NATIONAL PARK SERVICE NEWS

In 1919, Stephen T. Mather inaugurated a newsletter that he called at first "National Park Service News" and that later became "Park Service News." He explained why in the first issue:

"The National Park Service has now been organized for two years and it is high time that we have a definite means of keeping in touch with each other. The office in Washington is a very busy place and it is hard work to give the employees in the field, by correspondence, all of the important matters that are transpiring here. Then, too, the personnel in the individual parks should be brought into closer touch with each other ... we can learn something of what the other fellow is doing through the medium of a new bulletin which we are just inaugurating. It is being started in a preliminary way and we will be glad to have suggestions from any member of the Service that would make it more useful."

He continued the NEWS for at least two years. The National Park Service History Collection at Harpers Ferry Center has 10 of the issues: numbers 1-8 and 10 plus one unnumbered issue from November 1919 that we have given the number "6a." We are missing no. 9, which would have been the March or April, 1920 issue, and we have no issues beyond no. 10, May 1920. In fact, we do not know if any issues were produced beyond number 10. We are hoping that copies will turn up in one of the older parks or monuments.

The NEWS not only served as a communication medium between Washington and the field, it also contained information on travel statistics, weather and the use of such newly adopted (at the time) modes of transportation as the automobile and the airplane in the national parks and monuments. It also contained the kind of information found in park annual reports - events, significant visitors, etc.

The issues paint a very interesting picture of the National Park Service and the parks of the time.

David Nathanson Harpers Ferry Center

DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE NEWS

No. 1 April 1919

To the Members of the National Park Service:

The National Park Service has now been organized for two years and it is high t that we have a definite means of keeping in touch with each other. The office in Wash is a very busy place and it is hard work to give the employees in the field, by correspondence, all of the important matters that are transpiring here. Then, too, the personnel in the individual parks should be brought into closer touch with each other

The ideal arrangement, of course, would be that each superintendent should visi other park at least once a year. When I visited Mount Rainier National Park last Dece had Superintendent Sparrow come up from Crater Lake and see some of the excellent worthere by Mr. Reaburn and, later, I took Mr. Reaburn with me down to Yosemite National where, under Superintendent Lewis' efficient management, nearly a million dollars has spent on improvements. These trips were very illuminating to the visiting superintendent they were to me, and I wish trips of this kind could be made oftener.

In the meantime we can learn something of what the other fellow is doing throug medium of a new bulletin which we are just inaugurating. It is being started in a preliminary way and we will be glad to have suggestions from any member of the Servic would make it more useful.

The tourist season will be on us very soon with every prospect of a greater bus than we have ever had in the parks and with everything tuned up to take care of a rectravel. I want the man in the field to get in personal contact with the Washington of and to realize some of the broad purposes which we are trying to carry out. I am sure little publication will help to that end very materially.

Very cordially yours,

STEPHEN T. MATHER,

Director.

Now Eighteen National Parks

The 65th Congress created two new national parks, the Grand Canyon in Arizona a Lafayette in Maine. President Wilson approved both acts February 26, 1919. These new were formerly national monuments, the Grand Canyon and the Sieur de Monts.

The Lafayette National Park has the distinction of being the first eastern representative of the national park system.

While the Grand Canyon has been formally made a national park, the administrati still in the hands of the Forest Service, as our Service has no funds to care for it probably will not receive any before the beginning of the new fiscal year.

Park Bills Which Failed to Pass the Last Congress

The proposed Roosevelt National Park, in California, which will include the pre Sequoia Park, besides the wonderfully scenic country of the High Sierra to the east, created by the past Congress. It was left at the post together with many other import bills. However, it received a volume of favorable publicity both in the East and West the chances of this splendid and fitting memorial to the late ex-President Roosevelt created by the new Congress are very bright.

Another disappointment of the last Congress was the failure of the proposed enlargement of the Yellowstone Park to go through. After passing the House and being reported favorably to the Senate by the Public Lands Committee, it lost its place on unanimous consent calendar by unexpected objection, which was later withdrawn, and water defeated through lack of time in the strenuous closing days,

The Sundry Civil Bill, which carries the appropriations for national parks, was the appropriation acts which failed to pass the last Congress. Funds for the next figure for the parks will have to be obtained in the extra session of the new Congress.

Exhibit-of Winter Scenes in the National Parks.

A photographic exhibit of winter scenes in the national parks was displayed in Cosmos Club of this City and attracted a large attendance. It will form part of a Depenhibit in the New Interior Building where even a larger audience is expected to view Later it is planned to send the exhibit to New York, Boston and Chicago.

The parks represented are Mt. Rainier, Yosemite, Yellowstone, Sequoia, Grand Ca and Rocky Mountain. The exhibit includes scene of the finest work of such well known photographers: Herbert W. Gleason, Asahel Curtis, Jack Haynes, Rodney Glisan, Lindley and the Wiswall Brothers.

U. S. Railroad Administration Plans to Stimulate Park Travel

This should be our greatest year for park travel, as, besides the energetic pub work now being carried on by the various automobile highway associations, the U. S. I Administration has authorized the publication of series of national park and monument booklets to stimulate tourist travel by rail this coming season.

A list of the parks and monuments represented in this series, follows: Yellowst Glacier, Mt. Rainier, Crater Lake, Yosemite, Sequoia and General Grant, Grand Canyon Verde, Rocky Mountain, Hot Springs and Hawaii National Parks and Petrified Forest and National Monuments.

The publication of these booklets is in charge of the Western Advertising Committee Railroad Administration, and the work is well under way. This Service has cooperate with the Railroad Administration, in this as in all other ways, with Mr. Robert Ster. Yard and Mr. A. E. Demaray of the Washington Office going out to Chicago to assist in preparation of the booklets.

The Airplane in the National Parks.

In connection with plans for the dedication of the Grand Canyon as a national pairplane flight may be attempted from rim to rim. It is probably that a landing stat: be cleared on the south rim in the neighborhood of the Powell Monument.

Secretary Lane thinks it. may be possible to ultimately establish a regular ser from rim to rim in connection with administration and protection of the Powell Monum

It has been suggested that flights from the Canyon could be made to Zion Canyon and that the Rainbow Bridge, Navajo and Petrified Forest National Monuments could eas visited on a triangle trip by airplane.

Notice comes from California that a flight from Mather Flying Field, Sacramento Yosemite Valley may be attempted this summer with Lieutenant Don Tresidder as pilot & Arthur C. Pillsbury as cameraman. Both these men are thoroughly familiar with the surrounding country and the Valley, Mr. Pillsbury having had a photographic concession the park for a number of years.

Word comes from, Rocky Mountain Park that a landing station in Estes Park may be cleared. It may be a familiar sight in the near future to see the Denver-Rocky Mountairplane Express sail into Estes Park with its load of park tourists.

Personal Mention.

Director Mother sails for Honolulu, Territory of Hawaii, April 10, and expects return to the Pacific Coast about the 10th or 12th of May. His visit will be directly connected with matters pertaining to the Hawaii National Park.

Assistant Director Albright returns to Washington to assume the duties of Actin Director during Mr. Mather's absence. Mr. Albright has been in California for over two months looking after the national park interests in that State.

Mr. C. P. Punchard, Jr. ~ who was appointed landscape engineer in the Service A 1, 1918, has several notable accomplishments already to his credit, namely, plans for needed and splendid gateway at the Cody entrance to Yellowstone to be erected this suplans for improvements to the Mammoth and Canyon Camps in Yellowstone now under way; of conditions in Sequoia and General Grant; and studies of the forestry conditions of floor of Yosemite Valley.

Mr. Frank Pinkley, Custodian for several national monuments, in the Southwest, investigation of the ruins of the sixteenth century Franciscan Mission in the Tumacac Monument and work is now being carried out in accordance with his suggestions for the preservation of these remarkable ruins. Mr. Pinkley is also making plans for road improvements in the Petrified Forest Monument.

Mr. Reaburn, Superintendent of Mt. Rainier and Mr. C. P. Punchard, the landscap engineer, accompanied Director Mather on his visit to Grand Canyon early this year. P. Reaburn made some preliminary studies for road and trail improvements.

Mr. Herbert W. Gleason has been appointed an Inspector of the Department and wi visit a number of parks in connection with his work in the near future.

Mr. Chester A. Lindsley, Acting Superintendent of Yellowstone National Park, is Washington on official business.

Mr. W. B. Lewis, Superintendent of Yosemite, and Dr. W. P. Parks, Superintendent of Hot Springs, have been in the Washington Office this Winter.

A Word Regarding Our Mountain Lion Exhibit in Yosemite

On April 27 of last year, Mr. Jay Bruce, ranger in Yosemite National Park, succ in killing a female mountain lion and capturing alive her three young kittens. Mrs. (Sovulewski succeeded in the difficult task of rearing them through their infancy, on see two die after they

had grown into husky young mountain lions. However, the third lion is developing splendidly.

The exhibit has been augmented by the arrival of two more lions captured in ear youth in Yellowstone. The lions are as tame as any other animal pets, treated with ki and justice.

Suggestions and New Items

Suggestions for the news bulletin should be addressed to the Director and plain marked "For National Park Service News."

ORGANIZATION OF THE NATIONAL PARK SERVICE Washington Office

Stephen T, Mather, Director. Horace M. Albright, Assistant Director. F. W. Griffith, Chief Clerk.

Robert Sterling Yard, Chief, Educational Division.

FIELD SERVICE Engineering Division

George E. Goodwin, Civil Engineer, Yellowstone Park, Wyoming. Charles P. Punchard, Jr., Landscape Engineer, Yellowstone Park, Wyoming.

The National Parks

Hot Springs Dr. William P. Parks,
Reservation, Superintendent, Hot, Springs, Arkansas:

Chester A. Lindsley,

Yellowstone, Acting Superintendent, Yellowstone, Park,

Wyoming

Walter Fry, Sequoia, Superintend

Superintendent, Three Rivers,

California.

Walter Fry,

General Grant, Acting Superintendent, Three Rivers,

California.

W. B. Lewis,

Yosemite, Superintendent, Yosemite, California.

D. L. Reaburn, Mount Rainier, Superintendent, Ashford, Washington. Alex Sparrow, Crater Lake. Superintendent, Medford, Oregon, Roy Brazell Hot Springs, South Superintendent, Wind Cave, Dakota. R.A. Sneed Superintendent, Sulphur, Oklahoma. Platt, William A. Light, Acting Superintendent, Ft. Totten, North Sullys Hill, Dakota. Thomas Rickner, Mancos, Colorado. Mesa Verde, Superintendent Walter W. Payne, Belton, Montana. Glacier, Superintendent L. Claude Way, Rocky Mountain, Superintendent, Estes Park, Colorado. (none) Hawaii. Hawaii, (none) Lesson Volcanic, California. Mount McKinley, (none) Territory of Alaska. Grand Canyon, (none) Arizona. Lafayette, George B. Dorr Bar Harbor, Maine THE NATIONAL MONUMENTS E. W. Merrill, Sitka, Custodian, Sitka, Alaska. Casa Grande, Frank Pinkley, Custodian, Blackwater, Arizona. Tumacacori, Frank Pinkley, Custodian, Blackwater, Arizona. Navajo, John Wetherill Custodian, Kayenta, Arizona. Petrified Forest, William Nelson

Custodian,

Adamana, Arizona.

Andrew Lind, R. F. D. No. 1, Custodian Sausalito, Calif Muir Woods,

Sausalito, California.

Colorado, John Otto

Custodian Fruita, Colorado.

Oscar Rohn, Pittsmont Mine, Custodian, Butte, Montana.

Lewis & Clark Cavern

Mrs. W, H. Jack,

Capulin Mountain, Custodian, Folsom, Union Co., N. Mexico.

Evon Z. Vogt,

Custodian, Ramah, New Mexico. El Morro,

W. F. Thompson,

Custodian, Verendrye, Sanish, North Dakota.

Walter Ruesch,

Custodian, Springdale, Utah. Zion,

No custodians have been appointed for the Devils Tower, Montezuma Castle, Chaco Canyon, Pinnacles, Natural Bridges, Shoshone Cavern, Gran Quivira, Rainbow Bridge, Pa Saguaro, Dinosaur, and Katmai National Monuments.

No. 2 July, 1919

To the Members of the National Park Service:

Many things have conspired to prevent the issue of the National Park Service News for the past two months. In the first place, information requests were received in such unprecedented numbers that not only was it necessary to have two extra clerks detailed to us from the Secretary's Office, but the entire office force had to help out in the rush, letting the other work accumulate for the time being.

Then the Victory Loan came on and entailed a large amount of work for the Service as for every bureau in the Department. The detailed account of the results of the campaign which appears elsewhere in this issue will show how well the labor was repaid and how nobly the members of the Department responded to the appeal.

In May the Department had an exposition for the benefit of Congress and the general public, in which the activities of the various bureaus were shown. It required the entire time of two clerks to arrange and install the National Parks exhibit, which was beautiful and comprehensive. During the period of the exposition they were busy explaining our display to interested audiences at both day and evening sessions.

My absence in Hawaii added my work to the already heavy burdens of my assistants; and two members of our small office force were away on sick leave.

Taking it all in all, the Service has not known as busy a time in several years. Hereafter we expect the bulletin to issue monthly.

Very cordially yours,

STEPHEN T. MATHER,

Director.

Every member of the Department may well be proud of the showing made in the Victory Liberty Loan.

Standing of the Bureaus of the Department at end of the drive: (Washington force)

Office No emp	ployees Amount	subscribed	Percent	of	employees	subscribing
Pensions 79	94 \$ 233,	,950	100			
Mines 25	59 144,	,150	100			
Reclamation 10	00 17,	,750	100			
Alaskan						
Eng.Com.	7 3,	,350	100			
Parks 1	.6 8,	,500	100			
Land 49	0 88	,700	92			
Indian 33	84,	,700	90			
Patents 93	31 151,	,900	89			
Survey 56	59 100,	,450	89			
Education 18	37 24,	,900	85			
Secretary's 36	57 61,	,850	60			

		Washington and Field		
Office	Washington	Field	Total	
Pensions	\$233,950	\$ 16,100	250,050	
		·	•	
Mines	144,150	242,900	387,050	
Reclamatio	n 17,750	151,150	168,900	
Alaskan En	g.Com.3,380	149,000	152,350	
Parks	8,500	34,100	42,600	
Land	88,700	126,000	214,700	
Indian	84,700	230,650	315,350	
Patents	151,900		151,900	
Survey	100,050	37,400	137,850	
Education	24,900	10,600	35,500	
Secretary'	s 61,850		61,850	

The Interior Department Exhibit

Beginning May 19th the Department held an exhibit of the activities of its thirteen different Bureaus for the benefit of the new Congress and the public. The entire main corridor of the first floor running from 18th to 19th Streets was used for this purpose. The auditorium presented a daily program of motion pictures. The exhibit continued for two weeks and each Bureau, in the best spirit of rivalry, endeavored to make its section the prize winner.

National Park Service Exhibit.

The National Park Service exhibit, which was shown in the northeastern alcove under a bower of pines and cedars, consisted of enlargements of photographs illustrative of the scenic range of the principal national parks. There was also shown a working model of a Yellowstone geyser in operation; also a large electric map showing the sixty established national park areas, only forty-one of which have yet, however, been placed under the administration of the Department of the Interior, National Park Service.

The national parks pictured were Mount Rainier, Crater Lake, Yosemite, Sequoia and General Grant. Grand Canyon, Glacier, Yellowstone, Rocky Mountain, and Lafayette. There were photographs of national monuments, including ancient Spanish missions, and specimens of the giant cactus of our far southwest.

Examples of the sublime scenery. of the proposed Roosevelt National Park were shown in photographic enlargement.

A feature of the exhibition was the winter scenery of Mount Rainier, Yosemite, and Rocky Mountain National Parks which has recently been made accessible to visitors. Photographs showed winter sports in the Rocky Mountain National Park, which has led the others in this kind of development. But Yosemite is coming fast; a vigorous campaign is now on to raise money for an all-the-year-round automobile road which will enable many thousands to view the incomparable spectacle of Yosemite Valley snow bound. There were pictures of this spectacle in the exhibit.

There were also pictures in this exhibit of the fine hotels and the comfortable hotel-camps provided for tourists.

A park ranger in uniform, typical of the fine body of men who protect the national parks and care for the people who visit them, was present during the Exhibition.

Statement of mail and telegrams received in and dispatched from this Service during April, May and June, 1919:

RECEIVED	April	May	June
Mail, first class	1743 pieces	2184 p	pieces 1275 pieces
Mail, second class	16 "	53 "	" 64 "
Telegrams	135 "	171 "	" 87 "
_			
DISPATCHED	April	May	June
DISPATCHED Mail, first class	April 1623 pieces	-	June pieces 1694 pieces
-	_	-	
Mail, first class	1623 pieces	3190 p	pieces 1694 pieces

Interior Department Building.

The following extract from the report for the year 1918 of Mr. E. J. Ayers,. Chief Clerk of the Department of the Interior, gives some interesting facts relative to the Interior Department Building, dealing with its dimensions, plan of construction, and modern equipment for official business.

The building has a frontage on E and F Streets of 401 feet 10 inches, and on Eighteenth and Nineteenth Streets of 392 feet 2 inches.

It is eight stories in height and its shape is the letter E, with a total area of 685,000 square feet, or about 16 acres.

The building is covered with a promenade tile roof, giving a recreation space of two acres.

The cubage of the building is slightly over 9,000,000 cubic feet.

As a Comparison, I might mention that the cubage of the Treasury Building is 6,000,000 and the State, War, and Navy and the new Bureau of Engraving Buildings are approximately 7,000,000 cubic feet.

There are six entrances in addition to a private entrance for the Secretary of the Department; 6 inclosed stairways running from the basement to the top floor; also 12 elevators, 9 passenger, 2 combination passenger and freight, and 1 for freight only.

A building in the west court is used as a library. This is equipped with library shelving, being three tiers in height with glass floors, and has a capacity of 250,000 volumes in addition to cases for maps, offices for librarian, clerks, etc.

In the east court is an auditorium, equipped with 319 leather covered opera chairs, with stage, retiring rooms, operating room for motion pictures, etc,

At the south of the auditorium is the press room, where the large number of maps prepared by the Survey are printed. On the top of this wing is the largest photographic laboratory in the United States, complete with dark rooms, etc.

On the E Street side of the building special rooms are provided for the chemical analytical, physical, petroleum, and mineralogical laboratories of the several bureaus occupying the building.

The appropriation for the building, including approaches, was \$2,596,000.

A few figures:

For daytime lighting of this building there are a few more than 5,000 windows.

The building contains 52 toilet rooms, 830 lavatories, each being supplied with hot and cold water.

Ninety-six drinking water fountains in the corridors in addition to 38 lavatory fountains in the principal offices.

Eighteen thousand six hundred tons of structural terra cotta.

Six thousand two hundred tons of structural steel.

Five million four hundred thousand common brick.

One hundred and eighty thousand cubic feet of limestone.

Twenty-five miles of water and soil pipes.

Ten miles of heating pipe

The total wire in the building is a trifle more than 100 miles.

The terrazzo floors in the corridors would make a sidewalk 6 feet wide on both sides of the Avenue from the Treasury Building to the Capitol.

There are 28 miles of slate base in the offices.

The lighting fixtures total 3,625.

Heating apparatus: the building heated by direct radiation. The boiler plant consists of six boilers, equipped with downdraft furnaces, designed for the consumption of low-grade bituminous fuel with smokeless combustion, with a boiler capacity of 900 horsepower. The entire system of piping is designed for vacuum return circulation.

The electricity for light and power will eventually be furnished by the central light, heat and power plant. At present it is being supplied by the Capitol power plant.

A conversion plant of 1,000-kilowatt capacity is provided for converting high tension alternating current to direct current at a voltage of 110-230 volts. Rotary converters of the booster type are installed in duplicate units.

A complete-system of signaling is provided for fire and policing purposes. A non-interfering fire-alarm system has 53 stations and a watchman's time-recording system and intercommunicating telephone system are combined with the fire-alarm system. By means of this it is possible for the officer in charge of the watch to keep in touch with his entire force in any part of the building. A unique silent calling device is located near every station. All employees on watch duty can be instantly communicated with, either individually or collectively.

An automatic electric clock system is provided. There are now 116 clocks connected, located as requested. Provision, however, is made for an installation of 600 secondary clocks.

March 3rd last saw a novel innovation in the way of a lunchroom and dining hall for the officials and employees of the Department, which was that day opened for general service, in a structure devised and erected for the special purpose on the roof of the building, across the F Street front. Practically all glass and iron, the panoramic view of the city that spreads out on all sides is a delight to the eye, and a joy to the soul, which the visitor will not soon forget.

The lunchroom, however, is not entirely an esthetic proposition, but contemplates something more substantial. The floor space totals 9,000 square feet, which is occupied by three dining rooms; one for officials, which seats about 50 persons, the main dining room seating 500 persons, while a smaller dining room is set apart for employees. In the main dining room is a counter of battleship style; on one side food is served a la cafeteria, and on the other there is table-d'hote service.

This provision for the comfort and convenience of our people in their daily service puts the finishing touch upon this great business home of the Interior Department.

The Director's report to the Secretary rendered, June 14, 1919, contains the following;

Hawaii Park Inspection.

"I was only present at the office for the last several days of the month, the forepart being spent in connection with a trip to Hawaii where

I made an inspection of the Hawaii National Park, followed by a brief visit to Yosemite National Park and Denver on my return home. During my absence, which began with March 30th, Assistant Director Albright was acting director of the bureau.

."My trip to Hawaii was in company with Landscape Engineer C. P. Punchard, Jr., and while there we made quite an exhaustive study of the area which it is proposed to be included in the park. I visited the active volcano of Kilauea as well as the extinct volcano Haleakala on the Island of Maui, where I spent one night at an altitude of 10,000 feet. While at Kilauea I gave some thought to the suitability of that location for the eventual establishment of an administrative headquarters for the park.

"With the aid of Governor McCarthy, who extended me every courtesy and was of invaluable help to me during my stay on the islands, and through the kindness of Mr. L. A. Thurston and Land Commissioner Bailey of the Territory, especially, I was able to make very satisfactory progress in arranging for the exchange of private lands within the park area necessary to be included in the park for Territorial lands.

"The Bishop and Baldwin estates and other private interests concerned showed a distinct desire to cooperate with the Department and when I left the islands it was with the understanding that Governor McCarthy would advance negotiations with these parties for the acquisition of the necessary lands as far as he consistently could so no unnecessary delay would ensue after formal authority for the exchange had been given by Congress. '

"As a result of my visit I have every reason to believe that by fall the proposition will have advanced to such a point as to make it proper for you to submit an estimate for the protection, maintenance and improvement of this remarkable and unique reservation."

The Roosevelt National Highway. Reprinted from a recent newspaper editorial.

The Midland Trail, which for years has been known as one of the main Transcontinental Highways, extends from Washington, the National Capital, thru Louisville. Kansas City, Denver, Grand Junction, Salt Lake City, Ely, Tonopah and Goldfield, to Big Pine in middle eastern California, at which place it forms two branch roads, one to San Francisco by either Yosemite National Park or Lake Tahoe, the other to Los Angeles by way of Mojave.

Recently R. R. Elmore, M.D., Vice-President of the Louisville Automobile Club, the widely known organization of Kentucky, suggested that the name of the Midland Trail be changed to that of the Roosevelt Trail. The matter was taken up with various individuals and organizations and the name of Roosevelt National Highway has been definitely decided on. The change is now undergoing general ratification.

There is a peculiar appropriateness in the new name, because it is the only transcontinental highway that leads from the National Capital direct to the already famous Roosevelt National Park, now in process of extension. From

Washington to San Francisco by the Roosevelt National Highway, the distance is 2,930 miles. By railroad it is 3,110 miles. This great Highway extends thru twelve States,

nine State capitals, one hundred and twenty-five counties and ninety-one county seats.

It is already a favorite cross continent motor touring route and beyond question will gain great additional prestige from the wonderful developments which the future holds in store for the Roosevelt National Park.

Park to Park tours.

Several Park to park tours have been planned for this summer. One Under the auspices of the Massachusetts Forestry Association began June 26 at Boston and is to end August 22. It is cinder the personal management of C. L. Babcock as tour director. The itinerary includes Rocky Mountain, Yellowstone, Glacier, Mt. Rainier, Crater Lake, Yosemite and Grand Canyon.

The tour of the Travel Club of America starts from New York City July 16, and the return there is scheduled for September 8. It contemplates a visit to the same national parks included in the tour of the Massachusetts Forestry Association.

A tour under the management of the Brooklyn Daily Eagle will begin about July 20. The party, a hundred and thirty strong, expects to go to Denver by special car. From there they will go by automobile through Denver's Mountain Parks. They will also go by automobile to Rocky Mountain National Park. Most of the party plan to go by automobile from Estes Park, Colorado, to Cheyenne, Wyoming, and then to Fort Russell for Frontier Day Celebration. Yellowstone and Glacier are also included in their itinerary. Some of them are to go all the way by automobile, while others make the longer distances by train. Mt, Rainer, also, may be visited.

Motor Travel

Mr. A. L. Westgard, of the American Automobile Touring Bureau, reports an unprecedented call for information relative to routes leading to Yellowstone and Yosemite National Parks and requests an additional supply of maps of all the national parks.

He predicts that transcontinental traffic, largely stimulated by desire to see the national parks, will reach a volume equal to the combined volume of five years heretofore.

Motor Travel from Park to Park.

Unquestionably a new epoch in national park travel was begun when Secretary Lane announced on May 16th the plan for stimulating motor travel to Rocky Mountain, Yellowstone and Glacier National Parks by the inauguration of a motor line between these and intermediate points and operated under the management of Messrs. H. W. Child and Roe Emery. Already the projectors of this enterprise have received more requests for accommodations than they can take care of, and it is confidently believed this tour will shortly be a feature of park travel, and its scope enlarged as road and other conditions will permit.

Travel to the West by private automobile increased at a tremendous rate prior to the war, and the continued improvement of road conditions on the main highways, especially between the national parks, will result in bringing the private automobile traffic to phenomenal proportions.

Secretary Lane feels that the private motor car is going to be quite as important a factor in American tourist travel as the railroad facilities. He, however, is encouraging the use of every means to stimulate outdoor living and the enjoyment of our great natural resources for recreation, health, and observation, in order that the habit of using these resources may be firmly ingrained in the American people.

Travel Statement for 1919, to include June 30th Yellowstone National Park.

To include May 31.

Miscellaneous travel...... 390

June Travel		ENTRANCE			
	North Total		West	South	East
With Yellowstone Park Transportation Company	610	1,764		141	2,515
Miscls.Travel (mostly private automobiles)	1,537	1,637	144	747	4,065
TOTALS SEASON TOTAL	2,147	3,401	144	888	6,580 6,970
Private Automobiles Licensed: Northern entrance Western entrance Southern entrance Eastern entrance	405 434 38 216 1,092				

264 private automobiles entered in June, 1918.

JUNE TRAVEL IN THE YOSEMITE.

During the first 26 days of June 2,414 private automobiles entered the park, carrying 8,814 people. This compares with a total of 1,446 cars, carrying 4,916 people for the same period in 1918. Total travel by all means during this period in 1919 amounted to 12,623 people as compared to approximately 6,000 for last year -- in other words an increase of more than 100% in total travel.

From a recent press memorandum (Yellowstone N.P.)

The Yellowstone National Park has been subjected to a grooming on a scale unprecedented in its history, preparatory to the opening of the tourist season on June 20th. All of this work is now being handled directly under the supervision of the National Park Service, under a comprehensive policy designed to protect the interests of the nation in the preservation for future generations, and use by the present one, of the natural resources, curiosities, and wonders.

There is every indication that the park will be visited by larger numbers than ever before, and all plans for caring for heavy travel are being made by the National Park Service, the hotels, camps, and transportation company. The comfortable seven and ten-passenger motor cars have been thoroughly overhauled by the Yellowstone Park Transportation Company and are in good condition. The Yellowstone Park Camping Company, under the management of Mr. Howard H. Hays, who recently resigned as manager of the Bureau of Service, National Parks and Monuments, U. S. Railroad Ministration, to come to Yellowstone, is making extensive improvements and enlargements in all permanent camps, to add to their capacity, comfort, and appearance. The large hotels at Mammoth Hot Springs, Upper Basin (Old Faithful Inn), and Grand Canyon were ready for occupancy on June 20th.

The new road through Gardiner Canyon between the northern entrance and Mammoth Hot Springs has been completed, and is one of the prettiest drives in the park. Following a very mild winter, spring opened nearly a month earlier than usual, the result being that most of the roads in the park were cleared of snow and all points accessible for motor cars before the opening date.

Much work is being done cleaning up and improving the special camps assigned to private motorists, to give them as much comfort and convenience as possible. The water supply is carefully safeguarded, and wood is provided without cost. Night guards are provided at the principal camps to insure safety from thieves, bears, fire, etc. A herd of buffalo is on exhibition at Mammoth Hot Springs.

Due to the very warm, dry weather, precautions to prevent forest fires, have been found necessary. Road patrols are made during the tourist season by special rangers in uniform, mounted on motorcycles, instead of using saddle horses as heretofore.

The United States Fish Hatchery on Yellowstone Lake was put in operation nearly a month earlier than normal. The prospects are good for a long season of excellent fly-fishing.

More than a thousand new metal signs for roads and names of interesting features have been purchased, and are being placed for the information and guidance of visitors.

Park County, Montana, is making extensive and much needed improvements to the Livingston-Gardiner road, which is the northern approach to the park, and this work is being supplemented by labor and funds contributed by citizens of the county.

Everything possible is being done to provide the maximum of comfort and pleasure to travelers, and a banner year is expected.

THE FIRST AEROPLANE IN YOSEMITE

(Contributed by Superintendent W. B. Lewis)

I believe the first serious thought of an aeroplane flight into Yosemite originated in late August 1918, during a visit of the Director to California when it was suggested by Mr. Huston Thompson, who accompanied the Director, that it be featured in connection with the ceremonies to be held on September 7th of that year in dedication of the Yosemite Power Plant.

Authorization for an official air service flight was immediately requested from Colonel E. Lester Jones, then Director of the American Air Service, who instructed the Commanding Officer at Mather Field, near Sacramento, California, to investigate landing conditions and report on the feasibility of the proposed flight. For some reason, although no investigation was made, an adverse report was made and the proposition was abandoned.

The next indication of interest in the matter was displayed by Mr. A. C. Pillsbury, photographic concessionaire in Yosemite, when in March 1919 he solicited the aid of the Service in securing a plane from the Air Service with which to fly into the Valley, with himself as photographer, with the idea of securing scenic motion pictures. The Director instructed the writer to negotiate with the Air Service authorities and after interesting a number of people in the proposition, principally on the basis of the publicity value such a flight would have on the Yosemite Highway Campaign, Lieut. Colonel H. L. Watson, at present in Command of Mather Field, was induced to visit the Valley May 13th and 14th. He was accompanied by Lieut. J. S. Krull, Flight Commander, and together they made a careful study of the whole situation, with the result that Lieut. Krull volunteered to make the flight but would not consent to carry a passenger as the dangers that were believed to lurk in the supposedly unusual air currents in and around the rim of the Valley were not to be trifled with and additional weight was believed to be distinctly undesirable.

The landing field selected was the Liedig Meadow where a smooth landing space 300 yards in length existed. The field lies lengthwise of

valley and boxed in at both ends by bends in the Merced River so it was not possible to extend the length of the actual landing space. Up the Valley, however, by removing a number of willows and cottonwoods, it was possible to extend the clear area thereby giving an additional clear space of about 250 yards in which to clear the main forests in descending to and arising from the actual landing field. This was done and on the morning of May 27th Lieut. Krull left Merced at 5:57 a.m. At 6:54 am. he hove in sight over Sentinel Rock at an altitude of 7,000 feet above the floor of the Valley. Flying over Glacier Point and up towards Half Dome, he began a series of turns descending in the vicinity of Washington Column to an altitude of about 500 feet from the ground when he made a straight shoot for the field where he made a perfect landing at 7:02 a.m. on almost exactly the spot he had selected nearly two weeks before. The first aeroplane to make the attempt had landed successfully in Yosemite Valley and it is needless to say that the writer breathed a sigh of relief for it had quite generally been conceded that the feat was impossible and arty effort to negotiate it mist end only in disaster.

As a matter of fact, the dangerous air currents and "bumps" and "pockets" failed to show up and Lieut. Krull reported his having encountered only the most stable conditions.

Likewise the belief that, on account of the high elevation of the Valley Floor (4,000 ft.), it would be impossible or at least very difficult to rise and get away, was proven to be without foundation when on the following morning Lieut. Krull rose from the field as easily as he had landed and sailed away out of the Valley after having flown entirely around the Valley rim and over Half Dome, Clouds Rest, and Mt. Hoffman.

Not quite eleven years ago, after long negotiations on the feasibility of auto travel into the park, the first automobile, under the strictest of regulations, came into the Valley. Although the trip uses successful, it appeared the time was not yet ripe to mix automobiles and parks, with the result that another five years elapsed before the park was opened to this mode of travel. During the month just past, over 1,100 private automobiles visited the park carrying more than 4,000 people. What will be the effect of six years in air travel? May we expect a similar increase in air travel between now and 1925 to that experienced in auto travel between 1913 and 1919? The progress that has been made in the development of the aeroplane during the past five years and the possibilities that experts predict for future development undoubtedly justify the prediction such will happen.

There is no doubt in my mind but that the aeroplane will not be an uncommon sight in Yosemite from now on and who knows but that the Park to Park Air Line will be actually in operation long before the Park to Park Highway system is complete.

Airplanes and. National Forests.

The Weekly News Letter of the U. S. Department of Agriculture of April 16th contains the following article:

Army airplanes and captive balloons will cover portions of the national forests of California, Arizona, New Mexico, and other States this summer, to aid in detecting and suppressing forest fires. In compliance with an order from Secretary Baker directing the Air Service to cooperate with the Forest Service of the United States Department of Agriculture in this work, conferences are under way to determine where and to what extent the air scouts will supplement the forest rangers.

That there is a distinct and important place for aircraft in fire protection of timberlands is regarded by the Forestry officials as beyond doubt, but experimental trial of methods and possibilities will have to be the first step. This is now being planned for the coming fire season. Army airdromes and bases will be utilized for the experiments. Some of the bases near enough to national forests to be used advantageously are the flying fields at San Diego, Riverside, and Arcadia in southern California. Other points in the West and in the East are under consideration, including one near the White Mountains in New Hampshire.

One of the interesting possibilities to be tested is bombing fires to put them out. It is believed that bombs charged with suitable chemicals can be used with good results. Another plan to be tested is transporting fire fighters by dirigibles from which ladders can be lowered to the ground.

The chief use of the aircraft this summer, however, will be for fire detection. At present the Forest Service relies for this partly on patrol, usually by men on horses, motorcycles, or railroad speeders, and partly on watchers stationed at lookout points. Aircraft have many points of obvious superiority for both classes of detection work.

From the Army standpoint, the use of aircraft in protecting the national forests affords a valuable opportunity for training fliers and developing further the possibilities of aircraft and the art of flying.

Yosemite Lectures.

The University of California through its University Extension Division is offering a course of scientific lectures in Yosemite during June and July. They are known as the LeConte Memorial Lectures in honor of the name of Joseph LeConte, the famous naturalist and geologist. These lectures are receiving unusual attention, and covering the wide range of scientific subjects they do, are drawing large audiences.

The entire program, most of which will to given at the LeConte Memorial Lodge in Yosemite Valley, follows:

- 1. Professor W. L. Jepson, Department of Botany, University of California.
 - 1. The Origin and Distribution of Buttercups in Yosemite, Tuesday, June 24.
 - 2. The Biology of the Chaparral, Thursday, June 26.
 - 3. The Ancestry of the Yosemite Pines and Sequoias, Friday, June 27.

- II. Professor Frederick William Bade, Lecturer, Literary Executor of John Muir.
 - 1. John Muir, Nature and Yosemite, Tuesday, July 1.
 - 2. Muir's View of the Valleys Origin, Thursday, duly 3.
 - 3. Muir's Services to the Nation, Friday, July 4.
- III. Dr. F. Emile Matthes, Geologist, U. S. Geological Survey, Washington, D. C.
 - 1. Origin of Yosemite Valley, as Indicated in the History of its Waterfalls, Tuesday, July 8.
 - 2. The Highest Ice Flood in the Yosemite Valley, (to be delivered at Glacier Point) Wednesday, July 9.
 - 3. The Origin of the Granite Domes of Yosemite, Saturday, July 12.
- IV. Professor A. L. Kroeber, Department of Anthropology, University of California.
 - 1. Tribes of the Sierra, Friday, July 11.
 - 2. Indians of Yosemite, Saturday, July 12.
 - 3. Folk-lore of Yosemite. Sunday, July 13.

Electric Development in Yosemite

(Contributed by J. W. Emmert, Chief Electrician, Yosemite California)

With the completion of the 2000 kilowatt hydro-electric plant in the Yosemite Valley last year, we have a plant capable of taking care of the ordinary electrical needs of a city of thirty thousand. Electricity is used for heating and cooking, as well as lighting, in Yosemite. All of the camps, buildings, and main thoroughfares are well illuminated.

The school house, telephone exchange, electric plant, and all of the cottages at Camp Curry - about twenty-five - are heated exclusively by electricity. There are a number of other buildings having electrical heating as an auxiliary. Electric hot water and air heating is now being installed in the rooms of the Sentinel Hotel. Electrically heated water is supplied in the administration building and in the employees' club.

Camp Curry utilizes electricity wholly for baking and largely for cooking. During the busy season, last year, Camp Curry prepared over thirty-six hundred meals a day.

Personal Notes.

The Director has planned an official visit to some of the national parks and will be absent from Washington until the latter part of August on business connected with the Service.

Some of the members of his party will be:

Governor William D. Stephens of California
H. H. Saylor, Editor of Country Life in America
Dr. G. Lenox Curtis, of New York
Harry Chandler, President and General Manager of the Los Angeles Times.
Gilbert Grosvenor, Editor of the National Geographic Magazine.
Charles Moore, Chairman of the National Commission of Fine Arts.
Frederic T. Boles, of Chicago
E. O. McCormick, Vice-President of the Southern Pacific Company
Chester Rowell, Editor of the Fresno Republican
Allen Chamberlain, of the Boston Transcript

George Horace Lorimer, Editor of the Saturday Evening Post, who is making the trip from Philadelphia to Grand Canyon by automobile] expects to join Mr. Mather at Hammonds.. just before they reach the Tioga Road on the west side of the Sierra Nevada Mountains.

Henry S. Graves, Chief Forester, is expected to join the party at Fresno for the trip down to Roosevelt Park.

The Director's itinerary includes Lake Tahoe; Yosemite National Park, where two nights will be spent with the Sierra Club at their camp in Tuolumne Meadows and a visit made to Waterwheel Falls and other scenic points; Fresno, and a dinner with representatives of the Fresno Chamber of Commerce; General Grant National Park, with a grand camp-fire either there or at Horse Corral Meadows; Roosevelt National Park; San Francisco; the proposed Redwoods National Park, in Humboldt County, California; Crater Lake National Park; Mount Rainer National Park; and Yellowstone.

Assistant Director Albright, recently appointed by Secretary Lane Superintendent of Yellowstone National Park, leaves in a few days to assume his new duties. He will, of course, continue to take an active part in carrying out the broader policies of the Service.

Mr. Arno B. Cammerer, for many years Assistant Secretary of the National Commission of Fine Arts, will succeed Mr. Albright as Assistant Director of the National Park Service. Mr. Cammerer has long been interested in national park affairs and comes to the Service with splendid enthusiasm.

Mr. Robert Sterling Yard, who has been so long connected with the Department as editor on national park matters, has resigned to become executive secretary of the National Parks Association, which was organized at the Cosmos Club, Washington, D. C., on May 29, 1919.

It is expected that the relations between the National Parks Association and the Service will be very intimate and cordial. Mr. Yard is splendidly equipped for his new duties by his deep interest in all national park affairs and his wide knowledge of the subject.

Major R. W. Toll has been appointed Superintendent of Mount Rainier National Park, succeeding Mr. D. L. Reaburn, who enters the service of the Western Willite Road Construction Company, with headquarters at 463 I. W. Hillman Building, Los Angeles, California. Mr. Reaburn's administration of Mount Rainier was a very able one and his separation from the Service is deeply regretted.

Major Toll, who is an engineer of long experience, has lived for many years in Colorado. He made the Hawaiian trip in the Director's party, and assumed his new duties as Superintendent immediately upon his return from the islands. He is a mountaineer of experience and has shown deep interest in national parks and their development. His recently published "Mountaineering in the Rocky Mountain National Park," which becomes one of the Service's pay publications, is a valuable contribution to national park literature. It is fortunate that his services could be secured for the benefit of Mount Rainier National Park.

Superintendent Sneed of Platt National Park has submitted his resignation, which became effective at the close of June 30, 1919. He is leaving this Service to accept the office of Commissioner of Confederate Pensions for the State of Oklahoma. The Service is very sorry to lose Colonel Sneed.

The Superintendency of Wind Cave National Park, left vacant by the resignation of Mr. T. W. Brazell, effective at the close of March 15, was filled by the appointment of his son, Mr. Roy Brazell, who entered on duty March 16, 1919. Mr. Roy Brazell's previous service in the park dates back to the season of 1915 when he was appointed a temporary ranger, serving in that capacity also during the seasons of 1916 and 1918. He left the Service at the close of May 10, 1918, to enlist in the United States Army.

Miss Edna M. Peltz formerly of Mr. Yard 1s office in the Service, has just returned to duty after a visit to Rocky Mountain and Yellowstone National Parks.

Forty-five employees of the National Park Service holding Department appointments left the Service to join the military and naval forces of the United States during the pest two years. Many of these employees have kept in touch with the Service and have indicated their desire to return to their old positions after their discharge. To date twelve have reentered the Service, either by reinstatement in the positions which they left, or by reemployment in another capacity.

News Items.

If anything occurs in your park or monument which you believe would be of interest to your fellow employees in other parks and monuments or in the office at Washington, please send it in. You might write and tell if you like the news letter - we would like to know. Address all communications to the Director of the National Park Service, "National Park Service News." All communications should be received not later than the 25th of each month for use in the current number.

DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE NEWS

No. 3 August, 1919

To the Members of the National Park Service:

This issue of the News comes at a time when unprecedented travel to the parks and monuments has put every facility provided to the acid test. Not only have the concessioners with their extended equipments and large forces been pressed to meet the demands of an almost overwhelming influx of an enthusiastic and appreciative mass of tourists, but each member of the Service has been given a larger opportunity to exemplify by word and deed just what the Service itself promises the traveling public under such peak-load conditions; and through its members the Service appears to have measured up well to its high standards.

The park travel this season and the complimentary letters received indicate that not only are the national park tours proving wonderfully attractive to responsive visitors but that these visitors, as patriotic Americans sympathetic and appreciative of our aims, are spreading the news of the pleasures and benefits to be derived from such trips amongst their friends and acquaintances all over the land. For the National Park Service a satisfied and pleased visitor is the best advertisement; and courtesy in dealing with visitors under any and all conditions is the firm basis of success in our endeavors. The teamwork shown throughout the Service during this season should be an inspiration for the future and this makes us look with composure toward any demand the coming years may bring

"It ain't the individual,
Nor the corps as a whole,
But the everlastin' teamwork,
Of every bloomin' soul"

This also gives me the opportunity as a newcomer in the midst of those who have served long and well in the Service in this way to express my sincere appreciation of the privilege accorded me by Director Mather to join them in the great work the National Park Service is doing. The Service gets closer to the happy, joyous side of people than other Government activities, since its aim is to provide for the health, pleasure, comfort, and recreation of the American people.

Cordially yours,

ARNO B. CAMMERER

Acting Director.

New Park Legislation

July 8, 1919, Mr. Lea of California, submitted the following resolution in the House of Representatives:

Resolves, That the Secretary of the Interior be, and is hereby directed to investigate and report to the House of Representatives as to the suitability, location, cost, if any, and advisability of securing a tract of land in the State of California containing a stand of typical redwood trees of the species "Sequoia Sempervirens", with a view that such land be set apart and dedicated as a national park for the benefit and enjoyment of the people of the United States and for the purpose of preserving such trees from destruction and extinction, and also as to whether or not the whole or any part of such lands or the purchase price thereof would be donated to the United States, and the probable cost of maintaining such lands as a part of the national park system.

Government Employees Mutual Relief Association

The Service desires to call the attention of its field employees to the benefits of the Government Employees Mutual Relief Association, which is endorsed by the Secretary of the Interior, the Secretary of Agriculture, the Forester, and the heads of various bureaus of the Interior Department, the Department of Commerce, and the Interstate Commerce Commission.

This Association, composed of male employees of the departments named above, pays the following benefits:

"Loss of time during disablement preventing attention to official duties, and while not drawing salary and not have unused leave with pay; indemnity at rate of \$14 per week; total payment in any period of twelve months limited to \$150."

"Medical attention, for illness or accident preventing attention to official duties, or when not disabled but under medical care on account of accident or under necessary surgical treatment for sickness or accident: Doctors fees not exceeding rate of \$28 per week, except in case of surgical operations, when actual charges not exceeding amount scheduled in Constitution; medicine prescribed by doctor, not exceeding rate of \$25 per week; hospital expenses when directed by doctor, not exceeding rate of \$15 per week; and such further amounts as the Governing Committee may deem reasonable and proper for unusual expenses due wholly and necessarily to such sickness or accident, not exceeding \$50; total payment in any period of twelve months \$300."

"Death benefits, payable upon receipt of proof of death, \$200, and actual cost of, transportation of body to place of interment, not exceeding \$100."

"Benefits are paid immediately upon the receipt of the claim, when

properly certified and accompanied by paid bills. There is no red tape. Every eligible employee should take advantage of this opportunity for cooperation."

During the past year the Association has been able to do a good work among its members through its ability to pay a great many claims growing out of the influenza epidemic. They have paid out nearly \$10,000 since last October, which is doing pretty well for a small cooperative association of this character.

A few members of the National Park Service are now affiliated with the Association, and new members from the Service are sought. Inquiries as to membership should be addressed to Mr. C.H. Squire, Secretary, who will be glad to send application forms to those desiring to join the Association.

Some suggestions from Mr. Charles P. Punchard, Jr., The Service's landscape engineer.

In a recent report Mr. Punchard recommends that an accurate map of the water and other underground systems in the settled portions of our national parks be made, in order that each succeeding superintendent may be in a position to tell what is under the ground and have a definite base upon which to work when changes additions or improvements are made or contemplated. He states that Superintendent Lewis is constantly finding abandoned mains and lines of pipe which he and other older residents of Yosemite mover knew existed.

Mr. Punchard in disussing suitable stones for walls says that in some localities there are two kinds of stone found - small glacial boulders which have been washed down in the streams until they are almost of a uniform size and smooth as polished stone, and also a volcanic stone, more interesting in color and of various sizes and shapes, He recommends the use of the volcanic stone instead of the glacial boulders, which makes an uninteresting wall and have a smoother surface which offers no opportunity

for the cement to catch and hold unless the stones are broken. If any great weight is to be held by these smooth stones they will squeeze out of the wall and thus weaken it.

In regard to the forests, he thinks their appearance in the immediate vicinity of the roads may be improved by removing trees which fall across the road and cutting them into serviceable lengths for firewood, instead of cutting them in two and throwing them on the side of the road to decay. When trees are felled for telephone lines and other necessary work, the fallen trees should be cut into four-foot lengths, piled and then hauled to the places where it can be used when needed. If this practice had been followed in all the parks, very little virgin forest would have to be cut to supply fire-wood for local domestic uses.

Two Park Arrests

There are as many definitions of a gentleman as there are individuals to define the term, but the two instances cited here recall one man's idea of the word: "A gentleman is a man who performs every duty in the kindest possible way - who can even make an arrest without forgetting his dignity or the consideration due another."

In one of the parks a ranger arrested a motorist for speeding. The deed was done in such a way that instead of resenting it, the speeder wrote a letter to the Secretary of the Interior in which he praised the ranger for the manner of the arrest and for the spirit which animated him in the performance of his duties. The writer stated that as he was an employer of men he felt qualified to judge men, and he recommended the ranger to the Secretary for consideration for a place higher up in the service of his country.

The other instance happened in another park. A tourist overheard some friends joking a man about having been arrested. The man took the jokes good-naturedly and finally said in a delightful southern drawl: "Well, it was worth being arrested to see the courteous and considerate manner in which the ranger performed his exceedingly disagreeable duty."

Mount Rainier

Superintendent Toll reported in June that the snow was greater in depth than in June of last year, the drifts on each side of the fourth crossing bridge over the Nisqually River being from 25 to 30 feet deep. The snow here was blasted with dynamite to assist melting. By the first of July the road was open to Narada Falls and blocked by snow beyond that point. A road force dragged the drifts to remove snow from the road and blasted the drifts with dynamite and TNT. In order to be effective for snow removal, it was found that the blasting charge had to be placed near the bottom of the drift and close to the road. This resulted in small holes in the road surface, which were repaired after the road was opened to traffic, July 19 the road from Narada Falls to Paradise Valley was opened to public travel.

The Northwestern Ski Club held its annual tournament in Paradise Valley on June 29, which was attended by several hundred visitors.

Dr. W. P. Taylor, in charge of the Biological Survey party, arrived at Mount Rainier National Park early in July and was later joined by other members. They will remain in the park until the latter part of September, camping in various locations. They are engaged in field work for a publication on the birds and mammals of the park.

The Massachusetts Forestry Association party, seventy-eight in number, visited the park July 21-24.

July 26, the Mountaineers, eighty to one hundred in number, entered the park and started on their "Around the Mountain" trip, which will occupy three weeks.

July 27, Four or five hundred members of the Order of Eastern Star visited the park from Seattle, where the organization was holding its national convention

More than two hundred members of the West Coast Lumbermen's Association visited the park July 29-30, holding some of their convention meetings there, the rest being held in Tacoma and Seattle.

The Standard Oil Company completed the construction of its service station at Longmire Springs, July 5.

Guides have taken twelve parties, numbering sixty-nine visitors, to the summit of Mount Rainier during July, the first ascent being on July 2d.

Mount Rainier Travel for June and July

	1918		1919	
	Automobiles	Visitors	Automobiles	Visitors
June	808	3,723	650	3,192
July	2,586	12,347	3084	14,159

1010

Travel was less in the park during June of this year than the corresponding month last because the snow was heavier and the road to Paradise Valley was not opened until almost two weeks later.

Crater Lake

Considerable snow shoveling by the Crater Lake Company enabled automobiles to reach Anna Spring June 18th and the following day the road was open to Fort Klamath. By snow plowing and shoveling automobiles reached the Lake June 30th. Automobiles were six days later reaching Anna Spring and twelve days later reaching the Lake this season than in 1918.

The trail from the Lodge to the water was covered in many places by

huge snow banks, but trails were shoveled along the top of the banks and the trail was perfectly safe for travel June 30th.

There is more money to be made by the boats on Crater Lake than anything else in the park, so on July 9th ten steel row boats, four small launches and one thirty-six foot launch were shipped from Salem, Ohio, for use in the park. The former equipment consisted of seven row boats and a small launch. Fishing is excellent this season and this has increased the demand for boats.

The Superintendent reports that the roads in Crater Lake are better than they have ever been at corresponding dates, but they are getting somewhat rutted and very dusty, especially near the entrances. The Rim Road was open for travel August 3d.

The Massachusetts Forestry party came to Crater Lake via Medford July 28th and left by way of Klamath Falls July 30th.

Travel has been exceptionally heavy during July and the stage lines have been well patronized. 1,646 automobiles and 6,125 visitors entered the park in July.

YOSEMITE

In June the total number of people utilizing the public camps was 4,934 of which 4,530 were automobile campers, The number in camp at one time averaged about two thousand people, about twice the number camped at one time during previous years,

Mr. J, E. Patterson from the Bureau of Entomology, arrived in the Yosemite in the early part of June to continue insect control studies. Ten trees were cut and treated on the floor of the Valley, and in addition an intensive cruise of the entire valley floor was made, as well as studies of outlying districts.

Except for very extensive activities of the needleminer in the lodgepole pine in the Tenaya Basin, Mr. Patterson reported the park forests as being in unusually good condition and practically free from insect depredations.

Mosquito Control

Mosquito control under the direction of Ranger Adair was continued up through June 18th, when the absolute lack of breeding on the floor of the valley indicated that it was unnecessary to continua intensive operations further. Ranger Adair was, however, retained for service on the floor of the valley and watched the mosquito situation closely in connection with his regular ranger duties. All possible breeding places were inspected in July, but no breeding was taking place.

Major Geiger of the U. S. Public Health Service made a visit of Inspection about the middle of June and was much pleased with the success of operations. Mosquito control work in the Yosemite this year has demonstrated the fact that the mosquito nuisance can be entirely eliminated. With oil available on the ground another season and with the practical knowledge of the situation gained from the experience of this year, the evil can be fought even better next season.

Medical Service

Medical service in the Yosemite showed an increase of about 100% over June of 1918, indicating the necessity for such service increased in proportion to the travel

The most-serious injury in the Yosemite was that sustained by a government employee who was bitten by a rattlesnake while working on the construction of the El Portal telephone line. Suffering from three distinct bites, he was rushed to the hospital, arriving within half an hour after the accident. He is now practically convalescent and will undoubtedly suffer no permanent injury.

Travel

Travel in July in the Yosemite held up wonderfully, all camps and hotels being filled practically to capacity during the entire time. The public camping grounds accommodated 7,215 campers, or over 40% of the total travel to the park for the month. The total number of people entering the park during July was 17,070, as compared with 8,302 in July 1918, and slightly over 11,000 in July 1917. Of the 17,070 who entered in July 1919, 13,215 came in 3,667 private automobiles, 2,789 by railroad, 760 by automobile stage line, and 306 walking, driving, etc.

SEQUOIA

In Sequoia the fishing was excellent in June in all the streams and many tourists enjoyed catching the full limit. The fishing remained fairly good throughout July.

The superintendent reported on July 10th that after much effort on the part of Tulara, Fresno, Kings and Kern counties the State Fish and Game Commission established a temporary hatchery on the Middle Fork of the Kaweah River, five miles east of Three Rivers. If conditions prove favorable, they will build a big permanent hatchery in the near future.

A consignment of trout was distributed and liberated in different waters of the park early in July.

June travel in Sequoia was the heaviest in the history of the park. Travel continued heavy throughout July.

Bears were numerous around the camps in July, but complaints of their depredations were few,

Among the distinguished visitors to Sequoia and General Grant in July were the Secretary of Agriculture,, Hon. David F. Houston and Mrs. Houston; the Swiss Minister to the United States, Hans Sulzer, and Madame Sulzer; Col. H. E. Graves, the. Forester; and Director Mather.

GRAND CANYON NATIONAL PARK

Arrangements have been made looking to the administration of Grand Canyon National Park by the National Park Service. Mr. William H.Peters, Assistant Engineer, has been designated as acting superintendent and instructed to proceed to Grand Canyon at once to take charge of administration, and road and trail improvement work. Civil Engineer George E. Goodwin will also go to Grand Canyon soon to confer with Mr.Peters regarding administrative and improvement features to be undertaken in the park.

GLACIER

The Superintendent reported that in June a total of 350,000 trout fry were planted in the waters of Glacier National Park, divided as follows; 75,000 brook trout in Appistoki Creek; 50,000 in the north fork of the Cut Bank River; 125,000 in McDermott Lake and 100,000 in the upper end of Lake McDonald, All of the trout planted appeared to be in fine condition and it is believed that each planting will prove successful.

In July 569,000 trout fry were planted, of which 344,000 were rainbow advanced fry and 225,000 Montana grayling.

Fires and Roads

The hot and dry weather seems universal in the national parks this summer. In Glacier the extreme drought and high winds have made forest fires more prevalent and harder to fight. The roads were also badly affected by the weather conditions, The forest fires have been kept under control by cooperation between the park rangers and the Forest Service Erroneous reports of fire conditions appearing in the press have interfered with travel to the park by private automobile; but if it were not for the smoky atmosphere, few tourists would know there were fires in the park.

On July 9th the party of the Massachusetts Forestry Association entered Glacier, visiting all the principal points of interest. They left the park by way of Lewis's on Lake McDonald, being entertained on the eve of their departure by Wajor Wren and Supervisor Warner of the Forest Service.

The Howard Eaton horseback party was unusually large this year, numbering 175. They entered the park on July 19th, starting over the Mount Henry Trail to Two Medicine, They spent fifteen days in the park, leaving by way of Lake McDonald.

Professor Standly, of Washington, D.C. entered the park the latter part of July. He is studying the flora.

The superintendent reports a great increase in travel. The total number of visitors to the park in July was 8,827, as compared with 2,608 in July last year, 4,674 of these came in private automobiles.

YELLOWSTONE

Park-to-Park Route

In line with the Secretary's announcement of May 16 last of the establishment of a public automobile service between Rocky Mountain, Yellowstone and Glacier National Parks, it is interesting to note from a report of Superintendent Albright that he in company with the managers of the transportation lines in Yellowstone and Glacier parks and the secretary of the Helena Chamber of Commerce completed on July 23rd an automobile run from Yellowstone to the Rocky Mountain park, a distance of 809 miles, in 30 hours and 45 minutes, making an average running time of more than 26 miles per hour. This is a very creditable performance, taking into consideration the fact that condition of the roads more than any other element will be the limiting factor in the development of a large future park-to-park automobile travel.

Fish Hatchery

On July 16th Landscape Engineer Charles P. Punchard, Jr. submitted suggestions for the improvement of the Fish Hatchery grounds at Lake Station. The Fish Commission has agreed to follow Mr. Punchard's suggestions, The hatchery, residence, and all buildings are to be stained dark brown with dark green roof; dead trees are to be removed; and rough places in the grounds are to be graded. When this work has been completed the Fish Hatchery and grounds will present a very pleasing appearance.

Roads and Fires

Yellowstone also has had its troubles with hot and dry weather and attendant forest fires and bad roads. There were a great number of small fires as well as several which gained considerable headway, threatening at times to become disastrous, but all were finally subdued without at any time interfering with travel. By unusual effort the roads were kept in such condition that complaints of dust and roughness were few.

Many tourists enjoyed the fishing along the roads, and a few took time to visit fishing places remote from the regular routes. Dr. H.M. Smith, U. S. Fish Commissioner, has been in the park since July 8th, engaged in a careful examination of the conditions relating to culture of fish and stocking the park waters.

A small band of cow elk soon on Mary Mountain had with them 75 per cent of their own number in calves.

81 calves have been born in the tame buffalo herd this season. Elk, deer, antelope and bears are frequently seen by travelers.

Travel

In the Yellowstone travel for the month of July has broken all records. July 16th was the biggest day in the history of the park, almost a thousand people having entered that day. A total of 24,090 tourists visited the park in July, as compared with 6,580 in June, 1919, and 8,084 in July 1918. The number of private automobiles in July was 4,457, carrying 16784 persons.

Mr. Homer S. Cummings, chairman of the Democratic National Committee visited the Yellowstone with his party, July 15 to 19.

Mr. Hans Sulzer, the Swiss Minister, and party were in Yellowstone July 25 to 30.

ROCKY MOUNTAIN

The Cloud-burst

On July 30th the most disastrous cloud-burst in many years occurred in Rocky Mountain National Park, completely destroying eight miles of road on the Middle St. Vrain. This road is used largely for freight and mail, being the shortest route into the park. All bridges were washed out and five automobiles were stranded in the stretch. It is believed that it will take 200 men approximately 60 days to put this road in condition to travel. On the South St. Vrain three bridges were washed out. The damage to these roads makes it necessary to transfer all passengers, freight and mail through the Big Thompson Canyon, which is a very narrow road and not adequate to handle even normal traffic. As soon as the South St. Vrain road is fixed, which will be in the course of a few days, the traffic can be divided.

Travel

Total travel to Rocky Mountain Park by actual count up through July 27th was 8,231 machines and 37,240 parsons. The average weekly entrances through the Estes Park and Longs Peak gateways approximate 5,000. The Denver Tourist and Publicity Bureau and the Denver hotels report that about one hundred persons per day are turned away from Rocky Mountain National Park because they cannot secure accommodations.

Mountain sheep can be seen any time in the neighborhood of Specimen Mountain, to the northwestern part of the park, one party counting 175 head on that range.

One black bear was reported soon along the Glacier Basin Road.

In June two young men attending the YMCA Conference found a herd of deer near Bear Lake. In the herd was a young fawn. They scattered the herd and ran the fawn down, bringing it into the YMCA Conference Camp. These young men were removed from the park and have promised to report to all superintendents, should they ever again visit a national park and secure a copy of the regulations. The fawn was badly hurt and is being cared for by the superintendent. It is improving and as soon as it recovers sufficiently to be able to take care of itself, it will be turned loose.

On July 1st the Massachusetts Forestry Association party visited the Rocky Mountain National Park,

The Travel Club of America tour reached the park July 21st. The superintendent addressed both of these parties on the subject of national parks.

On July 22d, the superintendent went to Denver to meet the Brooklyn Eagle party. Mr. Albright also met the party in Denver and they all went by automobile from Denver via Boulder and the South St. Vrain Canyon to Longs Peak Inn, where the party had luncheon, and where addresses were made by Mr. Enos Mills, Mr. Albright and Mr. Way. In the afternoon the entire party drove over the Highline Drive and Fall River Road.

MESA VERDE

Superintendent Rickner reports that heavy and frequent showers during July necessitated work on the roads in Mesa Verde the entire month. The roads have been kept in good condition and the rains have not stopped travel.

Experimental Gardening

The experimental corn crop is doing well and gives promise of a big yield. The corn field has been cultivated by the rangers when other duties permitted. There are two experimental gardens on the mesa, one near Mummy Lake and one near Cliff Palace.

Tourist travel held up well in spite of the rains. The total number of visitors during the month was 574.

	July 1919	July 1918
In private cars	448	336
Concessioners	112	33
Other means	14	<u>16</u> 385
	5 74	3 85

WINDCAVE

Travel

Superintendent Roy Brazell reports that tourist travel through Wind Cave National Park and in that section of the country has been and still continues to be the heaviest they have over experienced, in spite of the exceptionally dry weather, which has nearly exhausted the water supply. There were 1886 visitors to the Cave during the month of July. 443 of them coming in with the transportation concessioner and 1443 by private conveyance. This is the greatest number of visitors conducted through the Cave in any one month since his connection with the park, and exceeds by 375 the month of July 1917 which had been considered the record-breaker. Camping parties were quite numerous.

Bird life in Wind Cave is on the increase.

P L A T T

Superintendent Ferris reports that in the portion of Platt National Park locally known as Bromide Park, which is made up of Bromide, Medicine and Sodium-Chlorid Springs, the number of visitors during July totaled 19,848. These people took from the springs a total of 4,198 gallons of Bromide water. 1,041 gallons of Medicine, and 730 gallons of sodium-chlorid. Two hundred gallons of water were shipped from these springs, making a total of 6,219 gallons of water removed in July.

HOT SPRINGS

Dr. William P. Parks, superintendent of Hot Springs Reservation, reports that the summer patronage of that resort is materially increasing and that a vast number of visitors has been handled through the office during July,

The First Assistant Secretary of the Interior, Mr. Alexander T. Vogelsang, accompanied by Mrs. Vogelsang and his secretary, Mr. J.G. Massey, spent three weeks at Hot Springs during July.

LAFAYETTE

Since the establishment of the Sieur de Monts National Monument, Maine, which was later designated as the Lafayette National Park, there has been a marked improvement in regard to conservation of plant and animal life. No wood has been stolen from Lafayette Park in the last year, which is a contrast to the year before.

A certain part of the park is naturally a favorite winter haunt of deer, and under the protection given they have rapidly increased by the incoming of wanderers from the mainland. They are now in the park in numbers, a herd of seventeen having been seen recently.

This same portion of the park is also a natural haunt and nesting ground of partridges - ruffed grouse - the most valuable game bird in New England. These birds are in present danger of extermination through destructive shooting and their immediate protection is of great importance. Partridges are now on the increase in the park,

Excavations in the Southwest

The Service is much interested in he archeological work now going on in some of the reservations in he southwest.

A permit who granted June 16 to Dr. Clark Wissler, American Museum of Natural History, New York City, to conduct archeological investigations at the Pueblo Bonito site within the limits of Chaco Canyon National Monument. This monument is in Northwestern New Mexico, about seventy-five miles from Gallup. The Pueblo Bonito contained originally about 1200 rooms and is one of the biggest prehistoric ruins yet discovered in the southwest. The permit covers the removal of short sections from some of the timbers in the ruin, in order that a special study of the tree rings might be made with a view to determining their relative ages; also the making of a few minor excavations in some of the rooms to check up data secured by the Hyde expedition, on which a publication is about to be issued by the American Museum of Natural History

Gran Quivira.

Gran Quivira is one of the most important of the early Spanish mission ruins in the southwest, reached by a good road from Mountainair, New Mexico, twenty-four miles distant. A permit was granted on July 22 to Dr. Edgar L. Hewett, Director of the School of American Research, Santa Fe, New Mexico, to excavate these ancient ruins. Work will be reported at the end of the season.

Mesa Verde

Excavations are now being made in the Mesa Verde National Park by Dr. J. Walter Fewkes, Chief of the Bureau of American Ethnology, by the cooperation of the Smithsonian Institution and the Service. \$3000 has been allotted by the Service for this work. The work planned is the restoration of the Square Tower of Peabody House, this tower being the highest structure in the park. The trail up to this ruin is now over sloping rock crossed by means of a rope anchored to a tree above. This will be replaced by an iron railing and a safe a trail will be made.

CASA GRANDE NATIONAL MONUMENT.

Casa Grande is located in southern Arizona on the Southern Pacific, the monument being about fifteen miles from the village. Its designation has recently been changed from Casa Grande Ruin to Casa Grande National Monument. Mr. Frank Pinkley, the custodian, reports 383 visitors to the reservation during the month of June, and 162 automobiles. This compares well with 145 visitors for the same month last year. During the fiscal year, 1436 automobiles entered Casa Grande.

TUMACACORI MISSION

Mr. Pinkley, of Casa Grande, who is also custodian of Tumacacori Mission, made an inspection trip there the latter part of June. He reports that since his last trip to the Mission the debris has been removed from the nave of 'the church, where it had been lying to the depth of nearly four feet. The floor plan of the church is now laid bare and several very interesting discoveries have bean made. It is thought that it was not the intention of the designers to seat a congregation in the church, but that its purpose was to impress and overawe. The facade was not only ornamented with columns, mouldings and statues, but was further decorated by painted designs, and must have been an impressive sight.

Mr. Pinkley concludes his report with the following paragraph:

"The primitive mind of the native must have been greatly impressed by the climax. After having examined the decorated facade as he approached the church, he entered the vestibule and saw, framed by the arch of the choir loft, the four large and two small altars of the nave, the great arch of the sanctuary, and behind that, and framed by it, the raised floor of the sanctuary, bearing the high altar with its figure of the crucifixion and the secondary statues overhead and at the sides."

EL MORRO NATIONAL MONUMENT.

This monument is situated about fifty-five miles from Gallup, New Mexico. The custodian, Mr. Evon Z. Vogt, reports a good many visitors this summer, many of whom came in from Grants, over a new road. The citizens of Gallup are interested in the construction of a new road from there to El Morro, via Ramah. This road is to be classed as a state highway.

Mr. Vogt is much incensed by the fact that some tourists have inscribed their names on Inscription Rock near some of the old Spanish inscriptions of the 17th and 18th centuries. Study is being given to the means to be employed to prevent the recurrence of such vandalism.

MUIR MOODS NATIONAL MONUMENT.

In Muir Woods, just across the bay from San Francisco, a water supply system for the picnic grounds has been installed in a first-class manner. It is giving excellent service and will be much used,

SHOESHONE CAVERN NATIONAL MONUMENT.

This monument is located about four miles southwest of Cody, Wyoming, on the Cody Road into the Yellowstone. A trail has been completed to the cave, with steps up to the entrance. Some work has also been

done on the interior of the cave to make it passable and safe for tourist parties in charge of a competent guide. This work makes the cave, known locally as Frost Cave, accessible to the public, and brings its rooms and crystal formations within reach of those using the Cody entrance to the Yellowstone.

ZION NATIONAL MONUMENT

Mr. Walter Ruesch, custodian of Zion, reports that the weather in June was very dry - not so much as a drop of rain falling during the month. This of course made the roads very dusty, but a good deal of work was done on them so that they only awaited the summer rains to be in good condition. In July there was plenty of rain.

Deer and blue grouse were noticed on the western rim and are thought to be increasing rapidly, while on the valley floor deer are frequently seen. Signs indicate that they are increasing.

The number of visitors in June was 219, many of them being doctors and college professors. In July there were 340 visitors.

Personal notes.

Director Mather has finished his inspection of Yosemite, Sequoia, and General Grant National Parks and the proposed Roosevelt National Park. He is now planning to visit Crater Lake, Mount Rainier and Yellowstone before his return to Washington.

Mr. Charles P. Punchard, Jr., the Service's landscape engineer, has made his inspection and report of conditions in Yellowstone. He arrived in Visalia, California, the latter part of July for his inspection of Sequoia.

Mr. Thomas Ferris, of Oklahoma, on July 16th succeeded Col. Richard E. Sneed as superintendent of Platt National Park. Col. Sneed resigned to accept the office of Commissioner of Confederate Pensions for the State of Oklahoma.

Mr. A. E. Demaray, of the Washington office, has just returned from a western trip which included visits to Muir Woods, Yosemite, Sequoia, Grand Canyon and the Petrified Forest. He was accompanied by Mrs. Demaray and their little daughter, four years old She made all the trail trips with her mother and father and was the youngest child who had been at Merced Lake this summer.

Mr. Evon Z. Vogt, of Ramah, New Mexico, custodian of El Morro National Monument, accompanied by Mrs. Vogt, made a recent visit to Grand Canyon. There he met George Horace Lorimer, editor of the Saturday Evening Post, and Samuel G. Blythe, who told him they were coming to visit Zuni and El Morro some time. Mr. Vogt states that Mr. Lorimer made some citron remarks to him about the condition of the Arizona and New Mexico roads.

However, Mr. Lorimer had a perfect right to feel disgruntled at the condition of the roads in that part of the country. He reports in a letter to Mr. Albright that when they struck New Mexico they began to have daily cloudbursts which continued until his car expired with a final grunt!

News Items

If anything specially interesting for the news happens in your perk or monument, please let us know about it. Address your communication to the Director of the National Park Service, "National Park Service News". It will help the Service.

(1367)

DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE NEWS

No. 4 September, 1919

TO EMPLOYEES OF THE INTERIOR DEPARTMENT:

To thrive by thrift one must spend wisely and practice self-denial. But we wisely hold some money for unforeseen emergencies. The best way is to make up one's will to a system of savings. Thrift and War Savings Stamps afford an excellent system to provide for the future.

It is hoped the employees of this Department will continue to practice the lesson of thrift that was brought to us as one of the necessary results of the War. The systematic campaign for buying War Savings Stamps has for its object the financial benefits to the purchaser and assistance rendered the Government in using money to pay our War obligations and expenses.

Mr. Willis B. Magruder, of the Patent Office, is chairman of the Thrift and War Savings Stamp committee for the Interior Department.

The following persons have charge of the sales of War Saving and Thrift Stamps in their respective Bureaus.

Secretary's Office W.H. Robinson Indian Office F.H. Daiker Land Office S.H. Weeder Bureau of Mines J. L. Cochrane National Parks G. C. McClain, Jr. Patent Office A. D. Merritt Pension Bureau J. M. McCoy Bureau of Education J. F. Abel Geological Survey Miss H. V. Corey **Reclamation Service** Mrs. Ella W. Ballard St. Elizabeth's Hospital George W. Kreis **Howard University** E. L. Parks

Begin a system of saving today. Make up your mind as to how many stamps you wall buy each pay day and then see the representative in your bureau and tell him what you intend to do. He will see that you don't forget your resolution.

Cordially yours,

FRANKLIN K LANE

SUGGESTED POLICY OF CONSERVING THE NATIVE FLORA OF NATIONAL PARKS AND OF MAKING

ALL IMPROVBMENTS NATURAL AND HARMONIOUS WITH THE SURROUNDINGS.

(Contributed by Marsden Manson, C. E., Ph,D., Mem. Am. Soc. C. E., San Francisco, California.)

(1) The range of native flora in the national parks is both grand and beautiful. It affords all that is necessary, from the noblest trees to the most humble plants, to make them instructive and attractive.

In some selected and very accessible area, and around each hotel or stopping place, it is suggested that this range of flora should be <u>completely represented</u>, and every <u>foreign species ruthlessly eradicated</u>. In some instances, forest weeds have been introduced and plants from remote regions brought in and cultivated to "beautify" the grandest spots of the continent, the native flowers of which afford all the opportunities for beautifying the grounds which the skill of man can ever properly utilize.

For instance, Yosemite Valley has many foreign trees and plants, and lacks the introduction of species native to the park and some of these are now, and have been for centuries back, perishing.

One of these species is represented by a <u>single specimen</u> which I nurtured by "surreptitiously" breaking the rules and destroying common shrubs and trees to give it more room and light.

(2) Hotels and houses, sign boards, etc., are of the Coney Island type of architecture instead of massive gray granite or other local stone. Bridges are of steel and wood instead of reinforced concrete masked by rough quarry faced atone. Sign boards are on a painted plank instead of on a rough hewn massive native boulder surrounded by native shrubs and vines with the arrow and names cut as if done in the stone age.

Cottages and other buildings should follow the suggestions as to hotels. Gray tiles, or in some instances a dark neutral should replace shingles or tiles of inharmonious colors.

In trees - the disappearing and perishing <u>yew</u>, or the California "nutmeg" are certainly more beautiful then the ailanthus from China or the black locust from Asia Minor, and in far better taste. The same is true of a dozen other species of trees and plants I could name.

PIGEONS WILL PROTECT FORESTS

(From. AMERICAN, FORESTRY,. August, 1919).

The War, Navy and Interior Departments, according to information just received by the Manufacturers Aircraft Association, New York, are co-operating in the forest patrol. The idea of such a guard against timber fires occurred simultaneously to the Forest Service and to the air service of the Army. Now comes the Navy Department with the offer to establish pigeon lofts in the forest reserves and to provide the forest airplane patrol with carrier pigeons whose duty it would be to carry messages direct to home relief stations whenever a fire is discovered.

The pigeon branch of the. Navy is expanding under the direction of Lieutenant McAtee, and recruits are now sought for this service, which is so closely akin to aviation that it is under the same general administration.

During the war there was no opportunity to train men for this important duty, but now a special school has been opened at Anacostia D. C., and twenty- enlisted men are receiving daily instruction in the training and keeping of carrier pigeons. At the same time these men have opportunity to put their learning t o practical uses.

The pigeon branch of the Navy has 2,500 birds. Plenty are available for the forest patrol. Experiments are going on constantly in the effort to increase the efficiency of the birds. Pigeons took an important part in naval warfare overseas. It has been proved that pigeons can fly at a speed at least equal to that of a sea plane or flying boat.

MOUNT RAINIER

Construction has been begun on a powder house to store the TNT received from the War Department. A frame building is being erected 14 feet by 18 feet in size. The location selected as the most suitable is on the Tahoma Creek Trail, and as far from the main road as a truck can be operated.

Forest Fires

Mount Rainier suffered from forest fires during the month and from the excessively dry weather which prevailed in most of the parks. The air was filled with haze during much of the month from the smoke of fires in the vicinity. The Forest Service lookout on Anvil Rock reported that on August 31st the smoke of fourteen fires was visible from his station.

The Mazamas, the mountaineering club of Oregon, held their annual outing in Mount Rainier, camping on Mazama Ridge from August 3 until August 17. Their stay in the park was saddened by the death of one of their party, Mr. John D. Meredith of Portland, who lost his life while climbing Little Tahoma Peak. This peak had been ascended by but two men prior to this year and is considered a difficult and dangerous ascent. On August 4 Mr. Meredith and Mr. Lee Benedict, both of the Mazama party, left camp in the morning and climbed to the top of the peak, reaching the summit about 5:30 P. M. The descent proved to be slow and difficult. At 9:15 when they had made only the first part of the descent, on the east side of the peak, Meredith called to his companion that he was losing his nerve, and a moment later he fell some forty or fifty feet, and then rolled several hundred feet. It is probable that he fainted before falling. Death must have been instantaneous. Mr. Meredith was an overseas soldier, aged twenty-.four years, and unmarried.

Director Mather arrived in the park on August 17. On August 19 he made an inspection trip to the north side of the park: in company with Mr. David Whitcomb, President of the Rainier National Park Company and Major Everett G. Griggs, Director of the company, and others, including the superintendent of the park. The party visited the Carbon River Ranger station, the terminus of the Carbon Glacier, Spray Park, and other points of interest on the north side. The trip occupied four days. The Director returned to Longmire Springs and Paradise Valley on August 24, and left the park the following day.

Travel

The total number of visitors for August, compared with last year, and also for the season to date:

	August	Jai	n. 1 to Aug. 31
1918	18,286		35,447
1915	31,301		49,354
Increase this year =	13,015		13,907
Percentage of increase	71%		39%

Travel for the Labor Day period broke all records, the figures being as follows:

	Cars	Persons	
Saturday, August 30	467	2, 065	
Sunday, August 31	833	3,761	
Monday, September	<u>114</u>	529	
Total	$1, \overline{414}$	6, 355	

The greatest demand for accommodation that occurred during the year was on the night of Sunday, August 31, preceding Labor Day - The number of visitors accommodated by the Rainier National Park Company on that date was as follows:

National Park Inn and Annex, Longmire Springs,	433
Paradise Camp	311
Paradise Inn	<u>485</u>
Total	1.229

In addition to the above, more than 150 people spent the night in the lobby of Paradise Inn. The National Park Service secured from the War Department the loan of 500 blankets. which wore used by the Rainier National Park Company on this occasion.

The Knights of Pythias held their annual initiation at Alta Vista, above Paradise Valley, at sunrise on August 11th. About three hundred members attended the initiation.

The Brooklyn Eagle party visited Mount Rainier August 8 and 9.

The Travel Club of America party visited the park August 9-12.

Three hundred and twenty-nine members and guests of the National Editorial Association visited the park August 13 and 14.

A party of thirty Boy Scouts from Seattle camped at Paradise Valley from August 18 to August 25.

The Washington State Bankers Association held a convention in the park from August 21 to 24. About four hundred and fifty members and guests attended the convention.

The first electric automobile to reach Paradise Valley made the trip on August 18. The trip was made by a demonstration car for advertising purposes.

Ascent of Mount Rainier

The guides of the Rainier National Park Company have taken twenty-three parties containing two hundred and nine visitors, to the summit this month. In addition to this number, about eight members of the Mazamas made the ascent, making a total of about two hundred and eighty-nine who have reached the summit during August, and about three hundred and fity-eight for the season to date - the largest number reaching the summit in any season.

CRATER LAKE

Fires

Electric storms occurred on the 6th, 13th and 19th of August, starting a few small fires which were quickly brought under control. One fire in the forest reserve west of Union Peak got across the park line, but no damage was done as it was confined to snow brush on an old barn...

The season in Crater Lake has been very dry and the roads on the lower levels where the soil is light are considerably cut up and very dusty.

The Rim Road was cleared of snow and the first automobile of the season went around the lake August 3d.

The labor situation continues difficult. A number of school boys who were working in the park have now left to attend school, and with the scarcity of labor in the locality and saw mills paying a minimum wage of \$4.50 per day, it is becoming difficult to secure laborers.

Crater Lake Lodge

Three fire escapes were installed on the Lodge during the month, and there are now ample means of escape in case of fire.

	<u>Travel</u>	
	Visitors	Automobiles
Travel for the month	7,039	1;828
" to date	13,995	3,733
" to same date, 1918	10,162	2,424
Gain over last season	3,833	1,311

August 11th the National Editorial Association visited Crater Lake. Including the drivers there were about three hundred and fifty in the party. Governor Olcott of Oregon, and Mayor Baker of Portland accompanied them.

Director Mather, accompanied by Madison Grant and Charles P. Punchard, Jr., arrived late that same night. As all accommodations at the Lodge had been reserved for the Editorial Association, the Director's party had to use their sleeping bags, which they were fortunate to have with them.

August 16th the Travel Club of America, a party of seventeen, conducted by Charles C, Heyl, came to Crater Lake via Medford. They departed August 18th via Klamath Falls.

YOSEMITE

Fires

Yosemite has been very fortunate in the matter of forest fires, no fires of any consequence being reported during the month, in spite of the dryness of the season.

In August the road through Yosemite Village was surfaced with river gravel, approximately 210 cubic yards of gravel being placed on it.

The roads in the valley at the beginning of the season could almost have been called boulevards, but now they are badly rutted, the river gravel with which they are surfaced having decomposed rapidly under the unusually heavy travel. Superintendent Lewis, states that the only final solution of the road problem in the Yosemite seems to be the paving of the roads. They are spending enormous sums for road maintenance and the roads are now in such bad condition that if they are not resurfaced at the beginning of next season, as they should be, it must certainly be done the following year. He suggests that in connection with any program that the Service may undertake looking toward securing a general appropriation for park road improvement, an item at least to start, the paving of these roads should be given the most serious consideration in the near future.

In regard to the labor situation, Mr. Lewis states that it is uncertain in every respect but that it is particularly bad in respect to trail work, as it is almost impossible to secure competent men to go out into the mountains on that. kind of work.

During August a stock of 170,000 fish from the experimental hatchery at Happy Isles were planted in the different waters of the park. They were rainbow and spotted trout and steel heads.

Contract was recently let to the Utah Construction Company for the construction of the main Hetch Hetchy dam, and it is understood that the contractor will take over the city's camp at Hetch Hetchy on September 1, and proceed with the work.

Insect Control

Insect control on a small scale was continued during the month of August by Mr. Patterson of the Bureau of Entomology, the work consisted principally of a study of the life and habits of the needleminer in connection with its activities in the Tenaya Basin and around the Toulomne Meadows.

On August 7th an accident occurred in which a man named John Moors was killed by being struck by the loose end of a guy wire while engaged in taking down a gin pole.

SEQUOIA

Fires

A forest fire was started on the morning of August 18th along the southern border of Giant Forest about one and a half miles from the tourist camp, and never before within the memory of man has the wonderful Giant Forest been so threatened with partial or perhaps complete destruction.

The fire was discovered about 11:00 A. M., and within less than thirty minutes after the alarm was given all available men were on the scene, and by heroic efforts the fire was surrounded after having spread over ten acres.

The fire did but little damage other than to the Chimney Tree, which it practically destroyed. This tree is a sequoia twenty-four foot in diameter with its top broken off one hundred and seventy feet above ground. In some past time it was hollowed out by fire so that one right crawl through an aperture and look out through the top, which was fringed by green branches. This fire entered into the immense hollow of the tree, and drawn up through the chimney, it burned away the sides leaving two charred halves as the remainder of what has been one of the objects of special interest to park visitors in the Giant Forest.

Fish

A consignment of trout was distributed and liberated in the waters of Sequoia as follows:

August 28, Middle Fork Kaweah River
29, Lower Marble Fork River
30, Lower Marble Fork River
30, Upper Marble Fork River
5,000 steel-head
5,000 steel-head

Travel

Total travel figures for the season are as follows:.

Total to	rave	l, with Transportation Company	272
"	"	, private	20,429
44	"	, trails, all sources	2,000
		Grand total, people	22,705
		" private automob	iles 3,510

Wild .Animals

Deer and bear are very numerous and quite tame.

The following letter has been received in the office at Washington:

"Gentlemen: .

When in the Sequoia National Park this year, I picked a red snow flower. Today I learn that I should not have picked that flower.

There wore no signs anywhere and no one there told me – instead people all admired my pretty flower and no one even knows its name. This - the name - I learned by seeing it pictured in colors in a San Francisco store.

Please accept my sorrow that I picked the flower, and believe me.

Faithfully yours, Astrid Kimball

September 5, 1919 From Casa Loma Hope ranch Santai Barbara, California.

GENERAL GRANT

Total travel figures for the season are as follows:

Total	travel with Transportation Company	75
"	", private	18,221
"	", trails, all sources	354
	Grand Total people	18,650
	" private automobiles	3,626

GRAND CANYON

Fires.

Like her sister parks, Grand Canyon suffered from hot and dry weather during August, there being frequent electrical disturbances, but very little rainfall. Six small fires occurred, caused apparently by lightning but they were all extinguished before they had gained any considerable headway.

Camps

Two public camps were maintained during August, one near Grand Canyon village and one at Grand View, but no accurate check could be kept of the number of campers because of the lack of ranger service.

Water is obtained by these campers at Grand Canyon from the Santa Fe Depot, where a charge of twenty-five cents per day per family or party is made. As all the water has to be hauled by rail from Flagstaff, a distance of ninety-six miles, this charge dues not seem unreasonable. Owing to the absence of water on the south rim, these are the only available camping sites. Later the superintendent intends to submit recommendations and estimates for catchment areas and cisterns to supply these and other public camps with free water.

Labor and Supply Markets

Owing to the distance from any large labor and supply markets, difficulty is being experienced in securing labor and supplies. It has been found necessary to bring men from Flagstaff, and to pay moat labor \$4.00 per day.

Wild Animals

On the South Rim animals are apparently scarce. Reports from the North Rim indicate a large number of deer, some mountain sheep, arid many lions. In a three day exploration trip on the North Rim a tourist reports having seen twenty "lion kills" - deer killed by mountain lions - and says few of these deer were used for food. This condition would indicate a large number of lions.

Because of the press of other business, it has been impossible for the superintendent to spare the time necessary for a trip to the North Rim. This visit 'is contemplated for the last week in September, at which time it is hoped to establish communication between Rims by the wireless telephone,

Travel

Automobiles entering Grand Canyon during August could not be checked because of the lack of rangers, so that only approximate travel figures can be given. The El Tovar management states that the travel for August 1919 slightly exceeds that for any similar period since 1915. Camping facilities are ample for the present but all indications point to a great increase in travel of this sort next year.

Estimated number of campers during-August	1200
People registered at hotel and camp	3838
Total	5039

Visitors

Among the visitors at Grand Canyon during August were:
Mary Roberts Rinehart
Robert Sterling Yard
Civil Engineer George E. Goodwin

GLACIER

It being very dry in August in Glacier, all of the fires reported on July 31st continue burning throughout the month and in addition several new ones started, some of them developing into serious fires.

The labor situation in that vicinity improved a little so that it was not quite so hard to obtain fire fighters but much valuable forest has been destroyed and some beautiful scenery made less beautiful. The south slope of Lower Two Medicine Lake suffered very much, the fire there immediately developing into a top fire by reason of the high winds, and getting beyond control. By August 31st this fire had burned over an area of about 9000 acres, 3000 of which are inside the park. The maximum crew engaged in fighting the Two Medicine fire was about seventy-five men.

The total cost of all fires in the park up to the present time is approximately \$30,000.00. It is believed that unless there is relief by rain in the near future the total cost of fires for this season will amount to from \$40,000.00 to \$50,000.00.

The only relief from the drought of the present season was experienced between August 1st and 5th, during which time a rainfall of .894 inches was recorded.

Fish

A total of 201,000 trout fry were planted in lakes and streams on the east and west sides of the park during August; they consisted of black spotted advanced fry and rainbow trout fry.

Travel

Travel fell off from the 8.827 tourists of July to 6.901 tourists for August. The decrease was probably due for the most part to the forest fires and the poor atmospheric conditions resulting not only from the fires burning within the parks but also from smoke blown in from the many fires around it.

A slight decrease was noted in the number of tourists entering by private automobile at both the Bolton and St. Mary entrances. Road conditions were not so good during August, due to the extremely dry season. The accounts of the fires raging in the park were exaggerated, so that many tourists were deterred from visiting the park.

Among the visitors to Glacier in August were Mr. LeRoy Jeffers, Secretary of the Bureau of Associated Mountaineering Clubs of North America; Mr. Horace M. Albright, Mr. Theodore Noyes, editor of the Washington Star; and Professor Walter A. Stafford, of the University of California.

On August 6th, Mr. John Kendrick Bangs visited the park. He delivered a lecture in the auditorium of the Glacier Park Station on "Devastated France."

The Brooklyn Eagle Party arrived in Glacier August 2. While-there they were entertained by talks by Mr. Albright, Superintendent Payne, Professor Standley, who is making a study of the flora of the park, and who addressed them on that subject; and by Miss Bassett, a member of the party, who spoke on the geology of the park and the effect of glaciers. Mr. Davidson, a Canadian, told of the bad stretch of road between Babb and the Canadian boundary and of the cost of putting it in passable condition. The members of the party immediately took the matter up and subscribed \$1120.00 to make the needed repairs,

The Flower Lady

The Glacier Park Hotel Company secured the services of Miss Gertrude Norton of Salt Lake City, to gratify the desire of tourists to know the wild flowers. She spent four weeks at the Many-Glacier Hotel, identifying flowers which the tourists brought to her and taking parties out on wild flower expeditions. Her work was very popular and she was kept busy.

On August 6th, Robert Singer, a sixteen year old boy of Evanston, Illinois, swam across Lake McDonald between Lewis's Hotel and Kelly's Bay. The distance was a mile and a half and was covered in an hour and five minutes. As the water is very cold, this was quite a feat.

YELLOWSTONE

Fires

The weather condition in Yellowstone were unusually hot and dry during the month of August so that the forest fires were unusually bad. The situation was not relieved until August 31st when there was a heavy rain, which helped conditions both inside the park and around it.

In fighting the fires in the Yellowstone, the Service was badly hampered by the fact that most of the available labor in the northwest was employed by the Forest Service in fighting big fires in western Montana and northern Idaho. They are still short of labor in the Yellowstone, but the rains are subduing the forest fires outside the park, thus releasing men for road construction work. The road crews in the Yellowstone are to be commended for fighting the fires inside the park without demanding the high wages paid outside for fire fighting. They, had forty-four laborers hired especially to fight fires from August 17th to August 31st.

Fish

As a means of conserving tae supply of fish in Yellowstone Lake the camping and hotel companies were prohibited by an order effective July 20th from catching fish in the park for the use of the hotels and camps. A total of 5,327 pounds of native trout were caught for supplying the hotels and crimps during, th6 season - most of them in June and July, when the fishing was fairly good. The fishing wag not good during August unless people took the trouble to leave the roads and go to places where the waters had not been constantly whipped by travelers.

In August some black-spotted trout eggs were shipped out of the park, and in addition 571,800 trout fry were planted in small streams adjacent to Yellowstone Lake.

The Greater Yellowstone Project

In almost every case tourists who Visited the extension area were enthusiastic over the possibilities of developing this region as a part of the park, and expressed a willingness to help advance the interests of the project in every feasible way.

But on the other hand the people of the Jackson Hole continued their fight against the extension. They held a meeting at Jackson on August 25th to which they invited the Governor of Wyoming.. The Governor invited Superintendent Albright; and Commissioner Clay Tallman of the General Land Of f ice was also present.

During the month Mr. W. C. Gregg, of Hackensack, New Jersey, made a trip into the extension area and took what were probably the first pictures of the headwaters of the Yellowstone, a stream flowing from an enormous glacier near the Continental Divide. The people who traveled through the Upper Yellowstone country have become very much interested in the extension.

Wild Animals

The wild animals were in excellent condition throughout the month and there was plenty of good forage for the elk, deer, antelope, and mountain sheep. But owing to the drought a hard winter for the wild animals is expected. The superintendent is trying to get all the hay possible, but thus far it has been hard to secure and the prices have been exorbitant. They are also cutting all the available native grass in the park which is suitable for feed. An attempt was made to get bids for hay shipped into Yellowstone from Minnesota and other Western states, believing they could ship it in for less than they could buy it in the neighborhood, but few bids have been received. It has been very dry in the Jackson Hole country and grave apprehensions are entertained for the elk in that vicinity, The hay crop is very short there,

A Yellowstone Bear Story

The bears are always a great attraction to all visitors around the hotels and camps, but one young black bear has carried off the palm. He had climbed up a tree to a knot hole about ten feet from the ground to steal a supply of bread crusts that some red squirrels had brought from the automobile camp and stored there. He put his head into the knot hole but alas, when he was ready to withdraw it, he found himself held fast, and all his violent efforts to free himself were in vain. There he had to stay until he was chopped out. About fifty people gathered around to watch the performance, and the bear was finally rescued without injury to himself or to the rescuer, Fortunately there was a limb at a convenient place below the knot hole so that the bear could rest his weight an it, or he would have been strangled to death early in the game. So frantic were his struggles that he lost his balance several times and turned completely over. In order to protect the chopper, it was necessary to hold the bear's hind feet with ropes.

It should have been a very shamefaced little bear that was finally released from his uncomfortable position, and if it didn't completely cure him of stealing,, this experience should at least teach him to beware of knot holes that aren't of goodly size.

An Unusual Accident

An elderly man, a member of the U. S. Chamber of Commerce party, stumbled and fell into Prismatic Lake on August 16th. He was wet to the neck and was burned somewhat, but not dangerously. He was able to travel in an ambulance and left with the party in a private car on August 18th. Prismatic Lake is quite large and while it is very hot in the center, it is, of course, cooler around the edge where the accident occurred.

Travel

Travel to the park was unusually heavy during the month,, all records for August and for the season to date having been broken. The year 1915 has been the record breaker heretofore, 51,895 people having visited the park that season. But it can no longer claim the record, 56,231 visitors having toured Yellowstone this season at the close of August.

4,410 private automobiles entered during August 1919, carrying 16,668 persons; the total for August being 25,171 visitors.

In August of 1918, 2,170 cars came into the park, carrying 8,166 persons, and the total number of visitors was 9,665.

The season's travel will exceed 60,000.

Visitors

Among the visitors to Yellowstone during August were:

Huston Thompson, Federal Trade Commissioner
Walter L. Fisher, Former Secretary of the Interior
William Hamilton Osborne, writer for the Saturday Evening Post
James Dorrance, writer for the Red Book and Munseys
Louis W. Hill, of the Great Northern Railroad
H. A. Noble, of the Glacier Park Hotel Company
LeRoy Jeffers, of the Associated Mountaineering Clubs
Famous Players Lasky Company, taking moving pictures
The United States Chamber of Commerce party and the
Governors' party - about twenty in each party,

Park-to-Park Tours

The Transportation Company in Yellowstone now hands cards to its passengers carrying the sign of Yellowstone Park (a Yellowstone bear) and of Glacier Park (a mountain goat), and advertising the Yellowstone - Glacier automobile trip as "Geysers to Glaciers"; 365 miles to Glacier Park. Automobiles leave Mammoth Hotel, Yellowstone, for Glacier Park Hotel, Glacier, Mondays and Thursdays at 7:30 A. M., arriving Helena at 6:30 P. M., and Glacier Park Hotel 7:00 P.M. second day, driving 193 miles the first day and 197 the second. The fare is \$35.00 including war tax.

Now Entrance to Yellowstone

The September number of the Colorado Highways Bulletin reports that public spirited citizens of Riverton, Wyoming, have organized a company with a capitalization of \$50,000 to build a thirty-five mile strip of the Wind River Road between Riverton and Jackson Hole, which will afford a new route to the southern entrance to Yellowstone National Park.

ROCKY MOUNTAIN

Fires

In Rocky Mountain there were several small fires during August, but they did no material damage to timber or other natural conditions. The fire hazard during August was less than earlier in the summer, because of the heavy rains the first part of the month.

Roads

The road to Lyons and Longmont, by way of the Middle St. Vrain, which was put out of commission by the disastrous cloud-bursts on July 30th, is still closed to travel. It is expected, however, that this road will be opened within the next few days, at which time the road down the Big Thompson will be closed to permit of double tracking and other extensive improvements.

Work on the Fall River Road is progressing very satisfactorily considering the shortage of labor. It is expected that this road will be completed the early part of next summer.

Wild Animals

More deer than usual at this season have been seen in the neighborhood of Longs Peak. Five deer were seen near Thunder Lake, an unusual record for Wild Basin. A few mountain sheep were seen above timber line in Glacier Gorge. There is abundant evidence that black bear are now in Meeker Basin. Grouse are fairly abundant. Several kinds of small birds have been unusually conspicuous, flocking together for fall migration.

The little fawn which was separated from the herd and run down by two young men attending the YMCA conference, and which has since been cared for by Superintendent and Mrs. Way, is now well and happy.

First Airplane in the Park

On August 8th, A: M. Lendrum and I. B, Humphreys made the first airplane flight from Denver to the Rocky Mountain National Park. The flight was successful in every way, and was made in fifty minutes.

Travel

Travel increased in the Rocky Mountain National Park during the month of August. Up to and including August 31, a total of 14,025 vehicles and 66,151 passengers, actual count, had entered the park through the Longs Peak and Estes Park entrance. The count missed approximately

twenty' per cent, due to persons coming in by way of the Devil's Gulch, or over the regular routes after the checkers have gone off duty. The figures given above do not include the Wild Basin entrance, or the Western Slope or Grand Lake entrance. Last year, for the corresponding date, the grand total of travel showed 10,756 vehicles and 51,051 passengers, an increase of approximately 35 percent, by actual count, this year over last. During the months of July and August the weekly average was in excess of five thousand through the Estes Park and Longs Peak entrances. The record weeks for the summer were the first week in July, with a count of 1,757 vehicles and 8,061 passengers, and the last week in August, with a count of 1,242 vehicles and 6,687 passengers.

The lack of hotel accommodations has prevented thousands of people from visiting the park this season. Many of the hotels have kept a record of the number of people turned away from lack of room. This list totals 10,487 for the Longs Peak and Estes Park entrances alone,, while approximately three thousand have been turned away at Grand Lake since June first.

MESA VE.RDE

Mr: Thomas Rickner, superintendent of Mesa Verde National Park, reports that the heavy rains of July mach it necessary to have the entire length of the road in the park graded and dragged during August. The roads are new in good condition.

Travel

Tourist travel .vas very good until the latter part of August, when the number of visitors dropped. Mr. Rickner attributes this falling off to the railroad troubles, The number of people visiting the park in August was 934, as follows:

Tourists in private car	814
" with transportation companies	102
" in wagons	11
" on horseback	6
" on foot	1
Total	934

From the Colorado Highways Bulletin for September:

"As the Bulletin goes to press many delegates from seventeen states had arrived at Durango, Colorado for the convention of the National Old Trails Association. Standish L. Mitchell, secretary of the Automobile Association of Southern California, was in the chair for President J. M. Lowe, of Kansas City, who was East on business. Mitchell had piloted a party of several cars from Los Angeles by way of Gallup,

New Mexico. The visitors were to be entertained later by a trip into Mesa Verde National Park."

WIND CAVE

The weather continues to be hot and dry at Wind Cave, which is favorable for tourist travel, but which is hard on the range and watering facilities.

Travel

Mr. Roy Brazell, superintendent of Wind Cave National Park reports that there were 2,457 visitors to the Cave during August, 448 coming with the transportation concessioner and 2,009 by private conveyance. So far as he has been able to ascertain this breaks all records for the number of visitors conducted through the Cave in any one month, This unusual number, he thinks, is due in part to the advertising campaign of the Hot Springs Commercial Club, and the entertainment it has offered to visitors in that part of the Black Hills.

Camping parties are quite numerous in the park. A large proportion of the tourists carry camp equipment and do not seek accommodations at hotel.

PLATT

Superintendent Ferris, of Platt National Park, decided to build a road, the foundations of which were laid by a former superintendent Col. A.R. Green. The road is almost completed and is now in use as a thoroughfare. In constructing this road a good clear water spring was found, which has been walled up and cemented, thus giving the park another spring.

Almost all the parks report unusually hot and dry weather during August. Platt, however, reports precipitation during the month of 7.24 inches, which exceeds the record rainfall for any other month since the local weather bureau was installed a year ago, The total rainfall since the first of the year is 29.92 inches.

The number of visitors to the Bromide Park during August totaled 29,325. These visitors took from the springs a total of 4,795 gallons of Bromide water, 514 gallons of Medicine, and 1,144 gallons of Sodium-chlorid. The only water shipped during the month was 135 gallons of Sodium-chlorid water. No Bromide nor Medicine waters were shipped during the month because of the scarcity of these waters and the number of visitors who had to be supplied.

HOT SPRINGS

Dr. Parks, Superintendent of Hot Springs Reservation, reports that the roads on Hot Springs, West and North Mountains wore gone over in August and kept grassed. All the lawns on the Reservation wore given special attention, and the flowers, shrubbery and hedger wore kept well trimmed and cultivated, and the grass neatly trimmed. All this makes the reservation present a very attractive appearance, and is a feature commented an by visitors.

The splendid patronage has continued during the month of August, which has necessarily added to ,the duties of tire office in supplying the wants of the largo number of people who came there for information..

Government Free Bathhouse

The average number of person: bathed daily at the Government Free bathhouse during August was 345, which was a considerable increase over the average number bathed daily during the month of July.

TUMACACORI

Mr. Frank Pinkley, custodian of the Tumacacori National Monument, in southwestern Arizona, reports that he has just made an inspection trip there from Florance where he is located as custodian of the Casa Grande National Monument. He made the trip in the new Ford truck. lately purchased for Casa Grande. He found the roads in the southern part of Arizona in fair condition, no particularly bad spots but the surface gone from some stretches so that twelve to fifteen miles an hour was all one could make in comfort. He says the range around Nogales looks well and the cattle he saw were in good condition.

Two prospectors camping in the vicinity of the mission have offered to put down a well on the monument grounds and their offer has been accepted. The present well is at some distance and is in rather bad condition. It will be a convenience to visitors to have fresh water on the grounds.

Mr. Pinkley also reports that the Tumacacori Mission ought to be roofed this year.

ZION

Fires

Zion National Monument has escaped any serious fires in August. One fire was discovered, caused by campers leaving burning coals; but it was extinguished before any damage was done. The weather is very dry and springs are getting low.

Deer have been seen on the valley floor by some of the visitors. The deer are becoming more plentiful each month owing to the excellent grazing in the canyon. The superintendent thinks it would be a good idea to place some elk in the valley - they would be an attraction to visitors, and grass would be available for their needs.

Travel

During August the Farm Bureau had an excursion to Zion

The number of visitors to the Monument during August was 670, as compared with 92 visitors in the same month last year.

PERSONAL NOTES.

Miss Isabel Story, secretary to the Assistant Director of the Service, has gone to Yellowstone National Park for a vacation.

- Mr. John Harvey, Chief of the Mails and Files and Appointments in the Office of the Secretary of the Interior, visited Hot Springs on August 15 and 16.
- Mr. P. C. Standley, of the National Museum, has returned to Washington after spending the summer in Glacier National Park, collecting material for a handbook on the flora.
- Mr. W, H. Peters has been designated acting superintendent. of Grand Canyon, the latest member of the national park family, which was created February 26, 1919. He arrived at the Canyon August 11th and took over the administration of the park. Mr. Peters is an engineer of experience. He was transferred to the Service as Assistant engineer at large from the Engineer Department at the War Department, May 6, 1919. His first ssignment in the Service was Yosemite, from whore ho was detailed to Grand Canyon.

(1430)

DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE NEWS

No. 5 October, 1919

To the Members of the National Park Service:

This number of the National Park Service News goes out to the parks at the moment when the superintendents and concessioners are about to meet in conference with me at Denver, so I am very glad at this time to give a word of greeting to those whom I will have the privilege of meeting next week in person at the Conference. I feel sure that this Conference will be of great value to all members of the Service both at Washington and in the field. The cooperation on the part of the field force with this office has been particularly gratifying during the past summer, which has been the greatest year of travel to the parks. We must gird our loins for a still more strenuous season next year.

My trip through the parks this past season was a very edifying one. I was able to visit by automobile practically all of the parks on the Pacific Coast, having visited General Grant, the proposed Roosevelt National Park country, Yosemite, Crater Lake and Mount Rainier; while I also made short visits to Rocky Mountain and Yellowstone National. Parks by railroad.

In closing I want to let the Service know how much I appreciate the fine work that was done by Superintendent Lewis of Yosemite and Acting Superintendent Peters of Grand Canyon in entertaining their majesties, the King and queen of the Belgians, who visited these two parks during the last month, and whose interesting accounts of these visits will appear in the next new bulletin. The impression made on his majesty was so great that we are informed by the Belgian Embassy here that he is considering the establishment of a national park in Belgium, operated along the lines of our own.

With greetings to all members of the Service,

Cordially yours,

STEPHEN T. MATHER, Director.

Forest Fires of Spontaneous Origin

It is usually assumed that forest fires when not the result of a stroke of lightning., are the result of carelessness on the part of lumbermen, campers, picnickers, or wayfarers. A French scientist, M. G. Raymond, denies this and furnishes several interesting hypotheses in a brief article in La Nature (Paris) to account for spontaneous fires.

He notes first that such fires always occur under the same conditions; namely, when the weather is dry, hot and windy. He considers it entirely possible that the dry and resinous branches of a pine forest might develop enough friction in a high, hot wind to strike fire, the cause being analogous to the method in which savages obtain fire by the use of a fire stick,.

Again, minute drops of resin spherical in form might act as. lenses to bring the sun's rays to a focus, thus setting fire to inflammable materials around them. .

A third suggestion is that since the ground of a pine forest covered with needles and other decomposing matter often acquires a very high degree of heat in the summer months, often a temperature several degrees above 100 degrees Fahrenheit, there might result catalytic effects in the presence of resinous substances. (From the Scientific American)

Motion Pictures from Airplanes.

A motion picture permit has been issued to the International Film Service Company, Inc., of Now York to take scenic motion pictures of the national parks from airplanes. The Air Service has been asked to cooperate in the taking of these pictures.

The Native Mammals of Australia

The following, taken from the news letter of the Smithsonian Institution, causes one to wonder if Australia has any reservations in which the wild animals may find a refuge as they do in our national parks.

The extract is from the report of Mr. Charles M. Hoy, who has been sent to Australia by the generosity of Dr. W. L. Abbott to collect, the fast disappearing native mammals and birds.

"The extermination of the native mammals has apparently gone much farther than is generally thought. Many species that were plentiful only a few years ago are now almost, if not altogether extinct. The greatest agent working toward the extermination of the native mammals is the fox; next comes the cattle and sheep men who distribute poison by the cartload in the effort to reduce the rabbits. This has also caused or helped to cause the extermination of some of the ground inhabiting birds. Another great agent is the bush fires which sweep over the country. These are often lit intentionally to clear out the undergrowth and thus increase the grass. Owing to the great increase in the price of rabbit skins and the consequent increase in trappers

the rabbits are fast ceasing to be a pest, and in some sections have become quite scarce. The foxes, which are everywhere, after killing off the native mammals, are now turning to the rabbits, which also helps in their reduction.

"Disease has also played a great part in the extermination. The native bear died in thousands from a disease which produced a great bony growth on their heads. A mysterious disease also spread through the ranks of the native cat, Dasyurus viverrinus; the domestic cat also played a great part in their extermination. Even adult specimens of Dasyurus were often dragged in by the family cat.

Praise in a Complaint Letter

A complaint letter which fills nine typewritten pages about the hotel and transportation companies in one of our parks closes thus:

"I believe we have in our National Parks a very great opportunity to foster certain qualities of quiet and love of nature that seem much needed in the haste of our life.

In closing let me express my admiration for the evidently great regard for safety and comfort in the work on the roads, and too my appreciation of the fine, courteous type of men who were on duty in the Ranger Service."

Appreciation of our Efforts

Another letter - not one of complaint this time - contains the following:
"During the past summer I was a member of the Travel Club Conservation Tour and visited seven of the parks. It was a delightful trip and most enjoyable.

"Early in the season we were at Rocky Mountain Park where Superintendent Way gave us a very delightful, informal talk. Afterwards I had the pleasure of a long talk with him. He is very enthusiastic about the park, as you doubtless know. He told us of the large portion that is inaccessible because the small appropriation necessarily restricts development.

"I am sure you will be pleased to know how much everybody enjoys all of the parks, and how much those who have visited them appreciate your efforts in their behalf.

"We from the east do not realize until we get there and see it how many, many people come to the parks and camp. Nor do we realize the invigorating power of the combination of altitude, atmosphere, and scenery, with rest and freedom from worry, until we have felt it.

"But this is much longer than I intended and quite unbusinesslike so I must close, after repeating that I appreciate your efforts at providing and improving playgrounds for children - both small and grown up, and I'll gladly do whatever I can to assist.

New Park Legislation

A bill to make the Zion National Monument into the Zion National Park has passed both the Senate and the House of Representatives and is now in conference to adjust some minor amendments. Zion is in every way worthy to become a member of the National Park family.

MOUNT RAINIER

Weather Conditions

The first snowfall at Paradise Valley was September 27, when about two inches fell, but melted the next day. It snowed again at Paradise Valley on September 30th.

Nisqually Glacier

Measurements taken of the lower terminus of the glacier indicate a recession this year of about 50 feet. This is about the average rate of recession per year during the past generation, or since 1892.

Concessions

The directors of the Rainier National Park Company have authorized the construction of foundations and other preliminary work for two buildings that are to be erected next year. One is to be a camp building, replacing the buildings on the ridge above Paradise Inn, and the other is to be a club house containing an auditorium, guide room and club rooms.

The National Park Inn, at Longmire Springs, closed on September 15.

The Standard Oil Service station closed on September 25.

Special Visitors

The U.S. Biological Survey party, which has been working in the park under the direction of Dr. W. T. Taylor, during July, August and September, collecting material for a publication on the birds and mammals of the park, completed its field work, which included a complete circuit of the mountain. Dr. Taylor left the park on September 30.

Mr. George E. Goodwin, Civil Engineer, National Park Service, visited Mount Rainier on September 2 to 4, inspecting the Nisqually and Carbon River districts.

Travel

Travel figures for September and for the year to date follow. The Labor Day travel was reported last month.

Year	September	Jan. 1 to Sept. 30
1919	5301	54,655
1918	8324	43,771
Decrease for	September 3023	$\overline{10,884}$ Increase for
	Percentage increase	year, 25% for the year

The decrease during September is due to the fact that the Sunday preceding Labor Day was August 31 this year; while last year it was September 1.

The heavy travel on that day was included in the August report this year, while last year it fell in September. The number of visitors on that day last year was 3700 and this year it was 3761.

CRATER LAKE

Weather

Snow began to fall September 4 and continued very stormy with snow every day to include September 9, About three inches remained on the ground and impeded travel to some extent until September 11, after which date there was fine weather until the 30th, when another severe snow storm set in.

Fish

Fishing continued good during the entire season. On September 20, twenty-five thousand young rainbow trout wore planted in the lake.

Game

Deer were plentiful this year and were very tame. The last snow storm had driven them to the lower levels and out of the park where they are being killed off. There was never known to be so many bears as this season. They have visited the camps daily and waited to be fed. They broke into the meat house on several occasions during the day and it was found necessary to incase it with barb wire. The bears were quite an attraction to the tourists, Mr. Sparrow, the superintendent of the park, expresses the hope that the bears will hole up in the park, for if they go to the lower levels for the winter he fears they be easily slaughtered, as they are so tame.

Travel

The snow storm of September 4 interfered with travel for a few days, after which it was about normal for the rest of the month.

Travel figures follow:

	Visitors	Automobiles
Travel for the month	2,341	715
Travel to date	16,336	4,448
" same date 1918	12,378	2,936
Gain over last year	3,958	1,462

YOSEMITE

Roads

All of the roads showed distinctly the effects of the exceedingly heavy travel and with few exceptions they were all probably more cut up than in any previous year for some time past. A two days rain beginning on the 28th of the month was an exceedingly great help and now that it is over all of the roads are in as good, if not better, shape than at any time during the season.

The new Mirror Lake road, twenty feet in width, of easy grades, is now practically completed. It is a great improvement over the present almost impassable road to the Lake, and Mr. Lewis feels sure that it will be

appreciated by motorists when open to travel next spring.

Winter Ranger Force

In a paragraph in which he gives the names of the permanent ranger force and outlines his plans for their winter employment, Mr. Lewis says:

"The ranger force which comes in such direct contact with the people is generally considered by the public in the light of an encyclopedia of information on all subjects, and I have always maintained that the successful ranger should be more or less a jack of all trades and should be able to give assistance and advice under any and all conditions and on as many subjects as possible. As a result of the great increase in automobile travel and the constant requests that are made to the men for assistance on the roads, I feel that it is particularly necessary that each man should have a general idea of the operation of automobiles. To give them this knowledge is my principal reason for planning to give them as much time as possible in the machine shop during the winter,

Fish

During the month a total of 118,590 fish were planted in various lakes and streams in the park.

The planting' of fish from the Yosemite Hatchery has been exceedingly successful, some 350,000 having been planted during the season. The planting of all these fish, particularly if it can be continued from year to year, will in time result in stocking the waters of the park to the extent that there should be a sufficient supply for all visitors who desire to fish, and it would indeed be a shame if the plans that have been under consideration for the past two years cannot be carried out and a permanent fish hatchery established.

Game

Deer seem to be exceedingly plentiful throughout the park and this is especially noticeable on the floor of the Valley where there seems to be more than usual.

Although open season on deer has prevailed outside of the park since August 15th, so far as could be ascertained hunters have not met with a great amount of success. The deer on account of the mildness of the season have kept well to the high country with the result that apparently comparatively few are drifting outside of the park. In fact it almost seems that the deer know they are protected within the park boundary and although numerous herds graze within comparatively short distances of the boundary, one sees comparatively few once the park line is crossed.

Travel

During the month a total of 2,806 people entered the park, of which 2,081 came in 630 private cars, 696 hauled by the transportation companies, and 129 by walking, driving, etc. Of the above amount 489 people were returned from Crane Flat and Aspen Valley in 152 return cars.

The railroad strike which took place during the latter part of August seems to have had a permanent effect on travel as there has been no tendency for travel to increase following the settlement of the strike. There has, however, been a relatively steady flow of travel but the flow was much lighter than was anticipated. Another factor that probably has contributed much to the falling off of the travel has been the condition of the roads, principally of those roads leading to the park, but also to some extent of those within the park boundary. The rain at the end of the month has put

all of those roads in much better condition than at any time during the season, and if weather conditions continue good in all probability October travel will be heavier than usual.

With the close of the month of September all camps and hotels were closed except the Sentinel Hotel on the floor of the Valley and the old Glacier Point Hotel, which is still receiving quests.

<u>Zoo</u>

During the early part of the month the building on which work has been going on for the past year to be utilized as a zoo, was completed and the three lion cubs were transferred to it. At first the two Rocky Mountain lions were separated from the Yosemite lion. Shortly after transferring the animals, however, the female of the Rocky Mountain lion died from unknown causes, and shortly afterwards the Yosemite lion was turned in with the remaining Rocky Mountain lion.

The skin of the dead lion was preserved and has been prepared for mounting. The work will be done by Chief Ranger Townsley when time permits during the coming winter.

After considerable difficulty two black bears have boon secured, one this years cub and the other a yearling, both of which have boon placed in the cage and are doing nicely.

Arrests

Between 8:00 and 9:00 p. m. on September 11, two men stopped at the El Capitan checking station on the floor of the Yosemite Valley, in a Hudson roadster, and inquired the road to Yosemite Valley. Ranger William Heim told them that they would have to secure a permit for their automobile to enter the park, and proceeded to make one out. Upon asking for to fee of \$5,00 the applicant who gave the namo of E. Wallis, stated he didn't have any money. Ranger Heim informed him that he could not proceed or leave the park without payment of the fee, and the young fellow stated that he would go out to the car and talk to his partner about it. When he got to the car, Ranger Heim heard—them starting the car and ran out and jumped on the running board and warned them that they could not leave. He ordered them to back the car to his station while he telephoned for instructions. This they did., but as Heim was about to step off the car and enter the cabin, one of the men stepped out on the opposite side of the car, drew a revolver and called to the other man to come with him, and keeping Heim covered until they reached the brush, they quickly disappeared.

Ranger Heim telephoned the Ranger's office and within fifteen minutes Chief Ranger F. S. Townsley and Ranger Clyde Boothe were on their trail. They tracked the two men up through the rocks and timber and brush in the vicinity of Ribbon Falls on the west side of El Capitan. When they reached the granite boulders near the upper end of the talus it was impossible to follow the trail. The rangers were sure they had their men cornered, and placed a cordon of rangers around the lower end of the pocket and stationed three rangers on top of the cliff.

That evening, no further evidence of the two men having been soon, the rangers who had been out for the past twenty-four hours with no sleep and little water, were withdrawn, leaving a small detachment on the lookout. In the night, the two fugitives worked their way down out of the timber and to the river where they got water, and then walked on up the road to Yosemite Village. Here they stole food supplies from the residence of Mrs. John Wegner by entering the back porch. Then going to the residence of Electrician

S.H. Cookson, they took his Ford roadster which was standing in front of the house and pushed it down the road about 150 yards before starting the engine, Then they got in and started up, making a break for liberty.

As they passed the El Capitan checking station on their way out, Ranger Heim was awakened, and he immediately telephoned to the rangers and reported the car which failed to check out. Ranger George McFarlane at Crane Flat was ordered to stop the car and investigate. Armed with a double-barrel shot gun, he waited until the car appeared and ordered them to stop, They refused to do so and speeded up their car. McFarlane promptly shot the tire off one of the hind wheels and they both ducked and stopped the car. McFarlane ordered them to back up, and one of the men jumping from the machine ran back with a revolver in his hand, threatening to shoot. McFarlane covered him with his shotgun and ordered him to drop his revolver, Which the outlaw did. McFarlane promptly placed both men under arrest and held them until Chief Ranger Townsley came out and got them and turned them over to the sheriff.

The Hudson roadster which they abandoned the first night, was found to have been stolen from the owner D.W. Wallis of Los Banos. They also admitted stealing a Ford touring car near Denver, They gave their names as Ray Foster and Howard Weeks, aged 19 and 18 years respectively, and their residence as Central City, Nebraska.

The boys were prosecuted in Merced County, and given an indeterminate sentence of from one to twelve years,.

The Ranger Service has reason to by proud of the results of this affair, as it developed that these boys had been trailed by the police for a month or six weeks from Colorado to California.

SEQUOIA

Weather

Light precipitation of about one inch fell over the entire park area on the 29th and 30th of September, with snowfall above the 5,500 foot level. Those persons who were camped at the Giant Forest Camp had an opportunity to experience the beauties of a warm mountain snow storm, and all seemed to enjoy it. Many Californians who were there had never before come in contact with a snow storm.

Game

Deer and bear are very numerous and quite tame.

Travel

Travel continued about the same during the month of September. The following are the travel figures:

	Cars	People
Transportation Company		289
Private Automobiles	3,819	27,077
Other travel, trails, all sources	•	2,116
Total -	3,819	29,482

GENERAL GRANT

Because of inability to secure labor, no improvements were accomplished in General Grant National Park during the month of September.

Travel continued heavy throughout the month.

Travel figures follow:

	Cars	People
Transportation Company		142
Private Automobiles	3,335	20,793
Other travel, trails, all		
Sources		412
Total	3,335	21,347

GRAND CANYON

<u>Fish</u>

The following is an excerpt from the report of Acting Superintendent Peters:

"While unable to visit the north rim during September, the Acting Superintendent crossed the Colorado, and made a short trip through Bright Angel Canyon. In this Canyon flows Bright Angel Creek (so named by Major Powell for its contrast to Dirty Devil Creek, which he had named a day or two before).

It is believed possible to stock this stream with trout, unless future explorations prove it to be subject to floods from occasional "cloud-bursts."

In the Colorado and some of it's tributary streams in the Grand Canyon are found the following species of fish:

Bony tail, Humpback or Gila trout (Gila Elegans) Small cat fish White fish or White Salmon Humpback suckers Carp

None of these are game fish and abound mostly in the Colorado itself, making fishing difficult and uninteresting. More extensive acquaintanceship with the Park may result in the discovery of streams suitable for trout stocking, but these streams will of necessity be on the north side of the canyon.

It is believed that at a comparatively small expense an artificial lake could be built near Grand Canyon Village (on the south rim) which would support base and pickerel or other game fish whose existence does not demand fresh, running water. A location for this lake has been tentatively selected and later an estimate of the cost of the necessary dam, excavation and stocking will be submitted."

Travel

The figures below give the travel during September

Persons using public camps	1090
Automobile travelers registering at hotels	240
Travelers arriving by train	3550
Total -	4880

Travel was slightly less in September than in August, and the difference is in the number of campers. This is due to the cold weather and high wind experienced during the last week of the month.

North Rim of Grand Canyon

Mr. John Willy, editor of the Hotel Monthly, made an automobile trip to the north rim of Grand Canyon during September, starting from Salt Lake and going over the Arrowhead Trail as far as Nephi, eighty-three miles; then leaving the Arrowhead and taking the old Marysvale Road, now called the Yellowstone-Grand Canyon Highway, which is the most direct route from Salt Lake City to Grand Canyon. A start has been made to build a concrete highway frog Salt Lake City to St. George, Utah, a distance of three hundred miles, to make the Arrowhead trail between these points one of the best in America.

The road then led through Marysvale and Panguitch, where a side trip was made to Bryce's Canyon, twenty-five miles distant, on a spur from the Yellowstone-Grand Canyon Highway. Mr. Willy reports Bryce Canyon as Grand Canyon in miniature, except that its formations are of infinite variety and carry the semblance of things animate. The colorings are more varied and fascinating than those of any other canyon.

Mr. Willy stayed at the Wiley camp at Bright Angel Point on the north rim. He states in his article in- the October number of the Hotel Monthly that since seeing sunset from Hopi Point on the south rim of the Canyon a few years ago the Grand Canyon has been a magnet to him and has drawn him back for the third time - that it will continue to draw him as long as he shall live.

GLACIER

Weather

During the first ten days of the month a general rainfall was recorded throughout the park. As a result of this rain, the most of the fires were put out sufficiently to enable the superintendent to reduce the crews greatly. The atmosphere was also cleared of most of the smoke, and climatic conditions were generally greatly relieved.

On the 26th slight snow flurries occurred over the western portion of the park. On the east side, however this storm assumed larger proportions and in places as much as two feet of snow fell.

Fish

September second 6,000 black spotted trout fry from the fish hatchery at Glacier Park Station were planted in the waters of Halloway Lake; and on September fourth 8,000 black spotted trout fry were planted in the waters of Midvale Creek.

Due to the approaching cold weather, it was found advisable to close the fish hatchery for the season on September 3d. Generally speaking, the past season has been very successful in so far as this hatchery is concerned - all fry turned out being in excellent condition.

Game

On two or three trips into the remote sections of the park taken during the month of September, the superintendent noticed that all game appeared in excellent condition, especially as regards the deer and the mountain sheep. Large bands of sheep were seen in the Kennedy Creek and Belly River sections and many deer are to be found grazing along the foot hills in the North Fork country. Effort is being made to lay by stores of hay — at the ranger's stations most suitable for feeding game during the winter so that in case of heavy snows, it will be on hand for feeding the game should browse become scarce.

On September first, Mr. E. F, Averill, predatory animal inspector under the Biological Survey, visited the west side of the park and inspected conditions

preparatory to employing one or two hunters to trap predatory animals during the coming fall and winter.Mr. Averill stated that he planned to put at least one hunter at work in the North Fork country just as soon as a competent man could be secured.

With the approach of the hunting season, Mr. Payne thinks it will probably be necessary to employ several temporary patrols on the western and southern boundaries of the park to guard against poaching.

Forest Fires

At the close of the month, all of the fires in the park were practically out, with the exception of one or two guarded by small patrol crews. General showers fell during the first part of the month and again during the latter part - the last rain being followed by snow in most sections. This had tended to practically remove the fire hazard for the remainder of this year.

A small crew has been retained for patrol work in the Two Medicine Fire. The fire is considered practically out in this district inside of the park boundaries, but several spot fires continue to burn on the reservation and it has been deemed advisable to keep the crews in the vicinity for any emergencies.

The total cost of all fires in the park to date has been approximately \$46,000.00. Added to this amount will be certain bills that have not been presented, as well as some additional labor charges for patrol crews that will, probably bring the total cost to somewhere in the neighborhood of \$47,000.00.

Travel

There was a marked decrease in visitors during that part of the tourist season from September 1st to 15th, the total number of visitors entering the park numbering 1010. This number added to the figures previously reported brings the total entrants up to 18,956.

Visitors entering the park up to September 15, close of the season:

via	Glacier Park Transportation Company	441
11	private automobiles	397
II	horseback	1
"	mall stages	60
11	boat from Waterton Lakes Park, Canada	111
	Total	$\frac{101}{101}$ 0

Labor Conditions

Owing to the scarcity of labor and the wages offered for men engaged on all classes of work, it was necessary to make an increase of 40 cents per day on all labor, to take effect October 1st.

YELLOWSTONE

General Conditions

Rain fell in quantities on eleven different days well distributed throughout the month. The total precipitation was equal to 2.51 inches. There was 7.9 inches of snow during the month. The total is about double the average precipitation for the month of September, based on a record of thirty years, and only one September during that time, when 2.85 inches of moisture were recorded, has exceeded this record. The snowfall of 7.9 inches beats the September record for thirty years.

Following a period of three months with scarcely any rain whatever with a consequent epidemic of forest fires of considerable size, this rain and snow were most welcome. But it came too late to mend much of the damage done to the winter range for stock and wild animals, though the grass in the mountains did revive to some extent.

Travel

The heavy travel of the previous months kept up well during September. The season for rail tourists closed on September 20, and hotels, permanent camps, the bath-house at Upper Basin, and the picture shops closed on that date. The general stores at Mammoth Hot Springs and Upper Geyser Basin remained open throughout the month, to accommodate private automobile travel, which continued to the end of September. The total travel for the month, 62,261, is beyond any prediction, and beats any previous year's travel (51,895 in 1915) by about 20 per cent. A notable fact in connection with private automobile travel is that of about 40,000 coming to the park in their own cars, about 25 per cent were from the state of Montana.

The roads in the park remained in good condition to the end of the season, and complaints in regard to them were rarely heard.

Travel figures for the month of September, and for September 1917 and 1918 are shown for comparison in the following tables:

Travel for the month of September

Private	transportation	By rail	Total visitors
Cars	Visitors		
780	2796	1646	4442
400	1876	265	2132
496	1946	1271	3217
	Cars 780 400	780 2796 400 1876	Cars Visitors 780 2796 1646 400 1876 265

Wild animals

The wild animals are all in fine condition. The unusual rains and snow storms brought them down in larger numbers than they ordinarily come in September, and elk, deer and antelope were frequently seen along the road by tourists. Alfalfa hay to the extent of about 470 tons was purchased, the price ranging from \$24 to \$26 per ton in stack near the feeding grounds, to \$32 per ton baled. This, with about 400 tons already on hand will be several times as much as ever before available for feeding wild animals, and it is hoped will be sufficient for their needs.

Bears frequented the hotel and camp dump grounds, and since the hotels and camps closed, and most of their food supply cut off, have become more of a nuisance than ever.

Buffalo: Nothing was seen of the wild herd during the month. The tame herd was kept on the flats on Lamar River and in the adjoining hills. Six calves were born during the month, making a total of 88 calves born this season, of which 50 were males and 38 **females**.

Fish

Fishing was fairly good in streams and lakes away from the automobile roads, although but few take the trouble to go there. A statement was received from the Yellowstone Park Camping Company to the effect that they took a total of 2,164 pounds of fish from park waters to supply the camps. These were taken in June and July, and, of course, were inadequate to supply the full needs. A carload of Rainbow and Eastern Brook trout fry and fingerlings, furnished by the Bozeman, Montana, branch of the United States Fish Hatchery, were planted in park waters during the month.

Forest Fires

On September first fires were still burning in a number of places; but heavy rains had them practically extinguished, and the men who had been fighting them were being returned to their work on roads, telephone lines, trails etc., as rapidly as could be done with the transportation had. No further trouble was given by these fires. Two fires of considerable magnitude broke out the latter part of September.

One of these fires occurred on September 28, high in the mountains, not far from Fawn Pass, between Fawn Creek and the Gallatin River. It was extensive enough to be seen from several miles away, but before the rangers who were sent to locate it arrived there, the heavy snow came on and they did not find it necessary to continue. This fire was remote from any sort of travel, and was doubtless caused by lightning.

Labor and Supply Markets

There was no particular change in the labor conditions in and around the park. Difficulty was still experienced in securing the services of enough men to carry on the work, and the price paid for common labor had to be raised September 12 from \$3.76 to \$4.00 per day, and skilled labor in proportion, in order to keep the men already employed in the park. Agents were sent to Salt Lake City, Utah, and Missoula, Montana, to get men, but they were none too successful. The concessioners encountered the same difficulties, though in their case it was not so important to hold the help, as they were prepared to begin to lay them off as travel gradually dwindled toward the end of the season.

Policies

No absolutely new policies have been adopted, but the policy of permitting dogs in the park under any conditions, and permitting hunting parties to pass through over trails, has been thoroughly discussed from all angles, and orders issued tending to limit these practices to the least possible, necessary to prevent extreme inconvenience, or actual hardship.

Special Visitors

Director Mather visited the park officially from September 8 to September 12, inclusive.

Mr. G.E. Goodwin, Civil Engineer, National Park Service, arrived on September 14 to assist in preparation of estimates of all national parks.

Miss Elizabeth Frazer, writer for the Saturday Evening Post, spent several days in the park, beginning September 14. She was shown all over the park, and visited the Buffalo Farm and the Jackson Hole country.

Mr. Charles P. Punchard, Jr., Landscape Engineer, National Park Service, was in Yellowstone from September 17 to 23, to take up certain landscape features in connection with improvements in the park.

Dr. Nicholas Murray Butler, President of Columbia College, visited the park from September 7 to 10.

The Famous Players Lasky Company, of New York, whose presence in the park was reported in the August report, finished their work and departed.

THE JACKSON HOLE COUNTRY

(By Hon. Clay Tallman)

The Jackson Hole Country is an area of roughly a million acres lying in western Wyoming just south of Yellowstone National Park. In years past, this region has been chiefly known to the outside world as a rendezvous for horse thieves and a place to hunt big game. It is still remote from railroads, and in the winter time is pretty much shut in- it has a telephone connection with the outside, however, and we were informed that during the war the high points in the war dispatches were phoned in, whereupon, the local exchange would, at a given signal, repeat the news to all connecting phones at once. The local residents were interested, too, for this frontier country furnished more than its quota of young men for the war.

In the main, Jackson Hole has been and is now a cattle country, for which it is ideal. In general, it consists of a valley along the upper reaches of Snake River, surrounded by high ranges of the Rockies, chief among which, from the standpoint of scenic grandeur, is the Grand Tetons. At the upper, or northerly end of this valley, is Jackson Lake, practically

at the head of Snake River; the United States Reclamation Service has made this lake into a storage reservoir of over 600,000 acre-feet capacity for irrigation use in southern Idaho; this reservoir is one of the most practicable from the standpoint of capacity and cost of any in the country.

The casual observer would naturally think that such a place as Jackson Hole could present but few administrative problems of difficulties for the State or Federal Government; on the contrary, it presents several, the chief factors of which are the following;

- (a) A proposed extension of Yellowstone National Park to the south, to include the principal portions of the Grand Tetons and a large area to the south and east of the park for scenic attractions, and to afford a natural boundary for the home of the elk.
- (b) A proposed use of Leigh Lake and Jenny Lake at the foot of the Grand Tetons for storage for a Carey Act irrigation project, the use of which lakes for storage reservoirs beyond certain limits might impair their value from the standpoint of use for park purposes.
- (c) Inter-state claims for water for irrigation; there is a possible use of some of the water of the Snake River drainage in Wyoming, but the use thereof may interfere with the water supply claimed and appropriated for use in Idaho.
- (d) The Elk; the last large herd of elk in the United States have their summer range in the Park and adjoining territory and their winter range partly in the area proposed to be added to the park, and partly in the area farther south. It is here that the Department of Agriculture conducts a hay farm to provide winter feed for large herds of elk and thus prevent their destruction by starvation.
- (e) The attitude of the people of Jackson Valley; they are quite generally opposed to the park extension, primarily because they want the territory for open cattle range; they profess to favor the preservation of the elk but not at the expense of their cattle business, either present or prospective.

These are some of the differences and conflicting interests that must be adjusted and harmonized with due regard to the importance of each. Surely the Grand Tetons, towering 14,000 feet high, straight up from a base plane of an altitude of about 6,500 feet, with their perpetual glaciers hanging over the beautiful lakes at the base of the mountains, constituting mountain scenery probably unsurpassed in the United States, should be made open and accessible to all the people; surely the last great herds of elk must be preserved and increased; consistent with these ends, the best utilization of the grazing and water resources should prevail.

(From the Land Service Bulletin)

ROCKY MOUNTAIN

Weather

The weather In Rocky Mountain National Park was generally fair during 5eptember, with frequent showers to heavy rains and one snow fall of four inches, on September $21^{\rm st}$.

Fires

Only one fire was reported this month, in Hallowell Park, caused by fire jumping right of way on new road that is being cleared. About one half acre of brush was burned by the time the park rangers arrived, but the fire was promptly extinguished.

Fish

Fishing conditions have been fair on the eastern and western slopes. The following fish were planted from the Estes Park Hatchery: 50,000 in Fall River; 20,000 in Glacier Creek, 20,000 in Cow Cheek. All were native trout.

Wild Animals

Deer, elk and sheep are coming down from the higher altitudes, and are in very good condition. Many bear have been reported, one breaking into the kitchen at Bald Pate Inn. More mountain lions have been reported this year than ever before. Superintendent Way is making arrangements to get lion dogs and is starting an intensive campaign against predatory animals this winter.

Roads and Trails

The North St. Vrain Road to Lyons was opened to travel on September 10th, and on that date the Big Thompson road was closed to traffic, and work was begun on double tracking, which is expected to be completed by June 1,1920.

Work on the Fall River Road has progressed very satisfactorily, but it is expected that weather conditions will soon put a stop to this work.

Travel

There has been a gradual falling off of travel during the month, the latter part of the month seeing practically the close of the season. The figures for the month follow:

					Autos	People
For	week	ending	Sept.	7	380	3374
11	"	11	II .	14	478	2363
II	11	11	II .	21	475	2365
II	11	11	II .	28	149	803
					1782	8905

Checkers were not employed after September 26. With two or three exceptions the hotels in the Park were closed at the end of the month.

MESA VERDE

Weather

Very little rain fell during the month of September, and the roads

are in very good condition.

Archaeological Work

Dr. J. Walter Fewkes, Chief of the Bureau of Ethnology, Smithsonian Institution, who has done a great deal of archaeological work in the Mesa Verde National Park and other historic ruins of the southwest, has finished his work for this year; but he expects to return to Mesa Verde early in the summer of 1920. Square Tower House is nor in fine shape and the trail to reach it is safe for all. The ruin is a fine one and attracts much attention. A very old type of building was unearthed on the mesa above Square Tower House and Dr. Fewkes considers it one of the most valuable finds, from an archaeological standpoint, that has yet been made. He calls it Pit House A, and says it represents the earliest type of building yet discovered in that section of the country.

Travel

Tourist travel fell off during the month of September, though weather conditions were very goody.

The number of people visiting the park during the month was as follows:

Tourists	in	private cars	305
II .	in	C.R. Beer's cars	45
II .	on	horseback	4
		Total -	354

WIND CAVE

Travel

There were 860 visitors to the Cave during the month of September, 213 of them coming with the transportation concessioner and 647 coming by private conveyances. This is nearly three times the number of visitors handled in the month of September 1918, and exceeds by 102 the number conducted through the Cave in June of this year. This heavy travel for the month eras beyond all expectations, as September is generally a very poor month for visitors. An unusually heavy run of tourists for October is expected.

Wild Animals

The bird life of the park does not appear to have been molested. Grouse are very plentiful and quite tame.

Skunks are becoming very numerous and are quite a peat. Five or six were shot or trapped during the month.

HOT SPRINGS

Dr. William P. Parks, superintendent of the Hot Springs Reservation reports that the patronage during the month of September exceeded that of the same month in any preceding year. The total number of visitors is conservatively estimated at 9,860.

The average number of persons bathed daily at the Government Free bath house during the month was 302, a slight decrease from the number bathed daily during August.

New Truck

The new two-ton Nash Quad truck has been equipped with a new bed, and will be put in commission during October, which will greatly facilitate the work of distributing gravel over the mountain roads.

PLATT

Weather

September was the only month during the year when they did not have more than an inch of rain.

The park is experiencing an early fall. Usually the month of September is considered one of the warmest months of the year there, but this year it has been cool enough for fires on some days.

New Fountain

Superintendent Ferris sends in the following report:

"Relative to the fountain near the Bromide, I desire to say that a citizen of the town who brought in a fine well producing mineral water which seems to be a combination of the Bromide and Sulphur, and which is just outside the park limits, entered into a five-year agreement with me to furnish an inch flow for a fountain in the Bromide park. The citizens furnished the greater part of the pipe and I agreed to build the fountain, which has been done. It is comprised of a large circular cement basin with a revolving spray in the center which lets the water go from the pipe into the basin. This is quite an attraction in this portion of the park and is much appreciated by visitors."

Elk and Buffalo

Mr. Ferris also reports that the citizens are preparing to meet the expenses of transporting the elk and buffalo from Yellowstone National Park and from the Wichita Forest Reserve, and that he has been getting a pasture ready to receive them.

CASA GRANDE NATIONAL MONUMENT

Weather

The weather was fairly good over the southern part of Arizona during September. The roads are in normal condition and more than the usual amount of fall and winter overland tourists are expected.

Travel

During the month of September there were 363 visitors and 138 automobiles in the Casa Grande reservation. This number compares well with the same month last year when there were 117 visitors and 50 automobiles - almost three times as many this year. It also compares well with August, when there were 264 visitors and 152 automobiles. The cooler weather prevailing in September helped to raise the number of visitors; but the increase over the same month last year shows that the monument is getting more widely known.

TUMACACORI

Travel

The number of visitors to the Tumacacori Mission during September was well up to the average.

Preservation of the Church

Custodian Pinkley still hopes to secure an appropriation for the roofing of the mission before the winter sets in.

ZION

Wild Animals

Game birds were seen in abundance on the western rim in September, particularly blue grouse.

Deer are also frequently noticed on the upper plateaus of the monument, with plenty of signs of them on the Valley floor. Utah has an open season on deer from the first to the tenth of November, and Custodian Ruesch fears that hunters will reach within the boundaries of the monument in their search for game. He will, therefore, keep a sharp lookout during the hunting season.

Travel

During the month of September there were 213 visitors registered in the monument.

Among them were Mr. Robert Sterling Yard, secretary of the National Parks Association, and Mr. Herbert Gleason, special inspector of the Department of the Interior, Both of them were most enthusiastic over the beautiful rock formations and their varied coloring.

PERSONAL NOTES

Director Mather returned to the Washington office about the middle of September from his official visit to the parks. He was much pleased with his inspection and greatly enjoyed the trip.

Mr. Ralph Linton, of Harvard University, Dr. Fewkes' assistant during this season's excavations in Mesa Verde National Park, Colorado, was a recent visitor to the Smithsonian Institution. Mr. Linton called to examine the several collections made by Neil M. Judd., curator of the division of American Archaeology of the Smithsonian, in western Utah and to gain information that will enable him to compare a newly discovered adobe ruin ["Earthlodge A" - Nusbaum 2-2-53] in Mesa Verde with others of similar construction uncovered by Mr. Judd.

News Items

If anything especially interesting for the news happens in your park or monument, please let us know about it. Address your communication to the Director of the National Park Service, "National Park Service News". It will help the Service.

(1548)

DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE NEWS

No. 6 November and December 1919

To the members of the National Park Service:

Some poet once said something about the best-laid plans of mice and men oft-times going wrong. Only I think he used the words "gang agley." So it was with our November issue of the NEWS. We mere so busy that we laid it off from day to day, and suddenly the holidays were upon us with the December issue becoming due. The November issue, however, will not be omitted. Instead we are combining both in one. Our editor is now working on the January number, which gill reach you more promptly.

This brings me to what I wished to cover in this number. The great bulk of the items in the NEWS is gleaned from the information transmitted in the monthly reports of the Superintendents and Custodians. We want the NEWS to be a live and snappy sheet, full of information that will not only be interesting but useful, not only to those in the field but also in the Washington office. What we would like is to have each Superintendent and Custodian, bear this in mind, and send in to us interesting items that can be edited and made available. The editor will give you a paragraph regarding this in the January NEWS.

There will also be a paragraph on a new feature we are installing in the Washington office. It consists of a file of detailed information on every park and monument, available at a moment's notice, not only for the men in the field but for the hundreds of thousands of people who are continually making inquiries about the history, characteristics and other features of our great scenic possessions.

ARNO B. CAMMERER

Acting Director.

ROYAL VISITORS FROM BELGIUM

King, Queen and Crown Prince Visit Yosemite and Grand Canyon.

Eat Luncheon Under the Big Redwoods, Climb, Ride

Horseback. and Enjoy the Great Outdoors.

During their recent visit to our country their Majesties the King and Queen of the Belgians and the Crown Prince spent a few days in two of our national parks - - Yosemite and Grand Canyon. Accompanying them were the American Ambassador and Mrs. Brand Whitlock and some fifty others. Superintendent Lewis's report of the Yosemite trip follows herewith:

"In accordance with instructions I proceeded to Santa Barbara, arriving there on Sunday, the twelfth of October, where I got in touch with Mr. J. M. Nye, Chief of Special Agents, Department of State, and who is in charge of the party, and made quite definite arrangements with him for the proposed visit. The arrangements made were that the party would reach El Portal at nine a.m. on the 15th, proceed to Yosemite Village and thence around the floor of the Valley, returning to the Sentinel Hotel for lunch at noon. It was then planned to drive to Glacier Point in the afternoon spending the night there and visiting the Mariposa Grove of Big Trees on the following day, returning to El Portal for departure from there at six o'clock that evening. This schedule was followed out exactly as planned with the exception that some sixteen members of the party, including the King and Queen, made the trip from Yosemite to Glacier Point on horseback rather than by automobile, and the Crown Prince instead of going direct to Glacier Point from the Valley, was outfitted with a camping outfit and camped over at Bridal Veil Creek on the Glacier Point Road on the night of the 15th.

The party consisted of about sixty people including twelve servants, the principal members of the party in addition to the King and Queen and the Crown Prince, being the Count D'Oultremont, Adjutant of the Court; Baron de Cartier de Marchienne, Belgian Ambassador of the United States; Countess Chislaino de Charaman-Chimay, lady in waiting to her Majesty; Lieutenant General Baron Jacques, commander of the 3rd Division; Colonel Tilkens of the General Staff, aid de camp to his Majesty; Lieutenant of Cavalry Goffinet, Officer of Ordinance to His Majesty; Lieutenant Colonel Nolf, physician to their Majesties; Max Leo Gerard, secretary to his Majesty, and Charles Craux, secretary to her Majesty; and the American representatives consisting of Brand Whitlock, American Ambassador to Belgium, and Mrs. Whitlock; Major General William M. Wright; Rear Admiral Andrew T. Long; Colonel Patterson, aide to General Wright, and Jefferson Gaffery, Secretary of the American

Embassy

The train was somewhat late in reaching El Portal but the party started for the Valley shortly after ten o'clock and proceeded to and around the Valley as per schedule, taking in the various points of interest including the fish hatchery at Happy Isles, (in which, by the way, we have had about 20,000 golden trout which had just been received from the State Fish and Game Commission), and the lion and bear cages. In these latter Majesty was particularly interested and appeared to derive a considerable amount of pleasure in having an opportunity to go into the cage and pet the California lion. In fact all through the trip the Queen was particularly interested in the animals and trees and flowers, rather more so perhaps than in the scenery. Mr. Punchard accompanied the Queen's car and it is needless to say she kept him pretty busy answering questions. Lunch served promptly at noon at the Sentinel Hotel and by half past one the party had started for Glacier Point, the King and Queen and some fourteen or fifteen others choosing to go by horse back over the Short Trail. On this trip and also after reaching Glacier Point the King's particular interest seemed to be towards climbing, and at Union Point spent considerable time climbing up and down the rather dangerous cliffs at that point.

At Glacier Point, in spite of the fact that up to three days before the arrival of the party the hotel had been closed and everything completely dismantled and stored away, by the time the party arrived here it had all the appearance of having been continuously open and everything was in first class shape. Considerable credit is due to Mr. Farrow and Mr. Bell for the promptness with which they reopened the hotel and had everything ship shape and ready for the guests. The only thing to mar the stay at Glacier Point was the water shortage, the supply giving out to the extent that it was impossible to get water above the first and second floor of the hotel. This, however, was not serious and did not in any way seem to detract from the party's pleasure.

Promptly at 8:30 on the morning of the 16th the party proceeded to the Mariposa Grove where a picnic lunch was served at 12:30. The lunch prepared at the Sentinel Hotel left the Valley for the Grove at 7:00 in the morning and at the Grove Mr. Sovulewski and Ranger Lloyd took charge of making the coffee and seeing that everybody was well served. The entire party seemed deeply impressed with the Big Trees, the King time and again remarking that they were the most wonderful thing he had ever seen.

Leaving the Big Trees promptly at two o'clock, a few minutes stop was made at Wawona and the King's car reached El Portal at exactly 5:30. I made the stop at Wawona more or less for political reasons and to satisfy the

Washburn people who I know felt somewhat slighted because the party did not stop for lunch instead of going to the Big Trees. This, as a matter of fact, was my original plan and was given up solely at the special request of the King, made to me at Santa Barbara that a picnic lunch be served at the Grove. This feature I explained to the Washburns and having had, nevertheless, the opportunity to personally meet the King I believe all were quite satisfied.

Twelve automobiles including my own were utilized for transporting the party and on each of the principal cars I placed one of our men, Mr. Punchard on the Queen's car, Ranger Hall on that of the Crown Prince, Ranger Wegner on that of the American and Belgian Ambassadors, and I drove the King's car myself. On the trail trip from Yosemite to Glacier Point Ranger Wegner and Lloyd and myself accompanied the party while Ranger Nelson took charge of the camping party of the Crown Prince, and on the second day, as before stated, Mr. Sovulewski and Ranger Lloyd looked after the matter of preparing the lunch in the Big Trees. At the Big Trees Ranger Rich who is stationed on patrolling duty there also gave every assistance to the party. I tried to get Rangers Skelton and Boothe into the Valley for the occasion also but was unable to get in touch with them in time, both being far out in the mountains at the time. Too much credit cannot be given all of the men for their efforts. Every man was assigned a particular work to do and in no case was there an instant's delay, everything going off like clock work, and not only the King but Ambassador Whitlock and many others of the party time and again commented on the efficient and courteous manner in which the men acted on all occasions.

Equal credit is due Mr. Farrow, Mr. Sell, and Mrs. Cook in the very efficient way in which they handled their part of the program, everything working smoothly at all times absolutely without delay or confusion. A party of that size is generally unwieldy to handle and I never have seen one handled with less delay and confusion than was the case in this instance. To be sure when it is considered that these twelve cars traveled between 1800 and 2000 miles without a moments delay for repairs, we must recognize that luck was with us. Nevertheless all of the rest said still holds."

From Yosemite National Park the party proceeded to the Grand Canyon National Park, where the Belgian colors mingled with the American flag in waving a welcome. We will let Acting Superintendent Peters tell the rest of the story -

"When word was received of the intention of the Royal Party to spend October 18th at Grand Canyon National Park, full preparations were made for their comfort and entertainment. I immediately got in touch with Mr. J. M. Nye, Chief Special Agent of the Royal Party, as did Mr. Brant, Manager of the El Tovar, and Mr. Nye through Mr. Brant, asked that arrangements be made as simple as possible and only the plainest of food served, and that they desired to see as much of the Grand Canyon as possible in the short time.

I, then, with Mr. Townsley's help, drafted the enclosed suggested program, which I handed to Mr. Nye upon his arrival. These suggestions were adopted and the program followed without change, except that during the afternoon the Crown Prince accompanied by Ranger White made a horseback trip along the rim from Village to Hermit's Rest, and between five and six, the King and his Court Adjutant accompanied by Ranger Townsley and myself, walked down the Bright Angel Trail to a point about seven hundred feet below the Rim. I believe this was the hour of the day most enjoyed by his Majesty. He is an enthusiastic walker and nature lover, asked for the names of all the flowers noticed on his walk, and was with difficulty restrained from climbing a thirty foot limestone cliff.

At Grand View Point Their Majesties required a complete geological history of the Canyon and took several pictures of the wonderful view this point affords. They asked many questions and took great interest in everything pointed out and explained. The entire party climbed down the trail a short distance to "Suicide Rock" and spent probably a half hour there. On the return trip "Thor's Hammer" was visited. Returning from Grand View an informal reception was held in the El Tovar and many of the local people as well as other distinguished guests were presented to the King and Oueen.

Luncheon was served in the El Tovar dining room.

During the Hermit Rim Drive stops were made at Powell Memorial, Hopi Point, Mohave Point and Pima Point. Tea was served at the Hermit's Rest and the Royal Party driven back to the El Tovar arriving at 4 P.M.

At 4:05 P.M., through the courtesy of Manager Spencer of the Hopi House and "Jimmy" Swinnerton, the cartoonist, an Indian Dance was held, at the conclusion of which, I presented, upon his Majesty's request, "Big Jim" second Chief of the Hava Supais, who received the honor with exactly the dignity and sang froid to be expected from one ruler of men, greeting another.

After the Indian Dance a visit was made through the Hopi House, at the conclusion of which the walk down the Bright Angel Trail was made.

Probably the most enjoyable part of the day was the evening trip to Hopi Point to view the sunset. Favorably, a few dark clouds on the western horizon made the necessary cloud reflections and the Canyon filled with a deep purple haze. I had had some fear of delaying the Royal Party beyond their schedule departure, but they only left when the last reflection was gone and the Royal Special did not depart until 8 P. M., one hour late.

Just before the departure His Majesty decorated Ranger Marbois with the Belgium Croix de Guerre with palm, and presented to Rangers Townsley and White the Order of Leopold, and to me, The Order of the Crown. His Majesty thanked me for the "efficient arrangements and splendid program" and was pleased to comment favorably upon our "fine organization of mounted rangers". The entire Royal Party displayed much interest in the work of the Service and many references were made to the enjoyable day spent in Yosemite.

About two thousand people visited the park on this day.

Too much credit cannot be given our Rangers for their display of courtesy and efficiency, and I wish especially to commend Rangers Townsley and White for their invaluable assistance and advice.

Messrs. Brant, Hubbell and Spencer cooperated with me splendidly and deserve much credit for the success of the visit."

It was a pleasure to receive those reports; the team work and cooperation of all gave a thrill and inspiration to the Washington office, and also brought the assurance that our field forces are ever ready for any emergency - even to entertaining royalty.

YELLOWSTONE

Weather

Most unusual weather conditions prevailed hero in October, and the month was one of severity. Except far one or two brief periods the temperature was below normal for the entire month. Midwinter conditions prevailed the latter half of the month, with almost daily snowstorms. The storm of the 22-23rd which yielded 15 inches of snow was not only unprecedented for October but with the exception of January 18, 1895, it is the greatest amount of snowfall for any one storm in 32 years' record, while the total for the month - 26.6 - is nearly 20 per cent greater than the normal for January, the month of the heaviest snowfall.

Travel

All roads were passable up to Oct. 22, but travel was light and consisted principally of concessioners making improvements to camps, hotels, stores, etc., in the upper park. A few tourists entered, and there were a few hunting parties enroute to Jackson Hole, Wyo. or Henry's Lake, Ida., who were permitted to pass through with their automobiles, sealed firearms and trophies, as this was the nearest route and sometimes the only thoroughfare.

Labor and supply markets

Because of uncertain weather and depletion of funds there was no demand for labor or purchase of supplies during the month. The concessioners who had begun improvements and repairs report the price of building materials as excessive, which with the present high price of labor makes building almost prohibitive, at the present time.

Wild animals

The storms of the month placed the elk herds in the gravest peril. The grass on the ranges was stunted and burned during the past summer. By October 28 several hundred head of elk had left the park, most of them going out in the vicinity of Crevice Gulch. Many of them were killed immediately upon leaving the park boundary. Acting Chief Ranger McBride reports that there are now approximately 3,000 head on Crevice Creek which will probably leave the park. Two large herds left the park at the mouth of Bear Creek. In order to stop the drifting of the elk out of the park the feeding of hay was begun. The worst feature of this drift of the elk is that all of the animals that are not killed by hunters, who came from all over the state of Montana, will probably starve to death, as there is no food for them in the forest north of the park. The range in the Absaroka National Forest was almost destroyed during the summer drought, and what little grass was not burned was eaten by sheep and cattle. The Forest Service is without funds to provide the necessary patrols for protecting the elk in the Absaroka National Forest. It is probable that between

1000 and 1500 head of elk had left the park by November 1. Montana game wardens were among the first to come to Gardiner for the purpose of killing elk and deer.

Bears have gone into winter quarters. The usual herd of mountain sheep came down to Gardiner Canyon after the storm.

Policies

A policy inaugurated during the month provides that no game meat shall be brought into the park for consumption there.

Special Visitors

A.C. Lucier, International Film Service, on October 7, to get moving pictures of tame buffalo during process of vaccination.

GLACIER

On October 20 snow began falling in many portions of the park and by the close of the month the storm made it necessary to close down most of the work. Indications are that a severe winter has begun, with a depth of 6.5 inches of snow.

Forest Fires

All fires were out by the 10th of the month and the crews returned to road and trail work.

Trails.

A small crew was engaged in maintenance work on the Lake McDonald East Side trail during the greater part o: the month. This represented practically the only trail maintenance work done during October.

YOSEMITE

Roads

By the end of the month maintenance work had been stopped on all of the roads in the park except the El Portal Road, the roads on the floor of the Valley and a few days work necessary to complete the ditching of the Wawona Road. All outside road work has been discontinued until Spring. On account. of the cold weather in the high country the

erection of the road house and barn at Eleven Mile station have been postponed temporarily.

Travel

During the month 724 poisons entered the park, of which 254 came in 83 private automobiles, and 470 by automobile stage. These figures compare favorably with former years, but the snow storm near the end of September did much to curtail private automobile travel. The September storm instead of damaging and closing the roads as most people expected, improved them greatly, and during October they were as good as at any time during the season. This together with the cool weather made October the best month of the season for automobile travel.

Fish.

On October 11th a shipment of 24,000 golden trout was received from the Fish and Game Commission. After staying at the hatchery for two or three days the fish were taken to the small streams and lakes on the north slope of Mount Clark and planted.

<u>Animals</u>

During the month, under the supervision of Ranger Adair, assisted by Rangers Lloyd and Nelson, some 700 pounds of poison barley were distributed to exterminate ground squirrels, as they had grown so destructive. The work was not confined to any one part of the Valley but distributed from Mirror Lake to Pohono Bridge with gratifying results.

MOUNT RAINIER.

Weather

The first snow of the season fell at Longmire Springs and the Park entrance on October 22, followed by several more storms during the month. At Longmire Springs the fall for the month was 2 inches, at Narada 8 inches and in Paradise Valley 24 inches. There was but seven clear days during the month. Maximum temperature, 74, minimum 20.

Travel.

During the month there were 383 visitors to the park, being 136 more than for October 1918. For the entire season the number is 55,038; the 1918 total number is 44,018, an increase of 11,020, representing an increase of 25 per cent.

General

The Superintendent's headquarters were moved from Longmire Springs to the Park entrance on October 21.

Paradise Inn was closed to visitors on October 8.

October is the month of open season in the state of Washington, and park rangers were kept at Carbon River, White River and Ohanapocosh stations to patrol the park and prevent hunting. Beginning October 12 permits were refused for carrying firearms through the park. More deer have been killed in this vicinity than for several seasons past, as they have been driven out of the park by early snows. Superintendent Toll thinks that in order to protect the deer which are in the park during the summer season, a game sanctuary should be established for several miles in width on each side of the park, This strip should include moat of the winter grazing grounds of the deer. Under present conditions game will never become plentiful enough to be frequently seen by visitors or become a feature of the park.

ROCKY MOUNTAIN

Weather.

The weather was variable; rather stormy for the season. Snowfall was 30 inches; temperature maximum 66, minimum 10.

Roads and Trails.

The Big Thompson road has been closed to travel on account of reconstruction work. All the other approach roads with the exception of the South St. Vrain, which was closed to all but horse travel because of snow, were open for travel.

Travel

No accurate record of visitors was kept, but the estimated figures are, automobiles 70, passengers 300.

Wild Animals.

Deer were seen frequently along the Fall River road along Mill Creek road, in Tuxedo park, on Deer Mountain and in the Wind River Basin. Comparison of records and reports kept by one of the rangers show that the fall migration of birds was from one to two weeks earlier than usual.

HOT SPRINGS

Estimated travel into Hot Springs during October was 9,752. The average number of persons bathed daily at the Government Free Bathhouse was 268. Heavy rains during the month retarded maintenance and improvements.

SEQU0IA

The mean temperature at Giant Forest camp during the month was 52.1; there was about a half inch of rainfall accompanied by snow in the high altitudes.

Travel up to the 15th held up fairly good. The total number of visitors for the season is 31,822; the number of private automobiles 3,876. Deer and bear were very numerous and in excellent condition. The park was officially closed on October 10.

GENERAL GRANT.

The park was officially closed on October 10. Visitors for the season were 21,815; number of automobiles 3,376. The mean temperature at the park headquarters for the month was 51.2, which is about normal.

WIND CAVE.

General.

There were 242 visitors to the Cave during the month, 163 coming by private conveyances. This is an increase over the corresponding month of the past three years. Skunks gave a little bother, but the trap and shot gun were exterminating them. Ducks and other water fowl stopped a few days enroute south.

Weather.

On October 18 there was an unusually heavy snow for the season, about 2 feet falling during the night, accompanied by a thaw which made the roads nearly impassable.

PLATT

Rain during the month exceeded that of any month since the

local bureau was established. As the total rainfall since January 1, 1919 was nearly 39 inches, it revives the hopes that Antelope and Buffalo Springs may resume their flow, as they have been dry since January 1918.

Superintendent Ferris has contracted with a local citizen to furnish an inch flow of mineral water for a fountain in Bromide park. The citizens of Sulphur furnished the greater part of the pipe, and the superintendent built the Fountain. It has a large circular cement basin with a revolving spray in the center which, lets the water go from the pipe into the basin. This is quite an attraction to that portion of the park and is much appreciated by visitors.

The citizens are preparing to meet the expense of transporting some elk and buffalo from Yellowstone National Park and from the Wichita Forest Reserve, and Superintendent Ferris is preparing pasture for them.

GRAND CANYON

During most of the month of October the weather on the South rim was cool and clear, this probably being the most pleasant month for visitors throughout the year. On the. North rim several snow flurries occurred and one snow storm closed the north rim in the vicinity of Bright Angel Point with a fall of 2 feet. One severe rain and sleet storm on the South rim completely obscured the Canyon for three days and badly damaged the Desert View road.

Travel.

There worn 4,471 visitors to the Canyon during October, of which number 1,111 came in 340 automobiles. Two public camps were maintained during the month, one near Grand Canyon village, and the other at Grand View.

Labor and Supply

Labor and supply are still the most difficult problems confronting the park management. For a few days work was almost at a standstill. A thorough search of neighboring towns brought some results, but with the completion of harvests and roundups the situation was expected to improve.

Forest fires

There was one small fire during the month, but it was put out before any damage was done. It probably started from locomotive sparks.

CASA GRANDE RUIN

The following excerpts from a letter recently received from Mr. Frank Pinkley, Custodian of Casa Grande Ruin, Florence, Arizona, who is also in charge of the Tumacacori National Monument, is worthy of notice:

"I arranged for a special visit for twenty-four High school pupils from the Florence Union High School this month (October). They are working in the early history of Arizona and I had two hours with them here at the ruins, dealing with the early civilization of this and the Salt River Valley. The idea was that they would not only have this as a history class but would handle it in the English course too, writing a description of the visit. It is possible that I will make a week end visit with this same class to the Tumacacori National Monument. It would take about three days to make the trip. It will be well worth the trouble involved if we can arrange it, for we could camp over night in Tucson, and I could arrange a talk at the University by the President end the head of the museum, thus giving us quite a lot of indirect advertising. I could also arrange for the High School pupils of Nogales to come out the same day end join us at the Mission, and thus keep up the interest down there, for I think the Nogales paper mould play it up for us.

"The matter of our museum here at the Casa Grande received quite a boost this month when our Director donated \$210 for the purchase of the McGee collection of prehistoric pottery and current Indian baskets and pottery I expect to install it in the Custodian's residence, and I can undoubtedly increase the interest of the visitors to the ruin by using it to illustrate talks on design, decoration, etc. I have had one visitor promise me his collection of Arizona material as soon as my museum building is ready to receive it. He said the State and County had asked for it at different times, but ho wanted to the United States Government where he knew it would be well cared for. I think there are many other Arizona citizens who may reason the same way."

THE DENVER CONFERENCE

National Park Superintendents and Representatives of National Park Utilities "Talk Shop" Together For Several Days.

[No. 6a]

November 1919 in the National Park Service will be marked with two important events - the National Park Conference, and a new national park, The new park - Zion by name - is introduced to you on another page.

The conference was held in Denver November 13th and 14th, in Rocky Mountain National Park the 15th and 16th, and again in Denver on the 17th and 18th. Most of the day of the 17th was spent in inspecting Denver's mountain parks and the foothills of the Rockies from 13 to 50 miles west of the city.

From every standpoint the conference was a success. It was purely a working conference, which made it particularly advantageous to the park officials attending. There were no set speeches and no attempts to carry out a prearranged program. The most pressing problems confronting the field service were brought up and discussed from various angles, and the concessioners, or as we prefer to call them, representatives of park utilities were given an opportunity to state their views on any problem confronting them.

Aside from the solution of several important problems affecting the administration, protection and improvement of the national parks, the conference was beneficial to the Service for the reason that it brought all of the responsible field officers of the Service together on a basis of friendship, and the result of this personal contact will be evident for a long time to come.

The superintendents and others present showed a deep interest in all that the Service is doing. It was gratifying to note that even when opportunities were presented for the superintendents and other officers to attend amusements they preferred to make the most of every moment by discussing park problems. They could be seen about the hotels in groups exchanging views and making notes at all hours after the official conferences had adjourned.

The City of Denver was very hospitable and gave more attention to the conference than any other city where these gatherings have been held in the past. Three luncheons were tendered to the visiting superintendents and representatives of the business interests - one on November 13th by the Denver Tourist Bureau, the second on November 14th by the Denver Civic and Commercial Club, and the third on November 17th by these same organizations. The trip to Rocky Mountain National Park and the tour of the Denver mountain parks was made possible through the generosity of the Rocky Mountain Parks Transportation Company, of which Mr. Roe Emory is the president and general manager.

Among those present who were neither park officials or representatives of park utilities were M. A. L. Thurston of Honolulu, owner of the Commercial Advertiser; Col. John R. Fordyce, Hot Springs, Ark.; Mr. W. C. Fordyce of St. Louis; Major W. A. Welch, general manager of the Palisades Interstate park, New York; and H. H. Hunkins, manager of the Western Lines Bureau of Service, National Parks and Monuments, of the U. S. Railroad Administration.

The Director, at the close of the conference at Denver, visited the new Zion National Park, and also the Bryce Canyon region, which is a short distance northeast of Zion park.

A NEW NATIONAL PARK ESTABLISHED

Zion in Utah makes the Nineteenth in the Federal System.

Zion National Monument is now Zion National Park. President Wilson on November 19th signed the bill which places this area of 76,800 acres or 12C square miles in the same class of scenery as the other national parks, of which there are now nineteen. It is located in southwestern Utah ,about 100 miles from the station of Lund, on the Los Angeles and Salt Lake railroad, and can be reached in less than six hours by automobile.

Zion National Park, which was formerly Zion National Monument and before that called Mukuntuweap National Monument, is a canyon more than fifteen miles long and varies in width from fifty to 2,500 feet. It has been described as a rainbow of the desert, and by some is considered more marvelous and beautiful than the Grand Canyon. The early Mormons chose this valley for a refuge and called it Little Zion to distinguish it from Zion, by which name Salt Lake City was called at that time. So remote was it from the usual lines of travel that not until 1909 was it brought under the protection of the Federal government as a national monument.

Each national park has it individual characteristics. Zion's is diversity.

Every angle and turn presents a new picture, a calm green vista or a riot in color, in fanciful outline. Within the park are several canyons, spectacular and different from each other. There are lofty mountains sheltering fertile valleys; cliff dwelling ruins telling

of a bygone phase of civilization; sites where heathen deities were worshipped; hidden trails, unexplored regions and unread geological volumes; natural bridges of great size and beauty - the work of millions of years of erosion; walls covering thousands of square feet of smooth surface on which are sometimes found fantastic designs - domes, temples, columns, and even animals and birds, as though painted or carved. Other walls appear as a vast expanse of brightly striped satin hung up against the sky. This is the region which Major Powell, the noted explorer of the Grand Canyon sighted in the 70's, and which the famous artist Moran and others tried to tell of on canvass. So weird and brilliant were both the word and oil paintings that for many years it was thought that Powell's and Moran's enthusiasms ran away with their veracity.

This country which contains. much of historic interest, and still retains old Mormon customs in the prosperous villages, has recently become better known through the efficiency of Utah's good roads. By the cooperation of the Federal and State Government a section has been opened up to the world that will rapidly take its place with the Yellowstone, Yosemite, Mount Rainier, Grand Canyon and Glacier National Parks as a scenic marvel.

Custodian Ruesch is in charge.

For Protection of Spanish Mission Ruins.

President Wilson has signed the proclamation enlarging the Gran Quivira National Monument, in New Mexico, from 160 acres to 560 acres. This was deemed necessary to save this most important of earliest Spanish mission ruins in the Southwest from vandalism.

The School of American Research has in the past done much to protect these ruins, for purposes of scientific study and the inspection of the public. The first 160 acres of this monument were sot aside by presidential proclamation in November 1909. This enlarged area also contains some Pueblo ruins.

YELLOWSTONE

Weather

The extreme weather conditions that characterized October as a record-breaking month continued with somewhat less severity during the first two weeks of November. With the exceptions of 1896 and 1911, it was the coldest November in 32 years. There was less than the normal amount of snowfall, but the wind and sunshine were about the average for November.

General Conditions.

Acting Superintendent Lindsley reports that the elk and deer continued to leave the range during the month. The tame buffaloes gave much trouble by breaking away from their range, and the tendency of all the wild animals in the park seems to be to go down to the lower grounds, because of the severe winter conditions and lack of forage.

There was no demand for labor in the parks as all improvement work carried on from the superintendent's office stopped in October. Supplies such as building materials used by the park utilities representatives, were scarce and high priced. Coal was also scarce. Alfalfa, needed for the wild animals was limited in supply and high in price. About 380 tons were purchased during the month at \$25 per ton in the stack. From 300 to 500 additional tons will be needed before spring for the herds of elk; but neither the alfalfa nor the funds for it appear to be available at present.

No road maintenance work was done during the month with the exception of removing loose rock from the Gardiner Canyon road. Nine snowshoe cabins in various parts of the park were supplied with rations and blankets for the winter. To accomplish this a boat was used between Lake Outlet and the Upper Yellowstone for the cabins in the southeast corner, as the snow was too deep for pack animals.

The ranger force was busy along the north line of the park patrolling to see that the many hunters kept on the outside, also in feeding hay to the elk and other wild animals. Both the patrols and the feeding have to by kept up constantly, every day including Sundays.

The state of Montana extended its open season in Park county to December 25, because last year it happened that there was no bad weather to drive the elk out of the park so as to make good hunting, until after the season closed, and but few got their winter's meat. This fact, together with the early winter, has resulted in a slaughter that is only rivaled by the stories of the "old timers" of the slaughter of buffalo on the plains in the early days. Hunters era coming in numbers by every train, and the outgoing trains are loaded with hunters and dead elk, which are shipped by express and which have required extra cars to handle nearly every day

since the slaughter began, the latter part of October. The residents of Gardiner, and ranchers for 20 milts down the Yellowstone Valley, are reaping a rich harvest, as trucks, automobiles, teams, and even saddle and pack animals (for occasionally a real sportsman comes along who is desirous of going to the mountains for his elk instead of shooting it from an automobile) are in great demand for hauling hunters out and hauling elk carcasses in to the depot. Good money is also made boarding the hunters, and some of them even pay for a guide rather than to take a chance of getting over the park line, or on the wrong side of the Yellowstone River into the Montana State Game Preserve. The crowds arc composed of men of all types and professions - farmers, lawyers, doctors, merchants, etc. and frequently women hunters are also in the field. Some of them have to be told which end of the gun to load, and the difference between elk and deer. One of the current jokes is that a man shot a stray mule and had it skinned and one foot cut off before a neighbor came along and told him it wasn't an elk.

A popular method of hunting is for a number of hunters to lie in wait until a band of elk, consisting of mothers with last year's calves, spike bulls, and occasionally an old bull with them, comes across the park line; then they surround the band of innocent animals which are so tame that they will follow a team looking for hay, and shoot promiscuously into the bunch until they all drop or a few sometimes got away badly wounded. Then each member who participates in the fusillade claims an elk, or two, if he has paid for special license for the second one.

These depredations, while not witnessed personally by Acting Superintendent Lindsley, were reported to him by several persons who claimed they had seen it. Chief Ranger McBride estimates that about 3,500 elk have been killed along the north boundary since the hunting season opened. He bases his estimate upon data from the Express Company, and information he has picked up among the hunters. That many elks are wounded and not taken away is shown by the fact that about 50 have strayed back to their home in the park and died, and of coarse there must be many elk wounded that have not died, nor been found.

The State Game Warden of Montana has several deputies stationed in the vicinity of the hunting grounds, but the state law is said to be so broad that :any one can get an elk within the law, with but little difficulty, and it now looks as though the slaughter would keep up until the last day of the season, as elk are still leaving the park in numbers. Park rangers a arrested four men during the month for hunting in the park. They plead guilty, were fined and made to forfeit their rifles to the United States.

GRAND CANYON

Weather

November weather here was delightful; the nights were crisp and frosty, the days almost balmy. As an example of pleasant weather it was possible to picnic in the pine woods, cook supper and stay out long after sunset. This at an altitude of 7,000 feet, in mid-November. Old residents say that such mild weather often prevails until Christmas and that they have picnicked on the South rim on that day. However, on November 26th the great blizzard which visited the west struck Grand Canyon, bringing the temperature below zero. After three stormy days the weather cleared and the combination of sunny days and snow covered pine forests was delightful.

Travel

Travel by rail and automobile continued fairly heavy. Many transcontinental tourists make Grand Canyon a stopping place during the months when the roads from Flagstaff and Williams are passable, from about May 1 to November 30. More would come by automobile but for the execrable condition of the only roads reaching the Canyon and which run from Flagstaff (86 miles) and Williams (64 miles). It is stated that at the height of the motoring season it is not uncommon for over 100 transcontinental cars to pass through Williams in one day, and less than half of those visit the Canyon. Many of those transcontinental tourists travel in families. The adventurous spirit of the ox-team days still remains, for among the month's travelers to the Grand Canyon was an eight months old baby from West Virginia, making the trip with an automobile party. During the month until the arrival of the blizzard, 2,815 persons, from thirty states, Canada and Mexico, had visited the Canyon. The number of automobiles entering was 180, representing 32 manufactures. The majority of those travelers came from Iowa, Illinois and Ohio.

Birds, Wild Animals and Fish

There is reason to believe that with proper protection wild game, in past years rarely seen on the South rim, may become abundant. There is evidence that it was formerly plentiful there. Mountain sheep and antelope which at one time were abundant, are now rarely seen. The reason for the diminishing of the latter is the wild burros, which eat all the food and are a general nuisance.

Other Matters of Interest.

A camp was established at the mouth of Bright Angel Creek on the north side of the Colorado and christened "Tram Camp". The only means of crossing the Colorado at this point heretofore has been on the single cable, 300 feet from cliff to cliff, and 60 feet above the tumultuous river, which breaks into rapids just below the cable. Rangers cross this cable by sitting on a small board slung from a pulley

and then hauling on the cable hand over hand, an arduous and rather dizzy experience.

From Tram Camp several parties of rangers have worked along the Kaibab trail up Bright Angel Creek to the North rim. This usually involves about 3 hours hiking in icy water knee deep, as the creek is confined in a box canyon for several miles. Above the canyon the creek emerges into a pleasant valley, which affords magnificent views of the buttes and temples and cliffs of the Grand Canyon and tributary crayons. This trail to the North rim has been practically abandoned for several years. Its development to afford free travel across the Crayon from rim to rim is one of the interesting problems facing the Park Service.

Provisional signs have been painted and erected along the Kaibab Trail, heretofore unmarked.

Foot Trails.

An important need in this park is the development of foot trails in the woods and in the canyon near Grand Canyon village and hotels. Abandoned or unmarked trails to attractive spots within a few hundred yards of the postoffice have been discovered by rangers. One short trail leads to the entrance of Hermit Rim road and to some ancient Indian pictographs painted and carved on the canyon walls. Because no deterrent signs have boon posted iconoclastic tourists have written or served their uninteresting names on the pictograph rocks. Fine bold Indian drawings in red on the yellow lime rock have been erased so that John Smither-Jones of Springfield, Califlorida [sic] might record his momentous visit to the Grand Canyon. Steps are being taken to stop such vandalism.

MOUNT RAINIER

There was a total snowfall during November of 18 inches. On the 30th there was a depth of 4 inches at the Park entrance, and 38 inches at Paradise Valley. Longmire Springs had 7 inches, Glacier (terminus of Nisqually Glacier) 14 inches, and Narada 21 inches. Maximum temperature 51; minimum 16. There was no travel during the month, the road between the park entrance and Tacoma being closed for six months for the widening of what is known as the Canyon road.

GLACIER

Weather

Extreme cold weather for the time of year was experienced in nearly all regions of the park, the temperature varying from 58 on the 22d to 11 below on the 27th. There were seven snowstorms, the one on the 10th becoming a blizzard on the west side of the park, making a total snowfall of 16.5 inches.

General Conditions

Notwithstanding that Flathead River froze from shore to shore at Bolton, Lake McDonald is still open for navigation its entire length. Losses of horses and cattle have boon reported on the Indian reservation just east of the park, and if the winter becomes very severe and the snow gets deep, feeding of the game in some parts of the park trill become necessary to prevent starving. A number of deer have been seen on the road between Bolton and Fish Creek and they appear in fine condition. Reports on the east side of the park show the game to be in good condition despite the early winter and severe weather. Fishing was excellent in the upper end of Lake McDonald and also in the lakes in the North Fork country.

YOSEMITE

During the month 304 visitors entered the park, 87 of whom came in 28 private cars, 212 by stage from El Portal and the remainder (5) walking or driving. This is a larger number than the average for November, and most of the visitors remained from four to seven days. In consequence the Sentinel Hotel was busier than ever before at that time of year, from 35 to 50 guests being accommodated daily up to the and of the month.

Weather

The weather was extremely mild. Toward the and of the month there was some fear of forest fires because of dryness, but on the 26th snow fell throughout the park area, - three foot at Glacier Point and four or five inches on the floor of the valley. The telephone switchboard and telegraph were in operation continuously throughout the month.

ROCKY MOUNTAIN

Weather

The first half of the month was fair and comparatively mild, the other half snowstorms and cold. Snowfall for the month was 30 inches, for the season to November 30th 72 inches. This is very much above the record of last year and perhaps 50 per cent above the normal snowfall for this date. Temperature, maximum 61, minimum 13 below; daily average 30.8. Total travel for the month vas estimated at 150 persons.

Roads and trails.

All entrance to the park are closed with the exception of Lyons road. All roads between the park boundaries are closed to automobiles; Fall River road open to horses and vehicles as far as the Fish Hatchery; Moraine Park road open to horse drawn vehicles as far as Moraine Park postoffice; Longs Peak road open to horse drawn vehicles as far as Long Peak postoffice, and practically blocked by snow beyond. A heavy snowfall on the 26th and 27th followed by hard winds and drifting snow rendered travel even on horse back difficult.

Wild Animals.

Deer were seen frequently. One was found killed by a mountain lion, on the Moraine Park road about three miles out of the village. Sheep are numerous ground Sheep Lake, Mary's Lake and the Fish Hatchery. Elk in small numbers hove been seen and heard on Deer Mountain. All animals seen were reported in good condition. A few pheasants have been seen.

SEQUOIA

The mean temperature at Giant forest camp during the month was 52.2, which is about normal.

California State highway engineers surveyed between Three Rivers and the west boundary of the park at the Mt. Whitney Power & Electric Co. road entrance on the Middle Fork of the Kaweah River. Construction of this highway is one of the projects that was provided for in the State bond election on July 1, 1919.

The bears are hibernating. Deer are most abundant near Hospital Rock and Clough Cave, as the autumn rains brought wild food there in abundance. Frequently 150 deer may be soon at either of those places.

GENERAL GRANT

Persons numbering 22,743 visited this park during the season, and 3456 automobiles entered.

The mean temperature at park headquarters during the month was 49.17, which is about normal. Rainfall was about a half inch. Ten miles of road have been surfaced and water ditched constructed preparatory for winter storms.

HOT SPRINGS.

The deeds for the site of the new bathhouse have boon recorded, and this completes the transfer of this ground to the United States. This land which is the gift of Hot Springs citizens to the government for a free bathhouse, is nearly opposite the eastern end of the Army and Navy hospital area.

The estimated travel to Hot Springs during the month was 12,156. Among the month's visitors were Senator Kenyon of Iowa, and Col. Wm.

Jennings Bryan. Each delivered addresses on Americanism in the Auditorium, to crowded houses.

PLATT

A new rustic rock fountain top over Big Tom Spring replaces the old enclosure damaged by a flood several years before. This work was done by Mr. Forest S. Townsley, a former ranger in the park, and is appreciated by both the park employees and the citizens of Sulphur.

Rainfall during November was 3.86, making a total since January 1, 1919 of 42.60. The mean temperature for the month was 48.

Laborer Milligon dispenses the waters of the Bromide, Medicine and Dosium-Chlorid Springs to visitors to the springs, and has charge of the pavilion from which these waters are taken. His record shows the number of visitors to those springs during November to have been 4,347, and that those people took from the springs a total of 2,020 gallons of Bromide water, 431 gallons of Medicine, and 238 gallons of Sodium-Chlorid. He shows that there were shipped 485 gallons of Bromide water and 80 gallons of Medicine, making a total number of gallons of all the waters removed from the springs during the month, 3,254.

WIND CAVE

Road and weather conditions account for the slump of visitors to this park during November, as there were only 38. The general weather conditions of the west for the month prevailed here. Heavy storms, short thaws, cold snaps, and drifting snows, made the roads impassable, and kept the park practically snowbound for the entire month.

MESA VERDE

Road work on Chapin Mesa was completed and the road is now in good condition to drain when the snows melt in the spring. During the first half of the month the weather was fine.

The deer in the park are in fine condition and despite the loss by predatory animals are not decreasing in numbers, but they are not increasing as they should. One late tourist, a man from Japan, was delighted to see three deer on the road at the head of Big Soda Canyon. Unafraid, they allowed the car to approach them, so he could see the beautiful creatures at close range.

Coyotes are numerous, fat and fearless, and show only curiosity at the intrusion on their domain. Tho mountain lions, although quite numerous, keep away from the roads and are rarely seen.

Total visitors for the month, 29.

News Items

If Anything especially interesting for the news happens in your park or monument, please let us know about it. Address your communication to the Director of the National Park Service, "National Park Service News". It will help the Service.

PARK SERVICE NEWS

DEPARTMENT OF THE INTERIOR National Park Service Washington

[No.7] January 1920

To the Members of the National Park Service:

I am glad to send greetings to all members of the National Park Service, both in Washington and in tile field. We are very busy at Washington laying our plans for the coming season, which promises to break all records for travel to the national parks.

Plans are row under way for the construction of a rangers' clubhouse in the Yosemite Valley. This will be the first building in connection with the new village development in that park, and will give the rangers the comfortable home they so well deserve. This structure, which will cost over \$20,000, should be ready for occupancy by the beginning of the tourist season when the work of our rangers becomes most active. During my visit to the Yosemite, in late December and early January, the rangers prepared a surprise in the shape of a fine toboggan slide, of which we all took advantage; and with their assistance I was able to give my guests from San Francisco a most enjoyable time during their short stay.

After an interesting visit with Superintendent Fry, at Visalia, and talks on the work of the Park Service at Fresno and Los Angeles, I spent two days It the Grand Canyon National Park, putting in about thirty miles on horseback on the trails, and attending to park business. The dedication of this park will be held the lest part of April, and it is our intention to have this event made an important feature of our year's program. I have been much impressed with the possibilities of the Grand Canyon as a great recreation ground. When we have developed a comprehensive system of trails in the Canyon proper there will be far greater opportunities to visit the many wonderful sections of this great gorge.

Yours very truly,

STEPHEN T. MATHER

Director.

TWO NEW NATIONAL MONUMENTS.

One in Nebraska, the other in Colorado.

Twenty-four in All.

During December two national monuments were added to our system. On the 12th of the month an area of 2,053.83 acres in western Nebraska became Scotts Bluff National. Monument. It combines scenic attractions and historic values. The Oregon Trail, the Mormon Trail, and the principal line of the Overland Trail; the Concord stages, and pony express of Buffalo Bill, are some of the romantic features of its history. As a "landmark" and rendezvous Scotts Bluff was used by thousands of immigrants and frontiersmen. Here was the danger spot of the "Fort Leavenworth and Fort Laramie Military Road." One of the pony express riders of those exciting pioneer days, one of Buffalo Bill's competitors, was a Cliff Cole, who one day after a scuffle with some Indians rode into "Scottsbluff station" with nine bullet holes in his body and seventeen through his clothing.

Scenically, Scotts Bluff was also worthy of national notice and preservation. Each summer hundreds of persons make the difficult ascent to its top, and from its elevation of 4,662 feet see six towns nestled in the North Platte valley, and many miles of irrigated acres of alfalfa, grain and other crops. This promontory and the hills adjoining on the west are the highest known points within the State of Nebraska. In frontier days it was called the Gibraltar of Nebraska, Dome Rock, visible for many miles in each direction was a signal station for the Indians, and later for the pioneers.

Yucca House National Monument

One week later -- December 19 -- Yucca House National Monument was created. These ancient ruins are located in the foothills of Sleeping Ute Mountain, on the edge of Montezuma Valley in Colorado, a few miles west of Mesa Verde National Park. The area contains what has been known locally as the Aztec Springs Ruins, which is historically interesting as being one of the first ruins in that area to be described. They consist of the remains of two great structures known as upper and lower house, and numerous smaller buildings, once forming an extensive village inhabited by prehistoric people.

The land embraced within the monument, approximately ten acres, was donated to the United States by Mr. Henry Van Kleeck of Denver, Colorado. The name Yucca House was selected after consultation with authorities of the

Smithsonian Institution, as being more appropriate than Aztec Springs Ruins, a namo which implies an erroneous theory of a relationship of the ruins with the Aztecs of Mexico. The Indians of Montezuma Valley called Sleeping Ute Mountain by a name meaning Yucca, which they gave to it on account of the abundance of the yucca plant which grows on the mountain sides. The superintendent of Mesa Verde National Park will be the custodian of the now monument.

A NEW PUBLIC BATHHOUSE

The site for the proposed now government free bathhouse at Hot Springs, Arkansas, is now the property of the United States government, absolute title to it being convoyed late in November.

This is a gift of the citizens of Hot Springs for the purpose designated-government free bathhouse. The site is across Reserve Avenue from the Reservation and nearly opposite the eastern end of the Army and Navy Hospital area. A portion of the land had been granted by the United States to the city of Hot Springs for "public use" as highways, under an act dated Juno 16,1880, and was deeded back to the government.

Most of the structures on this ground have already boon removed, so that construction will begin shortly.

THE DIRECTOR'S TRIP

Director Mather has returned to Washington from a western trip. Shortly before Christmas he left Washington for San Francisco where he met by appointment a party of California business men, who accompanied him to Yosemite National Park where they spent two days enjoying the winter sports and discussing park improvements. He also spent several days in Los Angeles where ho addressed the Los Angelus Chamber of Commerce on improvement plans for Yosemite. Mr. Mather also spent two days at Grand Canyon.

THE SLAUGHTER OF THE ELK

The last largo herd of American elk is in peril of extermination. The fight is on for its very existence. Unless speedy and effectual help is forthcoming this noble American animal may be known to future generations only through museums and textbooks.

The danger is from weather and the rapacity of man.

This herd of elk -- one of the nation's most precious possessions roams in Yellowstone National Park. During the past summer it numbered probably 40,000 animals, divided roughly into equal groups on each side of the Continental Divide. They remain contentedly in the highlands of the park until the heavy snows collect, when the northern herd goes down toward the park boundary and often beyond the park border in search of grazing spots. For the same reason the southern herd drifts south and east, into the Jackson Hole country adjoining the Yellowstone park.

For the past three summers Montana and Wyoming have had severe droughts, the 1919 drought being the most serious in the history of the northwest. Added to this calamity winter arrived in Yellowstone park earlier than usual. The first days of October brought the elk down on the winter range nearly two months ahead of the usual migration. On October 22nd and 23rd the worst snowstorm in 32 years raged, the fall being from 15 inches to 4' feet, with the mercury below zero. The storms continued to sweep, throughout November and December. The elk drifted in all directions in search of food, leaving the boundaries by thousands.

The story of the destruction by man is a sadder one. Of the elk in the park on October first, it is estimated that 7,000 had boon killed and wounded up to the night of December 24th, when the Montana hunting season closed. The several previous winters had been so mild that few elk had wandered from the park; so last year the Montana legislature lengthened the hunting season for elk several weeks. This combined with the exceptional early and severe winter contributed to a killing that made Park County resemble a slaughter pen. In their excitement the hunters forgot even the Montana law, which limits the kill but does not prohibit the shooting of does and fawns. Men fired by valleys, heedless of law or sportsmanship. The elk being accustomed to tourists had no fear of men. They would approach the hunters -- or rather "shooters" -- as a friend might, and would oven follow wagons looking for food. This misplaced confidence resulted in carloads and trainloads of carcasses being shipped from the Gardiner railroad station. The coal shortage, however, which brought suffering in its wake to so many, had a tendency to lessen the slaughter, because train service and shipping accommodations had been curtailed. But the slaughter of the elk continued until the last hour of the game season, in Montana.

There is enough hay on hand to feed the remaining elk until March 15th, but 200 to 300 tons additional are needed to carry them through the winter. No funds with which to purchase such hay are available. The superintendent of Yellowstone Park believes that \$8,000, if placed at his command without delay (alfalfa is now \$38 per ton, undelivered) would guarantee the preservation of the animals now left. Deficiency estimates have boon submitted to Congress to meet this emergency. The southern herd is being cared for as far as possible by the United States Biological Survey. Over 1200 tons of hay have been purchased so far, the Yellowstone Park road maintenance funds having to be used in the emergency.

P.S. Since the above was written Congress has granted funds in the deficiency bill reimbursing the superintendent of Yellowstone Park for his expenditures for hay, and to permit of the purchase of additional hay to tide the elk over the winter.

A LANDMARK FOR AEROPLANES.

Mr. Frank Pinkley, custodian of Casa Grande and Tumacacori National Monuments, says that Casa Grande is on the air route between Tucson and Phoenix, Arizona and that this may later be of use to the United States.

The main house of the ruins has a corrugated iron roof, 50 by 70 feet, and dark red in color. He points out that by painting a white cross or some other location emblem on this roof, it could be seen by the occupants of an aeroplane for many miles, and thus Casa Grande Monument would become known as a guide mark on the Phoenix-Tucson leg of the El Paso-Los Angeles air route. The road through the monument runs diagonally from the southwest to the northeast corner, and with slight modifications could be used for a landing field, as it is cleared about 100 foot in width and is quite level.

THE BURRO PROBLEM IN GRAND CANYON NATIONAL PARK

The thousands of wild burros in the Grand Canyon national park have become a nuisance, and the question as to how they may be done away with has come up for discussion and decision. In the most traveled section between Grandview Trail and Hermit Trail it is estimated that there are no less than 2,000, while herds from five to twenty are frequently seen on the Tonto Trail. Those now wild burros are descended from domesticated animals turned loose in the Canyon to graze. They have inbred and exhausted the food supply so that the stock has deteriorated, and is now too small for domestic use.

Acting Superintendent Peters of Grand Canyon Park states that from the park standpoint the damage they do comes under the three following divisions:

- (1.) They denude the Tonto Plateau and tributary canyons of all food for animals so that the government and others must now carry feed in a country formerly abounding in wild grasses and herbage.
 - (2.) In similar manner they drive out door, antelope and mountain sheep.
- (3.) They trample down the trails and make many false trails which mislead any but experienced guides.

The reduction, if not extermination, of these animals presents a peculiar problem in that all the national parks are sanctuary for wild life, except predatory animals -- and a burro can hardly be called that, no matter how we may stretch the imagination. The acting superintendent has asked for authority to shoot, corral, or otherwise dispose of them.

Dr. E. W. Nelson, chief of the Bureau of Biological Survey, is in favor of exterminating these burros, but his bureau cannot undertake the work of such destruction.

OUR NEW CENTRAL INFORMATION FILING SERVICE

A file has been established in the Service at Washington under the able personal charge of Miss Peltz, which it is hoped will fill a long felt want. It is proposed to gather and here file in easily accessible form every bit of information possible regarding the attractions characteristics, history, etc. of our various national parks and monuments.

Every week brings an important inquiry for this or that information which oftentimes takes hours to find, and again often cannot be found at all. As an example, it wasn't many weeks ago that a large film concern working on some very interesting national park materiel wanted certain information regarding Indian lore of two of our parks for captions for their pictures. We finally got some of it by delving into books at the Library of Congress, but it took a long time. Again, only during the past week a prominent public speaker scheduled to be the chief speaker at the National Parks banquet in Now York City next month, wanted information regarding the commercial and economic aspects of national park work. We got some data for him, but there must be a great deal we didn't get. So we want these files to become the lexicon of what the parks show in every way -- history, flora and fauna, roadways, local interest, bibliography, camps and camping, sports of every description, what other countries are doing, what other scenic material is available

outside our parks, city parks and state parks of prominence, in fact everything which at some time may have a value, and be available at a moment's notice for you and for us, and for the public.

Therefore, please keep your eyes open, and when you run across something that may fit into this file and which you would like to have filed as of some possible future use, send it on. The Service considers this file of such importance that a special letter will be sent to every superintendent and custodian to keep wide awake for such data.

And when you send it in, address it to the Information File, National Park Service. Keep your file up to date!

WINTER TRAVEL TO THE PARKS

Notwithstanding an early and severe winter, travel to the accessible parks was gratifying. Hot Springs, which naturally leads in the number of winter travelers, cared for 11,637. Grand Canyon entertained two special parties — one of 127 which arrived in special coaches, and the other which was a convention of the Bankers' Life Insurance Company, and numbering 357, gathered from all parts of the country, arrived by special train. The total number of visitors in this park for December is 3,884, an increase of 1,069 over November's figures. Platt follows with a record of 3,418; Yosemite, 244; Mount Rainier, 148; Rocky Mountain, 83; Zion and Wind Cave each 15, and Yellowstone 9. On December 28th a party of 125 mountaineers arrived in Mount Rainier Park for their annual winter visit. The monthly average of visitors to Tumacacori Mission during the fall and winter has been about 300; in December travelers from eighteen states and Hawaii signed the visitors' register.

A CHANGE IN NAME.

The name of the western entrance to Yellowstone National Park, known as Yellowstone, Montana, has been changed by the postal authorities to West Yellowstone, Montana, to avoid further confusion with the name Yellowstone Park, the Wyoming headquarters at Mammoth Hot Springs.

REDUCING THE FOREST FIRE MENACE

Glacier Park reports that during December four oil burning engines were installed on the Great Northern Railroad and are making the run from Essex to the Summit. Ten more engines of this type are to be added as soon as they can be equipped. If the use of those engines is continued during the summer

months it will greatly reduce the forest fire menace along the railroad. The coal-burning engines with their heavy trains, and heavy grades, increase the danger from sparks, falling live coals and wind.

VIOLATIONS AND ARRESTS

A man from Jackson, Mont. was tried before U.S. Commissioner on December 1st, charged with hunting in Yellowstone park. Ho was fined \$25 and costs. Ranger Burton Reese had made the arrest. On the following day a man from Laurel, Mont. was tried for killing an elk in the park. He was fined \$100 and costs, and made to forfeit his rifle as required by law. Chief Ranger McBride made this arrest.

Government property on which there are no wild animals was no obstacle to a young man with a gun at Hot Springs Reservation. He tried his marksmanship on a signboard in the vicinity of the Gorge, and after mutilating it pleaded guilty, and was fined by the Commissioner.

A decision in the case of a violation of rules and regulations governing Glacier Park, heard in the Federal court at Great Falls on December 12th, will be handed down during the January term.

SHIPMENTS OF EIGHTY ELK

Elk from the Yellowstone park herds were shipped in December to three points -- 12 to the City Park of St. Louis, Mo.; three to Platt National Park, Sulphur, Oklahoma; and sixty-five to the Palisades Interstate park, New York. The latter were caught and shipped under the direction of Mr. Howard Eaton, who accompanied the shipment. The second day after the arrival of the elk at Platt park, one of them died, but the others seem to be doing nicely, and are a constant delight to the public. Due to the intense cold enroute, a number of those shipped to the Palisades Park also died.

RATE OF FIR TREES' GROWTH

A Douglas fir, measuring 5 ft. 6 in. in diameter, fell recently across the road between Park Entrance and Longmire Springs, in Mount Rainier park. This tree is typical of the largo firs in that part of the park, and must have been a sapling of 100 years or more when Columbus discovered America. Its length was 180 feet, but as the top had been previously broken off at a point where the trop was 18 inches in diameter, its original height was much greater. The distance from the ground to the first branch was 105 feet.

Superintendent Toll reports that an examination of the annual growth rings of this tree indicates a definite rate of growth, which may be considered typical for that elevation (2,500 ft.), and gives an idea. of the time that would be required for reforestation.

The probable rate of growth is as follows:

Age	of	tree,	1	ft.	in	diameter	25	years
			2	ft.	"	11	69	II .
			3	ft.	II	11	103	II .
			4	ft.	11	II .	168	11
			5	ft.	II .	11	332	11
			6	ft.	11	II	633	11

This indicates an age from 1,000 to 1,200 years for the largest trees along the Nisqually Road, which are 8 foot in diameter. On December 30th, another fir, about 3 feet in diameter, fell across the road and temporarily blocked it.

WINTER SPORTS IN THE PARKS

Winter sports in the national parks are becoming increasingly popular. People are learning that some of the parks arc quite as enjoyable in their winter offerings as in their summer allurements.

On December 28th a party of 125 mountaineers visited Mount Rainier for their trip. Most of them wont on foot from Ashford to Longmire Springs and spent the night there. The following morning they walked to Paradise Inn and stayed there until January 1st. The time was occupied with trips to Sluiskin Falls, the saddle of Pinnacle Peak, McClure Rock, and with snowshoeing, skiing and tobogganing. Superintendent Toll and Ranger Flett accompanied them. On December 31st, a party of four men, including the Superintendent, made the trip to Camp Muir (elevation 10,000 ft.) partly on snow shoes. Tracks of martin. weasel and other animals were noted up to an elevation of about 7,200 feet, but above that no signs of life were seen. The mountaineers left the park on January 1st, most of them walking from Paradise Inn to Ashford, a distance of 18 miles. Snow shoes were not needed in reaching Paradise Inn; the depth of snow at that point was from two to three feet.

Among the several large parties visiting Yosemite park during the month was Director Mather with a party of prominent Californians, on the 27th and 28th. A Christmas-tree entertainment was hold in the new schoolhouse, and two days were spent in skiing, tobogganing, and discussion of plans for improvements in the park. The Sentinel hotel reports an unusually large business during December, and especially during the holiday season.

Weather conditions in Rocky Mountain park during November and early December were so inclement that winter sports there were later than usual. The Colorado Mountain Club is arranging to again hold its winter carnival at Fern Lake, either February 20-23 or the week following.

Other parks that are entertaining winter travelers, although the snow and ice sports are missing are Grand Canyon, Platt and Hot Springs.

A NATIONAL PARKS BANQUET

On the night of February 7th the Far Western Travelers' Association will give a banquet at the Hotel Astor in New York City, the entire evening to be dedicated to the national parks. Covers will be laid for over 2,000 guests. The banquet room and foyer of the hotel will be transformed into veritable bowers -- scenes from the various parks being in mind as part of the decorations. But the outstanding triumph of the affair will be the presentation to each guest of a splendid souvenir book on our national parka.

This banquet is merely an effort on the part of a bunch of whole-hearted men, farsighted and patriotic, who are going ahead on definite lines to push the national parks idea home to our tourists.

Among the guests of honor will be Director Mather, Asst. Director Cammerer, Horace M. Albright, superintendent of Yellowstone National Park, and W.B. Lewis, superintendent of the Yosemite National Park, the latter two now in the east; Robert Sterling Yard, executive secretary of the National Parks Association, and Charles Moore, chairman of the National Commission of Fine Arts. It was hoped Secretary Lane could attend, as the chief guest of honor, but he was unable to promise his presence.

Speakers for the evening on national park subjects are Hon. Huston Thompson, Federal Trade Commissioner; Bainbridge Colby, and Wilton Lackaye.

Details of the banquet will be given in our February NEWS.

THE MONTH IN THE PARKS

YELLOWSTONE

Weather

December was anything but a normal month. The mercury reached 31 degrees below zero, on the 9th, and 30 on the 13th, the previous December record for cold being 25 degrees below, which was in 1900. The monthly mean temperature was 15.4 which is 6.2 below normal for December. A lower mean temperature has been recorded but twice -- 12 degrees in 1910 and 1916. The total snowfall of 27.7 is greater than for any other December on record except 33.9 inches in 1916 and 60.6 inches in 1899. The high winds caused much drifting of snow, and the wind movement was considerably above the average for December, while the sunshine remained about normal taking the month as a whole. Even the precipitation which was 2.13 inches was 0.31 above December's normal. The severe weather occurred mostly during the first half of the month, following the severe storm of late November.

The Coal Shortage

While the park had enough coal to tide it over to the end of the coal strike the residents of Gardiner were not so fortunate. After securing permission from the Service a delegation of Gardiner citizens opened a vein of coal located 60 feet east of the main road in the lower and of Gardiner River Canyon, about a mile west of the northern entrance. Its products have done little to relieve the coal shortage. It is light, slacks so easily that it is hard to burn, and its value has thus far been less than the cost of the work.

Animals of the Park

The special report on the elk will be found on page 3. There are now 412 tame buffalo, one having died early in December. Three hundred and eighty-five of those are being fed hay at the buffalo farm, the rest being scattered. The antelope are fed daily with the elk, near the northern entrance. Ono small band of about 35 insists upon remaining outside of the park, where they seem to fare well and are not molested. About 250 were counted on the feeding grounds. About 50 deer were fed with the elk near Gardiner, and the same number near Mammoth, They are in good condition and are seen in other parts of the park, not all of them coming in to be fed. Eighteen mountain sheep wore seen on Mt. Everts, and seven in the vicinity of Tower Falls ranger station. Moose were observed near West Yellowstone. Many coyotes were seen and signs of wolves have been noted.

Miscellaneous

Ranger Skinner is collecting and preparing specimens for the park museum, also collecting and filing literature for information bureau and museum; this in addition to his regular work as a ranger when his services were needed.

Picture shows were held weekly at the Post Exchange at headquarters, under the cooperative arrangements of employees and residents of Mammoth and Gardiner, Mont. There was a community Christmas tree in the Post Exchange on the night of the 23rd. Church services were held every Sunday in the chapel.

GRAND CANYON

Weather

During the first part of December the weather was cold and disagreeable. Snow fell almost every day until the 10th, 16 inches in all. The latter half of the month was delightful, the days being cool but sunny and clear, and the nights crisp and frosty. The maximum temperature was 65 and the minimum 12 degrees below.

Approach Roads

Acting Superintendent Peters is of the opinion that this park does not receive more than 25 per cent of the transcontinental cars passing through Williams and Flagstaff, owing to the execrable condition of the entrance roads from these towns. He states that Coconino county lacks the money and interest to put these roads in shape, and that at his suggestion, the more public spirited business men of Williams have pledged themselves for various sums for improvement of the Williams road next spring. About \$2,000 had been promised up to January 1st, and others not being able to subscribe money have pledged several days work with teams, trucks, etc. In addition, a good roads day is to be announced, "upon which the entire male population of the town and its environs expect to work on this road". It is believed that, if this work is carefully planned and directed the Williams entrance road will be in shape through next season; in that case the portion of the park attendance arriving by automobile should increase appreciably. Continued efforts will be made during the winter to induce local officials and citizens to place the entrance roads in good repair for next season's travel.

Wild Animal Life

A herd of over thirty head of deer was seen on the Tonto Plateau beneath Isis Temple on the north side of the Colorado River. Several deer were seen and tracks noted in the forest on the South Rim within a mile or two of Grand Canyon village. During the past two months some effort has bean made to attract and care for birds and small animals, particularly the Kaibab squirrel, said to be peculiar to the Coconino Mesa. The usual tourist to this park is keen to see the desert vegetation -- the yucca, "our Lord's candle", the graceful lluvia d'oro clinging to some sheer cliff, the brilliantly flowered

cacti, or the astringent red sap of the sangre de dragon. Mr. Peters thinks that visitors would also be interested in the small animals if they know about them.

One of the most noticeable features of these animals is their almost complete abstinence from water. The large cinnamon colored rock squirrel lives by preference in the rocky niches near the top of talus slopes. There is evidence to show that he never gets more than a few hundred yards from his home, and yet the nearest water-hole may be many miles distant. Antelope, in spite of their swiftness, range when undisturbed over a comparatively small area, usually dry, and evidently derive their only moisture from the brush they eat. Speaking generally, the animal life in the Canyon seems more fierce elsewhere, probably due to the difficulty of even slightly subduing the everlasting hunger that desert animals seem to endure. Even the usually fierce rattlesnake is supplemented by the "sidewinder", smaller, faster and more dangerous in that ho strikes without first coiling; while the skunk which in other places pays strict attention to a skunk's business, unless disturbed, is prone to attack one when sleeping out. Foxes, coyotes, mountain lions and cats are rather abundant. Rabbits are on the increase on the mesas.

Bird Life

Bird life is quite abundant. During his three days' visit in December, Prof, Swarth of the University of California, listed twenty-six varieties. Occasionally the visitor may see the remarkable road runner. He is built for speed and quickness, and has doubtless lost his power of flight, for even when pursued will not take the air. His diet consists of the gray rock lizard (the "swift" of the East), with occasionally a scorpion or horned toad. These birds are particularly protected, because it is believed that they kill rattlesnakes.

Exploration of Cave in Horseshoe Mesa

Exploration of the limestone cave under Horseshoe Mesa has begun. It is reached from the Grandview Trail, is easily accessible, and although quite small at the entrance the cave at once becomes quite spacious. The floor is very irregular owing to deposits fallen from the top. Should the explorations result in finding extensive underground formations, readers of the NEWS will be given further details on this cave in the Grand Canyon.

Miscellaneous

Preliminary survey for a rim road from El Tovar to Grandview was pushed. A total of 547 miles was covered by rangers on patrols. Automobile traffic on the Hermit Rim Road is now under control; barriers have been erected to keep large touring cars from dangerous spots, and owners of private machines have boon forced to conform to schedule. Patrols were made to Indian camps on the South Rim, and foot trails along the Rim and in the woods were kept open. Owners of dogs in Grand Canyon have been listed and warned to keep them in yards or chained up. During the month rangers mot the incoming trains to give visitors

information and guidance. This service seems to be appreciated by the public.

YOSEMITE

Weather

The mild weather during the month melted the snow rapidly, leaving only patches on the north side of the valley. On December 31st there were 23 inches of snow at Glacier Point, and seven in the valley.

General

The rock walls of the approaches to Stoneman bridge were finished during the month. All that remained to be done was to complete the fill on the approaches. This bridge is receiving a great deal of favorable comment from visitors. A clubhouse and dormitory for the park rangers is now a certainty having been made possible by generous contributions from a group of prominent California business men for that purpose.

MOUNT RAINIER

Weather

An unusually cold spell was experienced during the weak from December 7th to 14th. A temperature of zero was recorded at Park Entrance and seven below at Longmire Springs on December 12th. Both of these are lower then the previous minimum temperatures. During the seven years that weather observations have been kept at Longmire Springs the previous minimum temperature recorded was 4 degrees below zero. At Paradise Valley temperatures of 8 and 7 degrees below were recorded on December 11th and 12th. Plumbing was frozen in most of the occupied buildings. The remainder of the month was moderate, with little snowfall. On December 15th there was 62 inches of snow at Paradise Valley, and on the 31st 34 inches.

Patrols

Superintendent Toll and Ranger Flett made a trip from Longmire Springs, to Indian Henrys Hunting Ground on December 20th, returning next day by way of Tahoma Creek. Tracks of mountain goat, coyotes, and other animals were seen. A colony of beavers was found on Fish Creek. The trail bridge across Tahoma Creek, just below Tahoma Glacier, has been completely washed out by high water.

Travel

For the your 1919 -- January 1st to December 31st -- 55,186 people visited the park, using 11,754 automobiles. The figures for 1918 are 44,177 people and 9,291 cars, an increase of 11,009 or 25 per cent. During December there was no private automobile travel, as the road to Tacoma is closed for construction work.

GLACIER.

Weather

Extremely low temperatures prevailed in all parts of the park during the first half of the month. At headquarters the minimum was 34 below recorded on the 9th, and the maximum 49 above, recorded on the 25th. Moderate weather prevailed during the last half of the month. Lake McDonald was frozen over during the first half of the month but is again open. Extreme low temperatures were reported from the several stations -- from 30 to 45 degrees below zero.

Chief Ranger Dorrington reports that on the night of December 16th the east side of the perk was visited by a terrific wind and snowstorm. No damage was done to government or hotel property, except to the telephone line. Nine freight cars were blown out clean from a freight train which was crossing a bridge three miles west of Glacier Park station. He also reports that cattle standing in a barn at Lubec were frozen to their hockjoints, and sheep took refuge under the chalets, as many as fifty in a bunch. On the adjoining Indian reservation there were enormous losses of cattle and horses during the severe weather.

ROCKY MOUNTAIN

Weather

A period of over two weeks of constantly warm, dry weather made a break in a winter otherwise unusually severe. The eight weeks, from about the middle of October to the middle of December, brought long and frequent storms, extreme cold, and heavy snowfall. The week of December 8-14th broke all records for extreme, long-continued cold. On December 8th and 9th the thermometer reached 27 degrees below zero, this being 7 degrees colder than the lowest temperature previously recorded at the Government station, in nine years, and remained around this point for thirty-six hours. The last two creeks of December, however, offered the other extreme of almost summer-like mildness. Snow drifts are numerous, deep, and very hard packed, and most pasture lands are quite bare, providing good forage for grazing animals, both wild and domestic.

Wild Animals

The severe weather drove moat of the deer and practically all of the predatory animals to lower altitudes. At the end of the month coyotes were returning. A deer was found that had been killed by a lion near the Fish Hatchery, on the Fall River Road. Two deer were also found that had been killed by coyotes, near the same spot. Sixty-eight elk, 65 mountain sheep, and 125 deer have boon reported, all in good condition.

Roads and Trails

The North St. Vrain road, from Lyons, is the only road into the park open to travel, all others being closed because of snow conditions. The Rocky Mountain Parks Transportation Company has kept the North St. Vrain road open at great expense, to enable them to bring in the mail and its few passengers.

HOT SPRINGS

Examination of Physicians

The regular quarterly examination of the Federal Registration Board was held December 16th and 17th, in the Superintendent's office. Three of the five applicants passed the examination, and have been recommended to the Service for registration on list of registered physicians.

Maintenance and Improvement

All the magnolias, elms and other trees along the Reservation Front and the lower slope of Hot Springs mountain have been trimmed to maintain a symmetrical appearance. The same treatment has been carried out with trees along Fountain street and around the old residence of the superintendent.

SEQUOIA AND GENERAL GRANT

Weather

The mean temperature in those parks was about 49 degrees, with a little snow on the higher attitudes.

Maintenance and Improvements

The California state highway engineers have completed their line of survey of the newly proposed highway between Three Rivers and the west boundary of Sequoia park, where they have connected up with what is designated as the Elk Park road on the Middle Fork of the Kaweah River. Twenty-five miles of the Giant Forest Telephone line has been finished, and seven additional miles of the Giant Forest road has been graded and water ditches constructed thereupon preparatory for winter storms.

Wild Animals

Deer in large herds are often seen near Hospital Rock and Clough Cave, and a few elk have been sighted in Shepherd Cove. All the animals were in excellent condition, as there is an abundance of new green food for them.

ZION

Weather

An unusual amount of snow fell, putting the mail service out of commission for six consecutive days; but the warm minds and dry ground soon consumed the moisture. On December 5th the thermometer registered zero, but spring weather prevailed soon after.

Road Conditions

The storms have made the roads impassable because of the many rocks which were dislocated by the freezing and thawing weather. The District engineer has assured Acting Superintendent Ruesch that all plans have been made to put the road in good condition for the coming season.

PLATT

Weather

Rainfall for the month was 1.10 inches, which added to the previous record brings the total for the your up to 43.70 inches.

Waters from the Springs

Five hundred and forty-five gallons from the springs were shipped, which with the 2,295 gallons taken away by visitors, make a total of 2,840 gallons besides that consumed by the public at the springs.

CRATER LAKE

Weather

On December 31st there were 47 inches of snow at Anna Springs, which is about the average for that date. The mean maximum temperature for the month eras 39 degrees and the moan minimum 15. This park will be practically dormant until the spring weather comes.

WIND CAVE

Weather

It has been an unprecedentedly early and severe winter here, with an unusual amount of snow and bad drifts, making the park practically snowbound for two weeks. The game animals are reported to be in good condition.

CASA GRANDE NATIONAL MONUMENT

Weather

The first part of December, for ten days, was cloudy and rainy. The remainder of the month was very pleasant. So far southern Arizona has had a very open winter. Range and ranch conditions are good. A good crop of long staple cotton has been harvested in the Salt River and Gila River valleys, and the average price of 80 cents per pound has made local conditions good.

Travel

During the month 470 visitors and 168 automobiles entered the reservation. This brings the total for the seasonal year, beginning October 13th to 1,189 visitors and 458 automobiles. The December totals compare very well with the total of a year ago when there were 169 visitors and 85 automobiles. From October 13th to December, 31st, 1918 there were 470 visitors and 266 automobiles. The calendar your of 1919 shows 4,534 visitors and 1,954 automobiles. Accurate figures for 1918 are unavailable, because Mr. Pinkley took charge in April of that year and no previous records exist.

TUMACACORI NATIONAL MONUMENT

Relics

Several pieces of copper, found by an Indian woman, several miles west of Tumacacori Mission, and given to Custodian Pinkley, have been placed in the state museum at the University of Arizona. This incident brings to mind the publicity that was given a few months ago throughout the state to the supposed finding of some candlesticks at the Tumacacori Mission. Mr. Pinkley, after examining them stated that they were not found at this mission, but were probably procured in Mexico and brought across the border by the man who was trying to sell them. The National Park Service, would note, of course, allow unauthorized excavation on any national monument; and the Federal laws are very stringent on this matter.

Mr. Pinkley reports that much interest is being shown in Tumacacori Mission by the people of Nogales. The Chamber of Commerce is working to acquire title to some patented land immediately west, and plans are under way to reserve some public domain in that direction so that the monument may extend to the state highway. This is necessary in the future parking plans as outlined by Mr. Charles P. Punchard, the landscape engineer of the National Park Service, who visited the monument last spring and studied the location from a landscape viewpoint.

PERSONAL NOTES

Among the visitors of the past four weeks to the National Park Service were the following:

Gov. R. D. Carey of Wyoming; and Mr. Chas. S. Hill, Immigration Commissioner of Wyoming

Mr. Arthur Page, president of Doubleday Page & Co.

Mr. W. N. Noffsinger, president of the Park Saddle Horse Co., Glacier Park, and Mr. Howard H. Noble, manager of the Glacier Park Hotel Co., and Mr. Roe Emory, president of Glacier Park Transportation Co. and Rocky Mountain Parks Transportation Co.

Mr. C. A. Hamilton, of Yellowstone Park

Mr. John S. Drum, director of the Yosemite National Park Co.

Dr. Herbert E. Gregory of the Department of Geological Sciences of Yale University, and Mr. Alexander Hume Ford, editor of the Mid-Pacific Magazine, Honolulu

Mr. George K. Davol, construction engineer, of San Francisco

Mr. Ford Harvey, president of the Fred Harvey system, operating El Tovar Hotel and other properties; also Judge T. J. Norton, general solicitor for the Santa Fe.

Mr. H. H. Hunkins, manager of the Bureau of Service, National Parks and National Monuments, U. S. Railroad Administration, of Chicago.

Mr. Chas. Sheldon, game conservationist, of Washington and New York, Mr. Sheldon is particularly interested in the Yellowstone elk, the Mount McKinley wild animals, and Grand Canyon explorations.

Mr. Chas. McCaffree, Immigration Commissioner of South Dakota.

Assistant Director Cammerer will make a flying trip to some of the parks and monuments in February.

ATTENTION!

If anything of interest to you or other readers of the PARK SERVICE NEWS occurs with relation to your park or monument, please let us know about it. It will help the Service, and what helps one helps all in this work.

Those NEWS items should be mailed at the same time as are the monthly reports of the superintendents and custodians, or as soon thereafter as possible, in order to be available. They should reach the

editor's desk not later than the 15th of the month, and be addressed to the Director of the National Park Service, "Park Service News".

The value and service of this little bureau paper can be increased by your cooperation. We want you to look forward every month to the coming of this NEWS letter, and perhaps got some inspiration from it. Also, we would like to have your suggestions and constructive criticisms as to how we may improve it, both in appearance and contents. The heavy pressure of work on the small force available in Washington makes every bit of assistance furnished in the form of interesting items doubly valuable and appreciated.

PARK SERVICE NEWS

DEPARTMENT OF THE INTERIOR National Park Service Washington

To the Members of the National Park Service:

Plans for a bigger year than ever in the national parks are keeping the Washington force up to top speed. The season this year will start with a ceremony -- the dedication of Grand Canyon National Park, April 30th and May 1st.

Among the participants will be Mr. F. S. Dellenbaugh of New York City, who was one of the members of Major Powell's famous expedition, in 1871. The flag carried on the Major's boat -- the Emma Dean all through the Canyon, will be brought and unfurled for the occasion. There were three boats and three flags, as you will probably recall. The exercises will take place at the Powell Memorial, which was constructed several years ago by the Department of the Interior to commemorate the discovery and exploration of the Grand Canyon of the Arizona.

This memorial and the dedication of this marvelous scenic area of the world is important from an American historical viewpoint, and the National Park Service emphasizes wherever possible the historic background of the national parks.

The Daily Brooklyn Eagle's annual thirty-days outing trip has been arranged this year with special reference to the ceremonies at Grand Canyon National Park, and its special train and party of 130 will spend three days there. The Director of the National Park Service, with a group of other officials, and friends, hopes to be present,

Very cordially yours,

STEPHEN T, MATHER

Director.

THE NATIONAL PARKS BANQUET

The banquet of the Far Western Travelers' Association, of which brief mention was made in the January PARK SERVICE NEWS, was held at the Hotel Astor New York City, on the evening of Saturday, February 7th. The occasion was the Association's seventh annual banquet. Approximately 1,600 were seated at the banquet tables while some 500 ladies occupied the galleries surrounding the beautiful banquet-room, and joined in the dance which followed the program.

The Far Western Travelers' Association is an organization composed of commercial travelers whose business activities are confined to the far western states. Last year this association decided to feature one United States government bureau each year, at its annual banquets in future, and the National Park Service was selected as the premier.

The speakers of the evening were Hon. Huston Thompson, member of the Federal Trade Commission; Mr. Bainbridge Colby, attorney of New York City and formerly of the United States Shipping Board; and Mr. Wilton Lackaye, the actor. Each of the speakers touched upon the importance of the national parks as an asset to the nation, and urged the dissemination of national parks information to the American people. Mr. Thompson's talk was particularly interesting, for in addition to a general outline of the national parks idea, he presented a specific scheme for interesting the Boy Scouts of America in the nation's playgrounds.

His plan, on which he has been working for more than a year, is to hold competitive contests within the various Boy Scout organizations throughout the country, the winner in each organization to be given a trip through one of the national parks. Obviously the idea has unlimited possibilities from the standpoint of arousing interest in the parka and stimulating travel to them. The hosts of the evening were not slow to recognize this point. Accordingly the matter is being followed up and the Far Western Travelers' Association intends to finance such a scheme among the various Boy Scout organizations of New York City. Next summer some fifteen or twenty proud boys — winners in competitive contests within their respective organizations — will be treated to a month's tour of Yellowstone National Park.

The Far Western Travelers' Association in its commercial activities connects the east with the rest, and comes in touch with all manner and kinds of people. It is therefore, a most admirable medium for creating and spreading interest in the national park system, and its active cooperation will have far-reaching effects and be of great assistance in promoting a strong public sentiment in behalf of the nation's playgrounds and recreation spots. It will also reap benefits, not only in the satisfaction of doing a patriotic work, but in promoting health, contentment and a larger knowledge of our country.

The National Park Service was represented at the banquet by Assistant Director Cammerer, and Mr. W. B. Lewis, Superintendent of Yosemite National Park.

HIGHWAYS AND TRAILS ASSOCIATION MEETINGS

The sixth annual meeting of the National Parks Highway Association met in Spokane recently and passed a resolution endorsing the road from Belton to Glacier Park, and calling on senators and representatives from all states in the Northwest to urge the construction of this road by the Federal government.

Plans for retracing and marking the Yellowstone Trail through its entire length from Albany westward, and for providing service stations and road condition bureaus were discussed at the ninth annual district convention of the Yellowstone Trail association, held at Billings January 29th.

Seventy-five convicts are engaged on the main Yellowstone Trail in the Bearmouth Nimrod Canyon, between Drummond and Missoula, in eliminating grade crossings and building one mile of road along a rocky hillside.

At a meeting of the Western Montana division of the Yellowstone Trail Association held at Deer Lodge, January 27, the plan to divert the route so as to include Helena and exclude Butte was defeated. More than 250 delegates representing all portions of western Montana attended the convention. Local and national problems, legislation, financial matters and the value of tourists were considered.

A meeting of the Eastern Montana division of the Yellowstone Trail Association was held at Billings, January 29th, but no details have as yet been received.

The Great Falls Commercial Club has offered its assistance in marking the Yellowstone-Glacier Bee-line Highway. Specially designed signs, telling the name of the highway, will probably be placed along the route.

The Montana State Highway Commission has approved an additional highway project for a north and south road leading out of Kalispell along the west side of the Flathead River. This is the second state highway out of Kalispell which has been approved. The State Highway convention at a recent, meeting designated the pass over the divide between Belton and Glacier Park as Roosevelt Pass.

On January 10th the Arrowhead Trail Association held a convention at Cedar City, Utah. The officers of the association and the District Engineer fir the State are asking for \$25,000, to be expended on the road between Hurricane Fault and the Park entrance, this coming season. If they are unsuccessful in this attempt, the most needed repairs will be made anyway.

YELLOWSTONE PARK WESTERN ENTRANCE TO RECEIVE IMPROVEMENTS.

West Yellowstone, Mont., changed recently by the postal authorities from Yellowstone, to avoid confusion with the name of Yellowstone, Wyoming, is to be re-surveyed and its future appearance and surroundings planned to accord with its importance as the western gateway to Yellowstone National Park.

The U.S. Surveyor General at Helena, Mont., the superintendent of Yellowstone Park, and the Landscape Engineer of the National Park Service, will cooperate in this undertaking, with the view to developing a model gateway village and summer colony.

All the property in the town belongs to the Government at the present time, and all the buildings thereon have been erected under temporary leases. This is an enterprise unique in National Park developments, and also in Government Land Office surveying.

TRAVEL TO THE PARKS

Each Monday during the month a "solid" Grand Canyon special train came to Grand Canyon National Park straight through from Chicago, carrying an average of 130 visitors. This was in addition to the two regular daily trains. The total, arrivals during January were 4,166, an increase of 766 over December, 1,351 more than visited the park during November 1919.

Snow conditions and closed roads kept travel in Rocky Mountain National Park down to 75 during January, the North St. Vrain Road from Lyons being the only one open to travel. Eleven persons visited Crater Lake National Park. All of them traveled on skis from Ft. Klamath, and the round trip required three days. Platt National Park entertained 4,384 visitors, Wind Cave 44, and Hot Spring 14,862. The total number who came into Yosemite park during the month was 261, of whom 232 were brought in by stage from El Portal, 12 by private automobiles, and 17 on foot. This travel is considerably more than that of any previous January.

SHIPMENT OF ELK

During January 210 elk were shipped from Yellowstone National Park: Two hundred to Rocky Mountain Park of Canada, Banff, by express, in four carloads, on January 20th. Mr. Howard Sibbald, Chief Game Warden of the Canadian parks, assisted by Mr. Howard Eaton, made the shipment. One hundred and ninety-five reached their destination alive. The two elk shipped to the Board of Park Commissioners, Minneapolis were reported to be in fine

condition on arrival. They were shipped by express, crated. Three were shipped to President Bizzell, Agricultural and Mechanical Collage, College Station, Texas; and four to the City of Aurora, Ill. One escaped from the crate at Livingston, Montana, and returned to the range. She was replaced by another elk a few days later.

A NEW FREE BATHHOUSE

Construction work on the Government's new free bathhouse, at Hot Springs Reservation, the cost limit of which is \$190,000, was started on January 31st. Ground was broken at an informal ceremony at which Assistant Secretary of the Interior, Mr. S. G. Hopkins, officiated. The Government was also represented by Chief Clerk Griffith of the Service, who spent several days in Little Rock and Hot Springs in connection with preliminary arrangements. Others present were the construction engineer, Mr. John W. Fordyce; Architect Mann, Mayor McClendon, the city commissioners, City Manager Belding, and other citizens.

The party mat at the office of Dr. Parks, Superintendent of the Reservation, and went to the site in automobiles. Mr. J. G. Blaschke, the proprietor of the Royal theatre, took motion pictures of the proceedings, which will appear later in the illustrated weeklies. Still photographs were also taken for newspaper syndicates. It is hoped to have the building finished early in November. Excavation is now in progress.

AMONG OURSELVES

Because of an unavoidable delay this issue of THE PARK SERVICE NEWS is about two weeks late. However, this fact enables us to give you a bit of news that would otherwise wait for the March issue. Mr. Horace M. Albright, Superintendent of Yellowstone National Park, sails from San Francisco on March 10th for Hawaii on official business in connection with legal and other matters pertaining to Hawaii National Park. Mr. Albright has been designated by the Department of the Interior as Field Assistant to the Director of the National Park Service. This is in addition to his duties as Superintendent of Yellowstone National Park, and brings no additional financial remuneration. He will return to America early in April, and expects to meet the Daily Brooklyn Eagle Grand Canyon Dedication Tour at San Francisco, where it will spend two days. Mrs. Albright is accompanying Mr. Albright.

Assistant Director Cammerer is making a flying trip to several of the national parks, and is expected back in the Washington office in a few days.

Last but not least, Superintendent Lewis, of Yosemite National Park has an assistant. He arrived at Parkersburg, West Virginia, on March 3rd, weighing 7 1/2 pounds, and is named Carle Latham. He expects to begin his work of growing up with the park, abut April 1st.

JANUARY IN THE PARKS

YELLOWSTONE

Weather

January being mild, with unusually light snowfall, brought relief from the almost unprecedented winter conditions of November and December. With the exception of 1896 and 1914 the month was the warmest January since the beginning of the record, in 1887. At the end of January snow ranged in depth from 8.6 inches, at Mammoth Hot Springs, to 50 inches at the Canyon.

General Conditions.

Everything is on a winter basis. The coal shortage has been relieved, and the opening up of the mine one mile south of Gardiner was discontinued. Ice for next summer's use in the park was placed in storage. The total cost of cutting, hauling three-quarters of a mile and packing in the icehouses of the several utility operators was \$1.57 per ton. Nine visitors entered the park during the month, to see the wild animals.

Animals.

The mild weather and light snowfall following the severe weather of the early winter gave the deer, mountain sheep, antelope and large herds of elk which are wintering on both sides of the north line of the park, a good chance to get through the winter without the serious loss predicted; but the scarcity of food on the range continues. Hay was hauled and fed to 3,000 to 4,000 elk, about 75 deer and 250 antelope. As the weather moderated many of the animals wont back to the higher ground. From 700 to 1,000 elk spent most of January outside of the park, on the west side of Yellowstone River, and they appeared to be having plenty to eat. The warm weather has uncovered considerable forage.

Motion Pictures.

Representatives of three motion picture companies spent from one to three weeks taking pictures in the park.

Miscellaneous.

A census of the park, taken by Mr. C. O. Lauer, one of the clerks in the superintendent's office, working for the U.S. Census Bureau, shows 165 people residing in the park, of which 116 live at Mammoth Hot Springs.

Picture shows were held weekly at Headquarters, on Saturday evenings, under cooperative arrangements between park employees and the residents of Gardiner, Mont. No admission fees were charged.

Old timers say the indications for an early spring are excellent. The elk and deer are shedding their horns earlier than usual, and woodchucks have been seen.

GRAND CANYON

Weather.

Although the thermometer registered between 5 and 64 degrees above zero during January, the weather was generally pleasant, and many of the days were warm and sunshiny.

Travel conditions.

On January 15th Chief Ranger White and Transitman Endersby left Grand Canyon in a Ford for Los Angeles to study road conditions for automobile travel between the two pints. Considerable hardship was experienced, and it required 8 days to cover the 560 miles. Only the first 80 miles were very difficult, but as this winter in that region has been quite open and mild the trip was not a conclusive test. However, it is believed that a paved road from Grand Canyon to Ash Fork, either direct or via Williams, would allow automobiles to make this trip nearly all of every winter, except for a few weeks during the unusually severe winters. The snow is not as serious an obstacle as the mud. Col. White and Capt. Endersby believe that the logical route would be direct from Grand Canyon to Ash Fork - 72 miles - and a gradual descent from 7,000 to 5,000 feet, a route which would be free from snow most of the winter, and would avoid the crossing of divides and the dhobie mud country.

GLACIER

Weather.

The temperature during the month ranged from 37 degrees below to 64 above. The first half of the month 'and the last week were mild, with light snows and rains. Snowfall mss 15.8 inches.

Animals.

Reports from rangers show very few animals on the lower levels, but those observed were in good condition. The rapid disappearance of the snow uncovered some feed on the higher grounds.

General.

High winds destroyed part of the entrance arch at the Glacier Park depot.

Ten oil-burning locomotives are now in operation on the Great Northern Railroad between Cut Bank and Whitefish.

About 100 ducks are wintering at the head of Lake McDonald.

MOUNT RAINIER

Weather.

So far the winter here has been exceptionally open. The U. S. Weather Bureau reported that on January 1st there was less snow in the elevated regions of the state than there had boon on that date for 12 years. The temperature ranged from 15 to 45 degrees during the month. There was no snow on the ground on January 31st at the Park Entrance and Longmire Springs, while at Paradise Valley it was 6 feet deep.

ROCKY MOUNTAIN

Weather.

With the exception of two brief storm periods, January weather was fair and warm, with little wind. The snow had melted considerably by the end of the month.

Animals.

All the park animals that have been seen were in good condition. Deer and elk in large numbers were reported on the south side of Deer Mountain. A few predatory animals were destroyed.

Visitors.

The Colorado Mountain Club expects to again hold its winter carnival of winter sports, at Fern Lodge, and Fern and Odessa Lakes, February 20-23rd. They expect to again fill the lodge to capacity which is about 40 people. They will travel to Estes Park from Denver in their own machines, and in the transportation company cars from the village to Moraine Park, thence to Fern Lake by snow shoes and skis. On January 31st the snow was not deep enough to ensure a good time; but the club members are very enthusiastic about their outings in Rocky Mountain Park.

HOT SPRINGS

Free Bathhouse.

The average number of persons daily to avail themselves of the Government free bathhouse was 281, or about 8,711. This is a substantial increase over December. The pay bathhouses also show an increase in the number of daily patrons

CRATER LAKE

Weather.

Extremely mild weather prevailed during the entire month. The mean temperature was 31 degrees. On January 31st there were 39 inches of snow at Anna Springs. This is 9 inches less than was there December 31st, and stockmen are somewhat alarmed over the probable shortage of water next summer. The heaviest snowfall however, usually comes in February, so there may be little or no shortage.

Animals.

Owing to the mild weather and light snowfall some deer still remain near the park, in the Seven Mile and Sun Creek districts. The high prices paid for all kinds of furs have induced many to try trapping and hunting, but as yet there have been no indications of any persons having crossed the park line.

PLATT

Weather.

Cloudy days and 2.65 inches of rainfall have made the roads almost impassable. Much cotton remains in the fields, adjoining. Winter travel however, is satisfactory.

Water from the Springs.

Visitors carried away 2,866 gallons of water from the springs, which with the 505 gallons shipped make a total of 3,371 gallons, besides that consumed by the public at the springs.

ZION

Weather.

Storms and cold marked the early part of the month, but the last days were warm and springlike, with early grasses making a small show.

Publicity.

The newspapers and railroads, especially the Salt Lake route, are advertising this park and the scenic wonders of southwestern Utah. All this is bringing many letters of inquiry.

WIND CAVE

Conditions.

While the weather has been moderate the roads continuo to be in very bad condition, which accounts in a measure for the lack of automobile travel to the park. Materials have arrived for the new stairways within the cave.

SEQUOIA AND GENERAL GRANT

Weather.

The mean temperature at Giant Forest during the month was 42.7 which is three degrees below normal. Snowfall was also below normal. The mean temperature at the headquarters of the General Grant Park was 41.3, which is also a little below normal. Snow eras reported as being about two feet deep on the level.

Road Surveys.

The California State Highway engineers having completed their survey of the newly proposed highway between Three Rivers and the west boundary of Sequoia park, are now engaged in running a changed location survey of the Giant Forest road between Three Rivers and the west park gate entrance, with a view to obtaining a more feasible route and better grade for the road.

Animals.

Deer in vast herds have gathered at Hospital Rock and Clough Cave. All animals seen are in excellent condition.

YOSEMITE

Weather.

The mean temperature at the weather station in the valley for the month was 36.48, with a maximum of 60 and a minimum of 14 degrees while the mean temperature at Glacier Point was 40.86, with a maximum of 65 and a minimum of 16 degrees. This would seem to indicate that the average temperature in the valley during the winter months is generally lower than that at Glacier Point.

Miscellaneous.

Snow conditions were not as good as indications promised early in December. Very little snow was fallen since then and much of it has melted from the elevations below 6,500 feet. But as the heaviest snowfalls come in February and March the prospects of ample water supply in the Sierra this spring are better than existed last spring.

To the park switchboard there were connected and maintained 97 miles of telephone line, to which were connected 66 telephones. Most of these were of the valley system. However, the lines to Glacier Point, Big Meadows, and the Wawona line as far as Alder Creek on the Wawona road were kept in operation.

Road work between the park line and El Portal was started by the Highway Commission under the Assistant Superintendent of the State Highway Commission, on January 14th.

Sentinel Hotel accommodated 221 guests during the month, the average stay of each being 2 1/4 days.

(1897)

DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE Washington

No. 10 May, 1920

GRAND CANYON DEDICATION

The most important event in national park history for April was the dedication of the Grand Canyon National Park, which took place on April 29 and 30.

The annual tour of the Brooklyn Daily Eagle had been arranged so that they might be present and participate in the dedication ceremonies. Their special train, carrying one hundred and nineteen guests, arrived at the Canyon at eleven o'clock the morning of the 29th, and they were met and welcomed by Director Mather, who had helped plan their tour, and by Superintendent Peters. The afternoon of the 29th was devoted to seeing the Canyon by means of trail and automobile trips.

In the evening a reception was given for the local visitors and for the members of the Brooklyn Eagle party by the Director and the Superintendent, assisted by Mrs. Mather and Mrs. Peters. The reception was followed by an informal dance. At this function, Mr. H. V. Kaltenborn, managing editor of the Brooklyn Eagle, suggested that the party subscribe funds for the erection of a gateway at the park entrance, and \$1,500 was raised to cover the cost of this structure. Mr. Van D. Copeland, a visiting artist, sketched a suggestion for its design, in which he worked out the architecture of the Canyon buttes and temples.

On April 30, at 3:30 p.m., the pilgrimage to Powell Monument got under way, headed by a group of Hopi Indians in gay attire, and by father Cyprene Vabre, of Flagstaff, Arizona, who represented the Franciscan order. About two hundred visitors took part in the pilgrimage and as many more went by automobile. The Director presided at the exercises, and speeches were made by Father Vabre, Col. H. C. Rizer, of the U. S. Geological Survey; Mr. Frank C. W. Pooler, representing the Forest Service; Mr. Edward Bassett, representing the Brooklyn Eagle Party; and Dr. George Wharton James, explorer, lecturer and author. In addition to the speakers, Mr. Thomas Moran, who has painted so many beautiful pictures of the Grand Canyon, and Mrs. Lida Peak, a niece of Major Powell's, were seated on the monument.

In the evening of the 30th the exercises were held in the lobby of the El Tovar Hotel, Director Mather again presiding. Speeches were made by Hon. Thomas E. Campbell, Governor of Arizona; Mr. Meier Steinbrink, of the Brooklyn Eagle party; the Director, and Sacakuku, next chief of the Hopi Indians.

At the close of the speech making the company was entertained by four Indian dances given in the firelight in front of the El Tovar. And then followed a formal dance at the El Tovar, Governor and Mrs. Campbell leading the Grand March.

Free transportation to Powell Monument was furnished by Fred Harvey to all who desired it, and the management of the El Tovar spared no efforts to make the program a success.

The Secretary of the Interior was represent at the dedication by Mr. Charles D. Mahaffie, Solicitor for the Department from the office in Washington.

Miss Beatrice Ward, of the National Park Service, represented the Service on the Brooklyn Eagle tour, and was present at the dedication.

"THE SILVER HOARD," A NEW MOTION PICTURE.

The story of "The Silver Hoard," by Rex Beach, has been produced in motion pictures and is now being exhibited throughout the country. Some of the Alaskan scenes, in the early part of the story, were taken in Mount Rainier National Park, in June, 1919. The Mount Rainier pictures include the dog sled pictures and a panorama of the Tatoosh Range. The early summer scenes in this part pass very well for Alaskan views, and of course they are much more easily obtained.

ENFORCEMENT OF SOME OF THE REGULATIONS

In Mount Rainier the regulation prohibiting dogs from the park is carried out by the ranger at the park entrance, who cares for the dogs and feeds them at his own expense, charging the owners 50 cents per day for this service.

It would be interesting to know how this regulation is observed in the other parks. If the other superintendents will write the News on this point, we will be glad to publish the answers in the succeeding number.

Many visitors claim that they have not heard of the regulations in regard to taking dogs into the parks and in regard to the picking of wild flowers in certain of the parks they have visited. It would also be interesting to know how these regulations are brought to the attention of visitors in the different parks.

THE TRAIL OF THE LIGHTNING.

In Mount Rainier National Park there is a tree visible from the automobile road which shows the effects of lightning to an unusual degree. The tree is a: Douglas fir, over 4 feet in diameter and nearly 200 feet high. The lightning in descending the tree followed the twist of the grain and made ten revolutions of the tree before reaching the ground.

It is, of course, a common occurrence for lightning to circle a twisted tree two or three times in the course of its descent, but ten plainly marked revolutions is certainly unusual and the tree is very interesting as an exhibit of the effects of the lightning.

The Service has a photograph showing the ten revolutions of the lightning and is sorry it cannot be used as an illustration.

Mr. Albright, Superintendent of Yellowstone Park, has been specially designated by the Department as "Field Assistant to the Director", and in that capacity will handle such field problems as are assigned to him by the Director. These duties will be in addition to his work as superintendent of Yellowstone National Park.

APRIL IN THE PARKS

CRATER LAKE

Weather

The days were slightly warmer and the nights cooler than normal for April, precipitation in the form of rain and snow to the amount of 7.74 inches fell during the month. On the last day of April there were 79.5 inches of snow at Anna Spring. On the same date last year there were 96 inches, and in 1918, 60 inches.

Travel

Only one visitor entered the park during the month.

Wild Animals

Ranchmen and stockmen who have been riding in the hills which constitute the winter feeding grounds of the park deer report seeing numerous deer following the snow line back to the higher levels, and that they appear to have wintered well.

Highway Notes

The State Highway Commission inspected the Medford-Prospect highway recently, and for numerous reasons would not commit themselves beyond a promise to maintain this road in much better condition than has been done heretofore. Jackson is the pioneer county of Oregon in the good roads movement, and they are not going to quit until there is a paved highway from Medford to Crater Lake, and from Ashland to Klamath Falls. Contract has been let and work will begin when weather permits on the three miles of road through the Forest Reserve joining the south or Klamath entrance to the park.

GLACIER

Weather

Glacier National Park, which is so much north of Rocky Mountain National Park, did not suffer from the weather during April as the latter park did. Slight snowfall was reported at various times, but it soon disappeared. There were several days of rain, but the fall was not heavy, and clear days prevailed during the latter part of the month. The mountain sides and valleys are fast growing green now; fish are beginning to bite; the spring birds are arriving, and the animals are coming out of their dens and hiding places -- in other words, spring has come.

Fish

It is not uncommon now to notice fishermen returning from streams and lakes in the park with strings of trout; and the string usually contains one 6 or 7-pounder. A few tourists who enjoy this kind of sport more than anything else are arriving in the park and making use of the opportunity for good fishing before the crowds begin to come.

Deer are plentiful, sleek and fat; they are gradually growing somewhat tame, and visit headquarters homes and administration offices almost daily. Salt has been placed in the rear yards for the deer, and they relish it very much, coming down for it through the woods, single file, usually in herds of at least half a dozen.

Fifty or sixty mountain sheep are: staying in the vicinity of the Many Glacier ranger station. They are getting to be very tame, and nearly all of them will eat out of the ranger's hand. Two fine rams and a ewe have been locked up in a hay shed, getting somewhat accustomed to domestic life; they are probably the

sheep which will be shipped to Yosemite Park next winter for the purpose of starting a flock down there.

Bear are coming out of their winter dens, their tracks frequently being seen in the snow.

One of the rangers reports a herd of elk seen on one of his patrol trips from the Two Medicine ranger station.

Another ranger counted a herd of 75 elk, all in fine condition, on one of his recent patrol trips in the vicinity of Double Mountain. On the same trip he saw two fine white-tailed deer.

All the rangers report that game is plentiful and that they have survived the winter in good shape.

Trails

Two new trails are recommended for the northern part of the park; one a winding trail to the top of Rainbow at Bowman Lake, where the tourist would have one of the greatest views in the park, viewing the country for over a hundred miles. The other trail would run to the top of Kintla Peak at the head of Upper Kintla Lake. From here one can see a long distance into Canada and also obtain a magnificent view of our own park.

Ice on Lake McDonald.

The ice has almost entirely disappeared from Lake McDonald, where a month ago it weds strong enough to bear up a heavy team of horses and a loaded sled. Sunshine and chinook winds honeycomb the ice, and then it dissolves and sinks. Sometimes, however, it floats down stream, and the park employees with poles have to keep the ice from blockading at the Fish Creek bridge. This year there was no difficulty of this kind. This lake is ten miles long by a mile and a half wide, and is very deep.

During April the Glacier Hotel Company cut and hauled 170 tons of ice from Lake McDonald. The ice cut averaged 18 inches in thickness, clear blue ice.

Range Conditions

In a letter to the superintendent, the Chief Ranger reports that on a recent trip he made to Duck Lake he saw carcasses by the hundreds of both cattle and horses, many former owners of stock not having a hoof left. That entire region is out of hay, and what is being shipped in cannot be hauled out, owing to the road conditions and a scarcity of horses. Hay is now \$55 per ton in that vicinity, and \$1.00 per hundred pounds is being offered to haul it a distance of eight miles. One Birch Creek rancher lost 800 horses. The big stockmen in that neighborhood are ready to give up the s struggle, as daily their herds diminish. Their only hope is that the weather will break and give the cattle and horses a chance for their lives.

Highway Notes

On April 29, Gus Holms, President of the National Park to Park Highway Association, and L. A. Newton, President of the Wyoming State Highway Association, both of Cody, Wyoming, visited Great Falls, Montana, in the interest of the proposed Park to Park Highway.

Two new highways, one to extend north and south and the other to connect Great Falls and Helena through the Canyon of the Missouri River, have been proposed by the Commercial Clubs of these two cities. The proposed north and south highway would extend from Banff, Lake Louise and the Canadian mountain parks to Salt Lake City and probably to Zion Park and the north rim of the Grand Canyon. It would also include Yellowstone, Lewis and Clark National Monument, Glacier National Park, and other well known scenic places.

Mr. Horace Clark, an old settler who owns a large tract of land adjoining the east entrance of Glacier National Park, at a meeting held at Glacier Park station for boosting the Roosevelt Highway, donated a tract of land for camping purposes for the use of tourists visiting the park. This gift fills a long-felt want and is much appreciated.

News Items

Captain Swanson, boat builder at Glacier Park station has completed thirty 16-feet row boats for the different lakes in the park, and has now commenced to build a 40-foot launch for Two Medicine Lake.

On April 29th, Mr. Johnson, from the fish hatchery to Leadville, Colorado, arrived at Glacier Part station with 300,000 Eastern Brook trout eggs. Everything was in readiness at the park hatchery for taking proper care of these trout eggs, and it is expected they will be hatched by May 15. They will then be planted in Lake McDonald.

HOT SPRINGS

On account of the heavy rainfall, no small amount of work was necessary in the maintenance of the mountain roads.

During the month of April caterpillars made their appearance on the trees on Hot Springs Mountain. Prompt steps were taken to eradicate them by burning them out.

Probably the most beautiful bed of tulips ever seen in this vicinity of Hot Springs bloomed in front of the superintendent's during April. It consisted of a large circular bed of "Pride of Haarlem" tulips. These flowers, which are an American Beauty color, are extremely large and beautiful, and made a most unusual showing. They were the center of attraction for a large number of visitors passing along the Reservation promenade.

Highway Notes

The United States Good Roads and National Bankhead Highway Associations met in Hot Springs during the week April 12-16 and it was estimated that approximately 3,000 people attended these meetings. Vice-President and Mrs. Marshall were honored guests there during the week and governors from several states were present.

The progress made at this meeting means much to our national highways and marked enthusiasm was displayed. The completion of the National Bankhead Highway, which runs through Hot Springs Reservation, will bring thousands of additional visitors there each year. The benefits to be derived from it cannot be fully appreciated until the highway is completed

Free Bathhouse

The average number of persons bathed d daily at the government free bathhouse during April was 426. This is a greater daily average than was shown during the months of February and March, which are considered the peak of the season.

Travel

The estimated travel into Hot Springs during April was about 14,000.

MESA VERDE

The report received from Mesa Verde shows that the snow was still so deep there during April that Spruce Tree Camp could be reached only by trail. The snow is now fast disappearing and road work will commence early in May. The camp will be formally opened May 15, but tourists who visit the Park before that date will be entertained there.

The outlook for tourists this season is promising, judging from the number of inquiries that have already been made.

The deer have withstood the rigors of the winter very well, and feed has been good all the season in the lower part of the park.

MOUNT RAINIER

In Mount Rainier the first months of the winter indicated a light snowfall and an early spring, but snows during the latter part of March and the month of April changed these conditions and brought the snowfall for the higher regions of the park more nearly to normal conditions. The maximum depth of snow during the month at the park entrance was 10 inches on April 2, and the greatest depth at Paradise Valley was reached on April 20, when the depth was 16 feet.

The road to Longmire Springs, which has been open most of the winter, with the exception of a few days after storms, was closed by snow from March 29 to April 26. The first automobile reached Longmire Springs on the latter date, and the road has been passable since that time.

Visitors

A party of fourteen from Tacoma and Seattle visited the park on April 2 for a four days' stay to enjoy the winter sports at Longmire Springs and Paradise Valley. They expressed their intention of making an annual Easter visit.

Wild Animals and Game

One of the rangers trapped a bob-cat within a hundred yards of the park entrance on April 16.

Deer have been seen along the road near the park entrance, and on April 25 the superintendent saw a black bear and seven mountain goats on the east slope of Mount Wow. A few grouse have been seen.

PLATT

Weather

Bad weather prevailed in Platt National Park during the month of April. The temperature varied from 10 degrees below freezing on the night of the 5th, which killed all the fruit in that section of the country, to 88 degrees on the $21^{\rm st}$. The high winds that prevailed were very disagreeable.

Visitors

The Bromide Pavilion had 9,052 visitors during the month, and over five thousand gallons of water were carried away by the visiting public, while 690 gallons were shipped to people away from Sulphur.

This is an increased number of visitors to the park, and the indications are that there will be an increased attendance this summer.

A great deal of work was done during the month to put the park in shape for the summer. The corn was gone over for the third time, and some kaffir has been planted so there will be feed for the elk, deer, and buffalo of the park, as well as the horses. The six acres of alfalfa sown last fall is doing well and will be ready to cut in May.

There are forty rose and flower beds on the park grounds. These beds are all located where they can be irrigated with city water and also with water from the Reservation, donated by owners of two flowing wells.

Gifts

There has been donated to the park about \$600 in cash to pay for bulbs, seeds, plants and roses to beautify the grounds, and for the payment of freight on the elk and buffalo which were shipped to the park from Yellowstone. These animals are doing well. There has also been donated to the park about \$400 in work, which makes a total donation of about \$1000. By means of this donation and the hard work of the superintendent and the park employees, they have been able to give the public satisfactory service even with the smaller appropriation allowed for this year. Both the people of Sulphur and the park employees are to be commended for their public spirit in maintaining the service of the park unimpaired under handicap.

ROCKY MOUNTAIN

Weather

The month of April in Rocky Mountain National Park was the coldest, stormiest April ever known in that section. There were several severe winds and a series of heavy snow storms. The snowfall for the month was excessive, 90 inches being measured at Longs Peak on the level. April was colder in Rocky Mountain Park than January, and for snowfall it surpassed any single month recorded in ten years at any season, the nearest approach having been December, 1913, with a snowfall of about 70 inches.

All trails in the park were completely blocked to ordinary travel, but, owing to the abundance of snow, ski travel was very easy.

Wild Animals

Owing to the severe weather conditions, fewer wild animals were seen than is usual at this season, hut all animals seen were reported in good condition.

A mountain lion was killed on Old Man Mountain, one mile west of Estes Park, by Biological Survey hunters, making a total of six lions killed in the park this winter, five being females.

Travel

A considerable increase was noted in the number of people visiting the park during the month, the estimated number being 500.

Summer Plans

Many additions are being made to the hotels, and changes in others will add greatly to the convenience of guests. Most of the hotels plan to open two weeks earlier this year than usual and many of them report that their reservations at this time are greater than they have ever been before. This is also true of the summer cottages in that section, all the modern cottages having already been rented for the season, and very few of the others being left.

The Y.M.C.A. Conference has also increased its capacity this year, and they expect a record year at the Conference grounds.

The Transportation Company has greatly increased their equipment, in anticipation of the increased volume of business they expect from the numerous inquiries made of them and of the railroads.

It is expected the Big Thompson Road will be officially opened the 15th of May. It is planned to celebrate the opening with a barbecue to be held at Estes Park, but the date of this celebration may be postponed to the first of June, because of the desirability of keeping too much travel away from the roads while they are soft.

SEQUOIA AND GENERAL GRANT

Weather

In Sequoia National Park there is approximately 39 inches of snow on the level at Giant Forest tourist camp, the fall during April being about the same as during the previous month.

Wild Animals

Deer are very numerous in those parts of the park covered by the ranger force, and a few elk have been seen. All the wild animals seen seem to be in good condition.

Fishing

Fishing throughout the month below the elevation of 4000 feet in the different branches of the Kaweah River has been excellent.

Travel

Travel to that section designated as the Elk Park, along the middle Fork of the Kaweah River started in heavy on the first of the month and held up fairly

well throughout the month. Most of the visitors were local residents who were on picnics and fishing excursions, and departed on the day of entry.

General Grant

Weather conditions in General Grant National Park for the month were about normal. A precipitation of 36 inches was recorded during the month, all of which was snow. The depth of snow at present is approximately 32 inches at the main camp and extends down to about the 5,500 feet level.

WIND CAVE

Travel

The travel to Wind Cave National Park was very light during the month, only 28 visitors being reported. They all arrived before the 13th, the roads being blocked by snow after that date.

Weather

The weather was exceptionally bad during the month, the worst April on record. A fifteen day storm raged, which would have been a blizzard had the temperature gone a little lower. Five feat of snow on the level was reported from several sources. It drifted very badly, drifts from 12 to 20 feet deep being common.

Telegraph and telephone lines were out of commission for several days, and the park was without telephone service for four days. The only way to get such mail as the crippled train service brought was to walk in for it -- a 15-mile hike -- which the superintendent made twice during the storm.

The storm had its good points, however, as it ensures plenty of stock water for the season, and a good grass crop.

The superintendent and ranger are trying to start some flowers and vines, and two more attractive little bird houses have been built, painted and erected. The migratory birds are very late this spring, and no game birds have been sighted, except a few flocks of ducks on their way north.

YELLOWSTONE

Weather

The general conditions of the weather throughout the month were disappointing to everyone interested in the welfare of the wild animals dependent upon grass for subsistence, as it was to ranchers and stock owners in the nearby states. Following a winter of unusual length and severity which was most trying to wild animals and domestic stock, April was constantly cloudy and stormy,

with a temperature too low most of the time to permit much growth of forage, and feeding had to be continued throughout the month.

The lowest temperature occurred on April 1, 3 degrees below zero, the lowest temperature ever recorded in April. Except for a few days at the beginning of the second week, the temperature was constantly below normal throughout the month.

At Mammoth the snow cover diminished slowly from 18.8 inches on April 1, to a trace at the end of the month. The thaw uncovered some range in the vicinity of Gardiner, Mammoth, and along the north line of the park on the lower levels, and the grass had made a start at the end of the month.

More than the usual amount of wind occurred during the month, and the maximum velocity of 42 mils per hour from the southwest on April 14 had been equaled but once in April, in 1913, when a 44 mile wind from the same direction was recorded.

There were fewer clear days and less sunshine than for any April recorded.

Travel

Sixteen people entered the park during the month, but these could hardly be classed as tourists as they were for the most part on business.

Labor and Supply Market

Acting Superintendent Lindsley reports that such men as were needed have been found thus far without trouble, and at last summer's wage scale.

Work of Concessioners.

The Yellowstone Park Transportation Company employed a considerable force during April, remodeling their bunk houses at Mammoth, and this work is still in progress.

The Yellowstone Park Hotel Company have begun the development of a vegetable garden on Gardiner River for supplying the hotels. A crew of men and a team were also employed for several days building a crib more than 300 feet long of planks and stones along the bank of the Gardiner River, to prevent the river from washing the garden away during high water.

The Yellowstone Park Camps Company maintained a large force of carpenters and laborers at Mammoth Camp, remodeling the camp for the approaching tourist season. Most of the old tents been torn down and made ready to be transferred to Lake Camp as soon as the roads are open, as the Lake, which has been closed for two years past, is to be opened again this season. At Mammoth Camp the old style tents are being replaced with tent cottages, with white asbestos roofs, arranged in rectangles containing eight single and three double rooms around a court, in the center of which will be a sanitary toilet. The capacity of each set of tents is to be 14 beds. The sets of tents are arranged in evenly spaced squares, with streets of suitable width between. Nine sets were partially completed during the month. This development of a tent city, is in line, with new plans for

remodeling Mammoth Camp in accordance with plans approved by the Service, and contemplates eventually tearing down all Service buildings, the main building, offices, etc., and erecting a new large building to house the office, amusement hall, dining room and kitchen, laundry, etc., but all of this cannot be accomplished before the opening of the season, as the company has an immense amount of construction work to do to get its camps in shape at Mammoth, Lake and Tower Falls, for the opening of season, June 20.

At Mammoth, this company also began the important work of building a plunge bath for the use of tourists and others, natural hot water for it to be taken from an excellent hot spring a little below Jupiter Terrace. The plunge will be 40 by 100 feet in size, and 3 to 5 1/2 feet in depth, and when completed will be one of the finest in the west. It is the intention to complete it by the opening of the season, and later, possibly next fall, to cover it with a suitable building.

About the middle of April the Camps Company sent a crew of carpenters and laborers to Tower Falls to resume the work of construction of a new main building at that camp, which was abandoned last fall on account of bad weather.

New Park Employee

A motorcycle mechanic was employed by the Service the latter part of April and is engaged in the important work of overhauling the putting in shape for summer road patrols the Yellowstone fleet of motorcycles. This work will take several weeks.

Roads

It is proposed to commence the opening of the park roads from Mammoth towards the Canyon and Lake, in cooperation with the Hotel Company, the Camps Company, and general store concessioners George Whittaker and C. A. Hamilton. It is hoped that the caterpillar tractor and snow-plow, which are being prepared, can be utilized to assist in the work of clearing this road of snow, though this is experimental.

Wild Animals

The month of April was an especially trying one for all of the wild animals. Never before was it necessary to feed the wild animals after April 1, and seldom after March 1, but with an average temperature of more than six degrees below normal during April, grass made but little progress and the animals were in a weak condition due to shortage of forage during the winter. It became evident early in April that if the herds of elk to be saved more hay must be purchased, and steps were immediately taken to that end. The money for this purpose was subscribed by private individuals and humane organizations -- \$4703 being

raised in this way. Approximately 100 tons of hay were purchased with this amount, and the greater portion of it cost \$50 per ton, plus freight from shipping point. This hay lasted until after the end of April, and the grass has now grown to such an extent that it is no longer necessary to feed hay to the wild animals, and even the tame buffalo and the horses have been turned out to grass to save the high priced hay.

Without the donations for hay the loss of life among the wild animals would have been enormous in April. Farmers, who were unable to get hay to supply the unlooked for need caused by the same conditions, either from its scarcity or because they did not have the money with which to buy at so high a figure, suffered a considerable loss either in the death of their cattle, or in selling at a heavy sacrifice.

<u>Buffalo, tame hard.</u> There was a total of 406 animals in this herd at the beginning of April. Two calves born on April 1 froze to death, but by the end of the month there were 26 calves living. The tame herd now numbers 432.

Bears

Like the spring days, the bears are backward about coming out, although two were seen during the month, and tracks of others reported. Assistant Chief Ranger Harry Trischman, who accompanied the representative of the C. L. Chester Company, taking moving pictures in the park, to Upper Basin and the Canyon,

relates that while the party was waiting to get a picture of the Giant Geyser, which was about to play, a cow elk in rather poor condition came on the scene, chased by a grizzly bear. A yell started the bear in the direction of the party, some of which suddenly decided they had important business elsewhere and lost no time in getting to it. A second yell changed the course of the bear which again took up the chase of the elk. She, however, had taken advantage of the situation to escape, but being too tired and worn out to run far, she took refuge under the bridge across the Firehole River, and the bear did not succeed in again locating her. After the grizzly had finally abandoned the search and left, it was with considerable difficulty that the elk was driven from under the bridge so that her picture could be taken.

The News would like to know if a picture was taken of the bear chasing the elk and also the moving picture party, and if so, when and where this picture may be viewed.

<u>Carnivorous Animals.</u> Two of the rangers devoted most their time during the month of April to hunting wolves and coyotes. 14 Wolves , 4 coyotes and one fox were killed during the month, which is most gratifying, and means much to the preservation of the elk, deer, antelope and sheep.

Accidents and Casualties.

On January 31, Mr. C. O. Davis, of Gardiner, Montana, reported to some of the park rangers that while he was trapping not far outside of the park line, he found tracks of a man outside the park and leading into it on Hellroaring Creek; that he found indications that this man had lived at the forest ranger's cabin on Hellroaring Creek for about a month, as all the rations that had been placed in the cabin by the rangers for winter use had been consumed. He also reported that the tracks and signs indicated that the man was crippled, probably from frozen feet. He took the pains to follow the trail until he reached the park line, but abandoned it there because he was carrying firearms and did not want to go into the park as he had no authority to carry arms unsealed there. He said he believed a dead man would be found in the park when the snow melted.

Following this report, one of the rangers vent to this vicinity several times to investigate, but the deep snows had covered up all traces, and he could find nothing.

It was not until April 21st that two of the forest rangers serving in the Absaroka National Forest in the special work of protecting the wild animals wintering outside of the park, returning from one of their patrols through the park, found the body of a man, the snow which covered him having melted so that a little of his clothing showed.

It was found impracticable to move the body under the winter conditions then prevailing, so he was buried near the place where he was found. The burial service was read from the Episcopal Prayer Book by one of the rangers.

The man was apparently a foreigner. There were no signs of violence, and it was apparent that he had perished from exposure and cold.

YOSEMITE

Road Work

Owing to the smaller appropriations for road work this year, the work has been confined entirely to grader work and no filling nor rolling has been done. One exception to this was the surfacing of short stretches of the roads in the vicinity of the barns where the natural dirt graces had become almost impassable, and the surfacing with gravel of the approaches to the Stoneman Bridge.

The maintenance of the El Portal Road was confined to such work as could be done with the two regular maintenance men who are stationed on that road and such additional labor as was necessary to remove slides resulting from the two heavy storms during; the month. One of these had its origin on the cliff some 500 feet above the road, and a good many tons of rock were avalanched into and over the road, with the result that about 100 feet of the retaining wall was taken out.

All this damage was repaired during the month.

The work of opening the Wawona Road was started a little earlier than usual in order to have it open for the Brooklyn Eagle party by the 24th. A force of men began work on the 17th and by the night of the 23d the road was broken through as far as the Fallen Monarch in the Mariposa Grove of Big Trees. More snow was encountered in the opening of the road than any year since Mr. Lewis has been superintendent, it being necessary to shovel through as much as five feet in some places. This is an indication of better snow conditions in the mountains than are generally supposed to exist.

Within the Mariposa Grove the road is open and in good shape as far as the Fallen Monarch, but is completely blocked with snow from the cabin up to the upper loop where drifts of from one to four or five feet still exist. It is proposed to let this part of the road open itself. This is both an initial saving and also a saving in the repair of the road after the snow is gone, as it is a fact that where a road is opened by shoveling through the snow, those portions where the snow has been shoveled become soft and boggy under heavy travel and require considerable care and repair to put them into shape.

The Big Oak Flat Road is scheduled to open on May 15. There is some question yet as to whether this will be accomplished as there is considerably more snow than usual in the higher sections.

Trails

Nothing was done on the trails during the month of April other than in cleaning up the foot and horse trails on the floor of the Valley and shoveling a few drifts on the Nevada Falls trail, and repairing the trail to Sierra Point. At the close of the month the Yosemite Point trail was open to the foot of the upper falls; the Tenaya Lake trail to Snow Creek on the rim of the canyon; and the Vernal and Nevada Falls trail as far as the top of Nevada Falls. Both the Long and Short trails to Glacier Point should be open about the 15th of May.

Machine Shop Work

The work of the rangers in the machine shop during the winter months was of such assistance to the general mechanic that by the 15th of April practically all of the motor driven vehicles had been completely overhauled and put in first class running conditions. Since that time it has not been necessary to give the general mechanic any additional help and he will be able to handle the machine shop work alone probably for another month, until repairs become heavy as a result of the greater use to which all of the motor driven equipment will be

put. The superintendent feels very much pleased with the results of the ranger force along this line, as they not only got a lot of excellent experience, but actually accomplished big saving in mechanical labor that would have had to be furnished otherwise had they not been assigned to work in the machine shop.

Wood

Twenty and one-half cords of wood were cut during the month. It is still almost impossible to secure woodcutters, and there is practically no supply on hind with which to furnish campers during the summer. It is hoped, however, by discouraging so far as possible the sale of wood to campers and urging them to hunt up their own wood, and cutting down as much as possible on the use of the residents, to tide over the situation until woodcutters are available.

Travel

During the month of April a total of 1717 people entered the park, of which number 1473 came by railroad via El Portal, 4 by the Yosemite State and Turnpike Company stages; 22 walking, driving, etc., and 218 in 74 private cars. This is almost a 300% increase over the travel in April 1919, when a total of 608 people entered the Park. It is interesting to note that although the Wawona Road opened on exactly the same date this year as in 1919, 74 cars carrying 218 people came in this your, as compared with 8 cars carrying 28 people in 1919. From all indications this is a good example of what may be expected in the way of an increase throughout the coming summer.

The Sentinel Hotel registered 916 guests during the month, with an average stay of 2 1/2 days.

Camp Curry opened on April 17 and between that date and the end of the month, registered 287 guests with an average stay of $2\ 1/2$ days each.

Snow

The following snow records were taken during the month:

				Glacier Point
On	ground	April	1,	56 inches
"	II .	II .	15,	46 "
11	II .	11	30,	34 "
				Yosemite
"	II	11	1,	Trace
"	II	II	15,	п
"	"	11	30.	None

On April 14 two of the rangers made a trip to Tuolumne Soda Springs. In the Tuolumne Meadows an average depth of 41 to 52 inches were found, 42 inches at Tenaya Lake, and 55 inches at the summit between Tenaya Lake and Tuolumne Meadows. They reported heavy snow all the way from Snow Creek on the Tenaya Lake Trail to Tuolumne Meadows all of which seems to be lying well and is well backed and solid.

Mosquito Control Work

Late in the month of March mosquito breeding was discovered in some of the stagnant pools and immediate control operations were started. In order that there may be no possibility of falling down on this work, Ranger Adair has been assigned to that work only and is making daily patrols of the entire floor of the Valley, visiting each of the 150 to 175 breeding place. As fast as breeding is noted, oil is applied. An interesting discovery in connection with breeding was made this spring. While it is generally known that mosquitoes hibernate to a certain extent over the winter months it was not supposed that this was done to any great extent, but rather that the: breeding for any year was the result of hatching of eggs laid the previous year. As soon as oil was applied this spring, however, it was noted that within a few hours after application, the surface of the water would be literally covered with full-grown mosquitoes. The inference is that these mosquitoes had hibernated in the rocks and brush during the winter months and returning to these various pools to breed, were caught in the oil film on the top of the water. Literally millions of mosquitoes have been destroyed in this way during the past month. So carefully has the situation been watched that at the present time there is absolutely no breeding anywhere on the floor of the Vallev.

Starting in at the very beginning of the breeding season this year, instead of after the hatching has already started as was the case last year, there will be a wonderful opportunity to ascertain the efficacy of the mosquito control measures that have been adopted.

Survey Floor of Yosemite Valley

During the month Engineer Taylor completed the field work of that part of the survey of the floor of Yosemite Valley left unfinished last fall. Mr. Taylor is now completing the office work of the survey and as soon as this is finished all the various sheets will be photographed and a few enlargements made for immediate use. This map is going to be of the utmost value in connection with all kinds of construction work, and particularly in connection with the laying out and installation of the new sewer system.

Special Visitors

On April 24 the Brooklyn Daily Eagle party arrived d by special train from San Francisco, The party numbered about 120. They spent the 24th riding, walking, and driving around the floor of the Valley, taking lunch at the Sentinel Hotel, and returned to El Portal to spend the night on their train. Or the morning of the 25th, the entire party was taken by automobile to the Mariposa Grove of Big Trees where lunch was served, the return trip being made to El Portal in the afternoon and the train leaving El Portal at seven o'clock in the evening. In spite of the early date, the party was able to get a pretty good general idea of the Valley and of that part of the park between the Valley and the Mariposa Grove, and all seemed enthusiastic over their visit.

Work of the Concessioners.

The Yosemite National Park Company moved their office and transferred all of their operations to the Valley about April 20, and since then have been engaged in getting their various units ready for operation, the Yosemite Lodge being made ready to open on May 1. A large force of men has been engaged on the various phases of their construction work, the two principal items of which are the new garage and the erection of the new bungalow cottages in the Lodge. The garage situation is being handled in temporary quarters at the old Kennyville barns, but it is expected that the new building will be ready for service early in June. There are to be 65 new bungalow cabins added to Camp Yosemite. There has been delay in their erection owing to the railroad strike and the difficulties in securing delivery of mill work, but every effort is being put forth and the whole operation is going along with enthusiasm and spirit.

ZION

Travel

The number of visitors entering Zion National Park during the month of April was 34, arriving in 9 automobiles. This shows a decided decrease from the travel of last year for the same month, which was 141. But the decrease was no doubt caused by the cold and backward spring, the month having been cold with both rain and snow.

Weather

There were storms of sleet and snow during the first part of the month, followed by heavy winds which loosened small stones and made extra work on the roads. Real winter weather prevailed until the 25th of the month, when warmer weather came. With the cold weather in the early part of the month gardens were frozen as well as alfalfa fields. The loss to the peach crop is estimated at \$100,000 for Washington County alone.

Roads

The roads within the park are in good condition, but the roads leading to the park are very rough, owing to the loosening of small stones by the sheep grazing on the higher levels. These stones find their way into the road bed and make it very rough.

Water Falls

With the great amount of snow and the warmer weather, Zion has at present two beautiful water falls, coming down dizzy heights.

Wild Animals

Deer are again seen feeding towards the park on the eastern rim, coming down from their winter ranges. These all seem in good condition.

Mail Service

Arrangements have been made with the Post Office Department to give Zion a six day mail service without a twenty-three hour lay-over at Laverkin, both going and coming, which has been the case in the past. The mail will also be one hour earlier.

Trees are now all in leaf on the valley floor, which is covered with grass and wild flowers.

CASA GRANDE RUIN

During April all records for attendance were broken by having 965 visitors and 302 automobiles enter the reservation. Compare this with the 445 visitors and 194 automobiles for April, 1919, and with the 430 visitors of 1918, and you will see a that they had more than double the attendance. Thus far the seasonal year has gone well, with 4136 visitors since the night of October 13, 1919, as compared with 2014 for the same period a year ago. Since January 1 there has been 2947 visitors as compared with 1564 a year ago -- not quite double the number, but nearly so.

The big day of the month was the 16th, when the Brooklyn Eagle party came through. Counting local visitors as well as the 126 in that party, we had 200 that day. On the 11th there were 139, and on the 25th 120.

Miss Beatrice Ward, of the National Park Service, with the Brooklyn Eagle party, is the first member of the Washington Office to visit the Casa Grande Ruin.

Weather

The weather during the month was clear and a little cool. The worst day of the month was the 16th when the Brooklyn Eagle party came through. There was a high wind and a great deal of dust that day. There was no good rain during the month. The spring season is later there, as elsewhere, and a great deal of cotton and other early planting had to be done twice.

Range conditions are still good but it will not be long until the range will begin to suffer from lack of rains. The stock in general between the Casa Grande and the border are in good condition. Reports from the Salt River Valley are to the effect that the bright outlook for the cotton market for the coming year makes the ranchers feel very well satisfied.

MUIR WOODS

In Muir Woods National Monument a general spring cleaning has taken place. The lunching groves have been cleaned, the rubbish burned. The Nature Trail has been gone over with a brush hook. The trails have all been gone over, the underbrush has been removed from the fire line trails, and signs have been nailed up throughout the park.

The custodian with a surveyor and Mr. William Kent has selected a suitable place on Mr. Kent's property adjoining the Monument for the parking of automobiles, and hereafter automobiles will not be allowed inside the monument grounds.

TUMACACORI

In submitting his report on the Tumacacori Mission, Mr. Pinkley tells of an interesting trip from Casa Grande to the mission the latter part of April. He was accompanied by Mrs. Pinkley and a cousin and they made a camping trip of it, spending three nights out on the desert. They found the mission in as satisfactory condition as could be hoped for. The building was nicely swept out, the register was in place and there was no evidence of vandalism. Cattle are Somewhat of a nuisance because they use the land in the vicinity of the mission for a bedding ground. It is hoped that there can be an addition secured to the land surrounding the mission and then a fence will remedy this situation.

The number of the visitors to the Tumacacori has averaged about 400 per month since the installation of the register in February. A man from Scotland had registered a few days before Mr. Pinkley's visit, and the general run of visitors seemed to be well scattered over the United States. The larger per cent of Monument visitors are naturally from the local state.

On the way over Mr. Pinkley visited the San Xavier Mission, and on the return trip they stopped a few hours at the Guevavi Mission. After leaving Nogales they ran out to the Calabasas Store for the purpose of locating and exploring the old Calabasas Mission, which they found very interesting. From his explorations, Mr. Pinkley draws the following conclusions:

- 1. The building was built and used for some time as the church building at the Calabasas Mission.
 - 2. It was then put to the more common use of a dormitory of living rooms.
 - 3. The building was then entirely abandoned and went to ruin.
 - 4. It was then occupied as a living house by more recent settlers.
 - 5. The building was then abandoned and has since been used as a stable or store room for hay or for both purposes one of after the other.