U. S. DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

EXTRACT
FROM THE ANNUAL REPORT OF THE
SECRETARY OF THE INTERIOR

1928

U. S. DEPARTMENT OF THE INTERIOR
ROY O. WEST, SECRETARY
STEPHEN T. MATHER, DIRECTOR OF THE NATIONAL PARK SERVICE

EXTRACT FROM THE ANNUAL REPORT OF THE SECRETARY OF THE INTERIOR FISCAL YEAR 1928

RELATING TO THE

NATIONAL PARK SERVICE

UNITED STATES
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NATIONAL PARK SERVICE

TRAVEL

Travel to national parks and monuments reached another new high mark this year. A total of 2,522,188 persons visited national parks and 502,656 visited national monuments during the 1928 season. This total of 3,024,844 is an increase of 227,004 persons, or 8 per cent, over the previous high record established in 1927.

AREA OF NATIONAL PARKS AND MONUMENTS

The total area of national parks was increased to 11,846 square miles during the year, through the establishment of the Bryce Canyon National Park and the addition of small areas to several of the other parks. Through boundary adjustments the area of the Hawaii National Park was increased from 242 to 248 square miles, while 80 acres were added to Lassen Volcanic, 49 acres to the Grand Canyon, and approximately 340 acres to Yosemite National Park.

The total area of national monuments was increased to 3,723.7 square miles. A total of 880 acres was added to the Chaco Canyon, approximately 6 acres to the Aztec Ruins, and 26,240 acres to the Craters of the Moon National Monument.

BRYCE CANYON ESTABLISHED AS TWENTIETH NATIONAL PARK

On September 15, 1928, Bryce Canyon, Utah, formerly a national monument, became the twentieth national park of the system. The new park contains 22 square miles. Authority to give this area national park status was contained in two acts of Congress. The first, approved June 7, 1924, provided for the establishment of the Utah National Park, to include the monument area, upon passing of title to all private lands therein to the Federal Government. The second act, approved February 25, 1928, increased the area to be included in the proposed park and changed the name to Bryce Canyon National Park. Under an agreement reached with the Union Pacific System, which owned the private holdings within the area, its lands were deeded to the Federal Government and title passed to the United States on September 15, automatically creating the park. State lands within the area were exchanged for other lands outside the park boundaries.

NEW EASTERN PARK PROJECTS

Progress was made during the year toward meeting the conditions under which Congress approved the establishment of the Great Smoky Mountains and Shenandoah National Parks. As mentioned in the annual report last year, approximately $5,000,000 had been pledged toward the acquisition of the necessary land for the Great Smokies project in North Carolina-Tennessee. During the past year the Laura Spelman Rockefeller Memorial agreed to match dollar for dollar all money so secured up to $5,000,000. It is believed on the basis of appraisals and estimates made by the respective park commissions that a total of $10,000,000 will be sufficient to acquire the necessary lands, of which over 100,000 acres have already been purchased by the State of Tennessee.

New legislation enacted during the year, based upon a careful examination by a representatve of the National Park Service, reduced the minimum area of the land necessary to be acquired for the proposed Shenandoah National Park in Virginia from 385,000 plus to 327,000 acres. The same act included provision for leasing lands within the areas of the proposed Shenandoah and Great Smoky Mountains in the discretion of the Secretary of the Interior for periods of two years to persons and religious and educational institutions. During the year the Legislature of Virginia made an appropriation of $1,000,000 toward the acquisition of the lands necessary for inclusion in the proposed Shenandoah Park and another $550,000 was pledged by friends of the movement outside of the State. This is in addition to the $1,200,000 subscribed by the people of Virginia toward the project several years ago.

INVESTIGATIONS OF PROPOSED PARK AREAS BY SENATE AND HOUSE PUBLIC LANDS COMMITTEES

Under authority of a resolution adopted by the Senate during the last session, a subcommittee of the Senate Committee on Public Lands and Surveys visited Yellowstone, Rocky Mountain, and Wind Cave National Parks and proposed park projects in North Dakota. Officials of the National Park Service accompanied the subcommittee.

A subcommittee of the Public Lands Committee of the House of Representatives, under authority contained in the second deficiency act of May 29, 1928, visited the proposed Ouachita Park area in Arkansas and the Bechler Meadows section of Yellowstone National Park. The latter area has been desired for reservoir purposes by irrigation interests in Idaho, which has been opposed consistently by the National Park Service.

PROPOSED TRANSFER OF MILITARY PARKS AND MONUMENTS TO INTERIOR DEPARTMENT

In pursuance of an agreement between the Secretary of War and the Secretary of the Interior legislation was introduced during the first session of the Seventieth Congress for the transfer of 10 national military and other parks and nine national monuments from the jurisdiction of the War Department to that of the National Park Service of the Department of the Interior. The bill, which passed the Senate on May 10, is expected to receive consideration in the House during the coming year. If transferred, these parks and monuments will be known as "national historical parks."

EDUCATIONAL DEVELOPMENTS

Realizing the importance of directing the growth of educational activities, the Laura Spelman Rockefeller Memorial made available a fund of $10,000 for the expenses of a number of educators to be appointed by the Secretary of the Interior to make a thorough study of and report on the educational possibilities of the national parks. This work has been started. Field studies were made during the summer and definite recommendations will be made after all the facts collected have been discussed in detail.

Through the American Association of Museums the Laura Spelman Rockefeller Memorial granted the sum of $118,000 for the construction of museums in Yellowstone National Park. Construction has already been started on a museum and auditorium in the Old Faithful section of the park, and further plans call for a new museum in the headquarters group at Mammoth Hot Springs, and several smaller buildings at other points in the park.

The value of maintaining libraries in national parks has been demonstrated by the use made of the library maintained at the Yosemite Museum. Through the interest of officials of the American Association of Museums, the American Library Association became interested in this project during the year, with the result that a committee was appointed to establish libraries in the parks. Already a number of books have been received for park library uses, and efforts will be made to secure more during the winter.

The Yosemite Field School of Natural History completed its fourth successful annual course in 1928. The term lasted six weeks, with an enrollment of 20 students, the maximum number that can be handled with the existing personnel. The students of this school receive training that prepares them admirably for conducting nature guiding activities.

The observation station and trail-side museum at Yavapai Point, Grand Canyon National Park, constructed with funds donated over

a year ago through the cooperation of the American Association of Museums, the Laura Spelman Rockefeller Memorial, the Carnegie Institution, and similar organizations was formally dedicated on July 19. Dr. John C. Merriam, of the Carnegie Institution, and Dr. Fred E. Wright participated in the dedication ceremonies.

ARCHEOLOGICAL INVESTIGATIONS

Archeological investigations were continued in the Mesa Verde National Park by Jesse L. Nusbaum, superintendent of the park and archeologist for the Department of the Interior. The work included excavations at an early pueblo burial mound in the southern portion of Chapin Mesa and investigations at Wetherill Mesa on the western side of the park. Over 40 restorable jars and bowls were uncovered at the two sites, and these will be added to the museum collection after restoration.

Archeological work was also carried on in several of the southwestern national monuments containing prehistoric ruins. The American Museum of Natural History conducted explorations at the Aztec Ruins National Monument and presented a nucleus of museum material to the monument. Studies at the Gran Quivira National Monument were conducted by the School of American Research at Santa Fe, as in past years.

The department archeologist cooperated with the superintendent of southwestern monuments and various monument custodians in planning repair and preservation work.

PROTECTION OF PARK FORESTS

All possible protection against the ravages of insect infestations and fires was given the magnificent stands of timber in national parks. Although the past season was generally very dry and the fire hazard unusually great throughout the national park system, no serious fire damage occurred within the parks. This was primarily due to the vigilance of park forces which cooperated with the adjoining national forest authorities in subduing conflagrations before they reached park lines. A fire control expert was appointed during the summer, who made field studies of fire conditions in Sequoia, Yosemite, and Glacier National Parks for the purpose of working out adequate fire-fighting plans. Insect control work in several of the parks was carried on in cooperation with the Bureau of Entomology of the Department of Agriculture.

CONDITION OF PARK ANIMALS

Wild animal and forage conditions throughout the national park system generally were good during the past year. Hunting of game in Mount McKinley National Park, Alaska, by prospectors and miners

when actually in need of food, was permitted in the organic act establishing the park. Abuse of this privilege, however, added greatly to the difficulties of park administration, and constituted a drain on the wild-animal herds. Upon recommendation of the department this provision of the organic act was repealed during the last session of Congress.

FISH-PLANTING OPERATIONS

The planting of fish in the lakes and streams of the various national parks was continued through cooperation with the Federal Bureau of Fisheries and several State hatcheries.

The construction of the new hatchery station at Lake Yellowstone in Yellowstone National Park, toward which $15,000 was donated last year by William E. Corey of New York, was begun during the summer and should be in readiness for use in the season of 1929. The Bureau of Fisheries allotted an additional $15,000 toward the cost of this layout.

An interesting experiment in Glacier National Park this summer was the introduction of golden trout in one of the lakes. This species of trout is a native of the High Sierra and the lakes tributary to the Kern River of California.

PARK ROAD DEVELOPMENT

Congress last year approved base plans for the development of adequate road and trail systems in the national parks on modern standards which call for the ultimate expenditure of $51,000,000, in addition to the total of $9,000,000 previously appropriated. Upon the basis of these plans Congress increased the authorization for park road construction from $2,500,000 to $5,000,000 annually.

The 1929 Interior Department appropriation act carried a cash appropriation of $2,500,000 for such construction, of which $1,500,000 was to cover contractual authorizations contained in the 1928 act. In addition the act authorized the Secretary of the Interior to incur obligations and enter into contracts for additional work not exceeding a total of $4,000,000. Under this authority projects have been approved for construction and contracts let or prepared for approximately that sum.

Under the stimulus of the enlarged park road program the betterment of park approach roads has gone forward steadily under State and Federal aid.

DEVELOPMENT OF OTHER FACILITIES FOR TOURIST USE

As the improved roads bring in additional motorists each year, heavier patronage of the public automobile camps follows. To meet this growing use the National Park Service improved its camp grounds during the last year and where necessary developed others.

The public-utility operators in the various national parks rendered excellent service during the past year, in most cases handling larger crowds than ever before. Hotel, lodge, and transportation accommodations and facilities were improved and enlarged.

The most important public-utility development of the year was the construction of the new Grand Canyon Lodge at Bright Angel Point on the north rim of the Grand Canyon. The layout, consisting of central lodge and 120 adjacent two-room sleeping cottages, was installed under contract by the Utah Parks Co., a subsidiary of the Union Pacific System. The new lodge was dedicated on September 14.

Tentative plans have been drawn up for the construction of a new all-year, fireproof hotel in Paradise Valley, Mount Rainier National Park.

WINTER USE OF NATIONAL PARKS

A steady growth in the winter use of the national parks during the past half dozen years culminated last winter in the heaviest travel yet experienced. Eleven of the national parks and several of the southwestern monuments were open during the winter.

Negotiations are now in progress toward securing for Yosemite National Park the winter sports events of the Olympiad, which is to be held in Los Angeles in 1932.

APPROPRIATIONS AND REVENUES

Appropriations for the national parks and monuments for the fiscal year 1928 amounted to $4,889,685. Revenues derived from the national parks and monuments during the same year amounted to $808,255.81, an increase of $104,406.21 over the 1927 revenues.

GIFTS TO THE NATIONAL PARK AND MONUMENT SYSTEM

Numerous gifts to the national park and monument system of lands, funds to purchase lands or equipment, and museum material were made during 1928. Contributions in cash amounted to $32,697.57. In addition gifts of money, including $5,000,000 from the Laura Spelman Rockefeller Memorial toward the Great Smoky Mountains project, have been made toward the establishment of proposed eastern national parks.

OFFICE AND FIELD ADMINISTRATION

The Washington office work of the National Park Service was kept current during the year and much constructive work was done. The appointment of several new officers and employees, the reallocation of others, and the expansion of quarters were important developments, making toward higher efficiency. A high standard has been maintained also by the field personnel.

COOPERATION WITH OTHER FEDERAL BUREAUS

In accordance with its long-established policy, the National Park Service availed itself whenever possible of the scientific and technical resources of other Government bureaus in solving special problems. All of the bureaus approached for assistance extended the heartiest cooperation. The Bureau of Public Roads of the Department of Agriculture handled major road construction for the service, and the Forest Service, the Bureau of Entomology, and the Weather Bureau of the same department furnished helpful aid. The Public Health Service of the Treasury Department continued its valuable aid in connection with sanitary problems in the parks, and the General Accounting Office of that department helped materially in simplifying accounting procedure. Other cooperating bureaus were the Bureau of Fisheries of the Department of Commerce, which assisted in stocking park waters with fish, and the Geological Survey and General Land Office of this department. The Department of Justice, Post Office Department, and Alaska Road Commission all contributed assistance.

PUBLICATIONS AND MAPS

A total of 583,250 free publications was prepared and distributed during the year. An allotment of $27,000 of Government funds was available for printing and binding, and private donations amounting to $2,261.41 were also made for printing. Owing to the widespread interest and numerous inquiries received, larger printing and binding appropriations are needed to enable the Park Service to meet all requests for free information.

In addition to the booklets, 148,000 automobile guide and other maps, 350,800 automobile windshield stickers, and 53,110 fire-warning posters and stickers were issued.

The new edition of the National Parks Portfolio issued during the summer, showed an extraordinary increase in sales. Supplies of these were placed in the larger parks on a consignment basis and receipts turned over to the Superintendent of Documents. A total of 2,500 copies ordered by the Superintendent of Yellowstone National Park for use during the summer was sold in less than a month and further orders placed. Supplies of topographic maps prepared and sold by the Geological Survey were also sent to the parks on a consignment basis, receipts from sales of such maps being turned over to the survey.

TENTH NATIONAL PARK CONFERENCE

The Tenth National Park Conference was held in San Francisco, Calif., February 15 to 21, 1928. Many phases of national park administration were discussed, with special reference to Government

procedure. Particular stress was laid on engineering, educational, personnel, and sanitation problems, while fire control, insect infestation control, and other forest problems were discussed.

YELLOWSTONE NATIONAL PARK, WYO.

The most sensational event of the year in Yellowstone National Park was the breaking out of a new geyser in the Lower Basin. Its crater or outer pit surrounding the vent resembles that of the Old Excelsior which ceased activity in 1888. It is approximately 90 by 140 feet, and the eruption is to a height of 80 to 150 feet every 10 to 14½ hours. The eruptions last from 4 to 6 hours. Dr. Arthur L. Day, director of the geophysical laboratory of the Carnegie Institution, made a special study of this newest and greatest geyser in the park.

Educational activities received new impetus through the donation for museum purposes of $118,000 by the Laura Spelman Rockefeller Memorial through the American Association of Museums. This will provide for a new museum at headquarters at Mammoth Hot Springs, a branch museum and auditorium at Old Faitfhul, and several smaller buildings. Construction of the Old Faithful museum was started during the season of 1928 and the building is expected to be ready for occupancy during the season of 1929.

During the summer the park was visited by subcommittees of the Senate and House Public Lands Committees in connection with proposed boundary changes. The Senate subcommittee was unanimously in favor of giving the Teton Mountains and Upper Yellowstone country national park status. The House subcommittee made an investigation of the Bechler River section of the Yellowstone, which Idaho irrigationists are desirous of securing for irrigation purposes.

Under the authority of Congress 28 buffalo were donated to public and private zoological gardens and game preserves, and 23 steers were slaughtered and sold for market purposes. It is the endeavor of the park authorities to keep the Yellowstone herd down to a total of 1,000, the maximum number that it is practicable to range.

Travel during the year reached a total of 230,984, an increase of 30,159 over 1927. In the various automobile camp grounds a total of 506,911 campers were cared for during the season. This figure, of course, includes many visitors who camped at several different camps and were counted each time.

YOSEMITE NATIONAL PARK, CALIF.

Considerable opposition having developed among local interests against the change in the western boundary of Yosemite National Park as recommended in 1926 by the President's Coordinating Com-

mission on National Parks and National Forests, this Commission has withdrawn its recommendation for the boundary change and has opened up the whole matter for further discussion and study. It is hoped that some means may be found by which the privately owned lands within the park may be acquired so that it may not be necessary to move the boundary inward as at first recommended. The Yosemite Lumber Co. suspended logging on its holdings in this area during the 1928 season, but other lumber companies have entered into negotiations with this company and the other large holding lumber company with a view to taking over their holdings. Should this be done logging operations will be resumed at once and if the trees are to be saved it is imperative that action be taken in the near future.

A board of expert advisers was appointed by authority of Congress to study and assist in the solution of problems confronting the service in the management of Yosemite Park. The heavy influx of visitors during the last two years, approaching the half million mark annually, has caused serious congestion and brought about conditions similar to those encountered in a small city. To handle the situation adequately it was necessary that a comprehensive study be made of all problems relating to the use and enjoyment of the park and of the preservation of its natural features. The board of experts met in the park during the summer and secured much data which it has since been studying. Further meetings will be held in the park this fall. The task is an enormous one and considerable time and study will be required to reach a satisfactory solution of all the problems involved.

The medical facilities were taxed to the utmost because of the inadequate and unsatisfactory hospital building. Plans however are now being drawn for a new building, to cost approximately $45,000, and this will probably be ready for the next summer season.

The paving of the roads on the floor of Yosemite Valley was completed last summer and five bridges under construction will be completed this fall. Contracts have just been let for the Happy Isles Bridge and for the first section of the Wawona Road.

Winter use of the park was heavier during the 1927–28 season than ever before. Negotiations are in progress to secure the holding of the winter sports activities of the Olympiad, which will be held in Los Angeles in 1932, at Glacier Point, where conditions are ideal for such sports.

GRAND CANYON NATIONAL PARK, ARIZ.

One of the most important accomplishments of the year at the Grand Canyon National Park was the opening to the public of Grand Canyon Lodge, built by the Utah Parks Co., a subsidiary of the Union Pacific system, which was dedicated to public use on September 14, 1928, with appropriate ceremonies. The lodge consists of a central

building containing lobby, lounge, dining room, recreation hall, kitchen, and other facilities. Sleeping accommodations are provided by log cabins, each containing two rooms. In addition to 100 standard cabins there are 20 so-called de luxe cabins, each equipped with private bath, porch, and fireplace. Unusual engineering difficulties were involved in the construction of these hotel and related facilities. Among other problems, there was involved the transportation of materials a distance of 200 miles from the railroad and over roads which, due to heavy snow conditions, made travel unusually difficult, especially since construction work proceeded throughout the entire winter. The problem of furnishing an adequate supply of water and electrical energy was successfully met by the construction on Bright Angel Creek of a hydroelectrical plant and a pumping plant by means of which the water from Roaring Springs Creek is lifted against a static head of 3,870 feet to storage tanks on the rim of the canyon.

Two trail developments were of outstanding importance. One was the completion and opening of the Kaibab transcanyon trail affording spectacular views and reaching from rim to rim. The other was the transfer of title to the famous Bright Angel Trail from Coconino County to the Federal Government, after several years of controversy. Immediately upon the taking over of the trail by park authorities the collection of the $1 toll was discontinued and Government maintenance of the trail was begun. As compensation to Coconino County for the Bright Angel Trail, the United States had previously agreed to reconstruct and improve the Williams approach road to the South Rim, and a contract letting the first part of this work was signed the same day the deed for the trail was accepted.

The construction of the new Kaibab suspension bridge was an important link in the Kaibab transcanyon trail. This bridge, unlike the old one which it replaced, is free from vibration and will accommodate an entire string of pack or saddle animals at one time. Formerly, in using the old swinging bridge, it was necessary for tourist parties to dismount in crossing, the animals being taken over one at a time. This caused congestion and delay at one of the hottest points on the transcanyon trip.

Another bridge which will be of great benefit to many visitors is that now being constructed across the Colorado River at Lees Ferry by the State and Federal Governments. This bridge, which it is expected will be completed and dedicated early next spring, will greatly facilitate park-to-park travel in the Southwest and make possible motor travel between the North and South Rims without long detours through adjoining States.

Travel during the year increased to 167,226, which was 3 per cent more than last year. Especially noticeable was the increase in North Rim visitors, the total number entering there being 18,834.

ROCKY MOUNTAIN NATIONAL PARK, COLO.

Owing to the fact that the Legislature of Colorado meets only biennially nothing was done during the past year toward settling the question of jurisdiction over the Rocky Mountain National Park. A bill for this purpose had been considered in the legislature in 1927. Until this matter is settled it will be impossible to go ahead with the adequate development of the park.

The Fall River Road, the highest road of the park system at an elevation of 11,797 feet, was cut through snow drifts more than 20 feet deep and opened to travel on June 14, a day ahead of schedule. Some 91,000 cubic yards of snow were removed from the roadway, most of the work being done by a steam shovel operating 16 hours a day. Owing to fresh snow on June 17 and 18 the road was again closed but was reopened by noon of June 19. This is the first time in the park's history that the road has ever been closed by fresh snows after June 15. This additional snowfall increased the cost of snow removal. The Rocky Mountain Parks Transportation Co. cooperated in bearing the expense of the snow removal.

A start was made toward the improvement of the trails in Rocky Mountain National Park. This work will have to be continued for several years if the trail system of this park is to be brought up to the improved standard toward which the National Park Service is now working. The popularity of the trails in Rocky Mountain National Park is increasing annually.

The first insect control work to be undertaken in the park was carried on during the spring months against a serious infestation of the Black Hills beetle which is now believed to have been checked.

Winter sports continued to be popular in the park. The Colorado Mountain Club held its annual winter outing at Fern Lake in February with about 80 members present.

A total of 235,057 visitors to the Rocky Mountain National Park was reported for the year.

MOUNT RAINIER NATIONAL PARK, WASH.

Notable progress was made in all lines of endeavor in this park. There was greater attendance, more progress in road, trail, and other developments, and better service provided for visitors. The number of visitors recorded for the year was 219,531, the highest yet experienced.

Tentative plans were drawn for the construction of a new fireproof hotel near the rim of the Nisqually Glacier in Paradise Valley and it is hoped that work on the new structure may be begun next spring, as there is need for additional hotel accommodations at this point. The proposed new hotel will be operated on an all-year basis, whereas the present one may be used only during the summer season.

Study was made of the Yakima Park section, to which a highway is now being built, with special reference to the tourist facilities and developments that will be needed properly to handle the influx of visitors that will follow the completion of the highway. Roads, trails, water supply, and camp and sanitary facilities should all be installed before visitors arrive in great numbers to prevent serious damage to this beautiful section of the park.

With the completion of the Yakima Park Highway and the Naches Pass State Highway, which will connect with it, the Yakima Park area will be opened to eastern Washington and will undoubtedly be heavily patronized by people from this warm section of the State.

The entire north side of the park covering about one-third of the total area, and three alpine park areas in the southwestern portion, have been designated "roadless areas," to remain free of road, hotel, pay camp, and other commercial developments, but open to hikers and horse travel. The areas so designated, together with the large central area to which it is practically impossible to build roads, definitely insure approximately 70 per cent of the total area of Mount Rainier National Park remaining accessible only to hikers or horse travel.

GLACIER NATIONAL PARK, MONT.

Weather conditions during the past two seasons were abnormally wet, resulting in an almost complete absence of forest fires. Several years may elapse before another such season is experienced. It is therefore important that facilities be made available for the quick detection and suppression of fires.

Work on the Avalanche Creek-Logan Pass section of the trans-mountain road was completed late in the summer and this section of highway through spectacular mountain scenery will be open to travel next season. There remain several miles of heavy construction work and some reconstruction before this road across the mountains will be completed.

The portion of the park east of the Continental Divide functions very poorly as a wild-life sanctuary or game preserve. When the eastern boundary was established it was located wholly for the purpose of bounding mineral land which was to be taken out of the Blackfeet Indian Reservation and thrown open to entry under the mining laws. Consequently this boundary, which became the eastern boundary, runs along the shoulders of the mountains and includes no winter range whatever for the elk and deer that range on the eastern slope of the mountains. This game ranges in the higher country within the park during the summer and fall but is forced out of the mountains by storms and deep snow during the late fall and winter. There is no place for it to go within the park and it is obliged to seek

winter range in the lower country in the Blackfeet Indian Reservation across the boundary, where it falls prey to hunters. Deer and elk can not increase in this part of the park until the eastern boundary is extended farther eastward to provide winter range for them. The natural eastern boundary for Glacier National Park is the line of the Blackfeet Highway. By extending the boundary to this line adequate winter range would be provided for all game on the east side. The desired land would, of course, have to be purchased from the Indians.

CRATER LAKE NATIONAL PARK, OREG.

This park enjoyed a highly successful season from every viewpoint. The number of visitors during the year was 38 per cent greater than last year, going into six figures for the first time with a total of 113,323. It is worthy of record, as a commentary upon the attitude and cooperation of the visitors, that there were no forest fires of any moment, no violations necessitating arrests, and no serious accidents.

No major construction work was undertaken for conditions demanded instead a completion program of road oiling, roadside clean-up and bridge construction.

A notable improvement was also made in the rim area. This vital area was opened at its west boundary by the completion of a new road, built on high standards of grade and curvature and emerging at a point on the crater's edge which gives the visitor a first breathless view of the magnificent spectacle. From this point a new road was completed and oiled, thus distributing traffic in turn to the new cafeteria and cabin group, to the camp ground, and to the hotel at the opposite end of a half-mile plaza. On each side of this boulevard an 18-foot parking strip was provided, which will accommodate several hundred cars. Along the very edge of the crater rim a wide asphalt promenade was constructed for pedestrians, and between this dustless trail and the log parapet which limits parking alongside the boulevard there was graded an area of variable width which will be restored to native grasses and wild flowers. The general effect of this development is reducing the dust evil, improving parking and traffic problems, and bettering the landscape.

The simultaneous completion of the new cafeteria and group of rental cabins, together with the new Crater Wall trail taking off from the west end of this area, rounds off this development. The new trail to the lake was constructed on high standards to permit the use of saddle animals, enabling many thousands to enjoy the lake who were heretofore denied that pleasure by physical incapacity.

The park now has 21 miles of new dustless highway from the two main entrances to the rim. A large number of small completion jobs are now practically done, opening a way for reconstruction of the matchless scenic drive around the rim.

SEQUOIA NATIONAL PARK, CALIF.

Excellent progress in clearing up private holdings was made during the year with the purchase of two 160-acre tracts. The Trauger Place on the Mineral King Road was bought for $3,200, half of which was subscribed by Miss Aurelia S. Harwood, of Upland, Calif., who last year gave $5,000 to secure the Dean 480 acres. Only a few weeks after this gift, Miss Harwood passed away, and the Sequoia National Park lost one of its warmest friends and supporters. The Camp Lewis property, key to the Kern Canyon, was bought for $10,000, of which $4,000 was contributed by the Hon. Robert Woods Bliss, United States Ambassador to Argentina, and $1,000 by the Sierra Club. Each of these gifts was matched by an equal amount of Federal funds from the special appropriation made for the acquisition of private lands within national parks.

Despite the general falling off in travel to California mountain resorts and parks, the total number of visitors to Sequoia was 98,035, or about a 3 per cent decrease compared with last year. This travel is largely of those coming in their own cars and patronizing the public camps, as train and stage travel is as yet very light.

Further progress was made in construction of the Generals' Highway, which was completed to the Sherman Tree, while construction to Lodge Pole Camp will be finished early in the next year. A trail construction program was begun with the High Sierra Trail from Giant Forest to Mount Whitney as the principal item.

Public automobile camps were extended at Giant Forest and additional sanitary facilities provided. Much progress was made in restoration and protection of landscape, particularly amid the intensively used sequoia groves at Giant Forest.

Further progress was made in the Kern Canyon-Mount Whitney district of 352 square miles added to the park in 1926. In addition to construction of the trail to the summit of Mount Whitney, improvements have been made to tourist pastures and a new ranger station has been built at the south entrance to the canyon.

GENERAL GRANT NATIONAL PARK, CALIF.

Travel increased from 47,996 in 1927 to 51,988 in 1928, despite the fact that tourist travel generally in California was not up to last year's average.

The intensive development of private resorts at Wilsonia, Sequoia Lake, Hume, and other places around the park, together with the fact that it stands alone in a region largely devasted by lumbering, makes it a veritable national oasis in the midst of private interests.

Puncheon fences were built around several of the big trees to protect them from too close approach by visitors. The work done

a year ago at the General Grant Tree is already bearing fruit and the ground under the tree is seeding in grass, flowers, and shrubs. The annual Christmas celebration of the General Grant as the Nation's Christmas tree was attended by over a thousand people.

MESA VERDE NATIONAL PARK, COLO.

The tender by the State of Colorado of jurisdiction over the park was formally accepted by Congress by act of April 25, 1928. Much better control within the area is assured with exclusive control vested in the United States.

All travel records for Mesa Verde were broken when 16,760 people visited the area. This is an increase of approximately 40 per cent over the peak travel of 1927.

The spectacular rim road connecting the Cliff Palace and Balcony House ruins was completed and progress made in relocating two sections of the entrance highway.

The greater part of the development work, however, was centered at park headquarters at Spruce Tree Camp. Government facilities here were improved and extended, and the operators of the public utilities also bettered their service to the public. With the increased travel there is an insistent demand for the erection of a modern hotel in the Mesa Verde.

Work was continued on the second 1-acre water catchment unit to augment the water supply of the park. Owing to subnormal precipitation it has not been possible to make the progress desired, since not sufficient water was available over visitor and camp needs to permit the running of more than one-third of the concrete yardage. The unit will be completed in a short time after sufficient precipitation occurs.

Archeological investigations covering a period of several weeks' work were made by the superintendent, who is also archeologist for the department. With funds donated for the purpose investigations were first undertaken in the fall in a small early pueblo burial mound in the southern portion of Chapin Mesa. This included the uncovering of six undisturbed burials and three others that already had been opened. Fifteen pieces of pottery of early pueblo type were recovered. Early in the spring further studies were made at Wetherill Mesa on the western side of the park. It was from these ruins that Baron Nordenskiold took the major portion of his comprehensive Mesa Verde collection. Careful troweling for 10 days of the previously worked débris resulted in the finding of nearly 30 restorable jars and bowls, including a large olla, or water jar, far superior to any now in the park museum.

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HAWAII NATIONAL PARK, TERRITORY OF HAWAII

During the year three deeds covering holdings within the Hawaii National Park totaling 63,056 acres were conveyed to the United States by the Territory of Hawaii. Of this total 45,926 acres are located in the Kilauea section of the park, connecting this and the former Mauna Loa section, and 17,130 acres in the Haleakala section.

With the completion of the Volcano-Hilo Road last October travel received a fresh impetus and the number of visitors recorded was 78,414, more than double last year's total. A modern concrete highway now stretches from the seaport gateway of Hilo to the park, a drive of 30 miles through delightful surroundings. The Chain-of-Craters Road, begun in April, 1927, was completed and opened to travel just a year later. It stretches eastward for 7 miles from the Crater Road and makes accessible more than 12 wonderful pit and cone craters on the Puna Rift.

Bird Park, an area of beautiful native Hawaiian woodlands, was in the spring protected against stray domestic animals by the erection of a stock-proof fence. By summer this protected area displayed many seedlings of ohia and other Hawaiian trees, while no new growth was noticeable in the area outside the fence.

Development of the natural beauty of the 7 miles of coast that forms the south boundary was begun with the planting of 70 sprouted coconuts and 40 lauhala seedlings on the beach. Fencing was also necessary here because of the wild goats and burros which have been such a pest in this portion of the island. Territorial officials conducted a campaign against the wild goats during the spring, ridding the island of over 1,700 of these destructive animals.

As the final event in the Captain Cook Sesquicentennial celebration a Hawaiian pageant was given at the edge of the pit of Haleamaumau in the Kilauea section of the park. During the hour's performance there was a terrifying roar from continuous avalanches in the huge pit.

LAFAYETTE NATIONAL PARK, ME.

Work on both the motor and carriage road systems made excellent progress during the year. An automobile camp ground, the first to be prepared, was completed during the summer.

A museum of stone-age antiquities, made possible through the interest of the late Dr. Robert Abbe, was erected on private land adjoining the main park entrance and opened to the public. A substantial endowment was provided through the gift of Doctor Abbe and others whom he interested in the project. The museum is in charge of an archeologist who explains to visitors the meaning and probable use of the various relics in the collection.

Travel totaled 134,897, a slight increase over 1927.

ZION NATIONAL PARK, UTAH

The outstanding event of the year was the commencement of construction of the Zion-Mount Carmel Road. This highway, when completed, will connect Zion, the Grand Canyon, and the new Bryce Canyon National Park. The State of Utah is now working at its end of this highway and is also improving a section of the Arrowhead Trail near the Arizona State line.

Travel showed a great increase, with 30,016 visitors as against 24,303 in 1927.

Upon recommendation of the National Park Service seven sections of land were withdrawn from the public domain by executive order pending a study as to the advisability of adding these lands to the park. There is still a further area, not yet withdrawn, that should be considered for addition to Zion. Included in this area are some interesting cliff dwellings as well as spectacular canyon country.

Cheap power for all park operations was made available through the extension of the power lines of the Dixie Power Co. into the park. The Nevada Contracting Co., which is building the Zion-Mount Carmel Highway, financed the building of the necessary power lines.

The public utility operators extended their facilities at Zion Lodge by the erection of a number of new cottages. They also built an unusually well equipped and designed swimming pool.

BRYCE CANYON NATIONAL PARK, UTAH

Bryce Canyon, the newest member of the national park system was dedicated on September 16. Owing to its close proximity to Zion, and its similarity of administrative problems, it will be administered by the superintendent of that park.

HOT SPRINGS NATIONAL PARK, ARK.

The Public Health Service continued the cooperative arrangement whereby one of its medical officers was detailed as superintendent.

The operation of the Government free bathhouse was continued, 6,566 persons being given 98,487 baths during the year, as against 5,699 persons and 87,348 baths last year. The free clinic examined and treated 5,467 patients. The total number of examinations and treatments given in the clinic during the year was 106,692. Of this number 2,872 examinations were for the city board of health. The park also assisted the city of Hot Springs in the physical examination and vaccination of all persons engaged in handling foodstuffs in the city.

The number of visitors is estimated at 199,099. As explained last year, the apparent decrease in visitors during the past two years is not due to an actual decline in the number of visitors but to a revision in methods of estimation so as to arrive at a more accurate travel figure.

Mosquito control work was conducted wherever breeding places were found, particular care being taken to keep the public camp grounds free from mosquitoes.

Nineteen pay bath houses operated during the year, using the hot waters under permit from the department.

MOUNT McKINLEY NATIONAL PARK, ALASKA

Legislation was enacted by Congress repealing the provision of the organic act inhibiting the appropriation of more than $10,000 annually for maintenance of the park, and also that provision in the organic act which allowed prospectors and miners in the park to take and kill game for actual necessities when short of food. The repeal of the latter provision was in the interest of the park's great herds of caribou and mountain sheep, as much killing was done illegally which could not be controlled.

Road construction work continued to be handled by the Alaska Road Commission under a cooperative agreement. Thirty-four miles of the main park road beginning at the railroad will be in operation this fall.

The public operators improved their facilities and offered improved service to the public. When the present road program is completed a comfortable hotel will be erected at Copper Mountain, to replace the camp now in use there.

In all 802 people visited the park, an increase of 23 per cent over 1927.

LASSEN VOLCANIC NATIONAL PARK, CALIF.

Lassen Park was the center of more electric storms during the past year than ever before since active administration was undertaken by the service. Fire suppression work was carried on under adverse conditions as most of the usually available help was drafted almost continuously to fight the many other fires burning outside the park. No serious damage, however, was done to the park, due to the vigilance of the park forces.

Excellent progress was made in extending the road system within the park, and the approach highway from the south was greatly improved.

This was the banner year for travel to Lassen, with a total of 26,057 visitors.

WIND CAVE NATIONAL PARK, S. DAK.

Wind Cave National Park is poorly developed. If this area is to continue to function as a national park its facilities should be expanded to a point where the needs of the visiting public may adequately be met. Last year 100,309 people visited the cave.

Especially important is the providing of an ample water supply. This can be secured through the development of the present source of supply and the addition of more storage facilities.

The Bureau of Biological Survey of the Department of Agriculture continued to operate a game preserve within the park.

PLATT NATIONAL PARK, OKLA.

A number of people from nearby points visited this reservation during the year, many of them picknickers who stayed only a few hours. In all there were 280,638 visitors. Most of the travel is local, but motorists from nearly every State passed through the area en route west and stopped at the public camp ground.

The Department of the Interior has held the view for many years that this area should be ceded to the State of Oklahoma and operated as a State park.

SULLYS HILL NATIONAL PARK, N. DAK.

Through the cooperation of the Bureau of Indian Affairs the superintendent of the Fort Totten Indian School continued to act as superintendent of the Sullys Hill National Park without compensation. No funds were available for expenditure by the National Park Service in this area nor ever have been. The Bureau of Biological Survey continued to use the park as a game preserve and should have jurisdiction over it. All improvements made during the year were financed from Biological Survey appropriations.

There were 24,979 visitors during the year.

NATIONAL MONUMENTS UNDER THE CONTROL OF THE NATIONAL PARK SERVICE

There are now 32 national monuments under the control of the National Park Service, with a total area of 3,723.7 square miles. The combined travel reached a total of 502,656 persons, the heaviest attendance yet noted. Superintendent Pinkley continued general supervision over the group of southwestern monuments with the exception of Carlsbad Cave, which is in charge of a superintendent who reports direct to the Washington Office.

Repair and archeological investigations were carried on in several of the southwestern monuments. The American Museum of Natural History conducted explorations at the Aztec Ruins National Monu-

ment and presented a nucleus of museum material to the monument, to which interested local people added several hundred specimens. The School of American Research of Santa Fe conducted studies at the Gran Quivira Monument.

The Alaska Road Commission continued its cooperation in supervising all Government activities in the Sitka National Monument. Only part of the cost of maintenance and repair work at Sitka was borne by the Park Service, its funds being augmented by generous allotments of funds from the Alaska Road Commission, the Territory of Alaska, and the Sitka Commercial Club.

It is the hope of officials of the Department of the Interior that it may soon be possible for the various States to take over some of the existing national monuments and operate them as State parks.

NATIONAL PARKS TABLE 1.—*National parks administered by the National Park Service*

[Number, 20; total area, 11,846 square miles; chronologically in order of creation]

Name	Location	When established	Area in square miles	Distinctive characteristics
Hot Springs [1] 1832	Middle Arkansas.	Apr. 20, 1832	1½	46 hot springs said to possess healing properties—Many hotels and boarding houses—Bathhouses under public control.
Yellowstone [1] 1872	Northwestern Wyoming, southwestern Montana, and northeastern Idaho.	Mar. 1, 1872	[2] 3,348	More geysers than in all rest of world together—Boiling springs—Mud volcanoes—Petrified forests—Grand Canyon of the Yellowstone, remarkable for gorgeous coloring—Large lakes—Many large streams and waterfalls—Vast wilderness, greatest wild bird and animal preserve in the world—Exceptional trout fishing.
Sequoia [1] 1890	Middle eastern California.	Sept. 25, 1890 July 3, 1926	604	The Big Tree National Park—Several hundred sequoia trees over 10 feet in diameter, some 25 to 37.3 feet in diameter—Towering mountain ranges—Startling precipices—Mount Whitney and Kern River country.
Yosemite [1] 1890	do	Oct. 1, 1890 May 28, 1928 [3]	1,126	Valley of world-famed beauty—Lofty cliffs—Romantic vistas—Many waterfalls of extraordinary height—3 groves of big trees—High Sierra—Waterwheel Falls—Good trout fishing.
General Grant [1] 1890	do	Oct. 1, 1890	4	Created to preserve the celebrated General Grant Tree, 35 feet in diameter—6 miles from Sequoia National Park.
Mount Rainier [1] 1899	West central Washington.	Mar. 2, 1899 May 28, 1926	325	Largest accessible single peak glacier system; 28 glaciers, some of large size; 48 square miles of glacier, 50 to 500 feet thick—Wonderful subalpine wild-flower fields.
Crater Lake [1] 1902	Southwestern Oregon.	May 22, 1902	249	Lake of extraordinary blue in crater of extinct volcano—Sides 1,000 feet high—Interesting lava formation—Fine fishing.
Platt 1902	Southern Oklahoma.	July 1, 1902 Apr. 21, 1904 June 29, 1906	1⅛	Many sulphur and other springs possessing medicinal value.
Wind Cave [1] 1903	South Dakota.	Jan. 9, 1903	17	Cavern having many miles of galleries and numerous chambers containing peculiar formations.
Sullys Hill 1904	North Dakota.	Apr. 27, 1904	1⅕	Small park with woods, streams, and a lake—Is an important wild-animal preserve.
Mesa Verde [1] 1906	Southwestern Colorado.	June 29, 1906 June 30, 1913 [3]	77	Most notable and best preserved prehistoric cliff dwellings in United States, if not in the world.
Glacier [1] 1910	Northwestern Montana.	May 11, 1910	1,534	Rugged mountain region of unsurpassed alpine character—250 glacier-fed lakes of romantic beauty—60 small glaciers—Precipices thousands of feet deep—Almost sensational scenery of marked individuality—Fine trout fishing.
Rocky Mountain [1] 1915	North middle Colorado.	Jan. 26, 1915 [3] Feb. 14, 1917 June 2, 1924 [3] June 9, 1926	378	Heart of the Rockies—Snowy range, peaks 11,000 to 14,255 feet altitude—Remarkable records of glacial period.
Hawaii [1] 1916	Hawaii	Aug. 1, 1916 May 1, 1922 [3] Apr. 11, 1928 [3]	248	3 separate volcanic areas—Kilauea and Mauna Loa on Hawaii Haleakala on Maui.
Lassen Volcanic [1] 1916	Northern California.	Aug. 9, 1916 Apr. 26, 1928 [3] May 21, 1928	124	Only active volcano in United States proper—Lassen Peak, 10,465 feet—Cinder cone 6,879 feet—Hot springs—Mud geysers.
Mount McKinley [1] 1917	South central Alaska.	Feb. 26, 1917 Jan. 30, 1922 [3]	2,645	Highest mountain in North America—Rises higher above surrounding country than any other mountain in the world.
Grand Canyon [1] 1919	North central Arizona.	Feb. 26, 1919 Feb. 25, 1927 [3] Mar. 7, 1928 [3]	1,009	The greatest example of erosion and the most sublime spectacle in the world.
Lafayette [1] 1919	Maine coast	Feb. 26, 1919	12	The group of granite mountains upon Mount Desert Island.
Zion [1] 1919	Southwestern Utah.	Nov. 19, 1919	120	Magnificent gorge (Zion Canyon) depth from 800 to 2,000 feet, with precipitous walls—Of great beauty and scenic interest.
Bryce Canyon 1928	do	June 7, 1924 [4] Feb. 25, 1928 [3] May 12, 1928 Sept. 15, 1928	22	Box canyon filled with countless array of fantastically eroded pinnacles—Best exhibit of vivid coloring of earth's materials.

[1] General information circulars on these parks may be obtained free on application.
[2] In Wyoming, 3,114 square miles; in Montana, 198 square miles; in Idaho, 36 square miles.
[3] Boundary changed. [4] Date acquisition private land as provided by act of June 7, 1924.

NATIONAL PARKS TABLE 2.—*National military and other parks administered by the War Department*

[Number, 11; total area, 22 square miles or 14,430.30 acres; chronologically in order of creation]

Name	Location	When established	Area (acres)	Description
Chickamauga and Chattanooga.	Georgia and Tennessee.	Aug. 19, 1890	6,534.85	Beautiful natural park; embraces battle fields of Chickamauga and Missionary Ridge and scenes of other conflicts of the Civil War fought in the vicinity of Chattanooga during 1863.
Antietam Battle Field	Maryland	Aug. 30, 1890	40	Scene of one of the greatest battles of the Civil War.
Shiloh	Tennessee	Dec. 27, 1894	3,546	Natural park embracing the battle field of Shiloh near Pittsburg Landing.
Gettysburg [1]	Pennsylvania	Feb. 11, 1895	2,530.32	Beautiful natural park; scene of Civil War combat; probably better marked than any other battle field in the world.
Vicksburg	Mississippi	Feb. 21, 1899	1,322.63	Beautiful natural park; scene of the siege and surrender of Vicksburg in 1863 during the Civil War.
Abraham Lincoln's Birthplace.[1]	Kentucky	July 17, 1916	110.5	Contains the log cabin and part of the farm where Abraham Lincoln was born.
Guilford Courthouse	North Carolina	Mar. 2, 1917	131	Near Greensboro; scene of one of the great battles of the Revolution; fought in 1781.
Moores Creek	do	June 2, 1926	30	Scene of one of most memorable battles of Revolutionary War.
Petersburg	Virginia	July 3, 1926	185	Scene of campaign and siege and defense of Petersburg, Va., in 1864 and 1865.
Fredericksburg and Spotsylvania.	do	Feb. 14, 1927	[2]	Scene of battles of Fredericksburg, Spotsylvania, Wilderness, Chancellorsville, and Salem Church at or near Fredericksburg.
Stones River	Tennessee	Mar. 3, 1927	[2]	Scene of the battle of Stones River in Tennessee.

[1] Donated in whole or in part to the United States. [2] Undetermined.

NATIONAL PARKS TABLE 3.—*National monuments administered by the National Park Service*

[Number, 32; total area, 3,723.7 square miles; chronologically in order of creation]

Name	Location	When established	Area (acres)	Description
Devils Tower	Wyoming	Sept. 24, 1906	1,152	Remarkable natural rock tower, of volcanic origin, 1,200 feet in height.
Montezuma Castle.	Arizona	Dec. 8, 1906	[1] 160	Prehistoric cliff-dwelling ruin of unusual size situated in a niche in face of a vertical cliff. Of scenic and ethnologic interest.
El Morro	New Mexico	Dec. 8, 1906 June 18, 1917	240	Enormous sandstone rock eroded in form of a castle, upon which inscriptions have been placed by early Spanish explorers. Contains cliff-dweller ruins. Of great historic, scenic, and ethnologic interest.
Petrified Forest	Arizona	Dec. 8, 1906 July 31, 1911	25,625	Abundance of petrified coniferous trees, one of which forms a small natural bridge. Is of great scientific interest.
Chaco Canyon	New Mexico	Mar. 11, 1907 Jan. 10, 1928	[1] 21,509.40	Numerous cliff-dweller ruins, including communal houses, in good condition, and but little excavated.
Muir Woods [2]	California	Jan. 9, 1908 Sept. 22, 1921	426.43	One of the most noted redwood groves in California, and was donated by Hon. William Kent, ex-Member of Congress. Located 7 miles from San Francisco.
Pinnacles	do	Jan. 16, 1908 May 7, 1923 July 2, 1924	2,980.26	Many spirelike rock formations, 600 to 1,000 feet high, visible many miles; also numerous caves and other formations.

[1] Estimated. [2] Donated to the United States.

NATIONAL PARKS TABLE 3.—*National monuments administered by the National Park Service*—Continued

Name	Location	When established	Area (acres)	Description
Natural Bridges	Utah	Apr. 16, 1908 Sept. 25, 1909 Feb. 11, 1916	[1] 2,740	Three natural bridges, among largest examples of their kind. Largest bridge is 222 feet high, 65 feet thick at top of arch; arch is 28 feet wide; span, 261 feet; height of span, 157 feet. Other two slightly smaller.
Lewis and Clark Cavern.[2]	Montana	May 11, 1908 May 16, 1911	160	Immense limestone cavern of great scientific interest, magnificently decorated with stalactite formations. Now closed to public because of depredations by vandals.
Tumacacori	Arizona	Sept. 15, 1908	10	Ruin of Franciscan mission dating from seventeenth century. Being restored by National Park Service as rapidly as funds permit.
Navajo	do	Mar. 20, 1909 Mar. 14, 1912	360	Contains numerous pueblo, or cliff-dweller ruins, in good preservation.
Shoshone Cavern	Wyoming	Sept. 21, 1909	210	Cavern of considerable extent, near Cody.
Gran Quivira	New Mexico	Nov. 1, 1909 Nov. 25, 1919	560	One of the most important of earliest Spanish mission ruins in the Southwest. Monument also contains pueblo ruins.
Sitka	Alaska	Mar. 23, 1910	57	Park of great natural beauty and historic interest as scene of massacre of Russians by Indians. Contains 16 totem poles of best native workmanship.
Rainbow Bridge	Utah	May 30, 1910	160	Unique natural bridge of great scientific interest and symmetry. Height 309 feet above water, and span is 278 feet, in shape of rainbow.
Colorado	Colorado	May 24, 1911	13,883	Many lofty monoliths, and is wonderful example of erosion, and of great scenic beauty and interest.
Papago Saguaro	Arizona	Jan. 31, 1914 Dec. 28, 1922	1,940.43	Splendid collection of characteristic desert flora and numerous pictographs. Interesting rock formations.
Dinosaur	Utah	Oct. 4, 1915	80	Deposits of fossil remains of prehistoric animal life of great scientific interest.
Capulin Mountain.	New Mexico	Aug. 9, 1916	681	Cinder cone of geologically recent formation.
Verendrye	North Dakota	June 29, 1917	253.04	Includes Crowhigh Butte, from which Explorer Verendrye first beheld territory beyond the Missouri River.
Casa Grande	Arizona	June 22, 1892[3] Dec. 10, 1909 Aug. 3, 1918 June 7, 1926	472.5	These ruins are one of the most noteworthy relics of a prehistoric age and people within the limits of the United States. Discovered in ruinous condition in 1694.
Katmai	Alaska	Sept. 24, 1918 Sept. 5, 1923	1,087,990	Wonderland of great scientific interest in the study of volcanism. Phenomena exist upon a scale of great magnitude. Includes Valley of Ten Thousand Smokes.
Scotts Bluff	Nebraska	Dec. 12, 1919 May 9, 1924	1,893.83	Region of historic and scientific interest. Many famous old trails traversed by the early pioneers in the winning of the West passed over and through this monument.
Yucca House [2]	Colorado	Dec. 19, 1919	9.6	Located on eastern slope of Sleeping Ute Mountain. Is pile of masonry of great archeological value, relic of prehistoric inhabitants.
Fossil Cycad	South Dakota	Oct. 21, 1922	320	Area containing deposits of fossil plants.
Aztec Ruins [2]	New Mexico	Jan. 24, 1923 July 2, 1928	17.2	Prehistoric ruin of pueblo type containing 500 rooms.
Hovenweep	Utah-Colorado	Mar. 2, 1923	285.8	Four groups of prehistoric towers, pueblos, and cliff dwellings.
Pipe Spring	Arizona	May 31, 1923	40	Old stone fort and spring of pure water in desert region. Serves as memorial to early western pioneer life.
Carlsbad Cave	New Mexico	Oct. 25, 1923	719.22	Beautifully decorated limestone cavern, believed to be largest yet discovered.
Craters of the Moon.	Idaho	May 2, 1924 July 23, 1928	51,200	Best example of fissure lava flows; volcanic region with weird landscape effects.
Wupatki	Arizona	Dec. 9, 1924	2,234.10	Prehistoric dwellings of ancestors of Hopi Indians.
Glacier Bay	Alaska	Feb. 26, 1925	1,164,800	Contains tidewater glaciers of first rank.

[1] Estimated.
[2] Donated to the United States. [3] From June 22, 1892, until Aug. 3, 1918, classified as a national park.

NATIONAL PARKS TABLE 4.—*National monuments administered by the Department of Agriculture*

[Number, 14; total area, 599 square miles; chronologically in order of creation]

Name	Location	Date of creation	Area (acres)	Description
Gila Cliff Dwellings.	New Mexico	Nov. 16, 1907	160	Numerous cliff-dweller ruins of much interest and in good preservation.
Tonto	Arizona	Dec. 19, 1907	[1] 640	Do.
Jewel Cave	South Dakota	Feb. 7, 1908	[1] 1,280	Limestone cavern of much beauty and considerable extent, limits of which are as yet unknown.
Wheeler	Colorado	Dec. 7, 1908	300	Of much interest from geological standpoint as example of eccentric erosion and volcanic action. Of much scenic beauty.
Mount Olympus	Washington	Mar. 2, 1909 Apr. 17, 1912 May 11, 1915	299,370	Contains many objects of great and unusual scientific interest, including many glaciers. Is summer range and breeding ground of the Olympic elk.
Oregon Caves	Oregon	July 12, 1909	480	Extensive caves in limestone formation of much beauty; magnitude not entirely ascertained.
Devils Postpile	California	July 6, 1911	800	Spectacular mass of hexagonal basaltic columns, like an immense pile of posts. Said to rank with famous Giant's Causeway in Ireland.
Walnut Canyon	Arizona	Nov. 30, 1915	960	Contains cliff dwellings of much scientific and popular interest.
Bandelier	New Mexico	Feb. 11, 1916	22,075	Vast number of cliff-dweller ruins, with artificial caves, stone sculpture, and other relics of prehistoric life.
Old Kasaan	Alaska	Oct. 25, 1916	38	Abandoned Indian village in which there are numerous remarkable totem poles and other objects of historical interest.
Lehman Caves	Nevada	Jan. 24, 1922	593	Limestone caverns of much beauty and of scientific interest and importance.
Timpanogos Cave	Utah	Oct. 14, 1922	250	Limestone cavern.
Chiricahua	Arizona	Apr. 18, 1924	4,480	Natural rock formations within Coronado National Forest.
Lava Beds	California	Nov. 21, 1925	45,967	Interesting ice caves. Battleground of Modoc Indian War, 1873.

[1] Estimated.

NATIONAL PARKS TABLE 5.—*National monuments administered by the War Department*

[Number, 13; total area, 221.81 acres; chronologically in order of creation]

Name	Location	Date of creation	Area (acres)	Description
Chalmette	Louisiana	May 24, 1907	17.47	Erected in memory of the Battle of New Orleans, which was fought on Jan. 8, 1815.
Big Hole Battle Field.	Montana	June 23, 1910	5	Site of battle field on which battle was fought Aug. 9, 1877, between a small force of United States troops and a much larger force of Nez Perce Indians, resulting in rout for the Indians.
Cabrillo	California	Oct. 14, 1913 May 12, 1926	.5	Of historic interest because of discovery of the territory now partly embraced in the State of California by Juan Rodriguez Cabrillo, who at this point first sighted land on Sept. 28, 1542.
Mound City Group.	Ohio	Mar. 2, 1923	57	Famous group of prehistoric mounds in Camp Sherman Military Reservation.
Fort Wood	New York	Oct. 15, 1924	2.5	Site of the Statue of Liberty.
Castle Pinckney	South Carolina	do	3.5	Fortification built in 1810 to replace a Revolutionary fort.
Fort Pulaski	Georgia	do	20	Built in 1810 to replace Fort Greene of the Revolution.
Fort Marion	Florida	do	18.09	Fort built by Spaniards in 1656.
Fort Matanzas	do	do	1	Relic of Spanish invasion.
Meriwether Lewis	Tennessee	Feb. 6, 1925	50	Contains grave of Captain Lewis of the Lewis and Clark Expedition.
Fort Niagara	New York	Sept. 5, 1925	.0074	Site for erection of cross to commemorate a cross erected by Father Millett in 1688 on what is now the Fort Niagara Military Reservation.
Fort McHenry	Maryland	Mar. 3, 1925	46.75	Restored and preserved as birthplace of "Star-Spangled Banner."
White Plains Battle Field.	New York	May 18, 1926	None.	Memorial tablet to indicate the position of the Revolutionary Army under the command of General Washington.

NATIONAL PARKS TABLE 6.—*Visitors to national parks, 1913–1928*

Name of park	1913	1914	1915	1916	1917	1918	1919	1920
Hot Springs	[1] 135,000	[1] 125,000	[1] 115,000	[1] 118,740	[1] 135,000	[1] 140,000	[1] 160,490	[1] 162,850
Yellowstone	24,929	20,250	51,895	35,849	35,400	21,275	62,261	79,777
Sequoia	3,823	4,667	7,647	10,780	18,510	15,001	30,443	31,508
Yosemite	13,735	15,145	33,452	33,390	34,510	33,497	58,362	68,906
General Grant	2,756	3,735	10,523	15,360	17,390	15,496	21,574	19,661
Mount Rainier	13,501	15,038	35,166	23,989	35,568	43,901	55,232	56,491
Crater Lake	6,253	7,096	11,371	12,265	11,645	13,231	16,645	20,135
Wind Cave	3,988	3,592	2,817	[1] 9,000	16,742	[1] 36,000	[1] 25,000	[1] 38,000
Platt	[1] 35,000	[1] 30,000	[1] 20,000	[1] 30,000	[1] 35,000	14,431	26,312	27,023
Sullys Hill	[1] 300	[1] 500	[1] 1,000	[1] 1,500	2,207	4,188	4,026	9,341
Mesa Verde	280	502	663	1,385	2,223	2,058	2,287	2,890
Glacier	12,138	14,168	14,265	12,839	18,387	9,086	18,956	22,449
Rocky Mountain	----------	----------	[1] 31,000	[1] 51,000	117,186	101,497	169,492	240,966
Hawaii	----------	----------	----------	[2]	[2]	[2]	[2]	[2]
Lassen Volcanic	----------	----------	----------	[2]	[1] 8,500	[1] 2,000	[1] 2,500	[1] 2,000
Mount McKinley	----------	----------	----------	----------	[2]	[2]	[2]	[2]
Grand Canyon	----------	----------	----------	----------	----------	----------	37,745	67,315
Lafayette	----------	----------	----------	----------	----------	----------	[1] 64,000	[1] 66,500
Zion	----------	----------	----------	----------	----------	----------	----------	3,692
Total	251,703	235,193	334,799	356,097	488,268	451,661	755,325	919,504

Name of park	1921	1922	1923	1924	1925	1926	1927	1928
Hot Springs	[1] 130,968	[1] 106,164	[1] 112,000	[1] 164,175	[1] 265,500	[1] 260,000	[1] 181,523	[1] 199,099
Yellowstone	81,651	98,223	138,352	144,158	154,282	187,807	200,825	230,984
Sequoia	28,263	27,514	30,158	34,468	46,677	89,404	100,684	98,035
Yosemite	91,513	100,506	130,046	105,894	209,166	274,209	490,430	460,619
General Grant	30,312	50,456	46,230	35,020	40,517	50,597	47,996	51,988
Mount Rainier	55,771	70,371	123,708	161,473	173,004	161,796	200,051	219,531
Crater Lake	28,617	33,016	52,017	64,312	65,018	86,019	82,354	113,323
Platt	[1] 60,000	[1] 70,000	[1] 117,710	[1] 134,874	[1] 143,380	[1] 124,284	[1] 294,954	[1] 280,638
Wind Cave	28,336	31,016	41,505	52,166	69,267	85,466	81,023	100,309
Sullys Hill	9,100	[1] 9,548	8,478	8,035	9,183	19,921	22,632	24,979
Mesa Verde	3,003	4,251	5,236	7,109	9,043	11,356	11,915	16,760
Glacier	19,736	23,935	33,988	33,372	40,063	37,325	41,745	53,454
Rocky Mountain	[1] 273,737	[3] 219,164	218,000	224,211	233,912	[1] 225,027	[1] 229,862	[1] 235,057
Hawaii	[1] 16,071	27,750	41,150	52,110	64,155	[1] 35,000	37,551	78,414
Lassen Volcanic	[1] 10,000	[1] 10,000	[1] 9,500	[1] 12,500	[1] 12,596	18,739	20,089	26,057
Mount McKinley	[2]	[4] 7	[4] 34	[4] 62	[4] 206	[4] 533	[4] 651	[4] 802
Grand Canyon	67,485	84,700	102,166	108,256	134,053	140,252	162,356	167,226
Lafayette	[1] 69,836	73,779	64,200	71,758	73,673	101,256	123,699	134,897
Zion	2,937	4,109	6,408	8,400	16,817	21,964	24,303	30,016
Total	1,007,335	1,044,502	1,280,886	1,422,353	1,760,512	1,930,865	2,354,643	2,522,188

[1] Estimated.
[2] No record.
[3] Indicated loss in travel from 1921 due largely to better methods of checking and estimating employed.
[4] Actual park visitors; many miners and prospectors passed through park.

NATIONAL PARKS TABLE 7.—*Visitors to the national monuments in 1923–1928* [1]

Name	1923	1924	1925	1926	1927	1928
Aztec Ruins (New Mexico)	6,234	5,968	[2] 7,000	5,646	7,298	18,359
Capulin Mountain (New Mexico)	[2] 1,000	[2] 7,000	[2] 7,000	14,965	12,617	[2] 7,600
Carlsbad Cave (New Mexico)	----------	[3] 1,280	1,794	10,904	26,436	46,335
Casa Grande (Arizona)	6,787	9,583	13,587	16,542	28,818	28,274
Chaco Canyon (New Mexico)	----------	----------	[2] 2,000	2,500	[2] 1,500	1,425
Colorado (Colorado)	[2] 7,000	[2] 8,000	[2] 9,000	[2] 9,000	[2] 9,500	[2] 10,000
Craters of the Moon (Idaho)	----------	----------	3,349	4,620	5,771	7,768
Devils Tower (Wyoming)	[2] 3,000	[2] 7,800	8,450	16,640	[2] 10,400	[2] 8,000
El Morro (New Mexico)	[2] 2,500	[2] 3,200	[2] 1,800	5,794	5,178	5,356
Gran Quivira (New Mexico)	----------	----------	[2] 1,000	1,577	2,034	2,779
Hovenweep (Utah-Colorado)	----------	----------	250	[2] 250	263	240
Katmai (Alaska)	15	17	----------	----------	----------	----------
Montezuma Castle (Arizona)	[2] 7,400	[2] 7,500	[2] 9,000	12,385	15,400	16,232
Muir Woods (California)	91,253	92,391	93,643	97,426	101,514	103,571
Natural Bridges (Utah)	20	62	----------	68	82	175
Navajo (Arizona)	----------	85	200	[2] 250	[2] 260	315
Papago Saguaro (Arizona)	[2] 6,000	[2] 10,000	[2] 30,000	[2] 53,000	60,540	66,450
Petrified Forest (Arizona)	45,475	42,781	55,227	53,345	61,761	75,225
Pinnacles (California)	[2] 6,500	8,973	[2] 10,000	10,167	11,265	13,216
Pipe Spring (Arizona)	----------	----------	[2] 4,000	16,728	16,853	17,321
Rainbow Bridge (Utah)	142	115	250	[2] 300	[2] 300	[2] 200
Scotts Bluff (Nebraska)	[2] 20,000	[2] 35,000	[2] 24,000	[2] 27,000	[2] 30,000	37,500
Shoshone Cavern (Wyoming)	----------	----------	----------	----------	----------	[2] 300
Sitka (Alaska)	----------	----------	----------	[2] 2,500	[2] 3,000	[2] 3,000
Tumacacori (Arizona)	[2] 6,000	[2] 8,800	[2] 10,500	13,683	16,761	17,341
Verendrye (North Dakota)	[2] 3,500	----------	[2] 1,400	[2] 8,000	[2] 15,000	[2] 15,000
Wupatki (Arizona)	----------	----------	[2] 500	[2] 600	[2] 450	[2] 500
Yucca House (Colorado)	----------	----------	[2] 100	[2] 150	196	174
Total	212,826	248,555	294,050	384,040	443,197	502,656

[1] No records for other 5 national monuments.
[2] Estimated.
[3] Opened to public June 1, 1924.

NATIONAL PARKS TABLE 8.—*Private automobiles entering the national parks during seasons 1921–1928* [1]

Name of park	1921	1922	1923	1924	1925	1926	1927	1928
Hot Springs [2]	----------	----------	----------	----------	----------	----------	[3] 1,559	[3] 1,455
Yellowstone	15,736	18,253	27,359	30,689	33,068	[3] 44,326	49,055	58,186
Sequoia [4]	7,139	7,886	9,796	11,032	14,273	26,503	30,165	29,290
Yosemite	18,947	19,583	27,233	32,814	49,229	74,885	137,296	131,689
General Grant	6,545	12,010	12,036	9,118	11,108	12,869	13,172	14,681
Mount Rainier	12,271	17,149	27,655	38,351	39,860	38,626	48,275	50,005
Crater Lake	7,892	9,429	15,377	19,301	19,451	26,442	25,667	34,869
Wind Cave [2]	9,078	10,096	13,570	17,200	22,598	28,332	26,879	33,300
Platt [2]	21,848	[5] 30,000	[5] 50,000	[5] 57,400	[5] 60,000	45,796	[5] 75,000	[5] 70,000
Sullys Hill [2]	----------	----------	----------	----------	2,271	4,484	[5] 4,700	5,229
Mesa Verde	651	969	1,255	1,803	2,197	3,054	3,315	4,803
Glacier	2,614	2,416	5,599	6,756	7,585	6,727	7,980	9,860
Rocky Mountain [2]	[5] 57,438	[5] 52,112	[5] 51,800	[5] 53,696	[5] 58,057	[5] 50,407	[5] 54,109	[5] 57,381
Hawaii [2]	----------	----------	8,025	10,150	12,650	[5] 6,500	8,345	14,505
Lassen Volcanic [2]	----------	----------	----------	----------	2,646	5,423	5,899	8,137
Grand Canyon	5,104	7,890	11,731	13,052	19,910	22,849	28,479	32,316
Lafayette [2]	9,958	8,650	8,600	12,561	9,381	15,361	29,181	31,998
Zion	604	662	1,446	1,993	3,928	4,796	6,203	7,532
Total	175,825	197,105	271,482	315,916	368,212	417,386	557,079	595,236

[1] Automobiles entering parks with or without licenses, to and including Sept. 30, 1928.
[2] No license required.
[3] Count made only at public camp ground.
[4] License required only for Giant Forest Road.
[5] Estimated.

NATIONAL PARKS TABLE 9.—*Automobile and motor-cycle licenses issued during seasons 1924–1928*

Name of park [1]	1924		1925		1926		1927		1928	
	Automobiles	Motor cycles	Automobiles	Motor cycles	Automobiles	Motor cycles	Automobiles	Motor cycles	Automobiles	Motor cycles
Yellowstone	28,912	158	31,488	144	38,942	135	43,062	191	54,139	179
Sequoia [2]	3,684		4,312		10,781		16,383		16,599	
Yosemite	17,696	89	23,203	68	29,302	82	96,580	218	75,213	183
General Grant	6,524		7,023		4,880		6,702		6,380	
Mount Rainier	19,267	321	21,753	23	20,490	101	28,340	47	32,885	33
Crater Lake	16,033	44	15,471	37	23,249	35	15,046	18	27,898	46
Mesa Verde	1,812	2	2,075	3	3,222	3	2,959	7	4,256	13
Glacier	3,981	2	6,039	3	5,240		5,196		7,350	5
Grand Canyon					9,707		21,629		26,429	
Zion					3,596		4,069	481	6,107	
Total	97,809	616	111,364	278	149,109	356	239,966	262	257,256	459

[1] No licenses required for Wind Cave, Hot Springs, Platt, Hawaii, Lassen Volcanic, Sullys Hill, Rocky Mountain, and Lafayette National Parks. No roads in Mount McKinley Park.
[2] License required only for Giant Forest Road.

Licenses not required in certain parks because of small road mileage or unimproved condition of roads (see footnote 1). Licenses also not required for travel on unimproved roads in other parks. No charge for license issued for operating cars on official business.

NATIONAL PARKS TABLE 10.—*Receipts collected from automobiles and motor cycles during seasons 1924–1928*

Name of park [1]	1924	1925	1926 [2]	1927	1928
Yellowstone	$217,235.00	$236,520.00	$119,286.50	$129,377.00	$162,596.00
Sequoia [3]	9,210.00	10,780.00	10,481.00	16,383.00	16,599.00
Yosemite	87,278.00	114,556.00	75,179.00	192,370.00	150,609.00
General Grant	3,287.00	3,511.50	2,440.00	3,351.00	3,190.00
Mount Rainier	48,488.50	54,405.50	21,488.00	28,387.00	32,918.00
Crater Lake	40,130.00	38,714.50	26,594.50	15,064.00	27,944.00
Mesa Verde	2,719.00	3,114.00	3,377.00	2,965.50	4,269.00
Glacier	5,528.50	9,338.50	5,240.00	5,196.00	7,355.00
Grand Canyon			9,707.00	21,629.00	26,429.00
Zion			1,798.00	2,034.50	3,053.50
Total	413,876.00	470,940.00	275,591.00	416,757.00	767,857.50

[1] No licenses required for Wind Cave, Hot Springs, Platt, Hawaii, Lassen Volcanic, Sullys Hill, Rocky Mountain, and Lafayette National Parks. No roads in Mount McKinley Park.
[2] Rates reduced in 1926.
[3] License required only for Giant Forest Road.

NATIONAL PARKS TABLE 11.—*Statement of appropriations made for, and revenues received from, the various national parks and national monuments, and expenditures made therefrom during the fiscal years 1917–1928,[1] inclusive; also appropriations for the fiscal year 1929*

Name of the national park	Appropriations		Revenue	
	Appropriated	Expended	Received	Expended
Hot Springs:				
1917			$35,611.75	$31,302.98
1918			28,883.44	42,822.02
1919	[2] $140,000.00	$140,000.00	52,109.15	32,130.36
1920			45,682.85	35,710.33
1921 (deficiency)	60,000.00	60,000.00	57,807.00	74,021.19
1922			55,339.15	85,043.85
1923	63,900.00	63,289.88	56,669.16	([3])
1924	67,600.00	67,294.82	44,769.53	
1925	78,000.00	[4] 85,541.38	[5] 60,577.70	
1925 (deficiency)	11,800.00			
1926	72,100.00	69,537.19	[5] 55,421.75	
1927	71,000.00	69,250.58	47,535.70	
1928	69,800.00	67,443.19	47,695.50	
1929	68,000.00			
Yellowstone:				
1917	8,500.00	8,500.00	54,795.69	53,775.61
1918	10,500.00	9,645.82	71,393.56	96,812.34
1919	334,920.00	332,583.03	42,775.50	([3])
1919	[6] 3,259.48	539.44		
1920	255,500.00	253,577.15	120,027.61	
1920 (deficiency)	71,026.64	71,026.64		
1921	278,000.00	285,992.28	158,806.84	
1921 (deficiency)	8,000.00			
1922	350,000.00	348,746.54	165,014.53	
1923	361,800.00	361,687.86	203,140.02	
1924	368,000.00	[4] 395,139.06	299,132.97	
1924 (deficiency)	27,700.00			
1925	372,800.00	394,086.50	318,861.60	
1925 (deficiency)	24,103.00			
1926	396,000.00	[4] 393,190.23	356,193.56	
1927	398,000.00	397,861.12	230,674.69	
1928	400,000.00	[4] 399,150.00	251,663.11	
1929	434,000.00			
Sequoia:				
1917	22,300.00	15,605.28	10,326.60	415.04
	[7] 50,000.00	50,000.00		
1918	25,000.00	24,578.71	13,402.53	25,508.45
1919	30,510.00	30,420.98	9,772.52	([3])
1920	35,000.00	34,824.54	15,899.00	
1921	36,000.00	35,732.79	19,584.99	
1922	86,000.00	85,961.84	20,086.27	
1923	78,000.00	77,671.62	23,917.22	
1924	120,000.00	119,590.60	24,220.21	
1925	136,000.00	140,638.90	19,981.08	
1925 (deficiency)	5,810.00			
1926	71,710.00	[4] 72,412.22	26,356.16	
1927	73,750.00	73,750.00	29,486.10	
1928	109,000.00	108,863.10	35,105.83	
1929	113,000.00			
Yosemite:				
1917	250,000.00	249,987.45	53,500.66	55,098.45
1918	235,000.00	226,368.29	65,865.65	88,975.62
1919	255,000.00	254,294.64	57,520.03	([3])
1920	200,000.00	197,611.29	85,601.54	
1921	300,000.00	300,645.44	95,894.47	
1921 (deficiency)	3,000.00			
1922	300,000.00	295,079.94	131,797.51	
1923	280,000.00	278,218.50	148,860.60	
1924	295,000.00	[4] 294,768.42	173,732.28	
1925	309,000.00	324,414.85	137,200.14	
1925 (deficiency)	21,414.00			
1926	252,714.00	243,703.59	231,209.14	
1927	256,640.00	254,170.31	239,382.94	
1928	301,000.00	[16] 257,363.73	276,438.20	
1928 (deficiency)	15,000.00			
1929	387,250.00			
General Grant:				
1917	2,000.00	1,999.55	1,153.78	536.97
1918	2,000.00	1,999.97	1,801.63	3,951.88
1919	4,500.00	4,481.51	1,063.90	([3])
1920	6,000.00	5,992.79	1,870.83	
1921	5,300.00	5,300.00	2,663.37	
1922	6,000.00	5,981.24	3,480.45	
1923	6,500.00	6,419.88	3,180.16	

Footnotes at end of table.

NATIONAL PARKS TABLE 11.—*Statement of appropriations made for, and revenues received from, the various national parks and national monuments, and expenditures made therefrom during the fiscal years 1917–1928,[1] inclusive; also appropriations for the fiscal year 1929*—Continued

Name of the national park	Appropriations		Revenue	
	Appropriated	Expended	Received	Expended
General Grant—Continued.				
1924	$50,000.00	$49,874.91	$4,847.73	
1925	14,175.00	15,151.51	2,907.54	
1925 (deficiency)	1,180.00			
1926	12,180.00	11,986.37	3,298.55	
1927	12,300.00	12,281.07	3,686.63	
1928	13,650.00	13,529.26	3,488.90	
1929	15,650.00			
Mount Rainier:				
1917	30,000.00	29,999.19	14,346.80	$17,617.04
1918	75,000.00	74,846.67	17,241.25	34,715.96
1919	24,600.00	24,552.28	17,336.47	(3)
1920	32,500.00	32,446.01	22,153.76	
1921	40,000.00	39,819.34	24,967.79	
1922	150,000.00	149,497.31	22,286.59	
1923	106,800.00	105,721.05	29,133.17	
1924	133,000.00	[4] 135,813.76	43,014.33	
1924 (deficiency)	[5] 13,000.00			
1925	100,000.00	117,906.78	51,395.58	
1925 (deficiency)	5,230.00			
1926	106,500.00	[4] 101,777.55	56,631.25	
1927	111,000.00	107,294.68	28,613.30	
1928	108,000.00	105,447.74	32,495.50	
1929	141,000.00			
Crater Lake:				
1917	8,000.00	7,999.88	4,565.25	
1918	15,000.00	14,738.44	5,505.72	
1919	13,225.00	13,203.84	5,958.21	(3)
1920	28,225.00	28,162.05	8,327.73	
1921	25,300.00	25,223.40	9,784.98	
1922	25,300.00	25,290.41	15,277.53	
1923	32,000.00	31,787.77	18,139.75	
1924	35,000.00	34,822.56	30,495.93	
1925	30,700.00	32,613.36	39,789.49	
1925 (deficiency)	1,980.00			
1926	35,980.00	35,865.26	41,486.50	
1927	37,160.00	37,084.77	20,232.00	
1928	63,590.00	62,382.53	22,927.69	
1929	47,100.00			
Platt:				
1917	8,000.00	8,000.00	434.11	138.28
1918	7,180.00	7,179.84	1,010.40	1,699.88
1919	7,500.00	7,485.05	482.63	(3)
1920	6,000.00	5,980.24	486.59	
1921	9,000.00	8,900.70	726.20	
1922	7,500.00	7,238.26	519.80	
1923	7,500.00	7,325.62	65.30	
1924	10,000.00	9,982.48	74.14	
1925	10,000.00	11,916.20	60.50	
1925 (deficiency)	1,920.00			
1926	17,920.00	17,818.60	54.13	
1927	12,400.00	12,154.12	50.00	
1928	13,050.00	12,991.87	77.16	
1929	18,000.00			
Wind Cave:				
1917	2,500.00	2,499.87	1,632.60	1,013.04
1918	2,500.00	2,498.40	4,082.60	8,006.53
1919	4,000.00	3,988.77	2,533.15	(3)
1920	4,000.00	3,987.24	3,714.15	
1921	5,000.00	4,971.55	2,918.20	
1922	7,500.00	7,500.00	3,785.25	
1923	7,500.00	7,443.84	3,869.00	
1924	10,000.00	9,934.56	3,856.50	
1925	10,000.00	10,800.63	4,232.61	
1925 (deficiency)	960.00			
1926	10,960.00	[4] 11,827.07	5,934.54	
1927	10,275.00	10,275.00	6,840.50	
1928	10,850.00	11,500.00	12,725.50	
1929	11,000.00			
Mesa Verde:				
1917	10,000.00	9,999.00	130.14	(9)
1918	10,000.00	9,913.05	2,763.75	
1919	18,000.00	17,022.44	3,348.66	
1920	11,000.00	10,959.69	3,317.95	
1921	14,000.00	13,929.71	3,771.35	

Footnotes at end of table.

NATIONAL PARKS TABLE 11.—*Statement of appropriations made for, and revenues received from, the various national parks and national monuments, and expenditures made therefrom during the fiscal years 1917–1928,[1] inclusive; also appropriations for the fiscal year 1929*—Continued

Name of the national park	Appropriations		Revenue	
	Appropriated	Expended	Received	Expended
Mesa Verde—Continued.				
1922	$16,400.00	$16,339.30	$1,273.72	
1923	43,000.00	42,812.62	3,690.10	
1924	35,000.00	[4] 36,685.21	4,071.65	
1924 (deficiency)	3,000.00			
1925	42,500.00	43,183.46	3,599.45	
1925 (deficiency)	1,895.00			
1926	42,835.00	42,596.97	3,221.15	
1927	72,300.00	70,720.99	4,391.00	
1928	50,750.00	48,343.59	3,342.80	
1929	83,000.00			
Glacier:				
1917	110,000.00	108,148.16	3,202.40	$1,352.75
1918	150,000.00	114,362.82	4,438.22	9,026.86
1919	80,000.00	79,958.69	2,624.53	[3]
1920	85,800.00	85,000.00	7,253.85	
1920 (deficiency)	81,849.12	81,572.94		
1921	95,000.00	107,847.30	10,513.20	
1921 (deficiency)	12,564.09			
1922	195,000.00	194,803.03	6,082.71	
1923	178,700.00	178,515.70	10,732.67	
1924	225,000.00	[4] 227,133.13	19,759.23	
1925	281,000.00	288,233.45	15,328.71	
1925 (deficiency)	9,260.00			
1926	184,960.00	172,888.11	21,311.72	
1927	167,745.00	167,113.23	12,020.58	
1928	163,300.00	162,525.28	14,652.59	
1929	188,200.00			
Rocky Mountain:				
1917	10,000.00	9,964.24	871.27	[9]
1918	10,000.00	9,922.10	598.75	
1919	10,000.00	9,993.94	307.50	
1920	10,000.00	9,924.85	1,507.78	
1921	40,000.00	39,945.40	537.25	
1922	65,000.00	64,923.10	2,695.41	
1923	73,900.00	73,153.99	3,077.08	
1924	74,280.00	74,000.03	582.38	
1924 (deficiency)	[5] 26,171.00			
1925	93,000.00	122,888.53	3,183.83	
1925 (deficiency)	4,540.00			
1926	84,660.00	[4] 82,259.56	2,538.35	
1927	87,000.00	86,100.00	2,401.88	
1928	97,620.00	95,612.07	924.12	
1929	95,500.00			
Hawaii:				
1919	750.00	731.40		
1920	750.00	747.52		
1921	1,000.00	125.00		
1922	10,000.00	9,645.16		
1923	10,000.00	9,969.03	775.00	
1924	10,000.00	9,658.74	1,460.00	
1925	10,000.00	9,463.09	760.00	
1925 (deficiency)	1,260.00			
1926	15,560.00	13,349.54	2,450.00	
1927	18,000.00	17,582.22	1,975.00	
1928	18,250.00	18,119.10	1,450.00	
1929	21,500.00			
Lassen Volcanic:				
1917			81.25	[3]
1918			118.05	
1921	2,500.00	2,410.90		
1922	3,000.00	2,922.41		
1923	3,000.00	2,963.42	228.66	
1924	3,000.00	2,865.61	277.27	
1925	3,000.00	2,957.51	170.96	
1925 (deficiency)	100.00			
1926	10,000.00	9,783.06	135.97	
1927	12,700.00	12,389.36	194.48	
1928	15,625.00	15,448.52	167.84	
1929	22,400.00			
Grand Canyon:				
1919			525.03	[3]
1920	40,000.00	39,874.27	399.32	
1921	60,000.00	59,948.45	8,305.43	
1922	100,000.00	99,966.55	4,872.02	

Footnotes at end of table.

NATIONAL PARKS TABLE 11.—*Statement of appropriations made for, and revenues received from, the various national parks and national monuments, and expenditures made therefrom during the fiscal years 1917–1928,*[1] *inclusive; also appropriations for the fiscal year 1929*—Continued

Name of the national park	Appropriations		Revenue	
	Appropriated	Expended	Received	Expended
Grand Canyon—Continued.				
1923	$75,000.00	$73,906.35	$7,508.72	
1924	125,400.00	[4] 124,798.40	12,655.42	
1925 (without year)	100,000.00	63,757.24		
1925	116,000.00	115,908.64	12,550.06	
1925 (deficiency)	4,360.00			
1926	192,360.00	189,579.00	15,806.45	
1927	132,000.00	129,288.38	41,300.12	
1928	128,760.00	128,268.33	46,097.43	
1929	169,000.00			
Mount McKinley:				
1922	8,000.00	7,792.88		
1923	8,000.00	7,850.61		
1924	8,000.00	7,730.85		
1925	11,020.00	11,497.89	68.93	[3]
1925 (deficiency)	700.00			
1926	13,800.00	13,575.86	135.45	
1927	18,700.00	18,379.15	45.68	
1928	22,000.00	21,314.12	63.04	
1929	35,900.00			
Lafayette:				
1919	[10] 10,000.00	9,972.42		
1920	10,000.00	9,930.06		
1921	20,000.00	19,997.73		
1922	25,000.00	24,992.99		
1923	25,000.00	24,819.20		
1924	30,000.00	29,785.89		
1925	34,700.00	37,258.20		
1925 (deficiency)	2,820.00			
1926	34,190.00	33,636.66		
1927	34,000.00	33,463.47		
1928	37,940.00	37,376.99		
1929	39,000.00			
Zion:				
1917 (deficiency)	15,000.00	14,963.81		
1920			511.50	[3]
1921	7,300.00	8,825.96	524.00	
1921 (deficiency)	1,585.07			
1922	10,000.00	9,968.62	414.95	
1923	10,000.00	9,727.39	584.37	
1923–24 (deficiency)	133,000.00	[4] 144,066.88	913.25	
1924	13,750.00			
1925	15,190.00	[4] 15,282.02	195.80	
1925 (deficiency)	1,560.00			
1926	20,000.00	19,968.90	479.50	
1927	22,000.00	21,772.52	2,231.00	
1928	30,900.00	30,737.69	3,106.50	
1929	40,500.00			
Protection of national monuments:				
1917	3,500.00	2,586.66		
1918	5,000.00	4,832.70	225.00	[11]
1919	10,000.00	9,473.10	320.75	
1920	8,000.00	7,802.92	123.50	
1921	8,000.00	7,838.99	123.20	
1922	12,500.00	12,019.98	39.00	
1923	12,500.00	11,385.55	135.38	
1924	12,500.00	11,774.15	23.50	
1925	20,750.00	21,179.10	57.00	
1925 (deficiency)	1,230.00			
1926	46,980.00	46,752.31	72.00	
1927	21,270.00	20,867.25	66.00	
1928	25,000.00	24,042.56	132.00	
1929	35,000.00			
Casa Grande National Monument:				
1917	900.00	[12]		
1918	900.00	[12]		
1919	900.00	[12]		
Improvement of Navajo National Monument, Ariz.: 1917	[13] 3,000.00	1,962.69		
Carlsbad Cave National Monument:				
1926	[14]		3,718.00	
1927	15,000.00	14,663.81	32,628.00	
1928	30,000.00	28,492.84	55,682.00	
1929	70,000.00			

Footnotes at end of table.

NATIONAL PARKS TABLE 11.—*Statement of appropriations made for, and revenues received from, the various national parks and national monuments, and expenditures made therefrom during the fiscal years 1917–1928,*[1] *inclusive; also appropriations for the fiscal year 1929*—Continued

Name of the national park	Appropriations		Revenue	
	Appropriated	Expended	Received	Expended
National Park Service:				
1917	$3,666.67	$2,513.62		
1918	17,600.00	17,413.33		
1919	19,200.00	19,177.50		
1920	22,220.00	21,524.46		
1921	27,420.00	27,090.59		
1922	31,020.00	30,957.72		
1923	32,420.00	32,383.50		
1924	33,200.00	32,922.67		
1925	44,000.00	46,632.92		
1925 (deficiency)	2,700.00			
1926	51,000.00			
1927	55,680.00	55,678.63	$94.00	
1928	57,100.00	57,047.56	20.10	
1929	70,200.00			
Fighting forest fires:				
1922	25,000.00	9,618.30		
1923	25,000.00	17,764.16		
1924	25,000.00	6,526.02		
1925	20,000.00	20,000.00		
Emergency reconstruction: 1925	20,000.00	17,009.15		
Emergency reconstruction and fighting forest fires:				
1926	40,000.00	80,000.00		
1926 (deficiency)	40,000.00			
1927	40,000.00	40,000.00		
1927 (deficiency)	235,000.00	225,930.59		
1928	40,000.00	[16] 26,865.46		
Accounting services:				
1923	6,000.00	5,216.60		
1924	6,000.00	5,992.11		
1925	6,000.00	5,564.15		
1926	6,000.00	5,899.19		
1927				
1928	6,000.00	5,835.71		
Construction of roads and trails:				
1925 (deficiency)	1,000,000.00	995,200.61		
1926	1,500,000.00	1,500,000.00		
1927	2,000,000.00	2,000,000.00		
1928	2,000,000.00	2,000,000.00		
1928 (deficiency)	1,000,000.00			
1929	2,500,000.00			
Insect control:				
1925–26 (deficiency)	25,000.00	24,945.24		
1927	20,000.00	18,344.47		
1928	7,500.00	7,379.35		
Southern Appalachian:				
1925–26 (deficiency)	20,000.00	12,453.27		
1927	[15]	7,252.21		
1928	5,000.00	[16] 3,887.13		
1929	4,500.00			
Purchase of lands:				
1928	50,000.00	13,925.00		
1929	50,000.00			

For statement of appropriations and revenues prior to 1917 see 1920 Annual Report, pp. 354–358.

[2] Made available during fiscal years 1920 and 1921 by sundry civil acts approved July 19, 1919 (41 Stat. 204), and June 5, 1920 (41 Stat. 918).

[3] Expenditure of revenue for park purposes not authorized. Sundry civil act of June 12, 1917 (40 Stat. 153); Hot Springs, act of May 24, 1922 (42 Stat. 590).

[4] Appropriation transfer. See Table 13.

[5] Includes $15,855 from sale of lots in 1925; $8,500 in 1926.

[6] Unexpended balance of 1918 War Department appropriation of $20,000 made available under Interior Department during 1919. Sundry civil act of July 1, 1918 (40 Stat. 678).

[7] For purchase of private holdings.

[8] Made available during 1925, act of Mar. 4, 1925 (43 Stat. 1331).

[9] Expenditure of revenues from Mesa Verde and Rocky Mountain Parks for park purposes not authorized by statute.

[10] Appropriation for 1919 made under the name of Sieur de Monts National Monument.

[11] Expenditure of revenue for monument purposes not authorized.

[12] Expended under the direction of the Commissioner of the General Land Office.

[13] Expended under direction of Smithsonian Institution.

[14] $5,000 and $25,000 of appropriation for protection of national monuments for 1925 and 1926, respectively, specifically made available for Carlsbad Cave.

[15] Unexpended balance of 1925–26 appropriation made available for expenditure in 1927. Act of July 3, 1926 (44 Stat. 857).

[16] $35,000 reappropriated and made available for expenditure in Yosemite during fiscal year 1929; $1,112.87 reappropriated and made available for expenditure for Southern Appalachian during fiscal year 1929; $13,134.5 reappropriated and made available for expenditure for emergency reconstruction and fighting forest fires during fiscal year 1929.

NATIONAL PARKS TABLE 12.—*Summary of appropriations for the administration, protection, and improvement of the national parks and national monuments, together with the revenues received, for the fiscal years 1918 [1]–1929, inclusive*

Year	Department	Appropriation		Revenues
1917	Interior Department	$537,366.67		
	War Department	247,200.00		
			$784,566.67	$180,652.30
1918	Interior Department	530,680.00		
	War Department	217,500.00		
			748,180.00	[2] 217,330.55
1919	Interior Department	963,105.00		
	War Department	50,000.00		
			1,013,105.00	196,678.03
1920			907,070.76	316,877.96
1921			1,058,969.16	396,928.27
1922			1,433,220.00	432,964.89
1923			1,446,520.00	513,706.36
1924			1,892,601.00	663,886.32
1925			3,027,657.00	670,920.98
1926			3,258,409.00	826,454.17
1927			3,698,920.00	703,849.60
1928			4,889,685.00	808,255.81
1929			4,659,700.00	

[1] For summary of appropriations and revenues prior to 1917 see 1920 Annual Report, p. 359.
[2] The revenues from the various national parks were expendable during the years 1904 to 1918, inclusive, with the exception of those received from Crater Lake, Mesa Verde, and Rocky Mountain National Parks, the revenues from which were turned into the Treasury to the credit of miscellaneous receipts.

NATIONAL PARKS TABLE 13.—*Statement of amounts transferred under the authority contained in the appropriation acts to transfer 10 per cent from one appropriation to another*

Year	Amount	From—	To—
1924	$3,000	Yosemite National Park	Mount Rainier National Park.
1924	1,000	do	Mesa Verde National Park.
1924	1,000	Zion National Park	Do.
1924	1,900	Mesa Verde National Park	Glacier National Park.
1924	800	Grand Canyon National Park	Do.
1924	200	Yellowstone National Park	Do.
1925	1,000	Hot Springs National Park	Zion National Park.
1925	500	Grand Canyon National Park	Do.
1926	1,000	Yellowstone National Park	Wind Cave National Park.
1926	913	do	Sequoia National Park.
1926	1,062	Rocky Mountain National Park	Mount Rainier National Park.
1927	200	Grand Canyon National Park	Sequoia National Park.
1928	200	do	Wind Cave National Park.
1928	450	Yellowstone National Park	Do.

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