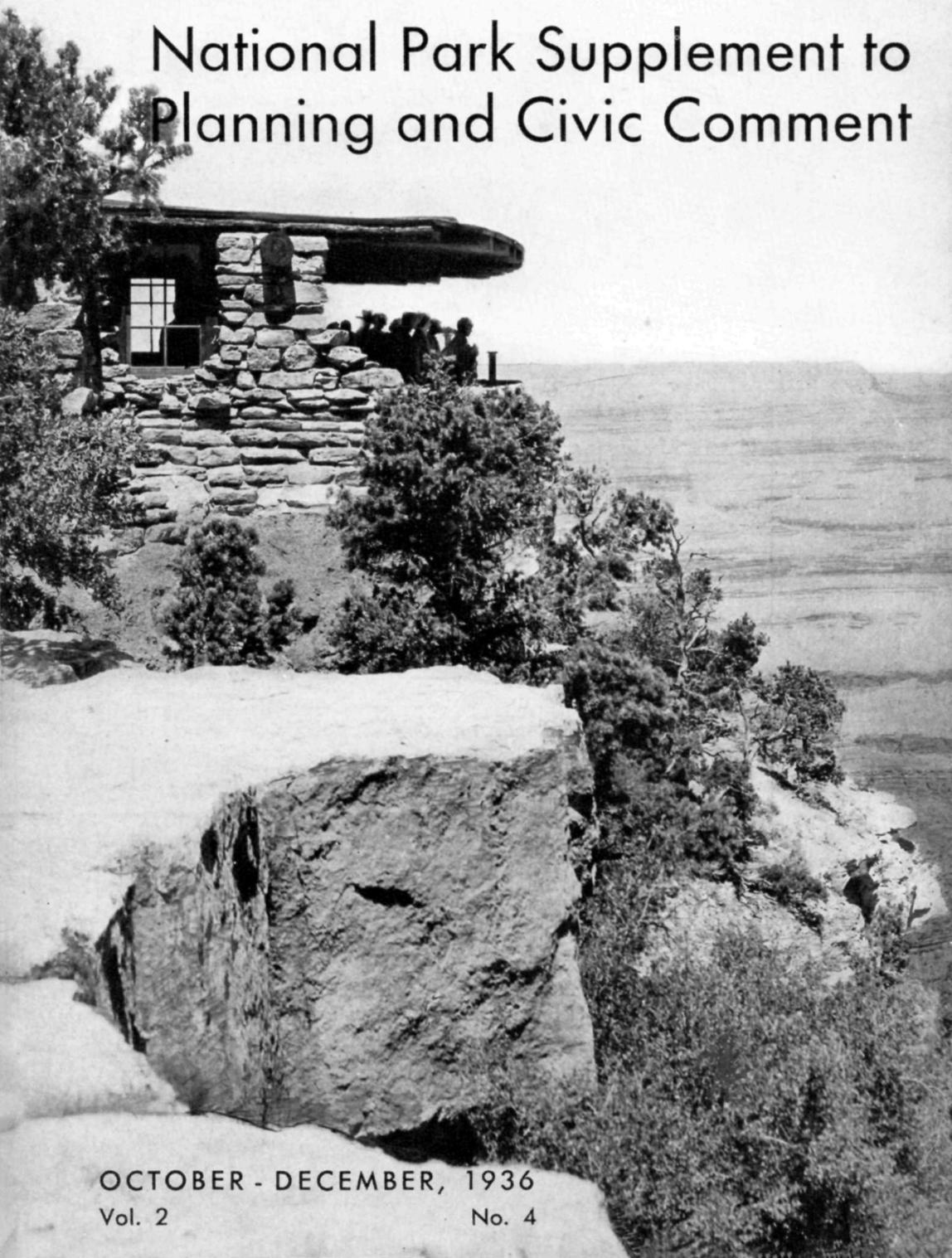


20th ANNIVERSARY

National Park Supplement to Planning and Civic Comment



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DEDICATION

TO ALL those who, as officials of the National Park Service and as friends of the National Parks, are working to create an adequate National Park System, to preserve in the National Parks natural scenery and wildlife and in the National Monuments archeological, historical and scientific areas, and to protect the parks and monuments from commercial exploitation and unwarranted intrusions, this 20th Anniversary National Park Supplement is dedicated, in the hope that there may be a better understanding of the aims, principles, policies and practices of the National Park Service, and a greater appreciation on the part of the public of the high inspirational and cultural possibilities in National Parks.

To the late Stephen T. Mather, to Horace M. Albright and to Arno B. Cammerer, the three men who have directed the National Park Service since 1916, we owe a debt of gratitude. Their unselfish service and steadiness of purpose in holding to the National-Park concept, first set forth in the act creating Yellowstone National Park, have given us the National Parks of today. We count on the continued coöperation of the Secretary of the Interior, the staff of the National Park Service and the public-spirited members of the American Planning and Civic Association and other interested organizations to support a program which will preserve in the National Park System all of those areas which meet the high standards set up for National Parks and National Monuments. To the full realization of this program we dedicate our best efforts.

A National Park System

ON AUGUST 25, 1916, an Act to establish a National Park Service in the Department of the Interior was approved by the President, and in April of 1917 the National Park Service was actually organized as the ninth bureau of the Department of the Interior, financed with funds made available by the deficiency appropriation act of April 17, 1917. Stephen T. Mather, of Illinois, former assistant to the Secretary of the Interior, was made director, and Horace M. Albright, of California, former assistant attorney of the Department of Interior, was made assistant director of the new service.

In this 20th anniversary year since the creation of the National Park Service it is fitting that we should inquire what has been accomplished, what are the existing conditions, and what is the program for the future. Perhaps, in order to do this, we should review briefly the history of the movement which led to the legislation setting up the National Park Service.

FIRST GOVERNORS' CONSERVATION CONFERENCE

In 1908, when President Theodore Roosevelt called together a Conference of Governors to consider measures for the conservation of the country's natural resources, there was no National Park Service, and the five large, and three small, National Parks then existing were administered by the Department of Interior as a part-time job. The Conference confessedly grew out of "the recent forestry movement, partly from the still more recent waterway movement." The syllabus for the meeting covered mineral, land and water resources, but no mention of scenic or recreation lands and waters. This is not remarkable when it is recalled that within the past decade an official legal opinion was given to the Federal Power Commission setting forth the theory that scenic and recreational uses of water constituted "no use at all" but simply a waste of possible power, irrigation or other "recognized" uses.

In the extensive proceedings of this excellent conference of 1908, Dr. J. Horace McFarland, then President of the American Civic Association, was the only speaker to mention natural scenery as a national asset and to urge the protection of the National Parks "all too few in number and extent." Said Dr. McFarland:

Scenery of some sort will continue as long as sight endures. It is for us to decide whether we shall permanently retain as a valuable national asset any considerable portion of the natural scenery which is so influential in our lives, or whether we shall continue to substitute the unnatural scenery of man's

careless waste. . . . We must hold inviolate our greater scenic heritages. . . . The scenic value of all the national domain yet remaining should be jealously guarded as a distinctly important natural resource, and not as a mere incidental increment. In giving access for wise economic purposes to forest and range, to valley and stream, the Federal Government should not for a moment overlook the safeguarding to the People of all the natural beauty now existing. That this may be done without preventing legitimate use of all other natural resources is certain.

NATIONAL PARK SERVICE ACT

From that time on, Dr. McFarland led the American Civic Association to advocate the establishment of a Federal bureau or agency to administer National Parks. In the monograph on *The National Park Service*, prepared in 1922 by the Institute for Government Research, the work of the association is thus recognized:

The American Civic Association, a society which has always been active in any movement for park betterment, took up the cause of a park bureau at about the same time (1910). It is not too much to say that the untiring zeal of this organization in keeping up interest in the project, both in and out of Congress, by meetings, publications, and influence brought to bear through the most powerful press organs, had more to do with the final successful issue of the movement than any other one factor. Sentiment in general was in favor of the creation of the bureau, but it was not organized and was largely passive. But for the life the American Civic Association put into the movement it is to be doubted if Congress could have been induced to create a new bureau to do work that had been getting done somehow for so long without it.

Following the suggestion of the Association, President Taft addressed a special message to Congress, saying:

I earnestly recommend the establishment of a bureau of national parks. Such legislation is essential to the proper management of those wondrous manifestations of nature. Every consideration of patriotism and the love of nature and of beauty and of art requires us to expend money enough to bring all these natural wonders within easy reach of our people. The first step in that direction is the establishment of a responsible bureau which shall take upon itself the burden of supervising the parks and of making recommendations as to the best methods of improving their accessibility and usefulness.

It was not, however, until Secretary Lane, after conferring with officials of the American Civic Association, took up the cause that legislation was drafted which was passed by Congress in 1916. Dr. McFarland has commented that up to that time not one whole desk nor the whole time of any one official in the Interior Department was devoted to National Parks. Further complicating the part-time administration of the National Parks were the patrols furnished by the United States Army where no clear demarcation of authority between the Department of the Interior and the War Department had been worked out.

In the act, the National Park Service thus set up, was directed to

promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified by such means and measures as conform to the fundamental purposes of said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

The passage of the act for the preservation of American antiquities in 1906 had made it possible for the President to set aside by proclamation any lands owned or controlled by the United States containing "historic landmarks, historic or prehistoric structures, and other objects of historic or scientific interest" as "national monuments."

At the time of the first annual report of the Director of the National Park Service, dated October 13, 1917, there were 17 national parks and 22 national monuments under the jurisdiction of the National Park Service.

THE YELLOWSTONE ACT

At the outset the new bureau inherited a concept of what a National Park should be, dating from an incident which had happened nearly half a century before its creation. Around a now historic campfire on September 19, 1870, the members of the Washburn-Doane expedition talked over the astounding country which they had seen. The proposal was made that the members might participate in a "profitable speculation" by taking up land surrounding the geysers and other wonders of Nature, to exploit them as commercial enterprises. But Cornelius Hedges objected, and declared that the marvelous Yellowstone country should never be allowed to pass into private ownership, but should be set aside for the use and enjoyment of all the people. The idea, thus launched, was adopted by the Expedition, and at once appealed to the popular imagination. The act of March 1, 1872 has served as a sort of Magna Charta for National Parks because of the language by which it dedicated the Yellowstone National Park "as a public pleasuring ground." A bill of rights for natural scenery was embodied in the provisions which make mandatory "the preservation from injury or spoliation of all timber, mineral deposits, natural curiosities or wonders within said park, and their retention in their natural condition," and the protection of fish and game in the park against "wanton destruction" or "capture or destruction for the purposes of merchandise or profit."

After the creation of Yellowstone National Park, it was nearly twenty years before any other national park was set up. Then in 1890, three parks in California—Yosemite, Sequoia and General Grant—were made national parks. In 1899, Mount Rainier in Washington was given National Park status and three years later, Crater Lake in Oregon.

NATIONAL PARK POLICIES

If the new service was fortunate on the whole in the areas and the concept which it inherited, it was not so fortunate in the conditions it had to meet. Except for Yellowstone, most of the national parks contained unpurchased private property. Grazing of sheep and cattle was permitted. Facilities for taking care of visitors in the parks had developed through private concessions without the opportunity to adopt uniform policies. Officials of the park service had to deal with widely differing customs which had grown up before they came into office. Not only were the patrols furnished by the Department of War under a very unsatisfactory method of coöperation, but the Engineering Corps of the Army was in charge of construction of roads and trails. Certainly at that time army engineers had little training in building roads in areas of great natural beauty, and there was no established custom of calling in competent landscape advice.

The declaration of principles in the Yellowstone act and the act of 1916, however important, did not constitute a body of policy. On May 13, 1918, Secretary Lane, in a memorandum to Mr. Mather, set forth instructions which were to change many of the practices in the parks as they had existed up to that time. He maintained that:

The national parks must be maintained in absolutely unimpaired form for the use of future generations as well as those of our own time. They are set apart for the use, observation, health, and pleasure of the people, and the national interest must dictate all decisions affecting public or private enterprise in the parks.

As rules of action he set forth:

Every activity of the Service is subordinate to the duties imposed upon it to faithfully preserve the parks for posterity in essentially their natural state. The commercial use of these reservations, except as specially authorized by law, or such as may be incidental to the accommodation and entertainment of visitors, will not be permitted under any circumstances.

Grazing of livestock was curtailed and, in all but a few instances, has been eliminated. Land leased to concessioners for hotels, camps, and transportation facilities was to be confined to tracts no larger than absolutely necessary. No park lands were to be leased for summer homes. Cutting of trees was to be restricted to absolute needs of the park. Roads, trails, buildings and other improvements were to harmonize with the landscape. Of particular interest was the stipulation:

All improvements will be carried out in accordance with a preconceived plan developed with special reference to the preservation of the landscape, and comprehensive plans for future development of the national parks on an adequate scale will be prepared as funds are available.

It was this latter practice, it may be said in passing, which made it possible for the National Park Service to put to work immediately the

CCC camps in 1933 on plans already drawn and approved. The Secretary urged the elimination of private holdings within the parks, and some progress has been made, but certain private holdings within national parks still remain a vexing problem and one which must be financed sooner or later if the national parks are to maintain their integrity.

Such sports as mountain climbing, horseback riding, walking, motor-ing, swimming, boating, and fishing were advocated, but hunting was banned in all national parks.

On March 11, 1925, Secretary Work, in a memorandum for the Director of the National Park Service, recapitulated and expanded the statement of policy, based on three broad accepted principles:

The national parks and national monuments must be maintained untouched by inroads of modern civilization in order that unspoiled bits of native America may be preserved to be enjoyed by future generations as well as our own.

They are set apart for the use, education, health and pleasure of all the people.

The national interest must take precedence in all decisions affecting public or private enterprise in the parks and monuments.

RECENT HISTORY

Thus the National Park Service undertook to protect the lands and waters entrusted to its care and acquired occasional new areas until in the report of the Director, dated October 12, 1932, the National Park Service administered 22 national parks, totalling some 13,000 square miles, and 36 national monuments, totalling some 6,500 square miles. Then on June 10, 1933, President Franklin D. Roosevelt by Executive Order set up the Office of National Parks, Buildings and Reservations and to it transferred the functions of the National Park Service, Public Buildings and Public Parks of the national capital and certain buildings, bridge and park commissions. By Executive Order of July 28 a long list of monuments was transferred to the newly-named bureau. On March 2, 1934, a rider on an appropriations bill changed the name of the Office of National Parks, Buildings and Reservations to its original name, National Park Service.

First as a Civil Works project and later financed by the Works Progress Administration, the Historic American Buildings Survey was inaugurated in 1933, with a National Advisory Committee appointed by the Secretary of the Interior. Many historic buildings have been measured and photographs and plans have been deposited in the library of Congress.

An act to create a National Park Trust Fund Board was approved July 10, 1935, consisting of the Secretary of the Treasury, the Secretary of the Interior, the Director of the National Park Service and two persons appointed by the President. The Board was authorized to accept and administer gifts and bequests for the benefit of or in connection with the National Park Service.

Finally, in an act, approved August 21, 1935, provision was made for the preservation of historic American sites, buildings, objects, and antiquities of national significance, and for an advisory board.

In 1933, when the CCC Camps were made available for work in parks, the National Park Service was placed in charge, not only of the work in National Parks but also of the work in State Parks, and this latter function has necessitated setting up regional machinery to handle the park improvements effectively. As a direct outcome of the demonstrated need in connection with the CCC park work, Congress passed an act, approved June 23, 1936, to authorize a study of the park, parkway, and recreation-area programs in the United States. Curiously enough, such a survey was authorized in the first draft of the bill which passed Congress in 1916, but it was thought best to limit the bill at that time to the creation of the service.

There are those who profess apprehension lest these newer and later functions directed by law to be exercised by the National Park Service may endanger or harm in some way the functions of the Service in regard to national parks and monuments in the traditional sense. No doubt the public-buildings functions will in due time be removed, to the advantage of all concerned, and perhaps some other adjustments may be found advisable, but we see no reason why the country should not profit by the peculiar kind of experience which the park officials have in the administration of certain areas, or at least by the advice they are prepared to give, *if* the National Park System itself is held intact, covering roughly what we now know as national parks and national monuments. There have grown up some inconsistencies in nomenclature which no doubt will be corrected as time goes on. In any case, in this Anniversary Supplement we propose to deal with the National Park System, without going into the details of the issues arising out of additional functions which the National Park Service is now performing.

In order that we may have before us a correct picture of what the National Park Service is now doing with the National Parks and Monuments, we have asked the Service to furnish us with an outline of present activities, which we take pleasure in presenting herewith.

We present first excerpts from an address delivered by Director Arno B. Cammerer at the New York State College of Forestry at Syracuse, New York, on November 20, 1936:

DIRECTOR CAMMERER ON NATIONAL PARKS

National parks and monuments have been variously defined but most of the definitions have been in agreement with respect to essential elements. For a working basis, we may generally define them as follows:

National parks are spacious land areas, distinguished by scenic beauty or natural wonders, so outstandingly superior in quality to

average examples of their several types as to be distinctly national in importance and interest, justifying their preservation in an unimpaired state as a part of a national park system for the enjoyment, education and inspiration of all the people for all time.

National monuments are areas set aside to preserve nationally significant historic landmarks, historic and prehistoric structures, and other objects of national historic or scientific interest, situated thereon.

The parks and monuments are at present the essential units in the system. Due to the consolidation in 1933 of all Federal park activities within the National Park Service, there are some units now within the system which need reclassification at the first opportunity. In addition to national parks and monuments, it seems desirable that national beaches be added. The ocean beaches constitute a limited and rapidly diminishing national resource, large sections of which should forever be preserved for public benefit and use. National parkways, may preserve some historic route and the historic structures along it or may provide a scenic route between centers of interest. The Secretary of the Interior, through the National Park Service, is authorized to acquire and manage historic sites and buildings of national importance and to assist the States and other agencies in the preservation and management of historic sites and buildings which the Federal Government may not necessarily own.

Briefly enumerated, these are now generally considered to be essential units which shall comprise the system. Although they may vary in character it should be noted that there is a fundamental and underlying unity in the group; namely, they are all nationally important recreational areas conserved for their intrinsic value. That factor, I believe, definitely sets them apart from areas that are developed for the purpose of converting their natural components into other values, such as a forest which is logged to produce lumber to build houses. Likewise, there is a fundamental principle governing the development of park areas which differs from the principles of development applied to commercially-exploited areas; namely, that their development must be conducive to the enjoyment of their inherent characteristics and their conservation in unimpaired condition for all time.

These simple principles sharply differentiate the national park system from all other systems of Federal land-use and should guide the selection and treatment of areas for inclusion in that system.

I have spoken of the different units as recreational areas, using the term recreation in a broad sense to connote that which recreates the individual and the nation. This is a broader use than the playground concept. When a person inspects the colonial structures at Williamsburg or takes a nature trail in Yellowstone, he is indulging in an educational activity that is also recreational. These two activities are inseparable human reactions to areas of intrinsic value, and they are, therefore, of

importance in the selection of suitable areas. While it may be desirable to establish playgrounds according to the centers of population and the recreational needs of the communities, it is not possible to select national parks and monuments on that basis. To the contrary, the thing of interest must itself be chosen. On these premises, it is possible to determine what types of areas, and which areas of the several types, should eventually be included in the national park system.

The system, as I visualize it, should portray by striking examples the story of earth forces and the progress of civilization in this country. The areas, in every case, must be so delineated as to comprise suitable administrative units, whether the areas are primarily geologic, biotic, or historic in character. Otherwise, they will be inevitably modified and impaired by human use.

The processes of nature and the evolution of life are continuous. Nature does not segregate itself into distinct units; man does that for practical reasons. Therefore, if the park system is to portray the coherent and orderly processes of development, it cannot be composed of a heterogeneous and unrelated assemblage of natural and historic curiosities but must comprise the areas and objects which exemplify the major themes of nature and history, as man understands them.

The geological formation of our continent is a theme of major educational and recreational importance. It cannot be told by the Grand Canyon and the Yellowstone alone, although they are outstanding segments of the story. Perhaps a rock outcropping, a particular fault, a group of fossils, or some other geological formation, even if unspectacular in appearance, may be a necessary link in the story. If the units of the system were chosen on their spectacular basis only, these particular links, and many others, would be omitted. Usually, however, the most instructive geological manifestations are also outstandingly scenic in character, and a happy coincidence of educational and recreational values is achieved.

In like manner, if the system is to portray the story of life, it cannot accomplish that end by the simple preservation of heterogeneous groves of spectacular trees and certain species of animals. It must include the finest representations of the different plant and animal associations, characteristic of the various ecological types. For example, the native plant and animal associations of the Alleghenies and the Southern swamps are just as valuable and as interesting as those of the Rocky Mountains and the deserts. Moreover, the desirability of preserving a sample of each type of association becomes more apparent as the native character of our country is modified by the impact of civilization.

Archeological material, because of its irreplaceable nature and limited quantity, is *per se* a resource of national value. The preservation of all such material is, of course, impractical. Nevertheless, as much of it as possible should be reserved for present and future study so that the

themes of human relationships, migrations, and development may be understood.

History is current as well as ancient. In no other field of park work is intelligent selectivity more necessary. Yet, it is humanly possible, and eminently desirable, to select those sites and objects which will best portray the developing life and characteristics of our nation. Historic sites are not composed of battlefields only. To the contrary, the domestic, cultural, and industrial phases are perhaps of even greater educational and recreational content. But, here again, the selection of sites and objects must be guided by the major themes of history and not by its curiosities.

By assembling these different types of areas into a coherent system, it is possible to see some of the implications of the national park idea and to forecast the general form which that system should ultimately assume. Areas, not now possessing park or monument status, but of such scenic, scientific or historic character, and national importance, as to warrant their preservation for their intrinsic value, should be included in the system. In the West, the problem has not been so difficult because of the vast extent of publicly owned lands. In the East, however, the areas which qualify are almost entirely in private ownership and must be purchased and, in many cases, restored to serve their most appropriate use. The system will grow as our information is increased and continuing surveys make possible the proper appraisal of different areas.

In general terms, such is the goal toward which the national park system is moving. Such a system, guided by major educational and inspirational themes and motivated by recreational satisfaction, can become a great implement of conservation and a unique factor in our national life. It can contribute to human welfare in a manner which no other form of land use now specifically provides, and it has been designed for that sole purpose. While the educational objective is the dominant one, the recreational element is inseparable and should not be overlooked. The provision for recreation is the *modus operandi* of the system.

Since there is no direct commercial return from the park form of land use, the problem of support is a vital consideration. Indirectly, of course, and in the aggregate, there is an enormous financial return from the tourist business. It has been estimated that the American public spends ten billion dollars annually for recreation. This sum filters into almost every variety of business and is, therefore, truly a multiple use of recreational resources. But the problem of supporting and maintaining the recreational areas is still to be met.

It should be admitted at the outset that free recreational areas do not exist. Some agency must pay for them. In some instances, the necessary revenue may be appropriated by a governing agency. In others, entrance fees or special service charges are levied. In still others, the necessary revenue is raised in the

area itself or in adjoining areas, by crop production methods such as logging, grazing, mining, power development, and even summer home permits. The latter method, however, tends to destroy the very characteristics of the area which it was desired to save and is, therefore, not suitable for sustaining areas of great intrinsic value. On the other hand, it may be a useful device for providing facilities in areas where recreation is one of several concomitant uses. A combination of the first two methods, appropriations and fees, appears to be the most satisfactory means of financing recreational areas. It is the financial basis upon which the national park system is being built and is, in fact, an essential element of the park form of land use. To give this point emphasis, I will state it as follows: The core of the park idea is that the area shall be largely self-supporting but not at the expense of any feature in it.

Throughout this discussion, I have repeatedly referred to parks as a form of land use. I have done so purposely because, upon first contact, one is apt to think of them as reservations locking up natural resources and may fail to perceive the tremendous implications of the direct human benefit and the indirect financial return. For example, the logging of certain trees might be a completely naive and destructive use of an irreplaceable resource; whereas their preservation might be the most complete and enduring use that could be made of them. The trees of Yosemite Valley are not being logged, yet no one could justifiably contend that they are not being completely and profitably used.

We are now facing the same problem that the explorers faced around their campfire in the Yellowstone in 1870.

The question is: does the economic structure of our national life permit us to retain and enjoy the areas and objects of great intrinsic value, the treasures of a nation, or does it demand that they go on the block for an immediate commercial return? I believe that our standards of living will require us to answer the question as the Yellowstone explorers did. If we accept that answer, then I submit that the national park idea is the most effective implement of conservation which has yet been devised for achieving that goal.

The park concept provides a new form of land use, humanly satisfying, economically justifiable, and with far-reaching social implications. Inherent in it is a new recognition of human values and a more intelligent method of commercial exploitation. As such, it is a progressive step in land utilization and must take its place along with the other great land-use techniques such as forestry, agriculture, and mining. While it has been given considerable impetus in this country it is still in its infancy. When it has been accorded proper recognition, the national park system will comprise fewer lands than those devoted to forestry and agriculture but it will include those areas and structures which cannot be adequately preserved or properly used under any other category of land management. It is a practical expression of the quest for new values and I urge you to appraise it with a receptive mind.

PARK CONSERVATION PLAN

The staff of the National Park Service is preparing a comprehensive report on the nature and significance of the National Park System, and, at our request, has been good enough to condense the findings into the following compact statements for the benefit of our readers.

GEOLOGY IN THE NATIONAL PARKS

In a broad, well-rounded, interpretative program of national parks and national monuments, the story of the origin of the earth, the ma-

terial of which it is composed, the forms of life which formerly inhabited it, and the forces which shape its surface should be told. The magnificent scenery which the visitor admires holds latent stories of the drowning of continents, the formation of mountains, the events of the Ice Age, and the devastating activities of volcanoes. Within the rocks themselves is found the record of earth history, the development of plant and animal species, the interplay of atomic forces, the operation of physical laws, and the chemical reactions which produce and disintegrate the minerals, rocks, and soils upon which our very existence depends.

Earth history is not easily separated from that of man whose first homes were natural caverns in the rocks; whose first settlements were founded near springs; whose modern seaports are chosen with reference to natural bays formed by wave action or sinking coast lines; and whose manufacturing cities are located near rivers for water and power. Mineral deposits which have contributed to the growth and comfort of our nation are the result of earth forces and adjustments.

The traveler who visits the national parks is interested in the natural surroundings in which he finds himself. He gives himself to the enjoyment of relaxation and exploration in the inspiring out-of-doors. It is but natural that he should seek an explanation of the features about him.

The development of a completely integrated park system requires that it be composed of units of national value which will represent noteworthy examples of the important natural phenomena of an inspirational or educational nature. Important among these phenomena are the geological features, and, collectively, the system should contain examples of all major subdivisions of geology.

Information now at hand indicates that the historical record of rock layers will be much better represented if several areas are added which contain important units of the rock succession which are not now represented.

Very few people understand the origin or accumulation of the mineral deposits which have been such a great factor in the development of our country. Natural exhibits showing the origin of coal, the occurrence of oil, iron, lead, zinc, mercury, and borax cannot but arouse public interest particularly if such exhibits have as a setting an interesting and little known country. The following examples are briefly discussed.

Powder River Dome. Ten miles northwest of the Salt Creek oil field of Wyoming lies the Tisdale or Powder River dome. Its great escarpment, known to the cattlemen as the "Wall," is formed by a continuation of the productive oil sand of Salt Creek. At the crest of the dome is exposed the Lakota sand which is here saturated with oil and is capable of yielding small quantities of oil from open pit holes. In fact, the Tisdale dome at one period of its geologic history contained an oil pool which has been liberated by erosion and of which the saturated oil sand is the last remnant.

The area is one of perpendicular cliffs, and beautiful wooded canyons. It is crossed by the South Fork of Powder River which has an interesting history of river erosion. Its domal structure is so evident that it can be seen at a glance. It contains an unusually fine display of rock layers extending from the Sundance formation of the marine Jurassic to the Niobrara of Cretaceous age. There are coiled sea shells (ammonites) as large as grindstone wheels and the bones of enormous dinosaurs, not to mention the fish scales found in the Mowry shales and great beds of volcanic ash known as bentonite. This is the type of area which should be included in the national park system.

Coal Formation. In the great area of badlands which lies between the Bighorn Mountains of Wyoming and the Black Hills of South Dakota are hundreds of square miles underlain by sub-bituminous coal. This coal is subject to spontaneous combustion when exposed to the air under certain conditions, and as a consequence billions of tons have burned in the hillsides, fusing the shales above them into great masses of red slag which lends to the rugged landscape fascinating colors difficult to describe.

The coal was formed from the trees of ancient forests which grew on marshy low-lying plains millions of years ago. Approximately 20 feet of wood were required to form one foot of coal so that the luxuriance of forests necessary to form coal beds 10 to 20 feet in thickness may be surmised.

Locally the coal beds are overlain by layers of sand, evidently the deposits of rivers at time of flood, which killed the trees. Today petrified trunks in a standing position may be seen rising from the surface of the coal below. Near at hand are slag formed by the burning of the coal, deposits of "lignitic shale" bearing impressions of marsh plants, large "swallow-tailed" crystals of selenite which form by crystallization in this shale, and beds of fine-grained sandstone carrying the impressions of leaves of trees.

By setting aside suitable sections of this area, the story of coal formation may thus be seen and interpreted as it is recorded in the greatest book of geology—the earth itself.

Bighorn Canyon. The canyon of the Bighorn River at the northern end of the Bighorn Mountains is one of the really great canyons of America. Less beautiful in color than the canyon of the Yellowstone, it has more of rugged grandeur.

The rocks exposed in the canyon walls range in age from the Deadwood shale of Cambrian age to the Tensleep sandstone of Pennsylvanian age. The known thicknesses of the various exposed formations in the canyon walls indicate them to be more than 2,400 feet high.

The Bighorn Mountains were formed by a broad arching of the rocks associated with horizontal movement of the rock layers, known to the geologist as thrust faulting. The canyon through them gives an ex-



Cliff Palace, an excellently preserved cliff dwelling and one of the most important ruins of Mesa Verde National Park

Photograph by George A. Grant
Courtesy National Park Service



Moore House Group, Colonial National Historical Park, a restoration which interprets the Yorktown Colonial period
Courtesy National Park Service

cellent view not only of the rock layers but also of the structure of a most interesting area.

Red Fork Valley. The Red Fork Valley at the southeast end of the Bighorn Mountains, Wyoming, is of historic as well as geologic interest. In the fall of 1876 Dull Knife's band of Cheyennes, who took a principal part in the Custer fight of the Little Big Horn, were killed by United States troops in this beautiful valley. In the Canyon of Bear Trap, just above the point at which the Indians were encamped, can still be seen on the ledges part way up the sides of the canyon, small barricades of rock behind which the Indians planned to conceal themselves while a small party enticed the soldiers into the canyon. The surprise attack by the soldiers which occurred in the morning of a bitterly cold day prevented the carrying out of this stratagem.

The area is fully as interesting from the standpoint of geology as from history. The Red Fork River flows on the southwest flank of an anticline which forms the mountain northeast of it. At one place it cuts into the side of the mountain fold forming a canyon and emerges below upon the softer rocks of the valley leaving a point of the hard Tensleep sandstone rising as an isolated peak from the valley floor. The stream evidently chose its course at a time when it flowed at a much higher level and was unable to change it when in its down-cutting it encountered the hard rock which lay below it.

In summary, the area exhibits mountain folding, the rock succession from the Upper Carboniferous to Triassic in age, the superposition of the present drainage and indications of ancient streams, the courses of which had nothing to do with those of the present. It is an area filled with interesting stories of the Indian wars, fights between the great cattle owners and cattle rustlers who supplanted them, and with stories of the Wyoming desperadoes, the famous "Hole in the Wall" gang which operated in this region in the late nineties.

Some other types of geologic formations which should be considered as possible additions to the national park system perhaps as national monuments are:

Meteor Crater: an example of which is located in northern Arizona.

Fossil Cataracts: water falls such as those exposed at Dry Falls in Grand Coulee, Washington.

River Delta: mouths of the Mississippi.

Barrier Beach: examples occur along the Atlantic Coast.

Sink Hole Lake: notable examples of such lakes may be seen in Florida, Texas, or at Mountain Lake, Virginia.

Sea Caves: an excellent example is Sea Lion Cave in Oregon.

Glacier Deposits: there are many typical glacial deposits formed by continental ice sheets, many examples of which occur in the Great Lakes region extending from New York to Wisconsin. Features such as kettles, kames, and drumlins are additions to present examples.

Coral Reefs: an example of a growing reef will be a notable inclusion.

Laccolith: a classical example is the Henry Mountains in Utah.

Fossil Fish Quarries: notable examples are to be found in Wyoming and California.

PLANT AND ANIMAL COMMUNITIES

When America was first visited by white men, and until a hundred years ago, it was teeming with wild animals of many kinds and these animals were associated in all cases with particular types of primitive vegetation. For example, characteristic of the vast grassland areas of the Middle West were the plains forms of animals. The most outstanding of these, perhaps, was the buffalo which was present in numberless herds. Associated with the buffalo in these grasslands were the jackrabbits, prairie dogs, grizzly bears, antelopes, wolves, sage hens, burrowing owls, and a host of other species making up, with the grasses and other plants, varied and interesting wildlife communities.

Within this great grassland area the communities of plants and animals differed from place to place. To the west the species of grasses were mostly those known as short-grasses, and with these were associated certain characteristic animals as well as various plants. Farther east the grasses were more largely tall-grass species, and the animal forms were somewhat different from those found with the short-grasses. In fact, while the general complexion of wildlife was similar throughout this vast area of grassland, it varied in many details not only as one traveled from east to west but also from north to south.

To the southwest the grassland gave way to desert, and this, like the grassland, varied much within itself in its wildlife communities. Likewise, the forested areas of the country supported many wildlife communities, those in the East differing radically from those of the Rocky Mountains; the latter, in turn, from those of the Sierra and other coast ranges; and those of the west coast forests differing from all of the others. In southern Florida, where almost tropical conditions prevail, semi-tropical luxuriance of vegetation and animal life was found. But throughout all of these various regions there was an abundance of both species and individuals of plants and animals.

The growth of the Nation as it expanded across the country was accompanied by many forces destructive to our wildlife and the primitive conditions in which it lived. Much of the destruction, such as that due to agriculture, the building of cities, and the general occupancy of the land, could not be avoided. But destruction caused by ruthless lumbering and grazing policies, pollution of streams and coastal waters, unwise drainage, and excessive hunting was needless and was due largely to a lack of knowledge and appreciation of the wildlife resources of the country.

The net result of the action of these destructive forces has been a

great depletion in many forms of animal life, the complete extermination of some, and the modification of vegetation to the extent that there are but few completely primitive wildlife communities left.

Americans are fortunate in still retaining relatively primitive conditions in wide areas of their country. Mountainous regions and desert regions still retain some of their original unspoiled landscape, and the wild plants and animals still exist in relatively primitive habitats in many places. True, much of this area has been grazed over by livestock, much of it has been altered by roads, trails, and various forms of human activity. But on the whole, samples of the primitive biota are not entirely lost to us.

This is in great contrast with conditions in many European countries which have lost everything that could be construed as representing wilderness and the wilderness biota.

In this respect, Americans have a great advantage. We still have an opportunity to preserve what is left of our primitive wildlife values, but the task is by no means simple. We have to deal with the spirit of exploitation, the thoughtless expansion of our road systems—thoughtless, because so many of the promoters are innocent of any objections to it, are unaware of the wilderness values which so many people are striving to retain and which today, after all, have such a tenuous hold on survival.

We have also numerous commercial interests—lumbering, farming, mining, etc.—which tend to encroach on and absorb primitive areas. As a result, wildlife is suffering. Winter range for the larger ungulates, such as moose, elk, bighorn, and deer, has largely been absorbed by commercial activity, and this has become a Nationwide problem. Remaining carnivores no longer find extensive enough areas for suitable habitat, and, because of widespread commercial land use, carnivores and birds of prey find their natural food supply restricted and can persist in a natural manner only in more and more restricted areas. Because of the shrinking of the game supply in the face of enormous numbers of hunters, some of the native species, already hard pressed for suitable habitat, are being replaced by exotic species which have survived the elimination experience of foreign faunas and learned to live under artificial conditions. The native flora is disappearing in the face of cultivation and the widespread introduction of exotic grasses of strictly "forage" value. Natural, interesting "prairie" vegetation, for instance, is on the verge of disappearing and has been the concern of conservationists for a number of years.

A wildlife community as used here refers to any aggregation of plants and animals, usually a large number of different kinds of each, all living together in a state of nature. It includes all living things, in the wild state, both plant and animal. It is ordinarily found that in such a community there exists such a nice balance between plants and animals;

between parasites and hosts; between predators and those preyed upon; that the condition is known as the Balance of Nature. As a general rule, no single species of either plant or animal can be removed from such a community without initiating a series of disturbances of that balance of nature and thus seriously impairing the wildlife value of the community.

The Place of the National Park System in Conservation of Wildlife Communities. The national parks began by rescuing from the immediate dangers of private exploitation certain areas which were climax examples of nature's scenic achievements and geological wonders. But with the rapid expansion of frontiers to the end that European culture not only replaced that of the Red Man but actually altered the physical condition of his environment, the national parks acquired a larger purpose. This involved a new conception; it marked a cultural achievement, because the intangible, aesthetic, and spiritual values of land were being properly balanced with those measured by material, quantitative standards. The importance of food for the brain as well as for the body was recognized. The American people entrusted the National Park Service with the preservation of characteristic portions of our country as it was seen by the early pioneers. This was primitive America, and it was to be kept for the observation of the recreation-seeking public and scientists of today and their descendants in the generations of tomorrow.

The park system has an outstanding opportunity to preserve wildlife. For years parks have been looked upon by the public as the one form of land use best fitted to preserve wildlife in inviolate sanctuary. When Charles Sheldon was exploring the Wilderness of Denali in Alaska, his thoughts turned to national park status as the best means of preserving that wilderness. He wanted it to remain in his memory as he knew it, and in many other instances the first thought of the interested public, when a wilderness area has come to its attention, has been, "Let's make this a national park." It has been sincere in this; it has thought that by doing so the wilderness will be preserved *in toto* and that it can be saved in this form by no other method. This has been the general thought, and it is not confined to this continent. Witness the various national parks being established in Africa for the express purpose of preserving the primitive aspects that spell "Africa" in her various presentations, her animal and plant life. As a matter of fact, in the London Convention for the Protection of African Fauna and Flora it was proposed to establish "strict national preserves" for the protection of natural conditions. Also, natural areas are being set aside in Switzerland and Germany with the strictest protection.

This continent has already lost certain manifestations of nature's variety and inherent beauties. Unless appropriate measures of protection are taken, this country will lose forever many native features of landscape, flora, and fauna which spelled natural America, and the land will sink toward a state of deadly monotony. It becomes increasingly

important to give careful consideration to what is left of this heritage to determine what can still be restored and to preserve in generous portions samples of natural America. Each type should be given careful thought. The desert in its various forms should be represented, as well as the picturesque mountains, the jungle-like southern forests, and Arctic tundras. Each of these has its distinctive flora and fauna.

It would be the part of good husbandry to include duplicates of each wildlife community whenever possible. This would lessen the danger of extermination of rare species induced by uncontrolled forces which may at any time be turned loose through man's interference with nature.

Most of the older national parks were set aside because of some superlative scenic, geologic or other feature with but little thought of wildlife. It is now fully realized that there is much more to nature than scenery and that plants and animals give life and meaning to an area.

Because flora and fauna were not considered in drawing the boundaries of the early parks, it was found, as the country became settled, that most of the parks lacked the necessary areas to support a fauna or flora fully representative of their regions. Winter range problems for certain animals became critical. Hunting and trapping exterminated predatory animals, thereby disturbing the balance of nature and causing calamities of far-reaching effect. In the absence of natural control by predatory animals, the food animals increase to abnormal numbers. Swarms of rodents develop and consume much of the natural forage of deer and elk. These latter species also tend to increase abnormally in the absence of natural control by predators. The results are wholesale starvation and death among the deer and elk and widespread destruction of valuable species of vegetation. The native types of vegetation may suffer a complete and lasting change to less desirable forms.

Most of the present parks have problems of this sort, although some improvement has been achieved by recent boundary extensions. The early boundaries were based on a too limited conception of the real place of parks in American culture.

Today when areas are proposed for park or monument status, the requirements for a well balanced flora and fauna are carefully determined before boundary proposals are made. But in spite of this, unsatisfactory boundaries must at times be accepted temporarily because of the settled condition of the country, and the difficulty there is in purchasing lands required for the wisest conservation.

Despite the fact that wildlife communities have not always had the full consideration they merited, the parks have played an important part in wildlife conservation throughout the West, and in recent years they have begun to render the same service in the East.

The scientific value of wildlife is unbounded. In recent years ecology has received a new impetus and a broader scope. Indeed, we look to the science of ecology for the solution of our wildlife conservation

problems. Yet the fields of operations are being progressively curtailed because of the constant elimination of one after the other of the elements in the natural flora and fauna here and there. There is an increasing demand for information on what the "original conditions" were. We are groping back into the meager early records, seizing eagerly the stray bits of information handed down to us by early wilderness travelers, who did not anticipate the great present-day need for data which they could so readily have obtained. We are greatly in need of virgin areas for comparison with modified areas. We must know the habits of animals in natural habitats to compare with their habits in new habitats or in new biotic associations. Nor is this only for the use of pure science; such data have today a direct bearing on our efforts to manage our wildlife in the hunting fields, to manage our countrywide environment in such a way that we can preserve animal life from extermination as a result of human occupation of the continent. Of special value is the question of food habits and food requirements, cover needs, and the complex relationships among the various plant and animal species. Investigators are more and more seeking "unspoiled" areas for study. Range experts eagerly seize upon "relic" areas, however small, to aid in the interpretation of range conditions as they find them. General zoologists, entomologists, mammalogists, ornithologists, botanists, and many others, find our wilderness flora and fauna a rich field for research. As time goes on, our natural areas will, of course, become much more precious than today. We have by no means exhausted the biological sciences. New fields are opening up, and it is the fervent desire of the present-day scientist that the natural areas, such as may be preserved in a national park or monument, be passed on to future scientists intact so that the work being done today may be continued by future workers. If the numerous groups of scientists interested in our flora and fauna were canvassed today, there would be few who would not endorse the preservation of generous areas containing the natural flora and fauna.

The parks perform important services to the hunters and trappers of America. In their capacity as animal sanctuaries, where hunting is not permitted, they preserve a breeding stock of utmost hardiness. Nature's method of selection is permitted to remove the weak and unfit; the strong survive to perpetuate the species. The strong primitive stock of the parks provides a reserve that may be drawn upon in case of urgent need to restock other public lands on which the native species may have degenerated or become extinct.

A more direct and immediate benefit realized by the hunters and trappers arises from the fact that parks act as wildlife reservoirs from which many game birds and animals and fur bearers overflow freely into all the adjacent lands surrounding the parks. Better hunting and trapping is a direct result of park management even though hunting is not permitted within the park boundaries.

Fishing is a sport which has always been enjoyed in the parks just as freely as on other public lands. Streams and lakes within the parks are liberally stocked with native species of trout. The disciples of Izaak Walton can enjoy their sport in streams of wilderness character, where the speckled beauties are as numerous as when the original Izaak Walton wove his philosophy and converted fishing into a true sport.

Wildlife Objectives and Policies in the National Park System. The objectives and policies pertaining to the wildlife in the National Park System are such as it seems will best serve to approach the ideal governing park management and use. They have been slowly molded in the highest conservation thought in America. It is felt that although at times certain values are lost, in adhering to the aims and policies outlined, that they are lesser values which have had to be sacrificed for the full attainment of the higher values.

Objectives:

1. To preserve, and restore, insofar as possible, the flora and fauna in their natural and undisturbed state in all park areas.
2. To provide the people with the opportunity for understanding and enjoying the higher values of the plant and animal life of the park areas.
3. To secure, through research, a thorough knowledge of the flora and fauna of all park areas.

Policies:

1. Each park shall contain within itself essential year-round habitats of all species belonging to the native resident fauna.
2. Each park should include sufficient areas in all the required habitats to maintain at least the minimum population of each species necessary to insure its perpetuation.
3. A complete report upon any new park project shall include a survey of the flora and fauna as a critical factor in determining area and boundaries.
4. No management measure or other interference with biotic relationships shall be undertaken prior to a properly conducted biological investigation.
5. Every species shall be left to carry on its struggle for existence unaided, as being to its greatest ultimate good, unless there is real cause to believe that it will perish if unassisted.
6. Where artificial feeding, control of natural enemies, or other protective measures are necessary to save a species that is unable to cope with civilization's influences, every effort shall be made to place that species on a self-sustaining basis once more; so that these artificial aids, which themselves have unfortunate consequences, will no longer be needed.
7. The rare predators shall be considered special charges of the national parks in proportion to their persecution elsewhere.
8. No native predator shall be destroyed on account of its normal utilization of any other park animal, unless the latter species is in immediate danger of extermination, and then only if the predator is not itself a vanishing form.
9. Species predatory upon fish shall be allowed to continue in normal numbers and to share normally in the benefits of fish culture.
10. The numbers of native ungulates occupying a deteriorated range shall not be permitted to exceed its reduced carrying capacity, and, preferably, shall be kept below the carrying capacity at every step until the range can be brought back to original productivity.

11. Any native species which has been exterminated from a park area shall be restored if this can be done, but if said species has become extinct no related form shall be considered as a candidate for reintroduction in its place.

12. Any exotic species which has already become established in a park shall be either eliminated or held to a minimum provided complete eradication is not feasible.

13. Every possible measure shall be employed to prevent the invasion of the parks by any exotic plants or animals.

14. The presentation of the animal life of the parks to the public shall be a wholly natural one.

15. No animal shall be encouraged to become dependent upon man for its support.

16. Problems of injury to the persons of visitors or to their property or to the special interest of man in the park shall be solved by methods other than those involving the killing of the animals or interfering with their normal relationships, where this is at all practicable.

17. A complete biological investigation shall be made in each park at the earliest possible date. This shall include determining the primitive biological picture, tracing the history of human influences, making a thorough biological survey and formulating a wildlife administrative plan.

18. Each park shall contain within itself representative examples of each vegetative type characteristic of the immediate vicinity.

19. The flora and fauna of all national park areas should be administered by a competent and sufficient staff of biologists.

20. The National Park Service should not confine its interests in wildlife conservation to the parks but should extend it to the country as a whole.

In order to give added protection to native species of fish within the park areas, the following policies should be used for guidance in all fish cultural activities carried on within them:

21. No introductions of exotic species of fish shall be made in national park or monument waters now containing only native species.

22. In waters where native and exotic species now exist, the native species shall be definitely encouraged.

23. In waters where exotic species are best suited to the environment and have proven of higher value for fishing purposes than native species, plantings of exotics may be continued with the approval of the Director and the superintendent of the park in which such waters are located.

24. It is the definite purpose of this policy to prohibit the wider distribution of exotic species of fish within the national parks and monuments and to encourage a thorough study of the various park waters to the end that a more definite policy of fish planting may be reached.

25. In waters where the introduction of exotic species threaten extinction of native species in an entire national park or monument area, such planting should be discontinued and every effort made to restore the native species to its normal status.

26. The number of any species of native non-game fish should not be reduced even where such reduction may be in the interest of better fishing.

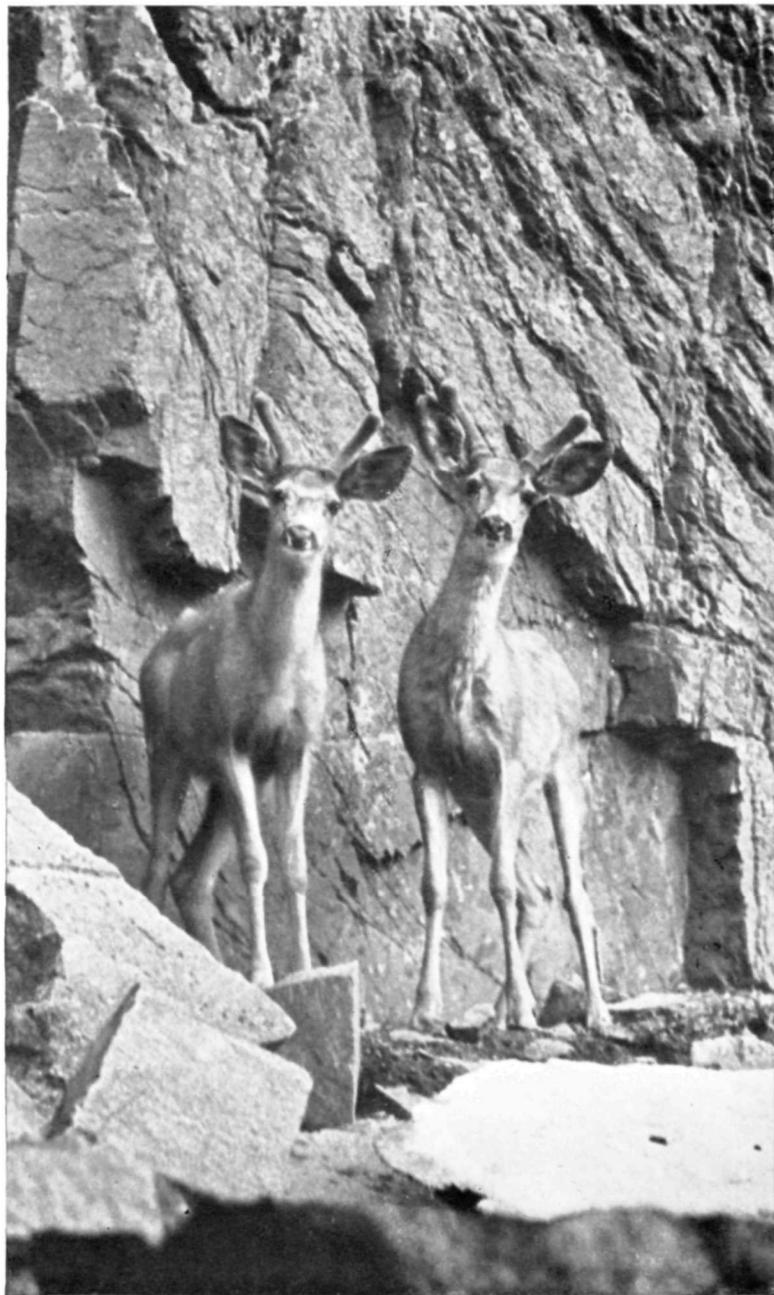
27. All forms of artificial stream improvement which would change natural conditions should be avoided, but the restoration of streams or lakes to their natural condition is permissible where thorough investigation indicates the desirability of such action.

28. There should be no effort to introduce exotic fish or other exotic aquatic life for the purpose of increasing the supply of fish food.



The Mansion and Well-House from the rear, showing the entrance road and English boxwood at Wakefield, Virginia,
the George Washington Birthplace National Monument

Courtesy National Park Service

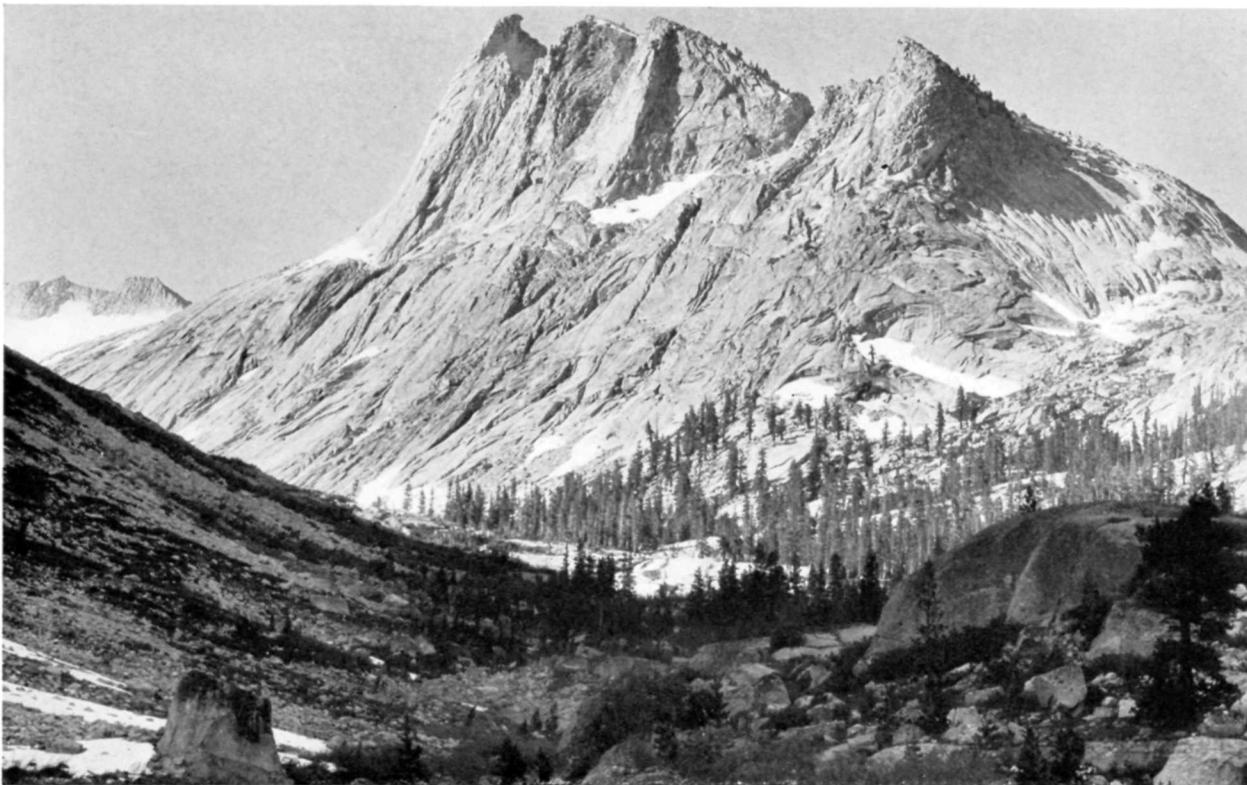


Black-tail Deer in the sanctuary of Glacier National Park
enjoying protection from its enemies
Courtesy American Forests



Mount Clarence King in the proposed Kings River Canyon National Park

Photograph by Ansel Adams



Deadman Canyon, Roaring River, proposed Kings River Canyon National Park
Photograph by Ansel Adams

29. In cases where a lake or stream is of greater value without the presence of fishermen, there should be no stocking of such waters.

30. In national parks and monuments where there still remain certain lakes which do not contain fish, permission of the Director must be secured before stocking.

Forest Protection. Animal life, in a state of nature, depends upon the forest or other forms of vegetation for both food and shelter. The whole wildlife community is subject to annihilation by certain destructive forces, such as fire, insects, and diseases whose direct effects are most noticeable in the havoc wrought upon vegetation alone. When fire sweeps a mountainside, destroying the forest and all other vegetative cover, many years, even a century, may elapse before nature's slow processes again clothe the area with a cover like that destroyed. Usually many animals are destroyed by any forest conflagration, but most of the animals fortunate enough to escape shun the burned area.

Destruction of the vegetative cover on an extensive scale, no matter where it may occur, leaves repulsive scars and blemishes upon the fair face of nature. In a national park, such scars are especially objectionable because most people visit a park to enjoy its great scenic beauty.

In certain types of forest and under certain weather conditions, fire quickly develops into an uncontrollable conflagration. Under such conditions it may travel with great speed sweeping everything before it in a terrific holocaust.

These are the direct effects which fire may have within a park. Much thought and planning are devoted to the devising of measures intended to prevent the occurrence of forest fires within the national parks. Unfortunately fires do occur in spite of preventive measures, and some have caused great damage. Some are the result of carelessness on the part of park visitors, some result from accidental causes, and some from lightning which is a natural and unpreventable cause. Whatever its cause, every fire is a potential disaster. It must be detected promptly and attacked without delay. The parks have modern equipment and an organization of men trained in the methods of forest fire control. As time goes on, research and invention provide more efficient equipment, the organization becomes more skillful, and more of the fires are held to small size.

The occasional fire which develops proportions of a disaster requires the marshalling of a small army of trained fighters directed by skilled personnel. When such an emergency arises, the additional power required is obtained through the cooperation of the United States Forest Service or State organizations. When the need arises on National Forests or other areas near a national park, the Park Service organization cooperates with its neighbors. The result is the best protection against fire which can be provided for the national parks and adjacent areas.

The direct effects of fire in a park are of such great importance that they fully justify large expenditures to insure adequate protection against damage of this sort.

There are important indirect effects of fire in a park which are closely related to forest influences. Soil erosion, flood damage, and water conservation are seriously affected by the destruction of vegetation, especially when it occurs on steep mountain slopes. The shade of the forest retards the melting of snow, its screening effect breaks the force with which rain strikes the earth, and the sponge effect of accumulated leaf litter on the ground holds much water in storage while it contributes to increased absorption of water by the soil. In this manner the forest conserves and stores water supplies which are released slowly for the benefit of distant farms, towns and cities. The forest, checking the force of the wind, and its matted root systems and carpet of mosses binding the soil, serves to prevent the soil from being either blown away by the winds or carried away by torrents of water. In this wise, soil erosion is prevented. Rapid run-off of water from steep slopes, accompanied by choking of stream channels by eroded soil, are principal factors which result in disastrous floods.

Most of the national parks include large areas of high elevation where rainfall is heavy and slopes are steep. Destruction of the forest cover on such areas either by lumbering or fire can result in disastrous consequences for communities in far distant places. These forests are essentially protection forests which should be kept forever in the undisturbed primeval condition.

Destruction of vegetation by insects and disease may result in disastrous consequences to scenic beauty of the parks, almost as serious as that wrought by fire. Great accumulations of dead material resulting from such causes greatly aggravate the danger of uncontrollable fires. Control measures are therefore employed to prevent widespread epidemic attacks and hasten the restoration of a normal balance of nature.

Destruction of valuable vegetation may at times result from too concentrated public use of restricted areas as in the case of camp grounds and picnic areas. Control measures are employed to safeguard and maintain the natural conditions as nearly as possible. Provision of alternate camp grounds permits periods of rest for areas where vegetation shows signs of distress.

Forest Protection Objectives. To retain the primeval and natural forest conditions so far as use and safety of the forest will permit and to maintain the forest ecological balance.

Policies. (1) To make the park fire protection organizations the best trained and equipped and most efficient forest fire protection organizations in the Nation because of the high scenic and recreational values at stake.

(2) To reduce the number and size of all man-caused fires to the smallest attainable minimum consistent with funds and facilities available and with human use of the parks.

(3) To locate, analyze, and reduce such fire hazards as adequate protection of park areas warrants and is consistent with the maintenance of natural appearance and wildlife habitat.

(4) To reach and combat every fire that starts in, or threatens, a park or monument with such strength, skill, and equipment as to confine it to a satisfactory minimum acreage and damage and always to gain control before the burning period of the second day.

THE HISTORICAL AND ARCHEOLOGICAL PROGRAM

The recent growth of the National Park System has included many historic and archeologic sites of national significance. While the outstanding developments in this important field are not difficult to name, their implications for the future deserve the careful consideration of every conservationist.

The Service has been active in this field since its establishment in 1916, and a decade of thought and discussion finally resulted in 1933 in the Executive Orders which greatly extended the historic sites and buildings program. Fifty-nine areas, administered by several bureaus and two departments were added to the national park system already existing. Historic and archeological monuments authorized by Congress since 1933 have without exception been placed under the same fostering care. The growth of the historic sites program and its far reaching effect upon the National Park system, may be gathered in part from the following figures:

	Historical and Archeological Areas established or authorized for administration by the National Park Service	All Areas established or authorized for admini- stration by the National Park Service
1916	8	31
1932	19	60
1933	80	130
1934	82	133
1935	90	141
1936	98	153

By the act of August 21, 1935, Congress declared it to be a national policy to preserve historic and archeological sites of national significance for the pleasure and benefit of the people. The Secretary of the Interior, through the National Park Service, was granted broad powers to perform the important duties and functions necessary to the accomplishment of that end. In addition to custodianship, Congress has now placed upon the National Park Service responsibility for leadership in a renewed Nation-wide movement to conserve the remaining unprotected historic and archeologic treasures.

Around the nucleus created by these changes have gradually been grouped other Federal activities both regular and emergency, in the conservation of historic and archeologic sites. The Historic American Buildings Survey has been initiated by the National Park Service and

includes, among its many accomplishments, a permanent working agreement with the Fine Arts Division of the Library of Congress and the American Institute of Architects to measure and record the irreplaceable architecture of the American past.

From the beginning of the Emergency Conservation Work program, practically all camps engaged in developing national or state parks of historical or archeological significance were placed under the jurisdiction of the National Park Service and their work has been guided by a technical staff of trained historians, architects and archeologists.

Finally, on August 26, 1936, there was established a cooperative arrangement with the Works Progress Administration whereby all WPA projects for historical or archeological excavation or restoration are now reviewed by the National Park Service. Already cooperating in much of its work with the Smithsonian Institution, the Service, by the completion of the agreement with the WPA has become the administrator or consultant on practically all historical preservation work carried out with Federal funds whether from regular or emergency appropriations. Like England, France, Germany, Italy and other European countries, the United States now has a definitely recognized government agency to serve as the guardian of the public interest in protecting the historic and archeologic treasures of the Nation.

Such changes, however effective they may be, do not come without raising questions or creating problems. Many fully aware of the importance of this program, and having deeply at heart the conservation of the scenic and historic beauty of America, wish to know what their effect will be on the national park system.

It is well to recall that in spite of the magnitude of recent changes, historic conservation is not new to the National Park Service. It has, in fact, been a part of the general conservation program of the Interior Department since 1906 and of the National Park Service since its establishment in 1916. Although until recently the activities of the Service in historical conservation were unheralded, they were from the first of undeniable importance.

Under the American Antiquities Act, "the President of the United States is authorized, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments."

Pursuant to that legislation, as early as 1916, when the National Park Service was established, the Department of the Interior had under its jurisdiction eight national monuments of historic and archeologic interest, as well as Mesa Verde National Park, one of the most prized areas of the system and antedating in establishment all but a handful of our present national parks. These areas were, in 1916, immediately

placed under the National Park Service, and formed the nucleus of the program which has been growing ever since.

The National Park Service Act itself named historic conservation as one of the important responsibilities of the organization. In 1924, only eight years after the establishment of the Service, negotiations were under way for the transfer of the military parks to the Department of the Interior. In 1932 came an important step with the creation of an historical division especially commissioned to study problems of administration and policy relating to historical and archeological sites. Meanwhile important areas had been added to the original group. Colonial National Historical Park and George Washington Birthplace National Monument were established in 1930 and the movement had begun which led to the preservation, under the National Park Service, of the important Revolutionary sites at Morristown, New Jersey. The Southwestern areas, such as Aztec Ruins, Bandelier, Montezuma Castle, and Canyon de Chelly, increased in importance until they began to approximate in interest the nationally important Mesa Verde. Thus when the general reorganization occurred in 1933, the National Park Service was prepared to assume its full responsibility of custodianship for the Nation's historical and archeological treasures. The policies and standards developed by the Interior Department and the National Park Service in twenty-seven years (1906-1933) of association with problems of historic and scenic conservation, are now being applied to the new areas acquired since 1933.

Viewed as a whole, the additions by transfer represent important as well as extensive resources. The national military parks, including the fields of Gettysburg and Chickamauga, as well as Lookout Mountain and Missionary Ridge, are among the oldest national reservations for public use in the United States. The significant battlefields which make up the system as a whole were created by Acts of Congress passed in response to an insistent demand which expressed itself steadily for almost half a century. The national monuments recently acquired include such areas as Fort Marion at St. Augustine, Florida, one of the most heavily visited and interesting historic monuments in the country, and archeological sites of such importance as Walnut Canyon and Tonto in Arizona and Gila Cliff Dwellings in New Mexico. Other acquisitions include the Ford Theater in Washington, D. C., where Lincoln was assassinated and the house, just across the street, where he was taken in his last hours. Added to the existing resources of the Service, these areas make a total of 98 historical and archeological areas both authorized and established, to which the Federal Government is extending protection.

The integration of these extremely valuable though varied resources into the National Park system is being accomplished through the adoption of the following policies:

1. Grouping of the ninety-eight separate areas, according to historical and geographical principles, into major units. So far nine such units, embracing sixty-eight established areas, have been approved. In each case an area of major historical significance has been selected as the administrative, technical and educational center for the related sites. Beginning in the northeast and proceeding south and west, the approved groups center around the following parks: Morristown National Historical Park; Gettysburg National Military Park; Fredericksburg and Spotsylvania County Battlefields Memorial National Military Park; Colonial National Historical Park; Chickamauga-Chattanooga National Military Park; Fort Marion National Monument; Shiloh National Military Park; Vicksburg National Military Park; and the Southwestern Monuments.

This grouping has resulted in a simplification of the system of historical areas, and a coördinated and directed administration of these resources for public use.

2. Physical development according to principles of natural beauty and historic authenticity with a minimum of monumentation. In each area historians, together with archeologists and architects where the problem demanded such technical assistance, have conducted basic studies of the major features of historical significance. These studies have laid the groundwork for the program of preservation and educational development which followed.

3. Introduction of a more effective educational program through the use of literature, museums, outdoor displays and markers, and a lecture and ranger service. Closely coördinated through group administration, this developing educational service in the historical areas of the east offers promise of providing a much needed public service.

The above developments have been accompanied by a general awakening of public consciousness to the need of preserving the historic and archeological treasures of America while they can still be saved. The Historic American Buildings Survey, begun in 1933, and since carried forward continuously in all parts of the country, has revealed in striking fashion the deplorable condition of many of the best of our architectural and historical remains. The survey of archeological resources, conducted by a special committee of archeologists for the National Resources Board in 1934, revealed an even more serious situation with respect to prehistoric remains.

On the basis of a study of long-standing legislation of a like character in effect abroad, the historic sites bill, referred to earlier, was enacted, granting broad powers to the Secretary of the Interior to undertake a national program for the preservation of important historical and archeological structures and sites. Among the most significant powers granted was that which authorized the National Park Service to enter into coöperative agreements with state, municipalities, corporations, associations, or individuals to preserve sites which are not owned by the Federal Government.

Two main developments have followed in the wake of the legislation. In February, 1936, an Advisory Board consisting of eleven members, including, among others, eminent authorities in the fields of history, archeology, and architecture, was appointed to aid the National Park

Service in formulating general policies. This Board, authorized by the legislation, holds quarterly meetings to aid the Service in its work.

In July, 1936 funds were made available to conduct a Nation-wide survey of historic sites for the purpose of determining which are of sufficient significance to warrant national recognition. The inventory, investigation, and classification of sites necessary in connection with this survey are now in progress. Both in that survey, as well as throughout the general historical program of the Service, the following policy, adopted by the Advisory Board on National Parks, Historic Sites, Buildings, and Monuments at its meeting May 9, 1936, governs the selection and treatment of areas for inclusion within the system:

The general criterion in selecting areas administered by the Department of the Interior through the National Park Service, whether natural or historic, is that they shall be outstanding examples in their respective classes.

The number of Federal areas must be necessarily limited, and care should be exercised to prevent the accumulation of sites of lesser rank. In the historical and archeological fields, national areas, it is believed, should be carefully chosen upon the basis of important phases of American history. The areas thus selected will collectively present an adequate story of American progress from the earliest beginnings of human existence down to comparatively recent times.

It is desirable in ascertaining the standards for selecting historic sites, to outline briefly the stages of American progress and then indicate lists of the possible sites illustrative of each stage. In the study of these lists it is expected that attention will be centered upon particular sites which, because of their deep historic value, as well as because of the fact that they possess important historic remains and are generally available, may be said to be the best examples in their respective classes.

It is these outstanding sites which should be saved, developed and interpreted by the Federal Government. In so doing, the National Park Service is following a line of precedents already clearly outlined in the selection of areas of all kinds, whether natural or historic.

With respect to historic and archeologic sites other than those selected for attention by the Federal Government, the function of the National Park Service should be to encourage state, local, semi-public and private agencies to engage in protective and interpretative activities. This work should always be closely associated with the program of National Historic sites administered by the Federal Government.

MUSEUMS IN NATIONAL PARKS

If it be the special privilege and function of the National Park Service to champion the interests of those who appreciate the inspiration of nature, how true it is also that that privilege and function extends to the furtherance of the interests of those who appreciate the pageantry and dignity of American history! The full recognition of the responsibilities of the National Park Service in interpreting and presenting the broad American story has given impetus to a unique educational program which today receives the commendation of scholar and layman. Nearly ten million visitors to the park system each year accept the

offerings of these natural preserves and historic reservations with an enjoyment based upon some understanding of the distinctive features of the areas. The philosophical aspects of the program of enlightening travelers in national parks is unthought of and unimportant to the average American but probably it is a fact, nevertheless, that here contribution is being made to the betterment of the thought of the Nation.

National Park Service executives, recognizing their opportunities, have defined objectives in this educational endeavor and established a program of work in which have been enlisted specialists in the fields of science, history and visual education. Geologists, biologists, archeologists and historians have coördinated their efforts in the field, laboratory and library in order that problems may be met, basic information organized and published, and a program of action projected. In all instances of such investigations ends have been shaped to enable the public to use the findings. So far as possible publications have been prepared or information disseminated by word of mouth. Contacts between park visitors and officers who can interpret the technical information assembled by the specialists are made easy but, it is hoped, not obtrusive. Underlying the program of publication, lectures and guided field trips is a system of unique museums which serve the double purpose of graphically interpreting the park stories and providing headquarters and working facilities for the men who contact the public.

These small institutions, at present fifty-three in number, are designed to present in form assimilable by the average visitor the findings of the technical investigators. In each instance the museum is limited in its scope to cover the story or stories to be told in the immediate area in which it is located. Every museum project is thus a true focal point of interest and information, and continuity of the larger story of related parks or park museums is insured through careful integration of the programs of individual units in the system to form a connected account of the whole.

One may reasonably ask how such integration can be guaranteed. With a program so extensive and made up of such great variety of units, full coordination is obtained only through close organization and direction from a central office. An administrative unit, the Museum Division, exists within the Branch of Research and Education. A first responsibility of this group of workers is the shaping of basic plans for the interpretation of the story of America as it is to be told in one hundred thirty-six units of the system distributed throughout the United States. Field officers such as park naturalists, park historians, archeologists, biologists and geologists, and in some instances architects and engineers, cooperate with the Museum Division in conducting research and assembling the essential information upon which museum plans may be built.

Leaders in the various branches and divisions of the Service survey



Seven Lakes Basin, near head of Soleduck River, revealing the dense primitive forests of the Olympic Mountains

Courtesy American Forests



The Alpine beauty of the higher elevations of the Olympic Range

Courtesy American Forests

this material and the themes which it represents and cooperate with the Museum Division in establishing a relationship between the many chapters of the National story here involved. Experienced curators possessed of comprehensive views of the broad objectives of the general educational program are thus enabled to prepare for the proper articulation of any museum projects to which they may be assigned. These curators, working in the field with naturalists and historians, then exercise their ingenuity in devising schemes for interpreting the essentials of the individual stories to be presented. Their specifications, when approved, form the basis for museum building arrangement and become the guide for preparators and artists who, in central laboratories, produce the graphic exhibit devices to find use in parks.

The one hundred thirty-six Federal areas administered by the National Park Service are distributed from coast to coast and from Mexico to Canada. In scope of stories they constitute a rather full revelation of everything American. The responsibility of preserving this wealth of national expression and making it comprehensible to the average citizen is perhaps as weighty a problem as confronts any government bureau. Recognition of the responsibility and provision for meeting it has come in time to guarantee that a reasonable share of our National heritage of wilderness beauty, natural phenomena and historic treasures shall be saved for all time. The present attitude of law makers and public would indicate that the projected program of the National Park Service in making critical examination of the physical nature of its areas and study of the human history represented within them is to continue and result in more adequate understanding of those possessions. The program of interpretation will be maintained as started and it seems safe to anticipate that the returns in the pleasure derived by enlightened visitors will exceed the cost of the educational operations and certainly contribution will have been made to the betterment of the thought of the Nation.

The small field museum has demonstrated its effectiveness in reaching all classes of park visitors with information that is retained and discussed after the park tour has ended. This ability to present varied stories in doses that are pleasant to take, easily comprehended and long remembered, argues for adequate provision for a continued museum program in national parks.

DEVELOPMENT OF PARK LANDS

Proper use is generally interpreted to mean that parks should become reasonably accessible, that shelter, food, safety, and sanitary accommodations be available to a visiting public. There are numerous other uses of parks such as regulation and maintenance of water-flow; conserving and increasing the supply of game animals and birds; as fields

for scientific research; as locations for appropriate sports; for control of erosion damage; as custodians of historical, archeological, and other objects of public value and interest. Such uses, however, of the national park areas, have brought with them the need for limited physical development. Roads and trails are necessary for access. Personnel is required for administration, protection, and maintenance. Superintendents, rangers, and laborers require houses in which to live. The visiting public requires necessities for physical comfort. To provide these things, and to do so with the least possible disturbance of natural conditions within a park, is a major responsibility of the National Park Service.

In the early history of national parks, this matter of development was not very seriously considered since visitors were few. Automobiles were barred from the parks, and in Yellowstone for example, ninety-five per cent of the visitors in the first 50 years of the park arrived by train and only five per cent by automobile.

In the next five years, as many people arrived at Yellowstone as had come in all the previous fifty years, and ninety-five per cent of them came by automobile! What a complete change in development this brought! New provisions for accommodation of the public immediately became mandatory. All other parks of the system experienced a similar increase in public use. Along with this there has been an increase in the number of areas added to the system.

From the beginning it has been a basic and controlling policy that no development work of a kind which might change in any way the physical appearance, natural condition, or manner of use of any area, should be undertaken without careful plans for such work prepared in advance.

Advance planning to provide for thorough consideration and study of all contemplated physical development, or any physical change in a park, is mandatory in park practice. All such plans for the future work or development within a park are brought together and presented by means of the "Master Plan" for that particular park. Briefly described, the Master Plan consists of:

1. *Base Map.* This shows topography and all existing features and is compiled and drawn from best available sources.
2. *Road System Plan.* Which shows existing and proposed roads with indications of progress being made in construction.
3. *Trail System Plan.* Showing existing and proposed trails.
4. *General Development, or Zoning Plan.* This shows locations of developed areas existing or proposed, wilderness areas, sacred areas, private property, historical areas, research areas.
5. *Fire Control Map.* Upon which is shown facilities for fire control, lookout locations, fire caches, communication lines, fire trails, water channels.
6. *Forest Type Map.* A map which indicates all different existing types of flora within a park.

7. *Developed Area Plans.* These plans comprise the larger number of sheets within the master plan, and show at large scale the present and future development proposed at each individual area where people must live. Locations of all buildings, roads, bridges, or other developments are established, including even parking areas, hitch racks, or flagpoles.
8. *Development Outline.* This outline consists of typed sheets which are bound with their corresponding graphic plans, and which state as briefly as possible the facts, figures, decisions, programs, and methods of treating the various problems of that particular portion of the park being considered.

The entire Master Plan is not the work of any one person connected with a particular park, but is the condensation of thought and plans of all who are concerned with the future protection and development of the park or its policies. It is revised each year to correspond with accomplishments of the season and further determination of ultimate development, thus assuring a constantly improved statement of the existing conditions and future policies of the park.

From this Master Plan, a "six-year program" is prepared annually which proposes the work which will be done within the next six years, with priorities, allocation of funds desired, and personnel needed.

The foregoing paragraphs are indicative of the care which is used in proposing any changes which may be deemed necessary to the development of any park; it is perhaps unnecessary to state that in case of doubtful necessity as to the development, the answer is "No."

Visitors to the national parks frequently express interest in the architecture of the buildings, especially within the western parks where there are examples of park architecture especially fitting to the scenic surroundings, and which are seldom seen elsewhere. In the early history of the national parks the principal buildings were the hotels and lodges of the operating companies.

A number of the early hotels were well planned by competent architects; however, many structures of that date were poorly planned and ill fitted to their landscape surroundings. These poor buildings are gradually being replaced, while the better ones are being maintained. Early government structures, with several notable exceptions, were quite uniformly poor because of lack of construction funds and little provision for architectural planning.

Architectural construction within parks now requires the preparation of complete sets of plans and specifications whether the buildings be constructed by operators or by the Park Service. Both must adhere to the Master Plan of the park as to locations and scope of operation. Operators must have plans prepared by licensed architects and approved by the architects of the Service. Thus there is a gradual improvement in the design and in the safety and suitability of park structures. The use of native materials, and the careful landscape location of buildings has done much to harmonize them with sur-

rounding park scenery so that Man's intrusion into Nature's sanctuary is least noticeable.

In many parks a natural landscape appearance has been much improved over conditions which existed only a few years ago. This has been accomplished by programs of "naturalization" work—a restoration of previously existing natural conditions—which includes obliteration of old, unnecessary roads and trails; planting out unsightly evidences of man's construction activities; restoration of sod in eroded areas; removal of fences; relocation of power and telephone wires to reduce visibility; obliterations of old borrow pits, refuse dumps and similar unsightly evidences of human activity.

Where new construction is found absolutely necessary within the parks, the strictest controls are exercised that the least possible landscape damage may result. This is especially true with respect to road and trail construction. Contrasted with the early years of the parks, when roads were built along lines of least resistance and with no thought as to damage to natural values, every precaution is now taken. These precautions have created something of a new technique in the construction of scenic highways even outside the national parks. Control of blasting operations is enforced that damage to surrounding features may be prevented; sidestepping of waste excavation material is eliminated or confined to designated stations; careful control of right-of-way clearing and burning is exercised; new specifications are written for improved road-sections; the technique of flattening-and-rounding of cut slopes is developed; new specifications are introduced providing for stabilization of loose slide materials; the popular use of masonry for guard rails, bridges, and other structures is revived; new types of log bridges and structures for use in forests are designed; landscape plantings of native shrubs, trees, and sod become a part of highway construction work.

Such unusual improvements in the construction of scenic roads have been made possible by a close cooperation between the Park Service and the Bureau of Public Roads. Major road construction in national parks is carried out by the Bureau of Public Roads of the Department of Agriculture, through an arrangement made in 1928 and called the "Inter-Bureau Agreement." This agreement is an outstanding example of coöperation between separate Departments and has functioned as a working partnership which has constructed many of the finest scenic highways of the Nation.

Within the different parks careful planning and construction work is being done to meet the needs for campgrounds, picnic areas, and similar grounds for public use. To keep these grounds attractive for visitors, it is necessary in the more heavily used areas to plan for camps, tables, fireplaces, and automobile traffic in a definite manner to protect the trees, shrubs, and grass.

With additions to the National Park System, come further needs

for protective planning and for provision that highest use, consistent with true conservation, may be made of the land. Charting the safe and sane course of development for each area will be its Master Plan in which is gathered and set forth the best thoughts and advanced planning of the many people who have given it painstaking study. It is the ambition of the Service that such use and enjoyment may be provided without detriment to the inherent natural values.

CONCLUSION

The American Planning and Civic Association has presented in the foregoing pages an analysis of the principles governing the character and growth of the National Park System as interpreted by the National Park Service. The Director of the National Park Service has described the qualifications of national parks and monuments and the policies which are being used to protect them in the system. In the statements that follow, the staff of the National Park Service has shown how these policies are applied to conserve the geological, biological, historical and archeological resources of the parks. In preserving the great scenic areas of the country it has been indicated that there are fine opportunities for preserving, also, for the public benefit, suitable examples of the plant and animal life native to the United States.

Consistent with those governing principles and resulting logically from their adoption, the way is pointed toward a land-use program of great national importance. It is significant that a large number of areas which should be conserved and protected from adverse use were once public domain and are still in public ownership. They could, therefore, be given park or monument status at no great cost to the public. The proposed Mount Olympus and Kings Canyon National Parks are striking examples, but there are numerous other Federally owned areas of comparable value that should be included in the National Park System.

It is not possible at the present time to enumerate all of the suitable areas, both publicly and privately owned, because no adequate survey of the recreational resources or of potential National Parks has ever been made.

An adaptation of the recommendations contained in the report on recreational resources, prepared by the National Park Service for the National Resources Committee, would indicate that the following general areas, now in Federal ownership, contain features suitable for inclusion in the National Park System:

1. The proposed Mount Olympus National Park, Washington.
2. An area of several hundred square miles in the Northern Cascades, Washington.
3. Supplemental areas, composed of a number of the volcanic cones along the Cascade Range, in Washington and Oregon, such as Mounts Baker, St.

Helena, Adams, Hood, and to include Mount Rainier National Park as a part of a larger conception.

4. An area of the Sierra Nevada, California, composed of Yosemite National Park, Kings River Canyon Region, General Grant and Sequoia National Parks, Redwood Mountain, and the intervening wilderness portions of the Sierra above the commercially valuable timber on both sides of the crest, and one or more extensions reaching down the east face of the Sierra.

5. A portion of the Channel Islands, California. Five of these eight islands are in Federal ownership, and the three principal islands are in private ownership.

6. An area in the Sawtooth Mountains of Idaho.

7. An area, the proposed Escalante National Monument, to include roughly the Colorado River Gorge from the junction of the Green and Colorado Rivers, Utah, to the northern Arizona boundary, and certain territory between the San Juan and Colorado Rivers.

8. The proposed Capitol Reef and Zion National Monuments, Utah, and the proposed Kofa Mountains and Organ Pipe Cactus National Monuments in southern Arizona.

9. The Thoroughfare country, adjacent to Yellowstone National Park, Wyoming.

10. The proposed extension of Grand Teton National Park, Wyoming, involving both Federally and privately owned lands.

11. An area in the Wind River Mountains, Wyoming.

12. The proposed Arapaho Peak extension of Rocky Mountain National Park, Colorado.

13. The proposed Green River National Monument, comprising Lodore and Yampa Canyons, Colorado, and Split Mountain and Dinosaur National Monuments, Utah.

14. An area in the Guadalupe Mountains of New Mexico, adjacent to and south of Carlsbad Caverns National Park.

15. An area in the Luquillo National Forest, Puerto Rico.

16. The area between Glacier Bay National Monument and the coast, Alaska, involving mostly public domain.

The following general areas, largely in private ownership, contain features suitable for inclusion in the national park system:

17. An area of perhaps fifty thousand acres in the coast redwood belt of northern California.

18. An area, or areas, of considerable extent, representative of the great plains in Nebraska, Wyoming, Colorado or Kansas.

19. A characteristic area in the lake region of northern Minnesota.

20. An area in the Green Mountains of northern Vermont.

21. An area in the Mount Katahdin region, Maine.

22. An area, or areas, in the cypress swamps of the South.

23. Extensive strips of the ocean beaches, of which the Cape Hatteras region has been specifically proposed.

In addition to the areas mentioned above, there are areas of great importance because of historic and prehistoric features, that are not now in the system of national parks and monuments. A number of historic areas should be added and also a number of prehistoric areas, but they are not listed specifically, because further study is needed to determine the order of priority of numerous areas of these types.

A few of the larger proposed extensions of existing parks and monu-

ments have been included in the above list, but there are many other desirable boundary adjustments, of lesser extent, such as the one involving Diamond Lake near Crater Lake, and the Carl Inn tract of sugar pine forest adjacent to Yosemite. Although these latter areas are of great importance, they have been analyzed repeatedly, and it is hardly necessary to list them here.

Continuing surveys will make possible the appraisal of other suitable areas, whether they are now in public or private ownership.

Throughout these pages, scant consideration has been given to the other conservational and recreational functions of the National Park Service, such as its cooperation with the States and their subdivisions in state and local park and recreational developments and surveys, or its cooperative activities in the conservation and development of historic sites and buildings not within the National Park System. The discussions have been purposely confined to an analysis and prospectus of the National Park System as an effective implement of conservation and a sound use of public lands.

During the thirty-one years of its existence, the American Civic Association, and more recently, the American Planning and Civic Association, has many times taken up the fight to prevent unjustified encroachments upon the National Parks. These fights have often been dramatic and have been won only through the efforts of many organizations and a well-recognized public opinion in favor of protecting National Parks from commercial exploitation.

Without abating the vigilance of the Association in defending existing National Parks in any degree, we are now setting out to adopt a program of acquisition for National Parks which will round out the system. It is not our intention to advocate the inclusion of any National Park or National Monument which does not meet the high standards adopted by the National Park Service in the past and herein set forth. But we realize that there are yet a number of unspoiled areas which meet every standard for National Parks and which should be given the permanent and sure protection of National-Park status. It is true that archeological remains may yet be discovered, and history is constantly being made. The system of National Monuments may thus need to be expanded as occasion arises. But it is our belief that the great scenic areas of the United States can be listed and acquired in the near future. Then, without the friction of disputed status, the policies of administration outlined herein can be applied to a completed system and a closer cooperation in policies and practices can be established between the various Federal and state agencies administering adjoining lands.

The conservation program here outlined is intended to enrich human life. The stories of earth processes, of the evolution and adaptation of plant and animal life, of the pageant of our nation's growth are all of great interest to us as a people. Perhaps the discriminating appreciation

of fine scenery and the intricate processes of Nature may prove in America, as it has in European countries, to be the highest common denominator of our culture.

December, 1936.

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