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Yellowstone NATIONAL PARK

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January, 1931

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February 4, 1931.

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

Dear Mr. Director:

Following is the report of the activities of the Yellowstone National Park for the month of January 1931:

500 - General

As in January 1930 the weather occupied the center of the stage for the month but two extremes were represented in the reports for the two years. January 1930 was the coldest January of record and the coldest month of any during the period of official records while at no time during January of this year did the thermometer reach the zero mark at Mammoth, the minimum being 5° above. Last year temperatures of zero or below were recorded on twenty days in January, with the minimum 24° below. Not only was there little cold weather recorded during the month but very little snow fell and unless the situation is changed there is grave danger that the range will be badly burned up this summer and there may result a serious shortage of water. For more than two months now the park has enjoyed incomparable weather and, as one old timer remarked, "the park seems to have slipped south about 500 miles." If this is a sample of the winters the park is going to experience in the future the California parks had better watch their step as the Yellowstone is likely to be their competitor as an "all-year park."

An elk count around the 20th of the month disclosed that it was possible to negotiate almost the entire north side horseback and even up to the end of the month the road to Lower Falls was passable for cars most of the way. On the 29th and 30th the road from Mammoth to Lower Falls was opened with a tractor and grader, and on the last day of the month it was possible to get from Gardiner to the Buffalo Ranch by car, an unprecedented condition in the history of the park.

The road from Ashton, Idaho, to West Yellowstone was plowed open during the month, the plow reaching West Yellowstone on the 13th but this

section was soon closed again by heavy winds. However, near the end of the month it was again opened. This condition prompted local people to suggest the introduction of winter sports into the park at Old Faithful. It is not believed that conditions similar to this winter will prevail in the park again for a great many years.

The road from Gardiner to Livingston was entirely free of snow and travel over it during the month was as comfortable as any time during the summer. A great many park people took advantage of the excellent road conditions and journeyed to Livingston for the week ends, leaving considerable money with the merchants of that town. The new bridge at Gardiner has been used for some time now and is a great improvement over the old structure, which had been condemned for a number of years.

Superintendent Toll remained in Denver during the entire month looking after matters in connection with proposed parks and monuments. Assistant Superintendent Edwards returned from leave on January 1st, and with the exception of four days, was in the park during the entire month. The four days were consumed in a trip to Helena to attend the meeting of the Montana Sportsmen's Association.

100 - Administration

110 - Status of Park

Work in all departments is current. All of the employees who were on leave during December returned during the month. The preliminary estimates for 1933 were prepared and submitted to Washington and considerable progress was made in the pasting of clippings and pictures.

Miss Marjorie Thurber, who was selected for a position as clerk-stenographer from the civil service register for Forest and Field Clerk, reported for duty on the 28th. However, in view of her inability to pass the physical examination she left the park on February 1st to seek a position offered her in Portland, Oregon.

120 - Park inspections by

121 - Acting Superintendent

Acting Superintendent Edwards returned to the park from leave on January 1st and made several trips by car on the Mammoth-Tower Falls road looking over snow and game conditions. A trip was made to Helena, Montana, on the night of the 8th, in company with Chief Ranger Baggley and Mr. Hunt, to attend the meeting of the Montana Sportsmen's Association. On the return trip he was accompanied by Dave Nelson, who is handling land and game matters for the Park Service, and Mr. Earl Fry, of the Game Research Division of the E. I. Dupont de Nemours & Company. On the 12th Mr. Edwards showed Messrs. Nelson and Fry over the northern firing line and looked over the ranches north of the park, and on the 13th the three, with Mr. Jeffs and Assistant Chief Ranger Miller, visited the buffalo ranch to view the buffalo

on their winter feeding ground. On the 30th and 31st Mr. Edwards accompanied Assistant Chief Ranger Fischman on a horseback trip over the country around Blacktail during the monthly elk count.

1X3 - National Park Service Officers

C. H. Madsen, Assistant Land Purchaser for the National Park Service, who handles land and game matters, visited the Yellowstone during the month, entering on the 13th and leaving on the evening of the 14th. Mr. Madsen was taken for a trip over the hunting area around Gardiner and Cardine and was given an opportunity to visit the buffalo ranch to view the buffalo on their winter feeding ground. This was Mr. Madsen's first visit to the park in the winter and he was very quick to size up the game situation. Mr. Madsen was accompanied by Mr. Earl Dry of the Farm Research Division of the Dupont Powder Company.

1X0 - Circulars, Bulletins, etc.

No circulars were issued during the month. The January Nature Notes were issued and distributed and, with a view to reducing the mailing list of those not particularly interested in the Notes, an inquiry blank was attached. The comments received on these blanks from those desiring to be continued on the mailing list have been very encouraging and indicate, without a doubt, that these Notes are one of the most important features of the educational department. The comments will be listed at a later date and forwarded to Washington. A copy of the January Notes is attached.

200 - Maintenance, Improvements and New Construction

The order of work for the Engineering section consisted of office routine for the entire month.

Various reports and estimates required from that department were completed during the month and considerable time given the revision of the map and plan files. Two large steel Card-Clip cabinets have been purchased and all engineering records will be transferred to these from the old homemade cabinets in use since about 1920.

The services of party chief L. M. Koopman were terminated on January 30 after he had completed the compilation of cost records for the season's construction projects and the map revisions on which he was being used.

220 - Improvements

Carpenter Shop: The Master Carpenter and his helpers were engaged during the month in making certain improvements and repairs to buildings at headquarters, and at Gardiner Ranger Station. Linoleum was laid in one set of quarters at Mammoth, and several days were spent in building portable buildings for the N. P. S.

Sanitation Department: The Master Plumber and his assistants were engaged during the month in maintaining the Mammoth water and sewer systems and in operating 8 heating plants. Miscellaneous work was done in various quarters and buildings at Mammoth and Gardiner Ranger Stations, such as repairing faucets, installing washroom in garage, installing laundry tubs and sinks, installing 40 gallon range boiler in one set of quarters, and working on installation of refrigerator plant in commissary.

Electrical Department: The Chief Electrician was engaged in assembling and trying out turbine #5, which was returned from the Caird Engineering Works at Helena after being repaired. It was necessary to send this back a second time for repairs, and it was received here January 23. It now seems to be working satisfactorily. In addition, miscellaneous electrical work was done at headquarters, and some time was spent in making out estimates and reports.

Paint Shop: The Master Painter was engaged in painting, paperhanging, kalsomining and waxing floors in different quarters at Mammoth. Linoleum was laid in two sets of quarters, and other work consisted of mixing paints and cutting stencils and marking garbage cans; some time was also spent on painting portable buildings erected for the N. P. R. during January.

300 - Activities of Other Agencies in the Park

Mr. George Whittaker operated his store at Mammoth to accommodate local residents and spent the entire month in this vicinity.

400 - Flora, fauna and natural phenomena

410 - Ranger, Naturalist and Guide Service

The usual midwinter activities were carried on by the Protection Department with very good spirit displayed by the ranger force in spite of the many handicaps due to the lightness of the snowfall and warmness of the weather which was not very favorable weather for good skiing. The usual patrols were made for the protection and observation of game and their condition. All roofs of buildings where necessary were cleared of snow. The snow depths reports and reports for cooperative bureaus have been submitted by this department. Due to this light snowfall this year, which during the month of January was about 15 inches below normal, the roads around the park were very late in closing. The Tower Falls road was closed on January 17 at Goode Creek. This road, however, was not closed by snowfall but by the wind drifting the snow. This Tower Falls road was again opened by tractor and grader to Tower Falls the latter part of the month, and it is now possible to drive to the Buffalo Ranch by car. The road from Tower Falls to the Buffalo Ranch has not been closed this winter as yet.

On January 15 the Idaho State Road Commission opened the road from Ashton to West Yellowstone. At that time there were only two miles on Pass

Lake Plata inside of the park which were closed and if this section had been open it would then have been possible to drive from Yellowstone on to California. However, the Ashton road closed up again on the 19th and was reopened again the 30th, and at the present time is still open.

It is still possible to drive from Cody to the Sylvan Pass Ranger Station, which is very unusual, there being only 8 inches of snow on the ground at that point. Ranger Fisher at that station reports that even the old timers in that country cannot recall a winter that is as light as this one to date.

The Gardiner- Livingston road was practically free of snow during the entire month, and on January 31st there was no snow encountered on this road at all. It is interesting to note that on this section of road when cars traveled over the graveled stretch large clouds of dust were raised by the passing cars.

Chief Ranger Bagley, following the meeting of the Montana Sportsmen's Association, which he attended at Helena, as stated elsewhere in this report, was on leave of absence until February 1st. Assistant Chief Ranger Miller was in charge of ranger activities in the absence of the Chief Ranger.

Because of the lack of snowfall which is necessary to give a good blanket covering on the ground the sewer and sewer pipe line at our Lake Ranger Station was froze up on January 22nd and at the present time is still frozen.

The entire ranger force were busy during the middle of the month on the census of wild animals over the entire park. The counts by districts are given elsewhere in this report.

It should be noted that the trappers in the vicinity of Yellowstone Park are this year having no luck in their line of business. The trappers on the east side of Yellowstone in the vicinity of Sylvan Pass have taken up their traps and left the country. There has been only one trapper in the Cherefare country and to date he has only taken 14 marten, 6 coyotes, 2 foxes and one weasel.

430 - Museum Service

The work of the Educational Department has progressed steadily during the past month. Approximately 50 hours have been spent on the photographic project and this is rapidly rounding into shape, although several months will be needed to complete the project. The pasting of clippings is practically complete and less than a week's work remains on this project. The Park Naturalist has spent most of his time during the past month in work on the Fishing Bridge installation. The majority of labels for three cases as well as the Wild Flower Exhibit and the Tree and Shrub Exhibit have been written during January. The work of organizing the summer staff of Ranger Naturalists is well under way and the outlook for an excellent staff is very bright. Eight books were received for the park library and the following articles have been accessioned: 1 beaver mount, 1 black bear rug, 2 marten skins. The work of the Educational

Department suffered a severe setback with the resignation of the Junior Park Naturalist on January 24th. Due to this resignation it has been necessary for the Park Naturalist to take over both his own work and that previously performed by Mr. Joyner. Leave was granted the Park Naturalist for four and a half days in order that he might go to Denver for an oral Civil Service examination. In addition to this he was granted sick leave on the 19th of the month. The museum caretaker has been on duty at Yellowstone during the entire month.

440 - Insect Control

Park Ranger Fred V. Johnston has spent considerable time in the office on work pertaining to insect control in the park. The forest insect and type map tracings were finished and were sent to Superintendent Toll at Denver for approval.

Rangers at Bechler River have been busy running strips for the location of mountain pine beetle in that region. Starting 10 chains south of the 15-mile post on the west boundary line these strips are run to the Bechler River. A strip is run every 20 chains apart and a chain on each side of these lines is searched for these beetles. Thirty-two new attacks from these beetles have been located. Some of these attacks were noted but have been pitched out. Thirty of these attacks are within 26 chains of the west boundary line between the 13-1/2 and 14-1/2 mile posts.

450 - Animal Disease Control

One fawn deer died on January 2 in the feeding corral. Post-mortem showed it to be heavily infested with lungworms and the larvae of some other internal parasite (possibly tapeworm). A fawn in a dying condition was killed by Mr. Rush on January 27. It was infested with several large tapeworms 12" to 30" in length. These have been sent to Washington for identification. Three fawns were subsequently caught and dosed with a medicine prescribed by Dr. Frank Nelson of Livingston. At the present date these three fawns are still alive and doing well. It is planned at a later date to dose the remaining fawns that come to the feeding pens.

A mild eye infection in the deer was noticed the first part of January. Dr. Nelson and Mr. Rush caught and treated one buck for this infection on January 25 in order to determine the practicability of handling the adult deer. This eye infection does not appear to be serious but if it develops further it is entirely practicable to treat the deer for its control. Only the deer at Mammoth appear to be seriously infested with tapeworms. The deer feeding pens were thoroughly disinfected with creosote on January 25. Also, a shed in which these animals have been kept has, before another is penned up, been thoroughly disinfected.

The memorandum issued to Mammoth residents on January 30, copy of which is attached to this report, regarding the garbage cans and the replacement of lids will in all probability prove to be a great benefit to the Mammoth deer, as no doubt a great deal of the deer trouble is caused by their eating garbage.

480 - Birds

The usual amount of bird life is prevalent throughout the park and reports from the various ranger stations disclose several varieties of the different birds, namely, camp robbers, magpies, ravens, Clarke's crows, cedar waxwings, water ouzels, flickers and juncos. There is also one downy woodpecker making his home at the Lake Ranger Station. A noticeable absence of water fowl on Yellowstone Lake and River was reported during the month. However, the latter part of the month large numbers of these birds were returning to this section of the park. A count in the vicinity of the Fishing Bridge shows 17 swans, 20 mallards, and 9 geese. There are also 20 mallards on Pelican Creek just below the snowshoe cabin. Actual counts on the Madison and Firehole Rivers were taken the latter part of the month and counts were obtained as follows: Swans 2, mallards [illegible], mergansers, [illegible], goldeneye 174, geese 145. There are very few waterfowl in the northern part of the park and in the Bechler River region although there are in these sections the same varieties but in lesser numbers than in the rest of the park.

470 - Animals

The lack of snow and the wonderful weather has been a great boon to the wild life the past month but it resulted in a very poor count of animals being taken on the 20th and 21st. The latter part of the month during the warm spell a very light crust was formed on the snow but it was not hard enough to keep the elk from drifting when getting their regular feed. All animals were noted to be in good condition.

Elk: The elk count begun on the 20th and 21st disclosed that the elk in the northern herd were spread over the entire country, it being possible for them to travel through the light snow to any section they desired to go. This greatly hindered rangers from obtaining a good count due to the impossibility of locating them. The following people have requested elk, authorization having been given by the Washington Office; and shipments are to be made as follows:

Sam Trude, Ashton, Idaho, 1 female 3 years old
Genl. Harry C. Trexler, Allentown, Pa., 2 females, 2 years old
A. J. Stackpole, Harrisburg Zoo, Harrisburg, Pa., 2 females, 2 years.
Isaac Walton League, Cascade, Mont., 2 carloads.
A. F. Clemens, Supt., Columbian Park Zoo, Lafayette, Ind., two 2 or 3 year old females.

In order to fill the above requests for the elk hay was spread at the trapping pens on January 28 to entice these animals in order that we may procure them. However, due to the prevailing fine weather for the past month we do not expect that we will be able to do so. Therefore, it is very probable that no elk will be shipped from Yellowstone Park this year, unless of course cold weather and snow are soon forthcoming. On January 30 there were [illegible] elk on the feed grounds at the Game Preservation Ranch. The following table shows the elk counts as taken by rangers on the 20th and 21st given by districts:

Vicinity of Mammoth	219
Game Preservation Ranch	299
Madison Junction	16
Fountain	11
Bakers Hole	15
Grayling	23
Tower Falls and vicinity	334
Hellroaring	363
Lower Slough Creek	133
Upper Slough Creek	730
Over top of Everts to Blacktail	179
South of the road to Upper Blacktail	634
Along Everts to Blacktail	223
Pebble Creek to Junction Lamar River and Cole Butte	103
Vicinity of the Buffalo Ranch	309
Slough Creek north to Lamar	220
Crevice	90
Beehler River	37
Gardiner	134
Snake River	10
Thorofare	7
Cabin Creek to Park Point	3
Canyon	15
Harys Mountain	3
Thumb	7
Cooke	15
Slip & Slide to Bailey Basin	28
Thelps Creek	34
McCauley Hill	3
Bassett Creek	7
Trail Creek	7
Bone Mountain	7
Madison Basin	38
Cedar Creek	21
Bailey Creek	480
Black Butte Creek	140
Tempee Creek Basins and outside park	550
Total.....	6154

Deer: Listed below are the deer counts for the month by districts:

Game Preservation Ranch	155
Vicinity of Mammoth	115
Old Faithful	15
Tower Falls	14
Blacktail	13
Crevice	13
Gardiner	21
Cement Ranch	33
Blending Ranch	10
Gallatin	11
Total.....	400

This count was obtained in connection with the elk count and this actual count of 402 is very good as compared with an actual count of 411 during January last year. Two hundred was the largest count during the month and was obtained on the Game Preservation Ranch on January 26. All deer seen were noted to be in fine condition with the exception of the few deer eating garbage at Mammoth. (See 450 - Animal Disease Control.) The first antlers shed by deer occurred at the Game Preservation Ranch on Jan. 6.

Moose: Forty-nine moose were counted during our elk count; 42 of these were in the Thorofare country. Heckler River and Thorofare is our natural moose country. The snow depths are so far below normal that these animals are able to travel and browse wherever they desire, whereas in usual winters they can be easily located in the creek bottoms. Therefore, a very good count on these animals now is an impossibility. All moose seen were noted to be in good condition. At the present time the majority of the bulls have shed their antlers.

Antelope: Listed below is the antelope count by districts taken on January 15:

Mammoth to Gardiner, west side of the Yellowstone River	78
Mammoth to mouth of Bear Creek	77
Gardiner, along the boundary, and Game Preservation Ranch	117
Outside the park, to Bear Creek, Link Ranch, etc.	78
Total.....	348

This is a very good count as compared with 416 as the actual count in January last year, and also as compared with 510, the largest antelope count obtained at any time last year. Their condition is noted as very good and the light snow conditions were favorable for these animals. It is very unusual to see antelope in Mammoth in January but 20 were seen on the hillside in the rear of the administration building on January 25.

Sheep: A count at Gardiner on January 18 disclosed 32 sheep in the vicinity of Black Butte and 3 on Rattlesnake Butte. There have been during the past month 10 sheep in the vicinity of Lower Falls, 7 ewes and 3 rams. On the 31st of the month 9 ewes and one dark colored lamb was seen on the ridge southwest of Junction Butte near Lower Falls. These 10 sheep are wintering in this vicinity and probably drifted up the Yellowstone River. The sheep wintering in the Gardiner Canyon have been fed cottonseed cake and hay, and on the 28th of the month 9 sheep were seen to be contentedly eating this cottonseed cake which is something new in feeding mountain sheep.

Buffalo - Lower River Herd: The roundup of buffalo for the purpose of weaning the calves was completed on January 1st. Since that time the calves have been kept in the corral and fed cottonseed cake and hay. These calves, up until the middle of the month, refused to take to the cottonseed cake and it was only after a great deal of effort and mixing of this cake with oats, salt and hay that they started feeding on the 17th of the month. At the present time we have a total of 1191 buffalo on the buffalo range

divided as follows: Bulls 322, steers 105, cows 693; these totals include the last year's calf crop of 210. On January 2nd there were 85 buffalo in the vicinity of Junction Butte but these animals later drifted back to the Buffalo Ranch where feeding was started. On the last of the month there was seen 30 buffalo about 3 miles above the mouth of Miller Creek; 13 at Willow Creek, 7 on Opal Creek and 13 at the Lemar River Bridge. The rest of these animals were on the buffalo ranch or vicinity.

Buffalo - Cold Creek-Yellow Creek Herd: This herd last year totaled 21 animals and this year has dwindled to 2, which were last seen on the Mist Creek Divide. As was noted in the monthly report of last month about 15 head have drifted over the Divide into the Upper Lemar Valley. These animals of this herd which were seen were noted to be in excellent condition and the light snowfall of this year has made feeding conditions very good.

Trailer Animals: Otter are noted to be abundant in the Southern District with an actual count of 54 as follows:

Snake River Hot Springs	10
Snake River Station	3
Pole Cat Creek	6
Lewis Lake	6
West Thumb	8
Crawfish Creek	3
Yellowstone River to the Canyon	10
Steamboat Point	8
Total	54

It should be noted here that the rangers in the Southern District are studying the outline for otter which was handed them last fall and they obtained a great deal of information regarding these animals. Muskrat tracks are numerous over the entire park. Marten signs at Riverside and other points throughout the park show that these animals as far as signs are concerned are not decreasing but rather increasing.

In Cold Creek beaver activity is being noted as well as seen in the Lower Falls District. The beaver in the Madison River which are back heavy are very rarely seen. Muskrat abound in the Madison River and may be seen at almost any time.

Predatory Animals: Twenty-four coyotes were killed this month, which makes a total of 76 to date, as compared with 100 last year. Coyote hunting, due to the fine weather, was not very favorable as the bare ground under trees and on the open hillsides has proved to be a very good cover for these animals. Horses which were killed to be used as coyote baits have yielded very few animals this year. It should also be noted here that deer kills and antelope kills have not been as numerous as in former years due to the ability of the animals to travel and escape any attacks.

Buffalo and Other Ranch Operations Activities at the ranches during the month consisted mainly of feeding game animals. At the Buffalo Ranch feeding of the buffalo calves and the adult animals was carried on for the entire month. There are about 200 elk being fed daily at the Lower Slough Creek Ranch and about 400 elk daily at the Upper Slough Creek Ranch. On the Gardiner Reservation Ranch the feeding of animals was started on Dec. 19. The feeding of elk was discontinued on January 25 due to the fact that the elk are able to forage for themselves now that most of the snow has left the ground in that vicinity. The antelope on this ranch are still being fed. A high count of 243 elk on this feed ground was noted on January 30.

400 - Natural Phenomena

No unusual activity was noted on the Mammoth Hot Springs during the month of January. New Highland and Angel Terraces are unchanged since the last report. The activity of White Elephant Back Terrace has increased slightly during the last month. Blue Springs, ever erratic, have decreased considerably and a great portion which was submerged last month was dry when these observations were taken. Orange Spring Mound seems to have increased slightly, as has the new vent at Narrow Gauge. The old Narrow Gauge Terrace, which has been practically inactive, has decreased still more and water is emerging from but one vent along the entire ridge. The new section, which is an outgrowth of Narrow Gauge, is most beautiful at this time and contains two small, but very noisy, springs.

In the vicinity of Old Geyser many new fumaroles and small gas vents are in evidence, especially in the roadway about 300 yards north of the Dragons Mouth. In several places they have sprung out within the last month or two and have melted all the snow off the road where they have made their appearance.

400 - Miscellaneous

Allyn F. Banks, park ranger, slipped on some ice on January 25, and in putting out his hand to save himself from the fall broke a small bone in his hand.

Gerald F. Yetter, Park Ranger, was married on New Years Day to Miss Velliann Cook in Cedar Rapids, Iowa.

The following is a report on the fish at the Mammoth rearing ponds: Number of fish on hand - black spotted trout 14,986; rainbow trout 27,657. The loss during the month was 84 black spotted trout and 61 rainbow trout. The length of the black spotted trout is 3-1/2 to 3-3/4 inches and the rainbow trout, 4 to 4-3/4 inches. These fish are all feeding exceptionally well. The temperature of the water in the ponds is from 42 to 47 degrees. Eighty pounds of ground sheep livers are fed each week.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

Travel for the past month consisted of 14[illegible] visitors traveling in 70 cars, all entering via the north gate. These visitors were mostly salesmen, business callers and persons interested in seeing the wild life of the park. Preseason travel to date consists of 4047 visitors traveling in 1586 cars as compared with 2935 visitors traveling in 1374 cars last year, and 2037 visitors in 1046 cars in 1929.

Snow Depths:	1929	1930	1931
Mammoth	13.4	3	9
Riverside	38	27	16
Gallatin	18	27	18
Norris	30	22	16
Slough Creek, Upper	35	24	12
Slough Creek, Lower	23	20	18
Boehler River	60	40	22
Snake River	52	41	23
Lake	34	32	11
Thorofare	45	32	15
Canyon	34	33	15
Tower Falls	18	13	12.5
Buffalo Ranch	20	14	7.5
Cooke	30	34	17
Hellroaring	16	18	8
Sylvan Pass	36	30	4
Cody Butte	20	21	10
Sportsman Lake			30
Two Ocean Plateau			40
Two Ocean Pass			30
Yan Creek			20
Cabin Creek			14
Falcon Creek Divide			30
Madison Junction			14
South Riverside			15
Old Faithful			14
Fountain			14
Continental Divide, West Bound			30
Cascade Cabin			44
Lister Creek			22
Six Mile Post, Snake River			30
Miller Creek Cabin			18
Cold Creek Cabin			16
Cache Creek Cabin			24
Crystal Springs			11

The following is quoted from the report of Dr. [illegible], of the U. S. Weather Bureau at Detroit:

Weather Conditions at Detroit for January: The mean temperature of January, 1932, was [illegible] degrees, which is only [illegible] degrees above normal; the month was, however, the warmest January since 1916, and was the third warmest January in the record at Detroit. January, 1906, the warmest, had a mean or average temperature of [illegible] degrees. The month just past is especially remarkable in contrast to January of 1930, the coldest month of the year in the record, with a mean temperature of [illegible] degrees. The lowest temperature recorded at City Hall during January, 1932, was [illegible] degrees above zero. Only once previously - in 1916 - has the lowest minimum recorded a January without any zero temperatures. In that year the lowest temperature was [illegible] above zero. The first month of 1932 therefore sets a new record for unbelievably low temperatures above - not and higher minimum. The highest maximum temperature of the month was [illegible] degrees. This has been equalled occasionally and exceeded three times in the period of record. In the first 10 days of the month the temperature rose to the freezing point but once (on the 7th, 33 degrees), and already with weather prevailing, with such conditions. It begins somewhat warmer at the beginning of the second week, and only one day thereafter failed to have a freezing temperature in the afternoon. To day maximum continuously above the freezing point: the highest minimum temperature of the month, 33 degrees, occurred on the 23rd, 27th, and 28th. The month averaged [illegible] degrees warmer than the weather ordinarily prevailing.

In total precipitation also January, 1932, begins the year with the establishment of a new record. Total precipitation was [illegible] inch, or [illegible] inches below normal. The lowest total amount previously recorded in January was [illegible], in 1908. The total precipitation for December and January together was [illegible] inch, the least ever recorded for the two months. The [illegible] of the past month was light and in very small amounts; [illegible] inch fell on each of [illegible] days, .[illegible] inch on 1 day, and .[illegible] inch on another. The last two amounts together occurred within a period of 14 hours. Hence, as amounts too small to measure, occurred on 12 days. All the precipitation of the month was in the condition of snow. The total fall, snow and, was [illegible] inches, which is very close to 10 inches less than the average for January. The predominance of a southwesterly wind, which the air-[illegible], has been noticeable. The [illegible] inches on the ground at the close of December diminished very slowly during January, and at the close of the latter month, on level ground, snow is not been substantial, and there is almost little effect of either drifting or wind-[illegible]. The average depth of snow was [illegible] inches.

There were [illegible] clear days in January, [illegible] partly cloudy, and [illegible] cloudy. The sunshine was [illegible] of the possible, and the wind velocity was [illegible] miles per hour, the prevailing direction being southwest.

The following is quoted from the report of Mr. [illegible] Lathrop, of the U. S. Weather Bureau at Mammoth:

Weather Conditions at Mammoth Hot Springs: The mean temperature of January, 1931, was 22.8 degrees, which is only 5.4 degrees above normal; the month was, however, the warmest January since 1914, and was the third warmest January in the record at Mammoth. January, 1906, the warmest, had a mean or average temperature of 25.6 degrees. The month just past is especially remarkable in contrast to January of 1930, the coldest month of the name in the record, with a mean temperature of 5 degrees. The lowest temperature reached at any time during January, 1931, was 4.6 degrees above zero. Only once previously - in 1914 - has the Mammoth station recorded a January without any zero temperatures. In that year the lowest temperature was 1 above zero. The first month of 1931 therefore sets a new record for maintaining the temperature above a new and higher minimum. The highest maximum temperature of the month was 45 degrees. This has been equalled occasionally and exceeded three times in the period of record. In the first 20 days of the month the temperature rose to the thawing point but once (on the 5th, 33 degrees), and steady cold weather prevailed, with much cloudiness. It became somewhat warmer at the beginning of the fourth week, and only one day thereafter failed to have a thawing temperature in the afternoon. No day remained continuously above the freezing point; the highest minimum temperature of the month, 28 degrees, occurred on the 22nd, 27th, and 28th. The month averaged 4.2 degrees warmer than the December immediately preceding.

In total precipitation also January, 1931, begins the year with the establishment of a new record. Total precipitation was 0.11 inch, or 1.48 inches below normal. The least total amount previously recorded in January was 0.23, in 1906. The total precipitation for December and January together was 0.36 inch, the least ever recorded for the two months. The 0.11 of the past month was dealt out in very small amounts; 0.01 inch fell on each of 6 days, .02 inch on 1 day, and .03 inch on another. The last two amounts together occurred within a period of 24 hours. Traces, or amounts too small to measure, occurred on 11 days. All the precipitation of the month was in the condition of snow. The total fall, melted, was 3.6 inches, which is very close to 15 inches less than the average for January. The persistence of a considerable snow blanket, under the circumstances, has been quite remarkable. The 11.0 inches on the ground at the close of December diminished very slowly during January, and at the close of the latter month, on level ground, where it had been undisturbed, and where it showed little effect of either drifting or wind-sweeping, the average depth of snow was 9.0 inches.

There were 3 clear days in January, 10 partly cloudy, and 18 cloudy. The sunshine was 30% of the possible, and the wind velocity was 7.0 miles per hour, the prevailing direction being Southwest.

540 - Visitors

Mr. Earl Fry of the Game Research Division of the DuPont Powder Company, with headquarters in Seattle, visited the park on January 13th and 14th, in company with Mr. Dave Madsen. Both men attended the meeting of the Montana Sportsmen's Association.

Mr. T. M. Nichols, Assistant to the President of the Yellowstone Park Hotel and Transportation Companies, stopped off at the park on January 23rd while enroute from Washington, D.C., to LaJolla, California. He merely visited the operations of his companies at Gardiner and did not come to Mammoth.

900 - Miscellaneous

Hospital and Medical Service: Dr. F. L. Guilmard, Resident Physician, submits the following report for the month of January:

Office Visits..... 56
Home Visits..... 48
Total.....104

Visits of 100 to 150 miles..... 1

Post Office: Business was about normal for this season of the year, and nothing unusual to report.

Church Services: Religious services were held in the Lodge Room Sunday morning, January 25, by Rev. L. O. Smith, of Livingston, Montana; also evening of Monday, January 26th, by Rev. Webster N. Clement.

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Miscellaneous: Foreman Sutherland and his men started putting up ice at Mammoth on January 14th and the work was completed on the 16th. Two hundred and thirty-five tons of ice were put up for Government use at a cost of $274.19.

United States Commissioner John H. Baldrum left the park on January 15th for Hot Springs, Arkansas, where he expects to spend some time in the Army & Navy Hospital. While the Judge's condition was somewhat improved from what it was last winter and during the summer he is far from being a well man. Word has been received that he reached the hospital without difficulty and is receiving the best of treatment.

An announcement for an examination to fill a vacancy as automobile mechanic in the park organization was issued by the local Civil Service Board on January 26th. However, instructions were later received to cancel the examination as there was already a register for this position available in the district office at Denver.

A dance was held at the Canteen on January 24th but due to the excellent weather and the fine condition of the road to Livingston there was a very small crowd in attendance.

Very truly yours,

Guy H. Edwards
Acting Superintendent.

Lmt

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

Office of the Superintendent January 30, 1931.

MEMORANDUM FOR MAMMOTH RESIDENTS:

It has been proven beyond a doubt that the poor condition of the deer around Mammoth is caused by their eating from the garbage cans. To remedy this condition, lids are being placed upon all of the garbage cans. Each family will be held responsible for keeping the lids on the garbage cans used by them.

As garbage mixed with ashes cannot be burned in the new incinerator, it is urgently requested that one can be used for garbage only and the other (marked ashes) be used for ashes.

Some of our people here have been following the practise of burning paper and trash in their garbage cans. This has constituted a real fire hazard, as some of the cans are located close to coal and wood sheds and other structures, and it is fortunate that up to now we have escaped having some serious fires.

Also, this practise has resulted in the misuse of the garbage cans and they do not last very long under these conditions. Likewise, the 4 x 4s which have been placed on the top of the cans have been burned through and it is necessary to replace many of them within short periods.

At a number of houses wire baskets have been provided for the burning of paper and trash and they must be used. We expect to get some more of these baskets and, if possible, place one at each set of garbage cans.

The burning of trash and paper in garbage cans must stop and it is earnestly requested that we may have the fullest cooperation of our people in discontinuing this practise.

Guy D. Edwards
Acting Superintendent.

m No. 1030—Mct'l.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MONTHLY METEOROLOGICAL SUMMARY.

tation, Yellowstone Park, Wyo. ; *month,* January , *19* 31

te.	Temperature. (Degrees Fahrenheit.) Max.	Min.	Mean.	Precipitation. (In inches and hundredths.)	Character of day.	Per cent of Possible Sunshine
	27	11	19	.01	Cloudy	7
	31	21	26	.01	Cloudy	28
	30	15	22	T.	Pt.Cldy.	13
	24	15	20	T.	Pt.Cldy.	55
	33	14	24	0	Pt.Cldy.	53
	27	10	18	T.	Cloudy	30
	23	9	16	T.	Pt.Cldy	31
	24	8	16	T.	Cloudy	2
	23	10	16	T.	Pt.Cldy	23
	24	9	16	.01	Cloudy	22
	28	8	18	T.	Cloudy	14
	29	10	20	.01	Cloudy	55
	29	14	22	0	Cloudy	35
	29	9	19	T.	Pt.Cldy.	49
	31	21	26	.01	Cloudy	45
	29	18	24	.02	Cloudy	0
	28	16	22	.03	Pt.Cldy.	65
	23	8	16	0	Pt.Cldy.	16
	27	7	17	0	Pt.Cldy.	100
	28	5	16	0	Pt.Cldy.	65
	33	11	22	0	Cloudy	56
	34	18	26	0	Cloudy	16
	42	28	35	T.	Cloudy	27
	34	18	26	.01	Cloudy	4
	29	14	22	T.	Cloudy	7
	32	21	26	T.	Cloudy	17
	38	28	33	0	Cloudy	28
	45	28	36	0	Cloudy	54
	45	20	32	0	Clear	100
	42	17	30	0	Clear	100
	41	12	26	0	Clear	100
				Total.		
gn	31.0	14.6	22.8	0.11		38

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

Mean 30.292; highest 30.74, date 29
lowest 29.79, date 6

TEMPERATURE.

Highest 45, date 28; lowest 5, date 20
Greatest daily range 29, date 31
Least daily range 9, date 4

MEAN FOR THIS MONTH IN—

1871	82		93	17	04	19	15	19	26	20	
1872	83		94	17	05	20	16	7	27	19	
1873	84		95	19	06	22	17	11	28	22	
1874	85		96	26	07	15	18	19	29	11	
1875	86		97	16	08	20	19	23	30	5	
1876	87	19	98	15	09	21	20	23	31	25	
1877	88	11	99	20	10	16	21	21	32		
1878	89	15	00	22	11	21	22	12	33		
1879	90	10	01	21	12	20	23	21	34		
1880	91	20	02	17	13	14	24	16	35		
1881	92	16	03	23	14	25	25	21	36		

Normal for this month 17.6
Absolute maximum for this month for 45 years 49
Absolute minimum for this month for 45 years -41
Average daily excess (+) or deficiency (−) of this month as compared with the normal +5.2
Accumulated excess (+) or deficiency (−) since January 1 +162
Average daily excess (+) or deficiency (−) since January 1 +5.2

PRECIPITATION.

Total this month 0.11; snowfall 3.6
Greatest precipitation in 24 hours 0.05, date 16-17
Greatest 24-hour snowfall 1.4, date 16-17
Snow on the ground at end of month 9.1

TOTAL PRECIPITATION THIS MONTH IN—

1871	82		93	1.82	04	0.05	15	0.41	26	0.35	
1872	83		94	1.82	05	0.25	16	2.50	27	1.10	
1873	84		95	4.76	06	1.48	17	0.69	28	0.70	
1874	85		96	2.21	07	1.44	18	1.08	29	1.00	
1875	86		97	1.12	08	0.85	19	1.88	30	0.88	
1876	87	7.70	98	0.51	09	1.61	20	0.28	31	0.11	
1877	88	5.05	99	4.21	10	1.99	21	1.42	32		
1878	89	1.05	00	0.30	11	4.56	22	0.74	33		
1879	90	6.10	01	2.26	12	0.89	23	1.49	34		
1880	91	0.48	02	0.29	13	2.60	24	0.80	35		
1881	92	1.40	03	0.60	14	0.97	25	1.32	36		

Normal for this month 1.59
Excess (+) or deficiency (−) of this month as compared with the normal -1.48
Accumulated excess (+) or deficiency (−) since January 1 -1.48

MEAN RELATIVE HUMIDITY (Percentage).

6 a. m. 77.1; local noon, 59.3; 6 p. m. 66.8

WIND.

Prevailing direction SW; total movement 5,176 miles; average hourly velocity 7.0; maximum velocity (for five minutes) 27 miles per hour, from SW on 1
Maximum wind velocity this month since 1928
(By three-cup anemometer) 30-South, 1930

WEATHER.

Number of days, clear 3; partly cloudy 10; cloudy 19
on which .01 inch, or more, of precipitation occurred 8

MISCELLANEOUS PHENOMENA (dates of).

Auroras 0; halos: solar 6, 19, 27, lunar 6
Hail 0; sleet 0; fog 0
Thunderstorms 0
*Frost: light ——; heavy ——; killing ——

NOTE.—"T" indicates trace of precipitation.

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

—1650 GOVERNMENT PRINTING OFFICE

W. T. Lathrop, Meteorologist.
Weather Bureau.

Form No. 1030—Met'l.

U. S. DEPARTMENT OF AGRICULTURE.

WEATHER BUREAU.

MONTHLY

METEOROLOGICAL SUMMARY.

STATION

.....

.....

MONTH

....., 19

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

10-157
(July, 1929)

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

YELLOWSTONE National Park for the month of JANUARY, 1932

	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
PRIVATE TRANSPORTATION:						
Cars first entry, ...	70	1480	32	1250	230	18
Cars reentry, ...		104		124	-20	-16
Motorcycles, ...		1		0	1	100
Total motor vehicles, ...	70	1585	32	1374	211	15
Persons entering via motor vehicles, ...	145	4847	64	3935	912	23
Persons entering via other private transportation, ...						
Total persons entering via private transportation, . . .	145	4847	64	3935	912	23
OTHER TRANSPORTATION:						
Persons entering via stages, .						
Persons entering via trains, .						
Persons entering otherwise, . .						
Total other transportation, .						
GRAND TOTAL ALL VISITORS, . . .	145	4847	64	3935	912	23

	This Year	Last Year	Increase Number	Increase Percent
Automobiles in public camps during month, ...				
Campers in public camps during month, ...				

YELLOWSTONE NATIONAL PARK

4632

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

National Park for the month of

	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
PRIVATE TRANSPORTATION:						
Cars first entry.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cars reentry.		[illegible]		[illegible]	[illegible]	[illegible]
Motorcycles.		[illegible]		[illegible]	[illegible]	[illegible]
Total motor vehicles. . . .	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Persons entering via motor vehicles.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Persons entering via other private transportation. . .						
Total persons entering via private transportation.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OTHER TRANSPORTATION:						
Persons entering via stages.						
Persons entering via trains.						
Persons entering otherwise						
Total other transportation.						
GRAND TOTAL ALL VISITORS. . .	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

	This Year	Last Year	Increase Number	Increase Percent
Automobiles in public camps during month.				
Persons in public camps during month.				

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UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

STATUS OF AUTHORIZED PROJECTS

YELLOWSTONE National Park for the Month of JANUARY, 1931.

Description of Projects	Percent Constructed To Date	Percent Constructed This Month	Percent Constructed Last Month	Probable Date Completion

No change in projects during the month.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

STATUS OF PERSONNEL

Yellowstone National Park for the month of February, 1931.

	This Month	This Month Last Year
Number of employees beginning of month,	70	76
Number of additions, ...	0	2
Total, ...	70	78
Number of separations, ...	1	2
Number of employees close of month, . .	69	76
Number of promotions during month	0	12
Aggregate amount of annual leave taken,	64	81
Aggregate amount of sick leave taken,	4	19
Aggregate amount of leave without pay,	12	12-1/2

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

STATUS OF PERSONNEL

National Park for the month of _____

	This Month	This Month Last Year
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.

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DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

REPORT OF PARK REVENUES

YELLOWSTONE National Park for the Month of JANUARY, 1931

	This Year	Last Year
Park revenue on hand beginning of month, ...	None	None
Received, ...	$74,770.88	$110,801.64
Total, ...	$74,770.88	$110,801.64
Remitted, ...	$77,770.88	$110,801.64
On hand close of month, ...	None	None

Park revenues received this year to date, ... $247,169.38

Park revenues received last year to date, ... $289,680.92

Decrease ~~Increase~~, ... $ 42,511.54

Per cent of ~~increase~~ decrease 14

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

REPORT OF PARK REVENUES

National Park for the Month of

	This Year	Last Year
rk revenue on hand beginning of month, ...		
ceived, ...		
Total, ...		
mitted, ...		
hand close of month, ...		

---

rk revenues received this year to date, ...		
rk revenues received last year to date, ...		
Increase, ...		
Per cent of increase, ...		%

10-162

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

REPORT OF TELEPHONE AND TELEGRAPH BUSINESS

[illegible] National Park for the Month of [illegible], 1951.

	This Month	This Month Last Year	Increase	Percent Increase
LOCAL BUSINESS				
Miles of circuit maintained	528	528	0	0
No. of telephones connected	177	162	15	.093
No. of measured service calls				
No. of other local calls				
Total No. of local calls	2,980	3,540	-560	- 16
Peak load in calls per day	147	188	-41	- 22
Receipts from measured service calls				
Receipts from coin boxes				
Receipts from telephone rental				
TOTAL RECEIPTS				
LONG DISTANCE BUSINESS				
No. Outbound calls	53	46	-9	- 18
No. Inbound calls	86	63	39	.5
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				
No. of money transfer messages				
No. of money transfer receipts				
TOTAL RECEIPTS TELEPHONE & TELEGRAPH DEPT-				

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

*ELECTRICITY GENERATED, SOLD, USED, ETC.

..... [illegible] National Park for the Month of ..... JANUARY, 1931.

	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, ...	59950.0	493092.0	67220.0	484040.0	8954.0	.017
Sold to park operators, . . .	897.6	600590.7	513.0	63354.5	-2663.8	-.04
Sold to others, ...						
Furnished to other Governmental agencies, ...						
Used by National Park Service, lost in transit, etc., . . .	59052.4	451701.3	66708.0	420705.5	-10915.7	-.02
Total current generated, .	59950.0	493092.0	67220.0	484040.0	10915.8	-.02

Amount receivable from the sale of electricity, ... $ 44.00

* Indicated by K. W. H.

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

*ELECTRICITY GENERATED, SOLD, USED, ETC.

National Park for the Month of . . . . . .

	This Month	This Travel Year To Date	This Month Last Travel Year To Date	Increase for Travel Year	
				Number	Percent
Kwh generated, ...					
Used to park operators, ...					
Used to others, ...					
Used in other Governmental agencies, ...					
Used by National Park Service, ...					
Net kwh generated, ...					

Net income from the sale of electricity, ... $

Prepared by E. H. H.

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

January 5, 1931

MEMORANDUM FOR ALL PARK RANGERS:

It is hoped that as much time as possible will be given to the wild life studies for which outlines were furnished in December. Of course, we realize that it will be impossible to make a complete report upon winter observations, yet a great deal of valuable information can be obtained if observations are carried on systematically and records kept of all observations.

All rangers who have been supplied with copies of Ten Lessons in Entomology should study them very diligently during the winter as the problem of forest protection is becoming more and more difficult in Yellowstone Park each year, and it will be necessary to detail rangers who are capable of handling this work to spend at least part of their time on bug control work.

We hope to be able to hold a short ranger conference in May, however, it is not definitely decided as yet. It is desirable therefore, that all rangers keep a list of subjects which they think should be discussed at the ranger conference in the event it is held.

This office is constantly requested for articles and information on rangers' experiences and his work in Yellowstone Park. It is impossible for us to answer all of these letters ourselves. We hope to build up enough information written by rangers themselves within a year or two, so that it can be supplied to people who are requesting information on a ranger's experiences and duties. During the winter I would like very much to have all park rangers prepare a write-up on their time spent in the National Park Service, listing amusing incidents and any unusual things that have happened to you. This could be prepared in a short-story form or in a narrative report form. A ranger's work is so diversified and so different from that of the average person, that a ranger should be well supplied with anecdotes and interesting episodes concerning himself and his work.

Park Naturalist Yeager advises that he does not receive enough Nature Note material written by park rangers and has been compelled to use old material. The one thing that has made Yellowstone Nature Notes so popular has been its individuality. With the present force of thirty rangers it would seem possible to have at least half of the Yellowstone Nature Notes written by park rangers throughout the year. If each one of you would submit a short story or article each month, a wealth of material would always be on hand for publication in the Notes. In the event you are unable to mail them in each month and have an unusually good story, Mr. Joffe will be glad to take it down in shorthand for you over the phone. Let's have some of your stories so that Yellowstone Nature Notes can be published regularly and contain things written by park rangers each month. Many incidents which seem trivial and ordinary to you would make a very good article for Nature Notes. The unusual things are what count.

Many of the rangers expressed their appreciation for the "Yellowstone Ranger News Bulletin" and we endeavor each time to give you as much news as possible from the office and park headquarters. In return we like to receive notes from you to include in our Bulletin for the information of our other rangers. However, do not confuse items to be published in the Bulletin with items which should be published in Yellowstone Nature Notes. Material for the Nature Notes should go to Mr. Yeager and for the Bulletin should come to this office.

GEORGE F. BAGGLEY,

Chief Ranger.

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

January 6, 1932.

MEMORANDUM TO ALL EMPLOYEES:

Beginning Wednesday, January 7th, warehouse employees will be starting on our annual inventory of supplies and equipment.

The warehouse will be open from 8 to 9 a.m. and 1 to 2 p.m. each day excepting Saturdays and Sundays. No issues will be made excepting during these hours unless it is an emergency and approved by the office.

GUY D. EDWARDS
Acting Superintendent.

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

Office of the Superintendent January 22, 1931.

MEMORANDUM TO ALL EMPLOYEES:

Those eating regularly at the Government mess will hereafter be required to notify the cook several hours in advance (if possible at the preceding meal), when they will be elsewhere for meals, otherwise the meal will be charged whether it is eaten or not.

Those taking only occasional meals at the mess must advise the cook several hours in advance (if possible, at the preceding meal.)

Meal hours are as follows:

1st breakfast	(mechanics & others)	7:15 a.m.
2nd breakfast	(office & rangers)	7:30 a.m.
1st dinner	(office & rangers)	12:05 p.m.
2nd dinner	(mechanics & others)	12:15 p.m.
1st supper	(mechanics & others)	5:15 p.m.
2nd supper	(office & rangers)	5:30 p.m.
Sunday dinner for all		12:15 p.m.

Everyone will be expected to be punctual, as it inconveniences the mess materially when you are late to meals.

Guy D. Edwards
Acting Superintendent.

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

Office of the Superintendent January 30, 1931.

MEMORANDUM FOR MAMMOTH RESIDENTS:

It has been proven beyond a doubt that the poor condition of the deer around Mammoth is caused by their eating from the garbage cans. To remedy this condition, lids are being placed upon all of the garbage cans. Each family will be held responsible for keeping the lids on the garbage cans used by them.

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The burning of trash and paper in garbage cans must stop and it is earnestly requested that we may have the fullest cooperation of our people in discontinuing this practise.

Guy D. Edwards
Acting Superintendent.