

Important
copy full
fill flood.

September 1929

October 5, 1929

The Director,
National Park Service,
Washington, D.C.

Dear Mr. Director:

The following is my report on operations and conditions in Zion and Bryce Canyon National Parks for the month of SEPTEMBER 1929.

000 General

With the exception of the afternoon of the 2nd and early morning of the 3rd, when the worst storm in years broke over Zion Canyon, bringing 3.56 inches of precipitation, the past month has been nearly ideal from the weather standpoint, and there has been very little interruption in tourist travel.

The storm mentioned above caused the worst floods ^{in 10 years} in the Mukuntuweap and Parunuweap Rivers, our gage on the former showing a rise of 7 feet. At Rockville, below the junction of these rivers, which forms the Virgin, the flood went three feet over the diversion dam we built last spring to protect the Rockville Bridge, and as this stands 8 feet above low water a flood with a head of 11 feet was indicated. However, the dam was entirely adequate and kept the water from undermining the bridge approaches. In Zion, two rock cribs protecting the road were carried away, level ground of utmost value to future developments at both the auto camp and lodge sites was carried away, and the channel has moved over so close to these developments that it is urgently necessary that the river be put back in the old channel as a simple matter of protection of life and property. It is estimated that this will cost about \$10,000. However, it is impossible to place an estimate on the level ground which was washed out as it can never be replaced and is badly needed. A flood rushing down Refrigerator Canyon was blocked by a log jam, and this turned the water down the West Rim Trail across a series of switchbacks carrying away the trail completely and causing about \$1,000 damage. Damage to the park road was estimated at \$1,000, and considerable damage was also done to unfinished sections of the Zion-Mt. Camel Highway.

100 - Administration

110 - Status of Work - With the exception of Office work, all of the park operations are well on schedule. It has been clearly demonstrated that our office force is not large enough to handle all of the work of two complete park operations, especially during the construction season, and it will be necessary to add to the office personnel if the work is to be kept on schedule. A qualified authority stated that we were doing 3 times the office work that was being done by parks with twice our office force.

120 - Inspections

121 - By Superintendent - I made two visits to Bryce Canyon and also made regular inspections in Zion. From the 12th to 29th inclusive I was absent on account of the Yellowstone Conference going and returning direct.

125 - Other governmental Officers - Mr. Finch, Mr. Frickstead, Mr. Mayo, and Mr. Bishop of the Bureau of Public Roads were in the park in connection with work on the Zion-Mt. Carmel Highway.

130 - Finance and Accounts - Statement is attached.

200 - Maintenance, Improvement and New Construction

210 - Some heavy maintenance work was made necessary on roads and trails due to the severe storms early in the month, especially the West Rim Trail.

230 - Working on a schedule calling for completion of all of our projects by October 1st, a check-up shows that all have been finished with the exception of the Superintendents Residence in Zion and the Ranger Station at Bryce.

The trail program at Zion has been finished, and with the exception of the Queen's Garden Trail, the trail program at Bryce is also finished.

Progress by the contractor on the Zion-Mt. Carmel Road has been rather slow and on September 20th, 26% progress had been made and 52% of the working time had elapsed. Officials of the Bureau of Public Roads are making special efforts to speed up the work. The main trouble seems to be with the sub-contractor who is getting out sand and gravel as he does not appear to be big enough to handle the job.

250 - Improvement of nearby Transcontinental Highways - The state of Utah is doing some improvement work on U.S. #89 south of Panguitch, but aside from this, construction work is rather slack at present.

400 - Flora, Fauna, and Natural Phenomena

410 - Ranger, Naturalist, and Guide Service * During the month the ranger force consisted of a Chief Ranger, two rangers, the temporary rangers, two ranger Naturalists, and one Naturalist (Temporary).

Practically all of the time of these men was taken up in checking, guiding, information office duty, etc. We did not have sufficient men to maintain patrol work.

At Bryce our ranger performed general police duties, and the other acted as a ranger-Naturalist, giving lectures, and taking out guide parties.

At Zion two rangers operated the park checking station, one was assigned to duty in the information office, and the Naturalist handled the guide work and lectures. One temporary ranger left on the 15th, and Mr. Woodbury, Naturalist, on the 30th, both these men having completed their seasons work.

During September a total of 15 field trips were made by the Educational Division with 400 people, and 30 lectures were given to 1,500 persons. A total of 152 publications were sold, and there were 1,500 visitors to the park museum. Our totals for the season are: 137 field trips with 4,240 persons, 312 lectures to 12,350, museum attendance of 8,568, and 603 sale publications disposed of make the total number of services during the season of 25,761.

Exact figures regarding the Bryce Educational work are not available; but the totals for the season are 83 lectures to 10,612 persons, and 5,653 park visitors availed themselves of the guide trips.

470 - Animals - Deer are reported as being in only fair condition. Many signs of Mountain Sheep have been seen in the Rock Pasture section but the animals have kept well out of sight.

490 - Miscellaneous - Although the heavy rains the past summer have caused us a great deal of trouble from the maintenance standpoint, it has been of greatest possible benefit to growing things of all kinds. I have never seen the Southern Utah country any more green and beautiful than it is at present, and, on the ranges, forage is the best it has been for many years.

We have also been treated to the sight of several of our spring blooming flowers putting on another show this fall. Although this is a usual occurrence, it is much more marked this fall.

The colored leaf display on Cedar Mountain is now at its height. A very unusual thing on this mountain is due to the fact Quaking Aspen leaves turn red about 50% of the time. I do not recollect them turning anything but yellow in other places.

500 - Use of Park Facilities by the Public

510 - Travel The total travel for the month of September was 3,656, of which 3,047 came in 948 automobiles and 609 by stages of the Utah Parks Company. There was a slight loss in travel for the month.

At Bryce the total was 3,746, of which 3,135 came in 601 autos and 611 by stage. No comparative figures are available.

The season total for Zion was 33,383 visitors which is the largest number ever to enter the park in one year, and exceeds last year by 3,367 or 11%. Visitors were registered from every ~~foreign country~~ state in the Union, Dist. of Columbia, Hawaii, Alaska, Canal Zone, Philippine Islands, and 22 foreign countries.

The total travel for the season to Bryce was 21,997.

Detailed statement regarding travel to the parks is attached to this report.

540 - Visitors - On September 2nd the House Sub-Committee on appropriations for the Department of Agriculture were in the park. Members were Mr. Dickinson, Dr. Summers, and Mr. Carpenter. Accompanying the party were Maj. Stuart, U.S. Forester, R.H. Rutledge, Dist. Forester, Orange A. Olsen and Mr. Riddle Supervisors to the Dixie and Powell National Forests, Mr. Forsling of the Great Basin Experiment Station, two other Forest Service men and Mr. Finch District Engineer of the U.S. Bureau of Public Roads. Congressman Colton also made the trip with the party.

On August 31st Mr. G.A. Atterbury arrived at Zion. He left on the 2nd for Bryce Canyon intending to spend a few days; but was taken sick and did not get away until about the 11th.

Dr. Frank Castler also spent the first 9 days of the month in Bryce and Zion parks.

600 - Protection

610 - Police Protection - Three young men from Salt Lake were arrested for carving their names on trees in the Public Auto Camp, and were released when they removed the letters as there was but little damage done.

This concludes my report.

E.T. Scoyen
E.T. Scoyen.
Superintendent.

No. 1- Picture showing rubbish dump for the past five years collection not yet taken care of.

2- Picture showing garbage and rubbish for the present season which has since been covered.

Zion ~~and~~ Bryce National Parks:

Trails:

There is approximately 26 miles of good trails in the park (Zion)
26 miles of poor trails.

Improved trails as follows:

Horse trails:

To West Rim	7 miles
East rim	4 Miles
Birch Creek	2 miles
Narrows	1 mile

Good Unimproved horse trails:

West Rim to Potatoe Hollow	4 Miles
Road Below Springdale to Cliff Dwellings	8 miles

Total 26 Miles.

Foot Trails:	Hidden Canyon	1 mile
	Narrows	1 mile
	Lady Mountain	2 Mile
	Birch Creek	2 Miles
	Emerald Pool	2 Miles
	Each Bench	3 Miles
	West Bench	3 Miles
	Weeping rock	1/8 Mi.
	Grotto	1/8 Mi.

Total 14 Miles

Poor unimproved trails (New trails needed badly)

East rim to Hog Heaven North East Corner of Park	12 Miles
Potatoe Hollow to Coal Pit Mt. via Phantom Valley	25 miles
Zion MtCarmel Highway east Park line to south east corner of park through the Rock Pasture which is a range for the only herd of Mountain sheep in the park.	5 Miles
Foot Trail to Natural Bridge on Bridge mountain	3 Miles

Roads in Zion National Park :

There is 15 miles of Automobile road in the park.

Canyon road to Narrows 7 Miles

Zion Mt. Carmel Highway from canyon road to East line 8 Miles.

Bryce Canyon National Park:

There is at the present time only approximately $1\frac{1}{2}$ miles of improved road in Bryce. 8 Miles of unimproved road in fair condition in dry weather.

	Foot trail	
ivite	To Inspiration point	1 mile
	Floor of valley	1 mile
	floor of valley to rim via	
	other route	1 mile

Several miles of poor unimproved trail originally used has been eliminated from the trail program.

There is a loop horse trail to valley and return over some of the most interesting sections of the park of approximately 10 miles three miles of which is excellent trail.

Many other trails both foot and horse trails are needed but no estimate has yet made of the cost of the contemplated trails as no survey has yet been made.

TRAVEL REPORT BY STATES FOR THE MONTH OF SEPTEMBER 1929. ZION NATIONAL PARK, UTAH.

STATES	CARS	PASS	STAGE	TOTAL PASS.
Arizona	13	35	1	36
California	370	1031	138	1169
Colorado	11	29	1	30
Connecticut	1	4	10	14
Delaware	0	0	2	2
District of Columbia	1	2	8	10
Florida	1	1	1	2
Georgia	0	0	4	4
Idaho	17	54	1	55
Illinois	12	32	43	75
Indiana	7	23	7	30
Iowa	7	21	5	26
Kansas	3	19	0	19
Kentucky	1	4	8	12
Maine	0	1	0	1
Maryland	1	3	1	4
Massachusetts	3	9	21	30
Michigan	8	21	10	31
Minnesota	2	5	1	6
Missouri	4	13	13	26
Montana	8	19	0	19
Nebraska	10	30	10	40
Nevada	19	60	0	60
New Jersey	4	8	29	37
New Mexico	3	9	0	9
New York	13	24	63	87
North Carolina	0	0	1	1
North Dakota	1	2	2	4
Ohio	12	36	100	136
Oklahoma	3	6	1	7
Oregon	6	13	5	18
Pennsylvania	3	17	38	55
South Carolina	1	2	0	2
South Dakota	3	9	0	9
Tennessee	0	0	5	5
Texas	14	53	5	58
Utah	384	1358	25	1383
Vermont	0	0	1	1
Virginia	1	4	2	6
Washington	10	25	12	37
West Virginia	0	0	5	5
Wisconsin	7	16	18	34
Wyoming	9	26	1	27
Australia	0	0	2	2
Canada	3	10	0	10
Cuba	1	3	0	3
France	0	0	6	6
Hawaii	2	5	2	7
Philippine Islands	1	2	0	2
New Zeland	2	3	0	3
Scotland	0	0	1	0
Totals	982	3047	609	3656

10-157
 UNITED STATES
 DEPARTMENT OF THE INTERIOR
 NATIONAL PARK SERVICE

TRAVEL REPORT

Z I O N. National Park for the Month of SEPTEMBER 1929.

	This Month	This Travel Year To Date	This Month Last Year	Last Travel Year To Date	Increase for Travel Year	
					Number	Per cent

PRIVATE TRANSPORTATION:

Cars first entry.	905 :	7608:	826:	7046:	552:	7%
Cars reentry.	79 :	995:	85:	472:	523:	110%
Motorcycles.	0:	9:	1:	14:		
	982 :	8612:	912:	7532:	1080:	14%
Total motor vehicles.	3047 :	28189:	2768:	25011:	5178:	12%
Persons entering via motor vehicles.	3047 :	28189:	2768:	25011:	5178:	12%
Persons entering via other private transportation.		12:	2:	20:		
Total persons entering via private transportation.	3047 :	28201:	2770:	25031:	5170:	12%

OTHER TRANSPORTATION:

Persons entering via stages	609 :	5151:	1053:	4940:	211:	4%
Persons entering via trains						
Persons entering otherwise.	0 :	51:	5:	45:		
Total other transportation.	609 :	5182:	1056:	4985:	197:	4%
GRAND TOTAL ALL VISITORS.	3656 :	33383:	3826:	30016:	3367:	11%

	This Year	Last Year	Increase	
			Number	Per cent
Automobiles in public camps during month	193	362		
Campers in public camps during month	877	1283		

WEATHER REPORT
For Zion

September 1929.

Mean Maximum..... 84 plus
Mean Minimum..... 56 minus
Mean..... 70
Maximum..... 93 on the 15 and 16
Minimum..... 48 on the 8

PRECIPITATION:

Total 4.81
Greatest in 24 hours..... 3.56 from 2 to 3
Number of days-
With .01 inch or more precipitation 6

Clear 17; Partly Cloudy 2; Cloudy 11

For Springdale;

September 1929.

Mean Maximum..... 84
Mean Minimum..... 59
Mean..... 71.5
Maximum..... 92 on the 16
Minimum..... 50 on the 8

PRECIPITATION:

Total..... 3.38
Greatest in 24 hours..... 2.00 on the 2 ~~and~~ 3

Number of days-
With .01 inch or more precipitation 7

Clear 18; Partly cloudy 3; Cloudy 9

STATUS OF APPROPRIATIONS

SEPTEMBER, 1929.

	<u>Allotment</u>	<u>Expended</u>	<u>Balance</u>
<u>48/9435 Zion National Park 1928-29</u>			
Previously reported	40,675.00	40,435.47	259.53
Transactions during month		1.67	
Status end of month	<u>40,675.00</u>	<u>40,437.14</u>	<u>257.86</u>
<u>49/0435 Zion National Park 1929-30</u>			
Previously reported	36,645.00	11,949.33	24,695.67
Transactions during month		4,870.77	
Status end of month	<u>36,645.00</u>	<u>16,820.10</u>	<u>19,824.90</u>
<u>49/0416 Bryce National Park 1929-30</u>			
Previously reported	23,795.00	7,906.86	15,888.14
Transactions during month		3,742.43	
Status end of month	<u>23,795.00</u>	<u>11,649.29</u>	<u>12,145.71</u>
<u>4x436 Roads and Trails, Zion</u>			
Previously reported	1,481,568.13	1,080,331.84	401,236.29
Transactions during month		2,219.56	
Status end of month	<u>1,481,568.13</u>	<u>1,082,551.40</u>	<u>399,016.73</u>
<u>4x436 Roads and Trails, Bryce</u>			
Previously reported	7,500.00	2,360.05	5,139.95
Transactions during month		3,195.81	
Status end of month	<u>7,500.00</u>	<u>5,555.86</u>	<u>1,944.14</u>

UNITED STATES
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STATUS OF PERSONNEL

ZION AND BRYCE CANYON National Park for the Month of SEPTEMBER, 1929.

	This Month	This Month Last Year
Number of employees beginning of month	81	85
Number of additions.	39	30
Total	120	55
Number of separations.	37	41
Number of employees close of month	83	14

Number of promotions during month.		None

Aggregate amount of annual leave taken		None
Aggregate amount of sick leave taken		None
Aggregate amount of leave without pay.		None

UNITED STATES
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REPORT OF PARK REVENUES

ZION & DRYCE CANYON National Park for the Month of SEPTEMBER, 1929.

	This Year	Last Year
Park revenue on hand beginning of month,	---	---
Received,	<u>438.50</u>	<u>412.50</u>
Total,	438.50	412.50
Remitted,	<u>438.50</u>	<u>412.50</u>
On hand close of month,	---	---

Park revenues received this year to date,	6,416.00
Park revenues received last year to date,	1,957.50
Increase,	<u>4,458.50</u>
Percent of increase,	<u>250</u>

UNITED STATES
DEPARTMENT OF THE INTERIOR
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STATUS OF AUTHORIZED PROJECTS

ZION AND BRYCE CANYON..... National Park for the Month of~~SEPTEMBER~~, 1929.

Description of Projects	Percent Constructed To Date	Percent Constructed This Month	Percent Constructed Last Month	Probable Date Completion
<u>Zion</u>				
Superintendent's residence	35	10	10	Nov. 1
Camp Ground Sewer System	100	10	70	
<u>Bryce</u>				
Comfort stations	90	10	55	Oct. 10
Checking station	100	20	70	
Sewer system	90	70	20	Oct. 15
Water system	15	10	5	Oct. 31
Foot trails	75	60	10	Oct. 15
Residence	60	60	00	Oct. 31