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(May 1929)

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UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Yellowstone NATIONAL PARK

FILE NO.

MONTHLY REPORT

May, 1936.

IMPORTANT

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ARNO B. CAMMERER,
Director.

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DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

YELLOWSTONE NATIONAL PARK

YELLOWSTONE PARK, WYO.

E OF THE SUPERINTENDENT

June 5, 1936

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

Dear Mr. Director:

Following is the report of activities for Yellowstone National Park during the month of May, 1936:

000 - General

The extremely pleasant and warm weather from the 10th of April continued throughout most of the month of May and the warm days resulted in the rapid melting of the snow so that it was possible to get most of the roads open and in good condition for travel by the 15th of the month, when the collection of the motor vehicle license fee began. At the beginning of the month the roads were open to West Yellowstone, Old Faithful, Canyon and Lake and the snowplow continued on to open the South Entrance highway. The plow reached the South Gate on the 19th but it was necessary to wait a couple of weeks before permitting travel so that the highway would have sufficient time to dry. It is expected to permit motorists over this highway June 5. From the South Entrance the plow returned to Lake and opened the road to the East Entrance, reaching that gateway on the 22d. On the 26th motorists were permitted to use this entrance. The Continental Divide road was next opened and then the Sylvan Pass road. Travel was immediately permitted over the latter highway but the Continental Divide road will remain closed to motorists until June 5, on which date all of the entrance roads, except the Northeast Entrance from Red Lodge to Cooke, will be open, as well as all sections of the Grand Loop highway. Travel was permitted over the South Entrance road from Thumb to Lewis Lake on the 30th to allow fishermen to fish that lake over the Decoration Day holiday. The Mount Washburn road should be open about July 1.

The new Superintendent, Edmund B. Rogers, entered the Park via the East Gate on the 25th and assumed his duties as the third civilian Superintendent of the Park on that date, having been transferred from Rocky Mountain National Park.

Considerable time during the last week of the month was consumed in the holding of the Ranger Conference on the 26, 27 and 28 and all of the permanent rangers as well as the Superintendent, Assistant Superintendent, and most of the department heads attended the sessions during the three-day period. The new Superintendent was afforded a fine opportunity to acquaint

himself with the permanent organization, as well as to receive information regarding the various problems which were presented and discussed. The sessions ended with a banquet and dance on the night of the 28th.

The fine weather and early opening of the roads afforded an opportunity for the contractors to get to work early on their various projects and the first crews of the Bureau of Public Roads arrived in the Park on the 8th, on which date the B.P.R. office at Mammoth was opened.

The National Reemployment Service opened its office in the barracks building on May 11, in charge of L. L. Caffney of Terry, Montana.

The ice went out on Yellowstone Lake on May 20th.

The fishing season opened on May 20th and, as practically all streams were high and muddy, most of the fishing was confined to the use of bait. The fly fishing is not good until the high water subsides and the streams are clear.

Work was resumed on the Utility Building on May 15th under contract awarded to Siegfus Brothers of Salt Lake City, Utah while the same Contractor began work on the new Post Office Building at Mammoth following receipt of advice on the 25th that work could be commenced.

020 - General Weather Conditions

A summary of the general weather conditions throughout the park will be found at the back of this report.

021 - In the Park

The summary referred to above is a record of weather conditions at Mammoth but it is indicative of the general weather conditions throughout the entire park. Temperatures have been somewhat above normal and precipitation below normal. Unusually mild temperatures prevailed during most of the month with the result that most of the winter's snow melted more rapidly than usual, making it possible to clear all of the park highways of snow by May 23, almost a month earlier than was predicted at the end of last month.

The rapid and early melting of snow has caused all of the streams in the park to be unusually high for this season of the year but no appreciable damage from high water has occurred.

022 - Approaches to the Park

The North and West Approach roads have been open to travel during the entire month. The East Approach road was cleared of snow and passable to the East Entrance on the first of the month. However, the road over Sylvan Pass was still blocked by snow and was not opened to travel until May 22.

The South Approach road remained closed to travel during the entire month but by the end of the month it was free of snow and passable to auto-

Almost all the primarily operation, it will be [illegible] [illegible] the various problems which were presented and discussed. The sessions ended with a banquet and dance on the night of the 19th.

The fine weather and daily opening of the [illegible] [illegible] for the conferences to get to work early on their [illegible] [illegible] first [illegible] of the Bureau of Mines [illegible] in the [illegible] which [illegible] the U.S.A. office [illegible].

The National Development Service opened its office in the [illegible] building on Day 11, in charge of L. L. Geffney of [illegible], [illegible].

The [illegible] on Tailing-[illegible] Lake on Day 10th.

The fishing season opened on Day 10th and, [illegible] all [illegible] were high and muddy, most of the fishing was confined to the [illegible] of [illegible]. The fly fishing is not good until the high water subsides [illegible] the [illegible] are [illegible].

Very [illegible] on the Utility Building on Day 13th [illegible] [illegible] to [illegible] of [illegible] City, that [illegible] [illegible] [illegible] on the [illegible] that [illegible] [illegible].

Day 9 - General Smelter conditions

A summary of the general smelter conditions throughout the year will be found at the back of this report.

Day 9 - In the [illegible]

The summary referred to above is a record of [illegible] conditions [illegible] [illegible] for it is indicative of the general smelter conditions throughout the entire [illegible]. [illegible] have remained above normal and [illegible] [illegible] [illegible]. Normally this [illegible] [illegible] during [illegible] of the month with the result that most of the smelter's [illegible] were [illegible] [illegible] [illegible], making it possible to [illegible] all of the [illegible] [illegible] or more by Day 12, [illegible] a [illegible] smelter [illegible] was [illegible] at the end of last month.

The [illegible] and early [illegible] of [illegible] [illegible] all of the [illegible] in the [illegible] to be [illegible] with [illegible] [illegible] of the [illegible] [illegible] [illegible] from [illegible] [illegible] [illegible].

Day 9 - [illegible] to the [illegible]

The [illegible] [illegible] [illegible] [illegible] to [illegible] [illegible] [illegible] [illegible]. The [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. However, the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

The [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

mobile travel to the South Entrance. The road from the South Entrance to East Thumb was kept closed to travel because of road bed conditions.

023 - In Nearby States

Weather conditions in the surrounding states have been comparable to the conditions recorded in the Park. Unusually high temperatures and low precipitation conditions have prevailed.

100 - Administration

110 - Status of Work

Due to the opening of the roads, the organization of numerous maintenance crews and the necessity of placing a number of men on the roads, the administration work increased considerably. Being without the services of the agent-cashier and because of our inability to fill clerical vacancies promptly, due to the delay in receiving certificates, it was very difficult to keep the office work current and much overtime was necessary. The additional work occasioned by E.C.W. and the added duties necessitated by new Civil Service regulations and the recommendations of various inspectors has made it difficult to operate properly with the present personnel. It is essential that we have a successor to the agent-cashier at an early date, as well as a successor to Chief Clerk Hundley, who is to be transferred to the Regional E.C.W. office in Omaha, if we are to keep our accounting and administrative work current.

Senior Clerk Neilson returned from leave on May 4.

Clerk Verna Roe was absent on annual leave from May 5 to the 18.

Seasonal Clerk Martin Gary reported for duty on May 19.

Chief Clerk Hundley left on May 20th for Omaha for a conference with regard to his transfer to the Regional E.C.W. office at that point. He returned to the Park on the 25th to await the approval of the transfer by the Secretary of the Interior.

120 - Inspections by:

121 - Superintendent

Superintendent Rogers arrived in the Park via the East Gate on May 25th and assumed his duties as the Park's new Superintendent on that date. Acting Superintendent Emmert met him at the East Gate and accompanied him to Mammoth. After his arrival at headquarters he made inspections around Mammoth and into the interior of the Park as follows:

May 26, 27 and 28 - Attended the Ranger Conference.

May 29 - To Tower Falls and return with Assistant Superintendent Emmert.

[illegible] travel in the [illegible] direction. The road from the [illegible] Station to Port [illegible] was kept closed to travel because of road and weather.

[illegible] - In Hurry Office

Railway conditions in the mountains, which had [illegible] to the [illegible] reported in the Press. Unusually high temperatures and low precipitation conditions have prevailed.

[illegible] - Rehabilitation

[illegible] - Drying of [illegible]

Due to the quality of the roads, the organization of numerous [illegible] and the necessity of placing a number of [illegible] on the roads, the [illegible] were increased considerably. Taking [illegible] the position of the [illegible] and because of our inability to [illegible] material [illegible], due to the delay in receiving [illegible], it was very difficult to keep the office work current and much overtime was necessary. The additional work occasioned by [illegible], and the [illegible] [illegible] by the Civil Service commissions and the [illegible] of [illegible] for work in [illegible] only as operate [illegible] with the [illegible] personnel. It is essential that we have a [illegible] to the [illegible]-[illegible] it is [illegible], as well as a [illegible] to [illegible] District Engineer, who is to be transferred to the [illegible] [illegible]. [illegible] is [illegible], it is [illegible] [illegible] [illegible] [illegible] [illegible].

Senior [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [

Acting Superintendent Emmert made inspections around headquarters and into the interior and outside the Park as follows:

May 5 - To Lake and return with Park Engineer Lord.

May 12 - To South Entrance road and return with Park Engineer Lord.

May 13 - With Messrs. Bauer and Robinson to Old Faithful and return.

May 15 - With Messrs. Bauer and LaNoue to Old Faithful and return.

May 18 - To Billings with Messrs. Carnes, Howard Baker, Hill, Gregg and Mattson, of the Branch of Plans and Design; returned Mammoth for night.

May 25 - To East Entrance to meet Superintendent Rogers; returned Mammoth for night.

123 - National Park Service Officers

Associate Landscape Architect Frank Mattson of the Branch of Plans and Design, arrived via the West Gate on May 6. He departed on the 26th for Great Smoky National Park where he has been assigned for the summer.

Sanford Hill of the Branch of Plans and Design, San Francisco, arrived via the North Gate May 9th. Mr. Hill is to be in charge of the landscape work in the Park this summer.

Howard Gregg of the Branch of Plans and Design, San Francisco, arrived via the North Gate May 11th. Mr. Gregg is to be assigned to the Yellowstone for the summer.

William Carnes of the Branch of Plans and Design, arrived via the North Gate May 15th. He departed via the same gateway on the 18th enroute to Washington where he has been assigned.

Howard Baker of the Branch of Plans and Design, Regional Office, E.C.W., Denver, arrived via the North Gate May 17th and departed via the East Gate for Denver on the 24th.

L. F. Cook, Chief of the Western Division, Forestry Department, National Park Service, Berkeley, arrived via the West Gate on the 25th to participate in the Ranger Conference. He departed via the North Gate on the 29th for Glacier Park.

Ward P. Webber, Engineer, National Park Service, San Francisco, arrived via the North Gate May 15th. He is to be engaged on work in connection with the Mammoth reservoir.

125 - Other Governmental Officers

William F. Hutton and Wilson H. George, Special Agents, Division of In-

[illegible] Department Center [illegible] Investigation [illegible] and have the Inspector-[illegible] outside the [illegible] in Tucson.

May 9 - To Lake and return with Test Pilots [illegible].

May 10 - To Boston Airport and return with Pilot Training Board.

May 12 - [illegible] Department, Tucson was [illegible] to the Pilots and return.

May 13 - [illegible] Department, Tucson was [illegible] to the Pilots and return.

May 16 - To Phillips with [illegible], [illegible], [illegible], [illegible] Department, of the Branch of Plans and Design; [illegible] for [illegible].

May 18 - To Fort [illegible] to meet [illegible] Department; [illegible] for [illegible].

12 - National Park Service Officials

Associate Landscape Architect Frank [illegible] of the Branch of Plans and Design, arrived via the [illegible] on May 6. He departed on the [illegible] for Grand Canyon National Park where he will [illegible] for two months.

Retired Gill of the Branch of Plans and Design, San Francisco, arrived via the North [illegible] on May 6th. He, Gill is to be in charge of the landscape work in the Park this summer.

Chief Engineer of the Branch of Plans and Design, San Francisco, arrived via the North [illegible] on May 11th. He, Chief is to be assigned to the Yellowstone for the summer.

Hillin Carson of the Branch of Plans and Design, arrived via the [illegible] on May 12th. He departed via the same [illegible] on the 14th [illegible] to [illegible] where he has been [illegible].

Howard Chief of the Branch of Plans and Design, Regional Office, [illegible], arrived via the North [illegible] on May 17th and departed via the [illegible] for [illegible] on the 18th.

L. J. Hook, Chief of the Design Division, Planning Department, National Park Service, Berkeley, arrived via the [illegible] on May 17th to participate in the Junior Conference. He departed via the North [illegible] on the 20th for Glacier Park.

Mark T. Reder, Director, National Park Service, San Francisco, arrived via the North [illegible] on May 19th. He is to be engaged on work in connection with the Redwood Conference.

13 - Other Government Officers

William T. [illegible] and Hugh G. [illegible], Special Agents, Division of In-

vestigation, Office of the Secretary, Washington, D. C., arrived via the North Gate May 28th and will spend most of the summer in the Park on special investigation work.

Oscar O. Brattebo, Construction Engineer, Procurement Division, Treasury Department, arrived via the North Gate May 31st. Mr. Brattebo is the Inspector on the new Postoffice building at Mammoth.

H. W. Johns of the Water Resources Branch, Geological Survey, Boise, Idaho, arrived via the West Gate May 26th to inspect gauging stations, contact observers and secure discharge measurements.

140 - Labor Situation

The early opening of the roads which permitted the contractors to start work on their various road projects and the starting of the maintenance crews by the National Park Service resulted in the rapid employment of men and by the end of the month many men from the neighboring states had secured employment. The National Reemployment Service reopened its office in the barracks building on May 11th in charge of L. L. Gaffney of Terry, Montana. Bernice Hooley of Wyoming and Harold L. Mitchell of Idaho are assisting Mr. Gaffney.

150 - Equipment and Supplies

Three carloads of coal, nine carloads of road oil, four carloads of gasoline, two carloads of groceries and one carload of fuel oil were received in addition to other shipments of machinery, iron, coffee, storage batteries, tires and tubes, hardware, beds, steel safe, etc. weighing 33,044 lbs.

160 - Status of Alienated Lands

There was no change in the status of alienated lands during the month.

170 - Plans, Maps and Surveys

The engineering personnel was increased by one man during the month, Engineer Webber being detailed from Field Headquarters for the Mammoth Water and Power Development project. General engineering activities were routine and the E.C.W. engineer spent the entire month on trail reconnaissance and surveys with representatives from the Landscape Division and the Chief Ranger's office. Selection was made from the Civil Service register to fill the position of Assistant Park Engineer and that engineer is expected to report about June 3.

180 - Circulars, Placards, Publicity Bulletins, Etc.

Circulars Nos. 8 to 12, inclusive, were issued during the month and copies are attached. The May-June issue of Nature Notes is in the process of preparation and will be circulated about the middle of June. A number of press releases on road openings, accommodations and C.C.C. activities were furnished the Associated Press, United Press and western papers, and numerous pictures

investigation, Office of the Secretary, Washington, D. C., arrived via the Air Force Data Log 1081 and will send most of the money to the Park on special investigation work.

Chase G. Gardner, Contracting Officer, Procurement Division, Treasury Department, arrived via the Data Log 1081. Mr. Gardner is the Treasurer on the new Courthouse building in Boise.

A. H. Tobias of the Sales Executive Group, Industrial Survey, Boise, Idaho, arrived via the Data Log 1081 in Idaho on Idaho Power Company business and discuss financing requirements.

140 - Labor Situation

The early opening of the roads which permitted the contractors to start work on their various road projects and the starting of the maintenance crews by the National Park Service resulted in the rapid employment of men and by the end of the month many can find the unemployment office but several employment. The National Development Service reopened its office in the Courthouse building on May 11th in charge of A. L. Gaffney of Twin Falls. Mention Hailey of Opening and Darrell L. Mitchell of Idaho are assisting Mr. Gaffney.

150 - Equipment and Supplies

There are plenty of coal, nine carloads of road oil, four carloads of gasoline, two carloads of powder and one carload of fuel oil were received in addition to other shipments of machinery, tools, motors, electric, cables, wires and tubes, hardware, tools, wheel rims, etc. and other supplies.

160 - Status of Allotted Funds

There was no change in the status of allotted funds during the month.

170 - Plant, Home and Camps

The employee housing was improved by the new barracks and dormitory buildings being built from Field Employees for the Department Water and Power Development project. Several maintenance activities were started and the C.C.C. engineer found the entire month in light maintenance and surveys with representatives from the Landscape Division and the Chief Engineer's office. Indication was made from the Civil Service Commission to fill the position of Landscape Architect but this position is expected to remain about June 30.

180 - Directives, Circulars, Availability Bulletins, etc.

Circulars Nos. 3 to 12, inclusive, were issued during the month and copies are attached. The one-line issue of Motors Notes is in the process of preparation and will be circulated about the middle of June. A number of press releases on road openings, recreation and C.C.C. activities were furnished the Associated Press, United Press and weekly newspapers, and numerous letters

were circulated for publicity purposes.

J. H. Nader, who has handled the publicity work in the Park during the past several years, has been reappointed for the coming summer and is expected to report about the middle of June.

200 - Maintenance, Improvements and New Construction

210 - Road Maintenance

The snowplow completed its work on June 14 with the clearing of the Dunraven Pass section, leaving only the Mount Washburn road to be cleared. This last named section is too narrow and crooked to permit the use of the plow and must be cleared by hand labor. Organization of the permanent maintenance crews followed closely the clearing by the snow plow and eleven of the crews were established on their sections at the close of the month with the remaining seven to be sent out during the first week of the coming month. Travel is permitted over all the park roads except the Old Faithful to West Thumb section and the southerly ten miles between West Thumb and the South Entrance.

The oiling crew started work on May 11, treating the service roads in the headquarters area for about ten days, moving then to Old Faithful to process the eleven mile Firehole Cascades-Old Faithful section which was graded by contract last season, and the service roads in the vicinity of Old Faithful.

The East Forest maintenance crew was established on May 11 and had that section in excellent condition by the time it was possible to open the east section within the Park.

220 - Improvements

Shops - The overhauling of trucks and equipment had been completed by the end of the month and the maintenance has gone forward.

Electrical Department - In addition to the usual maintenance and repair work during the month, the underground power cable at the reservoir was connected up permanently, the street light circuit was disconnected from the new Post Office site and rerouted, and a number of tent houses and portable houses were wired.

Two full-time telephone operators were secured to replace the two NYE appointments. Mrs. Mildred Christenot and Miss Esther Hoyd, two experienced telephone operators were secured through the Mountain States Telephone and Telegraph Company. The practice of calling by names is to be discontinued and a new directory listing all phones by number has been prepared. The system of calling by numbers will go into effect the first of June.

Carpenter Shop - Besides the usual miscellaneous repairs, three new bear cages were made for the shipment of bears, and repaired ten buffalo crates for the transferring of buffalo to the show herd at Hayden Valley.

are situated for mobility purposes.

F. F. Lodge, who has guided the mobility unit in its [illegible] for several years, has been responsible for the mobile maneuvers and is anxious to report about the utility of them.

100 - Maintenance, Improvements and New Construction

110 - Road Maintenance

The Sunflow contained its work on time in its clearing of the Sherwood Road section, leaving only the Sound Station road to be cleared. This last named section is the narrow and crooked to permit the use of the road and must be cleared by hand labor. Construction of the permanent telephone cross followed closely the clearing of the cross plus and stakes of the roads were established in their sections of the cleared to with the remaining areas to be work and further the first week of the month. Travel is permitted over all the park roads except the Mt. Tamalpais to Bolinas section and the primarily for mile between Bear Camp and the North entrance.

The oiling crew started work on July 11, treating the service roads in the headquarters area for about ten days, moving then to the Bolinas to process the drives with Trinidad (Asphalt-Oil Fabric) service which was treated by contract last season, and the service roads in the vicinity of the Mitchell.

The last travel maintenance crew was established on July 11 and had that section in excellent condition by the time it was possible to open the service roads in the park.

120 - Improvements

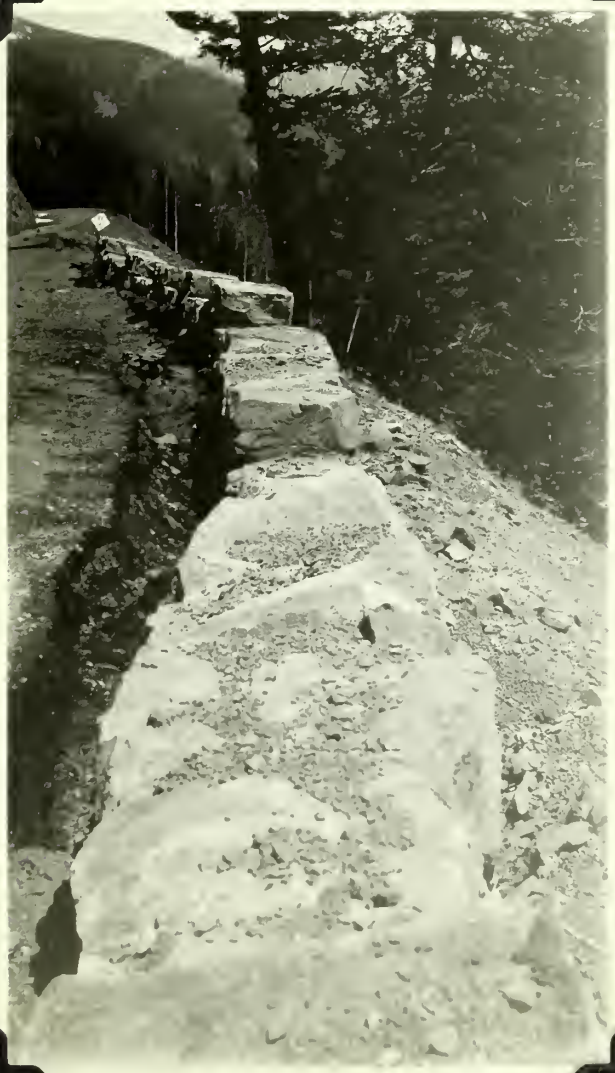
Lodge - The procuring of tools and equipment has been completed by the end of the month and the telephones has come forward.

Electrical Department - In addition to the usual maintenance and repair work during the month, the underground power cable at the [illegible] was connected up permanently, the new 1 light circuit was disconnected from the new first office site and removed, and a number of new lamps and portable boxes were added.

The full-time telephone repairmen were assigned to replace the two [illegible] operatorships. Mrs. Mildred Delahunt and Mrs. Fanny Hogg, the [illegible] telephone operators were assigned through the month in Mrs. Delahunt and Mr. Hogg. The practice of calling by number is to be discontinued and a new directory listing all phones by number has been prepared. The system of calling by number will go into effect the first of June.

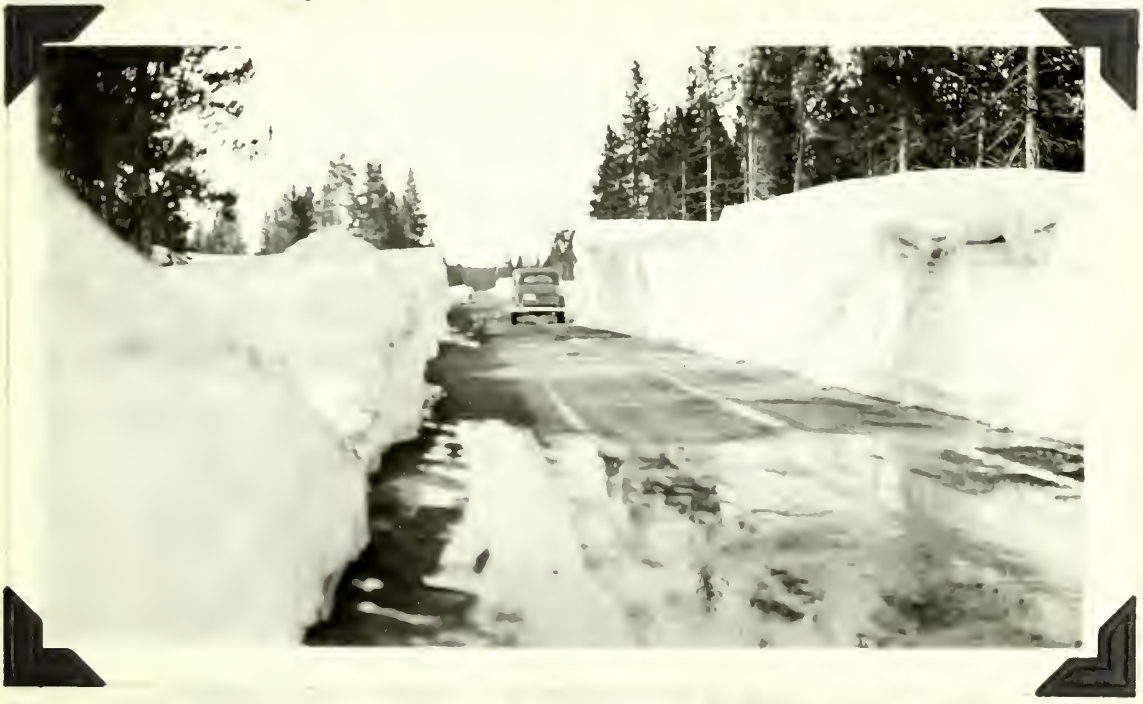
Carpenter Shop - Besides the usual miscellaneous jobs, three new bath houses were made for the Stinson of Beach, and repairing the Lagunitas center for the transferring of horses to the Bear Camp of Lagunitas Valley.

Rock slide on East Entrance road about 6 miles above entrance.



Heavy Washout and settlement of rock parapet on East Entrance road.

Snow condition near South end of Lewis Lake on West Thumb - South Entrance section. (May 12)



Snow condition on South Entrance section about 2 miles north of above picture.

Road condition at a point about 2 miles south of West Thumb on new grade completed last season.

Slippage of fill on Mammoth - Tower Junction section.

Plumbing Department - Besides the usual maintenance and operation during the month, water meters were installed at the Mammoth Hotel, Transportation Company, Hotel Commissary, Haynes Picture Shop, Nichols' and Childs ' residences.

Paint Shop - Linoleum was laid at the hospital at Mammoth, floors were worked over at the Mammoth and Norris museums and signs were lettered.

230 - New Construction

F.P. 347 - Utility Building, Mammoth - Work was resumed on this project by the contractor on May 15 with a crew of five men, increasing to approximately thirty men by the end of the month. Accomplishments for the period consisted of the pouring of all concrete footings for the excavated portion of the basement and the erection of the forms for practically all the balance of the foundations.

F.P. 584 - Old Faithful Water System - The contractor on this project resumed work on May 19 with twenty-eight days in which to complete the work. Work done during the month consisted of excavation for the upper section of the pipe line and the settling reservoir.

F.P. 596 - Water and Power Development, Mammoth - Work of installing and connecting water meters to the various utility operators units was continued throughout the month with nine of the ultimate sixteen installations completed.

Work on the pipe line and reservoir was resumed on May 19th with a crew of fifteen men. At the junction of the service lines with the storage reservoir and the domestic reservoir, where leakage had developed, excavations were made and backfilling and puddling with select material. The inner slope of the main reservoir was dressed down and given a coat of emulsified asphalt stabalizer at several points which appeared somewhat porous, a clay blanket being placed where necessary.

The areas around the power house and reservoir, where disturbed during construction, were under landscape treatment with this item about sixty per cent complete.

Contract Construction

A limited amount of major road construction was under way by the 15th of the month, at that time the Groves Construction Company having installed a crew of about fifty men on the Old Faithful-West Thumb section and actively started both clearing and grading. Contractors on the base course surfacing between Canyon and Lake, grading between Soda Butte and Lamar Canyon, and the two contractors placing bituminous final surface between Canyon and Mammoth through Tower Junction had moved in considerable equipment and organized small crews for preparatory work.

The contractor for the new Post Office started operations on May 27th and has the basement excavation about 50 per cent complete.

Flooding Experience - Based on the usual relationships of operation during the month, water should have fluctuated in the Cumberland Total Transportation Company, Inc. Terminal, during this flow, highly and highly r residences.

Joint Dam - Lightning was left at the condition of possible, floods occurred over of the Kennedy and Norfolk Southern Railroad were involved.

TVA - New Construction

T.V.A. 347 - Utility Building, Kentucky - work was resumed on this project by the contractor on May 13 with a crew of five men. Intermittent to approximately thirty men by the end of the month. Considerable for the period consisted of the pouring of all concrete foundations for the erected portion of the building and the erection of the frame for practically all the balance of the superstructure.

T.V.A. 348 - Old Hickory Water System - The contractor on this project resumed work on May 22 with twenty-eight men in order to complete the work. Work done during the month consisted of excavation for the upper section of the pipe line and the building foundation.

T.V.A. 350 - Water and Sewer Development, Kentucky - Work of installing and connecting water mains in the various utility easements with the continued laying of the 24-in. pipe of the 4-mile sewer to-installation completed.

Work on the pipe line and reservoir was suspended on May 15th with a force of fifteen men. In the vicinity of the reservoir lines with the Kentucky reservoir and the Kentucky Power, which involve the laying, and supervision were so in the installation and connecting with sewer material. The inner slope of the main reservoir was lined with a layer of soil or modified asphalt stabilized or asphalt which was covered with protect, - only thinner using plastic water reservoir.

The area around the power house not restored, when disturbed during construction, were under inclusive treatment with this line, but slight for most complete.

Contract Construction

A limited amount of major road construction was built out by the 15th of the month, it was then the Power Construction Company began laying installed a crew of about fifty men on the TVA reservoir. Work consisted of actively started back clearing and grading. Considerably on the base course excavation between Carson and Lake, grading crews into Lake Lake Dayton, and the two concrete plants. Structures first reached in Lake Dayton. At Kennedy Street Power Station, the level in installed, equipment and equipment pad to cover the generator area.

The contractor for the new post office started operations on May 27th and has the basement excavation about 30 per-cent complete.

Bids were opened in Denver by the Bureau of Public Roads office for the construction and improvement of Project RFEC 8-A-1, Small Bridges and Culverts, on the Tower Falls-Cooke highway. Award was made to the McLaughlin Construction Company with the low bid of $39,625.25.

Bids were opened in Denver by the Bureau of Public Roads office for construction and improvement of Project PEC 1-B-2, 4-A-1, A-2, 5C, D2, Bituminous Base Treatment, South and East Entrance highways, a distance of 37.304 miles. Award was made to the Taggart Construction Company with the low bid of $45,471.75.

500 - Activities of Other Agencies in the Park

510 - Public Service Contractors

The general store at Mammoth was opened throughout the month to take care of local residents and early visitors.

C. A. Hamilton arrived in the Park via the West Gate on May 9th and immediately opened his store at Old Faithful to accommodate early visitors.

The Pryor General Store at the Canyon opened on May 15th.

The Haynes Picture Shops, Inc. opened their Mammoth shop on May 22, the Old Faithful Auto Shop on the 26th, the Canyon Shop on the 27th and the Fishing Bridge Shop on the 29th. Mr. J. E. Haynes arrived on the 31st.

New gasoline prices became effective on May 20th, the price of regular gasoline at Mammoth being 24½¢ per gallon and at other points in the Park 25½¢ per gallon. The price of Ethyl gasoline is 2 cents per gallon higher at all points.

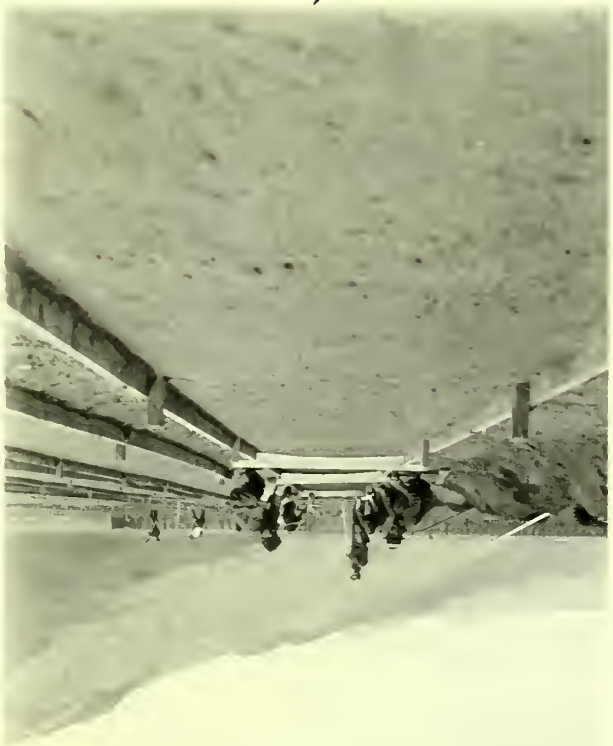
W. M. Nichols, President of the Yellowstone Park Hotel Company, Yellowstone Park Transportation and Boat Companies, arrived on May 25th and attended the opening session of the Ranger Conference on the 27th. He departed the following day for Helena, expecting to return the first of June to open his Mammoth office.

The Yellowstone Park Lodge & Camps Company opened its Mammoth office on the 26th and the following day opened its housekeeping cabins and cafeterias at Mammoth, Old Faithful, Fishing Bridge and Canyon.

400 - Flora, Fauna and Natural Phenomena

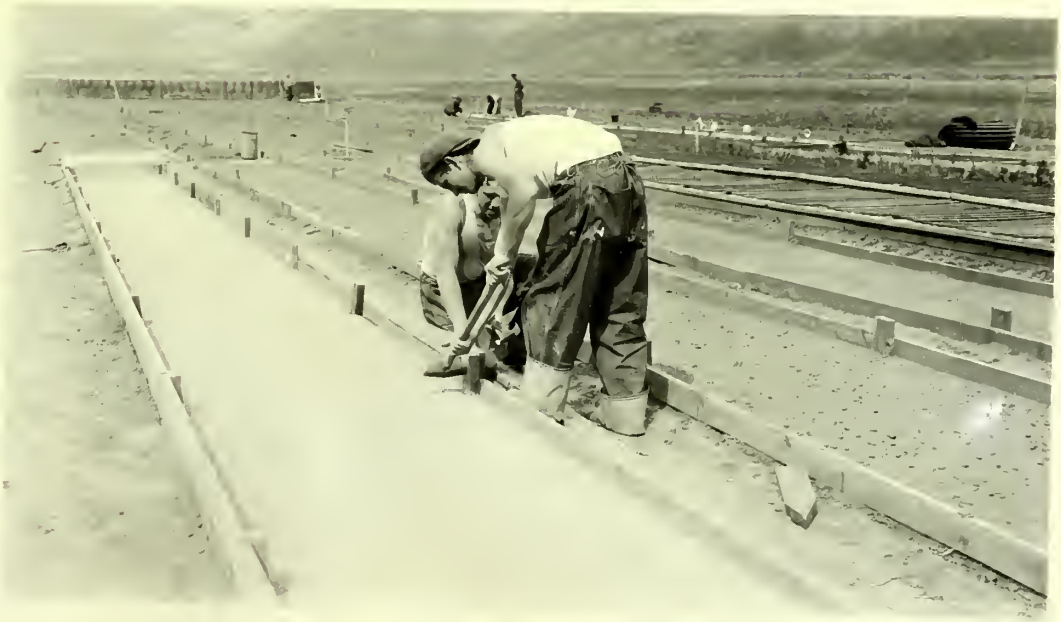
410 - Ranger, Naturalist and Guide Service

Protection Department work during this month has consisted of special work, sale of permits at entrance stations, supervision of trail maintenance, capturing and shipping of surplus bears, transfer of buffalo from the Lamar River herd to Hayden Valley, protection patrols and various other regular protection department activities.



1. Preparing seed bed at Forest Nursery

2. Seed bed leveled, mulched, and ready for planting at Forest Nursery.



Preparing soil for seeding at Game Preservation Ranch. C.C.C. enrollees, supervised by park rangers, were employed for all labor on this project.

. Drilling and seeding native grasses on barren fields at Game Preservation Ranch. These fields have been under cultivation for a great many years and several abortive attempts have been made to re-seed them with native grasses suitable for winter feed for game. If present weather conditions prevail there is some assurance of success this season.

Five temporary rangers were employed in addition to the permanent ranger force during this month. The role of permanent entrance stations has taken the services of four of these men, the fifth assisting at Old Faithful for polishing and protection of the cones of the natural geyser and other geyser formations.

A considerable amount of time has been devoted to the supervision of the preparing of fields and seeding of grass on burned grounds of the Game Preservation Branch.

A Ranger Conference, at which all of the permanent protection department personnel was present, was held in Yellowstone on May 26, 27, 28 and 29. Directly following the Ranger Conference preparations were made for moving all rangers to the various stations to which they had been assigned for the summer months. Three days of the Ranger Conference were spent in the discussion of various problems concerning protection department work and cooperation with other park service departments, Park operators and cooperative governmental agencies. The entire school were present at these discussions. One-half day on the 29th was devoted to instructions for rangers assigned to entrance stations. This conference was considered one of the most interesting and successful that has ever been held in Yellowstone Park.

The headquarters' personnel of the protection department has devoted a considerable amount of time in the field inspection and supervision of various protection department activities in addition to accomplishing a considerable amount of office work.

420 - Museum Service

Lectures were given by Park Naturalist Sawyer in Billings, Montana to the following groups: Rotarian Club, Lions Club, Masonic Lodge, High School biology classes, Garden Club, and Montana Normal School to a total of 808 persons. Several lectures were also given to the CCC camps by members of the Naturalist department. Assistant Park Naturalist Crane is preparing historical exhibits for one case at Mammoth and one case at Madison Junction. Junior Naturalist Kearns is preparing a fungi exhibit for a case at Mammoth.

440 - Insect Control

Insect control projects, in the vicinity of Mammoth and Old Faithful, were started during this month. Surveys of the areas were made by rangers and all of the infested trees within one mile of the center of each utility area were tagged. The tagged trees were later treated by a follow-up crew composed of CCC enrollees under the supervision of E.C.W. personnel. It was gratifying to note that there was a considerable decrease in the number of infested trees found in the vicinity of Mammoth were infested with the mountain pine beetle, while at Old Faithful the major portion was found to be infested with Ips.

On May 8, Mr. E. A. Joy of the Bureau of Entomology and Plant

Quarantine Service, visited the Park and recommend that a white pine blister rust control project be inaugurated in Yellowstone during this season. It was recommended that control in and around the Park nursery be instituted by removing all forms of Ribes in the area surrounding the nursery. The area in which blister rust would thus be controlled would extend about one-half mile in all directions from the nursery site. This project has not been definitely settled as yet, inasmuch as there is some doubt as to whether or not there is enough white pine blister rust in the Park to warrant control measures.

450 - Animal Disease Control

A female grizzly bear with two young cubs were found dead in the vicinity of the cabin camp area at Canyon on Apr 20th. A post-mortem examination revealed that these animals had been killed by eating poisoned meat which had been carelessly swept out of some of the housekeeping cabins. It has been the policy of the Park operators in dist ribute poison grains in various cabins and stores, where bedding and other equipment which is subject to damage by mice is stored during the winter months. Therefore, we know of no occasion when proper protective measures against the possibility of other rodents and birds eating this poison grain have not been fully adhered to.

460 - Birds

A great many waterfowl have been observed nesting on the various lakes and streams throughout the Park. Practically all of the small forms of bird life which are found in the Park during the summer but which are absent in the winter have returned with the mild weather experienced during this month. One pair of Avocet were observed in the vicinity of Yellowstone Lake. These birds are rarely seen in this locality. One pair of trumpeter swan have been observed on Swan Lake and on many occasions it was observed that they were being disturbed by ravens and coyotes. In order to offset this menace to the nesting birds, several carcasses of winter-killed deer and elk were placed near the lake to attract predators away from the swan's nest. The scheme was comparatively successful insofar as the coyotes were concerned; however, the ravens continued to harry the nesting female.

470 - Animals

Practically all of the animals in the northern Yellowstone game herd have migrated from the winter range to higher elevations and onto the summer range. Moose have been observed more frequently in Yellowstone at Canyon and at Lake and all signs indicated that all game animals are now on the summer range. Forage conditions are excellent and all animals observed seem to be in excellent condition.

Bears - One grizzly bear and one black bear were captured and shipped to the New York Zoological Gardens this month.

One grizzly female and her two cubs were found dead in the housekeeping

cabin area at Canyon. Their death was attributed to the eat [illegible] the poisoned wheat which had been accidentally spread from the interior of sacks in the cabins.

Buffalo - For some time the advisability of establishing a small buffalo herd in Hayden Valley has been under consideration. Hayden Valley is a large area of open grassy meadows which supplies a considerable amount of forage throughout the year. Sixty-six head of buffalo were captured from the Lower River herd and transported to Hayden Valley for release during this month.

Mountain Sheep - Several small bands of mountain sheep were observed in the vicinity of Eagle's Nest Rock, between Gardiner and Yellowstone, during the month. These were seen early in the month and on a later date it was observed that they were drifting to a higher elevation and greener range. There has been a very light mortality rate of mountain sheep during the past winter and all animals observed appear to be in excellent condition.

400 - Phenomena

Angel Spring - shows no appreciable change from April. The principal flow continues from the new outlet to the north.

Baby Spring - has decreased in flow twenty-five per cent during May.

Blue Spring - The flow has spread over a wider area and a portion of this water is covering Jupiter Terrace to the north.

Note: Last month the report for Blue Spring was listed Baby Spring.

Cleopatra Spring - No change.

Cupid's Spring - The heavy flow of April continues and travertine depositions are building up beautiful formations on the lower slope.

Hymen Spring - is inactive.

Highland Spring - is inactive.

Jupiter Spring - is inactive.

Main Spring - slight flow.

Mound Spring - shows a little increase in flow for the month.

Naiad Spring - has increased during May.

Opal Spring - is still flowing strong and is one of the most beautifully colored formations in the area. Two pictures of Opal Terrace taken from the same point are attached to this report to show the rapid deposition of travertine during the past three years.

Orange Spring Mound - shows no change.

Releasing buffalo in Hayden Valley. Thirty-six head of these animals were transported from their habitual range, on the Lamar River, and transplanted in Hayden Valley.

Trail Bridge across Snake River, near South Entrance, damaged by flood waters and drifting debris.

Twistle Spring - [illegible] no change.

Prospect Spring - [illegible] increased activity.

Summit Basin Spring - [illegible] still flowing [illegible] as in [illegible].

- - - -

Grand Geyser - On May 16, 17 and 18 the Grand Geyser erupted [illegible] about noon [illegible] a very [illegible] eruption on [illegible], May 17.

Giant Geyser - was observed in eruption on [illegible] and [illegible] on May 31.

Cliff Geyser - Located in [illegible] Basin, [illegible] on May 31st for a period of at least two hours and to a height exceeding fifty feet.

Handkerchief Pool - On May 14 Junior Naturalist [illegible] found that the Handkerchief Pool was active again but did not [illegible] times to the surface. Although it would rapidly take it down, it never [illegible] brought it back to the surface. On May 31st the Pool was performing as of old and although a bit slow, returned the handkerchiefs to the surface.

Beehive Geyser - On May 21st at 1:30 p.m. the Beehive was observed in eruption, throwing water to the highest point seen during the past months.

460 - Miscellaneous

Fishing conditions in the streams throughout the park have not been very good, due to the flood conditions at this season of the year. The waters of the park were opened to fishing on May 25 and during the following week a great many people visited the park to fish and camp. In many of the lakes the fishing is excellent and it was reported from the East Entrance that over three thousand fish were taken out of the park in one day at this gate.

The attempted control of suckers in Yellowstone Lake proved futile. It has not been definitely learned whether this exotic fish spawns before the ice leaves Pelican Creek or whether they spend the winter in warm waters around the location of the fish traps. Further studies are being made of their habits and the numbers in the Yellowstone Lake water shed, with a view to determining whether or not further control measures are advisable.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

The total travel to date amounts to 8100 motor vehicles and 21,041 visitors as compared with 3987 motor vehicles and 12,734 visitors to date last season. This represents an increase of 103.3 per cent in motor vehicles and 67 per cent in park visitors. The sale of permits was started at the North and East Entrances on May 15th, and at West Entrance on May 22. Travel statistics reveal that a large percentage of the early travelers consist of local people from Wyoming, Montana and Idaho. However, there is a considerable increase of visitors from other parts of the country.

PICTURES SHOWING RAPID DEPOSITION OF TRAVERTINE
at
Mammoth Hot Springs

OPAL HOT SPRING TERRACE - Beginning of flow after many years of inactivity. In the center, fresh travertine is covering old formations. Photo taken May 5, 1933 by G. Crowe.

OPAL HOT SPRING TERRACE showing deposition of travertine--two and one half feet in thickness in three years. Photo taken May 5, 1936 by G. Crowe. (Same location as above.)

10314-11 Kearns

Ice jam at Steamboat Point with ice breaking up on Yellowstone Lake on May 18, 1936.

10314-12 Kearns

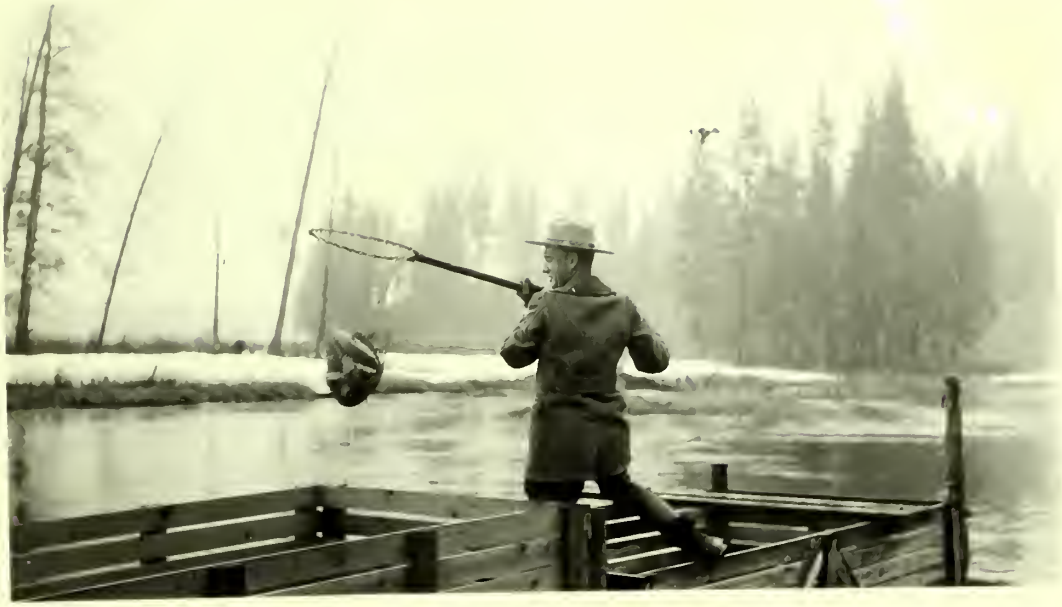
District Ranger Frank Anderson on ice piled against the shore at Steamboat Point to a height of 25 feet.

10315-1 Kearns

Ice Jam at Fishing Bridge on May 19, 1936. Ice cakes about six inches in thickness.

10315-2 Kearns

Ice flow in Yellowstone River immediately above the Fishing Bridge on May 19, 1936. (The ice was entirely out of the Lake the morning of May 20th.)



Fish traps installed in Pelican Creek used in connection with attempted control of suckers in Yellowstone Park. Note high water and snow conditions. It was necessary to maintain a constant watch to remove derbis from the racks to prevent high water from taking the trap out.

Black spotted trout caught in the early run of spawning at Pelican Creek. By installing the racks and traps in Pelican Creek immediately after the ice went out, it was possible to increase the egg take at this station by several hundred thousand above the normal take.

Traveling conditions through the park have been excellent [illegible] as weather conditions are concerned. All of the highways which have been opened to travel are in good condition and with this [illegible] conditions prevailing there has been a heavy inward [illegible] tourist travel.

530 - Visitors

May 21 - Mrs. Roger [illegible] Coll, wife of [illegible], arrived via the east entrance departed via West Yellowstone on the 25th.

May 28 - Mrs. Melville Cadlestone, Chicago, [illegible] President of the American Legion Auxiliary in North and [illegible].

May 28 - Louis [illegible], Lincoln, [illegible] Commander of the American Legion in North and [illegible].

May 28 - [illegible], Chicago, Illinois, [illegible] of Rotary International in and out north.

600 - Miscellaneous

Post Office - The volume of business during the month of May in the Post Office of Yellowstone Park showed considerable gain by corresponding month of last year.

On May 24, Kingfus Brothers, Contractors, [illegible] completion on the new Post Office building.

Church Services - There were no church services held at the Lamar Chapel during the month of May. Arrangements have been made to hold church services during the season at the Mammoth Chapel and also at Old Faithful and Fishing Bridge. These services are to be held at each point every Sunday and in some cases twice.

Hospital and Medical - There were 41 home calls and 121 office calls reported during the month of May.

E.C.W. - During the month there were two old enrollees arrived in Yellowstone Park. Camp NP #5, two [illegible] were occupied by [illegible] No. 635 on May 9 and field work began May 11. Camp NP #6, Gardiner, was occupied by [illegible] Company No. 730 on May 20 and field work in this camp began on May 17.

The projects at the three camps in the park have progressed satisfactorily but have been hampered some due to the shortage of supervisory personnel.

Fine cooperation between the Army and Park officer and from [illegible] in all connections.

- - - - -

Volley Ball Tournament [illegible] Yellowstone National Park particip-

pated in a State Tournament at Helena on May [illegible]. This was the first tournament in which a Yellowstone team was represented and while the team lost Fletcher lost the members of the team received much valuable experience and should be better prepared in future tournaments.

The regular monthly meeting of the Federal Employees Union No. 165 met in the Canteen building on May 4th.

A son was born in the park hospital in Airmontana on May 16th to Mr. and Mrs. Wayne Alcorn. Mr. Alcorn is a Park Ranger.

Yours very truly,

Adam S. Shortz,
Superintendent.

V.

By: Joseph Motte
Assistant Superintendent

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UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Yellowstone National Park for the month of [illegible], 1938

	This Month	This Travel Year To Date	This Month Last Year	Last Travel Year To Date	Increase for Travel Year	
					Number	Percent
VATE TRANSPORTATION:						
s first entry,	[illegible]	5739	1644	[illegible]	[illegible]	94.8
s reentry,	[illegible]	[illegible]	69	1087	1320	120.4
orcycles,	4	6	2	5	1	[illegible]
otal motor vehicles,	[illegible]	6101	1713	[illegible]	4114	[illegible]
sons entering via motor icles,	[illegible]	21641	[illegible]	[illegible]	[illegible]	87.7
sons entering via other vate transportation,	14	51	26	70	-19	-27.1
otal persons entering via rivate transportation,	8744	21938	4080	11782	10210	87.1
ER TRANSPORTATION:						
sons entering via stages,		9	7	12	-3	[illegible]
sons entering via trains,						
sons entering otherwise,						
otal other transportation,		9	7	12	-3	[illegible]
ND TOTAL ALL VISITORS,	8744	21941	4087	11794	10209	87.0

	This Year	Last Year	Increase	
			Number	Percent
omobiles in public camps during month,				
pers in public camps during month,				

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

[illegible] National Park for the month of [illegible]

	This Month	This Travel Year To Date	This Month Last Year	Last Travel Year To Date	Increase for Travel Year Number	Increase for Travel Year Percent
ATE TRANSPORTATION:						
first entry,	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
reentry,	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
rcycles,	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
tal motor vehicles	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ons entering via motor cles,	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ons entering via other vate transportation,	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
tal persons entering via ivate transportation,	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
R TRANSPORTATION:						
ons entering via stages,		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ons entering via trains,						
ons entering otherwise,						
tal other transportation,		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
D TOTAL ALL VISITORS,	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

	This Year	Last Year	Increase Number	Increase Percent
mobiles in public camps during month,				
ers in public camps during month,				

0-160

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

REPORT OF PARK REVENUES

Yellowstone National Park for the Month of May, 1938

	This Year	Last Year
'ark revenue on hand beginning of month,	-0-	$47.00
'eceived,	$400.74	5.15
Total,	$400.74	$52.15
'emitted,	400.74	52.15
'n hand close of month,	-0-	-0-

'ark revenues received this year to date,	$275,541.87
'ark revenues received last year to date,	207,153.09
Increase,	68,388.78
Per cent of increase,	33.013

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UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

STATUS OF PERSONNEL

Yellowstone National Park for the Month of May, 1936

	This Month		This Month Last Year	
	Appointed	Non-Appointed	Appointed	Non-Appointed
umber of employees beginning of month	* 95	Reg. 55 Ex 4	96	72
umber of additions	Ex. 7 Reg. 10	Reg. 100 Ex 21	Reg. 14 Ex 2 Ex 3	Ex 61 Reg. 157
Total	115	211	114	290
umber of separations	Ex 1 Ex 1 Reg. 2	Reg. 5 Ex 3	Reg. 4 Ex 2 Ex 3	Ex 10 Reg. 16
umber of employees close of month	** 109	203	107	264
umber of promotions during month	1		3	
ggregate amount of annual leave taken	Reg. 151-1/56 Ex 24 Ex 0		Reg. 79 Ex Ex 8	1/2
ggregate amount of sick leave taken	Reg. 13-1/2		Reg. 18	
ggregate amount of leave without pay	0		Ex 21	

*Includes 79 Regular; 15 Ex and 2 Ex.

**Includes 87 Regular; 21 Ex and 1 Ex.

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

STATUS OF PERSONNEL

Yellowstone National Park for the Month of _____, 19__

	This Month		This Month Last Year	
	Appointed	Non-Appointed	Appointed	Non-Appointed
Number of employees beginning of month				
Number of additions				
Total				
Number of separations				
Number of employees close of month				
Number of promotions during month				
Aggregate amount of annual leave taken				
Aggregate amount of sick leave taken				
Aggregate amount of leave without pay				

0-162

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

REPORT OF TELEPHONE AND TELEGRAPH BUSINESS

Yellowstone National Park for the Month of May, 1956

	This Month	This Month Last Year	Increase	Per cent Increase
LOCAL BUSINESS				
Miles of circuit maintained,	604	582	22	3.78
No. of telephones connected,	258	247	11	4.45
No. of measured service calls,				
No. of other local calls,	11,584	10,830	754	7.06
Total No. of local calls,				
Peak load in calls per day,	650	529	101	19.09
Receipts from measured service calls,				
" " coin boxes,				
" " telephone rental,				
TOTAL RECEIPTS				
LONG DISTANCE BUSINESS				
No. Outbound calls,	186	435	-249	-57.2
No. Inbound calls,	239	367	-128	-34.87
TOTAL LONG DISTANCE CALLS				
Out	12	29	- 17	
In	17	26	- 9	
Peak load in calls per day,				
Receipts from Long Distance business,				
TELEGRAPH BUSINESS				
Messages via Western Union,				
Messages via				
TOTAL MESSAGES				
Receipts from telegraph business,				
No. of money transfer messages,				
" " " " receipts,				
TOTAL RECEIPTS TELEPHONE & TELEGRAPH DEPTS.				

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

REPORT OF TELEPHONE AND TELEGRAPH BUSINESS

National Park for the Month

	This Month	Total Since July 1, 1934	Increase	Per cent Increase
LOCAL BUSINESS				
Miles of circuit maintained,				
No. of telephones connected,				
No. of measured service calls,				
No. of other local calls,				
Total No. of local calls,				
Peak load in calls per day,				
Receipts from measured service calls,				
" " coin boxes,				
" " telephone rental,				
TOTAL RECEIPTS				
LONG DISTANCE BUSINESS				
No. Outbound calls				
No. Inbound calls,				
TOTAL LONG DISTANCE CALLS				
Peak load in calls per day,				
Receipts from Long Distance business,				
TELEGRAPH BUSINESS				
Messages via Western Union,				
Messages via				
TOTAL MESSAGES				
Receipts from telegraph business,				
" of money transfer messages,				
" " " receipts,				
TOTAL RECEIPTS TELEPHONE & TELEGRAPH DEPTS				

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

*ELECTRICITY GENERATED, SOLD, USED, ETC.

Yellowstone National Park for the Month of May, 1936

	This Month	This Travel Year To Date	This Month Last Year	Last Travel Year To Date	Increase for Travel Year Number	Increase for Travel Year Percent
Current generated, ...	62,300	317,424	67,559	319,470	-2,046	- .646
Sold to park operators, . . .	2,904	4,224	2,209	4,167	57	1.367
Sold to others, ...						
Furnished to other Governmental agencies, ...						
Used by National Park Service lost in transit, etc., . . .	59,396	313,200	65,350	315,303	-2,103	- .667
Total current generated, . .	62,300	317,424	67,559	319,470	-2,046	- .646

Amount receivable from the sale of electricity, ... $ 145.20

* Indicated by K. W. H.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

ELECTRICITY CONSUMED AND USED BY

Yellowstone

Monthly for the month of

	Month	This month last year	Last month	Year to Date	Increase (+) or decrease (-) over month	over year
	Kwh	Kwh	Kwh	Kwh	Kwh	percent
Current generated	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sold to park operators	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sold to others						
Furnished to other Government agencies						
Used by National Park Service	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lost in transit, etc	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total current generated						

Amount received from the sale of electricity.

Indexed by K. R. H.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
YELLOWSTONE NATIONAL PARK
YELLOWSTONE PARK, WYOMING

Office of the Superintendent

May 7, 1936

Circular No. 8

Effective May 23, and until further notice, all waters in Yellowstone National Park will be open to fishing, with the following exceptions:

LAKES: Fish Lake, Shrimp Lake, and Buck Lake, near Soda Butte; Riddle Lake and Duck Lake, near West Thumb; and Fern, Tern, and White Lakes on the Mirror Plateau. Grebe Lake, in the vicinity of Canyon.

STREAMS: Campanula, Cougar, Duck, Maple, Gneiss, and Grayling creeks for their entire lengths inside of the park. All streams trapped by the Bureau of Fisheries shall be closed from the mouths of the streams and up the streams for a distance of three miles above the traps. Indian Creek, Panther Creek, and Glen Creek, and the Upper Gardiner River, above the water supply intake shall remain permanently closed to fishing.

SPECIAL AREAS: The Yellowstone River, from a point one hundred and fifty yards above Fishing Bridge to the Upper Falls, shall remain closed to fishing until June 20.

SPECIAL LIMITS: A limit of five fish per day, per person fishing, shall be in effect for an area within one mile radius of the West Thumb boat dock, and including all waters in Yellowstone Lake enclosed by a line from Gull Point, to the extreme north end of Stevenson Island, and continuing to the mouth of Pelican Creek. This limit shall also be in effect for the waters of the Yellowstone River, from Yellowstone Lake down to the Upper Falls. Parties taking boat trips to, or fishing in remote sections of Yellowstone Lake, or in sections of the Yellowstone River, which lie outside of the special limit area, shall be allowed the limit of ten fish per day per person fishing.

Streams trapped by the Bureau of Fisheries will be posted by them; and all other streams will be posted by the National Park Service.

FISHING REGULATIONS

Ten fish per day, per person fishing, shall constitute the limit for a day's catch, except in certain waters where the limit may be decreased or increased as indicated by posted notices. No person shall have in his or her possession, at any one time, more than two days' catch.

The use of live minnows for bait is prohibited in Yellowstone National Park.

J. W. Emmert
Acting Superintendent

Notice: POSTMASTERS PLEASE POST.

United States
Department of the Interior
National Park Service
Yellowstone National Park
Yellowstone Park, Wyoming

May 9, 1936

Office of the Superintendent

CIRCULAR NO. 9

The following Protection Department station and duty assignments for the summer of 1936 will become effective as soon as road conditions and other duties permit.

HEADQUARTERS

Francis D. LaNoue, Acting Chief Ranger. In charge of all protection department activities.
Maynard Barrows, Acting Assistant Chief Ranger, in charge of Game Protection.
Albert E. Elliott, Acting Assistant Chief Ranger, in charge of the Chief Ranger's Office.
Curtis K. Skinner, Acting Assistant Chief Ranger, in charge of field inspection and trails.
George A. Walker, Permanent Ranger in charge of Forestry.

SPECIAL ASSIGNMENTS

George W. Miller, Assistant Chief Ranger. In charge of E. C. W.
Rudolph L. Grimm, Park Ranger, range study, with headquarters at the Game Preservation Ranch.
Guy E. McCarty, Park Ranger, fish planting, with headquarters at Mammoth.
Lee L. Coleman, Park Ranger, the Antelope Creek Buffalo Corral.
Gerald P. Yetter, Park Ranger, Utility Ranger, headquarters at Mammoth.

RANCHES

Buffalo Ranch: Harry Trischman, Chief Buffalo Keeper.
Tom Phillips, Assistant Chief Buffalo Keeper.
David W. Pierson, Buffalo Herder.

Lower Slough Creek Ranch: John Bauman, Park Ranger in Charge.

MAMMOTH DISTRICT

Gardiner Station: John W. Jay, District Ranger

TOWER FALLS DISTRICT

Tower Falls Station: David Condon, District Ranger

SODA BUTTE DISTRICT

Soda Butte Station: F. Sheldon Dart, District Ranger
Cooke Station: E. LeRoy Arnold, Park Ranger

WEST YELLOWSTONE DISTRICT

West Yellowstone Station: Frank Oberhansley, District Ranger
Wayne Alcorn, Park Ranger
Gallatin Station: Walter H. Gammill, Park Ranger

BECHLER RIVER DISTRICT

Bechler Station: Thomas K. Garry, District Ranger

SNAKE RIVER DISTRICT

Snake River Station: Judson Rhoads, District Ranger

LAKE DISTRICT

Lake Ranger Station: W. S. Chapman, District Ranger
Raymond M. West, Park Ranger

Thumb Station: Verde Watson, Park Ranger

Sylvan Pass Station: Jack J. McNutt, Park Ranger

Thorofare Station: Robert Beal, Park Ranger

OLD FAITHFUL DISTRICT

Old Faithful Station: W. Leon Evans, District Ranger

CANYON DISTRICT

Canyon Station: Frank H. Anderson, District Ranger

J. W. Emmert
Acting Superintendent

United States
Department of the Interior
National Park Service
Yellowstone Park, Wyoming

Office of the Superintendent

May 16, 1936

Circular No. 10

The Master Mechanic has been issued enough fire fighting tools to equip all Park Service passenger cars and pickups. One axe or hazel hoe, one shovel, and one canvas bucket will be placed on every car, and it will be the duty of employees driving these cars to see that they have these fire tools. These tools are not to be locked up and must be readily available. On as many pickups as possible, the tools will be placed on the side of the truck bed and on other cars they will be placed under the rear deck.

HELP PREVENT

FOREST FIRES

J. W. Emmert

Acting Superintendent

Department of the Interior
National Park Service
Yellowstone National Park
Yellowstone Park, Wyoming

May 20, 1936

CIRCULAR NO. 11

The situation with regard to the handling of our Government switchboard at Mammoth has become quite critical and it is necessary that certain steps be taken in an attempt to improve the service and relieve the operators of many unnecessary duties which they are now performing. The opening of the apartment house has added 20 telephones and there are now 123 drops with only 15 sets of plugs.

Our telephone operators in the past have given service such as is not obtained from any city switchboard in that they have followed through calls for individuals, have placed orders at the meat market and stores in Gardiner and Mammoth, have helped locate children and members of families at various places in the community and other similar service.

Hereafter, beginning immediately, such service will be discontinued and the operators will ring three times, as is done on city boards, and if the party fails to answer the operator will say "Party doesn't answer" and will ring off.

It will be necessary for us to educate our people to refrain from asking special service from the operators and the operators are being instructed to merely place calls and not perform these special services. An information bureau is being established in Assistant Chief Ranger Elliott's office and all calls for information or special service to the operator will be referred by her to that office. If there is any criticism of the actions of the operators the operators will refer the complainant to Assistant to the Superintendent Joffe.

All reports regarding weak batteries or difficulties with telephones should be reported to the telephone operator who in turn will report same to George McMullin, who at present is in charge of the telephone system.

Some of the users of our telephones have been guilty of leaving their receivers off of the hook so as to eliminate the noise from ringing. The receiver should be removed from the hook only when in use.

In the past all calls have been placed through our switchboard by name. A new telephone directory is now in the process of preparation and when completed, within the next few days, will list all telephones by number so that it will be necessary that all calls be placed by number and not name. A directory will be provided for each park telephone.

In the matter of long-distance calls, when the conversations are not clear our park operators will not be expected to relay messages. This will have to be done by the long-distance operator.

The government lines are intended for government business and it is necessary that we curtail "visiting" on the lines. Our operators are being instructed to report excessive "visiting" by individuals.

It will aid the service on our switchboard if users of the telephones will "ring off" when their conversations are completed. This can be done by hanging up the receiver and giving a short turn to the hand crank. By so doing the drop on the switchboard will indicate to the operator that the conversation has been completed and she will better be able to tell when the line is free.

The WAE positions at present occupied by Mrs. Holman and Miss White have been made permanent and we are securing the services of two new full-time operators.

The information contained in this circular is a radical departure from our present operation of the switchboard. However, our board is antiquated and because of the tremendous increase in the volume of business which is coming over our board, through the establishment of the C.C.C. camps, the activities of the Bureau of Public Roads, the various contractors and operators and the new apartment house, and until we can secure funds for the purchase of a more modern switchboard, such action is necessary.

We are asking the cooperation of every user of the park telephone system in an effort to better our present service.

FIRE CALLS WILL BE GIVEN PREFERENCE OVER ALL OTHER BUSINESS.

J. W. Emmert
Acting Superintendent

United States
DEPARTMENT OF THE INTERIOR
National Park Service
Yellowstone National Park
Yellowstone Park, Wyoming

May 21, 1936.

CIRCULAR NO. 12

Circular No. 6, dated March 25, issued by this office, is found to be in conflict with standardized travel regulations; therefore, this circular is superseded by the following:

Meals taken by employees at Government messes while in travel status will not be deducted from their salaries but will be credited to 304, Mess Operations, and transferred in the accounts as a debit to the particular project benefitted by the individual's travel. All meals taken at other than Government messes must be paid for by the individual traveling and reimbursement requested on a reimbursement travel voucher.

This is practically the same procedure which was in effect prior to the issuance of Circular No. 6, with the exception that meals taken at other than Government messes were billed to the Park Service and then transferred in the accounts. These meals must be paid for by the individual, but meals taken at Government messes will not be deducted and should be reported on the travel form which was in use prior to the aforementioned circular. Forms covering meals taken at Government messes while in travel status, or so-called official meals, must be reported by the fifteenth of the month following the month in which they were eaten, otherwise it will be impossible to give the individual credit and deductions will be made from his salary and no reimbursement allowed.

Please note that absence of less than ten hours cannot be considered travel status.

J. W. Emmert,
Acting Superintendent

Department of the Interior
National Park Service
Yellowstone National Park
Yellowstone Park, Wyoming

CIRCULAR NO. 13 June 3, 1936

With the appointment of three permanent telephone operators for the government switchboard, Mrs. E. A. Allan, Mildred Christenot and Esther E. Boyd, the following shifts will be in effect beginning tomorrow, June 4, and continue until October 4, 1936:

	SHIFT NO. 1	SHIFT No. 2	SHIFT NO. 3
MONDAY	6:30 a.m. to 1:00 p.m.	1:00 p.m. to 6:00 p.m.	6:00 p.m. to midnight
TUESDAY	6:30 a.m. to 1:00 p.m.	1:00 p.m. to 6:00 p.m.	6:00 p.m. to midnight
WEDNESDAY	6:30 a.m. to 1:00 p.m.	1:00 p.m. to 6:00 p.m.	6:00 p.m. to midnight
THURSDAY	6:30 a.m. to 1:00 p.m.	1:00 p.m. to 6:00 p.m.	6:00 p.m. to midnight
FRIDAY	6:30 a.m. to 1:00 p.m.	1:00 p.m. to 6:00 p.m.	6:00 p.m. to midnight
SATURDAY	6:30 a.m. to 1:00 p.m.	1:00 p.m. to 7:00 p.m.	7:00 p.m. to midnight
SUNDAY	Off	6:30 a.m. to 2:30 p.m.	2:30 p.m. to 10:30 pm

	MRS. ALLAN	MRS. CHRISTENOT	MISS BOYD
June 4 to June 7	Shift #1	Shift #2	Shift #3
June 8 to June 14	Shift #2	Shift #3	Shift #1
June 15 to June 21	Shift #3	Shift #1	Shift #2
June 22 to June 28	Shift #1	Shift #2	Shift #3
June 29 to July 5	Shift #2	Shift #3	Shift #1
July 6 to July 12	Shift #3	Shift #1	Shift #2
July 13 to July 19	Shift #1	Shift #2	Shift #3
July 20 to July 26	Shift #2	Shift #3	Shift #1
July 27 to August 2	Shift #3	Shift #1	Shift #2
August 3 to August 9	Shift #1	Shift #2	Shift #3
August 10 to August 16	Shift #2	Shift #3	Shift #1
August 17 to August 23	Shift #3	Shift #1	Shift #2
August 24 to August 30	Shift #1	Shift #2	Shift #3
August 31 to September 6	Shift #2	Shift #3	Shift #1
September 7 to September 13	Shift #3	Shift #1	Shift #2
September 14 to September 20 ...	Shift #1	Shift #2	Shift #3
September 21 to September 27	Shift #2	Shift #3	Shift #1
September 28 to October 4	Shift #3	Shift #1	Shift #2

Under no circumstances should a deviation from this schedule be made without first notifying and securing permission from Mr. Joffe.

The Government switchboard at the Lake will be open daily from 6:30 a.m. to 10:30 p.m., beginning June 15.

During the hours not covered by the above schedule the switchboard will be operated by enrollees from the Mammoth C.C.C. Camp so that 24 hour service will be available on the Government switchboard. Mrs. Aleda C. Joffe will act as relief operator.

Edmund B. Rogers
Superintendent

United States
Department of the Interior
National Park Service
Yellowstone National Park
Yellowstone Park, Wyoming

June 4, 1936

Office of the Superintendent

CIRCULAR NO. 14

The following changes have been made in rangers' assignments for the summer season.

Bechler River District
Bechler River Station - Jack McMatt, District Ranger

Lake District
East Entrance Station - Thomas K. Garry

These changes shall become effective immediately.

Edmund B. Rogers
Superintendent

Department of the Interior
National Park Service
Yellowstone National Park

SPECIAL TO ASSOCIATED PRESS, UNITED PRESS AND WESTERN NEWSPAPERS:
Release ON RECEIPT

Yellowstone Park, Wyoming, May 9: With Yellowstone National Park's rotary snow plow working at present in about ten feet of snow near Lewis Lake, the north and west gates are now open to motorists and the main points of interest at Mammoth Hot Springs, Old Faithful, Canyon and Tower Falls are accessible, park authorities announced today.

Park rangers will begin the collection of the $3 motor vehicle license fee at the north and west gates beginning May 15 but it will probably be June 10 before the east and south gates are cleared of snow so that travel can be permitted over them. Because of the heavy snow on the new northeast entrance road from Red Lodge to Cooke, Montana it is not expected that this highway will be in suitable condition for travel before July 1.

Following the opening of the south and east entrance roads the plow will return to Old Faithful and open the Continental Divide road from Old Faithful to West Thumb and will then open the Dunraven Pass road from Canyon to Tower Falls.

Meals and lodgings are now obtainable at the general store at Old Faithful while the stores and gasoline filling stations are also open at present at Mammoth Hot Springs and Canyon. Beginning Decoration Day the housekeeping cabins and cafeterias will be open at Mammoth, Old Faithful, Fishing Bridge and Canyon and will provide the necessary accommodations until the hotels and lodges open on June 20.

The fishing season will open on May 23 and while many of the streams will be high and muddy at that time some of the waters will be sufficiently clear to permit good fly fishing.

# # #

J. J.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
YELLOWSTONE NATIONAL PARK
YELLOWSTONE PARK, WYOMING

May 8, 1936

Memorandum for all employees and residents of Yellowstone National Park:

Several fatalities occurred in Yellowstone National Park during the 1935 season, as a result of automobile accidents. The surrounding States are enforcing strict traffic regulations in an effort to minimize auto accidents, and it is felt that it is necessary to do the same in Yellowstone Park.

Your cooperation in this matter is requested and it is expected that all persons employed in the Park will set an example by driving carefully and by observing the National Park Service traffic regulations. A copy of the Rules and Regulations may be secured at any ranger station or at the Chief Ranger's Office.

J. W. Emmert
Acting Superintendent

United States
Department of the Interior
National Park Service
Yellowstone Park, Wyoming

May 16, 1936

General Memorandum No. 6-36

Federal regulations require that any Government employee, whose duties involve the handling of Government funds, be bonded in amounts commensurate with the amount of funds involved. Inasmuch as all park rangers are subject to assignment to entrance stations, messenger duty, or otherwise handling of Government funds, it shall be required that all rangers be bonded.

Applications for bonds are available at the Chief Ranger's Office and all rangers should make arrangements for executing these applications at the earliest possible date. The minimum premium accepted by all bonding companies is $5.00. This premium will provide coverage for maximum coverage of approximately $3700.00, which will be the maximum bond required for any ranger. The minimum bond shall be not less than $3,000.00.

Francis D. LaNoue
Acting Chief Ranger

Approved by: J. W. Emmert
Acting Superintendent

United States
Department of the Interior
National Park Service
Yellowstone Park, Wyoming

May 22, 1936

General Memorandum No. 7-36:

There is inclosed herewith copies of two memorandums, which have been issued to department heads, outlining the procedure to be used in handling Park Service transportation facilities in Yellowstone Park.

In order to comply with this regulation, it has been decided that the Chief Ranger's Office shall act as a clearing house for all motor vehicles assigned for protection department use. It will be necessary that all rangers located at stations at which a government car is assigned, call the Chief Ranger's office each morning and advise whether or not the vehicle is going to be used during that day. Each ranger should keep a time slip on the car which he uses, showing the proper charge account number for each day that the vehicle is used.

All vehicles when not in use will be held in the general pool. Vehicles assigned to stations in the interior of the Park will, when not in use, be turned over to the man designated as dispatcher at that location. In any event the Chief Ranger's Office should be notified before the motor vehicle is pooled and at all times when the vehicle is taken out of the pool for use on protection department work.

A sample time slip is inclosed herewith showing the account numbers administered by the protection department.

Francis D. LaNoue
Acting Chief Ranger

United States
Department of the Interior
National Park Service
Yellowstone National Park
Yellowstone Park, Wyoming

May 1, 1936

MEMORANDUM TO ALL DEPARTMENT HEADS:

After May 1, in compliance with instructions from the Director, all motor vehicles will be considered in a pool and will not be definitely assigned to an individual. Master Mechanic Robinson will be master of transportation and all transportation will be dispatched by his department. Howard Kocher will carry the detail of dispatching. Rufus Cramer has been detailed as traveling inspector of transportation and will inspect all equipment to determine its condition and whether it is being efficiently and properly used. Mr. Cramer will also audit timeslips, both truck and per diem personnel, in the field to see that correct time is being kept.

Beginning May 1, all motor vehicles will be handled through Account 301, Truck Operations. In the past it has been the custom to charge operating expenses for permanently assigned vehicles to the job which they were working on. After May 1, all such operating expenses, including the drivers' time, will be charged to Account 301, Truck Operations, and will be prorated to the various accounts benefitted. This includes all motor vehicles except passenger carrying cars, the operating expenses for which will be charged to 217, as has been done in the past.

This will necessitate accurate timeslips being turned in for all motor vehicles. These should be furnished to the Master Mechanic not later than the morning of the second day of the month for the previous month. Timeslips must show exactly what project the particular truck was working on for each day or one-half day. Time will not be broken down into smaller units than one-half day.

All gasoline, oil, washing, greasing, etc., will be charged to Account 301 for all vehicles except passenger carrying vehicles and will be prorated on the basis of a flat rate to the accounts benefitted. It is estimated that pickups, without drivers, will rent for $1.50 per day, trucks with and without drivers will be prorated in accordance with the accumulated costs.

Therefore, any time that a truck is not needed by a department, it should be returned to the pool to eliminate the flat rate charge being made to your project. All truck timeslips must show whether the time was with or without driver.

As has been stated, drivers' time in all cases will be charged to Account 301, Truck Operations, and will become a part of the truck rental. Truck drivers' time must not be included on the same time-slips with other classes of employees. However, it is permissible to put as many truck drivers on one timeslip as is necessary. The time of truck drivers will be kept by the department heads or the foreman in the field where a truck is assigned more or less definitely and continuously to them. Truck drivers' time will be handled the same as other classes of employees and picked up by those designated on the last day of the month. They must be turned over to the Master Mechanic, at the earliest date possible in order that he can in turn check them and turn them over to the paymaster for payment.

J. W. Emmert,
Acting Superintendent

United States
Department of the Interior
National Park Service
Yellowstone National Park
Yellowstone Park, Wyoming

May 12, 1936

MEMORANDUM TO ALL DEPARTMENT HEADS:

In view of recent instructions that all motor vehicles be considered as in a pool and not definitely assigned, the following regulations are promulgated to assist in clarifying procedure in connection therewith. At stations other than Mammoth the road camp will be considered the pool location and all vehicles taken therefrom must be returned thereto when not in use. They must not be taken from those pools without permission from the dispatcher, except in emergency cases; and, in case of emergency, the dispatcher should be notified as soon as possible the vehicle taken and the reason for taking it prior to getting his authority for taking it from the pool.

This also applies at Mammoth and no cars should be taken from the garage without authority from the dispatcher, except in cases of dire emergency.

Notice of need, or requests for transportation of all kinds, should be given the dispatcher as far in advance as possible. He will be in a much better position to comply with your requests and needs if given an opportunity to plan in advance.

All cars which are rented more or less continuously by a department must be reported by the user on timeslips showing the time it was in use and the project benefitted for each day or half day. These vehicle timeslips must be in the hands of the dispatcher not later than noon of the first day of each month for the preceding month.

Under no consideration are Government vehicles to be used for transportation between office and domicile or office to meals. Please see notice of criticism and punishment for the misuse of Government vehicles which will be posted on all bulletin boards.

J. W. Emmert,
Acting Superintendent

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

SUMMARY OF WEATHER CONDITIONS
at
MAMMOTH HOT SPRINGS, YELLOWSTONE NATIONAL PARK

MAY, 1936.

The mean temperature for the month was 51.1°, or 3.7° above the normal. With the exception of May, 1934, this has been the warmest May on record since 1904.

The highest temperature during the month was 85°, on the 30th. This high temperature breaks all records since 1904. The lowest temperature during the month was 28°, on the 17th. With the exception of May, 1926, which also had a minimum temperature of 28°, this is the highest minimum temperature since 1904. The entire month was much warmer than normal, with the exception of very moderate cool weather from the 5th to the 8th, on the 16th and 17th, and from the 20th to the 23rd.

Precipitation during the month was 0.61 inch, or 1.64 inches below the normal. This is the smallest May precipitation since 1904, with the exception of May, 1924, 1928 and 1934. Total snowfall during the month was 4.5 inches, and most of it fell on the 5th, 6th and 7th. Precipitation since January 1 has amounted to 5.87 inches, as compared with a normal of 8.37 inches. The very warm weather has dried the ground considerably and vegetation is suffering from the lack of proper moisture.

There were 7 clear, 19 partly cloudy, and 5 cloudy days during the month. Precipitation fell on 14 days, with 0.01 or more falling on 8 days. Hail fell on the 16th and 31st. The average wind velocity for the month was 8.6 miles per hour, and the highest velocity reached was 37 miles per hour, from the southwest, on the 20th. The prevailing wind direction for the month was southwest. The percentage of possible sunshine was 71. The lowest observed relative humidity was 13%, on the 26th, and the humidity for the month as a whole was rather low.

A. L. King.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MONTHLY METEOROLOGICAL SUMMARY.

Station, Yellowstone Park, Wyo.; month, May, 19 36.

Date.	Temperature (Degrees Fahrenheit.) Max.	Min.	Mean.	Precipitation. (In inches and hundredths.)	Character of day.	% of possible sunshine
1	53	37	45	0	Pt. Cldy	54
2	59	36	48	0	Cloudy	56
3	70	44	57	T	Pt. Cldy	66
4	72	39	56	.02	Pt. Cldy	76
5	55	29	42	.13	Cloudy	17
6	36	29	32	.14	Cloudy	0
7	48	31	40	.07	Pt. Cldy	57
8	50	29	44	0	Clear	100
9	67	32	50	0	Clear	100
10	72	32	52	0	Clear	94
11	74	40	57	T	Pt. Cldy	86
12	66	38	52	0	Pt. Cldy	78
13	75	37	56	T	Pt. Cldy	76
14	78	42	60	0	Clear	100
15	65	39	52	.01	Pt. Cldy	60
16	51	33	42	.09	Pt. Cldy	58
17	58	28	43	0	Clear	86
18	68	31.	50	0	Clear	100
19	73	41	57	0	Pt. Cldy	87
20	50	34	42	T	Pt. Cldy	53
21	50	30	40	T	Pt. Cldy	42
22	58	29	44	0	Pt. Cldy	74
23	65	33	49	0	Pt. Cldy	48
24	72	38	55	0	Clear	99
25	75	39	57	0	Pt. Cldy	88
26	79	40	60	0	Pt. Cldy	80
27	76	44	60	.08	Cloudy	60
28	70	45	58	0	Pt. Cldy	90
29	82	43	62	0	Pt. Cldy	87
30	85	45	65	T	Pt. Cldy	75
31	74	46	60	.07	Cloudy	42
Mean	65.7	36.5	51.1	Total. 0.61		71

~~Total degree days this month:~~ 428

NOTE.—"T" indicates trace of precipitation.

In the autumn frosts are not recorded after the occurrence of "killing," except in Florida and along the immediate coast of the Gulf of Mexico.

Lowest observed relative humidity, 3%, on 26th, at 6:00 p.m.

ATMOSPHERIC PRESSURE. (Reduced to sea level; inches and hundredths.)

Mean 30.007; highest 30.34, date 17; lowest 29.48, date 31

TEMPERATURE.

Highest 85, date 30; lowest 28, date 17

Greatest daily range 40, date 30

Least daily range 7, date 6

MEAN FOR THE MONTH IN

1871	82	93	42.8	04	45.3	15	42.8	26	48.4
1872	83	94	49.8	05	42.0	16	40.0	27	41.0
1873	84	95	46.0	06	44.8	17	42.0	28	50.3
1874	85	96	41.4	07	42.6	18	42.5	29	43.7
1875	86	97	54.0	08	43.3	19	46.6	30	46.5
1876	87	49.4	98	45.0	09	42.3	20	43.4	31	46.4
1877	88	45.6	99	42.4	10	46.4	21	44.6	32	47.2
1878	89	46.8	00	50.5	11	44.2	22	44.6	33	43.2
1879	90	49.6	01	52.2	12	43.1	23	45.8	34	54.7
1880	91	49.8	02	48.4	13	46.0	24	46.8	35	43.4
1881	92	42.1	03	44.8	14	47.9	25	48.1	36	51.1

Normal for this month 47.4

Absolute maximum for this month for 49 years 89

Absolute minimum for this month for 50 years 15

Average daily excess (+) or deficiency (−) of this month as compared with the normal +3.8°

Accumulated excess (+) or deficiency (−) since January 1 -160°

Average daily excess (+) or deficiency (−) since January 1 -1.1°

PRECIPITATION.

Total this month 0.61; snowfall 4.5

Greatest precipitation in 24 hours 0.20, date 6-7

Greatest 24-hour snowfall 2.8, date 6-7

Snow on the ground at end of month 0.0

TOTAL PRECIPITATION THIS MONTH IN

1871	82	93	1.01	04	1.31	15	2.33	26	2.19
1872	83	94	2.26	05	2.46	16	2.23	27	2.96
1873	84	95	1.68	06	2.01	17	1.97	28	0.51
1874	85	96	3.85	07	2.16	18	1.95	29	1.04
1875	86	97	1.55	08	3.38	19	1.29	30	1.04
1876	87	98	1.95	09	0.95	20	2.84	31	1.61
1877	88	99	2.52	10	2.34	21	4.48	32	1.69
1878	89	1.40	00	2.42	11	2.19	22	1.08	33	1.15
1879	90	2.00	01	2.72	12	2.17	23	1.71	34	0.42
1880	91	2.12	02	1.59	13	2.81	24	0.43	35	1.31
1881	92	2.06	03	0.65	14	1.14	25	2.32	36	0.61

Normal for this month 2.25

Excess (+) or deficiency (−) of this month as compared with the normal -1.64

Accumulated excess (+) or deficiency (−) since January 1 -2.50

MEAN RELATIVE HUMIDITY (Percentage).

6 a. m., 68.8; local noon, 31.4; 6 p. m. 33.8

WIND.

Prevailing direction SW; total movement 6,381 miles; average hourly velocity 8.6; maximum velocity (for five minutes) 37 miles per hour, from SW on 20

Maximum wind velocity this month since 1904 (By three-cup anemometer) 43 S 1927 (True velocity)

WEATHER.

Number of days, clear 7; partly cloudy 19; cloudy 5; on which .01 inch, or more, of precipitation occurred 8

MISCELLANEOUS PHENOMENA (dates of).

Auroras None; halos: solar 2, 22, lunar 2

Hail 16, 31; sleet None; fog None

Thunderstorms 19, 29, 30, 31.

*Frost: light 8, 9, 10, 13, 18, 21, 23.; heavy None; killing 17, 22

5-36-75

A. L. King

Weather Bureau.

8—1650 GOVERNMENT PRINTING OFFICE

Form No. 1030—Met'l.

U. S. DEPARTMENT OF AGRICULTURE,

WEATHER BUREAU.

MONTHLY

METEOROLOGICAL SUMMARY.

STATION

.....

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MONTH

....., 19

8—1650 U. S. GOVERNMENT PRINTING OFFICE: 1929