



http://archive.org/details/superintendoctober001932

10-23 (ay, 1929)

V

UNITED STATES DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

L'ecc

...YELLO ... STONL NATIONAL PARK

FILE NO.

MONTHLY REPORT

FOR

OCTOBER, 1932

IMPORTANT

This file constitutes a part of the official records of the l ational Park Service and should not be separated or papers vithdrawn without express authority of the official in charge. All Files should be returned promptly to the File Room. Officials and employees will be held responsible for failure t observe these rules, which are necessary to protect the integr y of the official records.

HORACE M. ALBRIGHT, ¹⁰ a. Government frinting office 1829 6-7410 Director.



DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE YELLOWSTONE NATIONAL PARK YELLOWSTONE PARK, WYO.

OF THE SUPERINTENDENT

November 4, 1932

The Director National Park Service Washington, DC

Dear Mr. Director:

Following is a report of the activities of Yellowstone National Park for the month of October, 1932.

000 - General

010 - Activities were rather quiet in the park during the month, with few visitors to take care of, but it was possible for our road crews to work until almost the end of the month, the last of the crews being released on November 1. The closing of the road through Golden Gate to travel on November 3 prohibited any further travel into the interior of the park and it was deemed advisable to bring in all of our crews for the year. The month was very favorable for travel and with no roadsblocked, by the end of the month it was even possible to negotiate the east and south entrance highways. Several snow storms occurred during the month but these did not tie up traffic completely. Accommodations were available at Old Faithful until October 15, on which date Mr. Hemilton closed his store at that point.

020 - General Weather Conditions

(Summary of weather conditions will be found at the back of this report)

100 - Administration

110 - Status of Nork

Superintendent Toll left the park on October 3, spending that night at Grand Teton Park and continuing on the next day to Salt Lake City. After an inspection trip in Utah, he continued on to Denver and will be away from this park until sometime in May, to be engaged on work in connection with the inspection of proposed parks and monuments. Assistant

DEPART MENT OF THE INTERIOR NATIONAL PLAK SERVICE YELLOW COLE ALTIONAL PARK

14_1011 310 21730 7

West of the second

: s.a . a

Land - Us

0 01 2 0. - 0.15 0. 10 00 - 0 18

y the start of the distribution of the start of the start

astation - 001

Superintendent Edwards became Acting Superintendent following Superintendent Toll's departure.

In order to keep the work cirrent, some over-time was necessary especially around the first of the month. The Loonomy Bill has necessitated a great deal of additional work and with reports and payrolls required to be in Washington on certain dates, this cannot be done with our present personnel without some over-time. Our clerical personnel are taxed to their full limit in trying to keep the work current. An examination announced for filling positions in the Thirteenth District for the Bureau of Public Roads caused many of our men to take the examination and the local board of civil service was burdened with new duties.

Several of our employees took a part of their furlough leave during the month and we are working with a minimum of personnel. This will be the case for some time yet as all of our permanent personnel will be entitled to 24 working days and will take at least a part of it this fall, pay for which has been deducted from their salaries.

120 - Park Inspections By:

121 - Acting Superintendent

Superintendent Toll left the park via the south gate on October 3 and trips were made by the Acting Superintendent during the month as follows:

- October 2 To Livingston to meet Col. Arthur woods and Vanderbilt webb, spending the night in Livingston.
 - 3 From Livingston to park with Col. woods and Vanderbilt webb and proceeding to Grand Loton Park for the night.
 - 4.- Returned to the park from Grand Teton Park.
 - 7 To Livingston to attend Annual Game Meeting, returning to park for night.
 - 10 To Cody with Assistant to Superintendent Joffe to attend annual banquet of Cody Club; night in Cody.
 - 11 Returned from Cody to west Yellowstone where met Col. woods and Mr. Webb and proceeded on with them to Bozaman, Montana, for night.
 - 12 Returned from Bozeman to park
 - 13 To Hebgen Dam near West Yellowstone with Chief Ranger Baggley for conference with William Corey, the man who donated \$15,000 for the Lake Fish Hatchery.
 - 17 To Livingston for Rotary meeting, returning home for night.
 - 19 To Livingston in evening for attendance American Legion meeting, returning Mammoth for night.
 - 21 To East Entrance with oil expert Goodwin to look over road matters; returning Mammoth for night.

Therefore a second seco

interved
interve

- . The second sec
- - in the second second
- - T DIT . T DIT I
- and a second and a second a s La second a s La second a s
 - . To be not the other provides the other of the other of the other of the other othe
- - I = 10 mode as particular (approximation of the second se second sec

- 27 To Livingston with Assistant to Superintendent Joffe to attend Dude Ranchers' Convention. In evening proceeded to Manhattan, Montana, for district meeting of the American Legion, returning to Livingston for night.
- 28 Spent day in attendance Dude Ranchers' Convention.
- 29 Spent day in attendance Dude Ranchers' Convention.
- 30 Returned to park from Dude Ranchers' Convention.

122 - Special Field Representatives of the National Park Service.

Kenneth C. McCarter, Junior Landscape Architect, who has been on duty here during the entire summer departed for San Francisco on the 26th.

123 - National Park Service Officers

E.T. Scoyen, Superintendent of Glacier National Park, entered by the North Gate on October 11, and departed via the west Gate on the 12 th.

John C. Freston, Assistant Superintendent of Rocky Mountain National Park, with Mrs. Preston, entered at the South Gate, October 4 and left via the North Gate on the 5th for Glacier Park.

125 - Other Governmental Officers

R.H. Rutledge, Regional Forester, U.S. Forest Service, Ogden, Utah, entered the park at the North Cate and left via the South Gate on the 10th.

127 - Other Agencies

Herbert Maier, Architect in charge of museums and trail-side shrines, left on October 24, having spent the entire summer in the park.

140 - Labor Situation

There was little change in the labor situation. We retained some of our crews until the end of the month keeping the best men on until the last. Also, we attempted as much as possible to employ married men with families. Most of the per diem employees were released by the first of November. The Morrison-Knudsen Company, contractor on the Golden Gate job, expect to work most of the winter and some of the men released by us will find employment there. While the wages paid would hardly be considered a living wage for a man with a family, many men are anxious to get any kind of work at all and there are each winter many men living in Gardiner without employment, who will welcome this opportunity to work. Men from neighboring towns will also be able to find some employment with this contractor part of the winter, which will tend to aid conditions somewhat.

- 29 Dema Gal J. 5 el .. 20 [1

183 - Special Ment stream at an of the Serie 1 + 14 - C. C.

F nneth C. 198-199, Junior L 1989 R Front, A Bacharan, A Martin and Antonia antonia and Antonia and Antonia and An

125 - Dation I F. r. svic. Daile r

al rr, atti comu, a fabrit of, fuscadar o, fo subtait toural rr, atti comunetan, e sincia uno una for, lifeore e si bar vie re orea sue nu ro cou su si core.

125 - Utier State 10 - C21

The set of the set of

127 - uttor rencios

Herbort Heirr, archit of is charge of a and on the la-side a la , lott on Cetoor 24, sevine spunt the main seven and and an a

140 - L.b.r Lits that

if is a first on a first har of the loss of a first first on a second of the rest har of

150 - Equipment and Supplies

One carload coal, three carloads gasoline, six carloads hay, sixteen carloads sever pipe, three carloads road oil, one carload bridge plank, one carload cement, and one carload cottonseed cake were received during the month. Miscellaneous items and conjugant received include the following: three shipments of groceries having total weight of 29,763 lbs., one four-wheeled rubber-tired trailer, and one three-eights yard gas shovel.

160 - Status of Alienated Lands

On October 20, President Hoover signed a proclamation adding approximately 7,600 acres of land, located in a triangular shape, extending $3\frac{1}{2}$ miles from Gardiner toward Livingston on the west side of the Yellowstone Niver, authorized by Congressional Act of May 26, 1925 (44 Stat. 655). The area is especially adapted for winter range purposes and will afford additional food for the antelope and elk which graze in this vicinity.

170 - Maps, Plans and Surveys

This activity required part time of one man on the preparation of plans and sketches of completed projects and a small shount of drafting and field work for other departments.

180 - Circulers, Placards, Publicity Bulletins, etc.

No circulars were issued during the month and no news stories were sent out from the park direct. However, several articles pertaining to the park, which were published by the Livingston Enterprise, were copied by other papers throughout the state. Several park features have been used by John Hix in his "Strange as it Seems" cartoons and have been syndicated nationally. No Nature Notes have been issued during the month but an issue will be forthcoming in the early part of November.

200 - Maintenance, Improvements and New Construction

210 Maintenance

No road maintenance was carried on other than the repair of the timber truss bridge across the Lamar River on the Cooke road. Two spans were built to correspond with the easterly span, wrecked by the Red Loage Cooke contractor, and rebuilt early in July.

Road oiling work consisted of the preparation of approximately 400 cubic yards of premixed patching material for the Mammoth section, and a light palliative treatment to Lava Creek on the Tower Falls road.

220 - Improvements

Shops: The usual maintenance work was carried on.

Lov - REALTE - UL

Un for der 20, 10 der 1 mm 1, 11 millen 10, 200 ximmely 7, 10 der 1 then, 14 32 interior of the 1 miller of the 2 miller of 2 miller state interior of the 2 miller of the 2 miller of 2 miller und, no tropic is to could der 2 miller of the 2 miller of 11 und, no tropic is to could der 2 miller of the 2 miller of 12 und. Interd different food for a control of the 2 miller of 12 violation.

1/0 - 100 1 - 100 - 01

This estator required web 4 of one and a completion of plans an end of the state of a state of the state of t

100 - Diroulers, Flances, 110 Luit sulleties, 800.

envolting ereigned to a and a and a set of end envolting the antreation of a single and a gride, and a set of a single a to a single a single used by some and a strong end to a single a single doubt a strong end to a single a single doubt a strong end to a single a single at a single a single a single a single a single at a single a single a single a single a single a single at a single a single a single a single a single a single at a single at a single a s

ละ เรียน บน

Mo too 11 000 D at 1 2 000 D at

caute yrane a pilitic ar opicial a contraction of the contraction of t

SLOT VOT - USG

Electrical Department - Usual maintenance work done around Manmoth and at points in interior of the park so long as weather conditions permitted. Heavy repairs were made to nine corner poles on the joint telephone line from Apollinaris Spring, such as re-guying and double arming. One-half mile of the telephone line near West Thumb which was unsightly from the highway was re-located. All of the brush cut last year on account of clearing for the new telephone line from West Thumb to the south entrance was burned and cleaned up and the brush cut this year for the new telephone line construction from the east entrance was burned and cleaned up. One new telephone was installed at the game ranch and one was placed in the McCarty's quarters at the south entrance.

Painting Department .- Usual maintenance and repair work done.

Carpenter Shop - Usual repairing and maintenance of various buildings was carried on.

Sanitation Department - Maintained and operated water systems, sewer systems, refrigerating plants, heating plants, hauled garbage, kept offices and buildings clean, operated chlorine machines for mewage systems and tested residual chlorine, also general repair and maintenance work was done on various buildings throughout the park. Changed plumbing system at Old Faithful ranger station so that it can be used during the winter. Installed heating system in bachelor building.

230 - New Construction

Project 484 - Mammoth Sewer - Completed on October 7 and crew disbanded.

Project 501 - Parking Areas - Three projects were under wayduring the month under this project number, two at points immediately north and south of Obsidian Cliff and at the Norris Museum. The area south of the cliff was completed with 393 feet of dry wall curb laid and 200 cubic yards of material borrowed for fill material. At the area north of the cliff all grading was completed and 50 feet of wet rubble curb laid but freezing weather made it necessary to stop all cement work and the crew was laid of f on October 21. The area at Norris Museum was nearly completed as far as grading operations on the parking space proper were concerned but the laying of rock curbing was not attempted because of low temperatures.

Project 553 - Artist Point Road Surfacing and Oiling - In the preparation of the grade preparatory to surfacing, 1200 yards of borrowed material was placed in building up shoulders and settlement and 1725 lineal feet of six-inch drain tile installed. Seven hundred yards of coarse gravel was also hauled from borrow pits to cover drain tile and backfill drain ditches. The first crushed rock surfacing was laid down on October 6 and this item of work completed on October 21, with approximately 3500 cubic yards of surfacing spread.

 $\frac{1}{10} = \frac{0.2}{10} = \frac{1}{10} =$

LOUTONTOSICS TEL - O'L

ist of the second second

Project 526.3 - Grand Geyser Trail - One thousand feet of this project were completed before the crew was disbanded on October 20 because of inclement weather. One short rustic type bridge and approximately 350 feet of trail remain to be built next spring.

Project 542 - Canyon Junction-Tower Falls Cleanup - All cleanup and burning completed and the crews disbanded on October 21.

Project 541 - Obsidian Cliff-Firehole Cascades Betterment - work closed down on the last day of the month with accomplishments as follows: cut slope treatment, 1740 feet; fill slope treatment, 4700 feet; oil mat gutter, 1600 feet; drainage tile installed, 6375 feet.

Project 549 - East Entrance Road Betterment - work closed down on October 31 because of weather conditions. Fourteen thousand seven hundred feet of drainage tile installed and 9,800 feet of fill slope treatment carried out during the month.

Project 558 - Obsidian Cliff-Terraces Cleanup - This project was started on October 1, with funds transferred for post-construction maintenance by the Bureau of Public Roads. Roadside cleanup covered 7 miles during the month with approximately 60% of the cleared material burned. One hundred twenty yards of selected material was placed on the northerly mile of the project where no surfacing had been spread by the contractor.

Project 550 - Inspiration Point Road Cleanup - One thousand feet of cut slope treatment was completed during the month, the resulting material being utilized to flatten slopes on fill sections and the coarser material hauled to the parking area of the bear feeding ground for fills.

Project 525.10 - Bear Feeding Ground Road & Parking Area - No work undertaken other than preliminary engineering and the hauling of material mentioned above.

Contract Projects -

Work on the Manmoth-Tower Falls road between Tower Falls and Lava Creek was progressing rapidly, finishing being practically completed to a point three quarters of a mile above Blacktail Deer Creek and rough grading 60% complete on the balance of the section. The concrete arch bridge over Tower Creek was completed sufficiently to carry traffic on October 26 and the contractor started removal of the old steel span.

On October 12 bids were opened by the Bureau of Public Roads' Office in Denver for the grading of the Golden Gate road in Yellowstone and award was made to Morrison Knudsen at 118,665.50. The contractor began clearing and grubbing on the north end of the project on October 25 and also began preparatory work on the tunnel and viaduct items.

Contractors McNutt and Fyle were ordered to close down their activities on their section of the Red Lodge-Cook job on October 22.

On October 11 bids were opened by the Bureau of Fublic Roads for the grading of the Southwest Approach Road to Yellowstone Park. The contract was awarded to Max J. Kuney Company, Spokane, washington at 184,522. Frejet 520.5 - 211. Court 11.11 - 20 7. Send 10 0 to 10 ject me complet do 100 to 10 0 0 10 do 10 0 to 10 0 co o incle nt test. Court 10 to 0 co fet of trult re in the function .

birdiag cumpt ted no an and not not the state - 1.

Indjuct 541 - 0 - 11 101 - 11 101 - 80 - 12 - 04 closed in 1 on th lot up t is the Land 1 in the result of the res the result of the res the result of the res the res the

Froject J. - Usedian Ultri- IT do UL Hig - hir projstarted on JJJD r 1, ith finds transered or Dit-contract in intended by the Life of Fablic of 1. Ordelds (1.) v 7 11 datin the month it appointly 60, or the close in interone aundred the ty rid of seleicd storic. In the close intermile of the project where no with ring and in the close inter-

kroject 350 - Lingitude. List o showing - the content of t cut lope treat as contend entire the content, the rest of the utilited to righted slope on shill proting unit - conrection hauled to the perkin area of the bear feelin group or sills.

Froject 200.10 - In Ledin draud and a chill of the structure the structure the structure of the structure and the structure and the structure.

- stocior tostfoi

Davetorer modes a cnearly transmirt and a construction of the cons

the raise to the struct of the structure of the structure

300 - Activities of Other Agencies in the Park

310 - Public Service Contractors

By the 13th of October there were no sleeping accommodations available in the park for visitors as on that date Mr. C.A. Hamilton closed his Old Faithful store and left the park. With the exception of Mr. Hamilton's store at Old Faithful all other operations in the park were closed by the first of October. The general store at Mammoth will remain open all winter to serve: Mammoth residents.

Mr. H.B. Brown, General Superintendent of the hotels, departed on October 1 and Mr. Vernon Goodwin, President of the Lodge and Camps Company left the park on the second. C.A. Hamilton left the park on October 14. Mrs. Anna K. Pryor and Miss Elizabeth Trischman departed on October 15, and J.E. Haynes left on the 25th.

400 - Flora, Fauna and Natural Phenomena

410 - Ranger, Naturalist and Guide Service

The entire month was spent by the protection department on preparing the snowshoe cabins and ranger stations for winter use and the patrolling of the park boundary line due to the opening of the hunting season in the adjoining states.

The Chief Ranger was in attendance at the Dude Ranchers' Convention on October 201 28 and 29.

Inspection trips were made by the Chief Ranger, Field Assistant and Forest Assistant during the month.

Several rangers were able to take part of their furlough during the month. Assistant Chief Ranger Miller was on furlough from October 5 to 25 and Assistant Chief Ranger Johnston from October 20 to 31.

At the end of the month all protection department matters were practically current.

420 - Museum Service

A series of Mode wineman pictures consisting of over 100 enlargements which were received some time ago were catalogued. Six Maxuillian prints made over 100 years ago were received, also several books and pamphlets for the library.

All museums were closed and the permanent staff concentrated its efand cataloging forts on completing the accessioning/of various gifts that have been received by the museum.

Ser al a reforma toto a multin toa - 00.

The last for the second second

Lae file orth a down to the proving the sector of the utor of the the showed of the star when the the star when the the star when the star when the star when the star of the star when the star of th

Le Caler a T. I Stadio T e ne lic. ' Tan an un ucuador Ma St.

evention of the solution of th

At the call of the router call of condition derivations of the second the termination of the care the second the care the second the care the second the s

JOUNTER AND - CON

series i 0 un ra rou o chitin our a nir a

11. The second s

440 - Insect Control

The preliminary check surveys of mountain pine beetle infested areas in Yellowstone Park were completed October 10. Five crews of two men each were actively engaged in this work over a period of approximately three weeks. All infested areas discovered and surveyed in 1931 were resurveyed this year in order to clearly analyze the mountain pine beetle situation which has become acute during the past few seasons.

All field data was compiled in the Chief Ranger's office immediately following the survey, and detailed reports of the project have been submitted to your office, Field Educational and Forestry Headquarters and the Bureau of Entomology.

A brief resume of the results of the survey follows:

Throughout 12 widely separated areas covering a total of 117,826 acres, the survey shows an estimate of 40,590 newly infested trees. Over the same areas surveyed in 1931 there were found to be 43,999 newly infested trees.

In comparing each area separately it has been found that the ratio of reinfestation during 1932 is very nearly one to one. This, of course, points out the fact that during 1931 and 1932 there were very nearly the same number of trees attacked by mountain pine beetle. This also points out the fact that for the past two seasons there has been intense activity of the epidemic in the park.

The survey this year as in 1931, found the epidemic to be confined in the white bark pine stands of timber principally at elevations above 8500 feet. It was also found that throughout the area treated in 1931 in the Bechler river region, practically no new infestation was in evidence although the epidemic still exists in a portion of the lodgepole pine timber in this region which was not thoroughly treated in 1931.

460 - Birds

Many species of ducks are being noted by the hundreds on nearly all of the open waters in the park except in the Bechler region. The freezing over of many of the small lakes has caused the birds to congregate in the open streams in large numbers. Geese are also being noted as numerous and in large flocks. Four pair of swan, thought to be trumpeters were seen throughout the month on Marys Bay in Yellowstone Lake.

One trumpeter swan was shot and killed by a duck shooter in Hebgen Lake near west Yellowstone. The hunter was apprehended by Deputy State Game Warden Danaher, tried and fined \$37.50 and had his gun confiscated. The dead bird was given to the Park Service and was later frozen and sent to George wright at Berkeley, California.

440 - 120 rt 7 1 ...

In print r, energy on the set of an order of the set of an order of the set o

Alticles a sought to a sough the sound and an ar's onited i early a ly following the mary part to an a sound on the sound of a sound the sound the sound the sound the sound of a sound of

: weile i varia and to statues out to states which

Throughout 12 whichy separ ted in a covaring a total of 117, ...6 are s, the urvey shows in eraling of 4, 500 rechy internations. Over these areas urveyed in ball there for the solution of the est of the so.

The section dering 1955 invery nonly on boost open of a section dering 1955 invery nonly on boost open in a sector of the section dering 1955 invery nonly on boost open in a sector open in a sector open is a sector open of the fact the fact the fact the fact the sector open is a sector open open.

in the survey this year as in taol, some the scinctle to be denoted in the write in place is us of the scinct of the stand box 8500 from the four the test south in the stante is four the south of the stand of the stand of the stand the first scill exists in sport to select of the brin first rest should be show the test.

400 - Bir. 3

Due restered and the second of the second of

470 - Animals

All of the game animals are slowly but surely drifting toward their winter range. No heavy storms have occurred to drive them across the boundary lines into the open hunting territory.

All game seen, as well as forage conditions, were noted as very good.

<u>Elk</u> - Practically all of the elk have drifted out of the Upper Lamar Valley and Mirror Plateau. The drift of elk from the Thorofare discloses that following a storm on October 10 elk were leaving that country and drifting toward the north. On October 11, 200 elk were counted on Beaver Dam Creek. Later during the month the elk in that section showed a decided drift toward the south and west, probably heading for the Jackson Hole country. A total of 564 elk were counted on Daly Creek in the Gallatin District on October 20. The end of the month saw very few hunters around the boundaries of the park. The number of elk killed to date totals about the same as last year for the same period.

A table showing the numbers of game animals killed this year up to and including October 29 will be found at the end of this section.

Deer - Deer in small herds may be seen over the entire north side of the park. The usual number of Marmoth deer are noted. One count the last of the month disclosed 47 animals. One of these deer died on October 25. Of the number of deer in Marmoth several have been noted as in very poor or sickly condition and will, no doubt, die before the winter is over. The number of deer killed by the hunters is about the same as last year. Location and numbers killed are shown in the table.

Antelope - No count has been made of the antelope. However, they are to be seen in large numbers in the vicinity of Gardiner and the foothills of Sepulcher Mountain. Judging from the evidence found, at least one antelope has been killed by the coyotes this month.

<u>Moose</u> - In the Thorofare region 42 moose were counted during the past month. On October 17, 14 bulls and 8 cows were seen at one time, in one large group in that region. Several moose were also noted in the Bechler and Riverside aistricts. Very few of these animals are being seen in Willow Park, whereas last month they were fairly numerous. One cow was found dead in the Thorofare district on October 6, probably dying of natural causes. Another one was illegally killed near mest Yellowstone.

Buffalo - Between four and five hundred buffalo were at the Buffalo Ranch at the end of the month. At least this number of animals have been drifting back and forth between the ranch and surrounding foothills all

470 - ini - UTA

11 ger seen, an in forage e ruitions, tere notas un valy

It - restically all of the elr have arither but on the operalmer Valey nather 1.5 at the drift on ear from the monofile discloses that colloring a structure country of his rate levels, that counted on deriver an areak. Le north, and other 11, and all that section should drift to toward the country in that in for the Jackson Hole country. A total of 564 els are counted on all the distribution is not all the section of all the fourted on derived an estimation in the the Jackson Hole country. A total of 564 els are counted on all the formers around the boundaries of the reference of all the fourter of the boundaries of the reference of all the formers around the boundaries of the reference of the country.

A table sho in the no bere of gas unings will a this year as to a includin Setabas 29 vill bufford, the end of is oblight.

<u>2026</u> - In the Levelar referration of routhal of the struct. Or book r17, 14 bills are considered in the struct of the state of the state.

Buifelo - et an four at five hurred and lo si alle alle a con the standard at five hurred and lo si alle alle a con the transmission of the standard at the st

of the past month. The condition of these animals is noted as excellent.

Requests have been received for five live buffalo. Plans are being made for the roundup which will be held the latter part of November The slaughter of the surplus buffalo will commence shortly after the first of December. The State of Wyoming has accepted the 50 head of buffalo which were offered to it for the relief of the needy in that state. No word has yet been received from Montana or Idaho as to whether or not they will accept their 50 animals respectively. It is our desire to supply the Indians of the Northern Montana agencies with some of this meat if at all possible.

Sheep - Nothing of interest to report.

Bears, Black and Grizzly - Damage done by the bears this past month was negligible. One grizzly bear skeleton and hide was sent to Harvard University at Cambridge, Massachusetts. Two black bears and one grizzly were killed this past month.

The following table discloses the location, species and numbers of animals taken this season up to and including October 29 in the hunting territory adjacent to the park.

										Be	eat	rs
	:	Elk	:	Deer	:	Moose	:	Sheep	:	Grizzly	:	Black
Bechler	*		:	2	:		:				:	
Cooke		4	:	2	:		:	5	:	5	:	2
Crevice	:		:	2	:						:	
Gardiner	:		*	4	:		*				:	
Gallatin	:	40	*	16	:		•		:		*	
Hellroaring	:	2	*	2			:				:	
W. Yellowstone	:	49	•	6	:	1*	:		:		*	
Slough Creek	*	29	:	2					:		*	1
Sylvan Pass	:	7	:	2	:		:		:		:	
Thorofare	:	25	*	2	•	6	3 0		*	•	*	
TOTAIS	:	156	*	40	:	7	:	5	:	5	:	3
*Illegal kill												

Buffalo and Other Ranch Activities - The usual routine duties were carried on during the month of October. The tractor was operated at the Buffalo Ranch for 18 days in plowing and leveling some of the hay land. One hundred ten acres at the Buffalo Ranch were leveled and seeded with timothy, alsac and brome grass. Approximately one mile of drift fence was built and the other fence repaired. It was necessary to replace the concrete floor in the slaughter house due to the settling and cracking of the old one. Various miscellaneous and minor jobs were done on the ranches, such as repairing hay corrals, etc. of the second state of the second of the second state of the secon

e de ton a sur contra son de la contra contra a sur contr

stautor co - more a contrat - go di

The falls in said dashes the to fin, ech in addition of a sector of a said of a sector of a said of a sector of a

a see ana air	annan ya man hareftan Y ^a ta	was str				18 151		-17.1	9	
101.12	: Losia	. daar	•	JOL 1	*	- Star	1	, a water -		1-0-5E
3								5		
v		•	-			3			-	U_9.1CO
					3	4	5		-	1 3.1 " I. V
						. 1	-	2_	2	ATTE I
	•	*				3	2 5	520		I LIK TIC
		*	:	L	e h	6	*	1 A	*	. Yollo "offer .
٢	-		19 19		4	5	•		•	
	:	4 10				* 3 1	2 2	24	7	- 1 5- VL
	:;		-		-		- and a state		and the second	5 T. A. L
م	:	÷Ğ			-	1 da		80.J.	•	Lille - 1 kill

curring of out on the state of the stat

The final hay figures for all ranches are as follows:

Game Preservation Ranch	30	tons
Gardiner Ranch, first cut	60	11
" " second at	25	82
Yancey Ranch	30	88
Upper Slough Creek Ranch	180	28
Lower Slough Creek Ranch	306	27
Buffalo Ranch	540	11

TOTAL 1,171 tons

In addition to the 540 tons of hay at the Buffalo Ranch 40 tons of cottonseed cake was purchased to supplement the hay in order to properly feed the buffalo.

480 - Natural Phenomena

The cold weather of the month has caused a pronounced darkening of the algae. Dark green and brown shades are especially noticeable.

Hymen Terrace has shown a great decrease in flow during the last few of the month. Two-thirds of the basins on the lower expanse of the terrace are empty.

An interesting statement was made by Judge Meldrum to the Park Naturalist recently in which he said that the waters of this terrace build up the deposits of travertine at the rate of about 12 inches a year. He also pointed out how Hymen Terrace has extended its basins to the north approximately 30 feet and in places 10 feet in depth during the 38 years that he had viewed it.

Diana, Minerva and Cleopatra Terraces do not show any noticeable change for the month.

Mound Terrace shows a slight increase in flow on the northeast slope. Jupiter Terrace shows a slight increase in flow. Shades of green, white, and pink coloring are quite vivid at the top of the terrace while lower slopes are a dingy yellowish brown.

<u>Blue Springs</u> for a portion of the month overflowed to the south but now all flow is confined to the east toward Jupiter Spring and to the northeast toward Pulpit Terrace. The coloring is chiefly dark green and brown. One or two basins are still light blue in color. An isolated spring 75 feet to the north is overflowing.

Baby Spring is building up several basins six to eight inches high to the west of the main crack or vent. The main flow of water if following the road to the north and some of the basins are empty. . I that is the I're I're the Latt ? ...

24	5	1010 . LLV TI OIL LL
	C.	t: Tit DIU . II TU
* I	1. Sal	ju de 393 ·
1	3.3	Y neey
11	OL S	ULEER BLOWLE T. CH LIER
-	205	Lo ar 1 real reach
	01.3	AT 10 C TIS.
arear day - 10 estill -0.000	and the state of t	

.... 1,12. t.DB

BLC CD . L . T. . - OBA

The cold weater of the longine can be a second and a second the second s

inter a bit show a fact este bit is a subility to the of the subility of the s

minteroving the solution of a solution of the solution of the

ising array a list roror all flore is the second array and a list roror and list flore is the second array and a list flore is the second array and array arr

Abronzi, viria videvci bucci constructori rost i constructori videvci bucci constructori rost t trono videvci constructori constructori rost t trono videvci constructori constructori The activity to the east is increasing and the cracks about it are widening. Several large masses of the dry formation have been loosened and have fallen down the slope.

Main Terrace shows a slight flow at both ends of the formation.

The Steaming Fumarole to the south of Cheops Mound shows no change and there is no change on Narrow Gauge

Orange Spring Mound - here the flows continue on the west slope as during the summer.

Highland Terrace is increasing in flow and beauty of color. Greenyellow and tan shades of algae predominate.

White Elephant Back Terrace - with snow on the ground a crack was plainly visible which extends across the road 100 feet from the terrace.

Angel Terrace - The flow from the crack on the north has increased slightly. During the month hot water flowed from the highest vent, which was so active in April. The main flow continues on the south end of the formation.

Steam is in evidence coming from the roots of a decayed tree 30 feet from the south vent. It is possible that greater activity may break out at this point.

NORRIS BASIN

Enerald Spring was observed on October 5 as a huge, deep blue pool filled to overflowing and boiling slightly in the eastern part. It was fuller than anyone has previously recorded. The next day it was a violent geyser and had thrown out such a tremendous volume of water that the lower besin has been flooded and fairly deep channels cut in the floor of the basin. It has continued to erupt at fairly regular intervals up to the present time. Its eruptions are even more violent than last year; a new vent has opened near the north end.

No observations had been made in the Upper Basin area at the time of writing this report.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

Following are the travel figures for the month of October, beginning September 26 and ending October 31, inclusive:

. So there and the store that the solar and a solar solar the

trains to the state of a serie has formed and the series of the series of the state of the state

idem if is million and the rest of mean is in the good them if the t from the good to the in equilation and the mean of the interval of the petude.

the state of the set o

Shares - and the range is not - and

Letter a start of the second and a start

الملاصلات عالم المراجعة معاملة المسالة المسالة المعامر الملاحين المعادين والمعادين المعادين المعادين المعادين و محرب محمد المعاد المحدية المحاد المحادي المعادي

Entrance	Cars	Visitors
North	550	1806
West	600	2050
East	325	1145
South	92	276
TOTAL	1567	5277

520 - Special Visitors

Borell,, A.E., Berkeley, Cdifornia, ranger-naturalist Yosemite National Park, with Mrs. Borell, in Gardiner October 15, out south, October 19.

Cnief Max Big Man, Crow Agency, Montana, chief of Grow tribe, in Gardiner October 29, out Gardiner, October 30.

Martin, Rene, and Louis Chevrillon, Paris, France, distinguished French engineers, in/October 7, out west gate October 8.

Webb, Vanderbilt and Col. Arthur woods of New York, representatives of the Rockefeller Foundation, in north, October 3, going direct to Grand Teton National Park, returning via south gate Cetober 11 and out west on same date, proceeding on to Bozeman, Montana.

600 - Protection

620 - Fire Protection

There were no fires during the month of October, although weather conditions during the fore part of the month were exceedingly favorable for fires had any started. Snows later in the month provided satisfactory conditions for brush burning, however, and this activity was carried on for approximately two weeks. All brush resulting from telephone line right-ofway clearances, building operations, and roadside cleanup during this field season, hus been disposed of. A five-man crew was employed for burning all brush except that accumulated by roadside cleanup, and this system of brush disposal has been found to work out very satisfactorily. The crew traveled by truck throughout the park burning the brush in each district. By this system of brush disposal, efficient work can be accomplished under satisfactory supervision.

The annual fire report for Yellowstone has been prepared and submitted tis month. The records show a total of 28 fires inside of the park and one fire outside the park. The total acreage burned amounts to 2048.35, of which 2020 acres were consumed by one fire - the Mirror Plateau fire. One or two small expanditures, not at present submitted on the cost of fires for 1932, will be submitted later. The costs as figured to date on all fires this meason are \$9,051.11

11112		J
1-1	000	13
500	Lev	30-0
0.9117	10.	Joel
	47 water 146	D. 1000
	1 7 w = ww	

in the first of th

and the second second

1 . 0 0 ... - ~ 1

Likensen -Ti - La

630 - Accidents

October 25: Government Ford, model a coupe, driven by Assistant Park Naturalist Crowe collided with a Ford model T, driven by R.H. Ovens of Minot, South Dakota. Accident occurred on a very foggy stratch of road at Norris Geyser Basin. Mrs. A. Smith, who was riding with Mr. Ovens was the only injured party. She sustained a cut on her mouth and her upper plate was broken. Damage to the government Ford consisted of bent frame, broken bumper bracket, left front fender flywheel housing, clutch case, draglink, tie rod, tumbler, brake rod, front spring, fan guide pulley and Lemp tie rod. Damage to Mr. Ovens' Ford consisted of broken windshield, radius rod, tire, front anle, tie rod, draglink, two fenders on left side and one splash guard and front spring.

640 - Destruction of Predatory Animals

Twenty two coyotes were destroyed, as compared with 25 in 1951 and nine in 1930.

900 - Miscellaneous

, Tostoffica

Postal business was slightly heavier than usual for October, due probably to the large number of men still working in the park.

The usual process of moving from summer to winter quarters was avoided this season, as the heating plant in the summer quarters was restored so it will not be necessary to move hemenfter.

Church Services

Church services were held in the Chapel Sunday evening, October 9, and again Sunday evening, October 30, by Rev. S.I. Smith, of Livingston. Services were also held in the Lodge Room the evening of Monday, October 31, by Rev. Webster H. Clemens, pastor of the Inglish Lutheran Church in Livingston.

Hospital and Medical

Dr. Budeaff, resident physician, made 56 house calls and hid 260 office calls during the month.

The general depression had little affect on marriages this month as there seemed to be an epidemic of them in the park and of park employees. Ralph K. Williams and Betty Kartes of Bozeman, Montana, were married in the park chapel at Mammoth Hot Springs on Sunday, October 9, kev. Sam McCarthy of Livingston officiating.

Frank Mattson, Junior Landscape Architect, assigned to duty in the

ala_____. - De

State Sala

يكان بالم الأرسينية (المرادة الم 10 أن الم 10 أن الم 10 من ا المكان الم أن الم أن الم أن الم أن الم الم 10 أن الم 10 من ال

المحدة، معتادة، معن المحدة التي أن المحدة، معن المحدة التي أن المحدة المحدة

4. 7.

and the second of the second o

and which is the proof of the second start, which make

Yellowstone this summer, was married to Miss Hildur Freeberg of Eveleth, Minnesota at Eveleth, on October 12. The couple returned to the park on the 15th and a reception was held for them in the McCarter home the following day.

Mr. Jack Aiton, Park Renger, and Miss Miriam Horkan, clerk in the Chief Ranger's office, were married at Idaho Falls, Idaho, on October 22. The couple will spend the winter at Old Falthful where Mr. Liton has been assigned to duty.

Clarence McDougal, employed with the road oiling crew during the past summer was married on October 27 in Livingston to Miss Marjorie Mitchell, caughter of Mr. and Mrs. C.A. Mitchell, who are in charge of the Marmoth mess. Miss Mitchell was employed at the Old Faithful mess during the past summer.

On October 29, Chief Max Big Man, chief of the crow tribe, with his daughter, Myrtle, were guests of the park force and gave an entertainment at the Manmoth carteen consisting of a talk by Chief Max and the singing of several Indian songs by his daughter. Several reels of motion pictures were shown during the program and those who attended were greatly pleased with the entertainment.

Yours very truly

Guy D. Edwards Acting Superintendent

CI

ide to the mail of mail of a state of a state of a state idention that is a state of a state o

السنة المحالي ا محالي المحالي ا محالي المحالي ا

LING THEY INTEL

.

22

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

10-157 July, 1929)

TRAVEL REPORT

YELLO SONE National Park for the month of OCTOBER, 1932

	This Month	This Travel Year	This Month Last	Last Travel Year	Increase for Travel Year	
		To Date	Year	To Date	Number	Percent
RIVATE TRANSPORTATION:						
ars first entry,	1478	1478	1855	1855	-377	20
ars reentry,	. 89	39	182	182	-93	51
otorcycles,	•				elillin filizzatu, initiala agas kaju-durž liugadu y	
Total motor vehicles,	1567	1567	2037	2037	-470	23
ersons entering via motor ehicles,	5277	5277	5934	5934	~657	11
ersons entering via other rivate transportation,	1	namen participa articipa anti constructiva anti da constructiva da materia da construcción da materia da const	alala - Alala shut mayanin a alau muunduk daga		1 1000 1000 1000 1000 1000 1000 1000 1	- 1 - Mar - 1 - Managama an ana matrice ananyamang na
Total persons entering via private transportation,	5277	5277	5934	5934	-657	11
THER TRANSPORTATION:						
ersons entering via stages,						
ersons entering via trains,	٠					
ersons entering otherwise, .	4 distant general shipshippin "	and a second standing standing stands	998,			
Total other transportation.	• • •					
RAND TOTAL ALL VISITORS,	5277	5277	5934	5934,	-657	11
	nt de sus engres - pligs - ma differs and plans		This Year		Inci	ease
					Number	Percent

Campers in public camps during month.

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

10-15 N.ly 1929)

TRAVIL R. PORT

Land National Fark for the month of

an des mes series						
aci acrY	Incres Troyed	Lesi Privat	This	This Tra ol	Ruit	
Percent	1.acr.uk	Year To Boie	Lac' Yoar	Year To D.te	Month	
						RTIATE TRANSPORTATION.
25	15:	U-L	1: 5	1.4.2	17.1	ars first entry,
1	-6-	2 11		C,		ars reentry,
	and the second s	ana in an an and a set of the set	والمحفول ويستعرف مستعرف والمحفول والمحفول والمحفو والمحفو			o.orcycles,
2	C* 3	in sta	1.01	· C. E	7010	"otal otor vehicles
						ersons entering via motor
7.1	1.3	60	5775	11-	1 1	e (0165,
alaya (anin dain 1977) - Santana - 1 a di 19	na a gana man	The field particular and an end of the state	1998 B Marcel Party Sector			creens entering via other ri ate trarsportation
<u>l</u> l	19 A C -	2762		T. Jack		To:al persons entering via i,ate transportation,
						THIR TRANSPORTATION:
						softe site gainetice and s
						umors entering via throng
						ti Greenteria othervise
						The ther transportation
- Anda	(L V ***	14300	4 _	5 ° -	J. T	P WE TOT L ALL VISITORS.
	En=c		1.117 1.907	-		 stand with device of the stand stands
PLICK	NUEDON					

10-160

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

REPORT OF PARK REVENUES

Xellowstone National Park for the Month of October, 1932

	This Year	Last Year
Park revenue on hand beginning of month,	\$3,729.95	\$1,533.00
Received,	3,278.45	6,820.80
Total,	\$7,008.40	\$8,353.80
Remitted,	6,634.00	8,353.80
On hand close of month, \ldots , \ldots , \ldots , \ldots	\$ 374.40	-0-
Park revenues received this year to date,	\$101,10	3.06
Park revenues received last year to date,	. 155,48	0.84
De Facrease,	54,37	7.78
Per cent of #crease,		

10 - 160

DEPARTMENT OF THE INTERIOF

NATIONAL PARK SERVICE

REPORT OF PARK REVENUL

10.000,L 09.047,81	Park revenue on hand beginning of wonth .
	Received,
	Total,
	Remitted,
- 11- 111 1 <u>5</u>	Cn hand close of month,
	Park revenues received this year to dote,
	Park revenues received lasy year of date, a new received lasy year of date, a new received lasy was received at the second secon
(7. 0°. 4.	porease,
1530.10	Per cent of forease

10—159 May, 1931)

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

STATUS OF PERSONNEL

YELLOWSTONE National Park for the Month of OCTOBER, 1932

	This	Month	This Month Last Yea		
	Appointed	Non-Appointed	Appointed	Non-Appointed	
mber of employees beginning of month	78	485	78	226	
mber of additions.	0	29]	103	
Fotal	79	514	79	329	
ther of separations.	A.	391	<u>A.</u>	91	
mber of employees close of month	75	123	75	238	
mler of promotions during month	0		0		
furlough gregate amount of commissi leave taken	229		261-1/	4	
gregate amount of sick leave taken	11	alanahara ay saya ay aga saya ay analanahara sa saya ay aharah kata	8		
gregate amount of leave without pay			4		

10 109 - 5. 103

Bar THE DIT NO

DEPARTURE OF THE INTERIOR

EDIVAL INT. LANDIT ...

TINN CORDE TO SUSATE

The end is the ball of the second of the second

	107		11111	1-01
		1.11 M. 24 2.4		
The Digital grade as younged in the	71	124	- 11	8.3
	0	63	1	
	77	1 - 1 - 2 		.36
and a specific sector of		10	~	24
dian is sails and the friends	E M	¢	1	803
and the second second	0		U	
30.000000000000000000000000000000000000				
l 'Ciadi XXX_ILA	288		802-1/s	
	Lik			
			a a construction and a construction of the second sec	

10-162

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

REPORT OF TELEPHONE AND TELEGRAPH BUSINESS

YELLO STONE National Park for the Month of OCTOFER, 1932

	This Month	This Month Last Year	Increase	Percent Increase
JOCAL BUSINESS				
Miles of circuit maintained, No. of telephones connected, No. of measured service calls, No. of other local calls,	542 194	532 186	10 9	24
Peak load in calls per day,	5037 225	4937 247	100 -22	2 -9
Receipts from measured service calls, "" coin boxes, "" telephone rental,				
TOTAL RECEIPTS				
LONG DISTANCE BUSINESS	glangs villing nages sambrin opporting			
No. Outbound calls,	158 124	243 193	-85 -69	-35
TOTAL LONG DISTANCE CALLS				
Peak load in calls per day,		15	-3	-20
TELEGRAPH BUSINESS				
Messages via Western Union,				
Receipts from telegraph business, No. of money transfer messages, " " " " receipts,				
ICTAL PECEIPTS TELEPHONE & TELEGRAPH DEPTS				

ROMETHI SHT TO THEMTSHEED

MI 101 AL PARK SER CE

The relation of the second state of the second

The second period that decent in the second se

an i a tale autorite i i i anteres	- ander is affine the states			
	ain d+!	Tala Metal Las Vari	usarata):	Percent Lociet
NO.L EVELNESS				
 Benin hade Address and mile Ball second statements for an in Differ a fig. 2 for an in Differ a fig. 2 for an in 	850 1942		101	a .
tering in our says and the	TE DA	Mr.C. Mart	end.	_
niin e (mi short hanna mili ang shire a shire a shire a shire a shire a shire a shire a shire a		ana - ao m.		
STATUDA THEF		· · · · · · ·		
CONCERN SOMETHING AND	ـــــــــــــــــــــــــــــــــــــ			
	ness agentidegenden	anner (nas scherter -	the second secon	a process
STILL SUPPORT CONVERSION				
TRACER OF THE CALES OF BOOK VER	8	14	, 	ų -
Letterd Hayara L				
torial in the ment of a second				
AND HALFT AV				

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

*ELECTRICITY GENERATED, SOLD, USED, ETC.

YELLOWSTONE National Park for the Month of OCTOBER, 1932

	This	This Travel		Last Travel	Increase for Travel Year	
	Month	Year To Date		Year To Date	Number	Percent
urrent generated,	64142	223960	62540	312750	-88790	-31
old to park operators,	934	32895	1680	47112	-14217	-30
old to others,						
urnished to other Governmental agencies,						
sed by National Park Service, lost in transit, etc.,	63208	191065	60860	265638	-74573	-32
Total current generated,	64142	223960	62540	312750	-88790	-31

Indicated by K. W. H.

UNITED ST. TEC

BEFARTMENT OF THE INTERIOR

N. TO M. PART SERVICE

STATES OF A STATES OF A STATES OF A STATES

at the X

N-tion for Pharman . . .

tu" staat tan'i ta	111	T	in Lat		Thie Thie The In	
J. 1	Sensing 1		JOUT L	IST OT		any so , we approximate any overlaphone data any topologic spin state in a
ale and	0 1.5-		62.0	001563	611 2	rrent generated
0 -	-1 17	4711	1670	65280	2 0	lá to park öperators,
						ld to others,
						rniched to acher Grvernm much agencies,
32-		010100	06000	19 605	G. ,0	ed by N ti nal Park Ser it-, lost in transit etc.,
-72	08766-	0.75.0	04.753	0001.57	14145	Total current generiel

our receivable from the set of the list of the set of t

Lificaled by K. F. H.

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

STATUS OF AUTHORIZED PROJECIS

YELLONSTONE National Park for the Month of _____OCTOB_R, 1932

	Percent Instructed To Date		Percer' Constructed Last Month	Drobable Dalo of Completion
84 - Mammoth Sewer System	99	1	.	
525.10 Bear Feeding Ground road	2	2	15	11/10/32
526.1 Trails, Old Faithful	100	0	0	
26.2 Trails, Biscuit Basin	100	5	0	
26.3 Trails, Old Faithful	90	70	75	
27 - Surface Betterments	100	0	20	6/15/33
28.2 Parking Area, Madison Museum		0	0	20/20/00
28.3 Parking Area, Fish Hatchery	100	100	49	10/15/32
34 - Gallatin Road, Surf. & Oil	100	55	0	
41 - Obsidian Cliff-Cascades Btrm		20	28	= /2 /==
42 - Canyon-Tower Jct. Cleanup &		70	25	7/1/33
14 - Norris-Madison Road, Stainin	OTTTO	70	20	
rail, and seal coat	100			
16 - E. Entr. Rd., Stng. rail.	100			
17 - Terraces-Obsidian Cliff, Oil		50	10	
18 - Canyon Jct. Tower Jct. Btrmn		50	10	
9 - East Entrance Betterment	95	20	25	12/2 /122
0 - Inspiration Pt. Road Cleanup		30	0	7/1/33
1 - Obsidian Cliff-Firehole Case		50	0	7/1/33
cleanup	90	85	5	10/30/32
6 - Approach Road, Jackson Lodge		0	0	10/30/32
3 - Artist Point Surf. & Oil	70	10	0	7/1/33
1 - Parking Areas	10	TO	U	1/1/00
.1 Norris Museum	10	10	0)
.2 Minute Man Geyser	0	0	0	
.3 Obsidian Cliff	60	55	5) 7/1/33
.4 Obsidian Cliff	100	95	5)

Balance transferred to #534

Further work to be done under surfacing contract

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

STATUS OF AUTHORIZED FROLE

A Start National Park for the Fonth of

1.000		Fundari	Fercen	
		Constrances de		Pescription of Projects
1. F. (= = 1	FILLING SUC	The Automatic	"o Eat	
6 1 5 5	15	£	37	et i a et tit
11/ 2/ -	C	5	2	10.10 BEET Jeudin. I and rord
	Ũ	0	100	What is ble a statut
	512	5	100	13.6 Irails, steer t Boit
· · · · · ·	13	70	00	I. Stiv. IIV, II T .V.
501.1/0	0	0	130	LULCOLIETT - COATE - T
7. 12 1	40	0	100	R.S. antitat, usu, 19, 19 19 19
1. / 2. /	0	100	UUL	Tent 11, Jer , Litz T 8.8"
	20	55	1.77	4 - Cullatt od, um. " 11
7/1/22	23	OS	a8 .tio	A - in the lift as we want
00/2/1	02	70	Chillin	and to an it and the second second second
	C.C.		3.	4 - OLIS- J'801 . U. 108'
			UPL	t. co Lees . T. seil, T.
			200	ist - L. entr ta . rail.
	LO	012	. 100	1
	the sea		16. 100	יידי גיער אינט איני אין אייי אייי אייי אייי איייי
1111	6.	0 _A	36	t
1/1/1	C		63 0	or it out at retringel
0111	-		· · · · · · · · · · · · · · · · · · ·	1 - Chidian 11 1- 1-2000 .
10/30/25	-3	8	0	cleinup
	0	0	05.0	
5. 11/2	C	10	ŪS -	Li
and the fire				aser juitin - 1.
	0	20	JI	mi - stric. I.
(0	C	C	s the m der z.
1./1/02	5	68	60	"Life mainter f.
	C	.800	OPE	Titu and isc i.

ut he ror a bound a statut de series

SUMMARY OF WEATHER CONDITIONS

 $T\Lambda$

MAMMOTH HOT SPRINGS, YELLOWSTONE NATIONAL PARK

Actober, 1932.

October is not very often colder and it is seldom snewier than the month for which the observations and records have just been completed. With an average temperature of 36.0 decrees. October, 1932, was 5.5 degrees lower than normal. The coldest October in the record from 1887 to date was that of 1919. which had an average temperature of 30 degrees. A 34 in 1905, a 35 in 1916, and a 33 in 1925 were the only other October mean temperatures lower than 36 degrees. Twelve days of the month were above normal, plus 6, occurring five times, being the greatest departure, and four days, the 12th to 15th inclusive, being the longest above normal period. This period was immediately preceded by a day with normal temperature and it was followed by one. Fifteen days averaged below normal, with minus 19 degrees, the greatest negative departure, on the 8th and 9th, and _ minus 18 degrees on the 7th. The average daily variation from normal temperature since January lst is -1.5 degrees. Highest temperature of the month was 71, on the 5th; the lowest, 12 degrees, at midnight of the 30th-31st. The frequent light snows of the month amounted altorether to 17.6 inches, a total which was exceeded in October 1925, 1919, and 1916 only. In inch of snow lay on the ground at the end of the month. Although the total snowfall was heavy, the water content was not great, and a total of only 1.01 inch of precipitation was recorded, an amount which is 0.59 inch less than the normal for the month. A trace of sleet fell on the 16th; no hail during the month. Rain fell (n three dates, of which one showed only a trace. Snew, melting down to .01 inch or more, fell on 13 days, with traces on three others.

There were 6 clear days, 12 partly cloudy, and 13 cloudy. The percentage of possible sunshine was 43. The total wind movement was 5,922 miles, giving an average velocity of 8.0 miles per hour. Southwest was again the prevailing direction. The highest velocity was 29 miles per hour, from southwest, on the 27th. An aurora was observed the night of the 20th. Light fog was noted on the 16th and 17th. No thunder was heard during the month.

W. T. LATHROP, Metecrologist.



MONTHLY METEOROLOGICAL SUMMARY.

¥	Cellor	stone	Park,	Tyo	·•	month, October, 1932.
	MPERATUR cees Fahrenh		Precipita- tion.	Charaeter	r cer of	(Reduced to sea level; inches and hundredths.)
:.	Min.	Mean.	(In inches and hundredths.)		ssibl Sun- hino	CMean <u>30, 151</u> ; highest <u>50, 70</u> , date <u>20</u> lowest <u>29, 68</u> , date <u>16</u>
1			0(lear		TEMPERATURE. Highest
Э			I	t.Cldy.	7.0	Least daily range date, date7
E	25			t.Cldy.		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
2			QC	100r		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
<u>}</u>		50	06	lear	100.	1875 86 97 41 08 38 19 30 38 1876 87 41 98 36 09 42 20 58 31 42
Э	33	46	<u> </u>	loudy	14	1877 88 43 99 38 10 44 21 45 32 36 1878 89 45 00 42 11 36 22 44 33
л £		28	17.(loudy	0	1879 90 58 01 46 12 36 23 33 34 1880 91 41 02 44 13 36 24 40 35
Э		26		loudy	QQ.	1881 92 42 03 45 14 22 25 36 Normal for this month 41 5 5 36
Ş	17	26			63	Absolute maximum for this month for46years82 Absolute minimum for this month for45years20
J	1.8			loudy	3	Average daily excess $(+)$ or deficiency $(-)$ of this month as compared with the normal5, 5
·		<u>/</u>		loudy		Accumulated excess (+) or deficiency (-) since January 1
<u>-</u>		<u></u> 9		lleer		PRECIPITATION. Total this month <u>1.01</u> ; snowfall <u>17.6</u> .
3	52 35	<u>4-8</u>		Pt.Gldy Pt.Gldy	84. 84.	Greatest precipitation in 24 hours _0, date _ <u>16-17</u> , date _ <u>16-17</u> Greatest 24-hour snowfall date _ <u>25-26</u>
7	36			Pt.Cliv	5.6	Snow on the ground at end of month
0		42		<u>[]</u> []ou v	10	1871 82 931.34.040.67.150.34.261.42. 1872 83 940.89.051.42.165.47.271.55.
4] }1-0:2-2; y	0-	1873 84 950 61 07 170 97 281 57 1874 85 960 06 070 54 182 27 291 27
				Sloudy	1	1875 86 97 7.2. 083. 0.0. 192. 6.9. 302. 5.9. 1876 87 98 2. 3.5 090. 3.4. 201. 80. 310. 7.8.
				Pt.Gldy		$1877 \dots 88 \dots 992.02 101.49 210.56 321.01$
6	1-3	30		Pt <u>Cl-A</u> zr		1879 90] 68 01 0 92 122 85 23 24 34 1880 91] 64 02 0 20 13 68 24 2 65 35
<i>[</i>			Q	loar	100	1881
Q	2-8		03		52-	Excess (+) or deficiency (-) of this month as compared with the normal
6	21			61-oudy	11	
						6a. m.,7.2.,.6; local noon, 4.9.,.9.;6 p. m. 5.5.,.7 WIND.
2		26	-10	Cloudy	0.	Prevailing direction; total movement
				Cloudy		minutes)
				Pt.Gldy		Maximum wind velocity this month since
				Pt-Cldy Gloudy-		WEATHER.
				GLOUGY Pt.Gldy		on which .01 inch, or more, of precipitation occurred
				G-fon-that		Auroras
						Thunderstorms
			1	1	1	s trace of precipitation.

u an frosts are not recorded after the occurrence of "killing," except in Florida and along the immediate coast of the Gulf of Mexico. Mist relative humidity observed, " and represented 19%, at 6 p.m. on 5th.

Motecrelogist Weather Bureau.

	MONTH	STATION	METEOROLOGICAL SUMMARY.	MONTHLY	WEATHER BUREAU.	U.S. DEPARTMENT OF AGRICULTURE.



