

10-23
(May 1929)
6-7410

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

COPY

Zion NATIONAL PARK

FILE NO.

ANNUAL REPORT FOR 1931

IMPORTANT

This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge.

All Files should be returned promptly to the File Room. Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ARNO B. CAMMERER,
Director.

September 2, 1931

The Director
National Park Service
Washington D. C.

Dear Mr. Director:

The annual reports for Zion and Bryce Canyon National Parks was mailed to Washington before the travel figures for the month of August were available. Will you please insert the following figures covering August travel:

Zion.

Cars	5,335
Passengers	10,893
By stage (rail)	654
Miscellaneous	9
Total visitors	11,556

Bryce

Cars	2,477
Passengers	8,283
By stage (rail)	683
Miscellaneous	00
Total visitors	8,966

Yours very truly,

Thos. J. Allen Jr.
Superintendent

August 29, 1931

The Director
National Park Service
Washington D. C.

Dear Mr. Director:

Attached is the annual report of activities and operations in Zion National Park during the 1931 year. Your instructions contained request that we comment on special items which you may wish to mention in your individual report to the Secretary. These comments follow.

New Land Purchase

Early in the year 1931 the National Park Service purchased in excess of one square mile of privately owned land at the mouth of Zion Canyon, and thereby gained control of the beautiful entrance to this park. All unsightly structures were to be either moved or razed by September 1. The Government was aided in the purchase of these areas by President Carl Gray of the Union Pacific System, and officers of the Mormon Church of Utah, who aided materially in securing purchases from families which had resided there for thirty-five to fifty years.

Zion Canyon Road

The entire length of highway passing through main Zion Canyon has been relocated and reconstructed with sufficient width and proper grades to make that drive one of the most enjoyable in the entire national park system. In connection with this project a bridle path four miles long has been constructed in order that park visitors can walk or ride horseback in the narrow canyon without interference from automobile travel. The views to be obtained of the high peaks are fully enjoyed only by being out in the open. The major portion of this project was paid from unemployment funds and it is this work which has saved this section of southern Utah from absolute want during the past spring and summer.

River Control

Work of controlling the Mukuntuweap River in order to prevent its breaking channels and laying waste to valuable canyon lands has been continued, and results at this time indicate very valuable returns from all

 **COPY**

funds so far expended in the last two years. Zion Lodge is now well protected and the most dangerous points on the road locations have been taken care of. The work, however, will not be completed without considerable additional funds.

Housekeeping Cabins

Travel figures for Zion Park indicate a continued increase in automobile travel and this has resulted in a strong demand and need for a housekeeping type of accommodation. Land recently purchased is now available for locating such unit, and recommendation is made that park operators be urged to install it.

Very truly yours,

Thos. J. Allen Jr.
Superintendent

TJA:E

ZION NATIONAL PARK

Theo. J. Allen Jr., Superintendent, Springdale, Utah

The past year in Zion Park was marked by several important changes.

In January a new superintendent, T. J. Allen Jr., was appointed, by transfer from Hawaii, former Superintendent Eivind T. Seoyen being transferred to Glacier Park. On the south boundary of the park 650 acres of privately owned land above Springdale were purchased in order to allow control of the south entrance and for administrative development. The main road up the floor of the canyon has been rebuilt from the checking station to the Temple of Sinawava and a road of modern standards substituted for the old unsatisfactory canyon road. A temporary checking station was established and operated on the Zion-Mount Carmel Highway at the east park boundary. Both the ranger and educational departments have been augmented by the addition of extra employees to take care of increased activity, and in March a permanent Park Naturalist was appointed to Zion and Bryce Canyon Parks. In the year of its operation the Zion-Mount Carmel Highway has developed into the principal cross-state highway of southern Utah.

WEATHER CONDITIONS

The past year has been the driest in the history of Zion Park. Precipitation for the whole year was less than half the normal amount, and in only one month, June, did it exceed normal. Only one snowstorm of importance occurred, when about fifteen inches of snow fell on the higher levels, in November, and none at all fell in the valley of the canyon. The past year will also be remembered for the extremely high temperatures which prevailed uniformly throughout the year. During July especially all records for hot weather were broken throughout the entire state of Utah.

PARK TRAVEL

The absence of snow and the mild temperatures which prevailed during the winter and early spring resulted in a heavy increase in travel during that period. At the end of March the increase amounted to fifty per cent over last year. Since that time, however, due to the extreme heat and drought, there has been a steady falling off in travel. At the end of August the increase amounted to only six per cent. The total number of visitors amounted to 59,186 an increase of 7 per cent over the 1930 travel year. Of this total, 56,680⁷ came in 18,215 motor vehicles, an increase of 5,483 in the number of passengers, and 2,582 in the number of autos; 2,438 came by stage, a decrease of 1,618; and 61 entered by miscellaneous means.

The heaviest travel during any month was in July, when 11,937 entered.

Visitors were registered from every state in the Union, District of Columbia,

Alaska, Hawaii, and 26 foreign countries.

The following is a comparative table showing park travel:

Year	By automobile		By stage (rail)	Miscellaneous Travel	Total Visitors
	Cars	Passengers			
1931	18,215	56,687	2,438	61	59,186
1930	15,633	51,802	4,056	39	55,297
Increase	2,582	5,485	-1,618	22	3,889
Per cent	16	10.7	44.05	56	7.03

The following table shows park travel by months:

Month	By automobile		By stage (rail)	Miscellaneous Travel	Total 1931	Total 1930
	Cars	Passengers				
<u>1930</u>						
Oct.	1,181	3,162 ✓	18 ✓	1 ✓	3,181 ✓	1,213
Nov.	419	1,103 ✓	2 ✓	5 ✓	1,110 ✓	396
Dec.	159	411 ✓		2 ✓	413 ✓	275
<u>1931</u>						
Jan.	306	861 ✓	1 ✓	2 ✓	364 ✓	318
Feb.	317	941 ✓			941 ✓	1,409

Month	By automobile		By stage (rail)	Miscellaneous travel	Total 1931	Total 1930
	Cars	Passengers				
March	690	2,161 ✓		2 ✓	2,163 ✓	2,167
April	1,106	4,023 ✓	2 ✓	8 ✓	4,033 ✓	4,822
May	1,540	4,740 ✓	24 ✓	8 ✓	4,772 ✓	3,425
June	3,497	10,842 ✓	687 ✓	6 ✓	11,335 ✓	9,099
July	3,443	11,140 ✓	785 ✓	12 ✓	11,937 ✓	15,691
Aug.	3,335	10,893 ✓	654 ✓	9 ✓	11,556 ✓	15,803
Sept.	2,222	6,610	265	6	6,881	15,289
Totals	18,215	56,687	2,438	61	59,186	55,297

During the year 18,225 people in 4898 cars camped on the public camp-ground.

PARK SERVICE ACTIVITIES

Construction. The major construction job in the park was the rebuilding of the Floor of the Valley Road. Work on this project began on April 22 and at the end of September was 75 per cent completed. The project was constructed under two separate contracts at a total cost of \$383,820.46. The first contract covered construction of 3.387 miles of gravel surfaced road, 16 feet wide, from the south entrance to a point 2,000 feet beyond the lodge.

The second contract covered the construction of 2.964 miles of gravel surfaced road, 16 feet wide, from the end of the first section to the Temple of Sinawava and one masonry bridge at Cable Creek. For a distance of 3.713 miles along the road a bridle path seven feet wide is constructed and the embankment. The reconstruction of this road was part of the emergency employment program of Congress, and helped very materially in relieving unemployment conditions in this section.

River Protection Work. Two additional rock dykes, 1,500 feet in length, were built in the vicinity of Zion Lodge at a total cost of \$11,800. The protection which these and previously built dykes afford has enabled construction of the new road past the lodge on a new alignment, allowing it to follow the river to a point near the public campground, thus making available for parking and construction purposes a large area which formerly was a part of the river channel. In addition to the force account work on river protection work, the contracts for construction of the Floor of the Valley Road contained provisions for protecting the road by masonry walls for a total distance of 850 feet.

Trail Construction. One new trail, approximately one mile in length, was constructed from the Lodge to the Grotto, and considerable improvement work was done on the East and West Rim Trails. Also the climbing trail on Mt. Zion was marked more clearly and cables, ladders, etc. repaired.

Water System, West Rim Trail. A water system was installed on the west rim of Zion Park to furnish water to the West Rim Trail. This was accomplished by developing a spring on top of the rim and piping the water a distance of two miles to a water fountain located on the trail.

Comfort Station. A new comfort station was constructed on the addition to the public camp ground. This was built of native sandstone, and was a much needed improvement to take care of the increasing number of tourists who use the public auto camp.

Residence and Powder House. Construction of these buildings will not begin until next spring when the mapping of the newly acquired area at the south entrance to the park will be completed. In the interests of future development of this area it seems more desirable to postpone construction of any buildings until the area has been thoroughly studied than to begin locating buildings haphazardly without regard to future needs.

Miscellaneous Construction. In addition to the above improvements, several small items of construction were completed in 1951. These include extensions of the water and sewer systems at park headquarters, further improvement of grounds in the administrative area, and extension and improvement of the public campground by topping a large sandy area with clay. Foot construction was done on Zion-Mount Carmel Highway points.

Maintenance. At the close of the period park forces had under maintenance 20 miles of road, 30 miles of trail, 17½ miles of telephone system, 18 buildings valued at \$40,000, one public auto camp with 100 cars capacity, two water and sewage disposal systems, one electric distributing system connected to the lines of the Dixie Power Company, and equipment consisting of 13 tractors, 5 passenger cars, one 3/4 yard power shovel, two graders, one tractor, 5 compressors, and numerous smaller items.

Ranger Activities. The park ranger force consisted of a chief ranger, two permanent rangers and three seasonal rangers. Work consisted of traffic patrol, fire protection, police duties, registering automobiles and placing boundary signs. A temporary checking station was erected on the Zion-Mount Carmel Highway on the east park boundary and two rangers were on duty sixteen hours each day throughout the tourist season. A permanent checking station is badly needed at this point. No arrests were made for infraction of park rules and regulations.

Office Operations. The office force consisted of a chief clerk, permanent clerk-stenographer, a temporary storekeeper, and a timekeeper. During the winter months one of the permanent rangers acted as storekeeper.

During the period from July 1, 1930, to June 30, 1931, the office force handled 477 purchase orders, issued 80 bids and paid 546 vouchers. The total disbursements amounted to \$247,403.59, and \$35,541.50 park revenues was collected and deposited. The greatest number on the payroll for one month was 135 in July, 1930, and the least number was 19 in February, 1931. Accounts for twelve separate appropriations were carried on the books during the year.

Educational Work. Mr. Angus W. Woodbury, who previously held the position temporarily, was appointed permanent Park Naturalist on March 13. The seasonal ranger-naturalist force was increased to three men, one of whom was assigned exclusively to the historical features of the park. During the busy season four lectures daily and two field trips were regularly conducted. The lectures included evening talks at both the public campground and the lodge, dealing alternately, or as occasion demanded, with topics of geology, history, plant life or animal life. The museum and information office has dispensed information on roads and trails and exhibited small collections of living reptiles, pioneer and Indian relics, rock specimens, fossils, mounted insects, plant specimens, etc. In addition to the regular routine work, considerable progress has been made in the collection of historical data and specimens of plant and animal life for research studies.

A summary of the season's work shows that 610 lectures were given, which were attended by 27,369 persons, and that 14,000 people visited the museum and information office.

Equipment Purchased. The major items of equipment purchased consisted of two 3-ton Kleiber dump trucks, one 2-ton Kleiber stake body truck, two Ford half-ton pickup trucks, one Chevrolet phaeton, one Caterpillar "Twenty" power grader, and one large Hix portable compressor.

Engineering Division. Mr. Thomas C. Parker, Associate Engineer from Field Headquarters, was in the park practically all summer supervising construction work in the park. Mr. Parker also acted as Assistant Superintendent and in the absence of the superintendent was designated as Acting Superintendent. Excellent assistance in all matters pertaining to park activities was extended by this official.

Landscape Work. Mr. Harry Langley, Assistant Landscape Architect, spent part of the summer in the park looking after landscape features in connection with all construction and improvement projects, although his major job was the Floor of the Valley Road. Much valuable service was rendered by Mr. Langley.

PARK WILD LIFE

A survey of animals and range conditions was made during the summer by Mr. Joseph Dixon and Mr. Ben Thompson of the Park Service, assisted by the Park Naturalist and two of the rangers. They estimated little increase in wild life over last year's count. In spite of the predatory measures taken last spring by the Bureau of Biological Survey, it is estimated that there are still 25 cougars remaining in the park. Deer are gradually appearing on the canyon floor in larger numbers.

Recommendation was made to the State Game and Fish Commissioner for the creation of a state game reserve around park boundaries, especially at the south of Zion Canyon.

COOPERATION WITH OTHER BUREAUS.

The Bureau of Public Roads had in charge the construction of the floor of the Valley Road in the park, and although this project is not yet complete, it has been carried on in a very satisfactory manner.

Several other Bureaus have rendered such worth-while cooperation in carrying on the work of the Service and solving its many problems. Among these are the Geological Survey, Biological Survey, Public Health Service, Forest Service, Weather Bureau, Bureau of Mines, Bureau of Entomology, and the General Land Office.

In addition to the above it is the wish of the Service that special acknowledgment be made of the cooperation rendered by state and county officials.

FIRES.

Two small fires occurred in the park during the year. One of these, near Zion Lodge, was of a very minor nature and did no damage. The other burned over an area of about fifty acres on the west rim and cost approximately \$100 to extinguish.

INSECT EPIDEMIC

Probably the worst infestation in many years occurred this spring when the park was literally overrun with caterpillars. Heretofore their activities were practically confined to the oak tree, but this year they attacked the cottonwoods as well, and since this is the major deciduous tree of the park, it became necessary to take control measures on a rather large scale. A large spray pump was rented from the State Board of Agriculture and in all about 3,500 gallons of lead arsenate spray was used. The treatment proved very successful but it is quite apparent that it should be repeated each year in order to keep the caterpillars in check.

IMPROVEMENT OF APPROACH HIGHWAYS

During the year the section of road between the east park boundary and Mount Carmel Junction was given an oil mulch surface. Also, the portion of U. S. highway 89 between Mount Carmel Junction and Kanab was reconstructed and given an oil mulch surface. These improvements have resulted in an excellent highway from the park to the Arizona state line. The southern approach to the park was given a dust proof coat of oil and approximately three miles of road west of Toguerville was treated with oil mulch.

ACCIDENTS

One fatal accident occurred in the park this year. Donald C. Groat, of Los Angeles, California, met death in a fall while trying to climb the Cathedral Mountain. He had previously made a successful ascent of the Great White Throne, and was fitting himself for a climb of West Temple, Zion's highest mountain. As no relatives appeared in response to inquiry, this Service stood expense of burial. Another tourist had to be rescued in the night from Lady Mountain where he became stranded on a narrow shelf of rock about 2,000 feet above the floor of the valley. Rangers assisted him with ropes.

TOPOGRAPHIC MAPS OF THE PARK

The U. S. Geological Survey completed all field work in connection with its map of the park and is now engaged on similar work at Bryce. Engineers from Field Headquarters made a topographic survey of the newly acquired area to the south and our headquarters lands in order that the areas might be studied with a view to future development and coordination of use.

IMPROVEMENTS BY PARK OPERATORS

The grounds in front of Zion Lodge were greatly improved by removal of the old rock seats and fireplace and planting of an attractive lawn. Other changes involving the grounds and parking areas will be made as soon as the old road is obliterated this fall. A new bake shop was built in the rear of the lodge.

PRIVATE LAND PURCHASE

During the year Special Representative J. F. Solinsky completed the purchase and assignment to the government of 659.145 acres of private land in sections 21 and 22, township 41 south, range 10 west, at a total price of \$64,945.00. Of this sum \$30,000 was donated by President Carl Gray of the Union Pacific System. By September 1 the owners had vacated and all buildings thereon had been removed.

SERVICE RENDERED BY PARK OPERATOR

In spite of a very poor year financially, the Utah Parks Company rendered excellent service to all its patrons throughout the tourist season, and in no way was their standard of caring for guests lowered from previous years.

VISIT BY APPROPRIATION COMMITTEE

The Subcommittee of Congress which considers National Park Service appropriations visited Zion in July under the chairmanship of Sen. Frank C. Murphy of Ohio.

Constructing rock diversion dams enclosed in wire net

in order to keep Mukuntuweap River in its channel

Power shovel cutting a new river channel across flood plain,

Mukuntuweap River.

Rearrangement of parking driveway
and attractive new lawn - Zion Lodge.