story also; for the geology here is directly responsible for as strange and colorful a melange of rock forms as can be found anywhere in the nation, and very likely in the world. In this portion of the Colorado Plateau running water has etched deeply into the rather soft, many-hued sandstones and mudstones of the Mesozoic, the "middle ages" of the earth's geological story. Here the two big rivers and their myriad tributaries—many of the latter are dry save for flash-flooding—have produced a welter of canyons and "parks," embellished with all manner of stone needles, fins, and arches; a maze of broken rock aptly described by Major John Wesley Powell in 1869 as "grandeur, glory and desolation . . . all merged into one." Major Powell was by no means the first white man in the area; others had preceded him; but the Canyonlands had been pioneered centuries earlier by the ubiquitous Anasazi, whose former presence is attested by campsites, granaries and pictographs, most of which are to the east of the so-called "Needles Country," shown on the map at the right.

Not long after the Park Service specialists had concluded their studies, Interior Secretary Stewart L. Udall brought forth a proposal for a Canyonlands Park of perhaps 1200 square miles, or more than three-quarters of a million acres, centering around the junction of the two mighty rivers and including much of the spectacular land sculpture in their southeastern Utah drainage basins. But with the passing years the Secretary's huge park began to shrink; first to 330,000 acres, then to 300,000 acres, and finally to its present 257,640 acres. However, our newly authorized thirty-second national park will preserve the finest of the Canyonlands rockwork and the most important geological and archeological interests.

A major article on the then-proposed Canyonlands Park by Weldon F. Heald, widely known American conservationist and writer, appeared in *National Parks Magazine* for January, 1963, illustrated with superb photographs by the National Park Service photographer M. Woodbridge Williams. The Association has on hand a very limited number of copies of this issue at 50¢ each on a first-come-first-served basis. ◆

Canyonlands, the thirty-second national park, was authorized by Public Law 88-590, signed by President Johnson September 12. It encompasses 257,640 acres of scenically and scientifically important wilderness country about the confluence of the Green and Colorado Rivers in southeastern Utah—a terrain which is even today not wholly explored. As originally seen, the park would have included most of the two areas shown below as "The Maze" and the "Land of Standing Rocks."

Federal Graphics



Book Reviews

THE ODYSSEY BOOK OF AMERICAN WILDFLOWERS. By H. W. Rickett, with color photographs by Farrell Grehan. The Odyssey Press, Inc., 850 Third Avenue, New York City 22. 1964. 252 pages 8¼ x 11½. $12.95.

Press notices call this "a big, beautiful volume," which it is; it is a little hard to determine what else to call it. Dr. H. W. Rickett, senior curator of the New York Botanical Garden, has done a good job with the text; his preliminary remarks on the vegetation of North America and the nature and diversity of flowering plants are especially well written and instructive. (Perhaps a curator of botany ought to refrain from an expression like "unlovely weeds," even in a popular work; and let us resolve to inter, once and for all time, that silly old botanical phrase "waste places").

Most of the color plates, which occupy 120 pages of the book, are adequate, and some are exceptionally fine; probably it is the profuse color that mainly distinguishes this volume from many previous popular works on the flowering wild plants of North America. With its 8¼ x 11½ format, this is hardly a field guide; it is, rather, a big, beautiful book for presentation to a wildflower enthusiast-friend.

THE LIVING WILDERNESS. By Rutherford G. Montgomery. A Torquil Book, distributed by Dodd, Mead and Company, 432 Park Ave. S., New York. 294 pages. $8.50.

"This is not a scientific book," explains Rutherford Montgomery at the end of *The Living Wilderness*. "It is a record . . . of a sentimental fellow who has always had a curiosity about living things; a great respect for wild creatures, big and small." Montgomery's respect for the wild creatures which he describes will rub off on many readers, particularly because they will find that each new chapter provides them with a wealth of fascinating details about bats, bears, cats, reptiles, birds, wolves, and other animals of all sizes and temperaments, in almost all parts of the country.

The animals are treated with careful attention to detail, as Montgomery strives to tell his readers, with the aid of some excellent drawings and photographs, that animals have personalities, as do humans, and that it is wrong to brush aside their antics as mere instinct. The animals in Montgomery's book are not subjects; they are characters. Even the hairy-legged tarantula, prowling for insects on the desert, sparkles with personality. This creature enters the book in the chapter on "Desert Dwellers," after Montgomery introduces it as one who spends most of its time hunting for food, but "at times he will hunt for the den of a female tarantula, which will be a burrow dug into the ground where the soil is loose . . . The courting tarantula will approach the bower and rap on the ground close to its opening. When the lady hears the knock, she will come to the door. The male will seize her and she will appear to faint. Then he will drag her away. . ."

Love and family relationships, most of which are even more interesting than that of the tarantula, enter the lives of all of Montgomery's characters. Bit by bit, he unfolds the drama of their wilderness existence with the patience of a storyteller who must be willing to sit on a log and watch a sleepy toad for hours so that he can record those unfortunate bugs that come within range of the toad's sticky tongue. If one can overlook Montgomery's run-on sentences, jumbled phrases, and grammatical snags, as the publisher wrongfully overlooked them, he will have a wonderful time with this book.

THE CONSERVATION DOCKET

At first thought there might seem little connection between the CONSERVATION DOCKET and the Wisconsin, or "recent" stage of Pleistocene glaciation in America. Nonetheless, a connection exists; for, just as Congress was about to adjourn during the early days of October, both House and Senate passed H. R. 1096 to establish an Ice Age National Scientific Reserve in Wisconsin. The reserve, to be of some 32,500 acres lying mainly in three areas of the southern and southeastern part of the State, (with several other scattered sites) will be established jointly by State and Federal governments to preserve and interpret the best of Wisconsin's renowned glacial phenomena. Several units of the future reserve are already under State protection as parks or forests; these will be enlarged and other units acquired. The legislation provides a $50,000 Federal appropriation for preparation of a comprehensive plan for the reserve; land acquisition money would, however, be deducted from Wisconsin's share of land and water conservation fund revenues.

• Another bill of educational and scientific nature was passed late in the second session of the 88th Congress and was signed by President Johnson as Public Law 88-449. This was H.R. 9393, to establish a National Tropical Botanical Garden in the State of Hawaii, with a corporation to conduct its business. Under the new law one or more tropical botanical gardens may be established on the Island of Oahu for basic research in tropical botany; for the dissemination of knowledge gained by the research; for the cultivation of tropical plants currently listed as threatened with extinction, and, in general, for the education, instruction and recreation of Americans. Financing of the garden or gardens will, it is thought, be largely accomplished by private donation.

• Senate bill 2249, which would have created an Indiana Dunes National Lakeshore along the Lake Michigan shorefront of Indiana, passed the Senate during late August but the appropriate House Committees had already suspended activities looking toward adjournment of Congress.

• A Senate bill of conservation interest that failed of passage this year was S. 2862 (Nelson of Wisconsin, for himself and Williams, of New Jersey and McIntyre, New Hampshire) which would have preserved the natural and scenic qualities of the Appalachian Trail from erosion by development, highway building, and adverse uses of adjacent land. While portions of the trail traverse land protected by Federal or State agencies, other segments pass through private lands with no protection from the developer and roadbuilder. Under S. 2862 the Interior Secretary would cooperate with Federal and State agencies to "define, redefine and delineate" the trail's route in order to retain where possible its natural scenic qualities and those of adjacent lands.

• A bill which appeared very late in the 88th Congress—too late for Congressional consideration this year—was H. R. 12707 (Barry, New York) which would have made it the policy of Congress to protect and maintain the scenic and historic integrity of the Hudson Highlands in New York. It would have established a Hudson River Conservation Commission to investigate the proper utilization and conservation of the Hudson, with particular reference to scenic, historic and recreational values; it would have submitted a report to Congress with possible proposals for legislation to implement its recommendations. (Readers will recall previous newsnotes and other comment in the Magazine concerning a power company proposal to install a large pumped-storage hydropower plant at Cornwall on the Hudson, and the Federal Power Commission's preliminary nod of approval. *National Parks Magazine* understands that Congressman Barry has asked the FPC to make no final ruling in the matter pending disposition of legislation similar to H. R. 12707 in the next Congress).

Two New Books about Parklands

in the Sierra Club's Exhibit Format Series for your library and for Christmas Giving

Ansel Adams

Time and the River Flowing

GRAND CANYON

by FRANÇOIS LEYDET

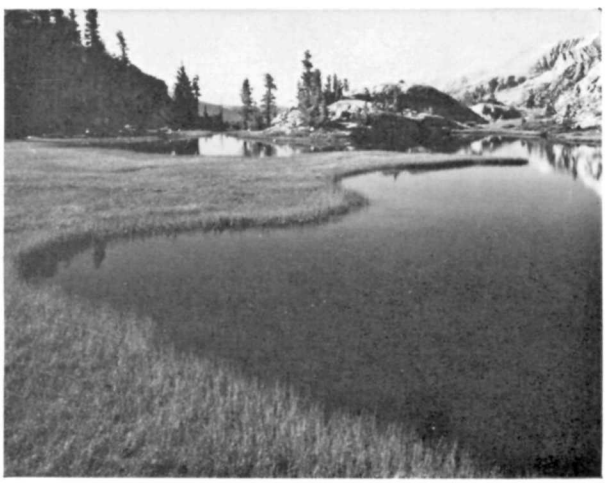
Little-known facts about America's supreme natural wonder with more than 100 color photographs, many taken from vantage points between rim and river that few visitors have yet reached. 168 pages; $20 until 12/31/64, $25 thereafter.

Gentle Wilderness

THE SIERRA NEVADA

photography by RICHARD KAUFFMAN

High country in and around Yosemite, Kings Canyon, and Sequoia National Parks, in 72 pages of color photographs. Text is from *My First Summer in the Sierra* by conservationist John Muir. 168 pages; $20 until 12/31/64, $25 thereafter.



Other titles in the Exhibit Format Series

Ansel Adams I: The Eloquent Light by Nancy Newhall. 176 pages; $20.
The Last Redwoods by Philip Hyde and François Leydet. 128 pages; $17.50.
The Place No One Knew: Glen Canyon by Eliot Porter. 168 pages; $25.
"In Wildness Is the Preservation of the World" with text from Thoreau and photography by Eliot Porter. 168 pages; $25.
These We Inherit: The Parklands of America by Ansel Adams. 104 pages; $15.
Words of the Earth by Cedric Wright. 96 pages; $15.
This Is the American Earth by Ansel Adams and Nancy Newhall. 112 pages; $15.

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Department of the Interior: Olympic National Park

Mount Olympus, in Washington's Olympic National Park; a view from the northeast

THE NATIONAL PARKS ASSOCIATION is the leading conservation organization in America devoted primarily to the preservation of the great national parks and monuments, but also to the protection and restoration of the natural outdoor environment generally. It functions partly as a constructive and objective critic of the policies of the great Governmental agencies responsible for the management of the publicly owned lands of the United States.

For example, we have presented in the pages of the *National Parks Magazine* a practicable program to provide water and electric power to Arizona and California without inundating portions of Grand Canyon National Park and Monument by reservoirs.

We have taken the lead in a reappraisal of conventional big-reservoir water management in river basins, with the Potomac as an example, proposing intensive pollution abatement at source, small headwater impoundments, and the use of coastal estuaries after depollution for water supply.

We are advancing imaginative plans for water access to the new national seashores, coupling protection with compatible recreation.

We are enlarging *National Parks Magazine* so that we can carry more of the story of conservation throughout America to our readers; beginning in January we add four more pages.

Inexorably the costs of operation and publication have been rising. Because we desire to serve as wide a public as possible, we have resisted the pressure over the years to increase dues. But the day of reckoning has come; we are forced to raise our basic dues to $6.50, and to increase other dues categories proportionately.

More than ever we need the loyal assistance of our membership. You can help most by renewing promptly at the new rates, and increasing your dues category if you can. You can also help by getting new members, and by taking out gift subscriptions for friends in the coming holiday season. Contributions over and above dues are always welcome; from time to time some of our members remember us in their estates, All dues, over and above basic annual dues, and all gifts and bequests, are deductible for Federal income, gift, and estate tax purposes.

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