











DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

Yellowstone NATIONAL PARK

FILE No. 143

MONTHLY REPORTS

February, 1927



March 4, 1927.

Dear Sir:

The following is a report on the activities of Yellowstone National Park for the month of February, 1927:

000 - General

Superintendent Aloright was absent from the park during the entire month of February, and during this time was in Washington, D.C., performing duties in his capacity as Assistant Director(Field). Asst. Supt. Leroy Hill was Acting Superintendent during the month, except the period from February 16-26 while he was on leave of absence. During his absence Clerk Joseph Joffe was Acting Superintendent, and during the rest of the month filled the position of Acting Supervisor. Resident Engineer M. F. Daum had general supervision of the engineering, mechanical, electrical and painting departments and the work of the carpenter foreman.

The same fine spirit of cooperation that has prevailed in the park during the entire winter was in evidence during the month of February and splendid progress has been made in all departments.

Road conditions have been good between the north entrance and park headquarters throughout the month and auto travel has moved daily between these points. Travel on the Cooke City road has been limited to mounted patrols by park rangers and the regular weekly trips of the Cooke City mail sleigh. This travel has been particularly difficult above Soda Butte on account of the snow depths which range from 24 to 72 inches. All other park highways have been closed to travel since November 23rd.

110 - Status of Work

All employees of the shops and office have been very busy all winter but the clerical force has been particularly busy during February because of additional work incident to assembling, cutting of stencils, and mimeographing the minutes of the Superintendents' Conference of 1926, which minutes were sent to this park for putting into final shape. During the winter several numbered letters have been written to persons who visited the park during the 1926 season asking for their comments regarding the park. Applications for employment and requests for Government literature are being received at the rate of about 30 per day.

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130 - Finance and accounts:

The total appropriation available to Yellowstone National Park for the current fiscal year is \$526,406.46. There is a reserve set up against these appropriations of 11,940.00 and an additional sum of \$16,774.00 was transferred from the Yellowstone appropriation to the Glacier Park appropriation to take care of a portion of the expense of fighting the forest fire. This leaves a balance available for expenditure in the park of \$497.692.46. The class of February 28, 1927, finds the status of these combined appropriations as follows:

Total available for expenditure in the park 497,692.46

Voucher Record Payments	\$409.715.57
Book Liabilities	3,552.16
Freight unpaid	1,241.27
Salaries unpaid	95.53
Meals unpaid	85.00
Dr. Windsor unpaid	213.50

Total expended and obligated

414.913.03

Balance, unexpended and unobligated

82,779.43

APPROPRIATION 46433 YELLOWSTONE NATIONAL PARK, 1926

	Allotments	Expended	Balance
Previously reported Repaid in February	\$353,083.00	\$352,931.47 27.62 \$352,903.85	\$151.53 27.62
•	\$353,083.00	\$352,903.85	179.15
APPROPRIATION 46433	YELLOWSTONE NATIONA	L PARK, 1926-2	27
Previously reported	28,700.00	27,341.21	1,358.79
Expended during February	\$28,700.00	27,341.21	1,358.79
APPROPRIATION 47433	YELLOWSTONE NATION	AL PARK, 1927	
THE RESERVE THE PARTY OF THE PA	24		0

Previously reported Expended during February	340,586.00	256,606.93	83,979.07
	340,586.00	269,329.61	71,256.39

APPROPRIATION 4x436 ROADS AND TRAILS, NATIONAL PARKS

Previously reported	125,906.46	110,858.69	15.047.77
Expended during February	125,906.46	1,144.94	1,144.94
	227970040	444,000	-2470-00

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APPROPRIATION 47406 INSECT INFESTATION, N. P., 1927

	Allotments	Expended	Palance
Previously reported Expended during February	\$2,500.00	\$ 1,041.00	\$1,458.90
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150 - Equipment and supplies

Employees of the Transportation Department were engaged during the month in hauling coal and moving supplies at headquarters, hauling coal from Gardiner to Mammoth (200 tons), gasolene and market supplies from Gardiner to Mammoth and hay for elk.

Commissary employees were engaged in inventorying supplies, building shelves for equipment, receiving and storing supplies, issuing supplies and equipment, repairing tools and equipment for road camps, cleaning out garage and shops, cleaning Manmoth dump, stables and yard, and burning bridge and the old target range house near Gardiner.

200 - Maintenance, Improvements and New Construction

210 - Maintenance

No road maintenance has been done this month. It has been necessary to clear the roads of snow twice during the month so that traffic could reach Manmoth.

220 - Improvements- Buildings

Carpenter Shop: The two carpenters have made the usual small maintenance repairs around the different buildings, in addition to building shelves am bins in the Plumbing Shop, Electrical Shop and Commissary and Garage. They have also built a stake platform body for a White truck and repaired three stake bodies for our FWD freighters.

Painting Department: The following work was done by the Master Painter: Finished Sprinkel's quarters complete - painting, varnishing, kalsomining, cleaning, etc.; decorated lodge room complete; glazed 32 pieces of glass during February; started work at Judge Meldrum's quarters on February 26th. Three days were devoted to cleaning the paint shop and miscell means work.

Plumbing Department: The following work was done by the Plumbing Division during the month: Six steam plants and four hot water plants were operated during the month, consuming 53 tons of coal. Four new grates were installed in heating boiler in office building; built heavy stovepipes for heating stoves in Bowman's quarters and in paint shop; installed large rap valve on steam boiler in new central plant; repaired roof of school house; charged 12 fire extinguishers; installed drain pipes from refrigerator in Mr. Hill's quarters; made heavy sheet iron cleanout pans for chimneys in Mr. Burrell's quarters; installed new low down toilet complete in Sprinkel's quarters; installed new water back in range in Beatty's quarters; roughed in plumbing work for bath, toilet, wash basin and 40-gal.range beiler in McFarland's quarters; installed new faucets and sink in Collins' quarters; thewed out gates at reservoir and general maintenance work to water and sewer systems at Mammoth.

150 - Redgames and supplies

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Electrical Department: The employees of this department were engaged during the month in rearranging and cleaning up the shop, and general maintenance work around headquarters.

Garage: The Master Mechanic and his assistants did the following work during the month: Miscellaneous repairs on three freight trucks; made a thorough inspection of Quad. No. 533 (sprinkler); overhauled completely 2 freight trucks No. FWD 515 and Graham No. 546; overhauled completely 3 tank trucks No. FWD 522, 525 and 526; overhauled completely 2 cars. Dedge #11 and Dedge #16; overhauled 1 power drag saw and 15 dump wagons.

230 - New Construction - Roads

There has been no road work carried on during the month.

260 - Landscape Work

No work along this line has been done this month.

300 - Activities of Other Agencies in the Park

311 - Character of Service Rendered to the Public

The general store at Mammeth Hot Springs has been operated throughout the month for the convenience of park residents and visitors; meals can be had at the community mees house at park headquarters, and lodgings are provided special visitors upon request.

400 - Flora, fauna and natural phenomena

410 - Ranger Service

Chief Ranger Woodring was in the headquarters district from the 1st to 12th auring which time his activities consisted of elk and deer feeding, the capture and shipment of 55 elk, ski patrols on Glen and Reece Creeks, mounted patrols of the sheep and antelope range, repairs to saddle horse and pack equipment and repairs to the elk corral and catching pen. He was on a ski patrol and tour of inspection in the Western and Southern Supervisory Territories from the 13th to 20th inclusive, proceeding via Morris and Madison Junction to Riverside Station, near West Yellowstone, and from thence to the Bechler River Station along the west boundary, distance 96 miles. Snow depths along the west boundary were noted as follows: West Yellowstone 60 inches, South Mi verside Cabin 102 inches, Suffalo Lake Cabin 118 inches, Soundary Creek Cabin 108 inches, Bechler River Station 107 inches. Blizzard conditions prevailed throughout the west boundary patrol and he broke through waist despent many points. The South Riverside to Buffalo Lake patrol, distance 16 miles, required a ski trip of 17 hours' duration. His plans to patrol east from Bechler

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Assistant Chief Ranger Trischman has made extensive patrols in the western and central areas during the month. He has covered the entire west boundary during the last half of the month. His patrols earlier in the month were from Riverside to Old Faithful, and from thence to park headquarters from which point he patroled the district lying west and north of Sepulcher Meuntain and later return to his duty station, via Norris and Madison Junction, on the 15th. He is now patroling the elk range in the Gallatin District.

Assistant Chief Ranger Douglas has been engaged in the following activities during the month: Routine work at headquarters station, supervision of elk and deer feeding at Slough Creek and Manmoth, assisting with elk captures for shipments, mounted patrols and tours of inspection in the Northern Supervisory Territory, repairs and maintenance to telephone lines and assisting with the elk count now in progress.

Assistant Chief Eanger Liek has been in the Southern and Central areas throughout the south; his patrols have included the Canyon, Lake, Thumb and Snake River Districts. He reports unusual snow depths and generally good conditions at all points covered by his patrols.

Assistant Chief Ranger Greer was engaged in the routine work of the Chief Ranger's office during the first 12 days of the month, consisting in part of correspondence with applicants for temporary ranger appointments, preparation of the protection department estimate for the fiscal year 1929, the preparation of a special report of plans and equipment for forest fire prevention and control in Vellowstone Park with recommendations for future improvements. He also assisted with the Nature Notes publication, and on the 13th to 15th inclusive accompanied the Chief Park Ranger on a ski patrol from headquarters to Riverside Station. He proceeded from Riverside Station on annual leave on the 17th enroute to Ashton, Idaho, to attend the annual dog derby. The trip was made on skis along the railroad right of way, distance 56 miles, during an interval of 3 days' travel time. He returned to headquarters by train on the 26th, and has since been engaged in report compilation and the other routine work of the Chief Ranger's Office.

The duties of rangers in the various station districts have consisted of the regular winter season patrols, predatory animal hunting, emergency repairs and maintenance to telephone lines, snow removal from buildings, horse feeding at the Yancey Ranch, wild animal feeding in the Mammoth and Slough Creek Districts, assisting with the capture of elk for shipment, special mounted and ski patrols in connection with the elk count

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now in progress and routine station duties. All patrols have been regularly made throughout the park, and conditions are good.

470 - Animals

Forage conditions have materially improved since the January report. Mild temperatures and warm winds have caused the snow to rapidly disappear from the lower levels and many of the exposed ridgs are now windswept. Extensive areas of good forage have been uncovered during the past two weeks. The elk, deer and other wild animals are wintering splendidly. Losses resulting from lack of forage and winter season saverities have been slight.

Mik: A special count of the followstone elk herds has been in progress since the 24th and a detailed report will be included herein. Representatives of the Forest Service and the State Came Department of Montana are cooperating with us in our efforts to secure the best possible count. Practically the entire ranger personnel in the Northern and Western Supervisory Territories, has been assigned to this work. The elk are widely scattered over their winter range. Very little of this range within the park can be covered under present conditions by mounted patrols. Skis and mowshoes are used almost exclusively. Six hundred and fifty elk have been fed at the Slough Creek ranches throughout the month. Barely more than 200 have been frequenting the feed ground at Masmoth and their appearances have been smewhat irregular during the past two weeks as many of the nearby ridges are now uncovered and they prefer the natural forege to artificial feed. Shipments have been made during the month as follows:

State Game Warden of Arizone, 1 earload shipment, of
Al cowe and 14 bulls 55
Col. W. W. Johnson of Berleo, Mo., 1 bull..... 1
To tal..... 56

The Arizona shipment arrived at its rail destination without less but I am informed that a loss of seven was occasioned by their removal from the car to the various distant points where they were finally released. The young bull shipped to Mexico, Mr., is reported to have died en route and we are now corresponding with the consignes with the view of shipping him another to cover the less. Our elk shipments this season to date total 74, with a loss of only one en route. One car load shipment of 30 to the State Fish and Game Department of Montana has been recently authorized by the Director and we plan to make the shipment, if possible, on or about the 6th of March. Five losses from winter kills and accidental causes have been observed during the menth which together with 20 previously reported makes a total of 25 this season to date.

The special count of the Yellowstone elk herds as directed by the Park Superintendent is reported in detail as follows:

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Cooke City Ranger Station to Soda Sutte Cabin	186
Mt. Morris, Cache Creek, Soda Butte & Lamar River	238
Miller Creek and Upper Lamer River District	35
Soda Butte to Rose Creek	352
Slough Creek above the canyon	
	777
Slough Creek to Rose Creek along north side of Lamar	u-11)
Amethyst Creek to Tower Falls along the summit of	400
Spec men Ridge	419
Amethyst Creek to Tower Falls along the north slope	0
of Specimen Ridge	498
Town Falls and vicinity	334
Tower Falls to Blacktail between highway and Yellow-	
stone Ri ver	685
Slough Creek to Hellroaring, area north of Slough	
Creek, Lamar and Yellowstone Rivers	838
Blanktail to Gardiner River along west slope of	-
Mt. Everts	81
Area southwest of Old Blacktail Cabin	115
Area southeast of Old Blacktail Cabin and south of	++7
	370
Tower Falls Road	132
Lava Oreek from Gardiner River to points in the	0
vicinity of Wraith Falls	108
Resous Oreck and vicinity	227
Northwest slope of Mt. Everts	270
North slope of Mt. Everts and target range	665
Mammoth Parade Grounds and vicinity of Buffalo Corral	61
East of power plant and in vicinity of catching pen	
near Gardiner River	189
Ball perk near 1 mile post north of Mammoth	62
Ice Lake and vicinity	132
East slope of Sepulcher Mountain from horse pasture	
to Hoppe Creek	900
Along Hoppe Creek	250
Horse pasture and Primrose Greek	104
Bull Mountain, Hellroaring and Coyote Creek vicinity	97
Hellroaring Creek to Crevice Station along east side	21
of Yellowstone River, including Crevice and	1/150
Cottonwood Basins	1059
Crevice Station along park boundary to Suffalo Flats	221
Snow Pasa, Glen Creek and southwest slope of Sepul-	
oher Mountain	104
Along highway from Golden Gate to Mprris	22
On meadows along Gibbon River between Morris and	n t
Madison Junction	38
On meadows along the Madison and Firehole Rivers, in-	
chuding the Y.W. pasture in the Riverside Distric	t 248
Grayling Creek District and Madison National Forest	150
Pelican Meadows, Lake District	23
Warm besins in Snake River District	AA
	44
Warm basins along Boundary Creek-Bechler River Dist.	72
Solfatara Basin, Canyon District	7
Meadows along east arm of Yellowstone Lake	10
Total of counts within the park	9,807

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Counts on area north of Park Boundary along the Yellowstone River	
Power House on Bear Creek, Decker's Ranch and vicinity of McCauley Mill	25.0
East side of Yellowstone River from Dailey's Basin to Jardine	250 1890
Head of Topee Creek, Green Lake and Quaking Ash Hollow	23
Sphinx Creek, Yankee Jim Ridge and West Side of Lower	2)
Molheron Creek	35
Cinnabar Mountain	272
Upper Molheron Creek	65
Vicinity of Aldrich	272 65 30 285
Reece Creek	285
Land within Game Preservation Ranch and on forest land	
back of it	386
Total of counts outside the Park	3236
Total count exclusive of the Gallatin Herd	13043
Plus addition of 10% allowed for all that escaped observation	
and not included in above actual counts	1304
Plus estimated total of the Gallatin Herd	3000
Grand Total	17347

The estimated total of the Gallatin Herd is based on counts secured by the State Fish and Game Department of Montana and the Forest Service and Park Service men after the close of the hunting season early in the winter, and it is agreed that a total of 3,000 is a conservative estimate of the number in this herd.

The counts within the park include 1149 prime bulls. The spike bulls were not separately counted. The reports from outside the park contained no separate counts of the bulls although it was noted that the number seen was considerably less than the number known to be in the district. Nearly all the bull counts submitted were from remote points along the high ridges and it is presumed that a great many escaped observation as the bands were more widely scattered than ever before at this season of the year. These conditions were considered when 10% was added to the actual count. Only 5 dead elk were seen during the entire count. One of these had bogged down in a sinkhole in the Blacktail District, another had drowned in Slough Greek and three were winter kills. Herd conditions are, in general, the best ever seen at this season of the year. Some losses, however, are anticipated among the old animals on the feed ground at Slough Greek and a few old cows and weak calves along the east side of the Yellowstone River between Hellrosring and Grevice Mountain.

Deer: There were no unusual deer counts submitted during the month although they have been seen in their usual numbers at points noted in previous reports. The losses observed during the month consist of 5 coyote kills; I occurred in the Mammo th District, I in the Gardiner District and 3 in the Hellroaring District, total 5. The season total is 26, exclusive of the kills made by hunters. Total losses from all causes 136.

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There will be some losses among the old does and fawns in the Hellroaring District as quite a few have been recently observed in a weakened condition. However, it is not considered that these losses will be in excess of normal.

Antelope: There are now 230 antelope on their winter range outside the park. Their movements and condition are observed daily by the ranger assigned to the special antelope patrol. There is very little snow in this area and forage conditions are good. A loss of one, a winter kill, occurred during the month. The snow is rapidly disappearing from their range within the park and the bands are all in excellent condition. 198 were counted on the morth slope of Mt. Everts on the afternoon of February 20th and several small bands are ranging the slopes of Sepulcher Mountain. There has been a loss of only 4 this season to date.

Shoop: The following shoop counts have been submitted by rangers on patrol during the month: Mt. Norris 38, Specimen Ridge 63, including 27 rams, Junction Butte 12, Junction of Slough Greek and Lamar River 18, Mt. Everts 24, Yollowstone Canyon near mouth of Bear Greek 11, Hellrearing District along the Yellowstone 21, total 207. No losses have been observed during the month.

Moose: The moose reports of the past month have not been unusual in any particular. Their condition is excellent and no losses are known to have occurred.

Buffalo - Lamar River Herd: There has been an average of 600 buffalo on the feed ground throughout the month. All the hay on the upper meadows had been fed by the 21st and on this date they were removed to a new feed ground on the lower meadows. They were extremely restless prior to their removal to the new feed ground and four stampedes occurred. Five cows have aborted during the month. The herd is in excellent condition. The calves have been segregated from the main herd since January and they are in equally as good condition as the adults.

Buffalo - Cold Creek-Pelican Creek Herd: Rangers on patrol in the districts frequented by this herd have observed a band of 12 near Saddle Mountain, a band of 6 on Mt. Norris and a band of 5 near the Pelican Creek Cabin. A few signs were also observed in the vicinity of Cold Creek.

Two buffaloes are reported to have recently appeared in the vicinity of Riverton, Wyo., and there is reason to believe that they have drifted from one of the remote bands on the headwaters of the Lamar. It is quite possible that their drift was down Pelican Creek and along the east shore of Yellowstone Lake and that they left the park via the Upper Yellowstone. This drift could be variously estimated at from 250 to 300 miles. An inquiry has recently been addressed to Dr. Thomas B. Winecoff of Riverton, Wyo., requesting all information obtainable concerning these animals.

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Bears: A large black bear that has been hibernating under the hotel at Yellowstone lake appeared on the trails in the vicinity of the buildings on the 19th. He was out during an interval of 2 days. His activities consisted in part of the theft of a ham from the winter keeper and after finding no thing further of interest he returned to his den. This is the first and only activities of bears reported since late last fall with the exception of the captive bear Juno at headquarters station. Frequent visits have been made to his den during the past two months and we find that he is easily aroused but is very sluggish in his movements; he accepts very little food and rarely emerges from his den. His disposition is harmless and gentle.

Productory Animals: No lion or wolf signs were observed during the month and there has been very few signs of productory activities by lions or welves this season. This is the mating season for coyotes and they have been seen in unusual numbers during the past 3 weeks. It is not unusual to see from 2 to 4 running together. They are always seen in close proximity to banks of elk, deer, antologe or sheep, but they have made comparatively few kills this season to date. Twenty-three coyotes were killed by park rangers during the month, which, together with 185 proviously reported, makes a total of 208 this season to date as compared with 225 to March 1st last year, and 163 to March 1st, 1925.

Small Animals: There is nothing of special interest concerning small animals at this time.

Water Fowl: Bucks and goese are increasing in numbers along the Yellowstone and Madison Rivers and their tributaries and swan have been seen as usual at several points.

Buffalo and Other Ranch Operations: The principal activities at Buffalo Ranch have consisted of the care and feeding of the herd. Considerable difficulty has been experienced in keeping them on the feed ground and four stampedes have occurred. There has been an average of 600 on the feed ground throughout the month exclusive of the calf herd which numbers 109. Other activities have consisted of the care and feeding of horses and routine work at the ranch. One hundred and eighty-five tons of hay was fed to the buffalo and 7 tons was fed to the horses during the month.

The activities at the Slough Creek Ranch have consisted principally of elk feeding and the care and feeding of the ranch horses. Elk feeding began at this point on January 18th. There has been an average of approximately 650 on the feed ground daily and 84 tons of hay has been fed. Other activities have consisted of routine work incident to the maintenance and upkeep of the ranch property.

The activities at the Yancey Ranch during the month have consisted of the care and feeding of the Park Service and ranger horses by the ranger

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Assertions while taken and perfect densely month and the military and

in charge at Tower Falls Station. The only activities at the Gardiner Ranch have consisted of hay hauling for elk and deer feeding at Mammoth. This work was performed by rangers. A detailed report of all hay fed at the various ranches during the winter season will be submitted when these activities are concluded. Measurements of the balance on hand at the various ranches at that time will enable us to determine the exact amount fed. The weights submitted from month to month are necessarily inaccurate as the hay is not measured or weighed at the time it is removed from the stacks.

480 - Matural Phenomena

Mammoth Hot Springs: It would appear that the hot springs are resuming their activity - one of the earliest signs of preparation for the coming season. The only changes since last month are for the better.

The lower spring on Hymen Terrace is very hot and there is more water coming out of it than there has been for some time. The main spring here and the one at the foot of Devil's Thumb are barely existent.

Cleopatra evidences more activity than all during the past summer, the spring nearest the Terrace Trail having covered a large area with ice and a new opening having appeared on the north face of the old terrace which has been dry for a number of years.

The east face of Mound, the it has been covered with snow all winter, has not lost its yellow coloring which has been there since last season when it was active. At present this portion seems to be warming up as from some of the cracks steam is issuing. The western spring is very active again, flowing down on two sides and covering the formation between Mound and Pulpit with a sheet of ice nearly two hundred yards square.

The Jupiter Springs are much the same as they were at the beginning of last summer. A great quantity of very hot water is issuing from the spring farthest south, the two pools are both full end the largest one is overflowing somewhat toward the west but none over the face of the terrace, and the new spring which broke out at the close of the season is about as active as it was at this time last month.

as they were last month with no activity on or about Angel Terrace. Unite Elephant, Orange Spring, Bath Lake or Soda Spring. Stalactite and Stygian Caves are both very beautiful, being filled with icicles, some of them as much as fifteen feet long. Devil's Kitchen was again carefully examined for bats and as before no traces were found.

Many squirrel, mouse, jack rabbit, snowshoe rabbit, elk, deer and two marten tracks were noted in the vicinity of the formations.

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Upper Geyser Basin: The geyser activity during the month has been, on the whole, noticeably more vigorous than the corresponding month last year. While there has been a marked slowing down in many cases it in no way equals the exceptional irregularity of the preceding winter.

The outstanding event of the month was an unusually vigorous oraption of the diant on February 4th. The last eruption was on October 20th an interval which is quite consistent with the three months period over which this geyser appears to be operating.

Riverside is performing very close to its summer standard; the interval is unchanged (72 hours) and there is only a slight reduction of water being ejected. The same is true of Dalsy althe its indicator, Bonita Pool, is so irregular as to be quite undependable. Grotto seems to be in eruption less frequently than usual. Its partner, Rocket, is displaying unwonted vigor. Castle is still playing in its ordinary spurting manner; this is the longest period without a "big eruption" the xwritarkar ever ritnessed.

Grand has been observed in eruption somewhat less frequently than in January but more so than in February of 1926. There is little change in the character of its activity. Sawmill has become very erratic, playing continuously for a day or more and then becoming dormant for an equal period. The Lion Group has not fulfilled its early promise of unusual activity. However, the Dragon, a minor geyser nearby, has been extremely active in its small way. Both Giantess and Beehive have been dormant during the two menths of the current year.

While Old Faithful is playing much more nearly on its summer schedule than last winter it still departs somewhat from its usual clock-like regularity. Six consecutive eruptions averaged 67 minutes; however, irregular intervals (45 to 75 minutes) are more frequent than in summer. There is practically no change in the elevation attained but the duration of the eruption is conspicuously shorter.

Lone Star Geyser has not been seen in consecutive eruptions but the single eruptions were quite normal. Biscuit Basin is unchanged and the same may be said for Black Sand Basin except for the fact that the Spouter drained early in the month and remains so at the time of writing.

500 - Use of Park Facilities by the Public

510 - Increase or decrease in travel

All entrance and exit travel during the month was via the Gardiner Gateway. There was no travel beyond park headquarters. Winter season visitors are not registered and we have no exact check of the travel. However, travel conditions have been good between Livingston.

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Montans, and park headquarters, and there has been a limited number of local visitors. Thirty-two traveling in 15 cars are known to have journeyed to headquarters since the last report. The preseason travel to date consists of 1299 visitors traveling in 479 cars, as compared with 514 visitors traveling in 164 cars for the same period of preseason travel last year.

520 - General weather conditions

521 - In the park

Temperature: Monthly mean, 22.9° . is 3.3° above normal. Comparatively mild temperatures prevailed throughout the month, except a few days of moderately cold weather at the beginning of the second week. No adverse winter conditions occurred. The highest temperature was 40° on the 2hst; lowest -9° on the 9th.

Precipitation: Total, 0.86 inch, is 0.98 inches below normal. Light snow occurred at frequent intervals. The greatest 24-hour precipitation was .28 inch, mostly rain, on the 20-21st.

Snowfall: Total 6.9 inches; normal 14.8 inches. The greatest depth of snow on the ground was 7.8 inches on the lst; at the end of the month there were 6.8 inches of compact snow, slightly crusted.

Wind: Average hourly velocity was 10.4 miles: normal 8.1 miles. The unusually light wind movement of the first half of the menth was followed by a week of strong velocities, the highest being 40 miles per hour from the southwest on the 21st.

Sunshine: Percentage of possible 41; normal 54. Number of days clear 3, partly cloudy 9, cloudy 16, with .01 inch or more precipitation 19.

Form 1030 is attached hereto.

Snow Dopths: Snow depths throughout the park with comparative figures for 1926 and 1925 are noted as follows:

,4200 201 2,200 0002 4,00, 000 -100 10	Inches	Inches	Inches
Station	1925	1926	1927
Buffalo Ranch	16	13	17
Soda Butte Cabin	14.	14	24 62
Cooke City Station	37	40	62
Tower Falls	19	10	18
Old Faithful	41	33	52
Lake	34	37	44
Thorofare	48	39	60
Hellroaring	17	8	16
Morris	28	22	36
Canyon	43	42	54

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Snow Depths (Continued):

Station	Inches 1925	Inches 1926	Inches 1927
Thurso	40	36	45
Riverside	40	24	50
Gallatin	31	26	24
Sylvan Pass	41	30	55
Snake River	67	49	75
Bechler River	86	75	107
Upper Slough Creek Station	34	42	36

Snow depths at other points are indicated as follows:

Buffalo Divide 65 inches, Cottonwood Basin 42 inches, Crevice Mountain 44 inches, Park Point 34 inches, Cabin Greek 38 inches, Thorofare 60 inches, Fox Creek Divide 96 inches, Aster Creek 108 inches, Seven Mile Post north of Snake River 144 inches, Harebell Cabin 70 inches and Heart Lake Cabin 72 inches. Snow depths along the west side are noted as following: Boundary Creek 108 inches, Buffalo Lake 118 inches, South Riverside Cabin 102 inches and West Yellowstone District 50 inches. There is 64 inches on the Morris-Canyon Divide. Temperatures have been comparatively mild throughout the month.

540 - Special Visitors

Mr. D. E. Pettis, State Gamo Warden of Arizona, was a visitor at Park headquarters early in the month. He arrived via Butte and Livings ton on the 2nd and departed via Livingston and Billings on the 7th. He was keenly interested in the wild life activities in the Mammoth District and was an interested observer of the Mammoth Hot Springs formations. The primary purpose of his visit was to receive and accompany a carload of elk consigned to his address in Arizona. He assisted with their capture and delivery to the carrier and enjoyed the experience immensely. He left here with a fine spirit of enthusiasm for Yellowstone Park.

900 - Miscellaneous

Hospital and Medical Service: Dr. Richard R. Brady, the Resident Physician, reports 24 office calls and 21 house calls during February.

Post Office: Mothing unusual to report for February.

Church Services: Religious services were held in the Park during February, at Mammoth Hot Springs, in the lodge room, as follows: English Lutheran by Rev. Webster H. Clament on Tuesday evening, February 1: Episcopal by Rev. John F. Como on Sunday evening, February 6th, and on Sunday morning, February 20th; Methodist by Rev. Otto G. Ponath on Wednesday evening, Feb. 23rd.

The small room in the knum ement Hall known as "The Lodge Room" was thoroughly renovated and put in splendid condition during the month of February; and is now a very suitable room for church and other small community gatherings.

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Izaak Walton League: The local chapter held one business meeting during the month, namely on the evening of February 8th. Good interest was manifested, and renewal of memberships is reported as coming in satisfactorily. The meeting was unusually well attended and considerable interest was manifested in the business transacted. Pleasing results were amounced in connection with the campaign for new members and membership renewals and it was stated that there is now a paid up membership of 49. It is believed that most delinquents will renew and that we will have a total membership of approximately 90. Mr. Ernest Miller of the Elk Horn Ranch and Mr. J. T. Gratiot of Dubois, Wyo., will probably be named as delegate and alternate to the National Convention in Chicago. The next regular meeting will be held on March 8th.

On February 26th a dance, sponsored by the Mammoth Community, was held in the Post Canteen. This dance was attended by practically all of the Mammoth residents and a very enjoyable evening was had by every one. There has been a number of social functions among the ladies of the community during the month and a very friendly spirit has existed among the people of the community.

Cordially yours,

LEROY HILL
Acting Superint endent.

The Director, National Park Service, Dept. of the Interior, Washington, D.C.

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DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

TRAVEL REPORT

YELLOWS TO NE Nat	tional Pa	rk for the	Month o	of	FEBRU AR Y	
	This This This Month Year Last		Last Travel Year		Increase for Travel Year	
		To Date	Year	To Date	Number	Percen
PRIVATE TRANSPORTATION:						
Cars first entry	15	479		164	315	192
Cars reentry						
Motorcycles						
Total motor vehicles	15	479		164	315	192
Persons entering via motor vehicles	32	1299		514	. 785	153
Persons entering via other private transportation	ALBERTA SELECTION OF THE AUGUST A					
Total persons entering via private transportation	32	1299		514	785	153
OTHER TRANSPORTATION:						
Persons entering via stages						
Persons entering via trains						
Persons entering otherwise						
Total other transportation.						
GRAND TOTAL ALL VISITORS	32	2 1299		514	785	153
	***************************************		This	Last	Incr	ease
			Tea,I	1 cal	Number	Percent

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UNITED STATES LEFATMENT OF THE INTERIOR NATIONAL PART SERVICE

TRAVEL REPORT

	YFI UNE	. "s	o denember.	k for th	10 Par	Jan I d. E. Ollly
	Parent Parent	La. r.v. Ye.r To D t	This Mo th L st Year	Thi Travel Year To Date	This Month	
						PRI''A 2 IRKIBERTENTION.
192	315	164		479	15	Cars first n'ry
						Carg resmiry
						Motorcycl s
251	315	191		479	Ğī	Total wtor vehicles
153	785	514		6621	32	Persone one ing via motor vehicles
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153	785	514		1299	32	T l prema mitering via priv t portation
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	765	tris		1299	32	TRANT STAT ALL VISITORS
	in and	Last Year	This			

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UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

STATUS OF PERSONNEL

YELLOWSIONE. National Park for the	Month ofF	BRUARY 1927
	This Month	This Month Last Year
Number of employees beginning of month,	63	64
Number of additions,	0	2
Total,	63	66
Number of separations,	0	0
Number of employees close of month, $=$	63	66
Number of promotions during month	0	<u> </u>
Aggregate amount of annual leave taken, _	83 ½	96 1
Aggregate amount of sick leave taken,	8	5
Aggregate amount of leave without pay,	0	0

691-55 UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL ARK SERVICE

STATUS OF PERSONNEL

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his Worth			
6.4	63		Number of serloyess beginning of worth
(,)9	63	artic de Proposition de La Pro	Number of weithers
99	63	-	Number of translations and substitute of translations
			Number o close of month
0	0		Number of prestions during month
963	કું ફ	de représentan usas recini	Aggregate of annual leave taken,
5	8	descriptions of the de-	Aggregate mount of sick leave taken.
0	O		Aggregate account of leave without ply.

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

*ELECTRICITY GENERATED, SOLD, USED, ETC.

YELLOWSTONE	Nationa	l Park fo	r the Mo	nth of ^{FEBR}	WARY 1927	
	This	This Travel Year	This Month Last	Last Travel Year	Increase for Travel Year	
and given were read their record first than their gift dair gift gift gift will dair some time the some time time the some time time time.		To Date		To Date	Number	Percent
urrent generated,	44090.0	496890.0	48810.0	471090.0	25800.	•05
old to park operators,	199.8	79605.9	317.3	74691.3	4914.6	.06
old to others,						
agencies,						
sed by National Park Service, lost in transit, etc.,	43890.2	417284.1	48492.7	396398.7	20885.4	.05
Total current generated,	44090.0	496890.0	48810.0	471090.0	25800.0	.05
Amount receivable from the sale	of elec	etricity,		, .	\$ 9.99	

^{*} Indicated by K. W. H.

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

*ELECTRICITY GENERATED, SOLD, USED, ETC

off M. W. Y. 1927	dinom edi	National Park for	Yallo Bluit.

	This Month	This Travel Year To Date	This Month Last Year	Last Trave Year To Dat	Increade Travel Number	
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urrent generated,	0.08044	0.068961	0.01884	471090.0	.0088	30.
old to park operators,	199.8	79605.9	327.3	74691.3	4914.6	30.
old to others,						
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ed by National Park Service, lost in transit, etc.,	43890.2	1.186217	48435.7	396398.7	20885.4	.05
Total current generated,	4,090.0	195290.0	48810.0	0.060127	25800.0	.05
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Indicated by K. W. H.

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

REPORT OF TELEPHONE AND TELEGRAPH BUSINESS

YELIO WITONE National Park	for the Mor	ith of	FEBRUARY	1927
	This Month	This Month Last Year	 Increase	Percent Increase
OCAL BUSINESS	14 * .			
files of circuit maintained,	391	363	28	•02
No. of telephones connected, No. of measured service calls,	141	132	9	•06
No. of other local calls,	5397	4819	• 578	12
Peak load in calls per day,	• • 303	262	41	15
Receipts from measured service calls, " coin boxes, " telephone rental,		bindentunkska tenestra, nasi sing bundetsi sa sa		and the second s
TOTAL RECEIPTS				
ONG DISTANCE BUSINESS	hondy coding to postace and ac-			
To. Outbound calls,		68 85	-29 -39	•
TOTAL LONG DISTANCE CALLS	5			
Peak load in calls per day,	\$39.67	8 2/.7 Telephone	-2 & Telegraph	
Messages via Western Union,	• • • • • • • • • • • • • • • • • • • •	parragina de par ja e . pares de . pares		• • • • • • • • • • • • • • • • • • • •
Receipts from telegraph business, No. of money transfer messages, " " " receipts,				

TOTAL RECEIPTS TELEPHONE & TELEGRAPH DEPTS-

DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

REPORT OF TELEPHONE AND TELEGRAPH BUSINESS

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Legi Mynery	the Month of	YLLLO TOTOLTS National Park for
Increase Percent Increase	This This This Month Month Last Year	· ·
		CAL BUSINESS
26. 8s	391 363 141 132	les of circuit maintained. of telephones connected
• 578 12 41 15	397 4819 303 262	of other local calls
		ceipts from measured service calls.
		" coin boxes,
d telephonological production and the contract points of the contrac		TOTAL RECEIPTS
		NG DISTANCE BUSINESS
-29 -42 -39 -45	39 68 46 85	Outbound calls,
		TOTAL LONG BISTANCE CALLS
-2 -25 -25 -25 -25 -25 -25 -25 -25 -25 -	6 39.67 States Telephone	ak load in calls per day
And the second s		CLEGRAPH BUSINESS
The state of the s	Service of Security Services (Security Security 12 to 10 to	TOTAL MESSAGES
		sceipts from telegraph business,

OTAL RECEIPTS TELEPHONE & TELEGRAPH DEPTS-

" " receipts,

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

REPORT OF PARK REVENUES

YELLO WETONE National Park for the Month of	FEBRU AI	RY 1927
	This Year	Last Year
Park revenue on hand beginning of month,	0	0
Received,	3,743.53	424.88
Total,	3.743.53	424.88
Remitted,		424.88
On hand close of month,	0	0
with the little gift, with July, was buy with with 1986		
Park revenues received this year to date,	\$ 216	,161.23
Park revenues received last year to date,	338	,604.38
Therease, Decrease	122	•443 •15
Percent of increase, decrease,	76	











