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DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
Yellowstone  
NATIONAL PARK

FILE NO.

MONTHLY REPORT

January, 1931

JANUARY, 1931

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IMPORTANT

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STEPHEN T. MATHER,  
*Director.*



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:

100 - 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  $5^{\circ}$  above. Last year temperatures of zero or below were recorded on twenty days in January, with the minimum  $24^{\circ}$  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 winter 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 10th 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 20th 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

5

section was soon closed again by heavy winds. However, near the end of the month it was again opened. This condition prompted park 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 foil remained in office 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 Game Clerk, reported for duty on the 15th. 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 Beartooth-over-Mt. Ellis 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 Mr. Coffey, to attend the meeting of the Montana Sportsmen's Association. On the return trip he was accompanied by Mrs. Hansen, who is handling local and game matters for the park service, and Mr. Carl R., of the Game Research Division of the U. S. Forest Service. On the 11th Mr. Edwards drove Mrs. Hansen and Mr. R. over the northern firing line and looked over the ranches north of the park, and on the 12th the three, with Mr. Coffey and Assistant Chief Ranger Miller, visited the Buffalo Ranch to view the buffalo

The first one year average rainfall ranged from 800 mm to 1000 mm and rainfall was observed to be more than 1000 mm. Average rainfall was 900 mm and rainfall was the least with a mean rainfall of 600 mm annual and maximum rainfall of 1200 mm and the total rainfall maximum was recorded during the 12-13 financial year which was 1000 mm.

There were no major cyclones over the period of 1990-2010. However, there was a major cyclone in 1999 which caused heavy damage to the coastal areas and its influence spread across the entire Bay of Bengal. In addition, there were many more cyclones in the period, such as Cyclone Fani in 2019 and Cyclone Amphan in 2020 which caused significant damage to the coastal areas and the economy.

There is a strong relationship between rainfall and cyclone activity. There is a positive correlation between cyclone activity and rainfall. This indicates that there is a positive relationship between cyclone activity and rainfall. This is because cyclones bring heavy rainfall and cyclones are formed by the interaction of wind and water.

Geographical Area = 652

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on their winter feeding ground. On the 10th and 11th Mr. Adams accompanied Assistant Chief Ranger Irischman on a horseback trip over the country around Blacktail during the monthly elk count.

#### 123 - National Park Service Filings

C. E. 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 Arlee and was given an opportunity to visit the buffalo ranch to view the buffalos 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 Game Research Division of the Dupont Powder Company.

#### 124 - Circulars, Bulletins, etc.

No circulars were issued during the month. The January Future 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 Callo-Slip 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. H. 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

Superior Camp: The Foster 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 the set of quarters at Arlee, and several days were spent in building portable buildings for the N. P. S.

unconscious thoughts with real-life events can affect memory and how memory can change over time and how this relates to the study of PTSD. These areas of research will help us better understand the effects of trauma on the brain.

### Conclusion

Conclusions about PTSD have been well described in the literature, and the findings are consistent with those from other studies. The findings suggest that the brain's ability to process information may be affected by trauma, which can lead to changes in memory and mood. These findings are important because they can help us better understand the effects of trauma on the brain, and this knowledge can be used to develop treatments for PTSD.

25 b

### Conclusion

The results of this study suggest that the brain's ability to process information may be reduced in individuals who have experienced trauma. This reduction in processing ability may be related to the emotional and cognitive changes that occur after trauma. These findings are important because they can help us better understand the effects of trauma on the brain, and this knowledge can be used to develop treatments for PTSD.

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Sanitation Department: The Master Plumber and his assistants were engaged during the month in maintaining the sewage, water and sewer systems and in operating 8 heating plants. Miscellaneous work was done in various quarters and buildings at Mammoth and Gardiner during January, such as repairing faucets, installing washroom laundry fixtures, installing laundry tubs and sinks, installing 40 gallon range-boilers in two sets of quarters, and working on installation of refrigerator plant in company.

Electrical Department: The chief electrician was engaged in assembling and trying out turbine No. 3, which was returned from the Curtis Manufacturing Works at Milwaukee after being repaired. It was necessary to send this back a second time for repairs, and it was received here January 20. 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, kaleeining and varnishing 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 U. S. W. during January.

#### 300 - Activities of Other Agencies in the Park

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

#### 400 - Game, fauna and natural phenomena

#### 410 - Ranger, Naturalist and Guide Services

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. No snow depth 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 Goose 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 18 the Idaho State Road Commission opened the road from Ashton to West Yellowstone. At that time there were only two miles on road

However, the smaller elements were quite similar to those of the larger ones, which were more or less randomly distributed throughout the field. There was also evidence of the same small-scale fluctuations in quality that were observed at the larger scale.

and the other two members were nominated by the party and appointed.  
The members of the committee of continuing inquiry will consist of the following:  
Chairman: Mr. J. B. Johnson, who has written the report on the  
affair of James W. Farnsworth, and who was present at the trial of the  
same.

Unification of systems of units and their use in engineering applications.

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

from 0-4

It is still possible to drive to the Sylvan Pass ranger station, which is very unusual, there being only 8 inches of snow on the ground at that point. Ranger Judd 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 5th 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 therefore country and to date he has only taken 14 marten, 6 coyotes, 2 foxes and one weasel.

#### 420 - Museum Service

The work of the educational department has progressed steadily during the past month. Many many 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

2000 feet above 4000 ft. Am. found some old log piles and the timber was all  
burned out so no timber was left in the area. There were some small clumps of grass  
and some bushes but the soil was very poor and there was no timber.

At about 4000 feet there was a small stream which was about 10 ft wide and 2 ft deep.  
The water was very clear and cold. It was flowing rapidly down the hillside. There was a lot of  
water in the stream and it was very noisy. I heard a lot of birds singing and some  
small animals running around in the bushes.

The ground was very rocky and there were many small stones and pebbles. The soil  
was very thin and there was not much vegetation. There were some small bushes and  
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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 T. 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.

Lawyers at Bechler River have been busy running strips for the location of mountain pine beetle in that region. Starting 10 chains south of the 13-mile post on the west boundary line these strips are run to the Bechler River. A strip is run every 10 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. Bush 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. Bush 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 croosote on January 25. Inc., a shot in which these animals have been kept has, before another is penned up, been thoroughly disinfected.

The memorandum issued to Mammoth residents on January 20, 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, no doubt a great deal of the deer trouble is caused by their eating garbage.

should be the ultimate goal of all scientific research. A scientific publication should not only contain new information, but also present it in a clear and concise manner. This is often not the case, and it is important to remember that a good scientific paper does not have to be written in a technical language. In fact, it can be very effective to use simple language and avoid jargon, as this will make the paper more accessible to a wider audience.

### Abstracts

The first part of every scientific paper is the abstract, which is a brief summary of the entire article. It should include a brief description of the problem studied, the methods used, the results obtained, and conclusions drawn from the data.

When writing an abstract, it is important to keep in mind that it should be brief and to the point. It should also be written in a clear and concise manner, avoiding unnecessary jargon and technical terms. The abstract should be no longer than one page and should be placed at the top of the first page of the manuscript. It should also be submitted with the manuscript, as it is often required by journals.

### Introduction

The introduction of a scientific paper is its opening, and it should be brief and to the point. It should begin with a brief statement of the problem being studied, followed by a brief description of the methods used. It should also include a brief summary of the results obtained and conclusions drawn from the data. The introduction should be no longer than one page and should be placed at the top of the first page of the manuscript. It should also be submitted with the manuscript, as it is often required by journals.

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460 - 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 robber, magpies, ravens, Clark'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. Total counts on the Madison and Firehole rivers were taken the latter part of the month and counts were obtained as follows: swans 3, mallards 48, mergansers, 60, goldeneye 174, geese 148. There are very few water fowl 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 - Mammals

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 10th and 11st. 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.

11: The elk count begun on the 10th and first disclosed that the elk in the northern herd were spread over the entire country, it being impossible 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:

Tom Trude, shtrm, Idaho, 1 female 3 years old  
Johnerry L. Trexler, Allentown, Pa., 2 females, 2 years old  
John Tackpole, Carrizbury Co., Carrizbury, Pa., 2 females, 2 years.  
Black Dalton League, Pendleton, Oregon, 2 year old.  
John Clemens,upt., Columbia River Co., 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 26 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 200 elk on the feed grounds at the Game Reservation Ranch. The following table shows the elk counts as taken by rangers on the 10th and 11st given by districts:

These last compounds however, do not have the ability to bind with the different classes of proteins, nucleic acids and other organic molecules which are present in the cell. The ability to bind with these molecules is due to the presence of a hydrophobic group in the molecule which is able to interact with the hydrophobic regions of the proteins and nucleic acids. This ability is due to the presence of a hydrophobic group in the molecule which is able to interact with the hydrophobic regions of the proteins and nucleic acids.

He has been very good with me, and I am sure they will make up the difference with his fees, and still have some left over.

Oct 4 1975

Vicinity of Mammoth	212
Cane Reservation Ranch	209
Madison Junction	16
Mountain	11
Bakers Hole	15
Greyling	23
Tower Falls and vicinity	234
Hellroaring	665
Lower Lough Creek	123
Upper Lough Creek	730
Over top of Merts to Blacktail	170
South of the road to Upper Blacktail	434
Along Merts to Blacktail	263
Pebble Creek to junction Lower River and Old Butte	163
Vicinity of the Buffalo Ranch	309
Lough Creek north to Lamar	220
Crevico	90
Bechler River	37
Gardiner	134
Snake River	10
Thorofare	7
Sabin Creek to Park Point	3
Canyon	15
Mary's Mountain	3
Thumb	7
Cooke	15
Rip & Ride to Bailey Basin	26
Thelpe Creek	34
McGulley Hill	3
Dusatt Creek	7
Drill Creek	7
Rose Mountain	7
Hidden Basin	38
Cedar Creek	21
Bailey Creek	460
Black Butte Creek	140
Tongue Creek Basins and outside park	400
Total.....	134

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

Cane Preservation Ranch	105
Vicinity of Mammoth	115
Old Faithful	12
Tower Falls	14
Blacktail	15
Crevico	15
Gardiner	91
Canyon Ranch	33
Blending Ranch	10
Gallatin	10
Total.....	400



This count was obtained in connection with the elk count and this actual count of 402 is very small as compared with an actual count of 511 during January last year. Two hundred was the largest count during the month and was obtained on the Game reservation Ranch on January 15. All deer seen were noted to be in fine condition with the exception of the few deer eating garbage at the ranch. (The 450 - animal increase noted.) The first antlers shed by deer occurred at the Game reservation Ranch on Jan. 6.

Moose: Forty-nine moose were counted during our elk count; all of these were in the Horofare country. Elk River is Horofare in 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:

Marmoth to Gardiner, west side of the Yellowstone River	75
Marmoth to mouth of Bear Creek	77
Gardiner, along the boundary, and Game Reservation Ranch	17
Outside the park, to Bear Creek, Link Ranch, etc.	71
Total.....	220

This is a very good count as compared with 416 as the actual count in January last year, and also as compared with 410, 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 Marmoth in January but 20 were seen on the hill-side in the rear of the administration building on January 15.

Sheep: A count at Gardiner on January 16 disclosed 16 sheep in the vicinity of Black Butte and 3 on Little Snake Butte. There have been during the past month 10 sheep in the vicinity of over hills, 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 over hills. These 10 sheep are now 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 20th of the month 9 sheep were seen to be contentedly eating this cottonseed cake which is something new in feeding mount in sheep.

Buffalo - Lamar River herd: The rounding up 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 Ranch.

Any model that will fit the data has to be true, since it's always a function of the data.

The above sentence was added to the original text from a copy of the 1940 *Encyclopædia Britannica* and placed before the original text from *Encyclopædia Britannica* in the original version of the document.

The 18th century has much to offer, according to Mr. and Mrs. John Gandy, owners of the historic Inn at Duxbury Harbor and its fine 18th century inn. The Gandy's have been here since 1965, and their extensive knowledge of the area makes them a valuable resource for anyone who wants to learn more about the history of Duxbury.

The results of this study will be used to inform the development of future guidelines.

and it combined with the other two positions as follows:  
Group 1 and 2 (from left to right)  
Group 2 and 3 (from left to right) and  
Group 3 and 1 (from left to right will always

With the exception of the first two, all the remaining species are represented by single specimens.

Divided as follows: bulls 522, steers 108, cows 693; these totals include the last year's calf crop of 110. In January 2nd there were 55 buffalo in the vicinity of Junction Butte but these animals later drifted back to the Buffalo Ranch where feeding was started. In the last of the month there was seen 30 buffalo about 5 miles above the mouth of Willow Creek; 13 at Willow Creek, 7 on Opal Creek and 10 at the Lower River Bridge. The rest of these animals were on the buffalo ranch or vicinity.

Buffalo - Old Creek-Lion Creek herd: This herd last year totaled 51 animals and this year has dwindled to 6, which were last seen on the East Creek Divide. It was noted in the monthly report of last month about 15 head have drifted over the Divide into the Upper Lamar 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.

Smaller 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
Lois Cat Creek	6
Lewis Lake	6
West Ranch	8
Brownfish Creek	3
Yellowstone River to the Canyon	10
Steamboat Point	2
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. Mountain 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 now in the Tower Falls District. The beaver in the Madison River which are bush houses are very rarely seen. Muskrat should 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 brush around under trees and on the open hillsides has proved to be a very good cover for these animals. Berries 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 my attacks.

and I have written you some 3000 words, 4000 lines, including all the facts  
and more which you wanted. As far as the "Lia" officer had not been  
sent to us, we will not be able to get him. We have also sent  
you the last and all previous reports which were issued with regard  
to a man who was captured by the Chinese. We have also made an  
effort to find out about the "Lia" officer. We have also made an effort  
to find out about the "Lia" officer. We have also made an effort

July 2011, 2011-2012, 2012-2013, and 2013-2014. The following table summarizes the mean daily water usage by each household and compares it to the mean daily water usage of all households in the study. The table also includes the mean daily water usage of all households in the study.

Industries will be required to pay higher rates under the new legislation.

www.2ctt.com 本帖最后由 风雨楼 从 版面 撤销

the long-standing and now a regular, and fairly broad, series of ridges of  
low, but high hills, which extend from Lake Huron northward and westward  
across the northern portion of Michigan, and across the Lake Huron, to include  
parts of Wisconsin. The name "Michigan" is derived from the Indian word  
meaning "large water," or "large lake." The name "Michigan" is derived from the  
Indian word meaning "large water," or "large lake."

After the first two hours the temperature was still 90° F., and the water was still 80° F. The water was still 80° F. after three hours.

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 Lough Creek Ranch and about 400 elk daily at the Upper Lough Creek Ranch. On the Custer Reservation Ranch the feeding of animals was started on Dec. 10. The feeding of elk was discontinued on January 20 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 213 elk on this feed ground was noted on January 20.

#### 480 - Natural Phenomena

No unusual activity was noted on the month of springs during the month of January. New Highland and Angel terraces are unchanged since the last report. The activity of White Elephant Jack terrace has increased slightly during the last month. Blue Spring, ever erratic, has decreased considerably and a great portion which was submerged last month was dry when these observations were taken. Orange Spring pond 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 Hot Geyser many new fumaroles and small gas vents are in evidence, especially in the roadway about 300 yards north of the bridge south. 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.

#### 480 - Miscellaneous

Llyn L. Banks, park ranger, slipped on some ice on January 22, but in putting out his hand to save himself from the fall broke a small bone in his hand.

Gerald J. Yetter, Park Ranger, was married on New Year's Day to Alice William Cook in Cedar Rapids, Iowa.

The following is a report on the fish at the Narrows reservoir ponds: Number of fish on hand - black spotted trout 14,986; rainbow trout 37,637. The loss during the month was 84 black spotted trout and 61 rainbow trout. The length of the black spotted trout is 2-1/2 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 40 to 44 degrees. Fifty pounds of ground sheep liver are fed each week.

and research areas with direct relevance to the study of mental illness.

and other important areas. Also, the committee would be responsible for ensuring that the new system is effective and efficient, and that it complies with relevant laws and regulations. The committee would also have the authority to make recommendations to the government on how to improve the system.

and the other two will be well worth buying. But as mentioned with all  
newspapers and periodicals, buying the books medium size is the best way to keep them in  
order. The above price will include all postage and taxes except shipping. The books will be  
shipped by express which adds some extra charges to the price and the cost from which

all the following are well known and based on classical physics.

and the most popular software class and with 70 million units of sales over the last five years.

and the other elements are distributed among the members of each organization with  
the following general proportion: 10% to the president, 20% to the first vice-president,  
20% to the second vice-president, 20% to the third vice-president, 20% to the fourth vice-president,  
and 20% to the fifth vice-president. The remaining 10% is divided among the  
members of the organization.

## 500 - Use of Park Facilities by the Public

## 510 - Increase or Decrease in Travel

Travel for the past month consisted of 140 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. Previous travel to date consists of 4047 visitors traveling in 1586 cars as compared with 2930 visitors traveling in 1374 cars last year, and 2007 visitors in 1046 cars in 1939.

Point of entry:	1939	1930	1931
Smooth	13.4	3	9
River side	38	27	18
Gallatin	18	27	15
Norris	30	25	16
Lough Creek, Upper	26	24	12
Lough Creek, Lower	23	20	13
Bechler River	60	40	36
Snake River	52	41	23
Lake	34	38	11
Therofare	45	30	15
Canyon	34	35	15
Tower Falls	18	13	12.5
Buffalo Ranch	20	24	7.0
Cooke	20	24	17
Hallroaring	16	12	8
Sylvan Pass	36	30	8
Log Butte	20	12	10
Portland Lake			30
Two Ocean Plateau			40
Two Ocean Pass			30
Yan Creek			20
Labin Creek			14
Taleca Creek Divide			30
Madison Junction			14
South Forks side			20
Old faithful			14
Fountain			16
Continental Divide, West bound			30
Cascade Cabin			24
Star Creek			20
Six Mile Post, Snake River			30
Miller Creek Cabin			15
Cold Creek Cabin			15
Cache Creek Cabin			24
Crystal Springs			11

and the other two were more than four hours apart. The authors also found that the mean time to first bite was 10 minutes, and the mean time to first defecation was 15 minutes. The mean time to first oviposition was 18 minutes, and the mean time to last oviposition was 10 minutes. The mean time to death was 10 minutes.

## DISCUSSION

### Effect of Temperature

The results of this study indicate that the temperature at which *C. capitata* females attain sexual maturity is 25°C. This is in agreement with the results of previous studies (Kaneko, 1962; Kaneko and Nakamura, 1963; Kelly, 1968). The results of this study also indicate that the time required for *C. capitata* females to attain sexual maturity at 25°C is 10 days.

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The following is copied from the report at you to be issued,  
at the U. S. Weather Bureau at Newark:

January, 1902, was very warm, with no cold nights being recorded;  
the month was, however, the coldest January since 1896, and was the third  
coldest January in the present 40 years. January, 1902, was uniform, had  
a day of intense heatlessness at mid-month. The month has been the  
exceptionally mildest in history of 1900, the mildest month of  
the year to the present, 1901, & was exceptionally cold in December. The lowest  
temperatures occurred at New Haven January, 1902, and had become abnor-  
mally cold previously - in 1900 - for the month's duration, and a  
further descent may come hereafter. In that year the lowest temperatures  
was 1.0° below zero. The first week of 1902 brought with it the record for  
extremes for New Haven during a period of 10 days. On Monday  
extreme temperature of the month was of record. This has been equaled  
several times and extended three hours to the point of record. On the  
first 10 days of the month the extremes were to the highest point for  
one in the Feb., 1896, and third cold winter since 1884, and  
with observations. On Jan. 10th, record extreme of the month of the year  
was, and will be thermometer index or temperature difference in  
the afternoon. No such marked contrast exists the greatest point of  
extreme coldness temperature of the month, 11 degrees, occurred on the 2nd  
of the month. The mean annual air density higher than the number  
conventionally given.

The verbal prediction of Mr. Johnson, 1902, that the 10th rank with  
the non-existence of a cold month, had proved false was held true, as  
14.0° below zero occurred. On Jan. 10th, record temperature contrast in  
January was 1.0°, in 1900. The record previous to the number one  
January regular was 1.0°, the last one occurring day after the month.  
On 1.0° of the past month was held and in many cases contrast 1.0° and  
1.0° on each of 10 days, with 1.0° on 1.0°, and 1.0° each of months. On  
Jan. 10th the extreme temperature contrast of 1.0° in a period of 14 hours. These  
extreme low will be equally recorded on 1.0° days. All the predictions  
of the month was in the realization of ours. On Jan. 10th, record low, and  
1.0° below zero is very close to 1.0° below zero than the average for  
January. The prevalence of a very sensible snow blanket, with the air  
extremely, but ~~heat~~ cold with remarkable. On 1.0° index in the general air  
the class of weather distinguished very clearly for the January, and at the close  
of the latter month, as usual present, there is still less coldness, and  
there is about 1.0° index of either sensible or wind-chill, the  
former depth of snow was 1.0° below.

There were 3 clear days in January, 11 partly cloudy, and 10  
cloudy. The radiation was 20% of the possible, and the total velocity was  
full miles per hour, the prevailing direction being northeast.

different from the other countries due to the different  
systems used on all four sides. The system of the United States  
and the Soviet Union is different from the one in the traditional countries.  
The former applies rules to maintain peace in every situation. While the latter  
uses their own set of guidelines according to the specific situations to keep their  
countries at peace.

Year	2004	2005	2006
1	100	100	100
2	100	100	100
3	100	100	100
4	100	100	100
5	100	100	100
6	100	100	100
7	100	100	100
8	100	100	100
9	100	100	100
10	100	100	100
11	100	100	100
12	100	100	100
13	100	100	100
14	100	100	100
15	100	100	100
16	100	100	100
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41	100	100	100
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89	100	100	100
90	100	100	100
91	100	100	100
92	100	100	100
93	100	100	100
94	100	100	100
95	100	100	100
96	100	100	100
97	100	100	100
98	100	100	100
99	100	100	100
100	100	100	100

The following is quoted from the report of Mr. E. V. Lathrop, of the U. S. Weather Bureau at Barre:

Weather Conditions at North Job, Vt.: The mean temperature of January, 1931, was 22.8 degrees, which is only 0.1 degrees above normal; the month was, however, the warmest January since 1914, and was the third warmest January in the record at Barre. January, 1896, 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 8 degrees. The lowest temperature reached at any time during January, 1931, was 6.6 degrees above zero. Only once previously - in 1914 - has the Barre station recorded a January without any zero temperature. 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 41 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 23rd, 27th, and 28th. The month averaged 4.1 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, .05 inch on 1 day, and .03 inch on another. The last two amounts together occurred within a period of 24 hours. Trace, 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, used to be .3.6 inches, which is very close to 10 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 19 cloudy. The sunshine was 30% of the possible, and the wind velocity was 7.0 miles per hour, the prevailing direction being southwest.

estimated at 17.6% from 1990's level of 19.6%.  
Source: The World Bank, 2000.

the many that have been made to explain the origin of the species. The theory of evolution has gone to prove it. There are millions upon millions of species, and every one of them is a living witness to the infinite wisdom of the Great Designer. The theory of evolution is a theory of God.

and the various stages of a career all begin with a solid base. The academic base can have additional well-defined academic and scholarly components based on one's field of study and applied research.

540 - Visitors

Mr. Earl Fry of the Game Research Division of the Mountaineer Company, with headquarters in Seattle, visited the park on January 10th and 14th, in company with Mr. Dave Adson. Both men attended the meeting of the Montana Portmen's Association.

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

and 200 + 100

which consist of the following documents and will be given from  
the year 1800, except the first, which is a copy of the original of the same.  
The following will therefore form the whole of the collection of 2000  
originals, which are now preserved in the British Museum.

The collection will be arranged thus, and divided into 2000  
folios, or books, and the first volume contains the first 2000 original  
copies of the following, arranged in alphabetical order, of course while the  
rest of each volume will contain the remaining 1000 copies and half a copy

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

Office Visits.....	66
Home Visits.....	43
Total.....	109

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 18, by Rev. L. D. Smith, of Livingston, Montana; also evening of Monday, January 26th, by Rev. Webster H. Clement.

- - - - -

Miscellaneous: W. R. Brown McFerland and his men started putting up ice at Smooth 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 E. Heldrum left the park on January 18th 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 Inn 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,

Ray N. Edwards  
Acting Superintendent.

should consider all the various factors involved.  
Finally, he should not fail to note, however, all the other influences

which bear upon  
the character of  
the market.

### III. COMPARATIVE TRADE INDEXES.

Let us now take up each factor which has influence upon the market.

The first of these will be the

political will of the country and the condition of the political situation. Governmental policies will tend to either help or hurt the foreign exchange market. This will depend upon the nature of the particular government's policies and the way in which they are carried out.

The political situation may also have important influence. A government will affect the value of its currency by its own internal policies. It may also affect the value of its currency by its foreign policy. In general, it is the government's task to try to make the country as stable as possible.

Secondly, we have the trade situation. A good trading record may help to keep the value of a country's currency stable. Conversely, a bad trading record may cause a decline in the value of a country's currency. This will not always be true, however, because there may be other factors which will affect the value of a country's currency.

Thirdly, the location of a country's institutions, its geographical position, and its natural resources will all have an influence on the value of a country's currency. A country with a large amount of mineral wealth, for example, will tend to have a higher value than a country which has little mineral wealth.

Fourthly, the will and ability of a country's government to control its currency and to maintain its political stability will also affect the value of a country's currency. A country with a strong government which can control its currency and which can maintain its political stability will tend to have a higher value than a country with a weak government which cannot control its currency or which cannot maintain its political stability.

Let us now consider each of these factors in turn.

BOSTON CHAMBER  
OF COMMERCE

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.

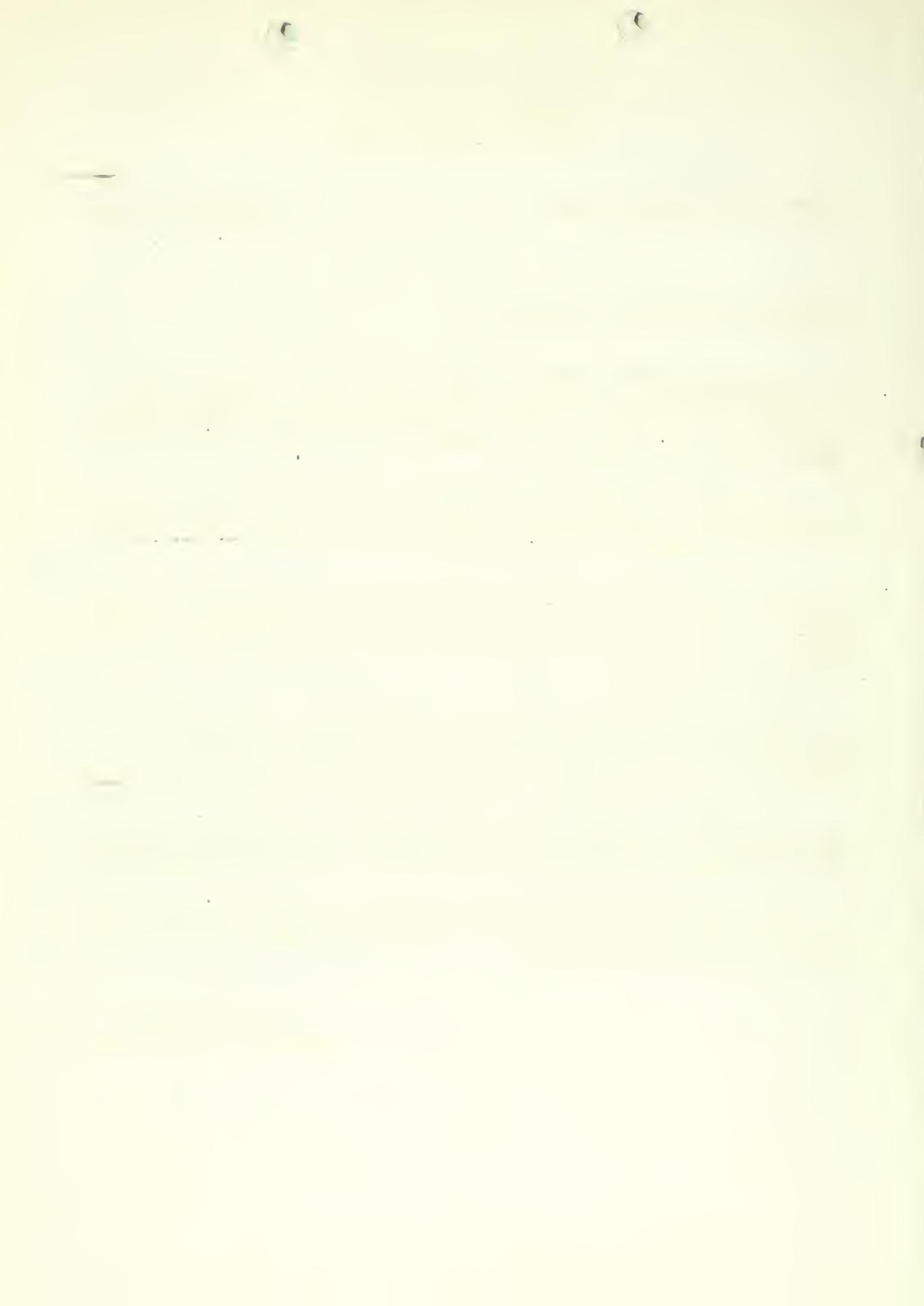
Some of our people here have been following the practise of burning paper and trash in their garbage cans. This has constituted a real fire hazard, as some of the cans are located close to coal and wood sheds and other structures, and it is fortunate that up to now we have escaped having some serious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



## U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

## MONTHLY METEOROLOGICAL SUMMARY.

Station, Yellowstone Park, Wyo.; month, January, 1931

TEMPERATURE (Degrees Fahrenheit.)			Precipita- (In inches and hundredths.)	Character of day.	Per cent of Possi- ble Sun- shine	ATMOSPHERIC PRESSURE (Reduced to sea level; inches and hundredths.)										TEMPERATURE				
Max.	Min.	Mean.				Mean	30.292	highest	30.74	date	29	lowest	30.79	date	6	TEMPERATURE				
27	11	19	.01	Cloudy	7	Highest	45	date	28	; lowest	5	, date	20							
31	21	26	.01	Cloudy	28	Greatest daily range	29													
50	15	23	T.	Ft. Cldy.	13	Least daily range	9													
24	15	20	T.	Ft. Cldy.	35	MEAN FOR THIS MONTH IN														
53	14	24	0	Pt. Cldy.	53	1871	82	93	17	04	10	15	19	26	20					
27	10	18	T.	Cloudy	32	1872	83	94	17	05	20	16	7	27	19					
25	9	16	T.	Pt. Cldy	51	1873	84	95	19	06	22	17	11	28	22					
24	8	16	T.	Cloudy	2	1874	85	96	26	07	15	18	15	29	11					
23	10	16	T.	Pt. Cldy	23	1875	86	97	16	08	20	19	22	30	5					
24	9	16	.01	Cloudy	22	1876	87	10	98	15	09	21	20	23	31	25				
28	3	13	T.	Cloudy	14	1877	88	11	99	20	10	16	21	21	32					
29	10	20	.01	Cloudy	55	1878	89	15	00	22	11	21	22	12	33					
29	14	23	0	Cloudy	35	1879	90	10	01	21	12	20	23	21	34					
28	18	24	.02	Cloudy	0	1880	91	20	02	17	13	14	24	16	35					
28	16	22	.03	Pt. Cldy	65	1881	92	16	03	23	14	25	25	21	36					
23	8	16	0	Pt. Cldy	16	Normal for this month														
27	7	17	0	Pt. Cldy	100	Absolute maximum for this month for														
28	5	16	0	Pt. Cldy	65	Absolute minimum for this month for														
53	11	22	0	Cloudy	56	Average daily excess (+) or deficiency (-) of this month as compared														
54	18	26	0	Cloudy	16	with the normal														
42	28	35	T.	Cloudy	27	Accumulated excess (+) or deficiency (-) since January 1														
54	18	26	0	Cloudy	16	Average daily excess (+) or deficiency (-) since January 1														
29	14	22	T.	Cloudy	7	PRECIPITATION														
52	21	26	T.	Cloudy	17	Total this month	0.11	; snowfall	3.6											
38	28	33	0	Cloudy	28	Greatest precipitation in 24 hours	0.05	, date	16-17											
45	28	36	0	Cloudy	54	Greatest 24-hour snowfall	1.4	, date	16-17											
45	20	32	0	Clear	100	Snow on the ground at end of month														
42	17	30	0	Clear	100	TOTAL PRECIPITATION THIS MONTH IN														
41	12	26	0	Clear	100	1871	82	93	1	82	04	0.25	15	0	41	26	0	35		
31.6	14.6	22.8	0.11	Total	38	1872	83	94	1	82	05	0.25	16	2	40	27	1	10		
						1873	84	95	4	76	06	1	48	17	0	60	28	0	70	
						1874	85	96	2	21	07	1	44	18	1	28	29	1	00	
						1875	86	97	1	12	08	0	85	19	1	28	30	0	88	
						1876	87	7	70	98	0	51	09	1	31	20	0	28	31	
						1877	88	5	25	99	4	21	10	1	21	1	42	32		
						1878	89	1	0	500	1	20	11	4	55	22	0	74	33	
						1879	90	6	1	00	2	26	12	0	82	23	1	49	34	
						1880	91	0	4	80	2	26	13	2	60	24	0	80	35	
						1881	92	1	4	00	3	0	30	14	0	97	25	1	52	
						Normal for this month														
						Excess (+) or deficiency (-) of this month as compared with the														
						normal														
						-1.48														
						MEAN RELATIVE HUMIDITY (Percentage).														
						6 a.m. 77.1	; local noon, 52.3	; 6 p.m. 66.8												
						WIND.														
						Prevailing direction SW	; total movement 5,175 miles;													
						average hourly velocity 7.0	; maximum velocity (for five													
						minutes) 27	miles per hour, from SSW													
						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 13												
						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 0	; heavy 0	; killing 0												

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.

W. T. Lathrop, Meteorologist  
Weather Bureau.

U. S. DEPARTMENT OF AGRICULTURE.

WEATHER BUREAU.

MONTHLY

METEOROLOGICAL SUMMARY.

STATION

MONTH

, 19

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

10-157  
(July, 1929)

TRAVEL REPORT

JANUARY, 1929

~~YELLOWSTONE~~

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
<u>PRIVATE TRANSPORTATION:</u>						
Cars first entry, . . . . .	70	1400	32	1250	250	16
Cars reentry, . . . . .		104		124	-70	-16
Motorcycles, . . . . .		1		0	1	100
Total motor vehicles, . . . . .	70	1505	32	1374	811	10
Persons entering via motor vehicles, . . . . .	145	4347	64	3930	912	22
Persons entering via other private transportation, . . . . .						
Total persons entering via private transportation, . . . . .	145	4347	64	3935	912	22
<u>OTHER TRANSPORTATION:</u>						
Persons entering via stages, . . . . .						
Persons entering via trains, . . . . .						
Persons entering otherwise, . . . . .						
Total other transportation, . . . . .						
GRAND TOTAL ALL VISITORS, . . . . .	145	4347	64	3935	912	22

	This Year	Last Year	Increase Number	Increase Percent
<del>YELLOWSTONE</del>				
Automobiles in public camps during month, . . . . .				
Campers in public camps during month, . . . . .				

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

10-163  
53  
1951

TRAVEL REPORT

National Park for the month of

Belmont	Maple	Normal	To Date	Year	Month	Year	Month	Travel	This	This	Fasc	Passenger for
---------	-------	--------	---------	------	-------	------	-------	--------	------	------	------	---------------

TRAVEL TRANSPORTATION:

as far as possible.

Belmont Maple Normal

Belmont Maple Normal

Belmont Maple Normal

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		Percent Constructed		Probable Date Completion
	To Date	This Month	Constructed	Last Month	

No change in projects during the month.

DEPARTMENT OF THE INTERIOR

MINERAL PARK SERVICE

Geologic	Belt	Geologic
Geologic	Geologic	Geologic

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

**S T A T U S   O F   P E R S O N N E L**

Yellowstone National Park for the month of January, 1931.

	This Month	This Month Last Year
Number of employees beginning of month,	70	76
Number of additions, . . . . .	0	0
Total, . . . . .	70	76
Number of separations, . . . . .	1	0
Number of employees close of month, . . . . .	69	76
Number of promotions during month	0	15
Aggregate amount of annual leave taken,	84	81
Aggregate amount of sick leave taken,	4	10
Aggregate amount of leave without pay,	22	22-3/4

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

STATS OF PERSONNEL

National Park for the month of

Last Year	This Month
-----------	------------

Number of employees beginning of month

Number of additions . . . . .

Total . . . . .

Number of separations . . . . .

Number of resignations . . . . .

Number of persons quitting month

Average amount of annual leave taken

Average amount of sick leave taken

Average amount of leave without pay

## DEPARTMENT OF THE INTERIOR

## NATIONAL PARK SERVICE

## REPORT OF PARK REVENUES

NATIONAL PARK for the Month of MARCH, 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
<hr/>		
Park revenues received this year to date, . . . . .	247,169.88	
Park revenues received last year to date, . . . . .	289,640.88	
Increase, . . . . .	42,471.00	
Per cent of increase, decrease . . . . .	14	
<hr/>		

## DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

## REPORT OF PARK REVENUES

National Park for the Month of

Year	This Year	Last Year

## UNITED STATES

## DEPARTMENT OF THE INTERIOR

## NATIONAL PARK SERVICE

## REPORT OF TELEPHONE AND TELEGRAPH BUSINESS

~~YALL 11074~~ National Park for the Month of ~~JUNE 1931.~~

	This Month	This Month	Increase	Percent Increase
	Month	Last Year		
<b>LOCAL BUSINESS</b>				
Miles of circuit maintained . . . . .	523	523	0	0
No. of telephones connected . . . . .	177	162	15	.093
No. of measured service calls . . . . .				
No. of other local calls. . . . .	2,688	3,042	-354	-10
Total No. of local calls . . . . .	147	100	-47	-47
Peak load in calls per day. . . . .				

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 . . . . .	24	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.**

СЕВАЛА ОЗЕМЛЯ

СОГЛАСНО ЭНТУ ТРЕМЯЧЕМУ

СОГЛАСНО ВСЕМУ ПРИЧИНАМ

СОГЛАСНО ПРИЧИНАМ ПРИЧИНАМ ПРИЧИНАМ

СОГЛАСНО ПРИЧИНАМ ПРИЧИНАМ ПРИЧИНАМ

СОГЛАСНО	ПРИЧИНАМ	ПРИЧИНАМ	ПРИЧИНАМ
СОГЛАСНО	ПРИЧИНАМ	ПРИЧИНАМ	ПРИЧИНАМ

СОГЛАСНО	ПРИЧИНАМ	ПРИЧИНАМ	ПРИЧИНАМ
СОГЛАСНО	ПРИЧИНАМ	ПРИЧИНАМ	ПРИЧИНАМ
СОГЛАСНО	ПРИЧИНАМ	ПРИЧИНАМ	ПРИЧИНАМ

СОГЛАСНО	ПРИЧИНАМ	ПРИЧИНАМ	ПРИЧИНАМ
СОГЛАСНО	ПРИЧИНАМ	ПРИЧИНАМ	ПРИЧИНАМ

СОГЛАСНО ПРИЧИНАМ

СОГЛАСНО ПРИЧИНАМ

СОГЛАСНО ПРИЧИНАМ

СОГЛАСНО ПРИЧИНАМ

СОГЛАСНО ПРИЧИНАМ

СОГЛАСНО ПРИЧИНАМ

## UNITED STATES

## DEPARTMENT OF THE INTERIOR

## NATIONAL PARK SERVICE

\*ELECTRICITY GENERATED, SOLD, USED, ETC...... National Park for the Month of ..... JANUARY, 1931.

	This Month	This Year	This Month	Last Year	Increase for Travel Year	
	Month	Year	Last	Year	Number	
	To Date	Year	To Date	Year	Percent	
Current generated, . . . . .	50950.0	492992.0	67220.0	48404.0	8844.0	.17
Sold to park operators, . . . . .	897.6	600590.7	512.0	614.0	-2853.0	-.04
Sold to others, . . . . .						
Furnished to other Governmental agencies, . . . . .						
Used by National Park Service, lost in transit, etc., . . .	50058.4	481701.3	66708.0	42070.0	-10918.0	-.02
Total current generated, . . . . .	50950.0	492992.0	67220.0	48404.0	8844.0	.17

Amount receivable from the sale of electricity, . . . . . \$ 41.00

\* Indicated by K. W. H.

UNITED STATES

# DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

ELIMINATE GENEERATED SOILS, ETC.

National Park to the west.

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. Yenger 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

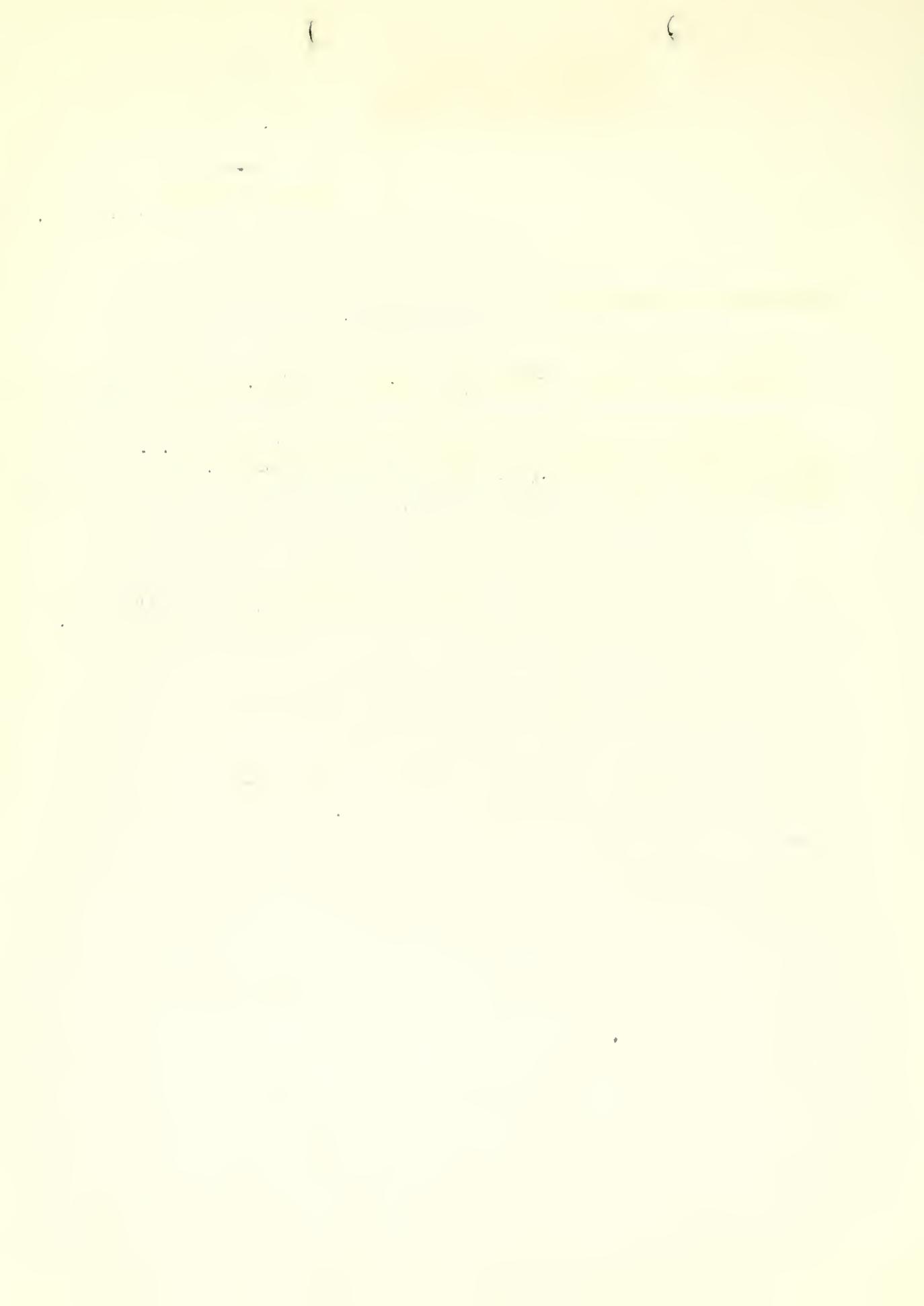
January 6, 1932.

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.

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.

