
**ANNUAL REPORTS
FOR
YELLOWSTONE NATIONAL PARK**

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ANNUAL REPORTS
FOR
YELLOWSTONE NATIONAL PARK

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YELLOWSTONE NATIONAL PARK

Roger W. Toll, Superintendent,
Yellowstone National Park, Wyoming.

GENERAL

An unsettled state of affairs throughout the country had its effect on the travel and business in Yellowstone National Park during the summer season. The park operators found it necessary to retrench considerably as the expected business failed to materialize. The reduction in rail travel was larger than in private automobile travel.

The Superintendent spent part of the winter on the investigation of proposed national parks, including inspection of the Wallowa Mountains in Oregon and the Everglades in Florida. He returned to Yellowstone early in April for the operating season. On March 31, 1930, N. F. Daum resigned as assistant superintendent to accept the managership for the Teton Lodge Company, to be in charge of their operations at Moran, Wyoming, and was succeeded by Guy D. Edwards, transferred from the San Francisco Office of the National Park Service. During the year the position of Chief Clerk was established, and B. A. Hundley, chief clerk of Glacier National Park, was transferred and assumed his new duties on October 27, 1929.

Instead of following average conditions, the weather during the year seemed to tend toward extremes. The fall season last year was very mild and it was well into November before the main roads were blocked, making it necessary to discontinue auto travel.

Very little cold weather was experienced until January but that month was exceedingly cold. The spring broke early and the roads were passable much sooner than usual. A rotary snow plow was used for the first time to aid in getting the roads cleared of snow. Park visitors were admitted at the north and west gates on May 15, although the roads were passable somewhat earlier. The fore part of the travel season was exceedingly dry but continued rains in August resulted in washouts and slides which considerably hindered travel and slowed up the construction work n the park highways. The heavy rains were general throughout the adjoining states and many roads suffered. Part of the decrease in travel during August was due to weather and road conditions.

When the travel season closed our records showed a decrease of 32,796 visitor over last year, or 12 per cent. This is the first decline in travel since 1918, the last year of the World War.

Through agreement with the various railroads serving the park the holding of ceremonies marking the opening of the season was discontinued. However, as Mrs. John F. Sippel, national president of the General Federation of Women's Clubs, was entering the park via the north gate on June 1st with the first rail visitors for the season, the Northern Pacific Railroad arranged for the taking of sound motion pictures to be used as a publicity medium.

Mrs. Sippel and her party were met at the train and placed in one of the old coaches used in pre-auto days in the park, and taken through the entrance arch, escorted by mounted rangers. The party then boarded one of the regular park busses and proceeded to Mammoth, where they were welcomed by the superintendent. Mrs. Sippel responded with a short talk on "American Womanhood and the National Parks."

The park roads showed a considerable improvement over former years and with increasing funds available for reconstruction of roads, a gradual improvement of the road system will take place. The heavy rains of late July and August seriously hampered road construction and made travel on some stretches difficult but the park roads did not suffer as much as some of the approach roads. The continuation of the oiling program added greatly to the comfort of visitors and there was favorable comment on the improved manner in which the oil was applied. The dry weather during June and July made the display of wild flowers less conspicuous than usual. The natural forage on the winter range of the elk, deer, antelope and buffalo was so damaged by the drought that the outlook for the wild life is unfavorable. A severe winter might cause a disastrous condition. A number of fires occurred during July, but all were extinguished before much damage was done. The largest covered 60 acres.

A general reduction in the price of gasoline and oil met with immediate favor of park visitors. The gas and oil prices were reduced to rates comparable to those in the immediate vicinity of the park.

Many visitors reported having seen park animals during their stay. Bears were abundant and numerous complaints were received regarding property damage and personal injuries inflicted by them. The bear problem is increasing and changes will have to be made in order to improve conditions. Fishing was excellent most of the summer, except when the heavy rains washed down mud into some of the streams, and the sport afforded a great deal of amusement and recreation to the thousands of visitors.

Director Albright made two visits to the park during the year, one from July 23 to August 4 and the other at the end of September. On the last visit he accompanied Senator Peter Norbeck, of South Dakota, a member of the Senate Special Committee on Wild Life Resources.

Many prominent persons visited the park during the summer including the Assistant Secretary of the Interior, Honorable John N. Edwards; four United States Senators, Honorable Nealey L. Jones of Washington, Frederic C. Walcott of Connecticut, Peter Norbeck of South Dakota and Key Pittman of Nevada; one United States Congressman, Mrs. Ruth Bryan Owen of Florida;

three United States Congressmen, Honorable Don B. Colton of Utah, Albert Johnson of Washington and John W. Sumner of Washington; one Governor, Honorable A. J. Rosser of Nebraska; John D. Rockefeller, Jr.; G. L. Bodenheimer, National Commander of the American Legion; former United States Congressman Charles E. Winter of Wyoming; and Mrs. John F. Gippel, National President of the General Federation of Women's Clubs. Other prominent visitors included; Honorable Horace M. Albright, Director of the National Park Service; Honorable R. Y. Stuart, Chief Forester of the U. S. Forest Service; Paul G. Redington, Chief of the Biological Survey, Judge C. D. Lawrence, Assistant Attorney General; Judge John L. Gay, United States Attorney, District of Porto Rico; Madam Schumann-Heink; Mrs. James Darnall, Director of State Parks of Kentucky; William H. Jackson, Pioneer Photographer who first visited Yellowstone with the 1871 Hayden Survey Party; Allard Smith, Executive Vice President of the Union Trust Company, Cleveland, Ohio; Henry E. Joy, former President of the Packard Motor Company and President of the Lincoln Highway Association; Gilmore D. Clarke, Landscape Architect for the Westchester County Park Commission, New York; John Nolen, Prominent city planner of Cambridge, Massachusetts; Professor Robert F. Griggs, Leader of the Natural Expeditions of the National Geographic Society; R. H. Compton of the Botanical Gardens, Cape Town, South Africa; Phillips Silvestri,

head of the Experiment Station at Naples, Italy; Frederic A. Gachard, State Librarian of Pennsylvania; Colonel George W. Burleigh, Conservationist and Member of Campfire Club; Dr. Ivan Frangos, Jugoslav Vice Consul; Lieut. Commander Carleton E. Wright of the U. S. Navy; Noel E. Clegg, distinguished English mountaineer; R. J. Bradshaw of the Geological Survey of India; Dr. Elwin C. Van Dusen, Professor of Entomology, University of California; Marle Thorpe, Editor of Nation's Business; Dr. Arthur L. Day, Director of the Geophysical Laboratory of the Carnegie Institution; Frank H. Warren, Conservationist and National Director of the Inez Walton League of America; Dr. Robert Friedenwald, author and historian; Mrs. M. A. Snow, wife of prominent wild animal photographer; Charles A. Benson, son of Senator Benson of Illinois; William Loeb, former Secretary of President Roosevelt; Arthur Chapman, author of "Out Where The West Begins"; Dr. Wallace Krugler, prominent New York physician and conservationist; Mildred Lee Clemens, writer and lecturer; members of the Princeton University Summer School of Geology; Clark University Summer School; American Nature Association Party; Garden Clubs of America; Appalachian Mountain Club; Luther League; Montana American Legion party and many prominent business, professional and scientific men and women. Keen disappointment was felt due to the cancellation of the visit.

of President Hoover and party. Newspapers throughout the country carried numerous stories of the President's proposed visit to several of the western National Park, but pressing duties in Washington made it necessary to cancel the trip.

The Senate Special Committee on Wild Life Resources, consisting of U. S. Senators Frederic C. Gilcott, Key Pittman and Peter Norbeck; Morris Legembre, Secretary; and C. D. Shumaker, Special Investigator, held meetings in and inspected the Jackson Hole Country with a view to determining the future of the Jackson Hole elk herd. Senator Norbeck visited the Yellowstone after leaving the Jackson Hole while the others visited it enroute thereto.

On July 4 a spruce tree, about 10 feet in height, was planted in the lawn between the Administration Building and the Mammoth Hotel in honor of Honorable Stephen T. Mather, former Director of the National Park Service.

ADMINISTRATION

Headquarters Office: The regular personnel consists of Roger S. Tull, Superintendent; Guy D. Edwards, Assistant Superintendent; Joseph Joffe, Assistant to the Superintendent; Chief Clerk Benjamin A. Sundley; Leroy Hill, Disbursing Clerk; Thomas McNamee, Senior Clerk and Bookkeeper; Anna E. Green, File and Personnel Clerk; Margaret Sebin, Clerk-Stenographer, and Virginia Gottlich, Bookkeeper. This force is augmented

during the summer season with two clerk-stenographers, 2 statistical clerks, one publicity clerk and 1 card clerk. In addition, one new clerk position was created to take care of the stenographic and clerical work in the Chief Ranger's office. The maximum number of employees on the payroll at one time was approximately 400 on a per diem basis, and the maximum number of appointed personnel was 145.

TRAVEL IN 1930

Park visitors this year totaled 227,901 as compared with 260,697 last year, a decrease of 32,796. The rail travel figures were 26,845 as compared with 32,972 last year, a decrease of 12,134. A comparison of rail figures of this season and last year are as follows:

Gateway	1929	1930	Gain	Loss
North.....	12,243	9,309		3,034
West.....	19,213	12,961		6,262
East.....	7,223	4,585		2,645
South	290	60		230
Total.....	38,970	35,845		12,134

*Rail travel accredited to the West Entrance during the tourist season of 1930 consisted of 10,271 persons via the Oregon Short Line Railway (Union Pacific System), 1,637 via the C. M. St. P. & P. (Gallatin Gateway terminal of the Milwaukee), and

363 persons from the Bozeman terminal of the Northern Pacific, plus 670 temporary employees of the Government and park operators.

Automobile visitors by entrance gateways, as compared with ~~are~~ last year, as follows: (this travel is exclusive of motor-cycle and passenger auto visitors.)

Gateway	1930	1930	Gain	Loss
North.....	39,198	56,970		17,772
West.....	26,377	71,045		44,668
East.....	23,732	64,535		40,803
South.....	21,730	21,451		2,279
Total.....	216,586	194,771		19,816

The number of cars and visitors reported at developed public camp grounds during the season of 1930 are as follows:

Designated Developed Camp Grounds	Cars	Campers
Fishing Bridge.....	11,454	36,195
Old Faithful.....	10,609	33,584
Mammoth.....	8,550	19,971
Lake.....	1,074	3,384
Canyon.....	2,352	6,009
West Thumb.....	2,350	7,332
Borris Junction.....	602	1,829
Madison Junction.....	956	3,018
Tower Fall.....	1,212	4,114
Total.....	37,493	113,446

Approximate number of cars and campers using undeveloped camp sites..... 3,500 : 11,000

Total Seasonal Travel by Entrance Gateways1930 and 1931

				Misc.			
	By Automobile	By Motocycle	(Walk-	Pro-	Total		
	ing.	ing.	shorse-	ing.	season:		
Ontario : <u>1930</u>	tires ; Cars;	tires	Gangs	tires	check, etc	tires	tires
North...:	9,200:13,419	: 36,920	: 25	: 56	: 205	: 3,618	: 40,999
West....:	12,961:22,472	: 71,263	: 26	: 97	: 341	: 1,634	: 86,418
East....:	4,505:50,746	: 64,500	: 70	: 103	: 203	: 0	: 69,716
South...:	<u>30</u> : 6,705	: 21,401	: 21	: 29	: 137	: 01	: 21,703
Total...:	33,645:63,408	: 124,771	: 120	: 236	: 627	: 5,149:227,901	
1931							
North...:	12,840:13,821	: 36,193	: 40	: 50	: 404	: 3,726	: 50,701
West....:	15,213:23,656	: 76,897	: 40	: 44	: 371	: 005	: 97,093
East....:	7,502:23,061	: 70,732	: 73	: 98	: 164	: 000	: 81,305
South...:	<u>30</u> : 7,777	: 24,736	: 23	: 28	: 1,472	: 100	: 26,603
Total...:	33,373:33,415	: 114,660	: 131	: 218	: 2,478	: 4,437	: 200,607

GYPSUM AND HOT SPRINGS.

Hannoth Hot Springs: In general no change occurred during the winter. A marked decrease in activity during the spring and an increase during the summer is to be noted. Narrow Gauge Terrace ceased activity, but a new vent broke out at one side with increased vigor.

Harris Geyser Basin: No distinct change in activity is to be reported.

a. Lower Geyser Basin. The only important event was the cessation of activity in Imperial Geyser during October, 1929.

Upper Geyser Basin. No special change to be reported.

CLIMATE

August, 1929, the closing month of the last annual report, was warmer than normal. Monthly mean temperatures from August on alternated regularly above and below normal until June, 1930, which, like May, was below normal. July was above normal, and the first three weeks of August showed an average nearly normal. January, with a mean of 4.4° , was the coldest month in the records of the Mammoth Station, while February, with 27.6° , equalled the warmest February. April was with one exception the warmest month of that name on record at Mammoth. December was warmer than November, and March was colder than February. The year's highest temperature at Mammoth was 98° on July 8; the lowest, -55° on January 17. On the latter date Buffalo Ranch reported a minimum of -50° ; Galatin, -46° ; Yellowstone Lake, -42° ; and Riverside, -37° .

Each month from, and including, September on was below normal in precipitation, excepting December and August. Precipitation recorded in August before the month was half over exceeded the total for any full August in the record. The greatest annual snowfall was at Snake River, the least at

Buffalo Ranch; the total at Mammoth, 72 inches, was 25 or 30 inches less than normal.

MAINTENANCE OF ROADWAYS

This department is in charge of Resident Engineer Cecil A. Lord. The park road system consists of 335 miles of road. In addition, the park forces maintained 28 miles of the East Entrance Road in the Shoshone National Forest and 38 miles of the South Entrance in the Teton National Forest. Approximately 170 miles are oiled. Of this about 140 miles are light oiled for dust prevention and 30 miles are semi-processed. This latter work was started on July 13 and consists of a semi-processing of all roads with a suitable natural surface material, in place of the former dust palliative method. Valuable assistance on this work was given us by the Engineering Department of Field Headquarters.

Roadside Cleanup.—Fourteen miles of roadside cleanup were done by donated funds and 14 miles by project funds. At present 92 miles of roadside cleanup are maintained from our regular maintenance funds.

The Park Service forces rebuilt 6.5 miles of the Mammoth-Borris road. One and one-half miles of this amount was from the Mammoth Lodge to the terraces. The other section was from Obsidian Cliff south 5 miles. In addition two miles of road

were rebuilt at the Paintpots section on the Madison-Old Faithful road.

The park forces also built 1/2 mile of paved trail at Mammoth and plan the construction of one mile of paved trail at Old Faithful. In addition, parking areas at Old Faithful were developed. Plans were made and construction started on the rebuilding of a new intake and the replacing of 2 miles of pipe line on Mammoth water system. The following major road contracts were let during the past year, all handled by the Bureau of Public Roads:

Projects 1-9-1, Canyon Junction-Lower Junction, 15.28 miles; 9-B, Artist Point, 1.6 miles; 1-B-2 and 1-B-3, Morris Junction-Madison Junction, 8.97 miles. The road project let last year from the East Entrance to Lake Butte made steady progress, and the grading will be practically completed this fall.

ELECTRICAL AND TELEPHONE DEPARTMENT

This department is in charge of Chief Electrician Charles D. Dale, and includes 3 permanent power plant operators and one permanent telephone operator.

The following table shows total production of power plant at Mammoth and the distribution of current:

	<u>1927-28</u>	<u>1928-29</u>
Sold to park operators	29,415	76,392
Street lighting	29,500	50,344
Used by Government buildings for power and lights		
	<u>647,795</u>	<u>889,556</u>
Total production in kilowatt hours at Mammoth	766,710	798,092

Sixty-eight miles of telephone lines were rebuilt during the past year, using native poles and metallic circuit. The usual electrical and telephone maintenance work was carried out. To maintain 520 miles of circuit and 100 telephones.

BUILDING MAINTENANCE AND CONSTRUCTION

All carpenter work is under the supervision of Master Carpenter T. A. Bowen. All painting is under the supervision of Master Painter, L. R. Hopkins.

The snowshoe cabin, 3 bunkhouses, 3 mess houses, 3 barns, 2 ranger stations, 1 fire lookout and one log comfort station were constructed by the department during the past year. The regular building maintenance was carried on throughout the park.

Mechanical Department

This department is in charge of Master Mechanic Robert R. Reinmen, and includes 6 permanent mechanics, 1 permanent blacksmith, 2 temporary mechanics and 2 temporary blacksmiths.

New equipment and passenger carrying vehicles purchased during the year included the following: 1 tractor, 4 motor patrol graders, three 3-ton trucks, four 1-1/2 ton trucks, 6 small Ford trucks and one passenger car.

Sanitation Department

This work is carried on under the supervision of H. D. Dawson of the United States Public Health Service, and under

the direct charge of William H. Wiggins. Mr. Faxon made a thorough inspection of our entire operations in June and outlined necessary corrective measures. Mr. Wiggins makes weekly sanitary inspection as outlined by Mr. Faxon.

The construction work this year consisted of the following: Completing the Morris water system, including the excavating and laying of 10,500 feet of 3" water pipe and 3,000 feet of 6" water pipe; building one comfort station at Morris; construction of sewage disposal plant at Morris; incinerator at Fishing Bridge; built complete water and sewer system and comfort station at Apollinaris Springs; began work of replacing 2 miles of old water line at Mammoth by 34" line and the construction of a new intake.

In addition to the construction work, nine water systems, thirteen sewer systems and three incinerators at various places in the park were operated and maintained by this department. The heating system at Mammoth, which includes 9 steam boilers, were also operated and maintained by this department.

LANDSCAPE DIVISION

Architectural and landscape work was supervised by E. C. McCarter, Assistant Landscape Architect in residence during the construction period and by Thomas C. Vint, Chief Landscape Architect during several general inspection trips. One of the

accomplishment of this year was the development of a plan for the Mammoth Brashearing area by Mr. Gilmore D. Clark, Landscape Architect for the Westchester County Park Commission of New York, after a thorough study of the problem on the ground.

PUBLICATION DEPARTMENT

Personnel: George F. Dugley, Chief Ranger, 4 assistant Chief Rangers, 36 permanent rangers; 45 temporary rangers (employed for the summer season, approximately 80 days).

Winter Activities: These were mainly regular and special patrols for the observation and protection of wild animal life; observation of weather conditions; reporting water gage heights, snow depths, and hunting predatory animals; repair and maintenance of telephone lines, buildings and other equipment; wild animal feeding; care and feeding of Park service horses at their winter feed grounds.

Summer Activities: Rangers were busy checking entrance and exit travel; regulating traffic; dispensing information; conducting parties; delivering lectures; compiling reports; maintaining and repairing trails, snowshoe cabins, ranger stations and other improvements; making patrols for forest fires and other regular and special patrols for the protection of the natural features of the park.

Forest Fires: Season of fire hazards began a month earlier than last year. Several small roadside fires were

extinguished, and several fair sized fires in the interior of the park were discovered and suppressed before much damage had been done. The total number of fires was 28 and the total area burned was 110 acres.

Trail Construction, Maintenance and Improvements: New construction consisted of 1-1/2 miles of trail to the Upper Geyser Basin; 9 miles of trail on Amphitheatre Creek to connect with the Cache Creek Trail; one mile of trail at Tower Falls; a new platform and walk at Kepler Cascades; new view platform at Tower Falls; new guard rail at Canyon; and several hundred feet of guard rail at various dangerous points in the park.

BUFFALO MIGRATION ACTIVITIES.

Work consisted mainly of care and keep of herd, repair and maintenance of equipment, irrigation and cultivation of hay fields. At this ranch one hundred and fifty tons of hay were harvested this year as compared with 500 tons last year and 345 in 1920. There are 170 tons of hay left over from last year. Seven hundred and fifty buffalo were fed 520 tons of hay during the winter.

HAY RAFFLE OPERATIONS

Wild game and horse feeding at the Slough Creek, Yancy and Gardiner ranches consumed 555 tons of hay as compared with 302 tons last year. There are on hand 272 tons in addition to this year's harvest of 240 tons. Other ranch activities

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have been the repair and maintenance of equipment and buildings. Two hundred and fifty tons of hay will be cut by contract on the Pelican Meadows near Yellowstone Lake. At all ranches a total of 640 tons of hay will be harvested this year. A total of 1075 tons of hay was fed to game during the winter.

PREDATORY ANIMALS

One hundred and thirty-five coyotes were killed during the past year, as compared with 328 in 1928 and 204 in 1929.

WILD LIFE OF THE PARK

Wild life conditions as observed and reported by park rangers throughout the year are summarized in the following table. Conditions, generally have been somewhat better than the previous years:

All Animal Count for Year of 1930

			Actual Count	Estimated	In-	Condition	Causes
			1929	1930	1929	Condition	Brown Logans
Antelope	633	810	650	Yes	Fair	Predatory 8; unusual 1; Winter Hill 5; man 1.	
Buffalo		27	35	Possible	Fair	2	
(Mountain)							
Buffalo	1108	1097*	1097	Yes	Good	Drowned 1; skipping 5; Winter Hill 5; Rounding 5.	
(Lamar Herd)							
Mountain Sheep	150	155	150	Yes	Fair	Accident 1.	
Moose	675	108	700	Yes	Good	-----	
Rak	13250**	9320	10600*	No	Fair	Predatory 4; accident 4; Winter Hill 61; usual	
Deer	606	778	800	No	Fair	Predatory 14; accident 8; Disease 60; man 4.	

*This count is not a definite, as 77 were shipped and 46 were slaughtered.

**This count has had a 10% addition. Report of losses cover the entire winter.

•110 were shipped to zoos and public parks.

Bear, Black and Brown: The bear count last year was 440 as compared with 400 this year. Large numbers are reported at Old Faithful, Canyon, Lake, Creek and Mammoth. The bear situation this summer has become a problem. These animals have done a great deal of damage to tents and automobiles and in many cases have injured people. A total of 75 bear bites and scratches has been reported. 3 bears have been killed because of their depredations and injuries to tourists.

Bear, Grizzly: Grizzly bears are on the increase and this year the total is estimated at 167 as compared with 150 last year. They are numerous at all feeding grounds and in excellent condition, due to the abundant food supply. No injuries were caused by grizzlies this year.

Beaver: There is no doubt that beaver are increasing very rapidly. A great many aspen groves and willow parks throughout the park have been entirely cleared out by this busy little animal. Their food supply is decreasing at some points, but as it becomes exhausted at one point they migrate to another place and start new construction work.

Insects and Insects: An aerial survey made by the Bureau of Entomology during July disclosed that a serious outbreak of

forest insects has occurred during the past year. In July the camp grounds at Mammoth were sprayed with a solution of volck and nicotine sulphate for the control of Aphides, and a marked improvement is shown by these trees. A few insect infested trees at Old Faithful, West Thumb and various other points were cut and destroyed.

A mapping project was started this spring for the purpose of locating and identifying all insect infestations or tree diseases, and accurately mapping those areas. The part to be mapped this year is the southwest corner of the park from the West Yellowstone-Old Faithful Road, south and west.

Waterfowl: Ducks, geese and other birds were observed in the usual numbers through the past summer and fall. The pelicans on Yellowstone Lake show an estimated increase of 75. Estimates show a total of 230 pelican on the lake. We are cooperating with the Bureau of Biological Survey in securing their waterfowl census.

Fish Planting: Fish planting has been carried on under the supervision of the Bureau of Fisheries, as follows:

Eggs taken.....	15,369,000
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Eggs shipped:

Bureau of Fisheries acct.	7,117,000
Glacier National Park.....	500,000
Grand Canyon National Park.....	50,000
	<u>7,667,000</u>

Eggs lost.....	2,302,000
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Fish lost.....	17,000
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Fish shipped:

Yellowstone Lake & system	2,661,000
Yellowstone Park waters.....	1,668,000
Transferred to Mammoth pools.....	500,000
Teton National Park	199,250
Teton National Forest	198,250
Shoshone Natl. Forest (Valley Ranch).....	173,000
Washakie National Forest.....	<u>39,000</u>
	<u>5,412,500</u>
	<u>15,337,500</u>

Mammoth Boiling Pools
(As of September 12, 1930.)

Fish shipped:

Loch Leven trout fingerlings #4	25,000
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Fish on hand:

Black-spotted trout.....	500,000
Rainbow Trout.....	500,000

~~EDUCATIONAL REPORT 1932~~

The staff for the past year has consisted of full-time Park Naturalist and Junior Park Naturalist, and 17 temporary ranger naturalists. The summer activities carried on by this staff were as follows:

Station	Field Trips	Lectures	Excursions	Auto Caravan	Other
	No. & Alt.	No. & Alt.	No. & Alt.	No. & Alt.	No. of Campsites
Old Faithful	461 : 35,064	618 : 282,945	107,335	137 : 530	5361
Mammoth	609 : 14,186	252 : 36,837	73,637	87 : 2,647	9467
Canyon	309 : 11,373	128 : 31,850			
Borris	:	:	: 26,925	:	:
Lake	138 : 5,365	362 : 26,431			
Fishing Bridge	68 : 1,220	69 : 16,788			
West Thumb	72 : 10,208	51 : 3,415			
Mt. Washburn	:	80 : 12,360	42,622	:	
Dover Falls	51 : 39	87 : 2,759	3,779 : 4	5	15
Total	1556 : 77,329	1,571 : 324,325	207,817 : 6233	3,102	12448

The Educational Department program has received an enthusiastic response from the visitors throughout the season. The above table will show the number served during the summer. The Morris Museum containing geological exhibits was opened on July 5, and the historical museum at Madison Junction on July 11. Both of these have functioned well during the summer. The backroom of the Mammoth Museum has been completely equipped with new wall and island cases containing geological, historical and Indian exhibits, and has caused considerable comment. Construction of a new museum was begun at Fishing Bridge.

An auto caravan was instituted at Mammoth Hot Springs and served a great many persons who would not have otherwise received attention. Three new illustrated lectures were started during the summer - one at the Mammoth Hotel, one at Lake Lodge and one at Canyon Lodge.

Dr. R. C. Dugue, Dr. Harold C. Bryant and Dr. Wallace W. Atwood, members of the President's Commission on the Educational Work in the National Parks, visited the Yellowstone during the summer. On July 1, 1930, Dr. Bryant was appointed assistant to the Director in Charge of Educational Activities.

IMPROVEMENTS BY PUBLIC UTILITIES AND INDIVIDUAL OPERATORS

Additional facilities completed or under construction during the year by the various public operators are as follows:

Yellowstone Park Lodge & Camp Company

Westgate: 6 comfort stations and 36-foot addition to horse barn; 60 permanent cabins, - 30 12 x 12 and 30 12 x 20; 2 comfort stations in housekeeping unit in public automobile camp.

Old Faithful: 2-story building, L-shaped, 70 x 50; comfort station, 18 x 36; 147 permanent log and frame cabins; comfort station, 18 x 36.

Lake: 10 permanent log and frame cabins and comfort station; 130 permanent log and frame cabins in housekeeping unit in public camp ground; building for wood house, 16 x 24.

Canyon: 7 permanent log and frame cabins; 2-story building, 30 x 60; 64 permanent log and frame cabins, comfort station 18 x 36 and comfort station 18 x 30 in housekeeping unit in public auto camp.

West Ranch: 27 permanent log and frame cabins and comfort station, 18 x 36, in housekeeping unit.

Yellowstone Park Hotel Company

Lake: New storage warehouse.

Common Hotel: New wing of 96 rooms with bath.

Yellowstone Park Transportation Company

Garfield: 5 3-car concrete garages.

Yellowstone Park Boat Company

Purchased 22-foot Chris Craft speed boat.

RELIGIOUS SERVICES

During July and August, Catholic masses were held in the Chapel at Park Headquarters at 6:00 a.m. and 8:00 a.m. every Sunday. Protestant services were held every Sunday at 10:30 a.m. and 6:00 p.m., during the tourist season, by ministers of various denominations from Livingston, and other points in Montana.

During the winter, Protestant services were held frequently by visiting ministers, mostly from Montana.

A bronze tablet giving in brief the history of the building of the Chapel was donated by Mr. A. L. Rile of Mason City, Iowa, and was dedicated by a short ceremony on July 9, 1938, after having been placed in an appropriate position on the front of the building near the entrance.

POST OFFICE

In addition to the main office, classified postal stations under the management of regular postal employees were maintained during the tourist season at Old Faithful, and at Fishing Bridge. Three contract stations were also maintained during the tourist season, at Lake Outlot, Canyon, and Tower Falls, respectively.

Star routes connected these stations with the main office giving daily service; Another star route connected the main office with West Yellowstone, Montana, and Old Faithful Postal Station with West Yellowstone, Montana.

The average business of the postal department in the park is about 20 per cent under the business for 1929, due mostly to decreased travel to the park.

VITAL STATISTICS

There was one death due to accident and _____ deaths due to natural causes, and one birth.

COOPERATING BUREAUS

The Bureau of Public Roads of the Department of Agriculture, the U. S. Public Health Service of the Treasury Department, The Bureau of Entomology of the Department of Agriculture, and the Bureau of Fisheries of the Department of Commerce have all cooperated to the fullest extent with officials of the National Park Service in Yellowstone during the year just closed, and members of the Geophysical Laboratory of the Carnegie Institute, Washington, D. C., were engaged in research work in Yellowstone during the summer.

Bound by the Western Museum Laboratories at Berkeley

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