

REPORTS OF THE
DEPARTMENT OF THE INTERIOR

FOR THE FISCAL YEAR ENDED JUNE 30

1918



VOLUME I

SECRETARY OF THE INTERIOR
BUREAUS, EXCEPT OFFICE OF INDIAN AFFAIRS
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REPORTS OF THE DEPARTMENT OF THE INTERIOR.

Administrative reports, in 2 volumes.

Vol. I. Secretary of the Interior.

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and Reclamation Service.*

Eleemosynary institutions.

Vol. II. Indian Affairs.

Territories.

* The Report of the Reclamation Service is not included in this report as it is made to Congress and printed under its direction.

RECOMMENDATIONS.

There are many undertakings for the improvement of the park that could be suggested. Indeed, the possibilities are almost limitless, but as these improvements can only be gained by working them out one by one, the more pressing needs will only be mentioned. Ultimately it is hoped that this park will be not alone attractive on account of its archaeological wonders, but also be made of interest to the naturalist. Nature has in Mesa Verde provided a rare place for a big game preserve, and it is hoped that some day will see it the home of herds of the big game species of America.

At present the more imperative needs are more roads and more extended restoration work among the hundreds of ruins in the park. A short strip of road across the divide between Morefield and Prater Canyons, some 3 or 4 miles in length, connecting with the present road at Stations 64 and 327, would eliminate some 6 miles of travel for the visitor going to the ruins, do away with the longest grade on the road, and add much to the scenic value of the trip. This road should be made during the coming season.

Other roads are necessary to open up to tourists sections full of interest, containing many rare old ruins that are now inaccessible except to those who are willing to make a hard horseback trip.

A short piece of road should be at once constructed from Station 64, at the head of Morefield Canyon, to the top of Point Lookout. This would be a side trip, and would be taken by all, either on entering the park or on the return. The level space on the very outmost point of the hill would provide ample space for cars to turn, and the view obtained in all directions is unobstructed. Many tourists now leave their cars at Station 64 and walk the short distance to the summit, and no one should leave the park without having seen the view from this point.

One of the immediate needs of the park is the preservation of Square Tower House, a fine example of prehistoric architecture. The square tower, from which the ruin takes its name, will soon fall if not strengthened. Here were found the only kivas with the original coverings, or roofs, in place. This ruin is only 2 miles from the camp and many tourists visit it, although the approach is perilous. It should be restored, protected, and an easy and safe approach provided. On the face of the cliff, near the center of the ruin, is carved the scroll, supposed to be the sign of water. It will be of great interest to learn whether, beneath the fallen rock and the drift of ages, there is a spring of water. Such will probably prove to be the fact, though now there is no sign of moisture on the surface to indicate the presence of living water. High up in a niche in the cliff, overlooking the ruin, is perched a small room with loopholes pointing downward, making it impregnable to foes from below. Altogether this ruin is one of the most interesting in the park and should be preserved. It is now fast falling into hopeless decay and the work of restoration should be taken up at an early date.

Mummy Lake should be excavated and restored, and the old ditch leading into it cleaned out that the water from the summer rains will be saved. At present the reservoir is full of water only early in the spring, but with the water protected it should remain full the greater portion of the season.

GLACIER NATIONAL PARK.

W. W. PAYNE, Superintendent, Belton, Mont.

GENERAL STATEMENT.

The Glacier National Park was established by the act of Congress approved May 11, 1910 (36 Stat., 354), and is located in northwestern Montana. It embraces 1,534 square miles of the Rocky Mountains and adjacent territory, extending north from the main line of the Great Northern Railway to the Canadian border. The eastern boundary is the Blackfeet Indian Reservation, and the western boundary is formed by the Flathead River. The park, which is irregular in shape, has an area of 981,681 acres. Its greatest length in a northwesterly-southeasterly direction is about 60 miles, with a maximum width approaching 40 miles. Within its borders are attractions for the scientist, nature lover, and tourist unsurpassed by any country in the world, tourists of world-wide experience pronouncing it the Switzerland of America.

The elevations in the park range from 3,100 feet to over 10,400 feet. The high central portions of the area in the northwestern-southeastern axis are formed by the Continental Divide, the peaks and cliffs of which are sharper and bolder than found elsewhere in the United States and are in marked contrast with the open plains of the east and the valleys of the Flathead River on the west. Many of the mountain peaks are difficult to climb, one of which—Mount St. Nicholas, "The Matterhorn"—has never been climbed; while Mount Cleveland, the highest mountain in the park, is 10,488 feet in elevation. But the most wonderful of all the mountains is Triple Divide Peak, for from the top of this mountain, and from no other place in North America, one can stand and throw stones into the headwaters of streams flowing northward into the Hudson Bay, into those flowing southward to the Gulf of Mexico, and into those flowing westward into the Pacific Ocean.

Within the confines of the park are 60 or more active glaciers, these ice sheets being the source of beautiful cascades and mountain streams flowing into numerous clear and placid lakes, for which the park is famed. The most noted of these lakes are Lake McDonald, Lake St. Mary, Lake Ellen Wilson, Iceberg Lake, Red Eagle Lake, Kintla Lake, Bowman Lake, Waterton Lake, Quartz Lake, Harrison Lake, Logging Lake, and Two Medicine Lake. Lake McDonald, which is situated at the west entrance, and Lake St. Mary, about 36 miles north of the Glacier Park entrance on the east side of the park, are the two largest and most widely known, and are visited by a large number of tourists each season. They are of easy access and have pleasure launches for the accommodation of visitors. Each lake in the park has a distinct individuality of its own. A special setting of soft, beautifully wooded hills and mountains, or rugged, bold, many-colored cliffs, and towering, serrated peaks with dazzling snowcaps, or perhaps blue-white glaciers, all of which present to the eye of the visitor a picture of unsurpassed beauty that is never forgotten.

The park is governed by a superintendent whose headquarters are maintained at Belton, the western entrance of the park. New administrative buildings were recently constructed on a tract of land purchased by the director, Mr. Stephen T. Mather, and donated

to the park for administrative purposes. Here is also maintained an office staff to assist in this part of the park administration and the office of the United States Commissioner, before whom are tried those arrested for violations of park regulations. The police and patrolling of the park is done by a force of 12 rangers under a chief and assistant chief ranger, the chief ranger's headquarters being maintained at Glacier Park Station on the east side of the park and the assistant chief ranger's at Belton. A telephone line connects all ranger stations on the west side with the park headquarters.

TRAVEL.

The regular tourist season was fixed from June 15 to September 15, and while it opened on schedule time and every accommodation was ready for the tourist there was a decided decrease in the number of visitors. However, tourists who visited the park appreciated the preparation that had been made for their accommodation by the various concessioners, the Glacier Park Hotel Co., the Glacier Park Transportation Co., and the Park Saddle Horse Co., as well as the Lake McDonald Transportation Co. and the privately owned Glacier Hotel on Lake McDonald. The total registration of tourists entering the park during the season and the accommodations furnished by the different transportation and hotel companies is summarized as follows:

Registration at Belton entrance:		
Via Glacier Park Transportation Co.....	629	
Via Weightman's livery service.....	315	
Via private conveyances (autos, etc.).....	2,579	
Entered on foot.....	123	3,646
St. Mary's entrance:		
Via Glacier Park Transportation Co.....	1,330	
Via private conveyances (autos, etc.).....	1,164	
Via horseback.....	81	2,575
Two Medicine entrance:		
Via Glacier Park Transportation Co.....	321	
Via private conveyances (autos, etc.).....	421	
Entered on foot.....	1	
Entered on horseback.....	90	833
Many Glacier entrance:		
Via private conveyances (autos, etc.).....		384
(All other visitors registered at St. Mary's entrance.)		
Belly River entrance:		
Entered via private conveyances, etc.....		146
Waterton Park entrance:		
Via boat from Waterton Lakes Park, Canada.....		1,502
Total visitors entering park.....		9,086
Automobile permits issued:		
Belton entrance.....	526	
St. Mary's entrance.....	327	
Two Medicine entrance.....	100	
Many Glacier entrance.....	100	1,053
Complimentary.....		12

The various transportation companies in the park report the number of tourists handled during the season as follows:

Glacier Park Transportation Co., total number of fares carried.....	2,280
Park Saddle Horse Co., total number of scheduled trips.....	1,172
Park Saddle Horse Co., total number of nonscheduled trips.....	1,105
Lake McDonald Transportation Co., total number round-trip and one-way fares carried.....	2,909
Glacier Park Hotel Co., boat on St. Marys Lake.....	2,685

The various hotels and chalets throughout the park report 35,544 meals and 15,700 lodgings being furnished visitors the past season, as follows:

Hotel or chalet.	Meals.	Lodgings.
Glacier Park Hotel.....	13,350	4,506
Two Medicine Camp.....	1,184	326
Cut Bank Camp.....	296	146
St. Mary Camp.....	1,426	359
Going-to-the-Sun.....	5,150	1,243
Many-Glacier Hotel.....	12,624	4,049
Granite Park Camp.....	1,014	329
Belton Chalets.....	(1)	830
Glacier Hotel (Lewis').....	(2)	3,912
Total.....	35,544	15,700

¹ None.

² No report.

CONCESSIONS.

The Glacier Park Hotel Co. operated all of their hotels and chalets throughout the park during the 1918 season with the exception of Sperry and St. Mary Chalets, which,

on account of the need of repairs and the small number of tourists in the park, were not opened. A few, however, were able to get meals at Sperry Chalet while en route from Going-to-the-Sun Camp to Lake McDonald, from the caretaker, who was stationed there a portion of the summer. In addition to their hotels and chalets, the Glacier Park Hotel Co. operates the passenger boats on St. Marys Lake between St. Marys Chalets and Going-to-the-Sun Camp.

All of the automobile transportation in the park is carried on by the Glacier Park Transportation Co., which operates about thirty-one 10-passenger auto busses and several touring cars. The larger cars make daily trips between Glacier Park Station and St. Marys and Many Glacier, as well as Two Medicine and Cut Bank, on the east side of the park, and between Belton and the foot of Lake McDonald, on the west side.

The Park Saddle Horse Co., which has the concession for furnishing saddle and pack horse service in the park, made scheduled trips to the various points of interest throughout the park from the Glacier Park Hotel, Many Glacier Hotel, Going-to-the-Sun Chalets, and the Glacier Hotel, on Lake McDonald, as well as nonscheduled trips for those desiring to make independent camping trips.

The concession for passenger transportation on Lake McDonald was given to Messrs. Miller & Kelly. During the past season the 75-foot gasoline boat *Lewtana* and the 35-foot launch *Emaline* were kept in operation on regular scheduled trips, the travel not justifying the operation of their other two launches.

A permit authorizing the collection of fishing parties for trips on McDonald Creek and the Middle Fork and North Fork of the Flathead River was issued to George E. Snyder, who owns and operates a 75-foot air-propelled launch and a 20-foot air-propelled launch, both especially adaptable for use in shallow water. However, to avoid concessions conflicting, this permit only permits the collection and return of parties from points on Lake McDonald for fishing trips on the aforementioned streams.

A permit was also granted Mr. H. H. Hansen to operate a tourist supply store and camp and to provide sleeping accommodations to tourists at the south end of Lake Waterton; also to operate a passenger boat service on that lake. A small log building was used for the store and several tents were erected for the accommodation of tourists desiring sleeping quarters. In view of the fact that over 1,500 tourists registered at this point during the season it is hoped that better accommodations can be provided to take care of those visiting this part of the park in the future.

A permit for operating a nonscheduled livery business on the west side of the park was granted Mr. John Weightman, who owns a livery barn at Belton. This concession, however, was not for scheduled trips, as the auto busses make the regular scheduled trips between Belton and the foot of Lake McDonald.

ROADS.

There are 130 miles of roads in Glacier National Park and in the Blackfeet Indian Reservation, which borders the park on the east, the construction and maintenance of which is under the supervision of the park superintendent. Of this amount about 95 miles are suitable for automobile travel and the remainder, owing to their unimproved condition, are used only by horse-drawn vehicles. The sundry civil act for 1919 carried an appropriation of \$80,000, under which the following road work has been done to date:

Glacier Park—Many Glacier Highway.—From Glacier Park to a point one-half mile south of 9-mile hill holes in the road were filled with gravel, gutters cleaned, and culverts repaired, and the Two Medicine bridge strengthened. From this point north to the bottom of 9-mile hill the road was graded, graveled, and rolled. On the loop, where the Browning Road connects with this highway, the road was graded, graveled, and rolled. In all, about 2½ miles of excellent road was completed. From this point on to 23 miles rakers were employed raking loose rock from the roadway and repairing culverts and bridges. From 23 mile to St. Marys slides were removed and gutters cleaned and some cribbing done.

From 35½ to 39 miles the road was graded, graveled, and rolled. A small amount of work, such as top dressing, still remains to be done here. About 3 miles of the road has been graveled. A small crew has been engaged from here on to Many Glacier repairing the road and bridges. The Swiftcurrent bridge was also redecked during the season.

Two Medicine Road.—Slides and rock were removed from this road and riprapping was done at Trick Falls bridge.

Cut Bank Road.—Slides and rock were removed from this road.

West side—Belton—Fish Creek Road.—The bridge across the Middle Fork of the Flathead River was repaired and strengthened and slides removed from the road between the bridge and the new administration site and the road was dragged when the weather would permit.

North Fork Road.—About 800 feet of new corduroy was completed on this road. Grading and repairing was also done, and the road is now in a condition for automobile travel for a distance of about 20 miles.

Remarks.—On account of the excessively dry season and high winds the roads became very dusty, and as it was impossible to drag them numerous holes developed. However, most of the bad places have been filled with gravel. Even on the newly graveled stretches it was impossible to get a hard, packed road, even with the use of the roller, without the proper amount of moisture. During the latter part of the season, however, there has been more rain and the completed sections are rounding into shape, and in the spring these new stretches should open up in excellent condition.

TRAILS.

Of the 225 miles of trails within the park about 150 miles were maintained during the 1918 season. The two principal passes, Gunsight and Swiftcurrent, were open when the tourist season opened, on June 15, but about July 1 Gunsight Pass was partially blocked by two slides. The trail was quickly reopened, however, and there was no inconvenience to tourists. The other maintenance work on the trails consisted in removing slides, fallen timber, and rocks and renewing drains, bridges, and corduroy. The new trail construction for the season consisted of the following:

Lake McDonald trail.—That part of this trail left unfinished last fall was completed and the entire trail from the foot of Lake McDonald to the Glacier Hotel cleared of fallen trees, etc. The trail as completed is from 6 to 8 feet wide and follows the old road survey line.

Logan Pass trail.—This trail was completed and opened for tourists August 3, the McAdoo party, consisting of Secretary McAdoo, Mrs. McAdoo, Mr. Oscar Price, Mr. Schaffer, and Dr. Frank Miller, passing over the route from Granite Park to Sun Camp on this date. This trail is 16 miles long and is one of the most scenic in the park, opening up for tourist travel Hidden and Twin Lakes and a very interesting unnamed glacier. Flowers in great numbers and varieties abound on the pass during the season.

BUILDINGS.

The buildings of the new administration headquarters at the Belton entrance which were started last fall were completed this summer and are now ready for occupancy. These consist of four residences, each 28 by 28 feet and having a kitchen, living room, sleeping room, and bath, and space for two additional rooms upstairs; frame warehouse, 28 by 36 feet, shingle covered; stable, 36 by 56 feet, and capable of accommodating 14 head of horses; carriage shed and hostler's quarters; and the water plant and sewer system.

The roof of the shelter cabin at Plegan Pass, constructed last season, was blown off during the winter and a crew was employed in laying a new roof.

The temporary warehouse at Glacier Park Station was demolished by a windstorm on the night of February 9. The Great Northern Railway loaned the park the use of their old stable for use as a warehouse until such time as a permanent structure could be constructed. Work was recently started on a building for this purpose on the site of land donated to the park by the Great Northern Railway Co. and the building will be completed and ready for occupancy before the cold weather sets in.

During the summer a fish hatchery was constructed on a plot of ground just back of the Glacier Park Hotel, description and operation of which will be discussed under separate heading.

FISH.

Excellent fishing has been reported during the past summer in nearly all of the lakes and streams in the park in which fish are found. Good fishing is, of course, always to be found in Avalanche Lake and Creek, but during the 1918 season such lakes as Two Medicine, St. Mary's, and McDermott, on the east side of the divide, as well as Bowman, Trout, and Snyder Lakes on the west side, have been reported as furnishing better sport of this kind than in previous years.

Fish hatchery.—The National Park Service, in cooperation with the Bureau of Fisheries, has erected a fish hatchery a short distance west of the Glacier Park Hotel at Glacier Park Station. The building is 49 by 34 feet and 1½ stories high, with shingled roof and rustic siding. It is equipped with 32 troughs 16 feet by 17½ inches, each trough containing 9 compartments which hold 6 loaded trays with one tray on top for binder. The egg capacity is about 5,000,000 during incubation; 2,500,000 fry can be hatched. An unlimited water supply is furnished by Midvale Creek, which passes within a short distance of the hatchery.

Species to be hatched.—*Salmo irideus* (rainbow trout), *Salmo mykiss* (black-spotted, native, or cut-throat trout), *Salvelinus fontinalis* (eastern brook trout), *Thymallus tricolor montanus* (Montana grayling), *Salmo gairdneri* (steelhead trout). Of the 300,000 black-spotted trout eggs sent to this station from the Yellowstone Park 275,000 sturdy trout were hatched and the lot are to be planted in the waters of the park.

Fry are to be planted in the following lakes and streams within the park: Lake Josephine, Gunsight Lake, Cutbank River, Lake McDermott, on the east side of the park, and in Lakes McDonald, Logging, Bowman, Quartz, Kintla, and other smaller lakes on both the east and west side of the park; 8,400 brook trout fingerlings have already been planted this season and more are to be made during this month; several thousand rainbow trout are to be planted, the brook and rainbow trout being shipped here from the Bozeman (Mont.) station.

Owing to the fact that the hatchery was not finished before the middle of August it will not be possible to hatch anything more this season. It is very probable that collections of black-spotted eggs will be started next season—June, July, and August. Brook-trout eggs will likewise be collected within the park in the near future, also rainbow, steelhead, and grayling. It is very probable that later on lake trout or Mackinaw trout (*Christivomer namaycush*), whitefish (*Coregonus clupeaformis*) will also be hatched and liberated in the waters of the park. The ground around the hatchery will be parked and no doubt some ponds made for holding adult trout for exhibition purposes. There is no reason why, under the proper system of development, the waters of Glacier National Park should not contain the best fishing on earth. The fry hatched here are wonderfully sturdy and lusty and this indicates that the water is better than the average for fish. This, together with the aquatic life (for fish food) in the lakes and streams, will in time make this park a wonderful mecca for the angler.

WILD ANIMALS.

The protection afforded the many species of wild animals found in the park is beginning to show in their increasing numbers and their tameness. This is especially apparent as regards the Rocky Mountain sheep, goats, and deer. In previous years a good view of a band of sheep or of a goat jumping from one crag to another on the mountain side was a rare sight indeed; but now it is a common thing to see tourists viewing these animals through field glasses from hotel or chalet veranda. Deer are also increasing in numbers and the campaign of extermination that is being inaugurated against the predatory animals in the park will help greatly in removing this menace to the deer. Elk are still plentiful in the southeastern portions of the park. Moose are seldom seen along the trails although it is claimed there are in the neighborhood of 100 in the park. They confine themselves usually to the lake regions on the west side of the park and in the North Fork valley. Bear, both black and cinnamon, are often seen by tourists riding over the trails. Occasionally a grizzly bear is seen, but they are not numerous.

Predatory animals.—During the early part of the summer the park was visited by Mr. Vernon Bailey, chief field naturalist for the Bureau of Biological Survey. Conditions relative to the destruction of game by predatory animals were investigated and considered sufficiently serious to warrant action being taken toward their extermination. A cooperative agreement was reached between the National Park Service and the Biological Survey under which the Biological Survey should train hunters and oversee the work and the National Park Service pay the salaries.

It was originally planned to send four hunters from the Idaho district, these men to devote about two months of the present fall season in systematically clearing the park of predatory animals and later returning to their regular stations. For several reasons it became necessary to abandon this arrangement, the most important of these being increased pressure of the Army draft and the conviction that more permanent and less expensive results could be obtained through securing local men and training them for the work. Experience has shown that no lasting benefit may be had through a brief period of work, however thorough. As the park is surrounded by hundreds of miles of infested territory, and predatory animals are more or less migratory, a small area is quickly restocked when work is relaxed. By the coming spring, the time when deer are killed in the deep snow by coyotes, enough of these would have drifted in to inflict serious losses and little would be gained by the brief period of fall work. Success in this venture will depend on the permanent employment of the required number of hunters and the job will be a question of years, not months.

Mr. L. J. Goldman, of the Biological Survey, arrived at park headquarters on August 22. He spent several days in familiarizing himself with local conditions, perfecting plans, and locating desirable material for hunters. In this work he was assisted by the assistant chief ranger and one ranger, every assistance possible being provided. Mr. Goldman personally covered the country about Lake McDonald and from Belton to Quartz Creek. Descriptions of the country from Quartz Creek to the boundary were sufficient for present purposes. This region is heavily timbered, with occasional burns and small clearings. The east slope of the park was not visited, as conditions there will not warrant placing cooperative hunters at the present time. This district east of the divide and including the adjoining Indian reservation is open in character. One hunter was established on Anaconda Creek, as this is a central point for the area where coyotes are most abundant and trapping most feasible. Another hunter was assigned the territory from Logging Creek to the International boundary. By September 6 the hunters had been thoroughly instructed in the proper methods of hunting and trapping, and the work was turned over to them.

Of the abundance of coyotes and the damage done to game on the west side of the park, it will be well to avoid taking snap judgment. This can only be determined as the work progresses. Some residents report many coyotes and much damage, but nothing can be more unreliable than the average citizen's estimate in such matters. Coyotes are not usually plentiful in heavily-timbered sections, as the animal prefers the open foothills and plains. But throughout the West there is often a scattering of these animals ranging through the timber and even above timber line. For a number of years I have observed their fall migrations, when, with the coming of winter and deep snows, many leave the mountains and drift into low country. Without study, no accurate report can be made on a given locality, and an attempt at such would be worse than worthless. Mr. Goldman found coyote sign in a number of places, but would not rate them as abundant. Six were killed in a very short time. He estimates that on the line placed, possibly from 15 to 25 coyotes may be caught during a month.

The coyotes' habit of killing deer and antelope about February and March, when snow is at its greatest depth, is well known. Several places in Idaho reported considerable losses last spring. A comparatively small number of coyotes can inflict a very large amount of damage, and there can be no doubt that there are enough coyotes in Glacier Park to destroy a large amount of game. In carrying on this work, benefit to stock and game interests is not necessarily based on the actual number of predatory animals killed, but in removing the individuals responsible for losses. That there is urgent need of game protection from the various carnivores, I am fully convinced. Rough, timbered sections are difficult to work owing to troubles encountered in attempting to handle long trap lines, which is the secret of success in predatory animal work. But the venture is well worth the cost, even though large kills per month are not made.

Work on the east side of the park is a straight Biological Survey affair. A large part of the territory to be cleared lies within the Blackfeet Indian Reservation, and this work will benefit local stock interests as well as the park. So long as it remains a breeding ground for coyotes, the animals will drift across the divide into the deer yards of the west slope. The game of the east side is not suffering from depredations by coyotes, since deer are not plentiful and mountain sheep and goats are in very little danger. Of other predatory animals there are some lion, a few cats, and, perhaps, some wolves ranging across from the Canadian side.

RANGER SERVICE.

During the year the ranger force consisted of 1 chief ranger, 1 assistant chief ranger, and 12 rangers. Private owners in the park have greatly assisted in the prevention of forest fires and in several cases have extinguished small fires without help from the park forces.

FOREST FIRES.

Although the season has been extremely dry, by constant vigilance on the part of park rangers and the hearty cooperation of the officials of the Flathead, Blackfeet, and Lewis and Clark National Forests no fires of any consequence have occurred within the park. The following is a summary of fires during the 1918 season:

June 12, a small fire started near Highgate, burning over an area of about 50 acres covered by dead-and-down timber. It was completely extinguished in two days.

June 13, a fire started on the forest reserve south of the park and jumped the river in the vicinity of Park Creek. A crew of 10 men drawn from the Forest Reserve extinguished the fire by June 23, the small damage being confined to a small area.

June 19, a fire was started near Highgate by sparks from a Great Northern Railway locomotive. A park ranger, assisted by a small crew, quickly extinguished the fire.

July 8, a small fire reported near Paola was extinguished by a small section crew working under the park ranger in that district. No material damage was done.

July 12, a fire was started by lightning on the west side of Lake McDonald. It was extinguished by a crew under the assistant chief ranger, after burning over about one-half acre.

July 17, a fire was reported on Howe Ridge, west of Lake McDonald, being started by lightning. It was extinguished by July 26 by trail crews after burning over an area of about 40 acres of a fair growth of pine and tamarack timber.

July 18, a small fire one-half mile west of Fielding was extinguished by the park ranger there, working with a section crew. About 1 acre of dead timber was burned over.

July 19, a fire, started by lightning, was reported as on Citadel Peak, near the Canadian boundary. It was extinguished by the park ranger there and crew before any material damage was done.

July 21, a small fire started in sec. 24, T. 33 N., R. 18 W. was extinguished by the assistant chief ranger while on patrol. No damage was done.

ACCIDENTS.

Due to the careful handling of the tourists, there were no serious accidents in the park during the entire tourist season.

RECOMMENDATIONS.

The old wooden bridge across the Middle Fork of the Flathead River at the Belton entrance is no longer safe, and a new short-span steel bridge should be erected at or near the old bridge site. At the same time the road from the bridge to the new headquarters should be raised so that it will not be flooded during the high-water periods.

With the increase in traffic on the west side of the park the need is becoming urgent for the improvement of the North Fork Road. Only a comparatively small portion of this road, which reaches to the Canadian boundary, is suitable for automobile travel. This road should be improved by grading and draining.

Very little work has been done in the past on the upkeep of the trail system already constructed in the park. Adequate provision should be made for the maintenance of the trails as well as roads that have already been constructed. No construction work other than the foregoing is recommended on account of the small appropriation expected.

In conclusion I desire to express my hearty appreciation to the entire working force for their loyalty, to the private owners for their strict observance of the park regulations, and to the concessioners for their cooperation in the entertainment of the tourists.

ROCKY MOUNTAIN NATIONAL PARK.

L. C. WAX, Superintendent, Estes Park, Colo.

GENERAL STATEMENT.

The Rocky Mountain National Park was created by the act of January 26, 1915 (38 Stat., 798). Under the act approved February 14, 1917 (39 Stat., 916), entitled "An act to add certain lands to the Rocky Mountain National Park, Colorado," approximately 48 square miles have been added, making the present area of the park approximately 400 square miles. The above acts provide that not more than \$10,000 shall be expended for administration, protection, and improvement in any one year without special act of Congress. Exclusive jurisdiction over the above area has not yet been ceded to the Federal Government by the State of Colorado.

TRAVEL.

An absolute check on the number of people entering this park can not be had under the present conditions. There are no entrance gates and no official checkers to ascertain the number of people or where they came from. This is a disadvantage from the standpoint of the visitors, as well as from that of the park, for with official entrance gates and checkers park officers would be in a position to give needed information to the visitors which would add to their pleasure, as well as information on traffic and other regulations necessary for the safety and protection of all.

Travel was exceptionally heavy to about June 15 this year, at which time a cold rain swept the country, with heavy rains almost daily, and travel fell off greatly, increasing again after August 1 and continuing through August and into September. The following tabulation shows the actual count.